

Bury Interchange Ph1, Platform & Tram Works Keolis Amey Metrolink / TfGM Construction Management Plan

1. Issue and Revision

Date	Description	Revision	Revised By
23/03/2026	Initial Draft for Comment/Approval	01	Jack Hall
29/04/2026	General review, update and inclusion of electrical envelope assessment	02	Jack Hall
12/06/2026	Refinement and updates with SCP input further to Metrolink/KAM discussions	03	Jack Hall



2. Introduction

This Construction Management Plan provides an overview of the control measures which will be in place for the duration of the works adjacent to the live Metrolink network and has been developed for the Bury Interchange Ph1 Project.

It sets out the control measures which will be required to ensure that the impacts of the construction works are minimised as far as reasonably practicable, and highlights risks and control measures. It will address the potential environmental impact of the construction and the methods to mitigate the specific environmental disturbances such as noise, vibration, dust and impact on ecology.

This document should be read alongside Transport for Greater Manchester publication 'Working safely near Metrolink'.

This document will be reviewed and updated as appropriate for the duration of the construction works.

Transport for Greater Manchester 'TfGM' remains the asset owner of all Metrolink infrastructure.

Keolis Amey Metrolink 'KAM' looks after the network daily and need to be engaged when works are planned near lines, stops and depots.

3. Project Details

Project Name: Bury Interchange Phase 1 – Bury Tram Stop & Bridge

Project Number: K00304

Address: Duke Street, Bury, OL9 0EJ

Expected project start date: September 2026

Expected project completion date: December 2027

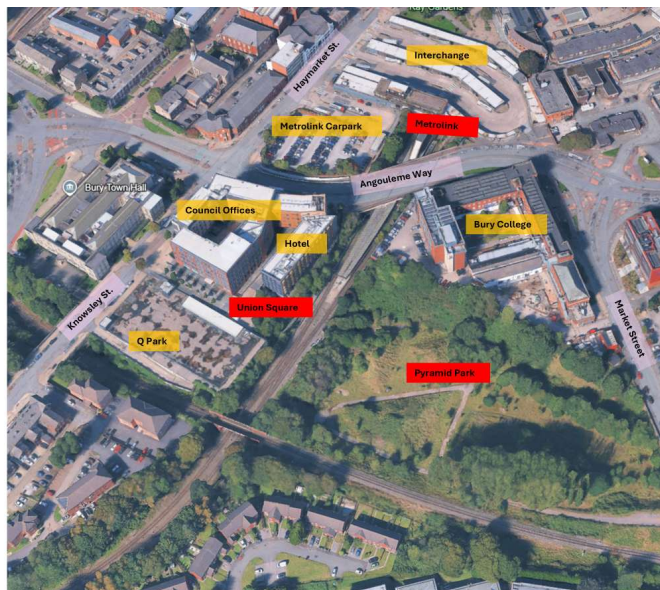
Scope of Works:

Works include new access to the Metrolink platform, providing new lift and footbridge including relevant service diversions. These works will enable the demolition of the existing Interchange and construction of the new Interchange, including 200nr residential units. This forms part of the next phase of works.

Willmott Dixon Construction has been appointed by TFGM to design and construct the redevelopment of the existing Bury Interchange within Bury town centre, creating a new Bus and Metrolink Tram Transport Interchange, ancillary infrastructure, including improved Metrolink access and Platform works over a series of phases.

Phase 1 'The Tram Stop' is the enabler of the overall redevelopment of the existing Interchange. It consists of the installation of a new pedestrian footbridge with associated landscaping situated at the Southern end of the platforms, spanning between the adjacent Union Square and Pyramid Park, providing passenger access and egress to the Metrolink platform to maintain the ongoing, live operation of the services during the subsequent Phase 2 rebuilding of the Northern situated Interchange building.

The Tram Stop works also include platform refurbishment and upgrade works including forming new canopies and diverting and providing new MEP, Security, Comms and Ticketing facilities. This allows the Southern end of the Metrolink platforms, which is accessed from the new bridge, can remain in live operation during the subsequent Phase 2 rebuild of the Interchange building which shall be a separate, subsequent appointment.



Landmarks

Work Zones



Bury Interchange, Phase 1, The Tram Stop – Location Plan

The construction site will operate primarily between the following hours and this will be agreed with TfGM/KAM as required, including submissions of relevant blockades in good time:

- Monday – Friday 7:30 – 17.00
- Saturday and Sunday 08:00 – 17:00 – where required

Due to the nature of the project working alongside operational electrified trams lines, some additional working periods would be required to ensure the safety of the operative, tram services and tram customers.

- Nights 17:00pm – 07:30am where trackside/Platform works to mitigate disruption to the Metro link operations or to maintain pedestrian safety during the works
- Nightworks 1:30am – 4:00am Delivery of materials to the platform working area whilst Night time Metrolink closure is in place.
- Planned Metrolink blockade closures during which 24-hour working will be required for a sustained period of 5 weeks to allow the platform reconstruction to be safely undertaken under a track overhead line isolation.
- 3 periods where weekend 24-hour working will be required to allow the safe installation of the new bridge, lift shaft, lift and the relocation of the Metrolink safety buffers and Overhead line stanchions

From a programme perspective, the works on site are split over two main sections, the bridge installation and the canopy works on the platform.

The construction period will be approximately 57 weeks with further design required to confirm precise period.

Planned commencement dates are highlighted in the table below. There are many other critical activities but the items below are the dominant activities critical to the completion of the project.

<i>KEY PROGRAMME MILESTONE DATES</i>	
Start on Site (estimated)	28 September 2026
Construction works 59 weeks	28 Sept 26 – 1 November 27
Site set-up 1 week	28 Sept 26 – 2 Oct 26
Site clearance 4 weeks	5 Oct 26 – 30 Oct 26
Platform and Canopy refurbishment	4 Jan 27 – 22 Sept 27
Public Realm Works Union Square:	28 June 27 – 22 Oct 27
Bridge installation	26 – 27 June 2027
Public realm works Pyramid Park:	21 June 27 – 4 Oct 27
Bridge Operational and interchange access closed	22 October 2027

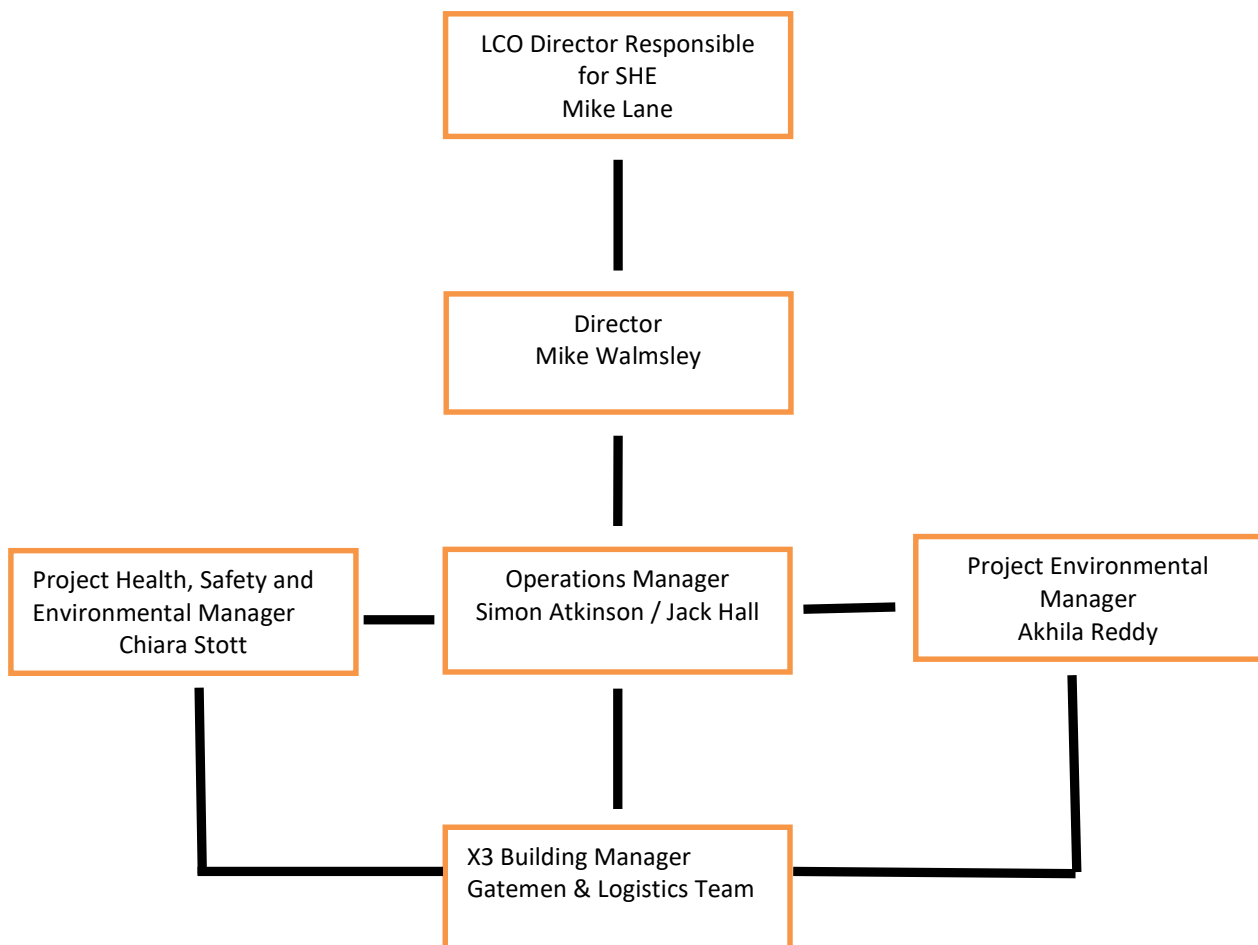
4. Project Team

The project team will be structured from the outset, and the team members will be carefully selected to give the project the best prospects for success.

The composition of the project team may change thought the duration of the project, but the initial team structure will be as outlined below with key contact phone numbers:

Name	Position	Tel
Mike Lane	Director of Delivery	
Mike Walmsley	Operations Director	
Claire Louise Lipinski	SHE Director	
Stephen Carbery	Regional Head of SHE	07376 161825
Chiara Stott	SHE Manager	
	Principal Sustainability Manager	
Akhila Reddy	Environmental Manager	
Simon Atkinson	Operations Manager	
Marie Hughes-Jones / Phil Lavers	Preconstruction Project Manager	07890 523 735
Jack Hall	Construction Manager	0797 653 9166
	Building Manager	
	Building Manager	
	Building Manager	
Mike Blackburn	Managing Surveyor	
Luke Gamble	Assistant Project Surveyor	

Latifah Meadowcroft	Principal Design Manager	
William Moss	Senior Design Manager	
James Wright	Senior Estimator	
Paul Crow	Planner	
	Document Controller	



5. Metrolink Electrical Hazard Zones

The electrical hazard zones are detailed within Transport for Greater Manchester Document 'Working safely near Metrolink'. These documents are to be referenced within the appropriate Method Statement/Risk Assessments as the works progress, clearly identifying the Metrolink Electrical Hazards Zones and proposed mitigation measures that form part of the proposed safe systems of work for each task.

**Diagram M1 –
Metrolink Electrical Hazard Zone**

Usually applicable in street running sections

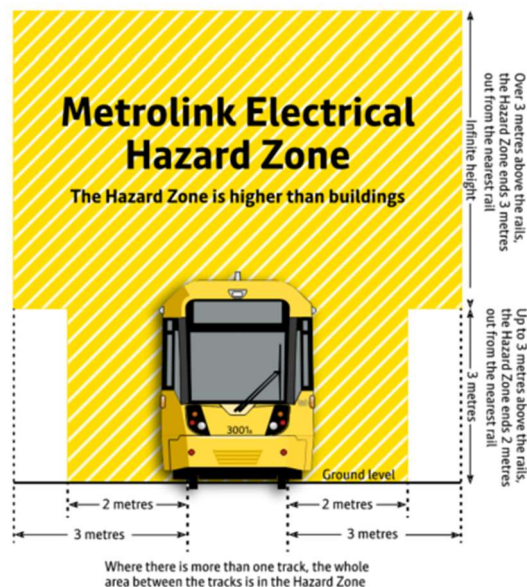


**Diagram M2 –
Metrolink Exclusion Zone around
overhead line poles**

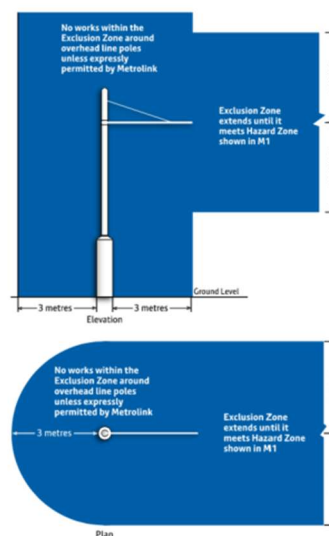
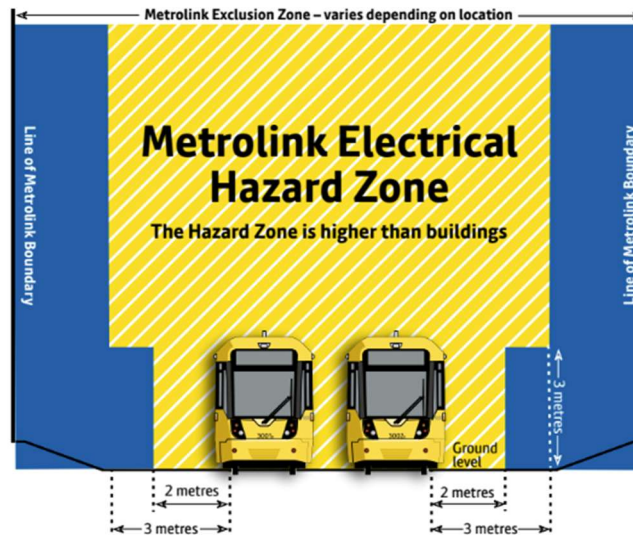


Diagram M3 – Metrolink Exclusion Zone

Area between Metrolink land boundaries and includes the Hazard Zone. Usually most applicable in segregated sections.



No person is authorised to enter the Electrical Hazard Zone to undertake works or carry or operate any equipment which has the potential to enter the zone without authorisation from Metrolink. All processes and procedures are to be followed as identified by Keolis Amey Metrolink

The following activities associated with the project are detailed below and whilst working on the platform and subsequent Metrolink areas, do enter the Electrical Hazard Zones.

We have been in significant dialogue with KAM and TfGM regarding these works and will ensure we are fully compliant with the KAM processes and procedures for relevant permits, approvals, training and sign-off procedures prior to commencing works.

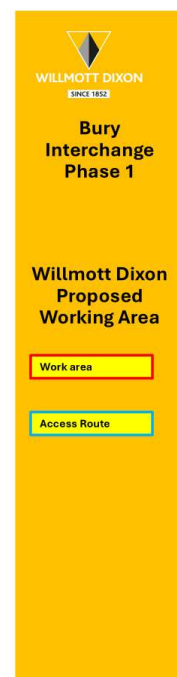
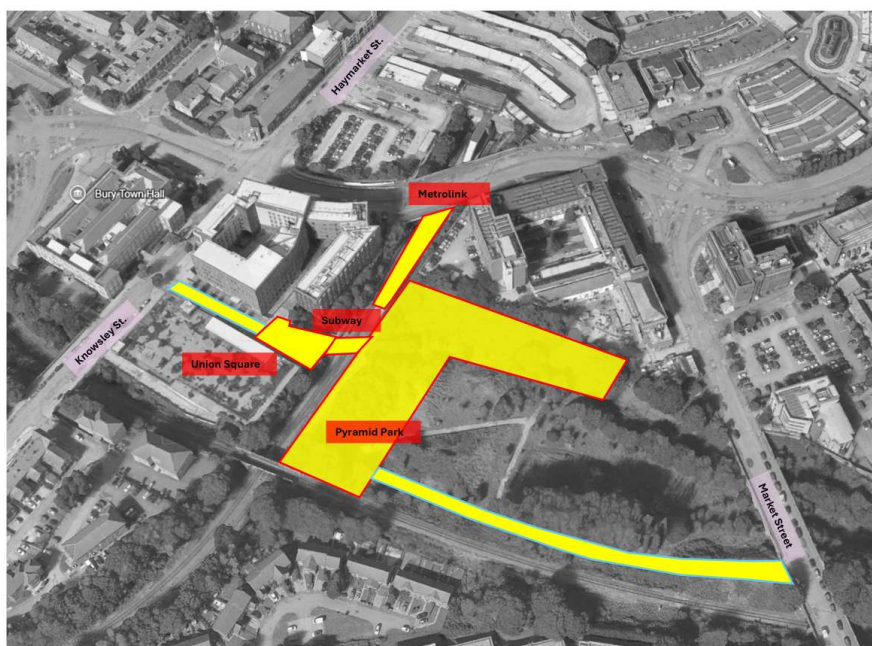
The proposed control measures associated with these tasks are detailed in Section 9 below.

6. Overview of Proposed Works & Logistics

6.1 Site Access and Traffic Management

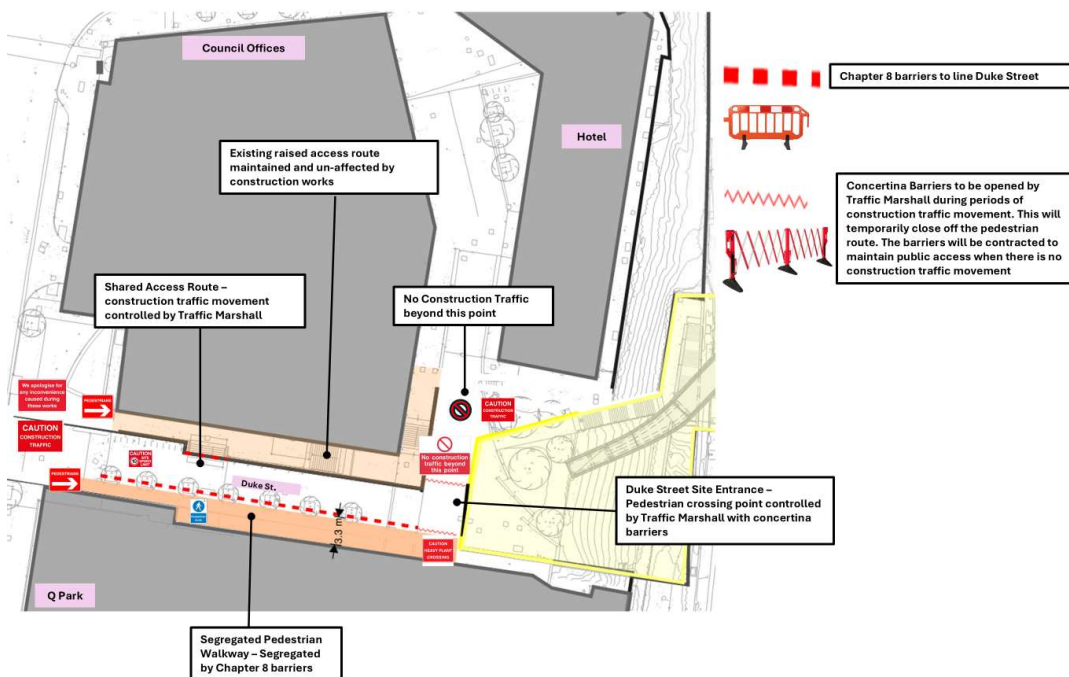
The project has three work areas, namely:

- Pyramid Park
- Union Square
- Metrolink Platform



Site Access to Pyramid Park work area will be via the existing KAM Metrolink service road which connects to the B6218 Market Street. A full time Gateman will be positioned at this entrance point during working hours to ensure only authorised vehicles enter the working area, whilst ensuring the safe egress of vehicle giving preference to pedestrians crossing over the site access point. The site gate will be closed and secured whilst not in use.

Access to our Union Square site entrance will be along the A58 to Knowsley Street and then onto Duke Street. Duke Street is a shared access road. Throughout the duration of the project, we will maintain the shared vehicle access route, and we shall provide a safe pedestrian access route along its length to ensure pedestrians are isolated from any construction traffic by Chapter 8 traffic barriers positioned along the length of Duke Street to form a segregated pedestrian route. A Full time Traffic Marshall will be posted on Duke Street to ensure the safe movement of construction traffic.




Bury Interchange Phase 1
Duke Street Pedestrian Management

Pedestrians will be directed via clear signage along the existing elevated pedestrian access route in front 3 Knowsley Place or along a segregated access route to the South of Duke Street adjacent the Q Park.

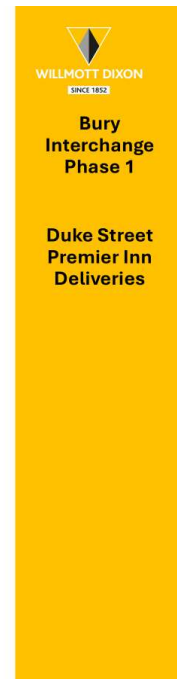
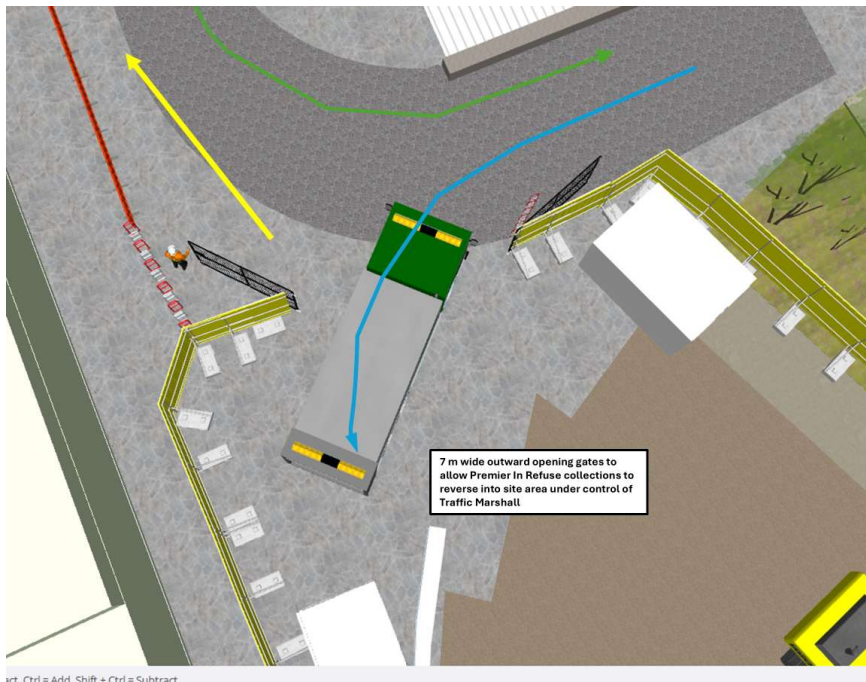
Pedestrian using this second route would have to cross in front of the site access gates. When no construction vehicles are using the site access, the gate will remain closed and secured. When construction vehicles are using the gate, the traffic Marshall shall temporarily close the pedestrian route in front of the site entrance by opening a concertina barrier. Once the vehicle has passed, the concertina barrier will be closed and the site gate closed and secured re opening the pedestrian access route.

Pedestrians and Vehicles using Duke Street will be notified of the presence of construction works and proposed access points by a series of appropriate warning signs located in the vicinity and along the route of Duke Street.

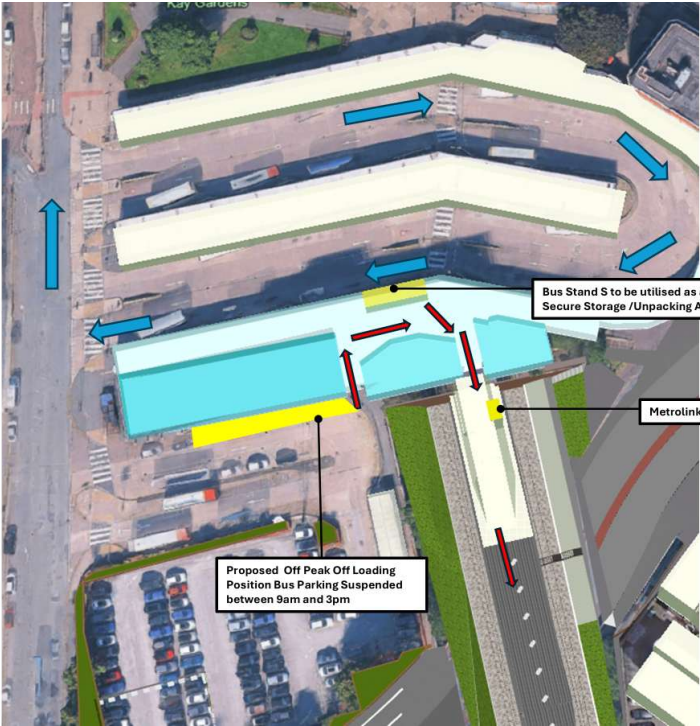


As noted previously Duke Street is a shared service road and we will need to maintain vehicular access to existing building served by Duke Street. The current arrangements for vehicle on Duke Street will remain unaffected with the exception where vehicle will need to use Union Square to reverse to allow forwards travel up Duke Street back onto Knowsley Road.

Our site hoarding will block the existing turning point. Therefore, to maintain this facility we will install an outward opening 7m wide gate. When delivery vehicles and refuse wagons need to leave Union Square, our Traffic Marshall located on Union Square, will open the site gates to provide the required turning point onto our site, Vehicles can then reverse onto site under the supervision of our Traffic Marshall allowing the vehicle to turn around and travel in a forward motion up Duke Street.



Access to the platform work area will be via the existing interchange building. A method and procedure to deliver small handheld deliveries has been agreed with the Bus Station Management team. Delivery vehicle will be permitted to off load materials either on the carpark approach road or via the bus station apron, to Stand S. Where handheld material will be carried through the interchange and along the operational North Platform to the segregated South Platform Work Area. Deliveries will be strictly restricted to off peak periods only between the hours of 9:00am to 15:00pm.



- Proposed off Peak distribution Route from off loading/Storage units via interchange building, Metrolink Platform access Stair, operational North Platform via gate into South Platform Work zone
- Off Peak periods only between 9am and 3pm and outside tram arrival periods
- SCP Delivery Route to Stand S
- Off Peak periods only between 9am and 3pm
- Scheduled Deliveries only



WILLMOTT DIXON
SINCE 1852

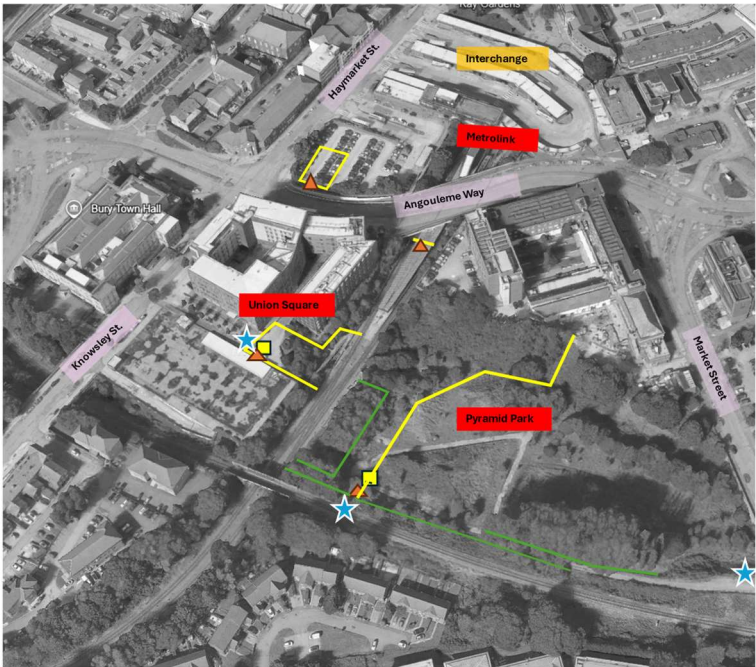
Bury Interchange Phase 1

Material Distribution Off loading Area

Interchange Car Park

6.2 Site Security

The site perimeter to all work areas will be secured with 2.4m high hoarding, vehicle gates and secure pedestrian turnstiles.



- Hoarding
- Vehicle Gates
- Gate house and Traffic Marshall
- Biometric Turnstile
- Tree Protection Zone



WILLMOTT DIXON
SINCE 1852

Bury Interchange Phase 1

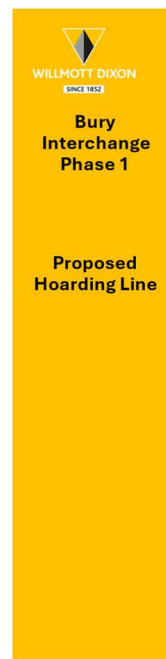
Site Hoarding

Rev Date : 16.12.2025
Drawn By : P Crow

The Hoarding will be either secured in ground (Pyramid Park) or on the Ground (Union Square) with 750kg ballast every 2.4m. The platform segregation will also be formed with Go Hoard, but supported by Water filled Ballast blocks to aid the hoardings construction on an 'island' location. Go Hoard is a highly robust hoarding constructed using recycled PVC waste, providing a more sustainable alternative to Timber hoarding. Vehicle access to Pyramid Park and Union Square will be via 2.4m high welded mesh metal gates, which will be secured when not in use. Examples provided below.

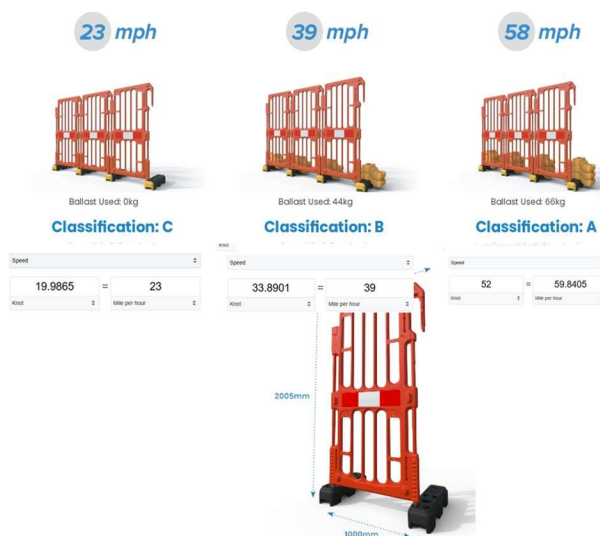


The platform edge shall be physically segregated from the work area using a ballast-mounted V-fencing system to prevent access to operational Metrolink infrastructure. The fencing system shall be independently stable and certified to withstand Beaufort Scale 7-8 wind conditions (Near Gale/Gale Force Winds). The exclusion zone shall be maintained at all times, with daily visual inspections recorded and thorough inspections each week. Additional inspections shall be completed following high winds or adverse weather.



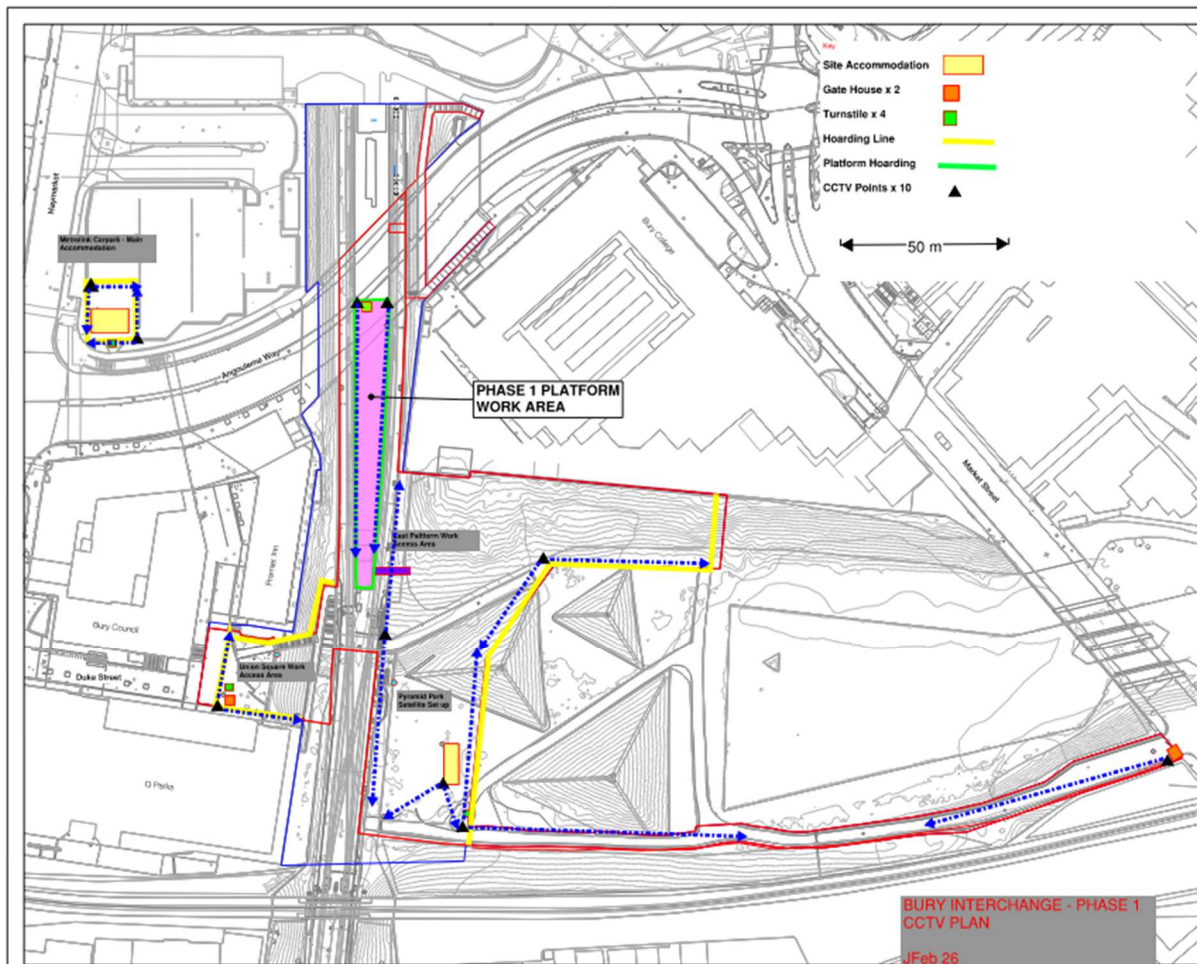
All temporary traffic barriers must be able to withstand three different classes of wind speeds with the use of a ballast. The standard BS 8442:2015 states the three classes as the following:
Class A: 26.3 m/s (58 mph)
Class B: 17.6 m/s (39 mph)
Class C: 8.7 m/s (19 mph)

The V-Fence Barrier was tested under strict conditions at the Full 50 Wind Tunnel at Mira to determine at which wind speeds the barrier withstands. Below are the results and guides as to the recommended ballast weight for each Wind Class.



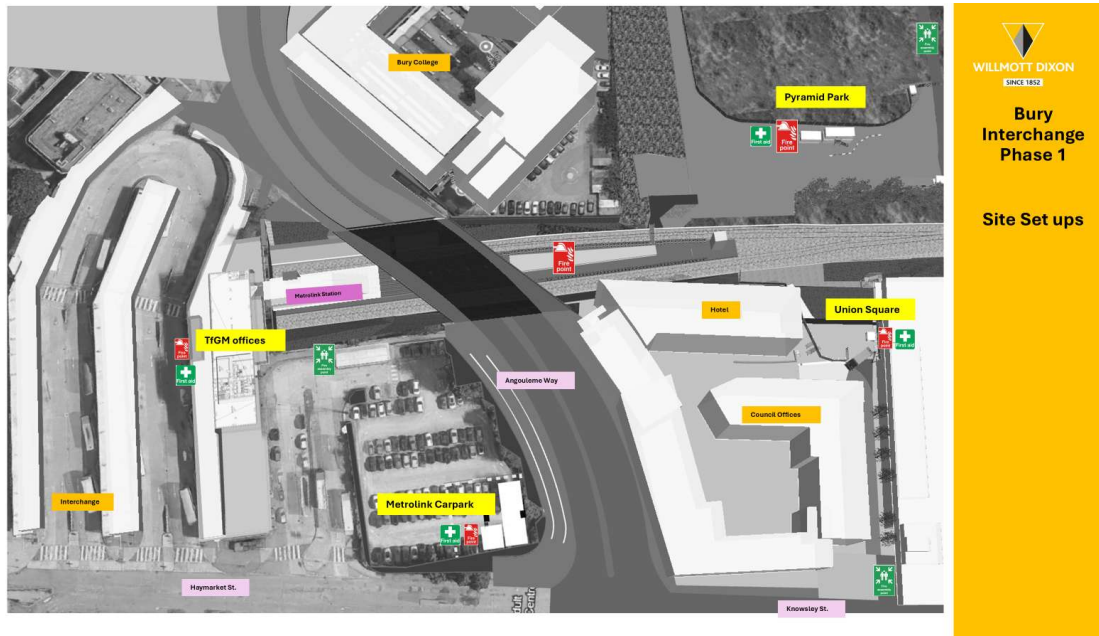
Beaufort wind scale	Mean Wind Speed		Limits of wind speed		Wind descriptive terms
	Knots	ms ⁻¹	Knots	ms ⁻¹	
0	0	0	<1	<1	Calm
1	2	1	1-3	1-2	Light air
2	5	3	4-6	2-3	Light breeze
3	9	5	7-10	4-5	Gentle breeze
4	13	7	11-16	6-8	Moderate breeze
5	19	10	17-21	9-11	Fresh breeze
6	24	12	22-27	11-14	Strong breeze
7	30	15	28-33	14-17	Near gale
8	37	19	34-40	17-21	Gale
9	44	23	41-47	21-24	Strong gale
10	52	27	48-55	25-28	Storm
11	60	31	56-63	29-32	Violent storm
12	-	-	64+	33+	Hurricane

Out of hours site security will be provided through monitored CCTV cameras, covering all site boundaries. All access points to the site will be gated and secured whilst not in use. Pedestrian site access will be controlled through a biometric turnstile with a facial recognition facility which will always record activity and personnel on site. Only authorised personnel who a pre-registered with the Willmott Dixon's site management team will be able to gain access to any work area.



6.3 Accommodation and Welfare Arrangements

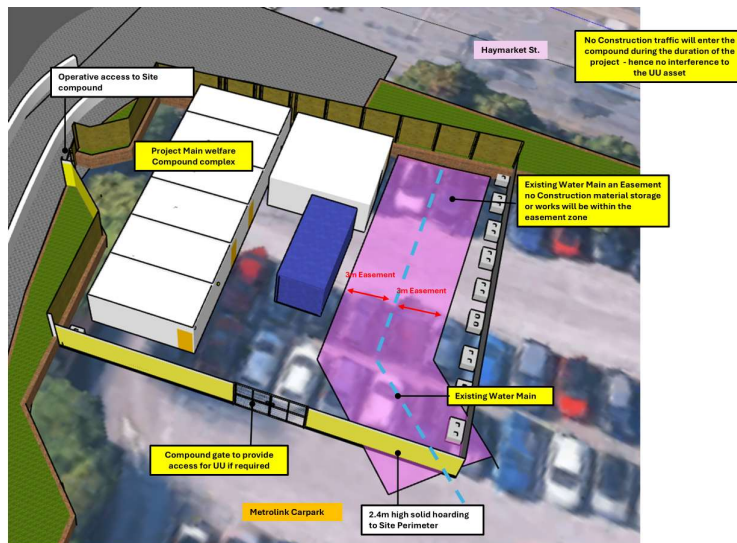
Due to the split site nature of the project a single site welfare and accommodation position would not be possible. Therefore, appropriately sized site accommodation and welfare facilities will be provided across the project.



Willmott Dixon's main site administration hub will be located on the first floor of the existing TfGM offices located within the Bury Bus Interchange.

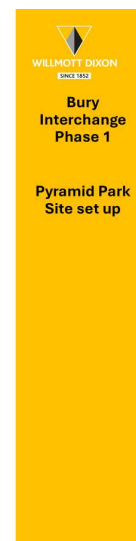
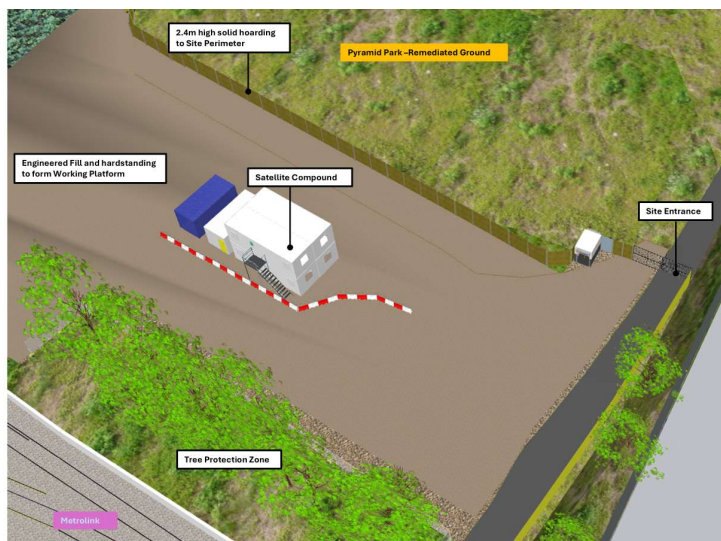
The primary welfare facility to service operatives working on the Metrolink platform will be located within the Metrolink Carpark off Haymarket Street. This provides office space for Supply Chain Site Supervisors, and the following welfare provision: Canteen, Male and female changing facilities, toilets, showers and Drying rooms. This facility will only have pedestrian access.

It is known that a United Utilities Water Main runs under within the compound location, therefore an easement will be created to ensure no accommodation units site within 3 m of the UU asset. A vehicle access gate will be provided within the site boundary to allow UU emergency access if required. No other construction related vehicles or parking facilities will be permitted within this welfare compound.

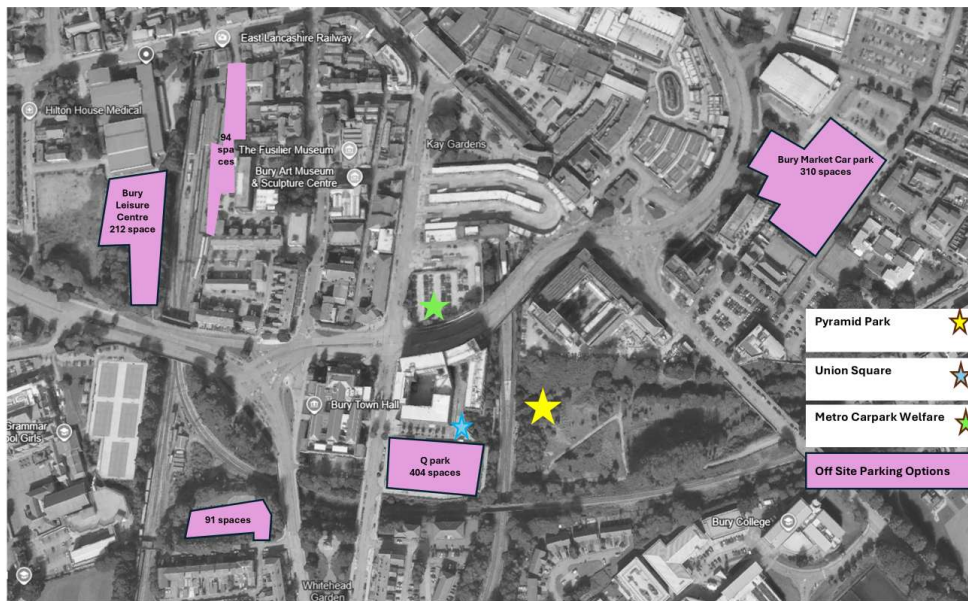


Union Square will be provided with a male and female toilet facility connected to a septic tank which will be serviced each week.

The Pyramid Park site area is isolated from the main welfare facility located within the Metro link carpark a suitable sized facility will be located within the Pyramid Park work area. This provides office space for Willmott Dixon and Supply Chain Site Supervisors, and the following welfare provision: Canteen, Male and female changing facilities, toilets, showers and Drying rooms



No parking will be provided onsite, within the exception of Pyramid Park, where some works will be undertaken outside of normal working hours and so a small on-site parking facility will be provided for operative working overnight. During normal working hours operatives, staff and visitors will be park on one of the several public car parks available within close proximity to the project.

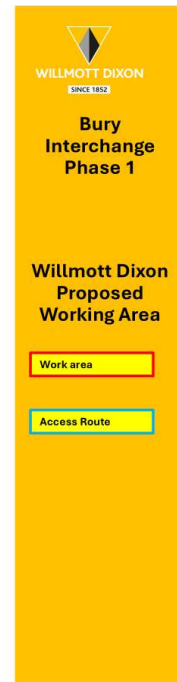
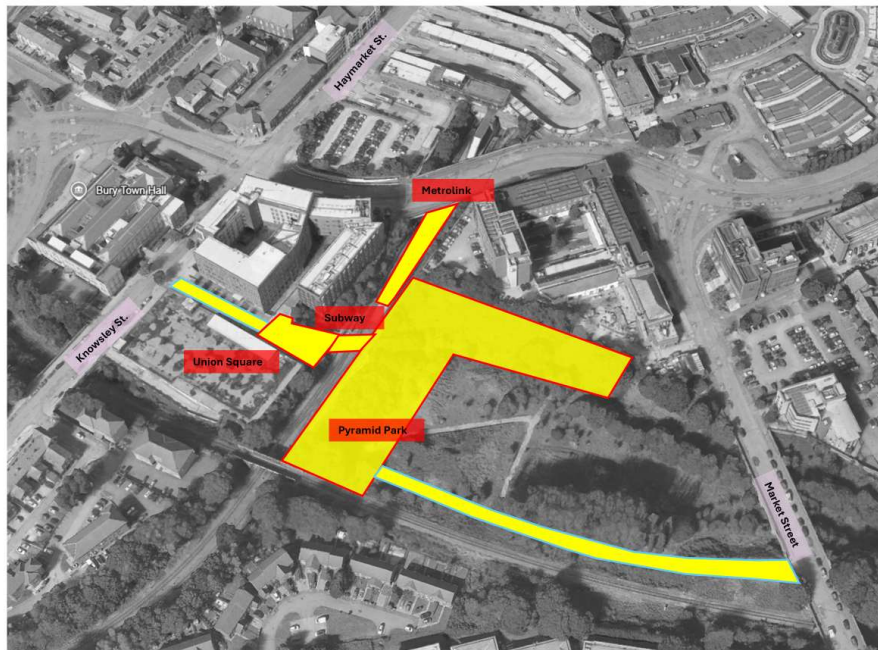


**Bury
Interchange
Phase 1**

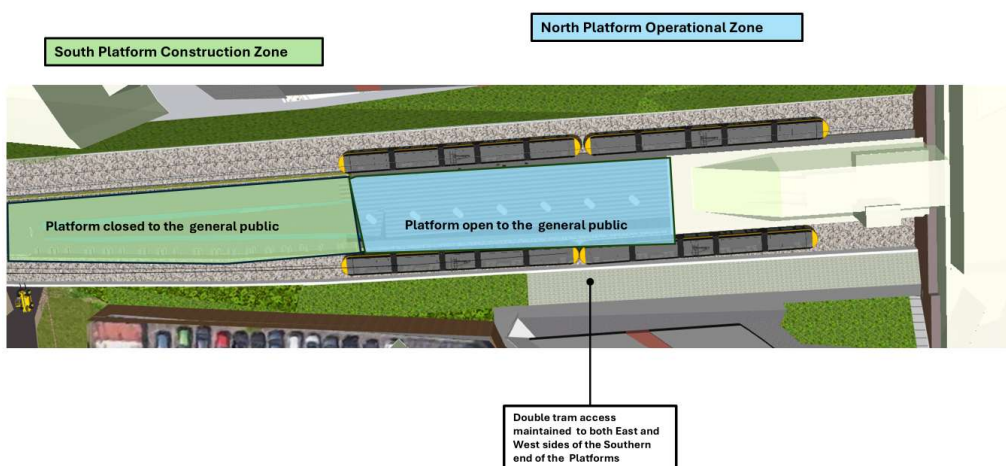
**Operative
Parking Options**

- Pyramid Park ★
- Union Square ★
- Metro Carpark Welfare ★
- Off Site Parking Options

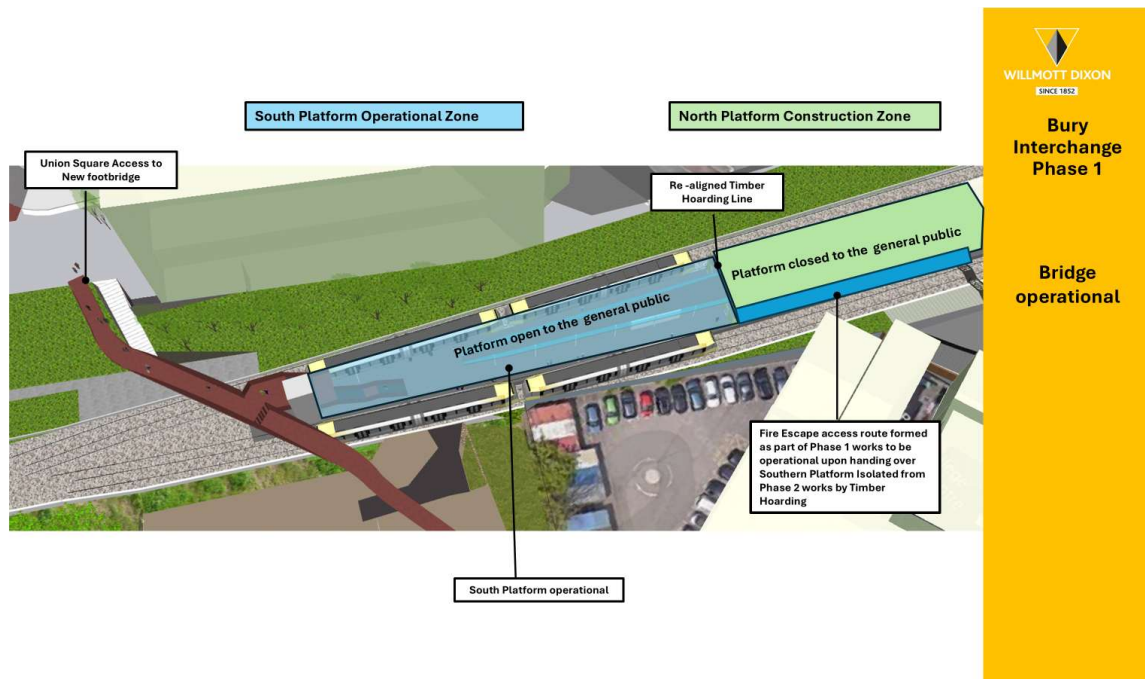
6.4 Logistic Plans



Works on the platform will commence 4 January 2027, the initial operation will be to segregate the operational North end of the platform, from the South End of the Platform which will become the construction zone. The North end of the platform will be accessed via the interchange and will remain operational throughout the project, with the exception of the pre-planned blockade periods, where tram services will be suspended and a bus replacement service will be provided.



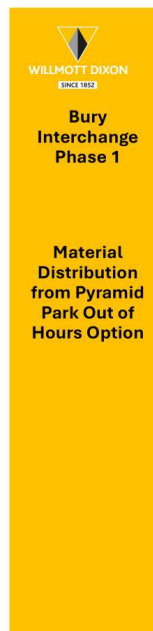
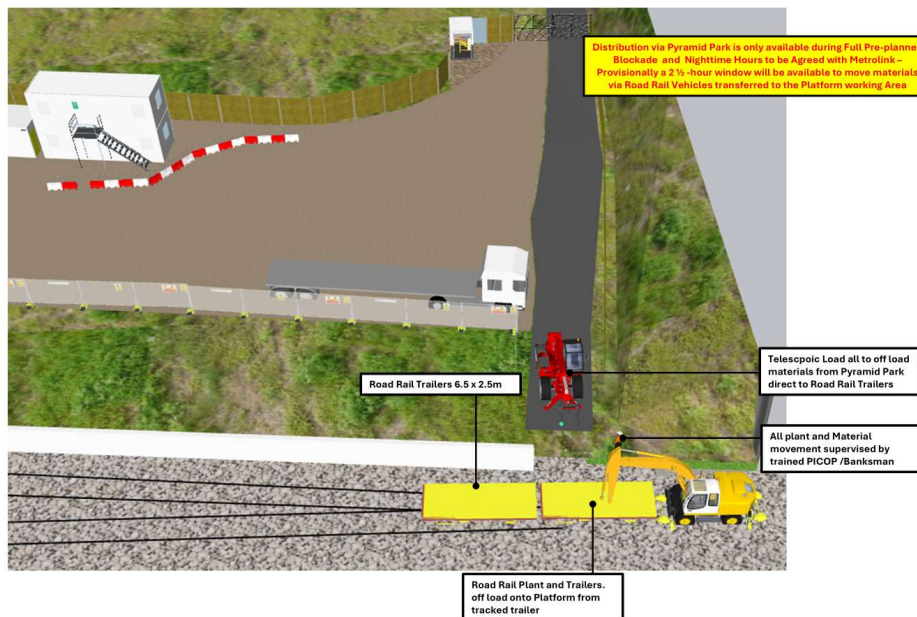
Upon completion of the Phase 1 works, the southern end of the platform will be reopened, and the North end of the platform will be closed to the public and tram operator and will become part of the Phase 2 construction zone. Access to the South platform will be via the newly constructed footbridge and lift, which will be accessed via Union Square.



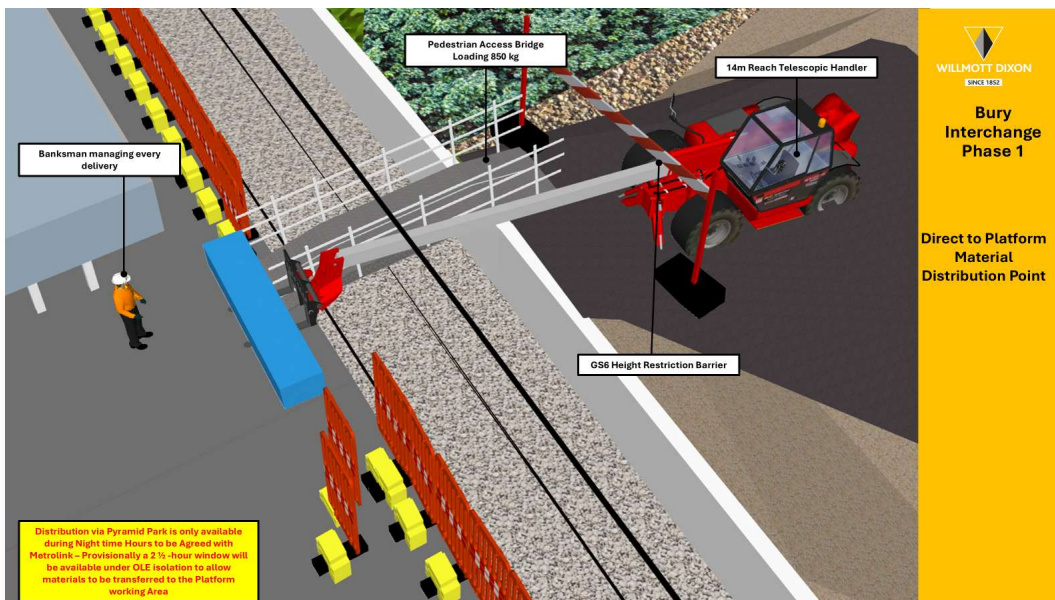
6.5 Material Distribution

Material Delivery to the platform area will have to be undertaken during night time track isolation, outside of Metrolink operating, generally between 1:30am and 4am.

Large bulk materials will be distributed to the platform work areas by Road Rail Vehicle, operated by our Specialist Metrolink approved contractor. The road rail vehicles will be loaded up from Pyramid Park by an all-terrain telescopic handler. The Road Rail trailer will be manoeuvred along the track by a Road Rail Long reach machine which will off load the materials directly onto the platform.

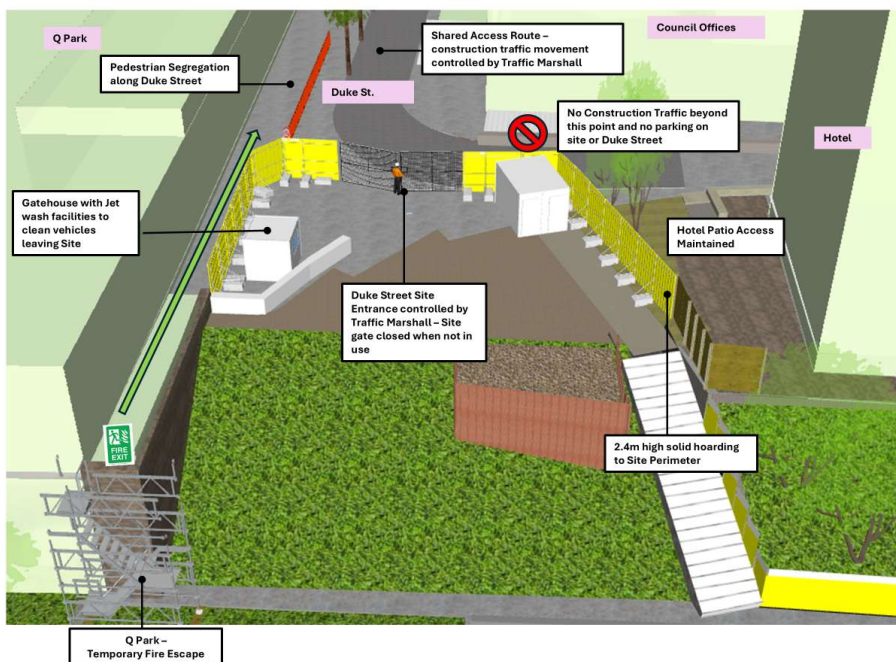


Smaller materials will be loaded out onto directly on to the platform from Pyramid Park by a long reach Telescopic handler. A physical height restriction barrier will be in place to protect the Metrolink assets during the below lifting operations. It has been agreed provisionally that distribution from this methodology will be complete during out of hours, provisionally a 2.5hr window will be available under OLE isolation to allow materials to be transferred to the platform working area.



6.6 Union Square Fire Escape and Muster Points

Existing Fire Muster points to building adjacent Union Duke Street will be maintained, the existing Fire escape route for the Q Park which currently uses the steps adjacent the Premier Inn to egress on to Union Square will have to be revised. The current route would mean the planned evacuation route would enter our work area. To ensure the safety of carpark users in the event of a fire, we will provide a replacement evacuation route, this would be via a temporary Haki staircase which would be positioned outside the Q Parks low level fire door and give direct access up to the existing Q Park walkway at high level.



6.7 Platform Fire Escape Route

The existing Metrolink evacuation plan, where passengers are asked to move to the Southern end of the platform in the event of a fire in the interchange. To maintain this system, we are proposing to install a fire escape door in the segregation hoarding line on the platform. A Fire Marshall shall also be in attendance during the tram operational hours [circa 130 hours per week]. The Fire Marshall will ensure a cleared route is maintained during site working hours, and establish a clear access route through the work site during the sites non-working hours.

Passengers will then be directed along the track onto Pyramid Park. An evacuation will be provided on site.

BURY INTERCHANGE PH1 (The Tram Stop)
METROLINK CONSTRUCTION MANAGEMENT
PLAN

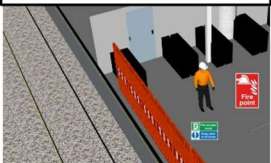


North and South Platform segregate
Hoarding with Push bar Fire Escape Door



1.2m wide clear access
route to be formed at the
completion of each work
shift

Platform Fire Marshall located upon the platform
at all times whilst the Metrolink is in operation
as requested by KAM Metrolink – 130 hrs week

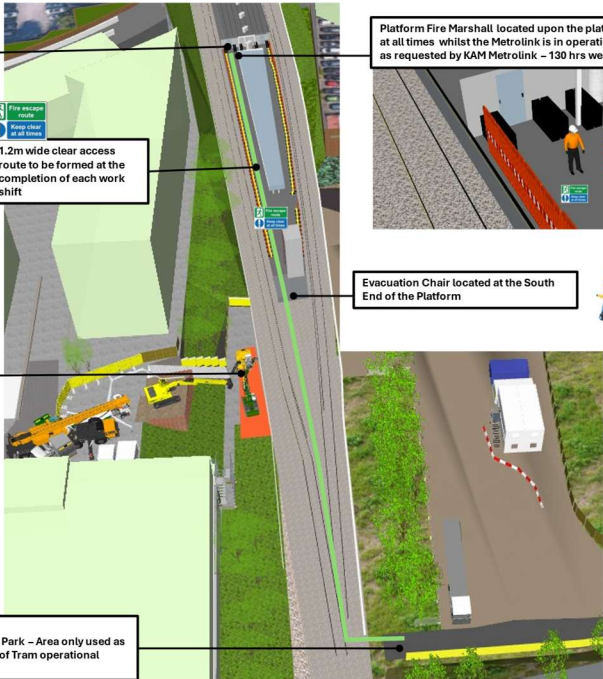


Evacuation Chair located at the South
End of the Platform



Union Square Work Zone
not suitable as escape
route

Fire Refuge Point
Located within Pyramid Park – Area only used as
a loading point outside of Tram operational
times



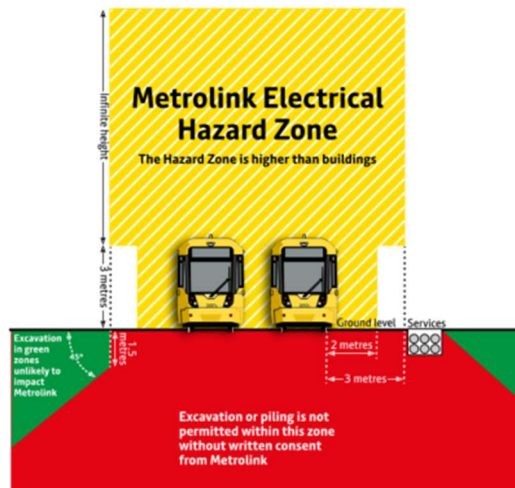
Bury
Interchange
Phase 1

Proposed
Platform
Evacuation
Route

7. Excavating Near Metrolink

The excavation and piling constraints are detailed within Transport for Greater Manchester Document 'Working safely near Metrolink'.

Diagram M5 –
Excavation and piling constraints



Authorisation is required from Metrolink when:

- Excavations or piling works enter the red zone.
- There is a risk of the equipment entering the Electrical Hazard Zone.
- The topple/collapse radius of any excavator or piling rig extends into the Electrical Hazard Zone.

The scheme involves excavation works as part of the scope involving the platform replacement works, involving works taking place within the electrical hazard zone. Predominately this is being undertaken during the agreed blockade periods.

A safe system of work for works in TfGM's hazard zones will be agreed and must combine TfGM exclusion zone rules, electrical safety guidance and Metrolink Safety protocols. The framework should be built around risk assessment, exclusion zones, permits, training, and supervision to ensure both worker and public safety.

All RAMS and safe systems of works will be agreed with KAM Metrolink in advance of commencement, with blockades and permits agreed accordingly.

8. KAM / TfGM Metrolink Handover and Handback Procedure

Willmott Dixon are aware and have agreed that the Metrolink Handover and Handback Procedure will be followed throughout, with input from Transport for Greater Manchester ("TfGM"), together with Willmott Dixon Construction and the relevant construction partners and KeolisAmey Metrolink ("KAM"). This will set out the terms, conditions and obligations necessary to safeguard and protect the relevant assets during the course of the project and clearly define the process through the AMP procedures.

This procedure is part of the Engineering Management and Safety Management of Change process, as described in SMS 350 and 313. It controls the maintenance and operational responsibilities of the Metrolink assets through a finite project cycle and identifies responsibilities of the contractor appointed to renew or replace assets or introduce new assets.

9. KAM / TfGM Basic Asset Protection Agreement

It has been agreed that a Basic Asset Protection Agreement ("BAPA") shall be entered into between Transport for Greater Manchester ("TfGM"), together with Willmott Dixon Construction Ltd and KeolisAmey Metrolink ("KAM"). The BAPA shall set out the terms, conditions, and obligations necessary to safeguard and protect the relevant assets during the course of the Project.

The Parties further agree that the detailed provisions of the BAPA, including but not limited to scope, responsibilities, liabilities, and procedures, shall be developed and incorporated as they are agreed through ongoing discussions between the Parties. Until such time as the BAPA is executed, the Parties shall act in good faith and cooperate to ensure that interim measures are in place to protect the assets concerned.

10. Controls for Working Adjacent to the Metrolink Hazard Zones

a. Retention of 24 hour site access to Metrolink equipment, cabinets, chambers for low voltage power, signalling and communication cables for Metrolink both during construction and once operational.

It is accepted (subject to agreement of terms and conditions) that authorised representatives of KAM/TfGM will be permitted to enter the site areas at Bury Interchange outside of the standard working hours for the purposes of inspection, maintenance and emergency works.

Out of hours shall mean any time outside those specified in the above identified working hours of this document.

Access will be permitted to authorised KAM/TfGM representatives outside of these hours.

The access party shall endeavour to provide as much notice as possible before any out of hours visit. Notification shall include names of personnel, purpose of visit and expected duration.

All persons requiring access to the site must comply with site safety rules, including induction requirements and wearing the appropriate PPE.

It will be necessary for any persons who initially respond to any emergency call out to be inducted at the commencement of the project. This will enable them to access the site without a representative from Willmott Dixon being available on site.

Willmott Dixon emergency procedures must be followed at all times. Lone working is prohibited unless expressly authorised.

Authorised persons from KAM/TfGM will be provided with details of how to access the site outside of normal hours. This information will be updated and issued to KAM/TfGM as necessary as conditions on site change.

Access will be limited to areas necessary for the maintenance of the Metrolink infrastructure only. KAM/TfGM will be responsible for the conduct of their personnel while on site.

Any damage caused during access shall be rectified at the Access Party's expense unless due to Willmott Dixon negligence.

Each party shall maintain adequate insurance coverage.

There will be a clear policy of a zero-tolerance approach for trailing cables as all temporary 110v power and lighting cables will be suspended via proprietary 'sky hooks' to ensure they do not trip emergency responders or block access to Metrolink chambers.

b. Access to TfGM/KAM service chambers within site areas

In addition to the out of hours access agreement, there are several underground service chambers and key infrastructure that which will require protection while the construction works are ongoing:

- Care will be taken when positioning the hoarding and undertaking construction works to ensure that it does not prevent access into these chambers or any Metrolink infrastructure.
- A full review will be completed of any chambers which are identified as being susceptible to damage by construction works. Subject to agreement with KAM/TfGM, these will either be fenced off or the construction of these chambers upgraded as appropriate.
- No materials will be allowed to be stored on these chambers.
- No vehicles will be allowed to park on these chambers.

c. Loading and unloading of plant and materials

Traffic both off and on site, including the loading and unloading of plant and material deliveries will be managed to minimise the impact on the Metrolink network. Full Traffic Management Plans will be produced and updated as site conditions change.

The following will be implemented:

- Loading and unloading of deliveries and plant will be dealt with inside the boundaries of the site to prevent these causing a nuisance outside of the site boundary.

- Duplex Communication Systems: to overcome the high background noise of active tram interchange, if required, all traffic marshals, plant operators and slingers will use the full-duplex communication headsets opposed to relying on hand signals.
- GS6 Height Restrictions – where required, physical height restriction posts will be adopted including warning signage (HSE GS6) at all vehicle egress points approaching the Metrolink OLE.
- Pedestrian Swept Path – to ensure a 1.8-metre physical clearance on all footways interfacing with deliveries, to ensure passengers are never forced into active bus or tram routes.
- Use of cranes on site to maximise efficiency in material distribution. This will be agreed in advance with KAM to ensure no oversailing of the tramway or Metrolink corralling infrastructure.
- Switch off engines when not required.
- Parking will be on adjacent pay and display car parks to prevent congestion of the site areas.
- Appropriate wheel washing noting the requirement not to use jet wash equipment in close proximity to the Metrolink.
- Preparation of access routes.
- Appropriate hardstanding and haul roads.
- Scheduling of deliveries.
- Site speed limits.
- Road sweeping as necessary.

d. Storage of plant and materials used during construction

Storage of materials on site will be kept to a minimum. Material deliveries will be booked in by the supply chain prior to arriving on site. This will be monitored by Willmott Dixon to ensure excessive materials are not delivered to site.

Control measures (e.g. covering materials which could contribute to airborne dust, tying down materials which could be blown by high winds etc) will be implemented as necessary.

Material storage areas will be positioned so that they do not prevent out of hours emergency access to the Metrolink assets.

Materials will be stored so that they do not prevent access to the underground service chambers.

Plant and equipment will be locked up out of normal working hours to deter unauthorised use.

All plant and equipment will be placed under a plant nappy or drip tray. Double banded fuel bowzers and any chemicals will be stored at least 10 metres away from any Metrolink track drainage catchments.

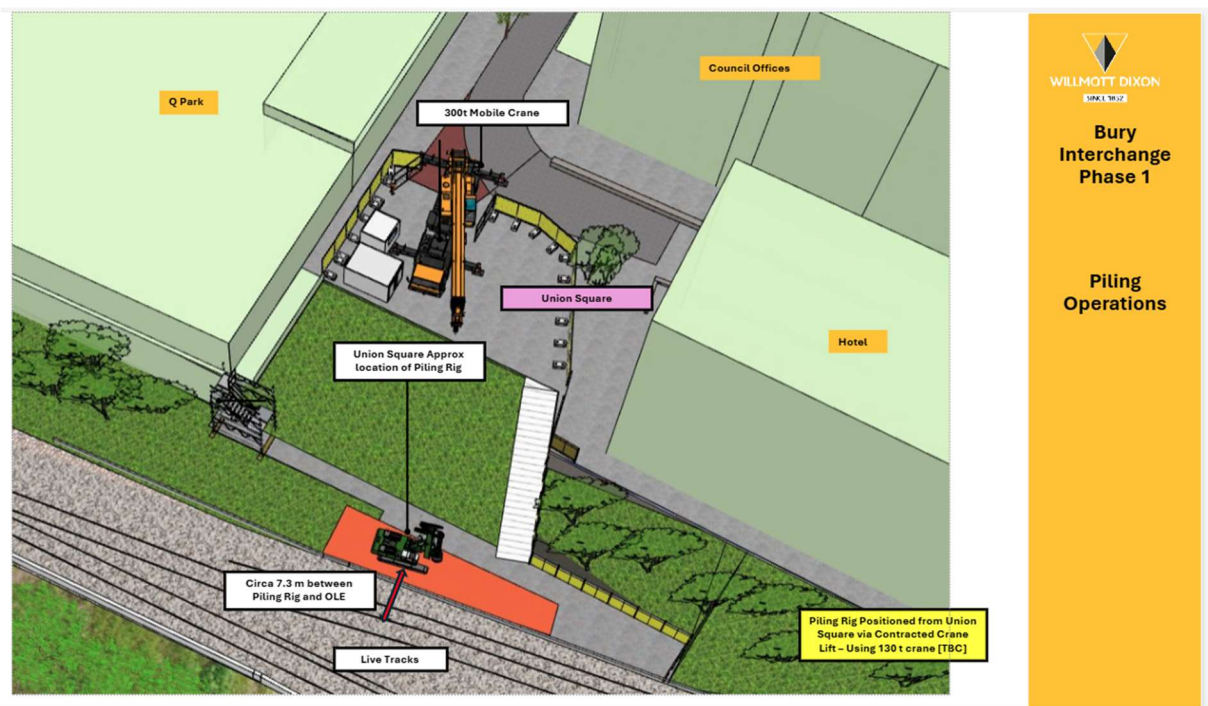
Any mobile plant parked overnight will be immobilised, keys removed and parked parallel to the tracks (not facing them). All mobile plant and hazardous materials, where feasible, will be placed to prevent contaminants washing onto the trackway.

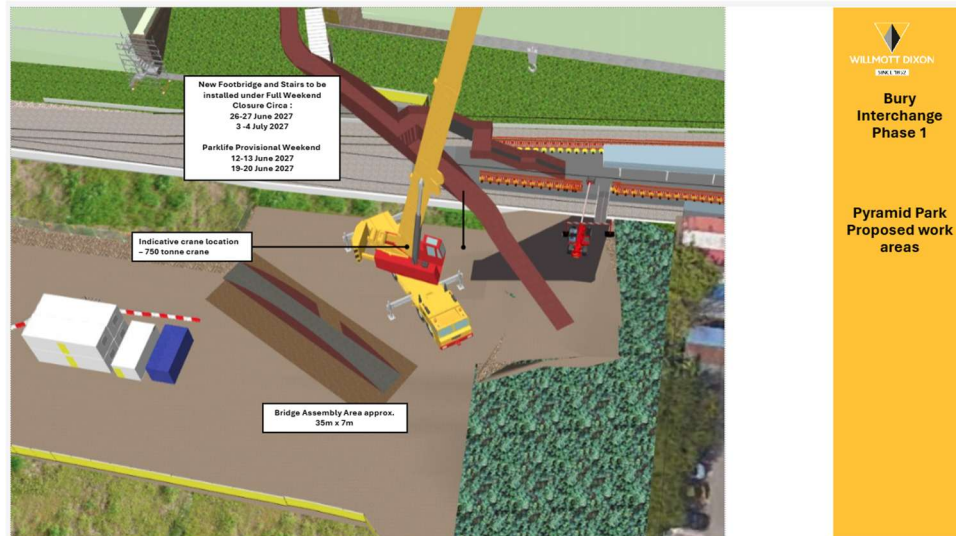
e. Use of cranes & construction methods

As part of the strategy, mobile tower cranes will be used in specific periods of the programme. This will be to lift plant into position via Union Square, as shown below, or alternatively lift the bridge into position via Pyramid Park. These will be done under agreed conditions with KAM Metrolink, as outlined above and are to be undertaken during the blockade periods when the tram is out of use. The Union Square works will be complete on an agreed date on a Sunday to minimise disruption.

All crane lifts will be agreed in advance with KAM Metrolink with all procedures followed, which include:

- The cranes must not over sail the tramway. The only exception is when in free slew during hours of non-operation.
- A full lifting plan will be issued to KAM/TfGM and agreed prior with a focus on over sailing and safe parameters agreed in full. The preference for KAM is that cranes must not over sail the tramway, with the exception being during out of hours operations.
- The cranes will only be used to 80% of the load capacity.
- Mobile cranes will be partially or fully derigged when not in use





In addition, as per KAM procedures, we will adopt a '1.2m Excavation Rule' where that non-destructive vac excavation or hand-digging will be enforced within 1.2m of any known Metrolink buried service.

As part of our Service Avoidance procedures, a GRP & Underground Services Co-Ordinator will be in place before any breaking ground takes place. The Ground Penetration Radar (GPR) survey will be in a valid date of 3 months from any excavation works and overseen by a dedicated Digging Services Co-Ordinator, with operation of a strict Permit to Dig System.

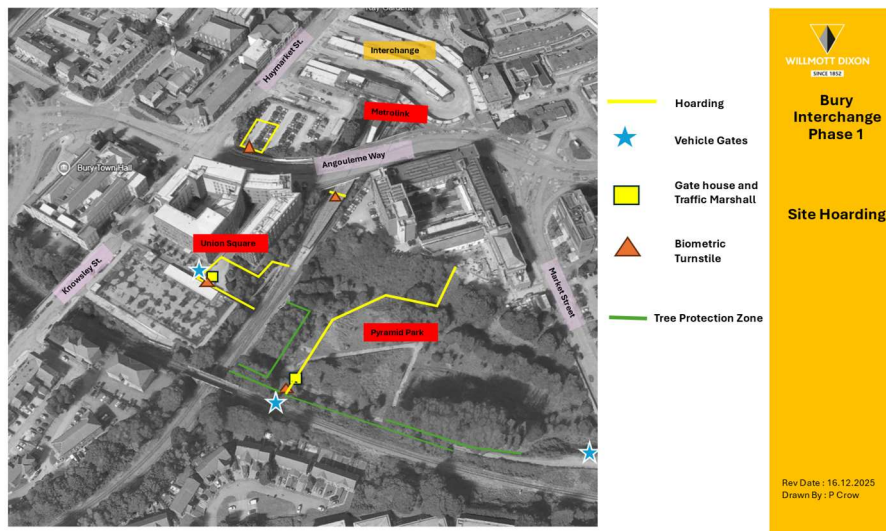
For works progressing while trams are running (ALO), physical barriers (as identified in hoarding section) will be used. Ensure excavators and cranes are fitted with high-performance physical and software slew restrictors.

For any lifting operations or a crane operating within its collapse radius of Metrolink infrastructure, it will be strictly restricted to 80% of its safe working load capacity.

f. Erection and maintenance of site hoarding

As detailed in the sections above, a hoarding will be erected to the full perimeter of the whole site area.

The location and type of hoarding has been agreed with TfGM/KAM as per the information issued earlier and drawing.



In specific to the site hoarding system to be used on the platform edge, the Metrolink lines shall be physically segregated from the work area using a ballast-mounted V-fencing system to prevent access to operational Metrolink infrastructure. The fencing system shall be independently stable and certified to withstand Beaufort Scale 7–8 wind conditions (Near Gale/Gale Force Winds). The exclusion zone shall be maintained at all times, with daily visual inspections recorded and thorough inspections each week. Additional inspections shall be completed following high winds or adverse weather.

The hoarding will be subject to a full Temporary Works Design by a qualified Temporary Works Structural Engineer.

The following has been agreed with KAM/TfGM:

- The hoarding can be erected under a Metrolink 'Blue Permit', obtained by submitting a Work Request Form accompanied by detailed RAMS for the works.
- There are sections of the hoarding which will be located within the Electrical Hazard Zone around the OLE line poles. These will be highlighted through safety signage displayed in these areas and non-conductive overhead service warning goal posts for any transiting vehicles.

The hoarding will be inspected by Willmott Dixon Construction Ltd daily with inspections recorded on a minimum weekly basis.

Willmott Dixon Construction Ltd will be responsible for cleaning and maintenance of the hoarding.

g. Measures to control the emission of dirt and dust during construction

Construction dust may be generated because of excavation works in preparation of the foundations for the proposed development. Should any activity associated with construction cause or appear likely to cause visibly dust to be carried towards any sensitive boundary, the activity will be modified or suspended until the conditions causing the emissions are resolved.

Mitigation measures could include but are not limited to:

- Screening and damping down during excavation works.
- Haulage routes dampened down as necessary.
- Paved and stoned up roads kept clean.
- Suitable wheel washing noting the restrictions around jet washing adjacent to the Metrolink.
- Storage of potentially dusty materials away from site boundaries.
- Covering of any potentially dusty materials stored on site.
- Suitable road sweeping.

Other construction related dusts could result in emissions during construction. Again, if this is experienced, the activity will be monitored or suspended until the conditions causing the emission are resolved.

Mitigation measures could include but are not limited to:

- Eliminating dust by processing materials off site where practicable.
- Dust extraction systems.
- Dust suppression system.

11. Contact Details

Willmott Dixon Construction contact details are included in Section 4 of this document.

Work request forms can be obtained at: www.tfgm.com/tram-safety or by emailing eplanner@metrolink.co.uk

12. Summary

Project specific Risk Assessments and Method Statements will be produced for all activities adjacent to or within the KAM/TfGM hazard zones.

These will be issued to KAM/TfGM as and when they are received from the specialist contractors completing the works.

No works requiring authorisation will commence until this has been formally agreed with KAM/TfGM.

This Construction Management Plan must be kept up to date as the project develops.

The items included in the initial plan may not be exhaustive and will be work dependent.

Safety is paramount – if in doubt whether works require authorisation, contact KAM/TfGM and ask.

13. Emergency Response Process

KAM/TfGM Emergency Process is outlined below.

This process has been incorporated into Willmott Dixon Construction Ltd document RMS-PL-023 Safety and Environmental Emergency Planning Arrangements (SEEPa).

If work obstructs the track unexpectedly, if anything comes into contact with the overhead wires or if tramway equipment is damaged, please inform the Metrolink control room immediately. The NMC (Network Management Centre) emergency number is contained below.

The emergency control room can be contacted at any time by:

- Using the emergency help point at any tram stop.
- By telephoning 0161 203 5619 – in emergencies only!
- Contacting a Metrolink representative.
- By contacting the emergency services (if needed) using 999.

If an approaching tram must be stopped

- Signal to the driver by holding both arms above your head
- Stand where the driver can see you
- Do not stand in the path of the tram.

Emergencies during work

If work obstructs the track unexpectedly, if anyone or anything comes into contact with the overhead wires, or if tramway equipment is damaged, please inform the Metrolink control room immediately.



Emergency contact

The control room can be contacted **at any time** by:

- Using the emergency help point at any tram stop.
- By telephoning **0161 203 5619** (emergencies only).
- Contacting a Metrolink representative.
- You can also contact the emergency services (if needed) using **999**.

You must tell the control room that there is an emergency. The controller will ask you for details of the emergency. Please answer the questions as quickly as possible.

Questions the control room will ask in an emergency:

- **Who** are you and where are you?
- **What** has happened?
- Is anyone or anything touching the overhead lines?
- Is the track obstructed?
- Which emergency services are needed (if any)?



Please ensure you follow any instructions given by the controller.

If an approaching tram must be stopped, signal to the driver by holding both arms above your head.

You should stand where the driver can see you, but not in the path of the tram.