

# Demolition Management Plan



## **Project: Castings Demolition**

### **Document Reference**

The Castings -DMP

### **Version- Tender**

**Revision - 01**

### **Prepared By**

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## REVISION RECORD

| Version | Date     | Page / Section Affected                                                        | Prepared by | Approved by |
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| Initial | 12.03.21 | All                                                                            | AM          |             |
| Rev 01  | 04.05.21 | Page 25 - Section 8.3 Noise – Saturday working Revised to 08.30hrs to 14.00hrs | CR          |             |
| Rev 02  | 16.07.21 | Page 18 updated to show half road closure to long acre street                  | PC          |             |
| Rev 03  | 19.08.21 | Road width to Longacre St – noted that 3.1m to stay open                       | PC          |             |
|         |          |                                                                                |             |             |
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## 1. INTRODUCTION

JRL has been appointed to prepare a demolition method statement for the part demolition of the existing castings building. This Demolition Management Plan has been developed to demonstrate the logistical feasibility of the project. Its purpose is to provide foundation principles, for the method of demolition and the protection of neighbouring facilities. A demolition programme indicating anticipated works periods has been generated to run alongside this plan

Its main purpose is to ensure the project is undertaken in an environmentally responsible manner and to current industry best practice and standards. It also seeks to ensure works are carried out with minimal disturbance to neighbouring properties, highways and members of the public by setting out a methodology within which the demolition works will be carried out.

Where appropriate options have been identified and assessed in accordance with relevant selection criteria. The key elements reviewed include:

- Site Security and Access Control
- Programme
- Pedestrian and Vehicular Traffic Management
- Materials Delivery Co-ordination
- Material Distribution
- Waste Management
- Good Neighbour Policies / Environmental Impacts

## 2. OUTLINE DEMOLITION METHOD STATEMENT.

### The Site

#### Existing Structures

The existing site comprises of two structures, these are both brick built with steel trusses supporting asbestos cement roof sheets.

#### Surrounding Land Uses/Adjoining Properties and Premises

The immediate area is dominated by Industrial and commercial buildings to the south, along the line of the approach to Manchester Piccadilly Station, and more residential areas to the north.



## Overall Sequencing of the works at the Traders Building

- Noise and Vibration Monitoring installation and Benchmarking
- Site investigations and pre-start surveys
- Design temporary works
- Site Set up Hoardings and scaffold protection
- Soft strip from the buildings
- Demolition Enabling works
- Progressive dismantling and demolition of the building
- Removal of Slabs and Foundations
- Site Demobilisation

## Pre – Start

Visual surveys will inform the method and confirm the nature of the structure of the Temporary Works required. Alongside the surveys, record and archive drawings will assist and develop the method and confirm the assumptions made. Such results will be made available to the project team.

During this period applications for licenses and agreements are made while designs are informed for Temporary Works and the protection of the retained services.

Opening up works with the consent of the developer will inform the method and confirm the nature of the structure and the Temporary Works required. Alongside the surveys record and archive drawings will assist and develop the method and confirm the assumptions made. Such results will be made available to the project team.

During this period applications for licenses and agreements are made while designs are informed for Temporary Works and the protection of the retained services.

## Site Establishment and Facilities

### Site Accommodation

On receipt of the Instruction to Proceed, the primary objective will be the establishment of office and welfare facilities. Our proposal in this respect is during the early stages of the works, to set up an Oasis Unit within the site boundary. This will allow us the time to get the full office set up. The facilities will comprise drying room, canteen, office and toilets. We will establish these in the Midgard set up.



The facilities will comply in all respects with current HSE guidelines including the provision of mains water and electrical services and have a dedicated PPE free safe access to them at all times.

The facilities will have dedicated cleaning staff to ensure they are maintained to the highest standard. A gateman will also be placed externally at the proposed vehicle access point Bridge Road to manage vehicle movements and control pedestrian access.

## Fire Safety

JRL Group will produce a fire plan which will be displayed on site notice boards and included in the site induction. Any Fire Safety duties performed by personnel will be undertaken in accordance with the Fire Plan.

Fire marshalling duties will be undertaken by appropriately trained and certified operatives.

Additionally, JRL Group will carry out regular reviews / updates of the Fire Plan to ensure it remains current.

JRL Group will provide fire points, which will be strategically located throughout the work areas. Fire points will include, as a minimum, fire point stand, fire extinguishers (1No Co<sub>2</sub> and 1No water), sand bucket, rotary hand bell and back panel for fixing appropriate signage (evacuation route, emergency procedures, etc.).

Appropriate signage will be positioned around the demolition area to effectively communicate the plan to the operatives. Emergency escape routes and exits will also be prominently signed.

In addition, the existing fire escape routes will be kept clear and maintained at all times. These will be indicated on the fire plan and briefed to all operatives during the induction.



## Demolition Enabling Works

### Existing Site Services

The importance of the isolation of incoming and shared high risk utilities will be an absolute priority during this phase of the works. In conjunction with the isolation any necessary temporary supplies will be installed to ensure an adequate supply of water for damping down at all loading and demolition faces and adequate provision for the welfare and site accommodation. All services will be isolated back to the point of entry to the building for use as temporary builder's supplies.

### Gas and Electrical Supplies

Our in-house specialist M&E contractor Ark will be employed to isolate the remaining services back to the incoming heads. All gas mains will be purged prior to disconnection.



Ark will also install the temporary power and water supplies to the site accommodation and power to the work areas.

On receipt of the instruction to proceed, ARK will survey each area to determine the locations of the Meters the readings and the MPAN numbers of the Electric Meters. Photographic records will be used to compile a full report of the current situation with the meters. This information will allow each individual service provider to attend site and remove their assets.

Our Utilities Tracker Document will be used to manage this process. The electricity supply to the units will be able to be made dead from the incoming Heads, this will allow an 110v supply and a water supply to be installed to the working floors to allow the commencement of the Soft Strip and Asbestos removal. The soft strip period will serve as the window for the service providers to reclaim their assets.

Water connections will be manged in the same way

### Demolition Protection Works

### **Asbestos Removal**

The existing buildings that require soft stripping pre-demolition may contain previously unidentified asbestos containing materials.

A full Pre-Demolition and Refurbishment survey will be completed for the Castings building. This will locate known asbestos and any asbestos that can only be located through intrusive surveying

A detailed 'Working Method Statement' and HSE ASB5 Notice will be issued for licensable asbestos materials.

Removal of any asbestos containing materials (ACM's) will be done in accordance with the demolition / refurbishment reports in accordance with Control of Asbestos Regulations 2012 and prior to the demolition work commencing.

Any asbestos identified will be double bagged. All bagged ACMs will be placed in to an enclosed skip for disposal.



The work area will be cordoned off with appropriate signage posted and only operative with the correct additional PPE will be permitted to enter i.e.: disposable overalls and half masks with P3 filters. A decontamination unit will be plumbed in to the site welfare area and a safe transit route established from the work area to the DCU.

All asbestos work will have full time supervision and JRL's Asbestos Manager will make regular visits and inspections.

All employees are asbestos awareness trained and all asbestos will be identified on site following the completion of the pre-demolition survey with asbestos stickers and/or spray paint as appropriate ensuring all operatives are aware of the potential hazard.



## Soft Strip

Initially a small element of pre-strip will be required to facilitate any asbestos removal. Once complete and the asbestos materials have been removed releasing critical zones or complete floors the soft strip removal will progress. Soft strip will comprise the removal of carpets, ceilings, fixtures, fittings, tenant's rubbish, non-load bearing partitions and mechanical and electrical installation.

The soft strip will be carried out in two phases by operatives skilled in works of this type. Phase One will comprise all combustible materials and be completely removed prior to the commencement of Phase Two. Phase Two will be predominantly the mechanical and electrical installation, which will involve the use of 'hot works'. Phase Two will be carried out under a strict 'Hot Works Permit Regime'.

Materials generated from the soft strip will be segregated into the following for recycling: -

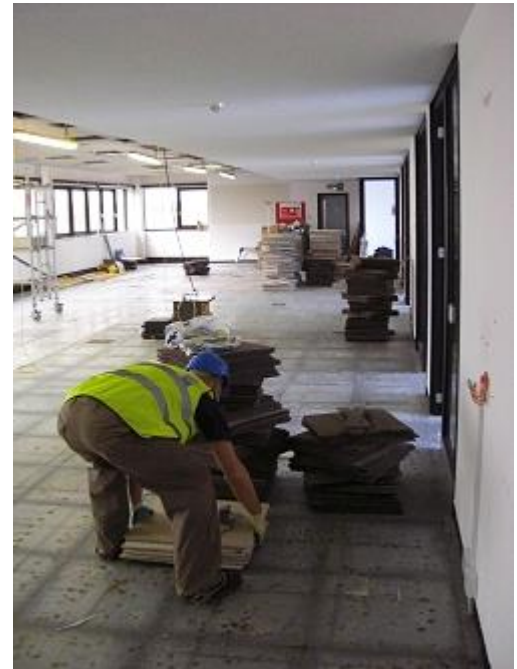
- Joinery, doors, architraves, skirtings, etc. will have nails, screws and ironmongery removed and sent to the Particle Board Industry.
- Glass, where suitable, will be sent for Cullet Merchants.
- Plasterboard will be sent for recycling by British Gypsum.
- Ferrous and non-ferrous materials will be sent to scrap metal merchants for recycling.

All waste is further segregated and sorted off site prior to recycling in order to achieve the minimum amount of material sent to landfill. We are currently achieving 97% or better.

## M&E Removal on the Floors

Once the Ceiling tiles and Grids and the Raised Flooring has been removed the Floor M&E will be visible. This will then be removed by a deplanting gang. The below floor cables will be cut using reciprocating saws and small tools. This will provide a stable platform for the access towers to allow the above ceiling plant to be cut down. The above ceiling plant will be cut using reciprocating saws where possible to clear the majority of the light plant back from the heavier gauge installations. The heavier plant will be cut using oxy propane torches and sectioned into handle able sizes prior to removal by the chute. The ceiling will then be cleared of fixings as the works progresses.

## De-Planting Works



The Remaining M&E plant will be drained down and certified as dead by our internal M&E Company ARK. This will allow the plant to begin to be removed. Large sections of plant will be cut out or unbolted. The sections of the plant will be cut along the same lines as the installations ie at flange locations or as a whole item such as splitting a motor from the pump it powers. This can then be moved using a bobcat with a fork lift attachment. Skids and dolly boards will be used to move the plant out of the building to a 20t excavator that will reprocess the material into recyclable sections



Plant will then be cut out in large sections to be removed from the building using bobcats and mini excavators. This will then be reprocessed by a larger machine with a scrap shear before being placed in bins for recycling.

## Asbestos Roof Removal

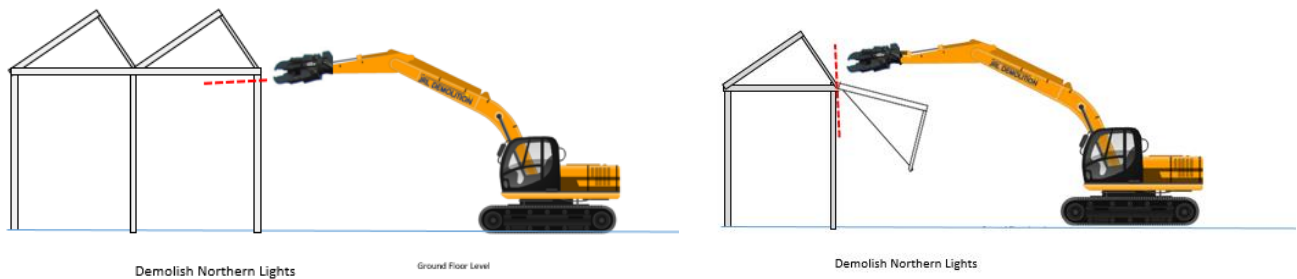
Once the Buildings have been stripped out and the underside of the asbestos roof is visible this will be removed.

Working from scissor lifts on the ground floor slab the j bolts will be cut using oxy propane cutting equipment. This will allow the sheets to slide down and into the scissor lift. The sheets will then be transferred into a lined skip for disposal. Personal and background monitoring will be carried out by a UKAS accredited analyst to demonstrate that the control limits have not been breached



## Demolition Sequence

Prior to the start of structural demolition all the protection measures allowed for will be in place. The building will be suitably soft stripped and the services cut back and made safe. The asbestos cement Roof will be stripped back exposing the frame. The rear wall of the building will be removed using the excavator to allow access into the structure. The roof trusses will be separated by the shear and the structure “sat” down onto the slab. This will then be placed behind the demolition machine for processing prior to removal.



**Slab and Foundation Removal**

A trained operative shall first scan the area with a cat scan and genny device insuring to the best of his knowledge there are no live hidden services.

The slab shall then be broken using a hydraulic breaker. Where possible the slab is to be pulled up using the excavator bucket. This will help to reduce the noise created from the pneumatic breaker. The footings throughout the footprint of the building are to be removed.

All concrete shall be heaped into an allocated position ready to be loaded into lorries for removal. The work area shall then be graded off and tracked in leaving it in a tidy state.

The area will be examined for signs of oil contamination and if necessary sampling of the contamination arranged

**Post Demolition.**

On Completion of the demolition the slabs will be made safe for any follow on trade. All pits will be filled with suitable material and all slab edges ramped down to avoid trip hazards. Where edges cannot be safely ramped fencing will be secured to the slab around the hazard, or the slab will be removed to ground level. All treatment of Hazards will be noted in the H&S File.

**Load Away Arisings & Processing**

We will have a water supply at hand for dust suppression to ensure that dust impact on the environment is reduced to a minimum.

Material will be loaded away as work proceeds in order to maintain a clean and unobstructed work environment. A road sweeper will be on call at all times to ensure the public highway is kept clean. In addition vehicles will have the wheels washed as they exit the site.

All soft strip material and other hazardous materials will be removed off site in a timely fashion to minimise the risk of fire and contamination.

**Waste**

The project team will be committed to maintaining the highest environmental standards and demand the same standards throughout the supply chain. In conjunction with the logistics provider, regular audits will be conducted or preferred waste carriers, transfer stations and landfill sites. These audits are intended to confirm compliance with legislation and to ensure every effort is being made to maximise the recycling of waste generated from site.

Best practice dictates that waste segregation should be undertaken at source. This does not simply mean 'on site' but actually at the point of waste generation at the workplace. Segregation at source is the only methodology that does not require a secondary process to sort collected mixed waste.

Mixed waste collected from site will be segregated off site at a local waste transfer station where all materials will be processed through a MRF (Material Recycling Facility). Materials will be handpicked and sorted into various categories ready for onward transportation to recycling depots. Materials that are deemed to be recyclable will then be sent through a trommel to be pulverised and used for fines, any materials remaining from the process will be sent to landfill. It is estimated that > 97% of non-hazardous construction waste generated on the project is recyclable. The project team will agree a target benchmark for waste reclamation (i.e. waste diverted from landfill). This target will be published in the Site Waste Management Plan.

### Site Waste Management Plan

A project waste champion will be appointed to ensure procedures are kept relevant and up to date and also to ensure waste materials leaving site are recorded for project benchmarking purposes. The client shall appoint a waste 'champion' to be responsible for the development of the Site Waste Management Plan and subsequent implementation and compliance. This may be the principal contractor but an alternative appointment may be made to ensure design and pre-construction activities are incorporated.

### Water Management

Gullies that are within the demolition zone will be sealed to prevent the ingress of debris to the sewer system. This will be by use of a gully guard or similar system. Where gullies are outwith the demolition debris zone they will be cleaned about and filled with sandbags to prevent debris from being able to access the drainage system. The gullies will continue to drain water through the sandbags to maintain surface water drainage and prevent a build-up of surface water that can run off. At the end of the demolition the sand bags will be removed from the gullies and the gullies re-cleaned out as required.



### Health & Safety

Health & safety is an integral part of the planning process for each project. Implementation of comprehensive Health & Safety System and Procedures ensures every facet of the construction process is planned, managed and monitored. This also ensures compliance with statutory obligations.

Designers and contractors engaged on the project will be competent and adequately resourced. This will be achieved by:

- Completion of prequalification health & safety questionnaire
- Interviews to ascertain compliance with their legal duties
- Review of existing health & safety policies and procedures
- Review of their health & safety performance and site visits

As Principal Contractor we will produce the Construction Phase Plan based on the current information and the pre-tender plan. The plan will set out the arrangements for managing and monitoring the project. Contractors

engaged to carry out works on the project will be issued with this Health & Safety Plan so that they can integrate this management philosophy into their health & safety plans. The project team will implement the plan assisted by specialist health & safety advisors.

All persons will be encouraged to express their views and concerns about health & safety. This is achieved by the formulation of various routes. These include:

- Project Health & Safety committees
- Safety representatives from each contractor
- Toolbox talks including a feedback process
- Discussion and briefing on method statements and risk assessments

An 'open door' policy will be employed whereby any individuals can discuss health & safety issues with any member of the project team. Site notice boards, toolbox talks and posters are used to convey relevant information to persons on the project.

## 3. SITE SECURITY & ACCESS CONTROL

### 3.1 Introduction

The demolition works will be part of the Midgard redevelopment of the site and as such all access will be coordinated between JRL demolition and Midgard. This will allow coordination of deliveries and prevent vehicles backing up onto the roads. 24hrs Notice will be given to Midgard of predicted vehicle movement to allow access to be planned

### 3.2 Generally

The general security of the site falls into three main categories:

- a) Maintaining a secure perimeter
- b) Preventing unauthorised access
- c) Deterring acts of theft and vandalism

This protection is provided by a combination of physical and manned security.

### 3.3 Physical Security

Physical security of the site will be afforded by the erection of perimeter hoarding and fencing erected in accordance with the Code of Good Construction Practice

Hoardings will incorporate a number of lockable gates to effect access and egress for both pedestrians and vehicles. Proposed barriers are identified on the logistics plan. Further measures including alarms to scaffolding (when installed at the perimeter of the site) and floodlighting to security sensitive areas during the hours of darkness will also be considered.

## **4. PEDESTRIAN ACCESS**

### **4.1 Maintaining Site Security**

In order to maintain site security it is important to provide the minimum practicable number of pedestrian access/egress points. In this instance a single access point into the project is proposed. Access into the site will be managed to ensure only authorised personnel gain access. The primary control point will be located at the designated pedestrian access. This control point shall be permanently manned to process visitors and non-inducted personnel.



### **4.2 Security Access Control**

All personnel and visitors arriving on site should immediately report to the project security reception within the project accommodation. All personnel entering the site will be required to log in and out of the site this point, this attendance information being essential should there be an emergency site evacuation.

### **4.3 Site Layout**

Pedestrian access / egress points and primary circulation routes are depicted on the site logistics plan. Vehicles making deliveries to the site or demolition material will travel via the designated routes.

Operatives will attire themselves with appropriate PPE within the site welfare before proceeding onto site. When passing between the welfare compound and the working site all personnel will be required to pass through a security control point. Within site, pedestrian routes will be delineated, segregated from vehicular construction traffic. These shall be classified as site walkways and the wearing of PPE in these areas shall be mandatory.

### **4.4 Transport Links**

There is limited parking available on site and local parking facilities are limited. It is, therefore, recommended that site personnel travel to site on public transport. The Manchester Piccadilly Hub is located within 5 minutes' walk with many train and bus services connecting

## **5. VEHICULAR ACCESS**

### **5.1 Introduction**

When considering vehicular access the four primary issues to consider are:

- a) Maintaining site security

- b) Segregation of pedestrian and vehicular traffic
- c) Manoeuvring of vehicles
- d) Delivery co-ordination

Vehicles will be pulled onto site as they arrive. The large paved area on site will be used to hold deliveries whilst they are processed. At no point will deliveries be allowed to queue on the road

## **5.2 Maintaining Site Security**

In order to maintain site security it is important that vehicle areas provide access to vehicular traffic only. Pedestrian access should be prohibited at these points. Vehicle access gates should be kept closed, opened only to receive or disperse vehicles. Vehicle access will be manned during site operational hours.

## **5.3 Vehicular / Pedestrian Segregation**

Vehicles and pedestrians should, wherever practicable, not share access / egress or circulation routes and vehicles shall enter/exit the site at a separate location to pedestrians. Protected pedestrian routes will be established within the site to ensure segregation from vehicles.

## **5.4 Delivery Co-ordination**

Site access / egress for all materials and waste will require tight control, and daily Liaison with Midgard. All delivery vehicles will drive into site with the assistance of the traffic marshal to the designated loading/unloading area. Traffic Marshalls will halt pedestrians and cyclists if necessary while vehicles are entering and leaving the site. Once the vehicle is unloaded or loaded, the vehicle will leave site under the Traffic Marshall's guidance.

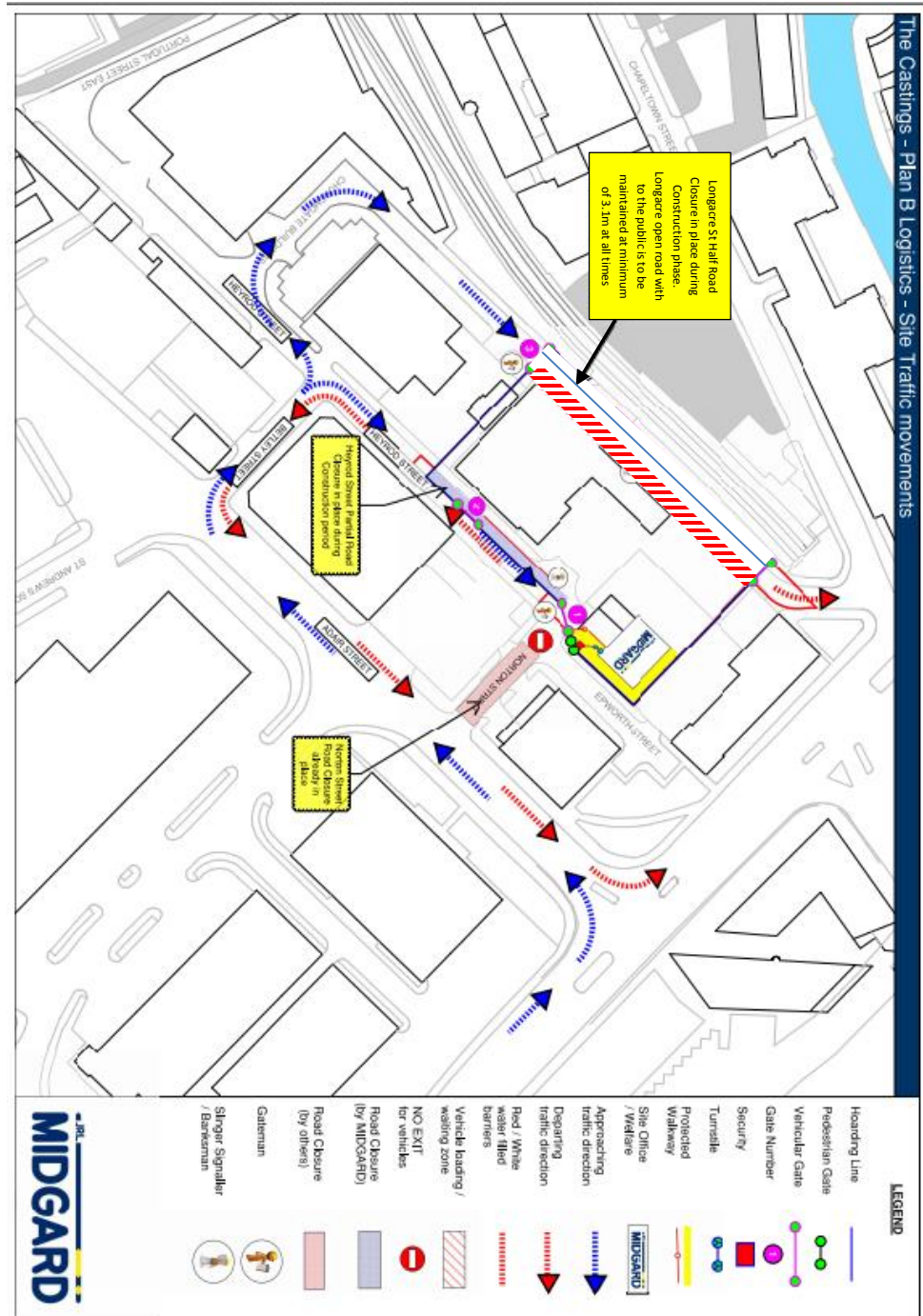
The development of a scheduling system will provide an efficient and effective means of controlling all deliveries. The implementation of pre-agreed delivery schedules and programmes will ensure that all deliveries arrive at the right time with materials being efficiently despatched to the correct offloading and storage zone. Daily delivery schedules should be provided at all gate posts/offloading points. Regular delivery meetings between all trade contractors should be implemented to ensure that the delivery schedules are pre-agreed with all. All suppliers will be required to service the site utilizing FORS members.

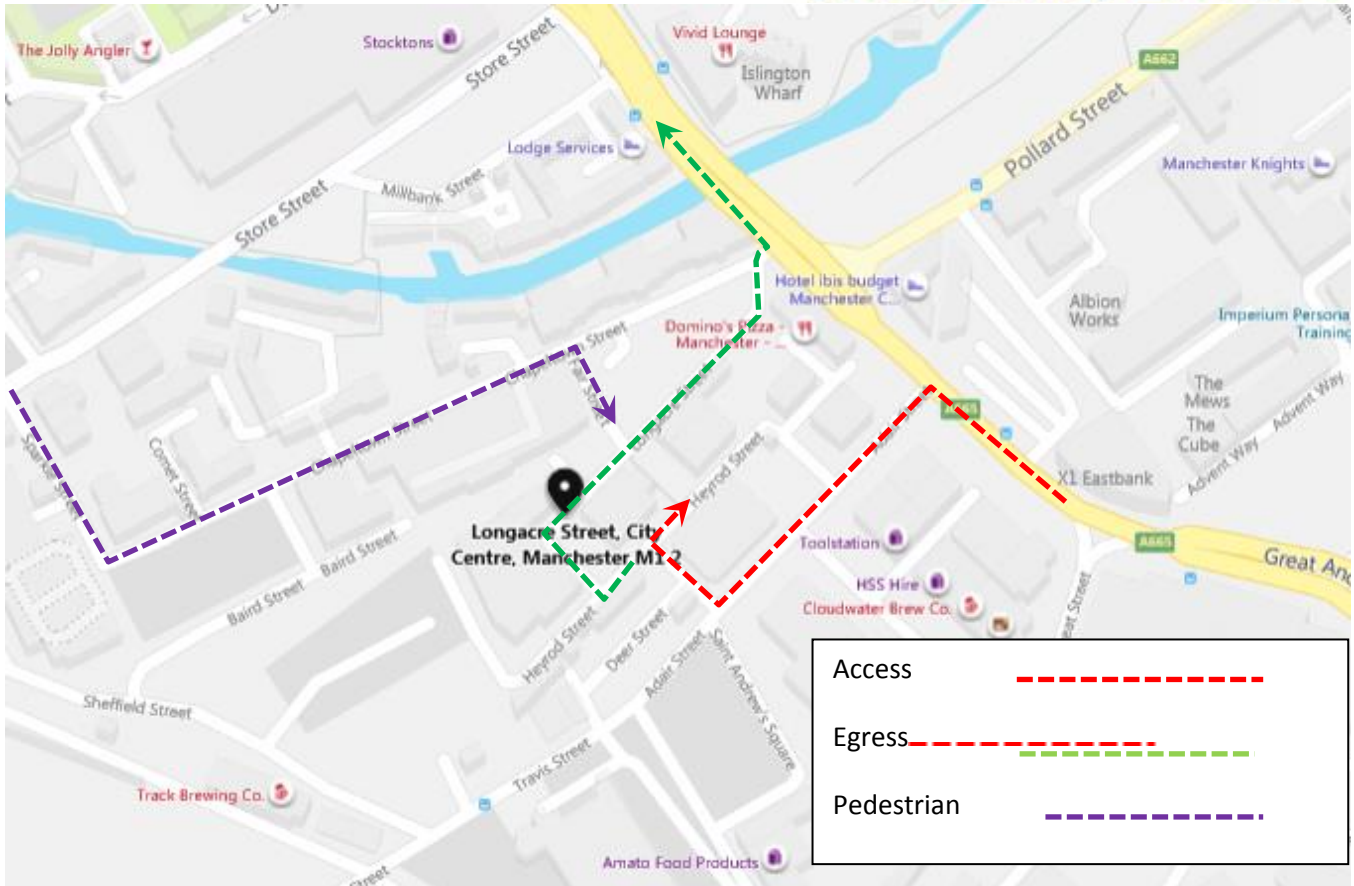
## **5.5 Manoeuvring of Vehicles**

In order to promote safe manoeuvring in and around the site it is recommended that reversing of vehicles is excluded wherever possible. This is most commonly achieved by the implementation of one way systems and / or drive through delivery zones. Where reversing of vehicles is unavoidable, such manoeuvres should be kept to a minimum and due consideration given to, amongst others, the space required to complete such manoeuvres, the exclusion of personnel from this area and the supervision, direction and control afforded to the manoeuvre.

## **5.6 Vehicle Arrival and Dispersal**

All vehicles shall approach the site, along the A665 Great Ancoats Street turning left into Adair Street and Betley Street. Directed by prominent signage and controlled by attendant banksmen, and exit the site via Longacre Street and Chapeltown Street.





## 5.7 Vehicle Access & Egress

Upon reaching the site vehicles shall be met by a vehicle gateman who will check the delivery against his records before assisting the vehicle with the manoeuvre required to enter site. It will, therefore, be necessary for vehicles to drive in and drive out in a one way direction as described above. To ensure this manoeuvre is achieved with maximum efficiency and in the safest possible manner the assistance of at least one vehicle banksman will be required.

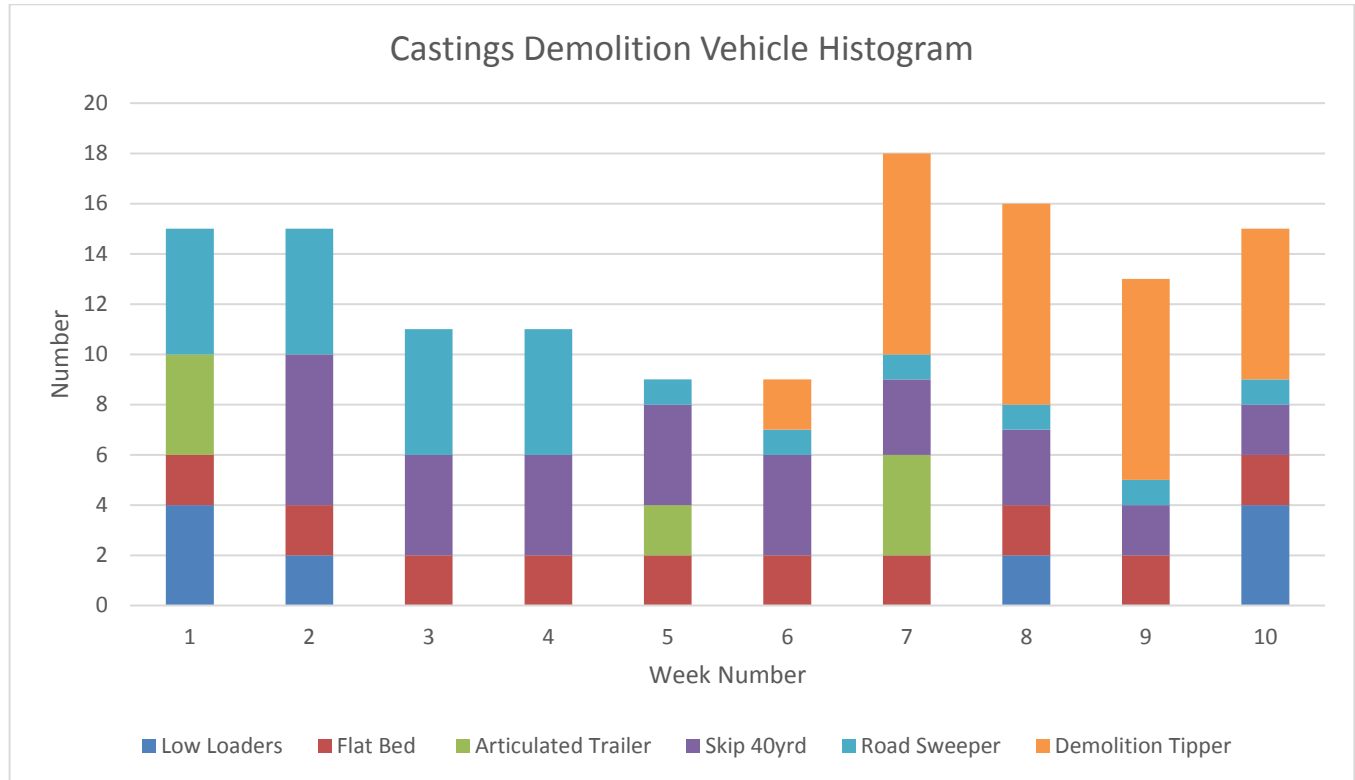
## 5.8 Traffic Management Operatives

All vehicle entrances and exits shall be manned by security traffic marshals responsible for receiving and dispersing vehicles. Duties will include checking that vehicles arrive in accordance with the planned delivery schedules, advising drivers of site rules, issuing vehicle passes and directing to the appropriate off-loading zone.

When leaving, marshals will collect passes, confirm the legitimacy of any plant or materials being removed from



site and check vehicles' cleanliness before finally dispersing back onto the public highway. Marshals will also be responsible for directing and banking vehicles to ensure that manoeuvres are executed safely, minimising the risk to the general public.



## 6. MATERIAL DISTRIBUTION

Material distribution has been reviewed and assessed in line with the following key considerations:

- 🔍 All Material will be off loaded with the site boundary
- 🔍 Off-loading materials close to their final location where practicable (minimise distribution around the site).
- 🔍 Distribution directly from off-load to workface ("just in time" deliveries to minimise storage and double handling).
- 🔍 Use of materials handling equipment to transport materials around site and to each level within buildings (minimise manual handling).

## **7. WASTE MANAGEMENT**

### **7.1 Introduction**

Waste management can be considered under three broad headings:

- Collection and transportation from the workplace
- Removal off site and disposal
- Environmental issues (segregation, recycling etc.)

### **7.2 Collection and Transportation**

A sufficient number of 240/660 litre wheeled bins will be delivered to site and distributed up / down to and across all floors by the logistics operatives manually. As operatives fill the bins, logistics labour will be deployed to exchange full bins for empties. Once emptied wheelie bins will be returned back to the floors for refilling. Where practicable and economically viable, waste streams will be segregated on site and separate arrangements made for removal / disposal.

### **7.3 Removal and Disposal**

On a regular basis, our roll on/off vehicles will attend site to remove all collected rubbish. The waste is transported from site and deposited at a licensed transfer station where it will be segregated for onward transportation to various recycling Facilities. Waste segregated on site will be collected by other registered carriers and transported either to a licensed transfer station for bulking or directly for recycling / reuse.

### **7.4 Demolition wastes**

All waste will be segregated on site into the various waste streams and using the relevant EWC codes Wastes will be divided into the following categories

#### Recyclables

- Metals-Structural members and services
- Glass-Windows and Partitions
- Concrete/Brick -from the main structure
- Timber- Various
- Plasterboard- partitions

#### Non recyclables

- Asbestos wastes
- Bitumen roofing

### **7.5 Waste Operatives**

Waste operatives from the logistics team will undertake bin distribution and removal as described above but, in addition, will also undertake the following tasks:

- 🕒 Maintaining and keeping clear emergency escape routes and exits.
- 🕒 Maintaining access routes.
- 🕒 General cleaning of unallocated rubbish.
- 🕒 General site cleanliness (litter picking)

## 7.6 Segregation & Recycling

As indicated above, on-site segregation, where practicable, will be promoted. However, any mixed loads will still be subject to off-site segregation to maximise reuse, recycling or recovery.

### Onsite Segregation

Segregation of waste on site is subject to certain constraints i.e. available space. On site segregation will only be performed on wastes which are deemed to be in recyclable condition i.e. uncontaminated and where we believe there is sufficient volume of a single waste stream to warrant a dedicated container. Best practice dictates that waste segregation should be



undertaken at source. This does not simply mean 'on site' but actually at the point of waste generation at the workplace. Segregation at source is the only methodology that does not require a secondary process to sort collected mixed waste. Onsite segregation relies on the support of all site management to ensure unauthorised use of dedicated containers for general builder's rubbish is prohibited. Loads found to contain over 5% diversity are deemed as contaminated and subject to increased transport and handling costs of waste transfer stations.

### Offsite Segregation

Mixed waste collected from site will be segregated off site at a local waste transfer station where all materials will be processed through a MRF (Material Recycling Facility). Materials will be handpicked and sorted into various categories ready for onward transportation to recycling depots. Materials that are deemed to be recyclable will then be sent through a trommel to be pulverised and used for fines, any materials remaining from the process will be sent to landfill. It is estimated that at least 96% of non-hazardous construction waste generated on the project is recyclable.

### Reclamation Performance

The project team will agree a target benchmark for waste reclamation (i.e. waste diverted from landfill). This target will be published in the Site Waste Management Plan. Waste reclamation includes:

- 🕒 Reuse on site

- Reuse on other sites
- Salvaged for reuse
- Return to supplier via a 'take back' scheme
- Collected from site by an approved licensed waste management contractor who shall segregate waste streams for recycling, recovery or reuse.

### **7.7 Site Waste Management Plan**

A project waste champion will be appointed to ensure procedures are kept relevant and up to date and also to ensure waste materials leaving site are recorded for project benchmarking purposes. The client shall appoint a waste 'champion' to be responsible for the development of the Site Waste Management Plan and subsequent implementation and compliance. This may be the principal contractor but an alternative appointment may be made to ensure design and pre-construction activities are incorporated. The Site Waste Management Plan shall include the following:

- Identification of the waste champion (the nominated individual responsible for implementation of the plan).
- The target benchmark for resource efficiency (the minimisation of waste generated).
- The target benchmark, by weight or volume, for waste reclamation (i.e. diversion from landfill through reuse, recycling or recovery). This target has been set at 98% non-hazardous recycled, 96% demolition waste.
- Procedures and commitments for minimising hazardous and non-hazardous waste to achieve or exceed the target benchmark.
- Procedures for monitoring, measuring and reporting hazardous and non-hazardous waste to identify and record the type and quantity of waste produced.
- Procedures for sorting waste generated into defined waste streams for subsequent reuse, recycling or recovery (either on site or off site at a licensed facility).
- Procedures for monitoring, measuring and reporting hazardous and non-hazardous waste to identify and record where and how each waste stream is disposed and the quantity reclaimed.
- Procedures for communicating the plan to management and operatives including appropriate targeted training.
- A review process to monitor the success of the foregoing procedures and promote continuous improvement during the project and for future projects.

### **7.8 Duty of Care**

As a waste producer, the client has a duty to ensure that any contractor who removes waste from the site is registered with the Environment Agency. We shall be required to provide documentary evidence that all waste carriers and waste brokers employed in connection with the project are appropriately licensed. Site records including transfer notes and conveyance notes shall be collected and retained.

## 7.9 Environment

The project team will be committed to maintaining the highest environmental standards and demand the same standards throughout the supply chain. In conjunction with the logistics provider, regular audits will be conducted or preferred waste carriers, transfer stations and landfill sites. These audits are intended to confirm compliance with legislation and to ensure every effort is being made to maximise the recycling of waste generated from site.

Monthly newsletters will be issued to the local community and neighbours as well as being discussed at the monthly liaison meetings and will include details of any proposed major traffic management changes.

## 8. GOOD NEIGHBOUR / MANAGING ENVIRONMENTAL IMPACTS

### 8.1 Minimising Impacts on the Local Area

Daily visual and audio checks are carried out to determine if the site could be considered a nuisance.

- 🕒 Is the site and surrounding area tidy and free of visual intrusion?
- 🕒 Are footpaths and roads kept clean and free of obstruction?
- 🕒 If you were a local resident is there anything that would annoy you?
- 🕒 Are measures being implemented to keep the air clean i.e. reduce dust?
- 🕒 Are there areas close to the site at higher risk such as flora, fauna and water courses?
- 🕒 Can noise be limited or eliminated?

### 8.2 Monitoring Site Impacts

As noted above construction activity has the potential to cause nuisance, or even harm, from environmental disturbance such as noise, vibration and dust. Such issues are often a cause for concern to the Local Authority, the project's neighbours and the public at large. Whilst mitigation measures can be adopted to minimise nuisance, it is also important to conduct environmental monitoring to measure site performance in relation to baseline data and to ensure noise. See notes under methodology section.

### 8.3 Noise

Hours of Work will be Monday to Friday 08:00-18:00 and **Saturday 08:30-14:00**. There will be no works Outside these hours. Noise will be monitored and a limit of 75dBA set at 1m from the façade of any occupied residential building.

Noise will be monitored on a real-time basis. Compliance reporting will be carried out and included in the Progress Reports

Compliance reporting will be carried out and included in the Progress Reports

All machinery will be modern and in good repair to minimise noise. Where a silenced option exists it will be used as a preference to non-silenced machinery

Acoustic mats and hoardings will be used between the site and the retained building to limit the transmission of noise.

Acoustic mats will also be used around machinery where practicable to further reduce sound levels

A system of quiet times will be utilised as is common practice during the day to allow respite from the noisier elements of works.

### 8.4 Vibration

The methods chosen by JRL Group, as our proposal for the execution of this project, is specifically geared to minimising the impact of our works on the adjacent neighbouring buildings and the wider environment. Our predictions are that we will remain comfortably <5mm/sec PPV during the works. In terms of the wider environment, we would expect these numbers to be below 3.0mm/sec PPV.

We will be carrying out real time monitoring of the vibration caused in the region of the party walls and will issue reports demonstration compliance at the fortnightly Progress Meetings

### 8.5 Dust

Dust is often the most notable nuisance when it comes to negative construction impacts. Unlike noise and vibration dust remains long after the operation that caused it has ceased. In addition to its unsightliness dust can be damaging to health as well as detrimental to property. Given the residential location of the project it will be necessary to adopt robust procedures for dealing with this issue. Dry spells during the summer months are the most likely times of year where dust can become a nuisance not least because of the lack of moisture to dampen down particles stopping them from becoming airborne. This will, therefore, require a monitoring and management regime to be employed by site staff.

Where practicable it should be considered that any potentially dusty works are to be times to be carried out during the most suitable weather conditions. Site management will be best placed to plan these works with due consideration for the local surroundings but will also have a range of tools at their disposal for managing any dust generated. Minimising dust is the best way to avoid any issues arising and this can be done by simply employing a vigorous housekeeping regime that uses an absorbent sweeping compound such as Dusmo. The use of water, wet vacs, equipment fitted with direct dust suppression attachments (for e.g. cut off saw) mechanical sweepers and Hoovers may also be used as an effective way of keeping dust to a minimum. For works that are being carried out remotely misting cannons (pictured) will be used to suppress any dust generated and prevent it from leaving the site envelope



## **8.6 Managing Site Impacts**

Controls for day to day issues affecting the local environment will include:-

- Dust Suppression – stand pipes with shower head hoses should be available around critical areas of the project. Hose heads should be spring loaded to ensure that water cannot be left running whilst unattended.
- Maintaining road cleanliness – a pressure washer to be used by gatemen to clean vehicle wheels upon exit from site. A visiting road sweeping service will also be utilised to help upkeep the surrounding roads.
- Cleanliness of the site perimeter – hoardings should be cleaned regularly to help maintain the site's tidy image. This should be achieved with neighbours in mind and executed within a cordoned area during off peak periods
- Provisions for inclement weather – grit bins should be available and positioned at the site gate and be filled with brown salt grit which can then be used for the purpose of snow clearance and frost preparation.
- Pest control – the provision of adequate means into which canteen and office waste can be deposited will greatly reduce the possibility of attracting vermin but will not entirely negate the need for a suitable pest control regime.
- Spill kits – spill kits for use on site in the event of a spillage should be readily available. These kits should be located at areas of the project which post the most significant risk. In this instance we recommend that they be placed at the vehicle gate plus the nominated fuel storage zone and the main vehicle unloading area.

## Appendix 1

### Programme

