Elford Demolition & Remediation

Charles Street, Manchester - DEMP, Method Statement and Programme

Contents

Introduction 3

Overview 3

Site Location 3

Scope of works 4

Highway Dilapidation Survey 4

Site Constraints 5

Buildings to be demolished 5

Site Logistics 6

Traffic management principles 6

Site Access 7

Site Boundary and Fencing 7

Site Security 7

Welfare 8

First Aid 8

Fire 9

COSHH (Hazardous Waste solids, gases or liquids) 9

Plant Storage 9

Skips, Bins and removal of surplus material 9

Incoming / outgoing Services 10

Protection of the Public and other workers 10

Communication 11

Working hours 12

Temporary works 12

Environmental Controls 12

General 12

Regulations 12

Waste Management 13

Control of Possible Ground Contamination 14

Control of Air Pollution 15

Control of Dust Pollution 16

Control of Noise Pollution 17

Control of Vibration 17

Environmental pollution control 18

Environmental Monitoring 19

Monitoring throughout Project Duration 19

Demolition Method Statement 20

Basements 22

Top-Down Deconstruction - Northern Elevation / End Block connection 23
End Block Demolition 26
Car Park - Remaining structure Demolition 27
Exclusion Zones 30
Appendix 1 – Site Set up Plan 31
Appendix 2 – Traffic management plan 32
Appendix 3 - Programme 33

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In accordance with the CDM 2015 Regulations, EDR Ltd will fulfil the role of Principal Contractor.

Important note – this combined DEMP document has been generated to support a planning application.

At this point, buildings to be demolished have not yet undergone any structural or engineering demolition assessments, so final methodology and sequencing may change subsequent to this issue.

The following individual documents will be or have been issued before the project starts:

- *Construction Phase Health & Safety Plan (CPHSP) – this is also known as a Project Management Plan (PMP).*
- *Environmental Management Plan (EMP)*
- *Air Quality & Dust Management Plan (AQDMP)*
- *Site Waste Management Plan (SWM)*

These documents would be finalised and submitted via planning condition

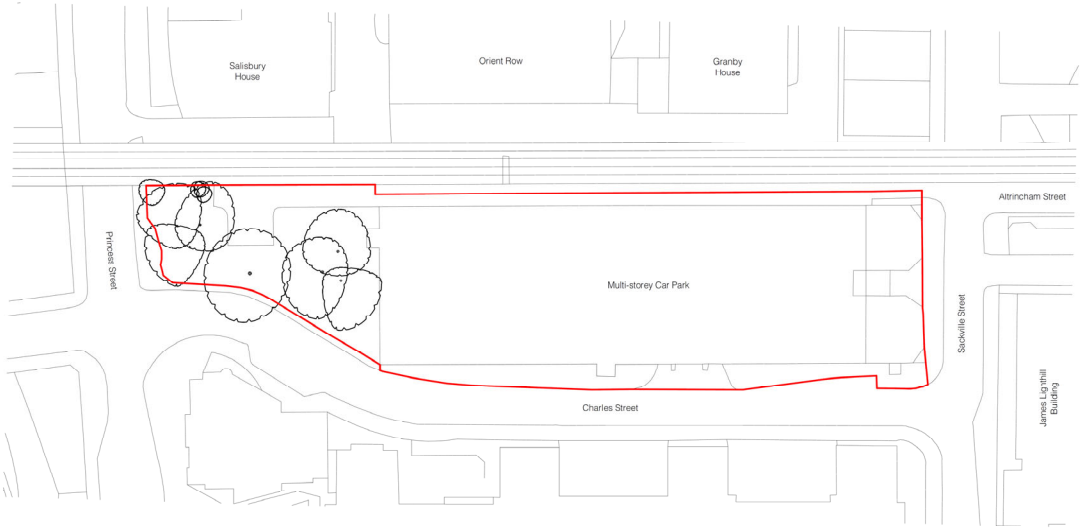
Introduction

Overview

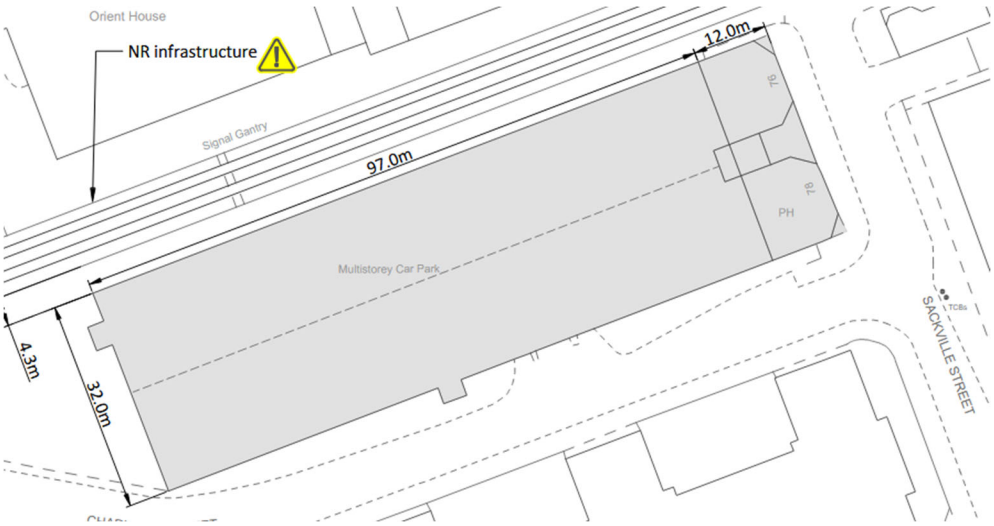
The following Demolition Environmental Management Plan (DEMP), including a Demolition Method Statement, is a demonstration of how Elford Demolition and Remediation Limited intends to execute the demolition of a multi-storey car park and associated buildings, Charles Street, Manchester, M1 7AR.

Site Location

The site is located close to the Manchester town centre, with other business, commercial premises, hotels and residential including Hotels to the South, West and east of the site, with a significant bridge and Network rail assets to the North.



Red line boundary



Approx. building areas

Scope of works

The Charles Street MSCP structure is a multi-storey (9-level) reinforced concrete building that has a single level basement that becomes shallower at the west end due to the site topography.

The car park features ramps that contribute to the overall stability of the structure, split-level construction, and external stair cores.

The general condition of the whole building is fair. Some slab spalling was noted on slabs in some areas and discolouration of structural members from water ingress.

The concrete frame appeared to be in good condition from a structural perspective and there was no obvious defect nor damage identified during the site visit by ANDUN structural engineering consultancy that would lead to a change in proposed demolition methodology.

There was limited access available for inspection of the adjacent multi-storey building referred to as the 'End Block'. This structure was identified as an RC frame with beam and block floor construction based upon visual.

There is a live Network Rail running line that runs parallel in and proximity to the North facade of the structures. The rail line is on a masonry viaduct that continues past the car park extents.

The structure is bounded by Charles Street and Sackville Street along the South and East elevations,

River Medlock used to run adjacent to the site and is understood to be backfilled. An archive map illustrates the building location in purple with the River Medlock line in blue.

It is recommended that the infill is verified prior to demolition works.

The Scope of Works consists of the following main items:

- Installation of perimeter site hoarding and vehicle gate.
- Removal of asbestos containing materials.
- Soft Strip.
- Installation of temporary works.
- Road and footpath Closures
- Top-down structure adjacent to the railway bridge (Network rail asset).
- Demolition of the remaining main block down to ground floor slab.
- Demolition of basement Car Park
- Lift concrete slabs and foundations
- Crush all hard arisings to 6f2 grading.
- Removal of all demolition arisings from site.
- Clean and clear site.

Highway Dilapidation Survey

Prior to starting on site, a joint written and photographic dilapidation survey will be carried out in association with the Client’s representative of the surrounding area along the boundaries of the site where the new construction activities interface with the existing finishes.

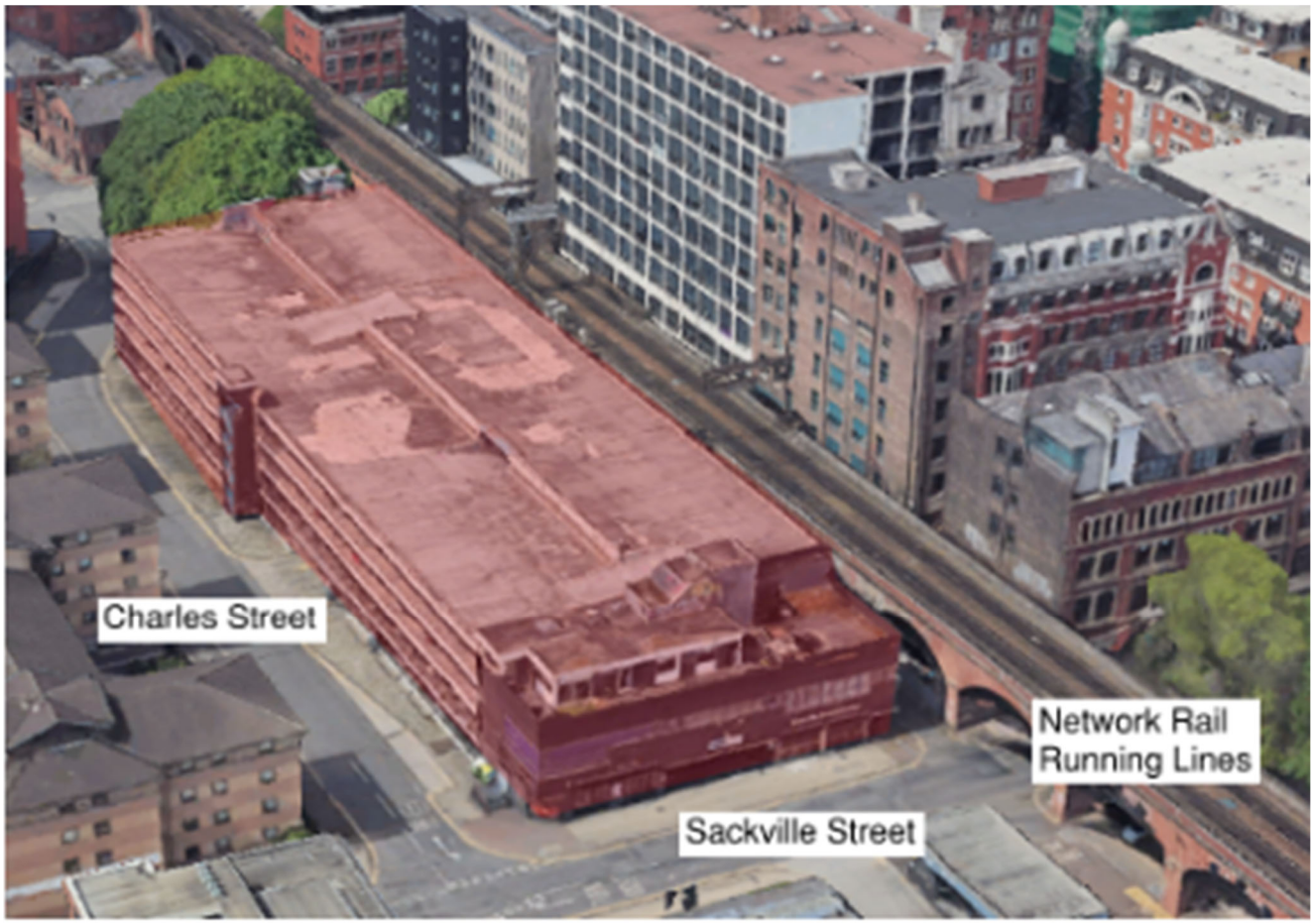
Site Constraints

Site constraints include:

- Noise, dust and vibration controls.
- Adjacent commercial and business premises, and their access routes.
- Local roads and traffic controls within site.
- Residential buildings and hotels
- Network rail asset
- Underground car park basement – propping assessment may be required prior to works starting.
- Back propping of structure for top-down demolition will require propping assessment prior to starting by structural engineer.

Buildings to be demolished

The entire block within the site boundary line (in red) is to be demolished.



Site Logistics

Traffic management principles

The site logistics plan located in **Appendix 2** outline EDR Ltd proposals for managing and controlling of site traffic and captures all temporary footpath closures that is required to allow the Project to be delivered safely.

The purpose of this plan will be to set out how the site is to be organised to eliminate and control risks from site transport.

This will be achieved through careful management, programming and coordination of the construction works. To minimise the impact of construction traffic on the existing roads and highway network the following principles will be actioned:

- Footpath closures will be implemented on Charles Street, Sackville Street. Pedestrians on Charles Street and Sackville Street will be diverted to the opposite side of the road.
- Delivery vehicles whenever practical will avoid "peak public traffic hours" to reduce traffic congestion and nuisance to the existing surrounding road and highway networks.
- Display of an emergency 24-hour contact number on the front gates.
- To minimise the volume of construction traffic from outside the area, local suppliers and subcontractors will be used whenever practical and suitable to do so.
- The approaches to the site shall be suitably signed by EDR Ltd to ensure that delivery / contractor vehicles stick to the correct route to site.
- The site entrance will be appropriately signed to ensure no accidental entry by the general public.
- The site entrance will be signed for "Emergency Access Point" for safe access and egress of emergency vehicles.
- Delivery vehicles will be unloaded within the offloading areas detailed on the site logistics plan located in **Appendix 1** All offloading operations will be managed by a dedicated, trained banksman.
- To avoid construction traffic congestion and nuisance to the surrounding area all suppliers and subcontractors will be made aware of the traffic routes.
- Clearly marked out storage areas shall be located away from pedestrian traffic.
- Site vehicle routes will be segregated from pedestrians.
- Crossing points will be established in areas with good visibility and appropriate signage.
- One way traffic routes and/or turning circles will be established on site to eliminate the risks from reversing vehicles.
- Trained and competent banksmen will be deployed to monitor vehicle movements, particularly in relation to slewing plant and the site pedestrian crossing points.
- The site entrance will be maintained and kept clean and clear by EDR Ltd operatives. There will be an "on site wheel washing" facility to prevent mud exiting the site onto the surrounding roads. This will be augmented with a vehicular road sweeper as appropriate.
- EDR Ltd adopt an operating policy that only persons with the relevant CITB/CTA/CPCS qualifications can operate plant on site.

For environmental and road safety issues all refuse containers leaving the site will be appropriately covered to avoid debris littering the surrounding roads and highways.

Site Access

The primary access for all EDR Ltd construction traffic will be via an entrance gate in the perimeter hoarding on Charles Street. Egress from the site shall be via the same gate. The primary access and egress for pedestrians will be via a pedestrian gate located on Charles Street.

The following control measures will be adhered to:

- All vehicle movements on and off EDRs site will be controlled by vehicle marshals.
- All demolition operatives shall use the established site pedestrian routes.
- Vehicles will not be allowed to queue on the highway.
- At no time will EDR vehicles exceed 5mph within site.
- All vehicles will be running on hard standings and will not require wheel washing facilities
- Mud will not be taken from site onto the surrounding public highway during the demolition phase.

Site Boundary and Fencing

Timber hoarding will be installed as part of the scope of the works, to 2.4m in height and either in-ground or on Kentledge (concrete) blocks. See attached appendix 1 for the Site set up plan. To provide security and protection to the general public a perimeter hoarding will be provided and located to the boundaries of the site. The exact line of the fencing may well be adapted and moved during the life of the contract to suit the site constraints and access requirements. Any such movement shall be after direct liaison with the Client and Manchester City Council Highways Department.

Site Security

Site security during working hours will be provided by EDR's gatemen & other operatives. Outside of working hours, security will be provided by one of EDR's approved security providers. Guards will speak and understand fluent English, have an induction on their first visit, and will be briefed on any potential issues by the EDR Site Manager.

This would then provide 24/7 security cover and prevent unauthorized persons accessing the site.

On first entering the site, operatives and visitors are required to undergo a site induction. The site induction will be carried out by an authorised member of the EDR Ltd project team and is intended to make all personnel aware of Health and Safety issues relevant to the site. On leaving the site all personnel and visitors must sign out on the site register.

EDR Ltd reserves the right to request proof of identity from any visitor and to carry out random searches on any person or vehicle leaving the site.

At the end of each working shift a designated member of the EDR Ltd project team will tour all working areas to ensure the following:

- all access points to the building(s) are secure.
- all access points to any perimeter scaffolding have been removed.
- all plant and machinery have been left in a disabled condition.
- all small tools and equipment have been locked in the secure storage units.

The main site vehicle and pedestrian gates shall be securely locked at the end of each day.

Welfare

Welfare facilities are to be available on site throughout the project duration and facilities will be of a standard in accordance with the requirements of the Construction (Design and Management) Regulations 2015 and incorporate the Smoke-Free (Premises and Enforcement) Regulations 2006.

The welfare area will have Heras fencing erected around the front access to segregate it from our area of works. A pedestrian route will also be erected to give operatives safe access from the cabins to their area of work - these routes will be created by erecting Heras fencing as and when needed.

In general, the site welfare will consist of the following facilities:

- Suitable numbers of sanitary conveniences which reflect the number of people working on the site and which are adequately ventilated and lit.
- Washing facilities, which provide basins large enough to allow people to wash their faces hands and forearms and a supply of clean hot and cold, or warm, water.
- A suitable means of drying will also be provided. Rooms containing washing facilities will be adequately ventilated and lit.
- A suitable supply of drinking water and drinking vessels, and an area for taking meals and breaks.
- Canteen facilities including a kettle or urn for boiling water, and a means of preparing food - microwaves, ovens etc.
- Project offices for EDR staff (desks / chairs / filing cabinets).
- Meeting Room / Site Induction Room
- Extra hand sanitiser pumps and anti-bacterial sprays or wipes for use in communal areas.

First Aid

First Aid provision will be in accordance with the requirements of the Health and Safety (First Aid) regulations 1981.

This will include:

- Adequate amount of first aiders / appointed persons onsite (EDR's Site Manager and Supervisor will both have the First Aid at Work qualification.)
- Fully stocked first aid box.
- Eye wash station.
- First aiders training certificates up to date.

- An Accident report book.

Fire

The EDR Site Manager or his/her Site Supervisor will compile a Fire & Emergency Management Plan within 48 hours of site possession, and he/she will assess the site and complete the plan accordingly.

The following control measures will be adhered to:

- No intentional fires on site.
- Air horns to be provided at fire points to raise alarm.
- A permit to work system to be in place to cover any hot works (none planned in the current scope of works).
- If undertaken, hot works to cease a minimum of 1 hour before end of shift for fire watch to take place.
- Observation of the HSG168 "Fire Safety in Construction" guidelines.

Fire extinguishers suitable for the possible types of fire will be available on site.

COSHH (Hazardous Waste solids, gases or liquids)

All substances covered under COSHH regulations will be stored in a designated outside area, and COSHH assessments will be completed for each individual item.

The following control measures will be adhered to:

- Control entry to storage area.
- Define a specific area for storage and put-up clear signage.
- Ensure the area is spacious, organised, well lit, ventilated and locked (when not in use).
- Provide enough space to easily deal with spills.
- Provide spill kits.
- Label all containers, including partly used ones.
- Floors should be impervious, resistant to liquids and easy to clean.
- Keep easily ignitable materials, such as empty packaging, in a separate storeroom and oxidising chemicals in dedicated buildings.

Plant Storage

Items of plant and equipment will be stored overnight in a secure location to prevent unauthorised removal, and the keys to machinery will be kept locked in the Site Manager's cabin.

Skips, Bins and removal of surplus material

All debris, redundant materials, etc. will be collected on site within each working area daily and removed from the building to designated rubbish skip locations. The Site Waste Management Plan (SWMP) shall be maintained and enforced on the site for the segregation and recycling of site waste.

All non-hazardous materials will be collected by a waste management contractor and taken back to a waste transfer station where approximately 99% of EDR Ltd construction waste shall be recycled and diverted from landfill. Monthly reports will be issued by the waste management contractor which shall identify types and tonnage of waste streams collected. These figures will be input into the Site Waste Management Plan which is monitored and reviewed on a regular basis to ensure that recycling targets are achieved.

All hazardous materials and their containers are disposed of using sealed lockable rubbish skips and are sent off site in a safe and competent manner, as approved by the relevant Waste Regulation Authority and in accordance with current legislation.

No burning of waste is permitted within the vicinity of the site.

EDR Ltd.'s Project Manager is responsible for ensuring that all waste is disposed of in a safe and competent manner, using only approved and licenced waste carriers and retains all waste transfer documentation on site for audit purposes.

EDR Ltd will provide labour to maintain the general cleanliness of the site. Individual sub-contractors will be responsible for maintaining their own working areas and operations in a clean and safe condition.

Our standard method of waste collection is 40 yd^3 skips which would be delivered to and collected from site using roll-on/roll-off lorries, coming onto and out of Charles Street watched by banksmen.

As the buildings are in the process of being cleared of rubbish and soft stripped, all arisings generated from the works will be vertically transferred to ground level where all materials will be separated into their specific waste groups, loaded into bins or skips and transported to a licensed waste processing facility. A Waste Disposal Log will be generated by EDR as an active document.

Waste tickets are scanned and recorded onto our project document system and comprise part of the final Health & Safety File.

Incoming / outgoing Services

Prior to demolition work commencing, any disconnections and/or diversions will have been undertaken by the client and completed by the relevant utility provider.

The term 'Service' means all pipes, cables and other equipment associated with electric, gas, water and telecommunications industries.

Before commencing works EDR will ensure that all the services have been tested, isolated, removed and re-routed (where applicable). All services will be assumed to be LIVE until a Certificate of Isolation for disconnection has been provided to EDR from the service providers or client. Copies of these certificates will be kept on site and can be viewed at any time upon request made to the Site Manager.

If water supplies are disconnected prior to site possession, our requirements for dust suppression during demolition will be gained from a metered hydrant.

Foul and surface water drains will be identified on site and protected or permanently sealed where required.

A protective scaffold crash-deck will be constructed on and around the sub-station at the NE corner to prevent any risk from collateral damage during demolition.

Protection of the Public and other workers

Demolition processes give rise to conditions that, unless carefully controlled, can have an adverse and direct effect on

the General Public, other site workers, and the surrounding environment. In this document, EDR will detail measures that will be taken to reduce the impact of demolition but retain effective and efficient methods.

Site pedestrians will be kept separate from vehicles on site by using separate site entry and exit points and barriered footways. A pedestrian entrance onto site will be located near the site offices & welfare accommodation. The location has been indicated on the site logistic plans located in Appendix 1.

Pedestrians will have a good view of any vehicles at gates and other crossings. Where necessary banksmen or signallers will be provided, especially for high-risk situations such as reversing or where visibility is restricted.

No reversing of vehicles without a banksman will be permitted. Vehicles will not be permitted to reverse onto a public highway unless necessary and only under the supervision of a banksman. No reversing of vehicle signs will be displayed at the site entrances.

Adequate lighting will be provided if necessary as well as other suitable warning signs. Banksmen and signallers will be trained in their duties. Vehicle drivers and visiting drivers will be informed about site transport rules during the site induction. Roads and walkways used by pedestrians or public vehicles will be kept free of obstructions and mud.

Pedestrian & vehicular routes outside of the site boundaries shall be always maintained. EDR Ltd Site Management shall carry out regular inspections of the site hoardings to ensure that all walkways are kept clear and that the hoarding is maintained in a good condition.

Designated pedestrian crossing points during the construction works, shall be monitored by a designated banksman who will ensure that existing roads and footpaths are not blocked during the construction. The site logistic layouts indicate the anticipated crossing positions during the project.

Communication

The Elford Demolition and Remediation Limited Site Manager will have overall control of the site of our work, while communication with any additional contractors will be maintained throughout the works.

In the event of a complaint from a neighbour or a member of the public in relation to any site activity, it will be recorded in a designated logbook, stating the nature of the complaint, the cause and, where appropriate, the remedial action taken. Should complaints about odour, noise, dust or vibration be received, they will be addressed directly by EDR to enable results at the time of the complaint to be reviewed, and where appropriate immediate actions employed to rectify the problem. All complainants will be contacted by EDR for further discussion and identification of a mutually acceptable resolution if the problem persists. Where valid grievance is raised measures will be put in place where practicable to avoid the recurrence of the complaint. EDR will notify the Client as soon as practicable once a complaint has been received.

EDR will co-ordinate a letter drop/information leaflet to the surrounding community informing them of progress and upcoming works, and they will be available on this project.

Working hours

07:30am – 6.00pm Monday to Friday, 8.30am – 2.00pm Saturday are the permitted working hours.

No work will be carried out on Sundays or Public/Bank Holidays without written consent, except for emergency response should such a situation occur.

Start Date – Planned for Quarter 4 2025

Duration: 15 weeks of main work.

Temporary works

The following temporary works will be installed, managed and removed during the demolition phase, all to be assessed by a structural engineer before work commences.

- External protection scaffolding to the elevations to the North, east and west for protection to assets close to the boundary.
- Potential back propping of floors for a safe top-down method.

Environmental Controls

General

- EDR Group's Environmental and Sustainability Policies shall be followed and applied to the commitments to environmental governance generated directly or indirectly for the project as a matter of priority for EDR Group. Copies can be provided on request.
- Our sub-contractors and suppliers are highly encouraged to make the same considerations and sign up to implement environmental protection mitigation measures on the project.
- Safe Systems of Work (SSoW), work instructions, risk assessments and method statements will be reviewed and implemented to minimise risk to the environment whilst on the project.
- Segregation of waste and materials on project will be implemented where there is sufficient risk mitigation to the environment (see Site Waste Management section).

Regulations

Work on this project will include the implementation of:

- Best Practical Means in accordance with BS 5228: Part 1
- BS6187 2011 code of practice for demolition and refurbishment
- London Councils – "The control of dust and emissions from construction and demolition"
- GLA/ALG procedures as set out in ''the control of dust emissions from construction and demolition' Supplemental Planning Guidance July 2014.
- ICE Demolition Protocol 2008
- Department of Markets and Consumer Protection COP for Deconstruction and Construction Sites 2013.

As standard on all projects, the Environmental Team will assess all aspects and risks that may influence the environment, eco-systems, flora and fauna and human interaction. To achieve this, checks are made on the nature of works and surrounding areas to pinpoint, categorise and identify all areas including natural features that may be at risk or have need of any special requirements, protection or considerations.

Detailed below are mitigation measures implemented in line with current legislation to minimise environmental impact on surrounding areas, including that of considerations to the remaining residents near the development and general compliance.

Waste Management

EDR are experienced in the compilation of Site Waste Management Plans (SWMP) and the NFDC Demolition & Refurbishment Information Data Sheet Programme (DRIDS), which ensures high standards of material handling, re- use, recycling, remanufacture, reduction and disposal on a project-by-project basis.

In line with the Sustainable demolition strategy and the Site Waste Management Regulations 2008, EDR Ltd shall implement a SWMP for the project. Its full and proper implementation by the Designers, EDR Ltd and Supply Chain will bring benefits to all parties involved. These benefits include but are not limited to:

- Full attention to the waste minimisation hierarchy – eliminate, reduce, reuse, recycle & dispose.
- Environmental benefits such as reduction in vehicular movements to and from site.
- Cost benefits to both the Client and EDR Ltd.
- Meeting the requirements of EDR Ltd quality & environmental systems.
- Greater control over risks in relation to materials and waste on site, good housekeeping assists with safety.
- A demonstration of waste minimisation and compliance with relevant legislation including duty of care and statutory licences.

In brief, the overall aim of the SWMP will be to avoid waste, reduce the impact of the construction work on resources, the environment and minimise waste management costs through SMART objectives.

The likely waste classification and predicted quantity produced during the demolition are listed below:

European Waste Catalogue	Key group	Est Quantity (tons)	Opportunities for Reuse/Recycling	% Target Reuse/Recycling
170102	Bricks	500	Recycling	100
170101	Concrete	3,000	Recycling	100
170604	Insulation	50	Recycling	100
1501	Packaging	5	Recycling	100
170201	Timber	50	Recycling	100
1602	Electrical and electronic equipment	1	Recycling	100
1301	Oils	1	Recycling	100
1703	Asphalt and tar	100	Recycling	100
170103	Tiles and ceramics	5	Recycling	100
1701	Inert	0	Recycling	100
1704	Metals	50	Recycling	100
170802	Gypsum	40	Recycling	100
170101	Binders	0	Recycling	100

170203	Plastics	20	Recycling	100
1705	Soils	0	Recycling	100
Most Relevant EWC	Liquids	0	Recycling	100
Most Relevant EWC	Hazardous	0	Recycling	100
Most Relevant EWC	Floor coverings (soft)	3	Recycling	100
Most Relevant EWC	Architectural features	0	Recycling	100
170904 (Mixed)	Mixed or other	0	Recycling	100

Waste will be avoided or minimised throughout the entire design and construction process so that the focus on direct costs is into the quality of the build and not what is being disposed off-site. Late changes in specification when materials are already on site are wasteful. Poor or incorrect storage of materials is wasteful.

EDR Ltd responsibilities throughout the duration of the Project:

EDR Ltd will ensure that: -

- A waste champion is appointed for the project to drive the waste minimisation culture on the project.
- All waste removed from the site is dealt with in accordance with the waste Duty of Care in Section 34 of the Environmental Protection Act 1990, and the Environmental Protection (Duty of Care) Regulations 1991, that materials are handled efficiently to minimise wastage and that all waste arising from site will be managed appropriately.
- All different type of wastes & waste streams likely to be produced are identified and shall arrange for appropriate storage and disposal measures in line with Duty of Care.
- An estimation of quantities involved for each proposed waste stream is provided.
- Targets and measurement criteria for the waste streams are set at the start of the project.
- A record will be kept of who removes the waste, what type of waste are removed, and where the waste goes off site.
- Any waste produced during the construction process is either re-used, recycled or disposed of correctly.
- The SWMP will be monitored on a regular basis to ensure that the plan reflects the progress of the works.
- The Client is informed upon the progress of the SWMP at regular meetings.
- The SWMP is reviewed upon completion of the project to learn any lessons where things could be done better, regarding amount of recycling undertaken and costs involved.
- The SWMP is kept on file for a period of two years after practical completion.

All personnel will be made aware of the relevant requirements of the SWMP at the initial site induction and in subsequent toolbox talks. The SWMP will be made available in the site office for inspection at any time.

Control of Possible Ground Contamination

Upon completion of the asbestos removal and demolition works, all areas of the site will be fully remediated. It is expected that a Remediation Statement/Strategy will have been developed and approved in writing by the Local Planning Authority prior to any works taking place.

The initial operation will comprise of the breaking up, excavation and removal of the existing hard surfaces, any buried foundations and any buried obstructions to a pre-determined depth or level. It is not envisaged that sufficient materials will be realised to warrant on site treatment and re-use, therefore, all materials recovered because of this operation will be removed from site to a licenced landfill facility, with replacement hardcore material being imported to site to form the

hard standings and piling platform in readiness for the piling operations. All relevant waste management duty of care documentation will be in place prior to works commencing.

A Site Investigation Survey (Phase 2) will be completed following better access to the site following on from the demolition works.

All hazardous material removed from site will be removed by a licenced removal contractor and recorded on a Hazardous Waste Consignment Note(s), with copies of the notes held on site. All duty of care information will be held on site.

Upon completion of the site remediation, a Verification Report will be prepared and submitted to the Local Planning Authority.

EDR implements controls to contain any spillages or possible fuel/ hydraulic oil leaks from plant and equipment. These include placing spill kits on site and training in the transfer of fuel and the positioning of drip trays beneath static machinery. Training is provided to project teams and tested for effectiveness.

To reduce the risk of ground contamination, plant, machinery and vehicles are to be well maintained to prevent leakage, and purchase of the most modern plant and machinery.

To mitigate any ground contamination from any potential leakages, EDR will ensure that substances are stored in a secured bunded areas with spill kits made available with effective management systems in place.

Control of Air Pollution

EDR Ltd will ensure that any dust caused by the construction works will be kept to a minimum wherever possible. Excessive dust generated from construction operations shall be controlled by water spray where required. To control the dust on site, EDR ltd will ensure that the following conditions are adhered to:

- EDR uses the most innovative plant with the most environmentally friendly specifications. Any plant, machinery and vehicles will be switched off when not in use, as this minimises unnecessary air pollution.
- Regular physical observation by key members of staff and the Environmental Team audit process is carried out.
- Pre- and Post-Task Briefings considering risk of dust emissions, adjustment of working assessment to mitigate or reduce where possible.
- Toolbox talks with all project staff to ensure all understand the impact of dust on the locality.
- De-construction methodology implemented considering de-construction drop distances, areas of exposure and dust control effectiveness.
- Local engagement to keep residents informed on progress and if works producing excess dust are due to commence.
- We will ensure that all Lorries are sheeted before leaving site and that damping down measures as detailed above are also deployed at the processing stage - this will ensure that dust emissions are minimised during the process.
- Demolition method as detailed previously – we will mitigate dropping from height as far as reasonably practicable. Demolition will be gradual and accompanied by suitable dust suppression as detailed above.
- Dust monitoring will be carried out at site perimeters on a weekly basis. A specific Environmental Management Plan (EMP) will be put in place prior to project commencement to denote monitoring

points at the site boundary, monitoring will be carried out periodically via hand-held devices with readings logged, reported and maintained on site for reference.

- Should monitored levels of dust be read above that of Workplace Exposure Limit (WEL) 0.3 mg/m³ Time Weighted Average (TWA) over an 8hr period, then works will stop while an alternative method or further mitigation measures will be implemented.

Control of Dust Pollution

Activities with the potential to generate dust will be visually monitored throughout the day by the site supervisor and site manager. The site team will dampen down with water during the works and post demolition.

Where dust is observed this will be managed with a review of the work methods and the implementation of dust suppression such as screening, covering over or dampening down. Emissions will be monitored and recorded at various positions along the boundary of the site using static dust monitoring devises e.g., frisbees, this will allow us to assess the potential impacts from our activities beyond the site boundary.

Where dust suppression is required, this will be implemented immediately. In dry weather the works will be dampened to ensure there is no dust emitted from the site. Motofogs and dust buster water misting plant will be utilised as required.

Key activities for dust suppression include:

- Demolition works to all the buildings have significant potential to emit dust. EDR will employ various control measures to ensure we prevent any dust from leaving our PC area. These include pre-soaking the area, damping down during demolition activities and damping down post demolition. Motofog/Dust Boss ® equipment will also be used along with additionally localised screening as appropriate. All vehicles will be sheeted on arrival and departure from site, and access routes will be dampened down during periods of dry and warm weather.
- The movement of plant and vehicles into and out of the site can cause dust and deposit material from the site. To prevent this traffic marshals will check vehicles before they leave site - wheel washing facilities, typically a jet wash, will be used to clean the wheels of vehicles before they leave site (this is typically an issue during winter and on projects with areas of groundworks). Surfaces will be swept back towards the site to ensure that no dust or mud leaves the site with vehicle movements.
- The exhaust fumes from plant and vehicle movements may contribute to the project emissions. To minimise these, vehicle movements on site will be restricted to prevent any additional exhaust fumes along with the implementation of a Traffic Management Plan to prevent unnecessary movement of plant or vehicles. We already operate a ‘no idling’ policy whereby static vehicles turn off their engines.
- To minimise any dust leaving the site boundary there will be minimal stockpiling on site where practicable - stockpiles and demolition activities will be dampened down to minimise windborne emissions. The project team are mindful that this is a highly residential area and dust management will be a priority.
- Any stockpiles will be dampened down using hoses to prevent any dust leaving the site. Stock piling will be kept to a minimum as materials will be removed from the site or re-used as quickly as possible.

Control of Noise Pollution

EDR Ltd are mindful of the disruptive effect that excessively noisy operations can have on the occupants of adjacent areas and property and accordingly the project team will ensure that all work will be carried out in accordance with BS 5228 "Noise Control on Construction and Open Sites – Part 1". Notwithstanding the above the following noise control procedures are applied to all EDR Ltd sites:

1) All current legislation, noise abatement orders, guidance notes and codes of practice will be consulted and strictly adhered to.
2) Where necessary noise levels will be monitored and noise assessments carried out.
3) Noisy plant and equipment will be located to provide minimum disturbance.
4) Plant, wherever practicable, will be electrically powered.
5) All plant and machinery will be fitted with efficient exhausts, silencers and mufflers and maintained in good condition.
6) All compressors used on site shall have 'sound reduced' units fitted with acoustic linings or enclosures and all ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturer.
7) Acoustic screens / barriers will be erected around excessively noisy plant.

Specialist subcontractors will be required to address noise and the ways it will need to be controlled within their method statement. PPE will only be considered as a last resort and must be worn where identified.

- Pre- and post-task reviews of working practices and ensuring noise risk is addressed and reduced to acceptable levels.
- Toolbox talks with trained project staff to update operations on potential and current noise level impacts.
- Pre-project and weekly project monitoring to ensure minimal impact to baseline noise levels.
- Self-imposed "quiet times" on site to coincide with local residential activities. Noisy works, unless agreed otherwise, will be limited to the approved working hours as detailed above, this being between 8.00am and 6.00pm Monday – Friday, this will include the collection/delivery of equipment.
- Physical barriers - for example, hoarding, Monarflex © covering on scaffold to reduce noise emission.
- Engagement with residents at regular intervals especially during noisy task specific works to explain progress.
- The use of the most modern silenced plant available in the industry for the task will be used to reduce the level of noise emissions from machinery as far as reasonably practicable. The use of hydraulic breaker attachment will be minimised and used only where necessary.
- Techniques will be used to minimise the dropping from height. All demolition activities will be carried out in accordance with 'BS6187: Code of practice for demolition and partial demolition'.

Control of Vibration

Vibration caused by the works shall be kept to a minimum wherever possible.

Equipment and working methods should be planned in such a way as to prevent the loss of or damage to any property, caused by vibration transmitted through the ground. During these operations EDR Ltd site management shall closely monitor the vibration for possible damage to surrounding buildings.

- If suitable, drop mats and machine pads can be positioned to reduce plant, vehicle and process

vibration.

- Regular resident liaison to confirm that vibration levels are acceptable and not impacting on the environment.
- Use of modern intrinsically compliant plant and equipment ensuring vibration levels are minimised.
- Utilisation of the right machine for the right job ensuring that plant is not under-powered to carry out the task and hence, generating more vibration than necessary. Also maintaining modern equipment with intrinsic vibration reduction designed in.

Environmental pollution control

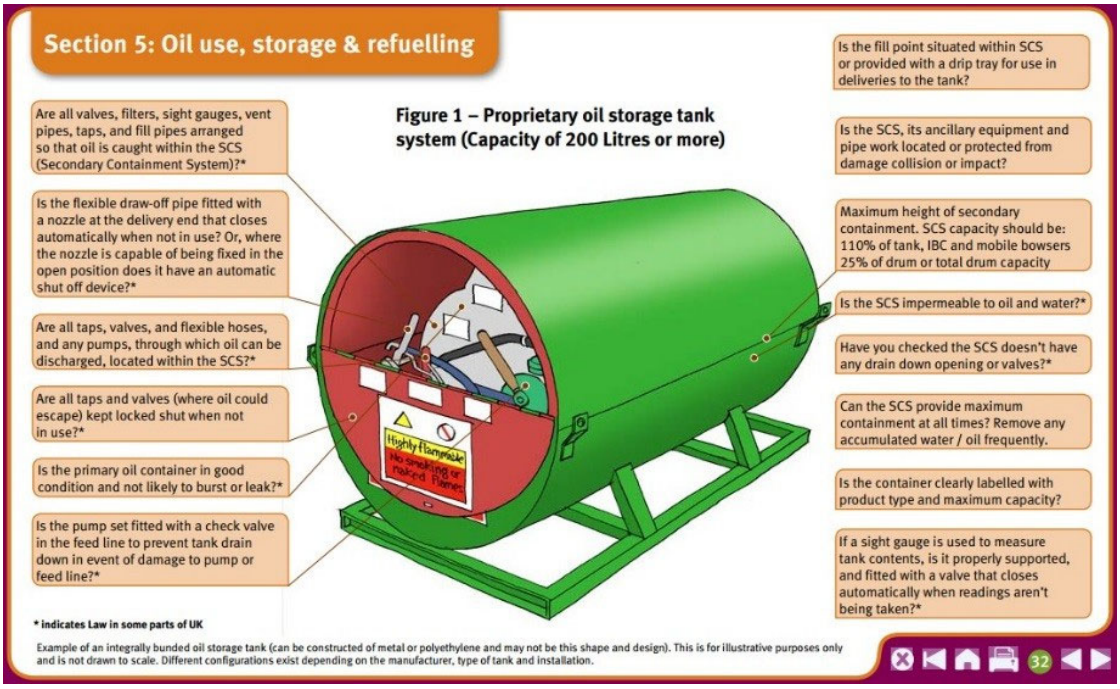
The storage of materials may lead to the accidental release of contaminated run-off during a rain event. There is also the potential for pollution or sediments from run-off to enter surface watercourses during normal rainfall events.

EDR Ltd shall allow for temporarily plugging all drains, gullies etc to any external areas to prevent the discharge of contaminated surface water into the drainage system.

Risks to the local environment will be effectively controlled by employing standard, good practice management practices and controls such as:

- Regularly maintaining construction plant to reduce the risk of hydrocarbon contamination.
- Storing, handling and managing materials with due regard to the sensitivity of the local environment and thus the risk of accidental spillage or release.
- Locating above ground storage tanks on designated areas of hardstanding.
- Storing liquids such as fuels, degreasers, solvents, lubricants and paints in segregated, bunded enclosures.
- Ensuring that any tanks storing more than 200 litres of oil on-site have secondary bunding. Bunding will be specified as having a minimum capacity of not less than 110% of the container's storage capacity or, if there is more than one container within the system, of not less than 110% of the largest container's storage capacity or 25% of their aggregate storage capacity, whichever is the greater.
- Appropriately siting and supervision of refuelling areas.
- Ensuring only a minimum quantity of fuel is retained on-site to reduce potential for release in the event of an incident.
- Avoiding servicing of plant as far as practically possible to reduce potential for oil and fuel spills. If required drip trays will be used for plant servicing and repair on-site.
- Immediately reporting any spillage via site management team and addressed using site spill kits and an incident report prepared.
- Siting storage points away from existing drainage.
- Ensuring only trained operatives dispense fuel and chemicals and ensuring any runoff passes through soil interceptors.

A plan for implementing flood risk management at the site must be produced to ensure that appropriate measures to mitigate environmental, health and safety concerns are acted on if a flood warning is received.



Environmental Monitoring

EDR's comprehensive Monitoring system allows monitoring at all stages throughout a project's lifetime, working alongside the most current legislation and regulations. Baseline noise readings will be taken before the project begins using handheld noise, dust and vibration monitors to determine pre-existing noise conditions. Due to differing local area regulations and restrictions of dust and noise limits, it is important that EDR monitor the pre-existing environment, to help develop environmental control plans and methods specific to each project. Control measures are summarised within our Environmental Management Plan.

Monitoring throughout Project Duration

Specifications for monitoring are set for each project and are subject to the client's particular project requirements. An allocated, competent member of staff would monitor pre-agreed points on site weekly, usually around the site perimeter. Special attention is given to sensitive areas, for example, next to or near to, party walls, residential buildings or adjacent to external noisy or dusty sites.

Monitoring is also implemented during planned heavy activity.

At each monitoring point, data is recorded and stored on the device in use. The surrounding environment, e.g., weather, wind speed and any noisy events, is also noted and considered to help contextualise the data and explain any peaks or troughs evident in the recorded data.

The device is then connected to a laptop where data is uploaded, stored and incorporated into a weekly report for each site. This is sent to the Health, Safety and Environmental team and finally to the client.

Demolition Method Statement

A complete structural survey will be completed prior to any works commencing.

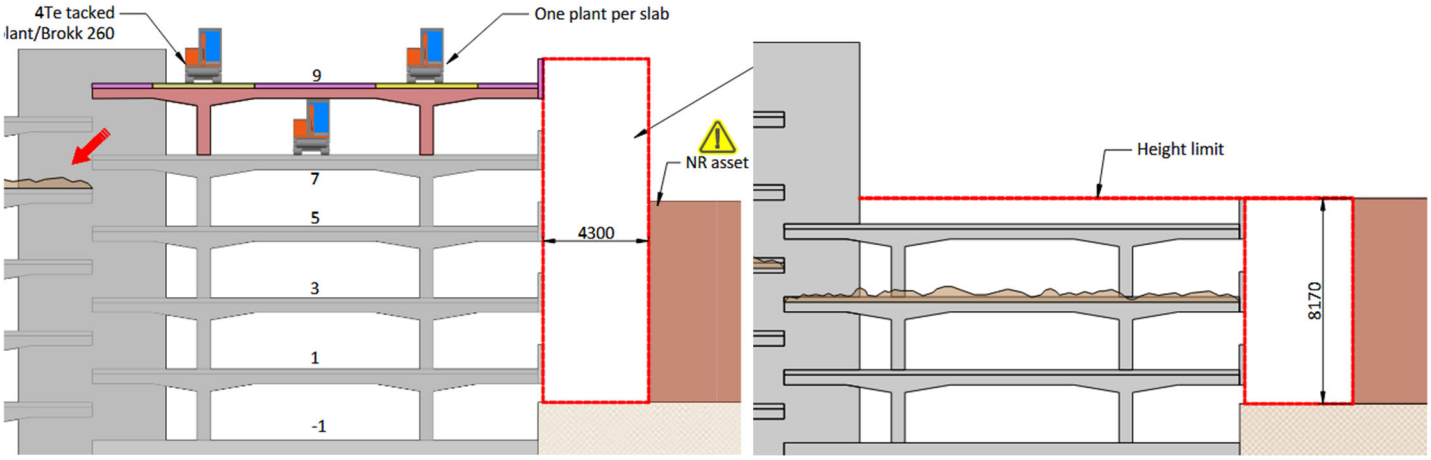
Adun Engineering Consultants have issued Pre demolition report Ref: 31873-2-ECC-MMS-MSV-REPORT-02 R2F for the purpose of assisting in preparation of this outline methodology.
A structural assessment of the car park and end block will be required to ensure the structure will remain globally stable during the proposed sequencing. An assessment will also be required to determine the maximum size plant permitted on the structure to assist the de-build works. (3-5te plant is expected) The stability of the structure throughout demolition will be reviewed by a structural engineer. Particular points of note are how the external stair cores will be removed and the interaction with movement joints during demolition.

Due to the proximity of Network Rail Asset Network rail approvals, such as a BAPA, will be necessary due to the proximity of their asset (Viaduct).

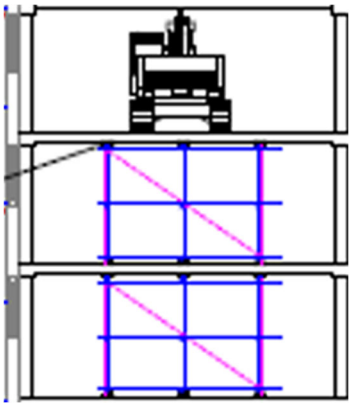
The former River Medlock used to run adjacent to the site and is understood to be backfilled.

An archive map below illustrates the building location in purple with the River Medlock line in blue.
It is recommended that the infill is verified prior to demolition works.

The working sequence will require the deconstruction of the north elevation and 'End Block' followed by mechanical demolition of the rest of the car park with a high reach excavator.
At least two floors should be de-built on the North side of the car park and end block to bring the structure well below the NR viaduct top level and thus reduce risk associated with demolition near the NR running line and equipment.



A requirement to install Internal propping may be directed by the appointed structural engineers. The propping will be installed in compliance of BS 5975 Temporary works Category 3. The appointed engineers will produce and issue calculations and drawings detailing the propping arrangement. Category 3 compliant checks will be undertaken and temporary works certificate issued.
Prop locations shall be set out on site prior to erection and adjustments made to the dimensions to ensure the propping system is installed a per design
The nominated temporary works co-ordinator (TWC) shall ensure that the props are correctly installed to the approved design, checked and maintained.



A nominated-on site temporary works supervisor shall also follow the instructions of the (TWC) in recording routine daily checks and reporting to (TWC) if there is a requirement for a modification or any occurrence which could affect the function of the system.

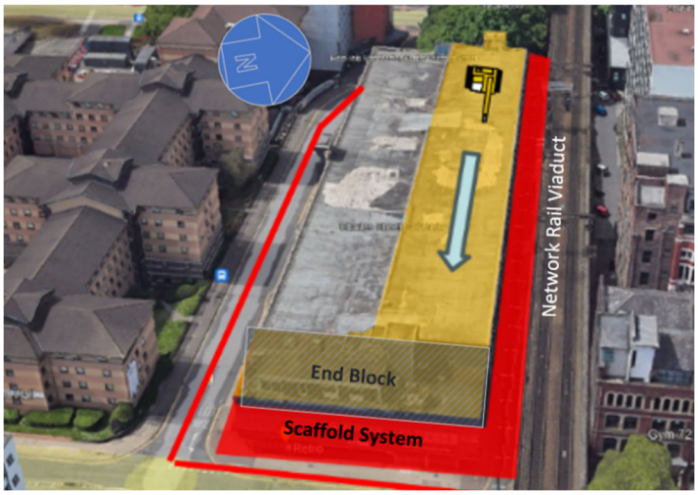


Fig 1

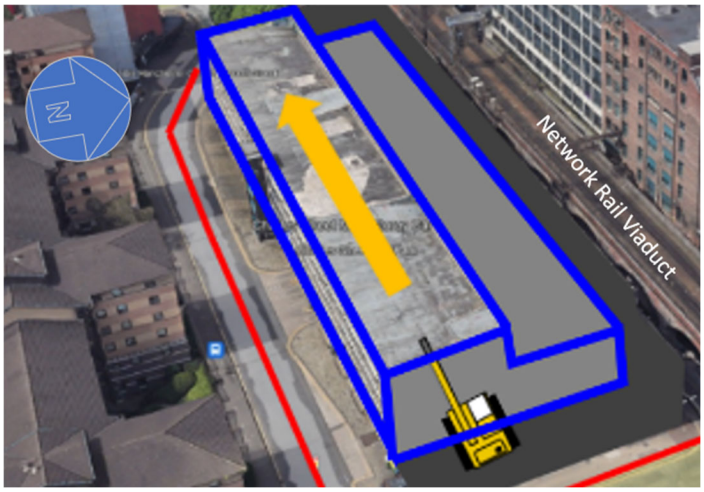


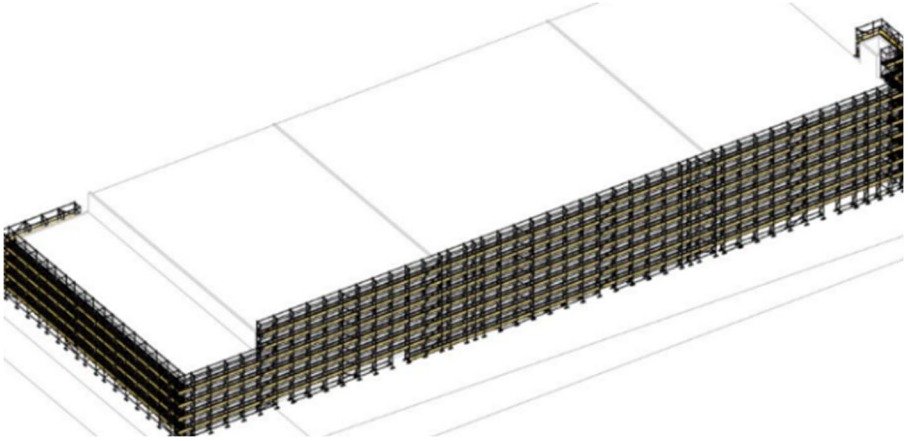
Fig 2

Top-down demolition two floors on the North side using mini excavators. See Fig 1

Removal of remaining floors using mechanical methods –360° excavators fitted with hydraulic rotating multi-processor attachment. See Fig2

All scaffolds will be erected in accordance with SG4:15, BS EN 12811-1 with reference to TG20:13 and The Work at Height Regulations 2005. The scaffold erection and dismantling will be strictly supervised by a competent scaffold foreman, (who will be an advanced scaffolder), in conjunction with our Site Supervisor. All scaffolds will be struck progressively along with the demolition, maintaining a minimum height of 1.5m above all working levels. The operatives will be in possession of a current CISRS (Construction Industry Scaffolder's Record Scheme) certificate or similar approved. All scaffold operatives will wear appropriate P.P.E. including harnesses and comply with the site rules.

Erection of external full height scaffold system enclosed with monar flex sheeting will be undertaken at commencement of operations, A specialist contractor will be engaged to complete the works.



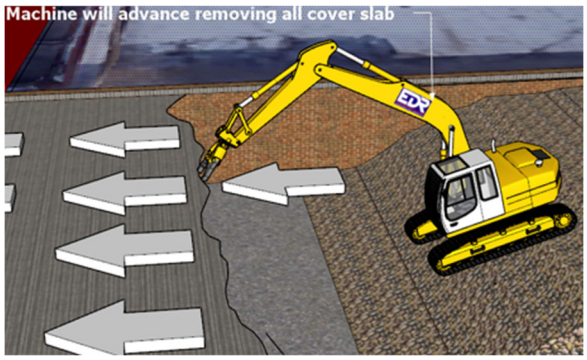
Demolition works will suspend to allow the scaffold to be reduced in height as the works progress.

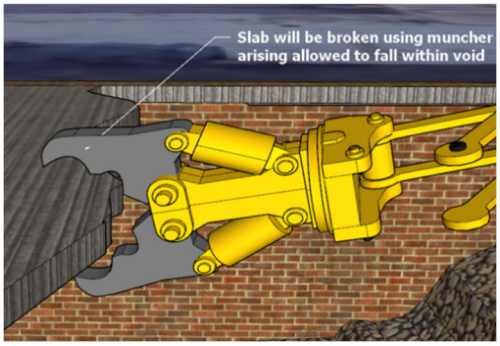
Basements

The structure has a single level basement that becomes shallower at the west end due to the site topography.

The extent of the basement will be communicated to the machine drivers at the commencement of works.
When demolition advances to the basement position the cover slab will be removed during the deconstruction phase, the void will be temporarily filled with site won materials. (This will allow machine operations to complete the superstructure deconstruction)
EDR will consult with the nominated engineers when the basement is fully exposed by the removal of the superstructure above. A plan will then be developed to excavate the remaining basement structure during the substructure removal phase.

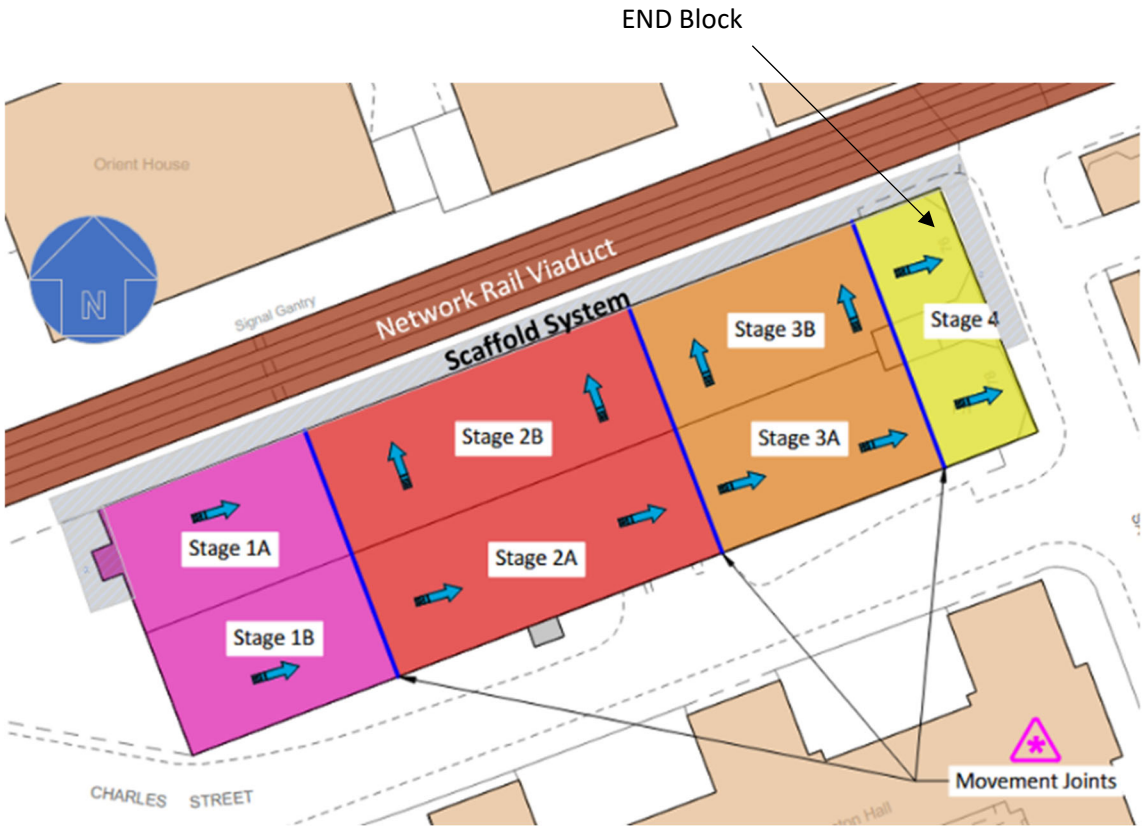
During deconstruction operations the exposure and break out basement cover will be undertaken and fill with compacted layers of site won engineered arising to slab level to allow demolition to progress.





For clarity each section of the structure will be designated a specific stage number as illustrated below:

The structure has been divided into 4 sections delineated by movement joints.



Top-Down Deconstruction - Northern Elevation / End Block connection

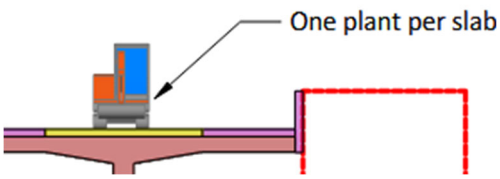
When all scaffolds / monar-flex have been erected and the *required back propping installed, the mini 360º excavators locate within the building.

(*If instructed by appointed structural engineers)

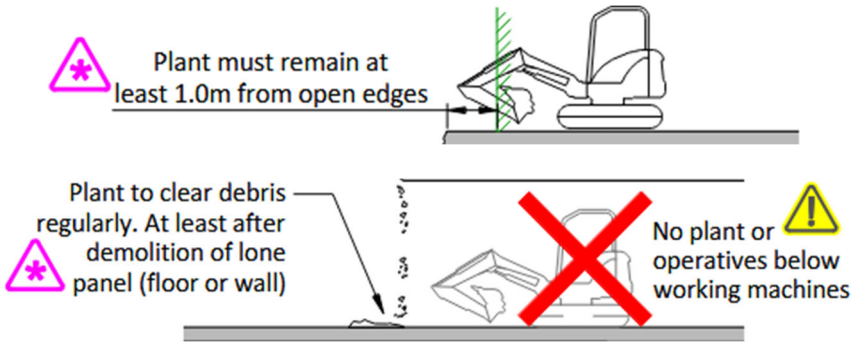
If lifting of machinery is a requirement then machinery will be lifted to roof slab level using a mobile crane as a Contract Lift. The crane hire company will provide a Lifting Plan, all lifting equipment and the current certification for Crane Operator and Equipment.

The Lifting Plan will include location of crane; pad loadings; swing radius; emergency procedures in the event of breakdown / failure of equipment; certification for Plant, Equipment, Crane Operator and Slinger / Banksman.

The small plant lifted onto the roof will be always dispersed and occupy different structural bays. (Structural bays are determined by the existing column positions) When travelling on the slabs the plant shall always maintain separation of a least one structural bay.



The parapet wall extending above roof level shall be retained to maintain edge protection for the roof works.



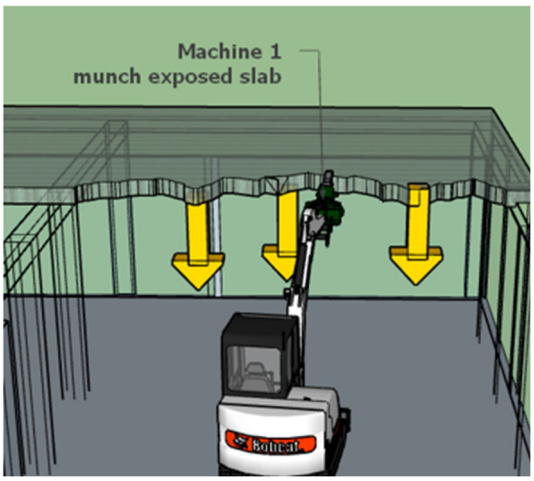
The primary and secondary internal stair cores will be closed off when demolition commences.

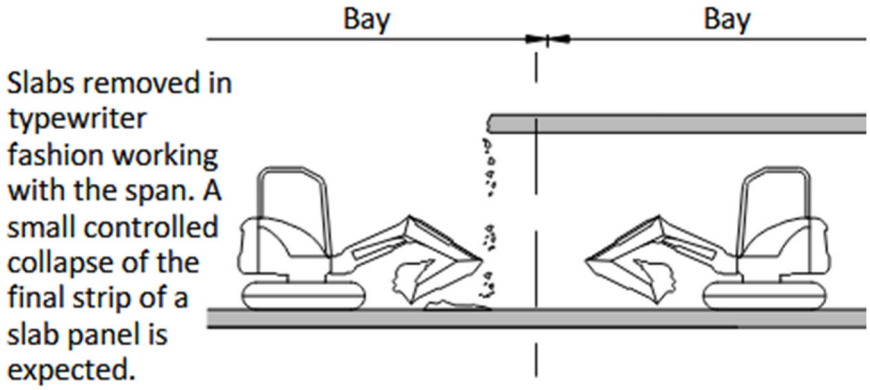
The external scaffold system shall always extend above the working floor, shielding the works from the public domain. The scaffold will be reduced as the works progress

Confirmation that a hose with a suitable water supply is available at the working floor to enable the control of dust.

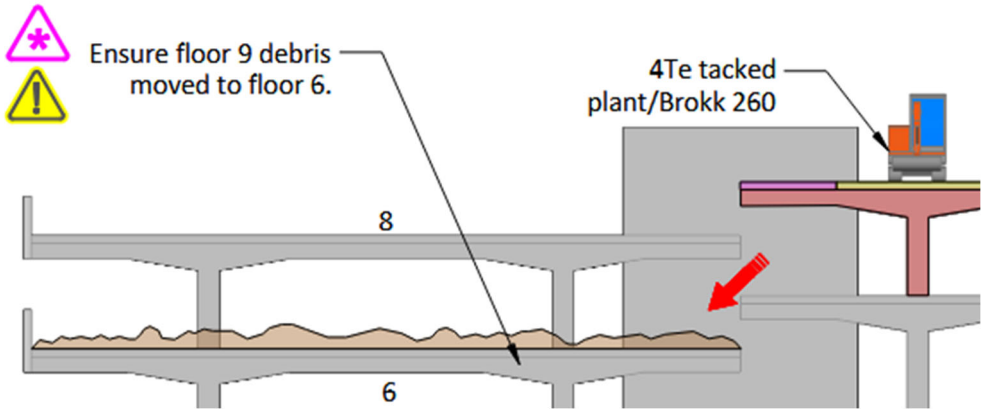
Working floor supervisor to monitor the works and ensure the dust control remains effective

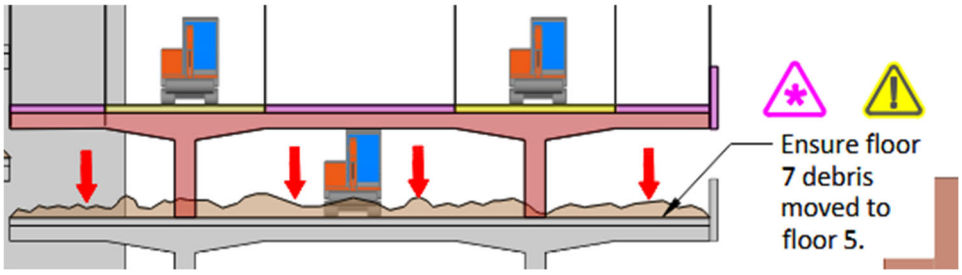
The demolition of the building shall be advanced by excavators working with concrete munchers, the driver shall attach to the exposed floor slab above and progressively munch the exposed slab allowing the arising to fall within the exclusion zone directly in front of the machine. Machines shall work in separate structural bays.
The driver will be instructed to munch the slab releasing small amounts of materials at a time, this will reduce kinetic energy minimising vibration within the building structure.





To prevent overloading the floor slabs during the physical demolition the machines shall mobilise at the completion of the demolition phase of one structural bay to clear away the arising from the floor slab, all arising shall be disbursed.



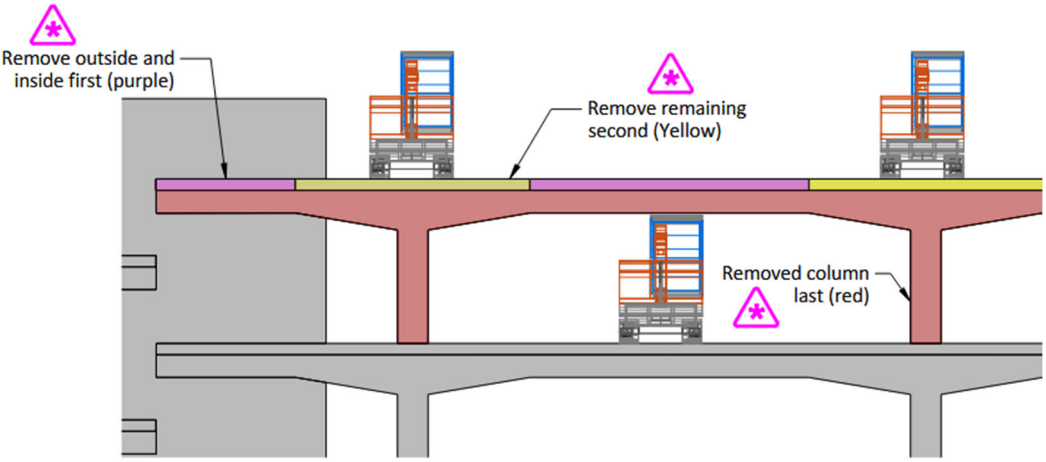


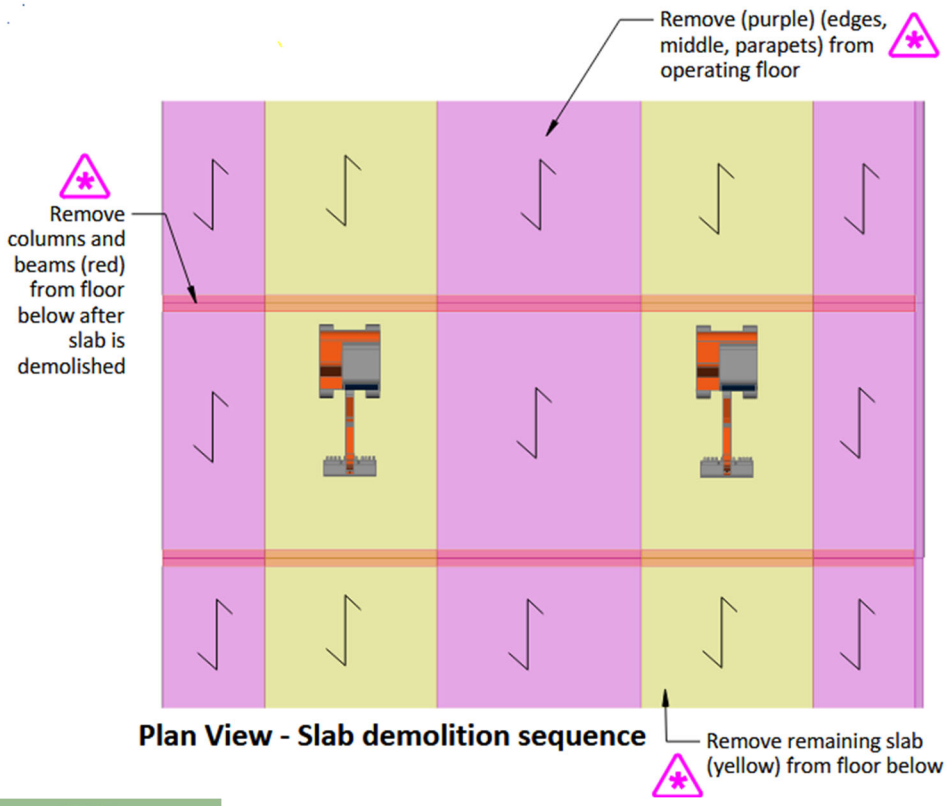
Operation Restrictions

- Plant exclusion zones apply. MAXIMUM OF 1 PLANT PER BAY (Bays are defined by single slab panel)
- Maximum one panel removal before debris is cleared.
- **Debris must not be stockpiled**. Max loading 3.5kN/m² (ie dead weight of slab). Plant must not track over debris.
- Plant must not track/operate within same bay. Bays defined in center of each floor.

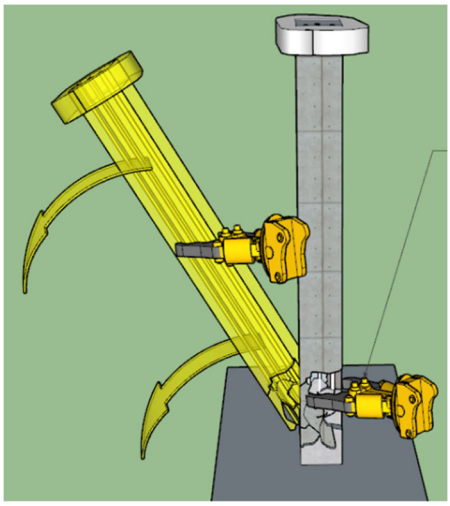
Plant

4Te Excavator (HITACHI ZAXIS38U or similar <4040kg). with attachment or Brokk 260





Plan View - Slab demolition sequence



Columns will be removed once the associated slabs have been removed, the driver shall attach the muncher close to the floor level and engage the muncher, (if columns are constructed from steel the driver shall change attachment to **steel shear**)

Once the column base has been compromised the driver shall attach to an upper part of the column and direct the member into the building footprint.

The external scaffold system will be reduced as the works progress. A deconstruction works will suspend when the scaffold is being modified.

End Block Demolition

This structure was identified as an RC frame with beam and block floor construction based upon visual inspection.

A full structural assessment is required to confirm building construction; the assessment will provide definitive information to allow the deconstruction methodology to be fully developed.
Below is an outline of proposed works.

The demolition works will be completed using a variety of techniques. Where possible works will be mechanised using specialist demolition attachments.

Due to the site restrictions a lot of the works will be undertaken by operatives using hand tools operating from within, Mobile Scaffold etc:

Works generally will be top down removed brickwork in courses, operatives using handheld breakers will detach the bricks by breaking the mortar bond between each course, the detached brick work will be directed into the exclusion zones.

Where possible works will be undertaken using mechanical assistance. A small d-rig fitted with various attachments will locate adjacent the area of works. The area surrounding the machine will be classed as an exclusion zone.

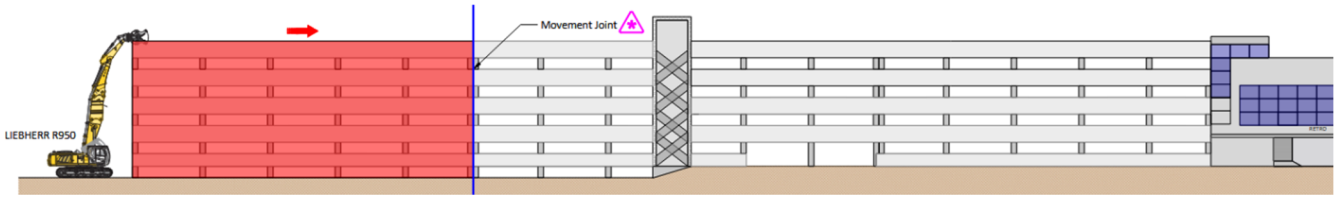
The external brickwork walls that require hand demolition (Borough High Street) will be reduced in height, operatives where required will work from the external scaffold which will be reduced in height as the external wall's height are reduced. Using small handheld electric breakers and hand tools such as bolster chisels and hammers the operatives will work the brickwork down in courses along the width of the elevation to be removed. This method will be used to work the walls down to the floor slab.

At the completion of the top down the scaffold contractor will be on call to reduce the system one lift at a time, the remote demolition will suspend during the scaffold system modification.

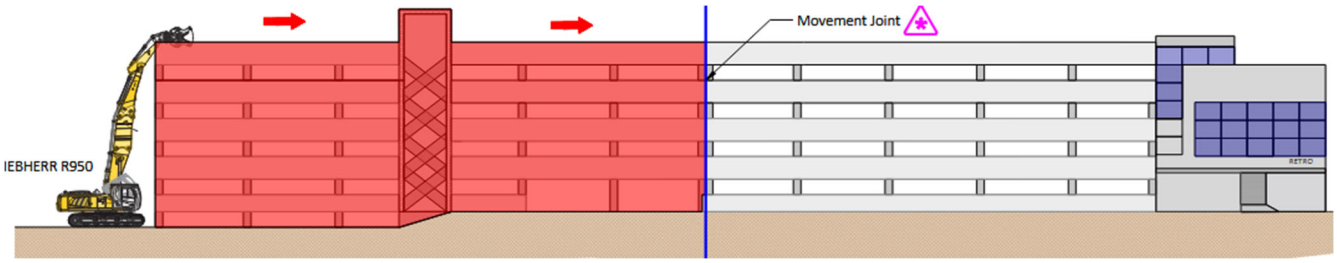
Car Park - Remaining structure Demolition

The structure is a multi-storey (9-level) reinforced concrete building.
The car park features ramps that contribute to the overall stability of the structure, split-level construction, and external stair cores.

The concrete frame appeared to be in good condition from a structural standpoint and there was no obvious defect or damage

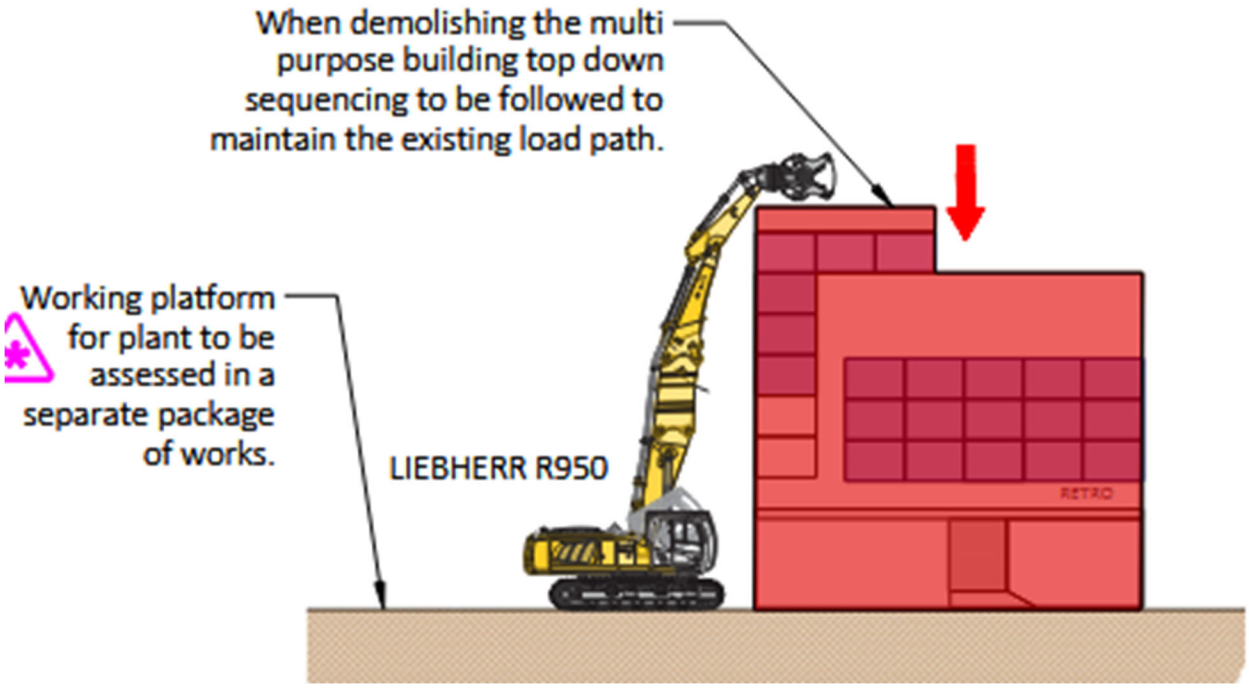


Stage 1

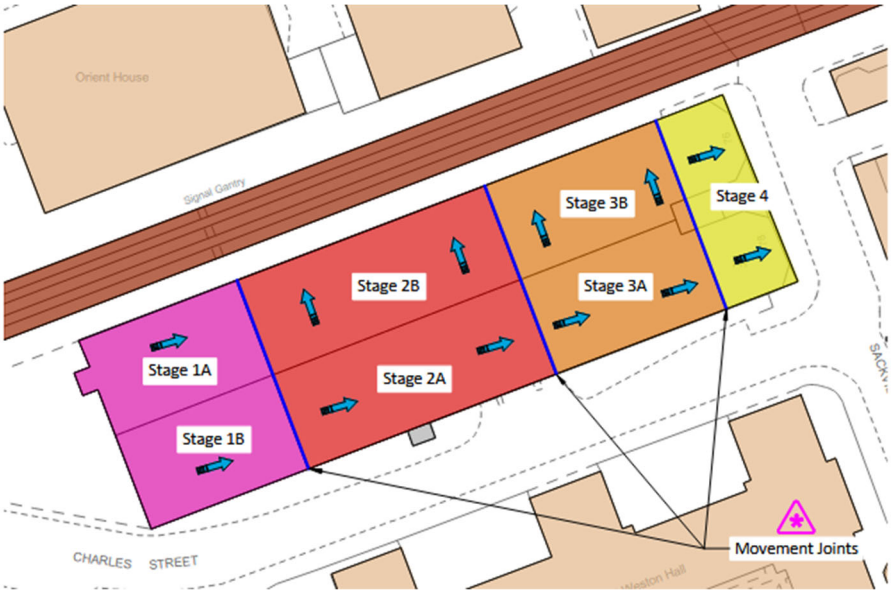


Stage 2

Stage 3

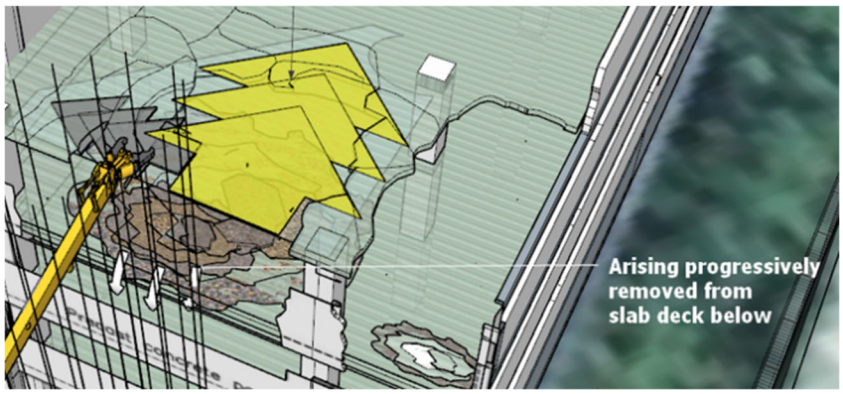


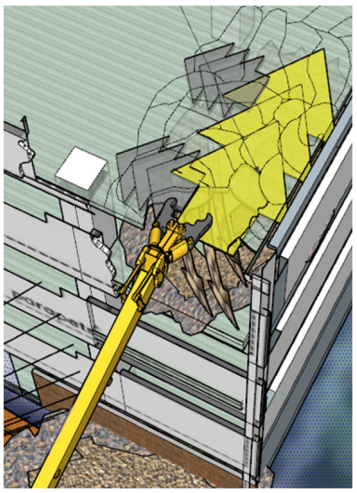
Stage 4



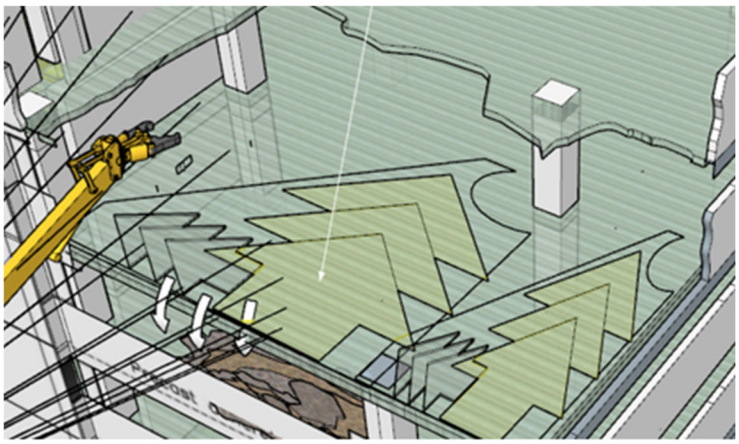
Plan view showing sequence of works.

Deconstruction will be undertaken using various attachments. All machines are equipped with quick hitch coupling, allowing the machine driver to select the most suitable tool for the operation.





The driver will nominate the concrete muncher where possible, but if steel beams are encountered then the steel shear will be selected.



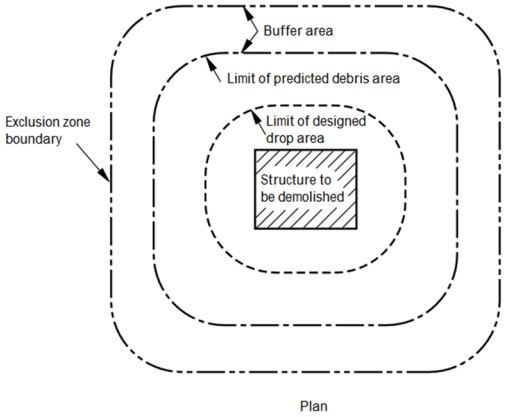
Dust suppression will be engaged during all periods of progressive demolition.

Banksmen will deploy outside site boundaries and remain in two-way radio contact with the site supervisor and machine drivers.

The banks men will be instructed to alert the supervisor / driver if visible dust is observed migrating from site during the operations.

Exclusion Zones

The exclusion zone is the designated three-dimensional space from which all persons, including the public, are excluded during demolition activities in certain circumstances, key personnel may remain within the zone for a specific task provided they are adequately protected.
The extent of the exclusion zone will be varied according to the demolition activity and rate of progress.

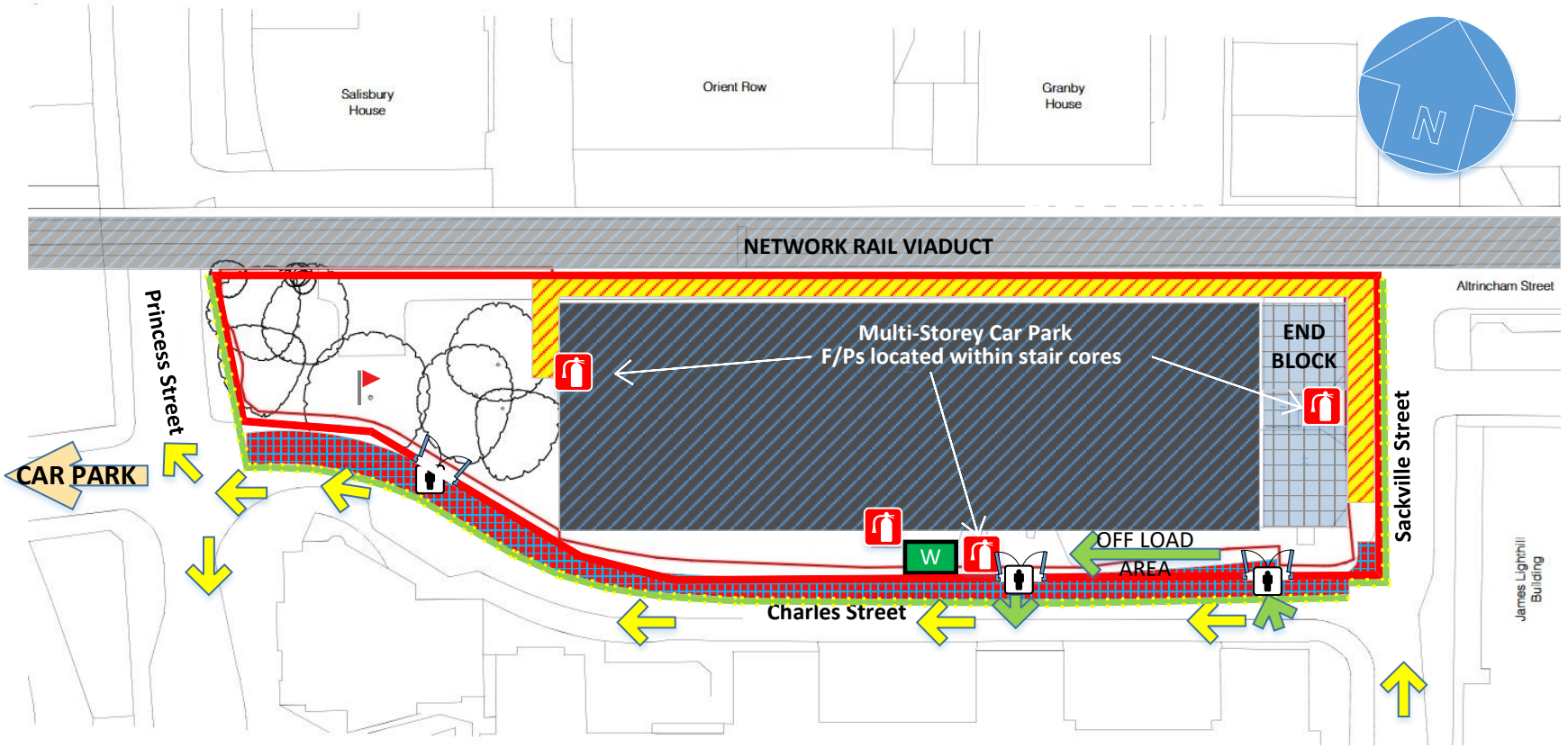


Exclusion zones will be applied when the whole structure or part of the structure is being demolished and includes areas where demolition machines are operating, and where arisings from the demolition can be deposited or otherwise handled, including controlled areas for soft strip materials.
During progressive demolition operations the site supervisor shall brief all operational personnel of the extent of designed debris zone (which is the immediate hazard area where the principal mass of the collapsing structure is planned to drop.) Limit of designed drop area (The perimeter of this second hazard area) is the predicted limit or extent to which any debris from, or secondary material resulting from, the structure being demolished will travel and come to rest. Buffer area (A hazard area that is planned to allow for any unpredictable events.) People beyond the external perimeter of this area the theoretical boundary of the exclusion zone is (safe from the effects of the demolition activity.)
During active demolition banksmen shall deploy on to public domain areas when required.
The banksmen shall remain in two-way radio contact with the machine driver and site supervisor,
If instructed the machine can temporarily suspend operations at any time.

Appendix 1 – Site Set up Plan

OFF LOAD AREA

Off loading of materials will be undertaken within site boundary, it is envisaged that initial area will be located Adjacent to car park entrance to allow material transfer within car park building.



W

Due to site constraints the site welfare facilities will be required to relocate during the working phases, initially the location will be on Charles Street adjacent to the existing external stair core. If feasible the welfare will relocate to the western elevation.

Muster Point located on the Western elevation grassed area in proximity to retained trees.

Due to site constraints Visitor and site staff parking will be off-site, Nearest, Euro Car Park Pritchard Street. (2 minute Walk)

Legend

- Working Site Boundary
- Site Access Charles Street
- Heras Fence
- W — Welfare Area
- Site Access Gates
- Gate smen
- Muster Point
- F/Ps Fire points
- Scaffold
- One Way Road closure

Project: Plot H
CHARLES STREET CAR PARK

Site Set Up

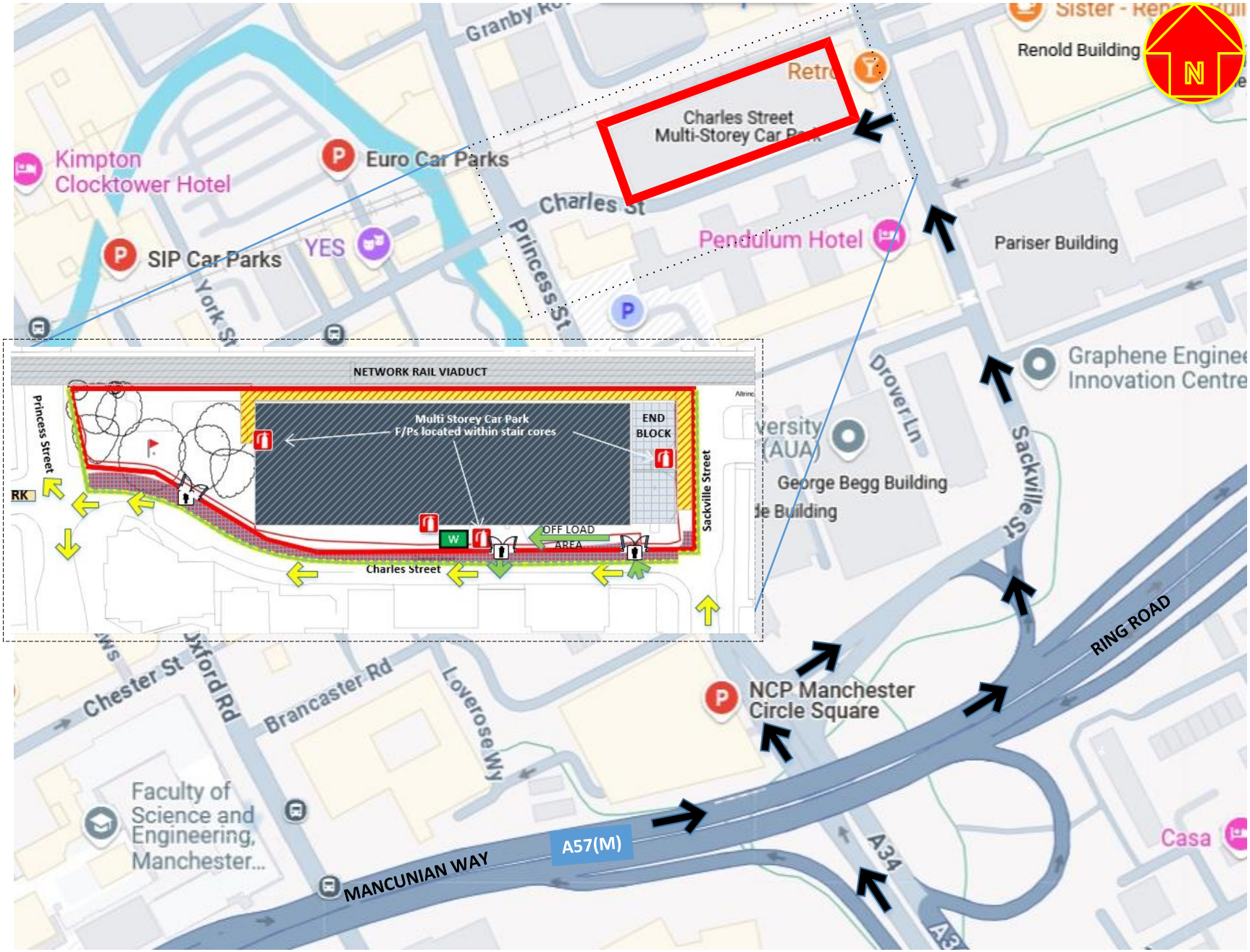
Drawing 25109-01

ELFORD DEMOLITION & REMEDIATION

Scale N/A Date 11.07.2025

Project No 25109. Rev 1

Appendix 2 – Traffic management plan



Legend

Site Boundary

Route

Project: **Plot H**
CHARLES STREET CAR PARK

Traffic Management Plan
ROUTE TO SITE

Drawing 25109-01

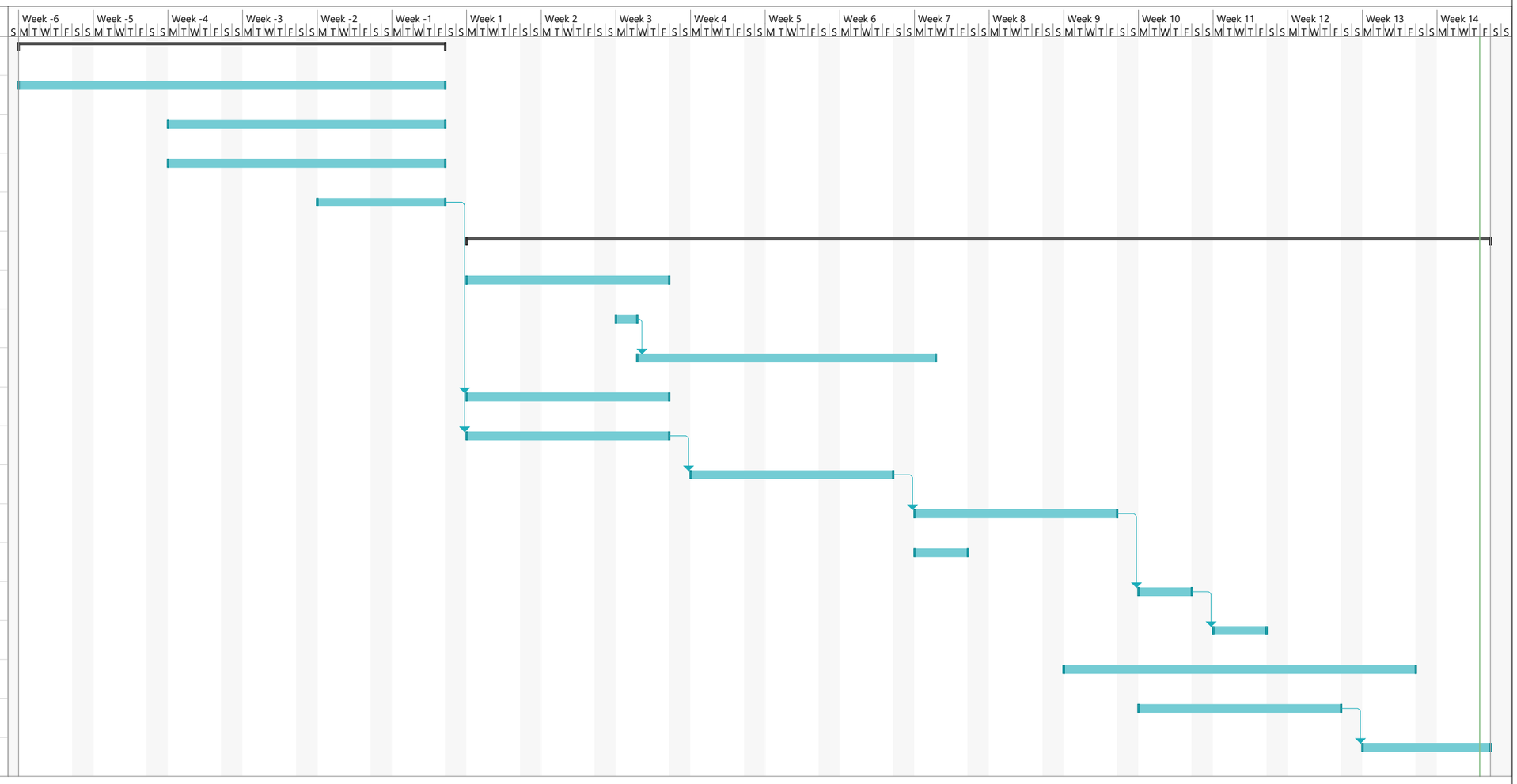
Scale N/A
Date 11.07.2025

Project No 25109

Appendix 3 - Programme

Target Programme - Car Park Charles Street, Manchester

ID	Task Name	Duration
1	**Pre- Commencement Programme Duration**	**30 days**
2	Network Rail APA Approval	30 days
3	TTRO Application	20 days
4	Hoarding / Scaffold Licence	20 days
5	ASB5 Notification	10 days
6	**On Site Programme Duration**	**70 days**
7	Scaffold Erection	15 days
8	TTRO Implementation	2 days
9	TTRO	20 days
10	Asbestos Removal Works	15 days
11	Soft Strip	15 days
12	Level 9 + 7 Demolition	15 days
13	Mechanical Demolition Stages 1 + 2	15 days
14	Hand Demolition Stage 4	5 days
15	Mechanical Demolition Stage 3	5 days
16	Mechanical Demolition Stage 4	5 days
17	Process Arisings / Crushing	25 days
18	Basement / Slab removal	15 days
19	Turnover / Engineer backfill and piling matts	10 days

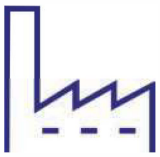


Project: EDR - Target Programm
Date: Fri 13/06/25

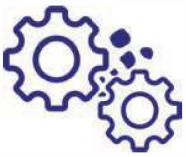
Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

DEMOLITION

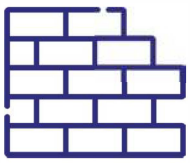
BULK EXCAVATION



DECOMMISSIONING



SPECIALIST CRUSHING



DISMANTLING

REMEDIATION

ASBESTOS REMOVAL

RECYCLING

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