



COMMERCIAL DEVELOPMENT, 27-31 KING ST WEST AND THE CARRIAGE WORKS, MANCHESTER

**CONSTRUCTION MANAGEMENT PLAN
AND OUTLINE METHOD STATEMENT**

**MAIN CONSTRUCTION PHASE - CONSTRUCTION OF NEW COMMERCIAL BUILDING AND
REFURBISHMENT OF EXISTING GRADE II BUILDING**

**By:
Property Alliance Group Ltd**

Rev 00 – for Commercial Planning Application September 2022

Content

1. Introduction	3
2. Scheme Overview	3
3. Programme and Site Working Hours	6
4. Site Access Strategy	6
Site Vehicles	6
Public Pedestrians	8
Operative Pedestrian Access	9
5. Temporary Traffic Management	9
6. Site Logistics	9
7. Site Security	9
8. Protection to the public	10
9. Labour Levels	10
10. Plant and Equipment	11
11. Welfare Accommodation	11
12. Temporary and Permanent Services Connections	11
13. Environmental Management	12
14. Community Engagement	15
15. Construction Information and General Description of Works	15
16. Project Directory	24
Appendix 1. Project Directory	25

1. Introduction

This Method Statement relates to the main phase of works in relation to a fully new-build commercial office building, south of the existing 'Carriage Works'. The 'Carriage Works' site is an existing Grade II listed building which will be retained and sympathetically refurbished compliant with Historic England.

This document sets out the overall method of delivery for the construction works, including logistics and environmental management processes required to be implemented on site by the appointed Principal Contractor engaged for the redevelopment of the scheme and refurbishment of the 'Carriage Works'.

The exact measures implemented may be subject to development following further contribution by the Principal Contractor and consultation with Manchester City Council (MCC), Client team, and any other relevant stakeholders. All provisions implemented on site will achieve as a minimum legislative compliance.

2. Scheme Overview

The overall development site occupies a prominent location in the City Centre, fronting onto St Mary's Parsonage and King Street West. Currently the site comprises the Grade II 'Carriage Works' building which was initially constructed in 1849 but then rebuilt following second world war bomb damage with substantial alteration and remodelling. 27-31 King Street West is an underperforming asset in terms of energy efficiency, floor to ceiling heights and overall condition; this has consequently negatively impacted its ability to be relet at current market values.

The site is within the St Mary's Parsonage Strategic Regeneration Framework area. The building is characterised by retail and food and beverage uses on the ground floor King Street West frontage, office on the upper floors, and a mixture of office and residential buildings in the wider vicinity with the majority of uses being commercial. To the north west is the existing Alberton House which comprises two existing 5 and 11 storey blocks, and has had a recently consented 18 storey commercial scheme. To the east of the site is the 7-storey former Kendal Milne Department Store and 6 storey Car Park which achieved planning approval for 546,000 sq. ft. of office space in June 2021.

The below image highlights the adjacent schemes that are in the vicinity; the red outline is Albert Bridge House which will be going for planning in September; the green outline is Alberton House which has had planning approved for an 18-storey office redevelopment; the blue outline is Cardinal House which is currently on the market and becoming vacant in October 2022; the yellow and orange outlines are the former Kendal Milne NCP Car Park and the former Kendal Milne department store, respectively. Property Alliance Group acknowledges these proposed schemes and have designed our scheme to work in conjunction.

All the above properties are within the St Mary's Parsonage Strategic Regeneration Framework, with others due to be redeveloped in-line with Manchester City Councils vision.

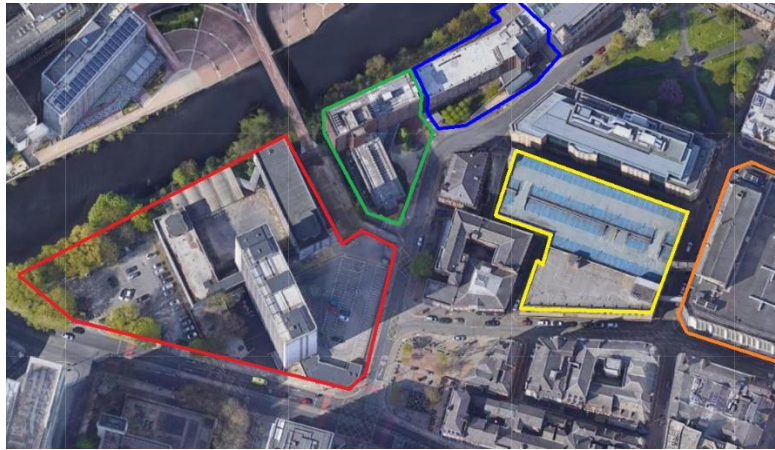
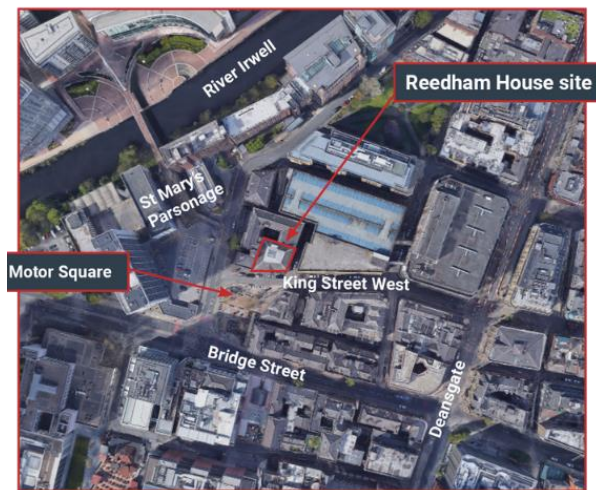


Image outlining the adjacent schemes



Proposed Site Location Plan



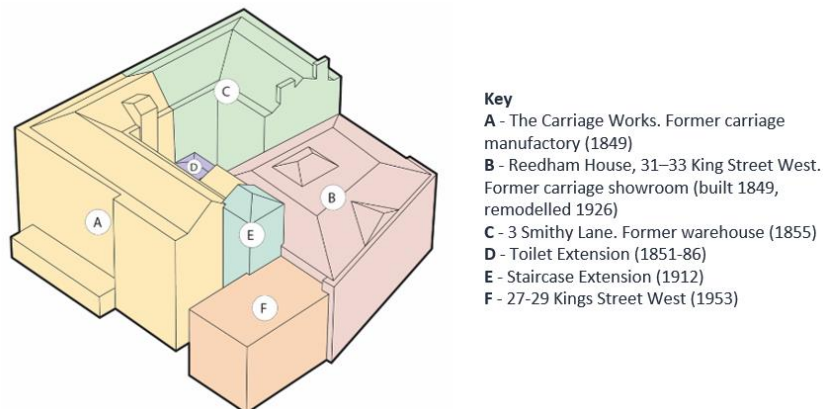
Existing Carriage Works Interior View

The 'Carriage Works' Grade II Listed Building is at the rear of 27-31 King Street West will be repurposed as office space with careful consideration given to natural lighting and access, as shown below.



Proposed Interior view of The Carriage Works repurposed as a workplace

The subject site covers a block of six interlinked buildings between King Street West and St Mary's Parsonage shown below;



The planning application to which this document relates is for the construction of a new 13 storey Office Building. The scope of works generally includes a new concrete-frame building, with 13 floors above ground of high-specification office space and new façade. The entrance lobby shall be on the King Street West elevation and retail units along St Mary's Parsonage will complement and continue the retail offering in the area. The entrance to the refurbished 'Carriage Works' building will be from Garden Lane to the North of the site and a third separate entrance into the Gym amenity space will be from Smithy Lane to the East.

This Method Statement is to be read in conjunction with the Construction Phase Health and Safety Plan (CPH&SP), the requirements of which must be strictly observed. The CPH&SP will be provided once a Principal Contractor has been procured and prior to works commencing on site.



Proposed ground floor plan

3. Programme and Site Working Hours

Anticipated Commencement Date: Early 2023

Duration: Approximately 2.5 years

Normal Site Working Hours for all construction work, and ancillary operations, including deliveries to and dispatch from the site shall be confined to the following periods:

Between 08:00 and 17:00 Monday to Friday

Between 08:30 and 13:00 on Saturdays

No planned works on Sundays and Public Holidays.

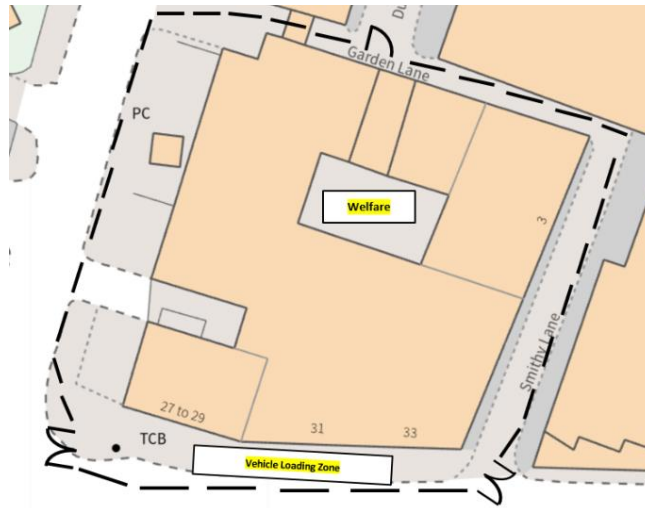
The operation of plant/machinery/power tools and any noisy operations will be limited to the core hours stated above. Note that quiet works associated with office work may continue outside these hours.

It is recognised that there may be exceptional circumstances where the restriction on hours of work cannot be adhered to, in which case all reasonably practicable mitigation management procedures will be implemented, such as the Principal Contractor will provide advance notification and justification for any extension to the working hours to the Planning Authority and notify any affected neighbours before works start outside normal hours.

4. Site Access Strategy

Site Vehicles

The construction methodology relies on segregating along the Back South Parade, Dunlop Street, and Garden Lane to facilitate the works. A logistics pit lane will be formed on King Street West for vehicle deliveries, offloading and material movement to supply the construction works. See below site boundary and hoarding layout plan.



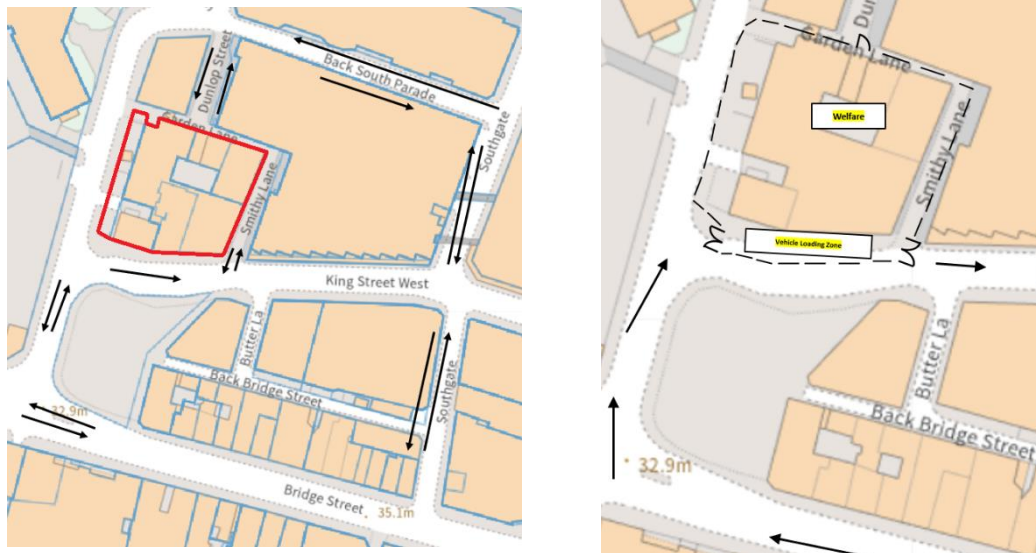
Indicative site hoarding layout plan



Imagine outlining the parking bays proposed for suspension

The site hoarding will be erected around the perimeter which includes the King Street West frontage, St Mary's Parsonage, Garden Lane, and Smithy Lane. A pit lane will be incorporated within the King Street West frontage through the suspending the existing pay and display as well as dropping the kerb to ensure sufficient space. In order to incorporate the pit lane for construction vehicle loading and delivery, necessary permissions will be sought from Manchester City Council. Existing Street Furniture, Lighting, Telephone Box etc shall be temporarily removed/relocated to facilitate these works. An existing tree on the corner of the St Mary's Parsonage and King Street West will also be removed under licence as part of the enabling works.

The primary route for site vehicles shall be from Bridge Street and right onto King Street West and following up into the 'Loading' pit lane. Once any loading / off-loading has concluded, vehicles can then leave the lane through the gate at the bottom of Smithy Lane and continue up King Street West towards Deansgate. Ongoing vehicle routes to and from site will need to be reviewed and managed in accordance with Manchester City Council requirements and to accommodate any other temporary traffic orders as required.



Construction and smaller, more lightweight vehicle local traffic movement

Advance planning and liaison on hoarding and vehicle movement will be entered into in order to manage the constraints of the site to best facilitate the construction of the project with minimal disruption to the local environment. Critically, the site boundary has been developed to create full site enclosure to reduce the interface with the public on all elevations.

Due to the proximity of the site works to the existing footpath, as well as the adjacent Alberton House development, the existing footpath around the site will be closed and pedestrian access diverted prior to arriving at the site vicinity. There is sufficient space and locations leading up the site to safely divert pedestrians away from the site, and to use the opposite sides of all three major roads for continued safe pedestrian movement.

Vehicle and site pedestrian access gates shall be installed at each end of the hoarding as shown above to allow vehicle movement off the public road into the site boundary with the least impact on the traffic circulation.

Site vehicles delivering or removing materials from site shall use the hoarded off logistics area provision on King Street West. All vehicles arriving at the site shall be pre-informed about the access routes and vehicle management system on site and shall comply with the Delivery Management System that will be implemented by the Principal Contractor. It is anticipated that approximately 10-25 vehicles will arrive/depart site on any given day, at any time, with 10-15 tippers during the demolition works.

No vehicles will be permitted to park / wait on the immediate access roads and vehicle holding points will be identified by the Principal Contractor in the wider area from site to allow just-in-time arrival to enable vehicles to be escorted directly to the designated area for delivery/collection.

Site access signage will be placed in clear visible positions warning both vehicles and pedestrians alike of the location of the site entrance.

It should be noted that an alternative site office location may be sought through leasing a plot within the Albert Bridge House car park, subject to necessary permissions from owners.

Public Pedestrians

Pedestrians shall be diverted from the site perimeter using the Traffic Management and agreed routing as implemented during the demolition phase of the project, and throughout the project thereafter.

Operative Pedestrian Access

Pedestrian access to site shall be via a dedicated site entrance gate segregated from the vehicle gates, either on the side of Smithy Lane or at Garden Lane, depending on the phasing of the works. All site operatives must at all times whilst on site comply with the site rules and requirements of the Health and Safety at Work Act 1974 etc., the Construction (Design and Management) Regulations 2015 and all other relevant safety legislation codes, standard and guidance.

No parking on site shall be permitted and any operative vehicles may use the public car park on King Street West, or other nearby parking facilities.

5. Temporary Traffic Management

Temporary Traffic Management (TTM) shall be prepared, submitted and implemented for all works that interface with the public highway. Any modifications to this during the course of the construction phase shall be planned and coordinated with MCC and any additional TTM shall be implemented.

All site entrance and exit gates shall be managed and controlled by designated gatemen and banksmen to ensure the safe and controlled movement of vehicles into/out of the site boundary and to ensure the traffic and pedestrians are managed accordingly. Any further detailed TM can be developed further by the Principal Contractor

6. Site Logistics

The logistics of the site will be very much within the control of the appointed Main Contractor, but it is anticipated that 1 tower crane and external hoists will be required, as well as cantilever loading platforms, and external mast climber platforms. Potential locations for tower cranes and hoists shall be confirmed once a Main Contractor has been appointed. For tower crane assembly, sections of full road closure will be required at weekends to carry out the erection works safely. Separate applications will be made via the Main Contractor for these works.

7. Site Security

The site will have security during the times where work is not ongoing with adjoining interfaces having physical hoarding or fencing separation. Access control measures will be coordinated by the Principle Contractor. All personnel shall enter via a Site Security control point dedicated for pedestrian access point to enter/exit site. All gates shall be controlled by a designated gateman/banksman to ensure only authorised vehicles enter the site.

Out of hours, all site access points will be locked and security present on site to patrol and maintain security during non-working hours.

The integrity and effectiveness of site security arrangements will be subject to a daily recorded check by the Principal Contractor with any adaptations or amendments required addressed as a matter of urgency.

Site security will also be maintained by security cameras provided by an approved SIA registered security contractor. The cameras will be monitored 24/7 for the entire duration of this project.

8. Protection to the public

In addition to the specific measures identify in sections 4-7 above, the works shall be undertaken in such a manner to minimise the impact to the public, which the following aspects being implemented:

- Take all reasonable steps to minimise the creation of dust, with the use of low-impact breakers, screens and enclosures and water dust suppression systems where parts of the internal building need to be demolished and removed, should this be deemed necessary;
- Curtail, suspend or re-arrange work as necessary to allow the works to proceed whilst reducing the impact on any of the adjacent building occupiers or neighbouring properties/premises;
- Ensure all plant is fit for its purpose and adequately maintained so that noise generation is within the manufacturer's stated maximum noise level;
- Given particular consideration to activity on site at the start of the day to minimise disturbance of the neighbours. Reversing manoeuvres will be avoided in the early morning to prevent reversing sirens sounding. The timing of any particularly noisy operations will be coordinated to minimise disturbance as far as reasonably practicable;
- Monitor the condition of the public highway when HGVs are leaving site;
- Air-quality and noise monitoring shall be in place throughout the works.
- Light pollution from the site temporary lighting shall be planned in such a way and controlled to minimise the impact on the adjacent premises.
- Where pedestrians are required to walk near to the site hoarding, particularly relating to the opening of adjacent phases of the development, additional segregation, protection measures, lighting, or signage shall be provide as required.
- Site security and logistics staff shall be courteous and respectful to the public moving around the site boundary and shall provide directions in relation to the works or the vehicle movements being carried out.
- All construction delivery vehicles shall be fully compliant and roadworthy.

9. Labour Levels

Labour levels will be managed in accordance with the different work activities and phasing of work over the construction works programme. The below table gives an indicative break-down of resources for main packages of works, as a guide.

Office Building	
Demolition Contractor	10
Principle Contractor	10
Site Logistics	10
Structural Works	25
Façade Works	10
MEP Works	30
Roofing	10
Interior Fit Out	25
Lifts	5
External Works	15
Sundry	20
Total	150

Numbers will be re-assessed and verified following review of the works by the Principal Contractor.

10. Plant and Equipment

The plant and equipment will be specified and provided by the Principal Contractor for the works once appointed. The below list identifies key items that are envisaged to be used, but may be substituted for alternative items further to construction methodology development by the Principal Contractor.

- Small to Medium-sized excavators with various pneumatic arm attachments for removing existing structural floors.
- Mobile Cranes for material delivery.
- Tower Crane
- 40m3 roll-on-off (roll on roll off) skips and lorries for general waste, timber and scrap metal
- Waste compactors and waste bins
- Scaffolding and access towers
- Mobile Elevated Access Platforms
- Mast climbers or Gondola Systems
- Concrete wagons and mobile concrete pumps
- Delivery vehicles of various sizes from small vans and pick-ups to articulated lorries
- Material and Access Hoists
- HIABS and articulated delivery lorries

The Principal Contractor shall operate a Delivery Management System to ensure all deliveries are planned, controlled and managed throughout their journey to and from site.

Note that for all applicable plant, certificates will be obtained for and copies of the certificates retained onsite. All operators will have appropriate CPC cards and all site staff shall have a valid CSCS card.

11. Welfare Accommodation

Suitable welfare facilities will be established within the site boundary. This shall be in temporary cabins inside the hoarding/logistics area and/or temporary built in-place offices within the existing Carriage Works building. The ground floor retail spaces may be used for site accommodation or material storage, depending on the detailed method of works developed by the Principal Contractor.

The site accommodation will comply with the Construction (Design & Management) Regulations 2015 and Covid guidelines and will provide the following facilities as a minimum: security, rest areas, toilets, changing rooms, drying rooms for work-wear, offices for Principal Contractor and Subcontractors, equipment stores, canteen facilities and first aid facilities.

All welfare shall be segregated from construction works and vehicles and designated PPE-free and mandatory PPE zones identified. PPE-free routes shall be provided from the site entrance points to the welfare and offices. Statutory and project information shall be displayed on Principal Contractor notice boards informing staff and visitors of the site requirements.

12. Temporary and Permanent Services Connections

Permanent services disconnections, diversions and new connections shall be coordinated by the MEP Consultant and relevant notices issued by Property Alliance Group.

All live services information will be stored on site within the Construction Phase Health & Safety file. Key service providers are as follows:

Electricity – Electricity North West Limited
Gas – Cadent Gas
Water – United Utilities
Telecoms – Open Reach

A full scope of service diversions shall be prepared as part of the overall development.

All temporary site services shall be provided from within the development, coordinated with the supplies to the Carriage Works to serve the new-build development.

13. Environmental Management

13.1. Dust Control and Monitoring

Dust may be created on site during phases of construction and this will be managed throughout in accordance to the specific works.

Generally good housekeeping should be employed to reduce the amount of dust created. The Principal Contractor in conjunction with its sub-contractors shall ensure dust generated from site activities does not become a risk to others and in doing so shall assess the dust risk for each work package, ensure adequate controls are in place and review these controls with their contractors.

Removal of demolition arisings shall be done using enclosures, water dust suppression with sprays, and netting and covering waste skips and tipper trucks. For other trades, waste shall be transported in bins via a goods hoist or internal lifts and brought to a single waste collection point for collection and removal in skips or compactors. Measures will be taken to eliminate, or at least minimise, dust generation with consideration given to material usage, type of work equipment used and work methods applied. Where dust creation is unavoidable, dampening down techniques will be applied.

Dust monitoring shall be implemented around the site perimeter and data recorded and monitored by the Principal Contractor throughout the site works.

13.2. Noise Control and Monitoring

Noise control measures shall always be addressed in advance of the works during the planning and assessment phase of the works and specific measures shall be incorporated in the method statements. Operation with high noise levels that may impact upon construction operatives and residents/neighbours in nearby premises shall be managed with appropriate noise reduction measures locally at the works location. Construction works shall be limited to the site working hours as described in Section 3.

The requirements described within The Noise at Work Regulations 2005 and the British Standard BS 5228 Noise and Vibration Control on Construction and Open Sites will be adhered to fully.

The Principal Contractor will limit as much as is practical high noise operations and where this is unavoidable measures will be taken, such as the selection of plant and equipment or work processes, which does not emit high noise levels or equipment, which is fitted with silencing/anti-vibration equipment.

13.3. Waste Management

The site shall implement a Waste Management Plan which shall provide a strategy and management plan for reducing, storage and disposal of all wastes generated during the construction works. It is also concerned with the establishment of procedures for complying with statutory and good practice requirements for waste management. The Principal Contractor is responsible for ensuring that the relevant documentation is completed and held on site. In addition, all operatives will be responsible for adhering to the requirements of the procedure.

Relevant Legislation and Guidance:

- Environmental Protection Act 1990, Part II;
- Environmental Protection (Duty of Care) Regulations 1991;
- Hazardous Waste Regulations, 2005;
- Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991; and
- Site Waste Management Plans – Guidance for Construction Contractors and Clients, Department of Trade and Industry; July 2004.
- The National Construction Best Practice Programme advocates 'lean production' methods and the minimisation of accidental on-site material wastage.

The reuse of materials should take place wherever possible. Any remaining waste should be considered for recycling

To assist in achieving best practice, the Principal Contractor's attention shall be drawn to the following initiatives:

Waste exchange - electronic waste board where contractors can advertise the availability of various types of waste available and companies can search for materials they need (www.wasteexchange.org);

WRAP – The Waste Resources and Action Programme set up to establish markets for buying and selling recycled materials. Includes a guide to specifying sustainable aggregates www.wrap.org.uk
Best Practical Environmental Option - Assessment by BRE of methods of demolition, construction and disposal of wastes to enable development of Best Practical Environmental Options for waste management; and

Other Building Research Establishment (BRE) and CIRIA current initiatives relating to construction.

Over-ordering of materials should be avoided, and deliveries of materials should be arranged for the appropriate stage of construction. Packaging from raw materials should only be removed immediately prior to use, to avoid damage to the materials and waste generation.

Initiatives to reduce waste streams should be incorporated where possible. These may include obtaining information on materials packaging from manufacturers and suppliers and avoiding purchase of over-packaged materials, liaison with the suppliers to enable packaging material to be sent back for reuse, use of off-cuts where possible and the recycling of off-cut material by the supplier e.g. plasterboard.

13.3.1. Recycling

Materials to be recycled will be sorted on site and stored in an appropriate container or stockpile ready for collection. The amount of waste reused, recycled or sent to landfill should be recorded by Principal Contractor and compared with the targets for waste re-use and recycling.

A detailed waste plan should be developed by the Principal Contractor to identify methods of waste minimisation and recycling. The following materials will be identified for potential recycling:

- Inert materials such as soils, clays, sand, gravel and natural stone;
- Metals such as reinforcement and steel, cables and wires;
- Packaging such as paint pots, pallets, cardboard, plastic wrapping, cable drums and wrapping bands;
- Concrete such as kerb stones, paving slabs, rubble and solid blocks;
- Timber; and
- Chemicals and oils.

13.3.2. Waste Disposal

Waste should be segregated into recyclable, inert, non-hazardous or hazardous waste and retained in clearly labelled stockpiles, skips or drums in designated areas

All waste removed from site (including recyclable waste) must be taken to a licensed or exempt waste disposal facility by a registered waste carrier. The Principal Contractor will ensure that all waste carriers and waste disposal facilities are licensed. Non-hazardous waste will be covered by a Waste Transfer Note.

The Transfer Note must include an accurate description of the type, quantity and containment of waste, the European Waste Catalogue Number and details of the waste carrier. Sufficient information must be provided to ensure that the waste disposal operator is aware of any potential hazards of the substance. All documentation must be retained for a minimum of 2 years and be available for inspection.

13.3.3. Waste Storage

All waste will be stored in an appropriate container to prevent escape of material and the site must be left in a clean and tidy condition at the end of each day.

General waste materials removed as part of these works will be segregated into the various waste streams and loaded into the designated skip assigned for that material.

Waste will be segregated into the following waste streams:

- Reinforced Concrete
- Brick
- Metal
- Timber
- Plasterboard
- Hazardous Waste from paints, sealants, oils, etc
- Office Recyclables
- General Waste

Waste transfer notes will be issued for all waste materials from the site and these will be kept within the construction Phase Health and Safety File.

Food waste will be collected regularly to avoid attracting vermin to the site. More frequent cleaning will be carried out around canteens and toilets.

All roads, pavements, construction equipment, temporary structures, materials and machines will be kept clean and tidy at all times with litter and rubbish removed promptly

14. Community Engagement

During the course of the works, community engagement is an important part of our responsibility. The Principal Contractor shall appoint a single point of contact, the Community Liaison Officer, for engagement and liaison with the local community and various schemes and communications shall be implemented:

The site shall be registered with the Considerate Constructors Scheme and shall aspire to achieve a minimum of Silver rating.

Any queries or complaints shall be received, logged, reviewed and responded by the Community Liaison Officer for anyone who wishes to raise an issue. These matters shall be actioned by the appropriate team member, according to the issue raised.

Communication about the construction works shall be provided, in the following forms: generally, project information displays on the site hoarding; a communications display board mounted to the hoarding; regular progress updates displayed at the site, distributed by email and issued as letter drops as appropriate; special notification of key events or significant works that may impact beyond the day-to-day site operations.

15. Construction Information and General Description of Works

The Office Building is a new-build construction from foundation up, following on from the proposed demolition works.

a) Asbestos Removal

Following completion of the Asbestos survey any Asbestos Containing Materials have been identified, quantified and located on site plans will be removed in accordance with legislation. Property Alliance Group will commence removal works as required.

Demolition of buildings from which asbestos has been removed will not commence until an independent analyst has issued a certificate of re-occupation for the building in question. We shall also identify the current location of all asbestos based materials within the site and arrange for access to be prevented in this area to remove the risk of accidental damage of these materials.

Site and task specific method statements associated with the licensed asbestos removal works will be completed ahead of commencement and issued to the HSE. A copy will also be stored within the CPHSP together with Risk Assessment and operative training records.

b) Soft Stripping Internal

A compound area will be formed at various points adjacent to the building by use of Heras type fencing and this will form a secure area where skips will be located. This area is also known as the “Drop Zone”.

All waste materials will be removed within the confines of the site.

Operatives carrying out the soft strip will remove waste materials from within the building via the windows and place within the designated waste skip below. If no skip is available at that time, then the materials will be passed onto the floor below where it will be reloaded into a skip by use of a demolition machine whilst fitted with a grapple attachment, once a skip becomes available.

Warning signs (as described below) will be displayed at the appropriate points around the perimeter of the drop zone:

1. Danger Demolition in Progress.
2. Danger Demolition Keep Out.
3. Danger Dropping Zone.

Operatives will strip out all doors, frames, wall covering, floor coverings, suspended ceilings, windows, timber of any description, studded and non-structural/load bearing walls, toilets, pipe work, ducting, electrical items and any debris.

Waste will be segregated into the following waste streams:

- General Waste – Carpets, tiles, plastics, rock wool, roofing felt, MDF etc.,
- Recycled Timber – Clean solid timber, non MDF, non tanalised.
- Plasterboard

Waste transfer notes will be issued for all waste materials from the site and these will be contained within the construction Phase Health and Safety File.

c) Enabling Works

There is underpinning identified to the existing Listed Carriage Works building to the rear party wall line which will be fully designed by the Structural Engineer, and will be implemented in accordance with the design and managed by the Principle Contractor.

The underpinning will allow for the retention of the Listed element, the full design of which will be undertaken by the Principle Contractors Temporary Works Engineer in accordance with the Principle Contractors Temporary Works procedures. A temporary works supervisor will be appointed by the Temporary Works Coordinator from the installing subcontractor and permits to load and strike will be utilised to control the works affected by this.

Temporary propping of existing floor structures will be required in order to introduce masonry support, or similar, to existing openings so that the demolition can be undertaken. The full design of which will be undertaken by the Principle Contractors Temporary Works Engineer in accordance with their Temporary Works procedures. A temporary works supervisor will be appointed by the Temporary Works Coordinator from the installing subcontractor and permits to load and strike will be utilised to control the works affected by this.

d) Demolition Phase 1

As a preface to the methods identified below, the following general description of the sequence of work may be valuable:

- Careful strip out 'Carriage Works' monitored by the heritage consultant to ensure preservation of all listed features; for example windows, partition walls, plant rooms, and sanitaryware
- Demolition of structures using only demolition-specification excavators with appropriate attachments;
- Processing of arisings (e.g. loading of waste into skips, stockpiling masonry, loading scrap, timber materials for recycling) using an additional demolition-specification excavator with appropriate attachments;
- Removal and disposal off site of all waste materials deemed associated with the demolition works.
- Initial phase is related to demolition to ground level

The working area which will be classed as a "Demolition zone" will be fully enclosed with hoarding which will be fully secured at all times. The perimeter location of the fencing will be moved accordingly to suit the sequence of demolition.

There will be a series of scaffolding assembly which will be undertaken sequentially to facilitate the internal strip out works.

The internal strip out of the existing basement will commence whereby an appointed heritage consultant will observe to ensure that the work is being undertaken in a sympathetic and compliant manner. The below image shows the existing Basement layout along with annotations of the Toilets, Kitchen, Plant Rooms, and Countertop which will contain the largest quantity of items to be removed. The Stores will contain various items which will be assessed with the heritage consultant to ensure that the original fixings are retained, and necessary permissions are sought.

Safety measures include liaising with trained and qualified professionals to comprehensively review the temporary structures to ensure they have been correctly and safely installed prior to commencing the excavation.

The building will be demolished mechanically to ground level by use of demolition type excavator fitted with various controlled attachments such as a 360-degree rotational selector grab always and only to be operated by a licenced and trained operative.

Following underpinning works, the operative will begin at roof level with the utilisation of the 360-degree rotational grapple to remove any roof coverings and placed at ground level for further processing and / or reuse.

All windows will be mechanically removed and be lifted in their entirety and lowered to ground level to designated processing locations.

Remaining side walls will be folded into the footprint of the building, ensuring there is no comprise to the retained element. To ensure structural stability, and when necessary, the demolition contractor will "scrape" any floors in the building to remove demolition arisings. This will continue until all arisings are segregated and appropriately processed.

This will be continued for all elements that are to be demolished on site and carried out sequentially;

working from the top downwards ensuring the structural integrity of the Carriage Works building is maintained throughout.

The demolition process will be carried out sequentially to ensure that stability within the structure is always maintained at all times. This will begin with the 27-29 King Street West (F), then Reedham House (B) and the Staircase Extension (E), and finally, the Toilet Extension (D), the structures are referenced in the image below.

As part of the Phase I demolition, the existing link bridge between 3 St Mary's Parsonage and the 'Carriage Works' Garden Lane elevation will be removed. The original construction of the bridge was designed to cause minimum damage to the listed building through the careful removal of the existing window, stone cill and brickwork below. The bridge structure comprises steel channel sections spanning the gap at roof and floor level infilled horizontally with timber joists and boards and vertically by double glazed units. This type of structure allows for a simple sequential demolition whereby the double-glazed units on either side will be removed, thereafter removing the timbers so that the remaining steel channel sections and frame can be carefully stripped.

The hoarding will be adjusted accordingly so that personnel are able to conduct the work in safe and compliant manner, with necessary permissions being sought from Manchester City Council.

All rubble arising from the works will be removed from site using 4-wheel tippers.

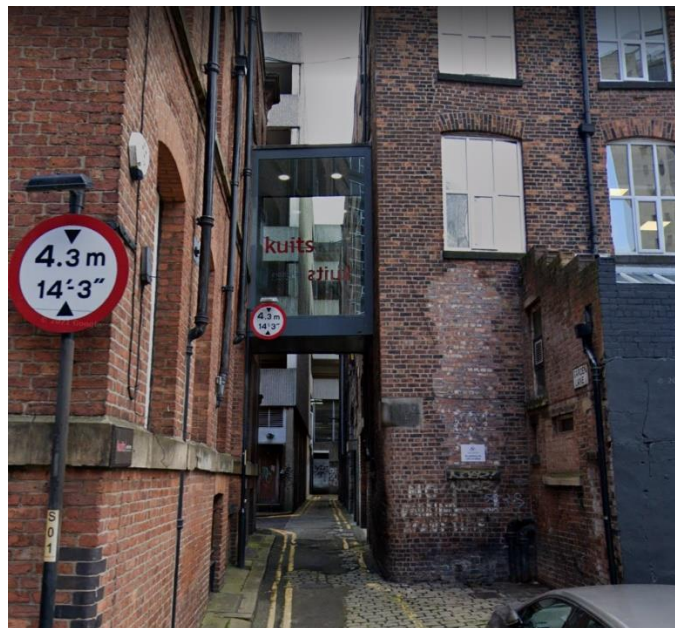


Image showing link bridge

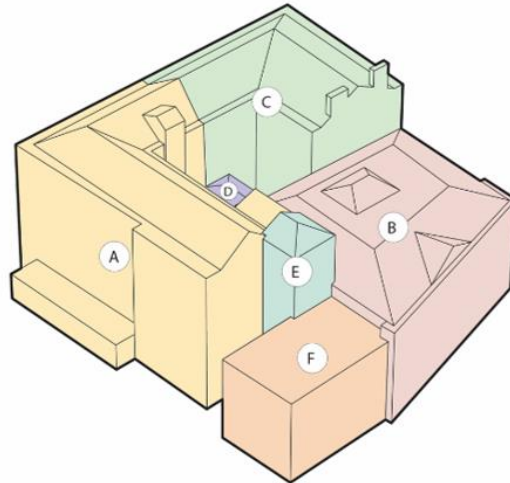


Image showing structure key for sequential demolition

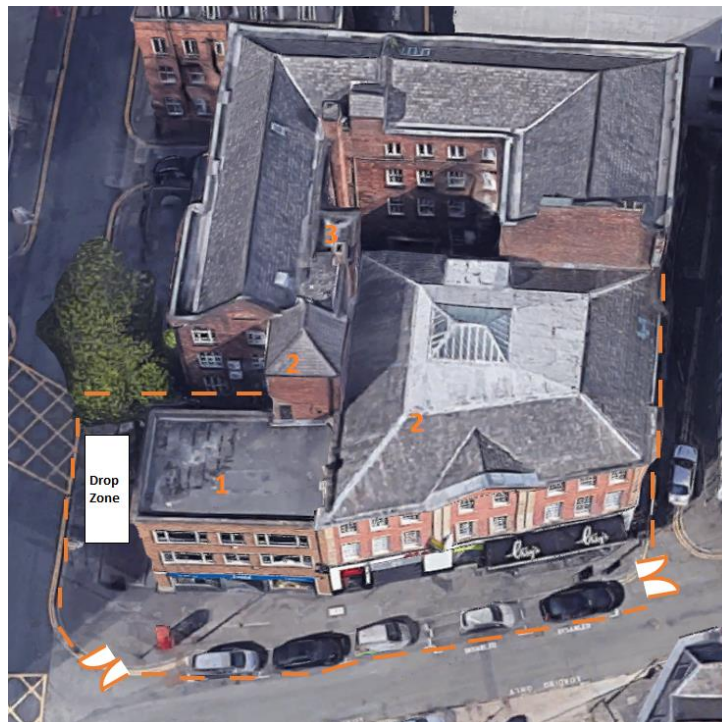


Image showing the initial hoarding set up

e) Demolition Phase II

The initial phase of the scheme will involve pile installation for both the building load bearing piles and the contiguous piled wall. The basement wall will be designed as self-retaining and once completed, the piled wall capping beam will be constructed to tie the piled wall together.

Once the capping beam is complete, the excavation for the basement will be undertaken, including cutting down the building piles to the required basement slab level. Once the excavated level has been reached, the pilecaps and suspended basement slab will then be installed, followed by the basement concrete liner wall. Which will enable the vertical elements of columns and core to be built upwards. The basement is not accessed by vehicles in the permanent design, so any temporary plant access to

the basement will be via temporary ramp or lifted in/out.

The ground floor slab will be constructed as a traditional reinforced concrete slab and will provide additional logistics space to facilitate the follow-on fit-out works. The cores will be constructed using a jump-form or slip-form methodology and will proceed in advance of the building columns and slabs.



Existing Basement plan with annotations

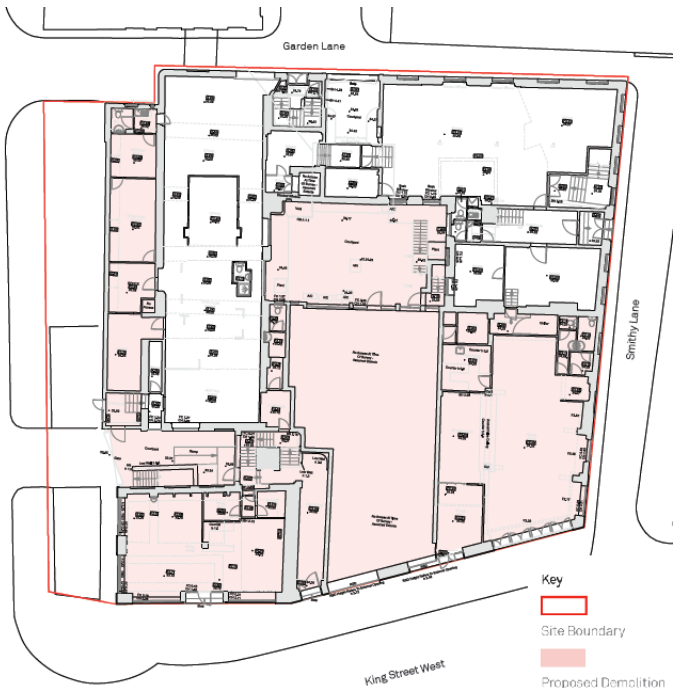


Image outlining the site boundary and shaded proposed demolition

f) Handover from Demolition Works and Site Set-up

A full handover will take place from the Demolition Contractor to the Principal Contractor to ensure all aspects of the works with any temporary conditions identified and communicated.

The demolition works include underpinning of the rear Carriage Works building to ensure that there is a clear division as well as mitigating any harm to the structural integrity of the building.

The Principal Contractor shall take possession of the site from the Demolition Principal Contractor and ensure the site is secured and the existing hoarding checked and any modifications or adaptations required for the next phase of works. The hoarding line will be in accordance to the general layouts show in Section 4 above.

Construction signage displayed around the perimeter of the site will be reviewed and amended as required for this phase of the works.

g) Structure

The building structure is proposed as a reinforced concrete frame, including one main concrete core supported on piled foundation from the underlying Sherwood sandstone. A new basement is to be formed by contiguous piled wall.

The building structure above ground floor will be a reinforced concrete frame, with post-tensioned slabs. This will progressively be constructed with a traditional formwork system and perimeter protection screens. The type of system shall be determined by the appointed Main Contractor.

h) Façade

The façade will be of aluminium glazed panels curtain walling which will be prefabricated and assembled off-site and delivered to site in units of 4 on flatbed packs. Whilst waiting for the prefabrication and assembly, curtain wall anchors will be installed onto the frame and set out layout points will be marked for the subsequent installation. Once delivered to site, the panels will be lifted by crane to be sequentially locked into the curtain wall anchors on a floor-by-floor basis. Following locking and quality assurance checks, resistant sealing to scenes will be applied, then fire protection, and finally a stool trim to the internal, subject to evolution of design.

i) Roofs

The proposed design includes 3 types of roofs at different levels of the building with the below indicative images showing them.

First, the existing courtyard will have a new glazed roof to create a more flexible and transient space at ground floor level. This will involve the delivery of prefabricated glazed panels supported by steel frame and lifted by crane into position to be installed via a propping or bracket system, the structural detail has not been fully developed.

Secondly, a galleria space is proposed one the 10th level; this will include a fitout which will be designed to enhance wellbeing, as well as glazed floor to ceiling height panels separating an external waterproofed terrace along with a balustrade around the southern and eastern sides of the new build structure.

Thirdly, the top floor roof will comprise of plant rooms as well as tenant amenity space; it will be a standing seamed roof with external louvres and plant enclosure in addition to a balustrade around the southern and eastern sides of the building.



Image showing the proposed galleria and roof top amenity spaces

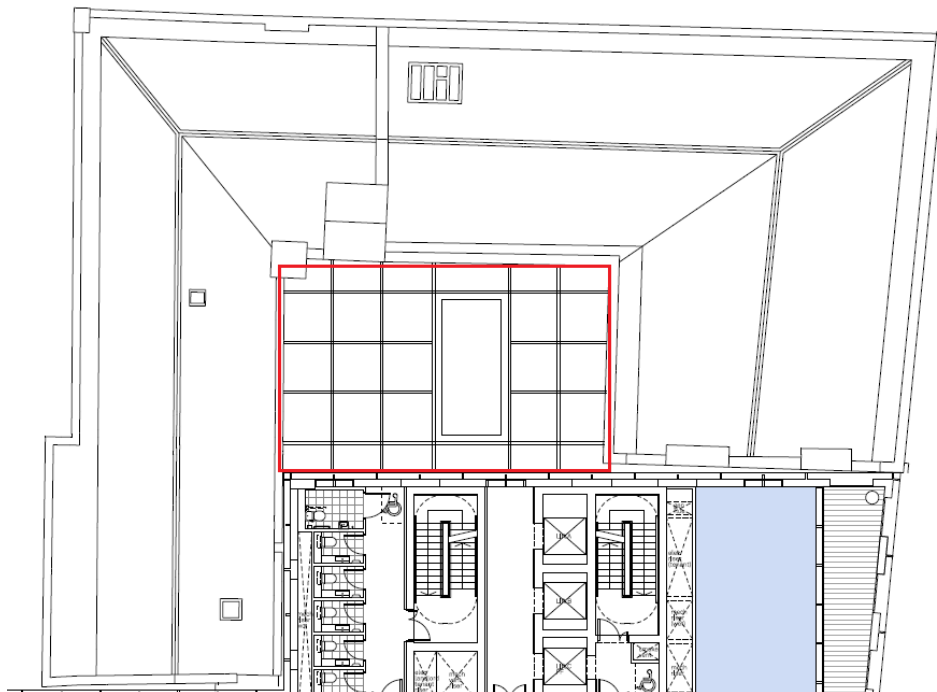


Image outlining proposed glazed atrium above existing courtyard area

j) Fit-Out – Building Services and Internal Layouts

The works shall entail full building fit-out of interior finishes, with building services, lifts, common spaces, apartments, and back of house works. Delivery of all materials shall follow the same logistics

strategy as outlined above.

k) External Works

These works shall be at the end of the programme of works once the main logistics areas are no longer required and the building works and fit-out works are predominantly finished.

Any service connections or diversions shall be done in advance of the external finishes being installed.

The below image shows an indicative vision from the Landscape consultant for external landscaping following public consultation and initial conversations with Manchester City Council Highways Team.



Aspirational Landscaping Layout

l) Completion

- Testing and Commissioning
- Inspections and Quality Control
- Handover Documentation
- Defect Rectification
- Demobilisation of site set-up, including hoarding removal
- Acceptance and Practical Completion

Finishing works shall be managed alongside the construction works to ensure quality of finish is achieved and timely defect rectification ready for a smooth handover. Completion and handover shall need to be carefully planned and sequenced in relation to the adjacent phasing of the development and other adjacent works scheduled to suit.

16. Project Directory

The latest project directory is attached in Appendix 1.

Appendix 1. Project Directory