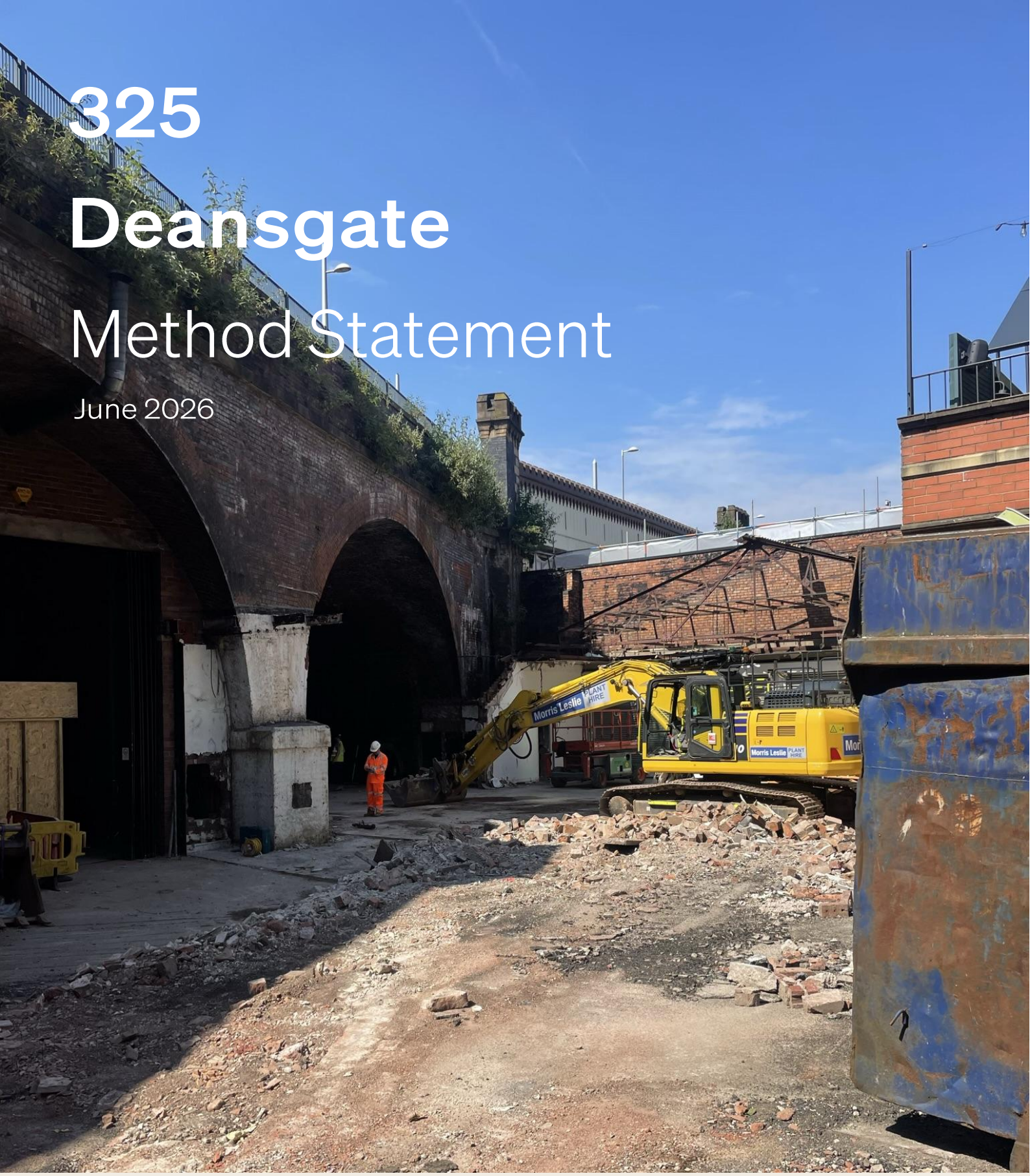
325 Deansgate

Method Statement

June 2026



Prepared for:

Jedi Properties

LEVRANT

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1. INTRODUCTION

1.1 Purpose & Background

i) Heritage Architecture Ltd, a specialist practice of architects, heritage consultants and surveyors, working exclusively in the built historic environment, have been appointed by Jedi Properties to provide a conservation-led Method Statement for the installation of solid concrete floors and free-standing mezzanine deck and the removal and construction of external wall to the west arch of the Grade II listed Castlefield Viaduct at 325 Deansgate, Manchester, M3 4LQ (the 'Site') (**Figures 1 & 2**) as part of the consented hotel development.

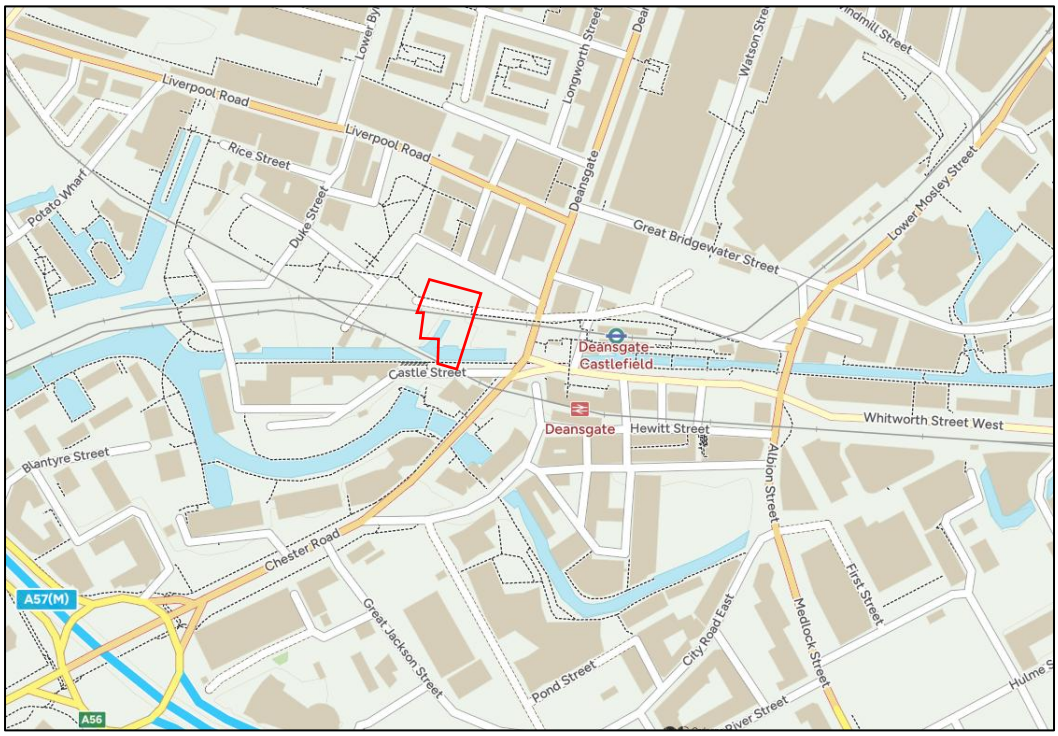


Figure 1: The location of the Site (outlined in red) **Source:** Ordnance Survey 2024

ii) The works comprise the conversion of the west viaduct arch into useable space for retail, storage and leisure space within the Grade II listed viaduct structure. Detailed specifications and drawings were provided by the Architect **Simpson Haugh** and the Engineer **Eckersley O'Calloghan** to illustrate the proposed development. This Method Statement should be read alongside these documents.

iii) This document seeks to partially discharge Condition 6 and Condition 3 and fully discharge Condition 5 and 8 within the Decision notice of Listed Building Consent application: 125804/LO/2019 (See Appendix I for full details). This document has been informed by ongoing discussion with the LPA, and responds to previous comments as included in Appendix V.

iv) Condition 3 has previously been partially discharged (Decision Notice ref: CDN/23/0130), requiring the following clarifications below. Please refer to Section 2.3: *'Demolition of modern infill and installation of wall to the south'* for further details:

v) "Main elements are removed up to 1 metre offset. At this point the method of how the structure to be demolished is fixed into the building will need to be reviewed and the appropriate method of removal agreed so that it safeguards existing original fabric. The use of sledgehammers and mattocks at this point, will not be appropriate if the modern structure is

directly fixed into existing historic fabric for instance into brick faces. The CDN/23/0130 Page 2 of 3 fixings will need to be removed carefully by hand. The heritage consultant / supervisor needs to advise on the most appropriate methods at this hold point in the demolition; and

vi) *When all of the material is demolished and the extent of repairs is visible. there will need to be a review with the contractor and heritage consultant the full extent and nature of repairs and detailed specification including mortar analysis (referred to in the document). For instance if brick or stonework repairs are needed officers will need to see details of these to ensure they are not left in an un repaired state. This is a requirement of the condition."*

vii) This document will be submitted to the LPA for approval prior to the commencement of any onsite activities.

viii) Works will be carried out by the Principal Contractor, **Assured CMS Ltd,** following the discharge of planning conditions.

1.2 The Site

i) 325 Deansgate is located on the site of the former Poggen Pohl Kitchen Design Centre at the southern end of Deansgate in Manchester City Centre. The Site extends to approximately 2250 sq. m. and is bound by Trafford Street to the north, Century Street to the east, Whitworth Street West and the Deansgate-Castlefield Metrolink stair and lift core to the south, and Deansgate to the west.

ii) The Method Statement below refers only to the enclosed west arch at the ground floor of the Site within the confines of the railway viaduct arches.

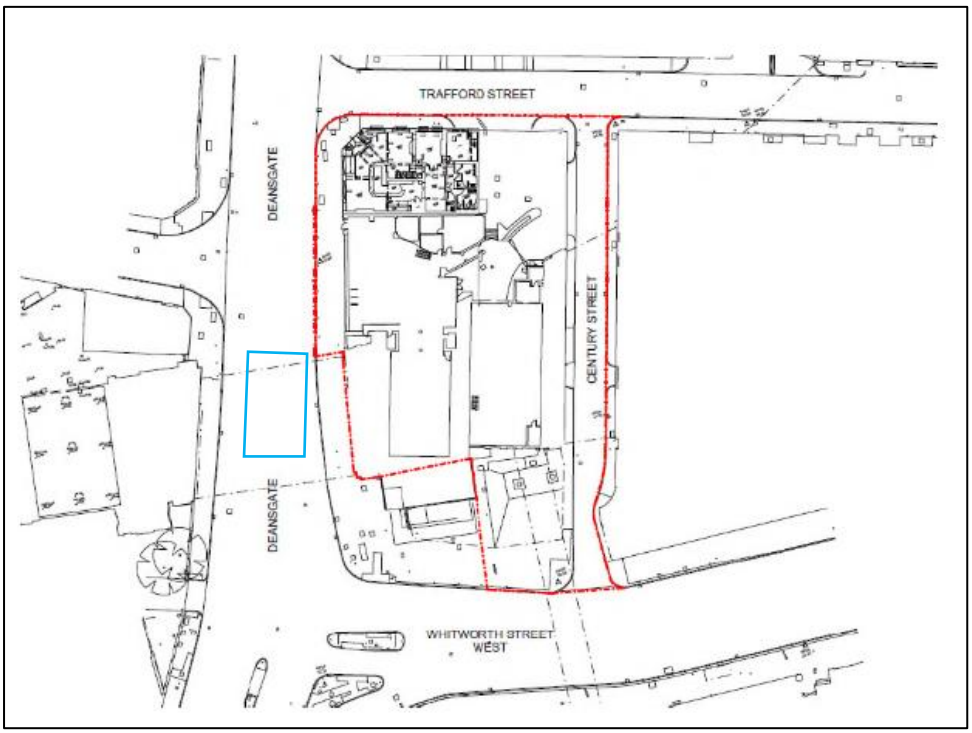


Figure 2: Site Plan, the west viaduct arch identified in blue.

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1.3 Background

i) The Castlefield Viaduct was built in c.1877 to carry twin railway tracks from ground level at Cornbrook Junction (to the south-west of the city centre) into the area of the new Central Station on Lower Mosley Street (now Manchester Central exhibition centre), and was Grade II Listed in 1988.

ii) The west arch forms part of the consented redeveloped of the wider site as part of a new aparthotel complex to form front of house hotel space at ground floor and bar and/or dining area at mezzanine level.

2. METHOD STATEMENT

2.1 Introduction

i) This Method Statement pertains to both brick arches to the Grade II listed Castlefield Viaduct located within the Site and has been written in the context of the most recent fabric condition surveys as of November 2025.

ii) This document should be used in conjunction with the relevant Risk Assessments prepared by the principal contractor **Assured CMS Ltd** in order to manage the health and safety of staff on-site. All operatives should be appropriately trained and competent to complete the tasks outlined below (See **Section 3.3**).

2.2 Prior to works commencing

i) Safe methods of work will be followed prior to any on-site works commencing. The minimum of 5-point Personal Protective Equipment (PPE) (hard hat, hi-vis clothing, gloves, safety boots with protection mid-sole, and eye protection) will be required and suitable tools will be employed for the task.

ii) All operatives will be aware of the principal contractor's Health and Safety policies and procedures. Health and Safety issues will be monitored by the principal contractor each day to identify any changes in health and safety issues. Health and Safety policies will be provided by external contractors to be reviewed and approved by the principal contractor. Sub-contractors will be permitted to carry out works once Health and Safety documentation has been approved.

iii) All operatives will be required to hold a valid CSCS card and have sufficient competency in their trade and the equipment they are using.

iv) The client team will brief all operatives on the approved Method Statement and operatives will be required to sign off on the Method Statement. All site operatives will be made aware of the heritage significance of the viaduct arches and the conservative approach required to its respective historic fabric, specifically that which will affected by the planned works. This information will also be shared in the pre-start induction and relevant activity briefings.

v) Operatives on site are to be managed by the principal contractor. All specialist contractors will provide supervisors for each of their teams.

vi) A photographic record will be taken of the condition of the Site prior to works commencing and following the completion of works.

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vii) Prior to the installation of steel columns and beams to support the mezzanine floor, the arch will be subject to a measured survey to ensure placement of the steels and subsequent mezzanine floor will not lead to direct contact between the mezzanine floor slab and the viaduct walls.

viii) An assessment of the condition of the walls will be made. The walls will be assessed for defects from the base of the walls. Areas of loose, friable mortar and/or severely damaged or eroded brickwork will be repaired and/or repointed using the methods outlined in **Sections 3.4 to 3.6** of this report. Bricks eroded to more than a third of the brick's overall width will be replaced in like-for-like material.

2.3 Demolition of modern infill and installation of wall to the south

Please refer to the drawings at Appendix III (f) and the Demolition Method Statement produced by D&R Demolition, submitted to discharge Condition 3 in April 2023, approved in May 2023.

i) The modern brick infill to the arch at the southern end of the west viaduct is to be removed in accordance with the demolition Method Statement approved by the LPA in May 2023.

ii) The works are to be carried out with hand tools only. The main elements of the structure will be removed up to 1 metre offset from the historic brickwork. At this point works will stop to allow for a review of how the remaining attached modern infill is attached and the most sensitive method for its removal, which will be discussed with the LPA for agreement.

iii) Where removal of remaining infill results in damage to the brickwork/stonework being unavoidable; repairs will be undertaken on a like for like basis and finished to match the existing fabric. Any historic fabric that is required to be removed will be retained, stored and labelled for reuse.

iv) The end of the exposed arch will then be infilled with a double fireboard wall comprising a 2 x 12.5mm Siniat Fire Board with Siniat CS70/Rx C-Stud at 600mm centres and a further 2 x 12.5mm Siniat Fire Board to seal the arch and close off the building from the TfGM Metrolink stair/lift tower.

v) The fireboard will to be fixed into the viaduct walls and brick soffit at regular centres using suitable fixings. **Fixings are to be attached only to the mortar joints or areas where cementitious repairs have been undertaken, and not into the bricks.**

vi) Power tools used to install fixings will use drill bits no more than 2/3rd the width of the mortar joint to be penetrated.

vii) Installation is to be installed as per guidelines from the manufacturer and to the architect's specifications.

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2.4 Installation of ground floor

Please refer to the drawings at Appendix III (a-d).

Prior to installation

i) Prior to removal of the current floor, health and safety measures will be taken to control dust. Dust suppression systems and FFP3 dust masks will be employed whilst the floor is removed, the existing subbase is compacted, and the proposed subbase is installed.

ii) The current floor will be removed and the ground will be excavated to a depth of ~850mm to accommodate the new reinforced concrete raft slab floor and the localised reinforced concrete raft slab thickening which will support the bases of steel columns.

iii) The existing ground subbase will be rolled and compacted to the Engineer's specifications.

iv) Geotextile membrane will be laid over the compacted subbase layer.

v) Pending confirmation from the geotechnical engineer, the new subbase will be built up of no less than three compacted layers of DOT type 1 fill material. Geotextile material is to be laid between each layer of fill. The final layer of fill will terminate with a layer of geotextile material.

vi) The base of the viaduct walls will be lined with a vapour-permeable membrane ('breather membrane') which will run continuously the full extent of the drainage system. The membrane is to extend continuously no less than 15mm above the height of the proprietary drainage system up the walls and extend no less than 15mm from the drain under the concrete slab. **The material will be vapour-permeable to inhibit the effects of condensation at the interface between the viaduct walls brick wall and the exterior of the drainage channel.** The membrane will provide protection should the drainage system become blocked and water subsequently discharges against the viaduct walls.

During installation

vii) A proprietary cavity weatherproof drainage system will be installed as per manufacturer instructions at the internal perimeter of the viaduct arch, at the junction between the wall and the subbase.

viii) The drainage system will be laid to reasonable falls to divert excess water from the base of the walls and will be connected to main drainage system, to allow water to drain away effectively from the structure.

ix) Raft slab thickening units of no less than ~2m in length and width and ~450mm thickness will be laid at intervals as per manufacturer instructions and as per drawings and specifications by the Engineer.

x) A reinforced concrete raft slab of no less than 300mm thickness will be installed as per manufacturer's instructions and as per drawings and specifications by the Engineer. It will terminate at the linear boundary of the perimeter drainage channel. **At no point will the floor slab be in direct contact with the exposed brick arch walls.**

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After installation

xi) A screed will be installed to specifications by the Architect. A barrier will be constructed where the drainage system abuts the concrete slab and will extend the full height of the remaining floor build-up which will hold the additional floor layers in place. The floor build-up including the screed is not to be in direct contact with the viaduct walls.

xii) During internal fit-out the floor will be covered with the final floor finishes.

2.5 Installation of steel structure and mezzanine floor

Please refer to the drawings at Appendix III (a-c)

Steel structure

i) Steel columns of no less than 254mm x 254mm x 73mm (**C08**) will be installed and secured as per manufacturer/fabricator instructions over raft slab thickening units (see **2.2.11**) to the Engineer's drawings and specifications. Steel columns will be installed no less than ~1300mm away from the viaduct walls and will not exceed ~3345mm in height from the level of the screed.

ii) Universal steel 'H' columns of no less than 152mm x 152mm x 30mm (**C01**) will be installed at the south of the arch as per manufacturer/fabricator instructions and drawings by the Engineer. They will not be in direct contact with the viaduct walls.

iii) The steel columns will support universal steel 'H' beams, as per manufacturer/fabricator instructions and drawings by the Engineer:

- **B01:** Beams of no less than 356mm x 171mm x 67mm will run east to west and north to south supported by the steel columns at both bearing ends.
- **B21:** Beams of no less than 254mm x 146mm x 37mm will run east to west supported by a beam at the east and west perimeters of the space spanning north to south, and by a steel column at their bearing ends.
- **B03:** Beams of no less than 203mm x 133mm x 30mm will run north to south at the east and west perimeters of the space, supported by columns (see **2.5.2**) and beams spanning east to west. At the south 1no. beam will be supported by beams spanning east to west (**B01**). At the north 5no. beams will be supported by beams spanning east to west (**B01**).
- Beams will be connected using bolted steel plate connections with slotted holes.

iv) All steels will be supported on steel columns (see **2.5.1** and **2.5.2**) and the modern main building complex. Thus, **no steelwork will come into direct contact with the viaduct walls.**

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Mezzanine floor

viii) The mezzanine floor level will comprise a timber floor structure (50x200 C24 timber joists with 12mm ply deck over), which will be supported by steel beams and columns (see 2.5.1 to 2.5.4), and finished with floorboards/covering/timber skirting as per drawings by the architect and engineer

ix) Acoustic insulation material and mineral wool insulation material will be installed at the interface between the composite raft slab and the Rockwell arch lining system. Insulation material will be supported at the base of the composite raft slab by a metal angle bracket.

x) **The gap between the composite raft slab and the arch lining system will not be excessively padded with insulation material. The panels to the arch lining system will not have direct contact with the viaduct walls. This is to ensure that the arch lining system retains consistent cross-ventilation to the viaduct walls and can be removed as necessary for intermittent access to the arch brickwork.**

2.6 Installation of temporary arch lining system (period of ten years)

Please refer to the drawings at Appendix III (d-e). Subcontractor drawing to be provided by ACMS.

i) Following ongoing technical and design discussions, and in conversation with the LPA, due to the poor condition of the historic brickwork to the arches, this has dictated the preferred full concealment option.

ii) The only system that has flexibility for required access by TFGM, as well as the ability to paint it a bespoke colour, is the Rockwool system proposed.

iii) Following condition assessment and completion of conservation repair works to the viaduct walls, the Rockwell arch lining system will be installed as per manufacturer's instructions and to drawings by the architect.

iv) The Rockwell lining system is designed to be removable to provide access to the historic fabric as and when required, please see Appendix IV: *'Specifications of arch lining system' for further details of arch lining system (Document Reference: rockwell_arch_lining_brochure) & Method Statement for the proposed installation of the arch linking. (Ref: Rockwell arch lining system- Method Statement.zip).*

v) Where possible, works should be completed from a mobile access tower scaffold to the Principal Contractors' *Working from Height* policies and procedures.

vi) Rockwell WPC composite battens are to be used and fixed into the viaduct walls using Rockwell's specified batten fixings (plastic wall plugs) (see specification at **Appendix IV**).

vii) The proposed lining system will form a temporary solution for a period of ten years, at which time adequate repair and water proofing will be enabled to halt the ingress of water from the track bed into the hotel spaces below.

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viii) The method of affixing the lining system to the viaduct structure will aim to use minimal fixings into mortar joints and in locations where cementitious repairs have been undertaken. However, in instances where fixings into existing brickwork is necessary; these fixing locations will be repaired by isolated lime mortar repairs upon removal of the lining system. *(refer to Mortar, Mortar (general), Vi).*

ix) Power tools used to install fixings will use drill bits no more than 2/3rd the width of the mortar joint to be penetrated.

x) The Rockwell arch liner system is to extend around the complete surface of the viaduct brickwork walls.

2.7 Installation of gantry for M&E

Please refer to the drawings at Appendix III (d).

i) A composite gantry system will be installed to a bespoke design. This will serve the M&E requirements which will be confined to the upper level at the mezzanine level.

ii) The gantry system will be supported on the mezzanine floor slab, which is in turn supported by the primary steel frame described in Section 2.4. **The gantry system will not therefore have direct contact or be supported by the viaduct walls or jack arch ceilings.**

3. PROTECTIVE MEASURES

3.1 Protection of historic fabric

i) The need for temporary protection should be assessed prior to undertaking any task on site.

ii) During the works the surrounding areas (building fabric associated with the viaduct arches) to the work location shall be carefully protected.

iii) Areas surrounding the work location shall be protected by rigid plastic sheeting or plywood enclosure as appropriate.

iv) Measures shall be put in place to minimize dust and debris circulating around the site during the works.

v) All exit and entrance routes and other walkways shall be clearly marked, made secure and protected if necessary during the site works.

vi) Internal work spaces shall be kept clean and tidy and all materials and tools removed at the end of the working day to reduce the risk of accidental damage, trip hazards etc.

vii) Protection that encloses significant elements shall be clearly labelled to identify what is behind the protection. Before commencement of any repair works all fixed architectural features identified as being of heritage significance will be protected by the contractor to the satisfaction of the project architect and/or conservation consultant.

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viii) All protection (including to brickwork) should be non-abrasive and free of any substances.

ix) Protection shall be fixed in place without the need for fixing into the building. Where this cannot be avoided, fixings should only go into mortar joints and should be no larger than 50% of the size of the mortar joint width.

x) Adhesives should in no circumstances be used.

xi) Protection should be installed not to trap moisture.

xii) The contractor must also ensure the provision and maintenance of special protective measures throughout the implementation of the contract (such as boarding, screens and barriers) to keep the site location and building secure. The adopted means of protection shall be self-supporting and avoid fixtures directly into the building's fabric.

xiii) Ensure that any areas to be opened up (i.e. arches to the east side of Deansgate) are protected from wind and if necessary, temporarily weatherproofed to prevent further degrading of existing fabric prior to remedial repairs during the works.

xiv) All scaffolding is to be designed and erected in line with **Section 3.2**.

xv) The scaffolding contractor should define the proposed protection measures in accordance with ensuring that protection is non-abrasive, malleable to mould around the building, and should not place any pressure on the building fabric or trap moisture / debris.

xvi) Protection of all identified features shall also be maintained throughout the construction phase or until it is safe to remove.

3.2 Access scaffolding

i) To avoid any damage to historic fabric, the erection and support of necessary scaffolding to enable the temporary works and implementation of the repair works must be carefully detailed.

ii) Scaffold access arrangements should be designed to protect masonry features from accidental damage especially during the erection and striking of scaffolding. Scaffold caps to be used throughout and direct contact between scaffold structure (especially ends of scaffold poles) and masonry to be minimized.

iii) The design of all scaffolding will be the responsibility of the scaffolding contractor, subject to the below requirements below and in accordance with the recommendations of BS 5973: 1990 "Code of Practice for access and Working Scaffold and special scaffold staircases in Steel" or as updated. Compliance with the various Acts and regulations listed in BS 5973 is the responsibility of the Contractor. The following minimum requirements will be met. Compliance with all aspects of Health and Safety during erection, using and dismantling is the responsibility of the Contractor. Please see attached document (Doc Ref: Scaffolding Design).

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iv) The scaffolding contractor's task Method Statement will include proposals which include clear drawings and structural calculations in duplicate sufficient to prove the stability of the proposed temporary structures in accordance with BS 5973: 1990. Drawings will be provided to the project architect, structural engineer, conservation consultant. Please see attached document (Doc Ref: Scaffolding Design).

v) These drawings will clearly indicate positions and methodology where any scaffold is to be tied back to the fabric of the building. Fixings should aim to either align with mortar joints, previous fixing holes or where cementitious repairs have been undertaken. Where it is necessary to brace the scaffold from the building's structural frame then timber packing and hessian of a minimum thickness of 25mm is to be placed between the scaffolding and the masonry. Please see attached document (Doc Ref: Scaffolding Design).

vi) All vulnerable historic surfaces are to be suitably protected to prevent the scaffold damaging existing external and internal finishes.

vii) Ensure any architectural features or areas prone to damage are suitably protected. Where protection measures are considered inadequate the contractor will at his own expense provide additional protection as directed by the architect.

3.3 Workmanship

i) All operatives working on site will be inducted and trained to strictly comply with the approved documents and understand the consequences of undertaking unauthorised works.

ii) All cleaning, repair and replacement works will be undertaken with care and consideration of the historic fabric, preventing unnecessary damage or destruction of adjacent surfaces and materials.

iii) The site staff responsible for carrying out any repair/replacement works are to be suitably trained and evidence of training is to be available upon request.

iv) The site staff responsible for carrying out any repair / replacement works to historic fabric including masonry, brickwork and joinery and other original features shall be suitably trained and experienced and under the supervision of a suitably experienced foreman / supervisor. Evidence of credentials and CSCS cards shall be available for inspection.

v) On completion of the works all areas shall be left thoroughly clean and free of debris, builder's rubble, dust, grime, and dirt to the entire satisfaction of the project architect and conservation consultant.

vi) Workmanship samples will be required as per Section 3.4.

3.4 Materials and workmanship samples

i) We have outlined below the minimum expected material and workmanship samples that are currently anticipated, as the project develops it may become necessary to develop further trials to ensure an appropriate level of sampling is undertaken prior to commencement.

ii) All samples will be reviewed by the project architect and conservation consultant and submitted to the local planning authority for approval, to discharge planning conditions.

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iii) **Brick replacement samples.** A suitable replacement brick type has been sourced, viewed on site and approved by the LPA (as detailed below). Where possible brick replacement will be undertaken from dismantled areas of brickwork elsewhere on site. (to be undertaken in line with **Section 3.5**).

iv) **Mortar analysis.** Mortar analysis has been undertaken (as detailed below) - If further sampling is required in the future this should be undertaken in line with **Section 3.6**.

v) **Paint removal sample (external).** Undertake paint removal trials to the white paint that is applied to the brickwork to the arch for inspection by the project architect and / or conservation consultant and / or conservation officer for confirmation that the proposed sample meets best practice and thus the requirements of the 'consented development'. Paint removal trials are to be undertaken to an inconspicuous area of brickwork or areas which have graffiti.

vi) **Mortar samples for brickwork.** Following a site survey, sampling in two locations and analysis of samples was undertaken by Mark Womersley in July 2023.

vii) Deansgate Sample 1 – The results of the analysis found that it was *"probable that the mortar was made up by volume from a combination of 1.5 parts impure quick lime or 3 parts impure lime putty to 1 part ash and a small amount of sand, this mortar may date to the 19th century."*

viii) Deansgate Sample 2 – The results of the analysis found that it was *"probable that the mortar was made up by volume from a combination of 2.4 parts impure quick lime or 5 parts impure lime putty to 1 part ash and a small amount of sand, this mortar may date to the 19th century."*

ix) It was concluded that the new mortar mix needs to take account of *"prevailing site conditions, building materials and condition, location and function of the new mortar, building details, exposure, seasonal working etc."*

x) And consequently, the recommended mortar mix is as follows: ***"If possible, re-pointed with a weak or moderately hydraulic lime, ash and sharp sand based mix. One such mix could be 1 part Ionic 3.5 Old White: 1 part Leighton Buzzard Sand: 1 Nosterfield: 1/2 parts clinker based ash and some black, iron oxide based pigment."***

xi) Using the above recommended mix, create sample mortar biscuits to be reviewed by heritage consultant and LPA.

xii) Once inspected, allow for re-pointing 1m^2 of brickwork for inspection by the heritage consultant and / LPA for confirmation that the proposed sample is suitable and meets best practice and thus the requirements of the 'consented development'.

xiii) **Sample cleaning.** Prior to commencing the contractor will undertake sample cleaning to establish the necessary pressure to be applied and at what distance from the surface is required to successfully remove soiling but not cause saturation. The sample cleaning will be undertaken to an inconspicuous area of masonry and begin using the least amount of pressure starting from a distance of 1m for inspection by the project architect and / or conservation consultant and / or conservation officer for confirmation that the proposed sample meets best practice and thus the requirements of the 'consented development'.

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3.5 Brickwork

i) The Specially Selected Malvern Red brick from Northcot Brick was viewed as part of a site visit with the heritage consultant and LPA in July 2025.

ii) It was subsequently confirmed by Northcot Brick that this brick was able to have all visible faces to meet the textured finish of the historic brick of the viaduct arches. This brick type was consequently approved by the LPA.

iii) Exposed brickwork is to be cleaned and re-pointed where required. Care is to be taken in removing failing cementitious mortar repairs, as use of mechanical tools can damage the brick arises. New mortar is to be 'breathable' lime mortar without waterproofing agents, so that over time the brickwork will be able to dry out.

iv) It is likely that white salts will appear on the surface as this occurs, which will be unsightly, but can be brushed off. Cleaning the brickwork to remove paint must be undertaken carefully to avoid abrasion or damage to the adjoining stone banding.

v) Where movement has occurred, it should be established whether this movement is at risk of continuing, or it has ceased before any intervention is designed. Cracks and / or larger than normal mortar joints may simply require re-pointing.

vi) Primarily, cracks should be re-pointed and monitored to see if movement is ongoing or stable.

vii) All repair works should be preceded by monitoring and investigation as cracks may be historic and the brickwork stable, therefore not requiring any intervention.

viii) The use of helical bar may be appropriate to prevent further movement but consultation with the project structural engineer shall be required to establish the need for stitching cracks.

3.6 Mortar

Raking out and Mortars generally

i) Raking out shall be undertaken with hand tools only, the use of mechanical means to remove mortar (air chisels, angle grinders etc.) is not appropriate as they risk irreversible damage to masonry and brick.

ii) The thickness of the chisel/tool used should be no more than 50% of the width of the mortar joint to prevent accidental damage to the arises of the brick and stone.

iii) Generally, where cement mortars have been used, an attempt to remove them should only be made if they have de-bonded from the stone or brick. Attempting to remove well-adhered cement mortar can result in damage to the arises of the surrounding masonry and brick. Only in the circumstance that the cement mortar is causing an increased rate of erosion shall its removal be permitted when well-adhered.

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iv) Pointing mortar is intended to be a sacrificial element of the building that acts to preserve the masonry and brickwork from premature decay.

v) Where possible, all new mortars should be lime based and replicate the composition of the original mortar used. Where this is not possible, an authentic replication of the original mortar shall be acceptable where it can be demonstrated that the new material is functionally appropriate and has similar strength and durability properties as the original mortar.

vi) Mortar analysis should be undertaken across the building to include pointing mortars for brickwork. The number of samples required should be agreed with the conservation consultant and the information required to accurately understand the mortars used.

vii) Mortar analysis should be undertaken in a laboratory that is UKAS accredited and meets the internationally recognized standard of ISO/IEC 17025 to the approval of the project architect / conservation consultant.

viii) Each mortar sample analysed should provide the following details:

a) Visual observations of the mortar received (Macroscopic and Microscopic)
b) Carbonation of received sample
c) Breaking Strength
d) Friability
e) Colour (Using Munsell Soil Colour Chart or similar)
f) Water droplet test for indication of permeability / absorption rate
g) Weight ratios of binder to aggregate
h) Observations during acid digestion
i) Aggregate size distribution by weight
j) Hydraulicity and inclusions (tested by X-ray Diffraction (XRD))
k) Indication of source of a matching aggregate
l) Mix proportions in weight and volume

ix) In some circumstances thin section analysis may be required to assess the mortar for the original mixing method and actual porosity.

x) The specifications for new mortars should be compatible with the existing, with specific regard to the suitability and durability of the mortar and the material properties of the surrounding building fabric.

xi) Where necessary, the contractor and operatives should be adequately trained in mixing, using and protecting the type of mortar to be used. Details of previously undertaken works should be provided and / or adequate training undertaken.

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xii) Quicklime and other lime binders are volatile, reactive materials that can have serious health and safety implications if not handled and used with due care. The contractor will present Method Statements for: the handling, storage, mixing, and application of these mortars to protect all operatives against avoidable harm to the project architect / conservation consultant prior to commencing on site.

xiii) Aggregates should be as close a match to the original mortar as possible and sourced from a local sustainable source. The contractor shall ensure that the aggregate is suitable for purpose and is not contaminated with anything that would adversely impact the mortar's performance or durability. The aggregate should be well-graded and generally the largest aggregate should be no larger than 2/3 the width of the mortar joint.

xiv) Cement for mortar is not acceptable for use on the brickwork unless otherwise specified.

xv) Admixtures / Pozzolans: Do not use in mortar unless specified or approved. Pozzolans should be based on any inclusions identified in the mortar analysis or justified to the needs of the new mortar being placed. Pozzolans should be used sparingly and not impede the function of the mortar as a sacrificial element. Do not use calcium chloride or any admixtures containing calcium chloride. Admixtures, if specified, to be to BS EN 934-3:2003.

Mortar (general)

i) Bedding mortars require different characteristics to the mortar outlined below due to the requirement of compressive strength. Where bedding mortar is being replaced the contractor is to consult the conservation consultant and structural engineer.

ii) Pointing mortars are a sacrificial element of the structure and enable the masonry and brick to survive for future generations by drawing moisture and salt from the wall. The profile of any repointing should therefore be agreed on site to match that of the surviving mortar. Pointing should generally be in a non-hydraulic lime mortar in a precise mix to be agreed in response to mortar analysis of the existing mortar and to match the existing mortar in respect of colour.

iii) The mortar needs to be robust enough to be able to carbonate through exposure to the weather, whilst not impeding its functionality.

iv) All mortars should follow the standards outlined above.

v) Mortar to the brickwork needs to be a good colour and texture to match to the original surviving mortar.

vi) Any isolated mortar repair required to fixing holes within brick/stone resulting from the removal of lining system should be filled using a lime-based mortar of the same mix as used in repointing. The mix can be shaded to suit the particular brick/stonework by the addition of pigmented brick dust where required.

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4. APPENDICES

Appendix I: Details of Planning Conditions attached to Listed Building Consent (Ref: 125805/LO/2019

Condition 3 has previously been partially discharged (Decision Notice ref: CDN/23/0130). Please refer to Section 2.3: 'Demolition of modern infill and installation of wall to the south' for further details:

Condition 3) Prior to the removal of infill to the arches, as shown on drawings 10185-SHP-Z0-ENXE- A-B5D8-G100-0003,10185-SHP-Z0-ES-XE-A-B5D8-G100-0003 and 10185-SHPZ0- EE-XE-A-B5D8-G100-0003 stamped as received by the City Council, as Local Planning Authority, on the 8 January 2020, a detailed Method Statement and specification for the demolition/removal, alteration and repair of the exterior/interior of the listed structure shall be submitted for approval in writing by the City Council, as Local Planning Authority.

This shall include methods for dismantling the infill areas of the arches to avoid damaged to the historic fabric and details, including materials, how the arches will be repaired (including masonry repairs internal/external). The demolition/removal and repairs must be carried out in accordance with this Method Statement and specification.

The approved details shall then be implemented as part of the development and be completed prior to the first occupation of the development.

Should any parts of the Listed structure become damaged as a consequence of the alterations then such damage should be made good following a method of works previously agreed in writing by the City Council, as Local Planning Authority.

Condition 5) Prior to the commencement of works to attach the aparthotel to the viaduct, as shown on drawings 10185-SHP-Z1-TY-DE-A-B5D8-G251-0005 and 10185-SHP-Z1-TYDE- A-B5D8-G251-0006 stamped as received by the City Council, as Local Planning Authority, on the 8 January 2020, a detailed method statement and specification for the works shall be submitted for approval in writing by the City Council, as Local Planning Authority. For the avoidance of doubt this shall include details of how the interface of the aparthotel building would be attached to the historic fabric, what historic fabric (if any needs to be removed/altered) and how the historic fabric will be repaired once the interface has been attached.

The approved details shall be implemented as part of the development. Should any parts of the Listed structure become damaged as a consequence of the alterations then such damage should be made good following a method of works previously agreed in writing by the City Council, as Local Planning Authority

Condition 6) Prior to the commencement of works to install any relevant mechanical and electrical M & E) installations (including CCTV and lighting) attached to any listed fabric, detailed plans, Method Statement and specification showing the location, profile, fixing, sections and suitable samples, where necessary shall be submitted for approval in writing by the City Council, as Local Planning Authority. This shall include details of the removal, alterations and repair of the historic fabric of the building.

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The development shall then be carried out in accordance with the details approved and thereafter be retained as approved throughout the life of the development. Should the M & E no longer be required, they should be removed and the elevations should be made good following a scheme previously approved in writing by the City Council, as Local Planning Authority.

Condition 8) Prior to the installation of the mezzanine deck and floors, which are attached to listed fabric, to the commercial units, a Method Statement for the attachment of the mezzanine and floors to the arches shall be submitted for approval in writing by the City Council, as Local Planning Authority. The approved method implemented as part of the installation of the mezzanine and floors.

Appendix II: Definition of terms used

i) **REMOVE** means disconnect, dismantle as necessary and remove the stated element, work or component and all associated accessories, fastenings, supports, linings and bedding materials, and dispose of unwanted materials.

ii) **KEEP FOR REUSE** means, during removal, prevent damage to the stated components or materials, and clean off bedding and jointing materials. Then stack neatly, adequately protect and store until required by the Employer or for use in the Works as instructed.

iii) **REPLACE** means carefully remove the stated existing components, features and finishes, and hand to the Employer for their records. Provide and fit in place of new components, features or finishes which, unless specified otherwise, must match those which have been removed. Make good as necessary.

iv) **REPAIR** means carry out local remedial work to components, features and finishes as found in the existing building. Re-secure or re-fix as necessary and leave in a sound and neat condition. It does not include the replacement of components or parts of components or redecoration.

v) **MAKE GOOD** means carry out local remedial work to components, features and finishes which may have been disturbed by other, previous work and leave in a sound and neat condition. It does not include replacement of components or parts of components or redecoration.

vi) **TO MATCH EXISTING** means use products, materials and methods to match closely all visual characteristics and features of the existing work, with joints between existing and new work as inconspicuous as possible, all to the approval of the architect.

Appendix III: Drawings referenced in this Method Statement

a) Eckersley O'Calloghan Drawing no: DEA-EOC-XX-00-DR-S-1021

b) Eckersley O'Calloghan Drawing no: DEA-EOC-XX-00M-DR-S-1031

c) Eckersley O'Calloghan Drawing no: DEA-EOC-XX-ZZ-DR-S-2040

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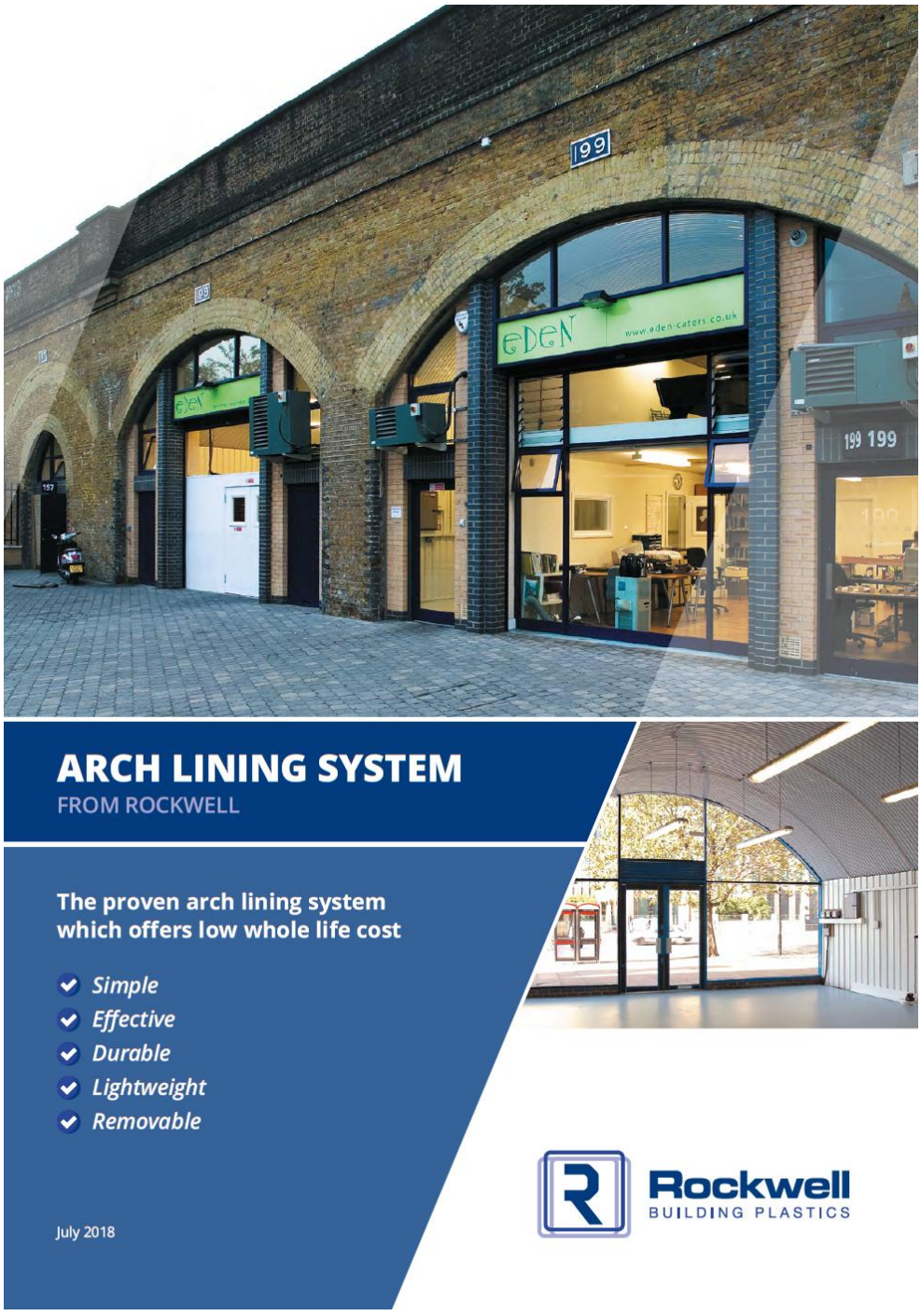
d) Simpson Haugh Drawing no: 10446-SHP-Z0-A-G252-DE-XX-040

e) Simpson Haugh Drawing no: 10446-SHP-Z0-A-G252-SE-XX-001

f) Simpson Haugh Drawing no: 10185-SHP-Z1-XX-A-B5D8-G100-0004

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Appendix IV: Specifications of arch lining system





ARCH LINING SYSTEM

Transform railway arches from dark and damp environments into pleasant work, storage, retail or leisure space.



The standard Rockwell arch lining system provides a long lasting lining which allows any water that has permeated the brickwork to be directed around the arch into floor level soak aways, gutters or drainage channels.

The versatile nature of the components makes the system suitable for a wide range of curved or flat lining projects. For specific applications Rockwell can also advise on the use of additional products from its stock of plastic lining and glazing materials.

Contact the technical department on 01676 523 386 to discuss any specific requirements.

SIMPLICITY

The economical and established railway arch lining system that has proved effective for many years.

High impact plastic lining sheets are flexible enough to adapt to each arch and will cold curve to match most vaulted ceilings.

Screw fixed directly to brickwork, the system is completely demountable allowing arch structures to be easily inspected.



PROVEN

The corrugated white PVC sheets are extruded in a bi-orientated process to give double the traction impact resistance of comparable PVC sheets.

Battens and sheets are completely water and rodent proof plus offer good chemical resistance.

For internal lining applications Rockwell white PVC sheets can expect to have a useful life in excess of 25 years.



TECHNOLOGY

Rockwood WPC composite battens are extremely robust yet flexible enough to follow uneven brickwork.

High quality austenitic fixings are manufactured from 304 series stainless steel to give the ultimate system durability.

The systems' attractive gloss white finish evenly reflects the maximum available light and the complete lining is B s1 d0 fire rated (equivalent to UK Class 0).

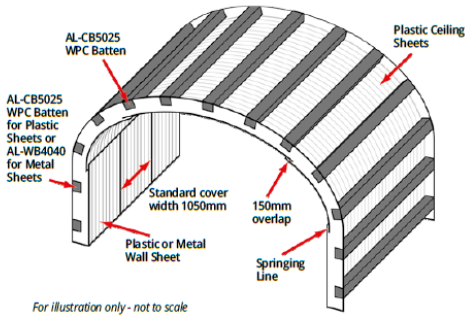
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TYPICAL SYSTEM INSTALLATION

DESIGN & SHEET LAYOUT

Measure the arch to determine the number of corrugated sheets required to go around the arch ceiling down to the springing line on each side allowing approximately 150mm for sheet end overlaps.

The first sheet spans the crown of the arch to avoid an overlap in the centre of the ceiling. The adjacent sheets going round the curve will fit in front of the first sheet thus allowing water to drain freely down the corrugations. An arch therefore always has an odd number of sheets going around the ceiling between the springing lines (or from floor to floor on arches with no vertical walls).



For illustration only - not to scale



There are 3 lengths of corrugated sheet available to help achieve the optimum material yield; 2.44m, 3.05m and 3.66m. Allowing one corrugation for sheet side-laps, the sheets will have a cover width of 1050mm with respect to the depth of the arch.

Wall sheets are generally fitted from floor level up to springing line height and can be either plastic or corrugated metal depending on the specification required.

BATTEN FIXING

Begin by securing AL-CB5025 WPC battens horizontally to the brickwork with AL-CBF65 fixings. For ceiling areas allow approximately 750mm between batten runs. Depending on the radius of the curve, the sheet length used and the sheet configuration the batten centres can be increased or reduced by up to 150mm in order to achieve even spacing.

For side wall areas where greater rigidity is desired the batten spacing should be reduced to 600mm. Use either AL-CB5025 WPC battens and AL-CBF65 fixings behind plastic wall sheets or AL-WB4040 WPC battens and AL-WBF80 fixings behind metal wall sheets. Both battens are supplied in 2.9m lengths.

Use 7 fixings per 2.9m batten length to give max 500mm between fixing points. Start at the centre of the batten and work outwards to keep batten flat to the brickwork.

Drill clearance holes through battens before fitting screws. Always use correct stainless steel batten fixings and heavy duty plastic wall plugs.

SHEET FIXING

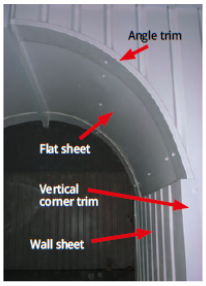
Plastic ceiling or wall sheets are secured to Rockwood WPC composite battens with 25mm stainless steel sharp point fixings (AL-WGF25P) which are supplied complete with push fit white plastic caps to give a discreet finish.

Fixing screws have an 8mm hex head. Use a suitable socket tool to fit a minimum of 4 fixings across the sheet into each batten run..

JACK ARCH LINING

The ceiling of these small interlinking arches should be lined with flat white 2mm thick PVC sheet.

Depending on site conditions the Rockwood AL-CB5025 WPC battens would normally be installed horizontally on jack arch ceilings. When fixed horizontally the battens should be angled slightly to create 20mm gaps within each row to facilitate drainage. The battens should be evenly spaced (max. 600mm centres) and secured with AL-CBF65 batten fixings. The 2mm thick flat white PVC lining sheets are then secured to the battens with AL-WGF25G sheet fixings.



The bottom of the flat white sheets fit behind the jack arch wall sheets. On the joint between the edge of the jack arch ceiling sheets and the main arch wall sheets use the hollow section angle trim which will flex to suit the curve of most jack arches. These are secured with 38mm hex head fixings (AL-TRF38L) through the flat sheet into the AL-CB5025 batten.

Where the jack arch ceiling sheets meet the angle trim it is advisable to use a butyl sealing strip to ensure a watertight joint. The angle trims allow any water at this junction to be directed around into the vertical corner trim where it will drain to floor level. Vertical corner trims give a neat, robust finish and are secured through the wall lining sheets into the battens with 50mm hex head fixings (AL-TRF50XL).

BACK WALL CLADDING

For a planked effect finish to the upper section or whole of the back wall Rockwell offers triple plank PVC panels with tongue and groove edges. These simply slot together and are secured vertically with AL-WGF25P fixings to horizontal AL-CB5025 battens at max. 600mm centres. For damp rear walls allow 20mm gaps between ends of the horizontal battens to act as weep holes.



The T & G cladding planks are scribed tight to the arch ceiling sheets – additional capping trim or flashing can be used here if required. Where the planks are not running all the way to the floor they will tuck neatly behind the metal wall sheets.

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MAIN ARCH LINING COMPONENTS

Batten & Batten Fixings

AL-CB5025	Rockwood WPC composite batten 2900mmx50mmx25mm
AL-CBF65	Batten fixing: 4.8 x 65mm s/s counter sunk screw c/w plastic wall plug (per 100)
AL-WB4040	Rockwood WPC composite batten 2900mmx40mmx40mm
AL-WBF80	Batten fixing: 4.8 x 80mm s/s counter sunk screw c/w plastic wall plug (per 100)

Sheet & Sheet Fixings



Rockwell 70/18 greca box profile corrugated PVC sheet 1090mm wide (1050mm cover width) available in the following sizes:

AL-WG2440	White Greca profiled 70/18 corrugated sheet: 2440mm long
AL-WG3050	White Greca profiled 70/18 corrugated sheet: 3050mm long
AL-WG3660	White Greca profiled 70/18 corrugated sheet: 3660mm long
AL-WGF25P	25mm hex head sheet fixings: austenitic s/s sharp point c/w white caps for plastic sheets and cladding (per 100)

Note: Rockwell is a plastics specialist and does not supply corrugated metal sheets. Industrial roofing suppliers will advise on the cost and availability of metal sheets and flashings.

Bending radius

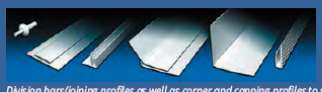
White corrugated PVC sheet	- 2.5m
2mm thick flat white PVC sheet	- 0.4m
Hollow section PVC angle trim	- 1.4m

Based on ambient temperature during installation being above 60C

JACK ARCHES, REAR WALLS & ACCESSORIES

Cladding & Trims

AL-W8	White flat PVC sheet: 1220 x 2440 x 2mm
AL-W10	White flat PVC sheet :1220 x 3050 x 2mm
AL-HS300/5	Triple plank T & G cladding: 300mm x 5m
AL-HB150	Angle trim in white hollow section PVC: 150mmx5m
AL-BUT15	Butyl sealing strip: 3mm x 9mm x 15m roll
AL-HA10080	Vertical corner trim in white hollow section PVC: 100mm x 80mm x 5m
AL-FLEXI	White PVC flexi-angle: 35mm x 35mm x 5m
AL-5050AW	White PVC rigid angle: 50mm x 50mm x 5m
AL-FB100	5mtr x 100mm White Flat Board
AL-FB150	5mtr x 150mm White Flat Board



Division bars/joining profiles as well as corner and capping profiles to suit flat sheets or triple plank cladding are available. Also stocked are 3mm flat white PVC sheets, flat-boards, sealants and drive rivets plus black or white PVC guttering - contact Rockwell for details.

Trim Fixings

AL-TRF38L	38mm hex head s/s fixing with washer c/w white cap for angle trim/flat sheet (per 100)
AL-TRF50XL	50mm hex head s/s fixing with washer c/w white cap for angle trim/corrugated sheet (per 100)

Note: White plastic accessories and metal wall sheets may be a slightly different shade of white to the PVC ceiling and wall linings. To ensure system integrity, during installation always use the correct fixings as detailed in this brochure.

Material weight

White corrugated PVC sheet	- 1.65Kg/m2
2mm thick flat PVC sheet	- 2.8Kg/m2
Triple plank PVC cladding	- 2.3Kg/m2

STORAGE & MAINTENANCE

Sheets should be stored and transported flat and kept suitably protected against the elements if stored outside. Rockwell lining products require practically no maintenance and may be simply cleaned when necessary. On such occasions mild detergent and warm water solutions only should be used together with non-abrasive cloths or sponges. Never use cleaning agents that contain abrasives or concentrations of chemicals, especially alkalis.

DELIVERY & PAYMENTS

Materials are usually available for delivery nationwide within 7 days from receipt of order. Payments are with order or, subject to status, Nett 30 days to approved accounts. Delivery charges apply to all orders and will vary by location and size. Next day/special dedicated deliveries can also be arranged and are subject to an additional surcharge - Please contact our sales office on 01676 523386 for accurate delivery costs before placing order.

PRICES & NOTICE

All prices listed exclude VAT. Prices listed and component details are correct at time of printing, Rockwell Sheet Sales Ltd reserve the right to change product specifications or prices without notice. Please check the current prices and system details with the Rockwell Sales Office when ordering.

HEALTH & SAFETY DATA

Rockwell plastic lining products present few hazards to the user and there are no exposure limits for working with the materials. Swarf may be produced during cutting or drilling and as a precaution the use of standard PPE such as gloves, goggles and masks are advised during handling, cutting or drilling.

FIRE DATA

Rockwell greca corrugated profiled and flat white PVC sheet meet the requirements for a UK Class 0 fire classification. Rockwell hollow t&g cladding profiles are Class 1 fire rated to British Standard BS476 Part 7 (1997) 'surface spread of flame'. When subject to thermal decomposition some PVC materials can give off fumes containing Hydrogen Chloride, Lead Oxide, Barium Oxide, and Nitrogen Oxide. Inhalation of fumes arising from ignited material must be avoided. Extinguish using dry powder, water, carbon dioxide or foam.

RECYCLING & DISPOSAL

Rockwell uses recycled materials in its products wherever possible and PVC products can be recycled up to 10 times. Most plastic cladding sheets and profiles can be recycled where facilities exist. As an alternative to disposing of used sheets in approved landfill sites, Rockwell is able to arrange reprocessing of returned items - please contact us for further details.

All information in this brochure is given in good faith and for general help and guidance. Since detail is likely to vary with different arches, it cannot be assumed to be suitable for every application. All information in this brochure is Copyright Rockwell Sheet Sales Ltd.

Rockwell Sheet Sales Ltd
Rockwell House
Birmingham Road
Millisons Wood
Coventry, CV5 9AZ

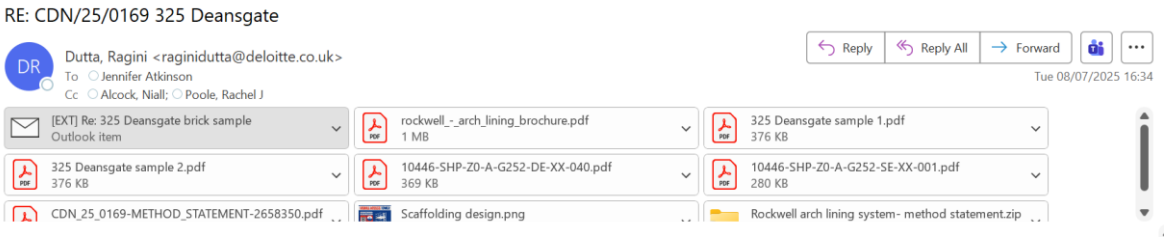
Tel: 01676 523 386
Fax: 01676 523 630
Email: info@rockwellsheet.com
www.rockwellsheet.com

Rockwell BUILDING PLASTICS



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Appendix VI: Emails between LPA and Deloitte regarding conditions



Hi Jen,

Hope you are well.

Please find responses in blue.

1. *The proposal impacts on the arch which is part of the listed viaduct. It appears to involve the internal lining of the arch with a Rockwell lining system, which is not ideal as it will cover up all of the brickwork and lead to a heavily sanitised space with none of the existing original brickwork on show. The brickwork is an important element of the arches character and attempts should be made to keep exposed and only introduce damp control measures in targeted locations, where there might be localised issues of water ingress rather than a total covering up of the arch.- Rockwell lining system has been proposed as it was a request from TfGM to avoid issues with water ingress. This has been used inside the arches backing onto HOME on Whitworth Street without a long term, detrimental impact to the structure. It is lightweight and removable, offering low whole life cost. It has been effective for many years and is 'completely demountable allowing arch structures to be easily inspected. They require practically no maintenance and may be simply cleaned when necessary. Please see attached:*

    - *Rockwell Arch lining brochure for further details (Document Reference: rockwell_arch_lining_brochure)*
    - *Method Statement for the proposed installation of the arch linking. (Ref: Rockwell arch lining system- Method Statement.zip)*

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2.5 Installation of Arch Lining System

Please refer to the drawings at Appendix III (d-e)

i) Following condition assessment and completion of conservation repair works to the Viaduct walls, the Rockwell arch lining system will be installed as per manufacturer's instructions and to drawings by the Architect.

ii) The Rockwell lining system is designed to be removable to provide access to the historic fabric as and when required.

iii) Where possible, works should be completed from a mobile access tower scaffold to the Principal Contractors' *Working from Height* policies and procedures.

iv) Rockwell WPC composite battens are to be used and fixed into the Viaduct walls using Rockwell's specified batten fixings (plastic wall plugs) (see specification at **Appendix IV**). **Batten fixings are to be attached only to the mortar joints or areas where cementitious repairs have been undertaken, and not into the bricks.**

v) Power tools used to install fixings will use drill bits no more than 2/3rd the width of the mortar joint to be penetrated.

vi) The Rockwell arch liner system is to extend around the complete surface of the Viaduct brickwork walls.

The Method Statement refers to access scaffold and i'm not sure if there is a separate condition for this, but we'll need to see and agree the scaffold design. – Please see attached document (Doc Ref: Scaffolding Design)

It would also be helpful to see the actual mezzanine design to see how close the structure is to the walls.- Please see attached details which shows the intended interface with the arch walls (Doc ref: 10446-SHP-Z0-A-G252-DE-XX-040 and 10446-SHP-Z0-A-G252-SE-XX-001)

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3.2 Access scaffolding

i) To avoid any damage to historic fabric, the erection and support of necessary scaffolding to enable the temporary works and implementation of the repair works must be carefully detailed.

ii) Scaffold access arrangements should be designed to protect masonry features from accidental damage especially during the erection and striking of scaffolding. Scaffold caps to be used throughout and direct contact between scaffold structure (especially ends of scaffold poles) and masonry to be minimized.

iii) The design of all scaffolding will be the responsibility of the scaffolding contractor, subject to the below requirements below and in accordance with the recommendations of BS 5973: 1990 "Code of Practice for access and Working Scaffold and special scaffold staircases in Steel" or as updated. Compliance with the various Acts and regulations listed in BS 5973 is the responsibility of the Contractor. The following minimum requirements will be met. Compliance with all aspects of Health and Safety during erection, using and dismantling is the responsibility of the Contractor.

iv) The scaffolding contractor's task method statement will include proposals which include clear drawings and structural calculations in duplicate sufficient to prove the stability of the proposed temporary structures in accordance with BS 5973: 1990. Drawings will be provided to the project architect, structural engineer, conservation consultant.

v) These drawings will clearly indicate positions and methodology where any scaffold is to be tied back to the fabric of the building. Fixings should aim to either align with mortar joints, previous fixing holes or where cementitious repairs have been undertaken. Where it is necessary to brace the scaffold from the building's structural frame then timber packing and hessian of a minimum thickness of 25mm is to be placed between the scaffolding and the masonry.

The statement refers to samples and we'll need to see those highlighted below as well as the cleaning sample referred to.- Please see attached Mortar analysis and original mix details (Doc ref: 325 Deansgate Sample 1 and 325 Deansgate Sample 2). Specially Selected Malvern Red Brick confirmed as brick replacement sample as per mail dated 3 July 2025 (attached).

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3.4 Materials and workmanship samples

i) We have outlined below the minimum expected material and workmanship samples that are currently anticipated, as the project develops it may become necessary to develop further trials to ensure an appropriate level of sampling is undertaken prior to commencement.

ii) All samples will be reviewed by the project architect and conservation consultant, and submitted to the local planning authority for approval, to discharge planning conditions.

iii) **Mortar analysis.** Mortar analysis has been undertaken and if further sampling is required in the future this should be undertaken to in line with **Section 3.6**.

iv) **Brick replacement samples.** The appointed contractor will provide samples of replacement brick units prior to placing any orders for purchasing replacement bricks for inspection by the project architect and / or conservation consultant for confirmation that the proposed sample meets the requirements of the 'consented development'. This will include, red, blue, specials and glazed bricks. Where possible brick replacement will be undertaken from dismantled areas of brickwork elsewhere on site.

v) **Paint removal sample (external).** Undertake paint removal trials to the white paint that is applied to the brickwork to the arch for inspection by the project architect and / or conservation consultant and / or conservation officer for confirmation that the proposed sample meets best practice and thus the requirements of the 'consented development'. Paint removal trials are to be undertaken to an inconspicuous area of brickwork or areas which have graffiti.

vi) **Mortar samples for brickwork.** On receipt of the mortar analysis results, prepare 5no. pointing sample mortar biscuits based on the original mortar and any justified need of the brickwork for inspection by the conservation consultant and / or conservation officer. Once inspected, allow for re-pointing 1m^2 of brickwork for inspection by the project architect and / or conservation consultant and / or conservation officer for

Kind Regards

Ragini Dutta (pronounced R-aa-gini)
Senior Associate | Real Assets Advisory | Deloitte LLP
07900765494 | +44 330 138 6276

From: Jennifer Atkinson <jennifer.atkinson@manchester.gov.uk>
Sent: Tuesday, April 29, 2025 1:54 PM
To: Alcock, Niall <nalcock@deloitte.co.uk>
Subject: [EXT] CDN/25/0169 325 Deansgate

Niall

Sorry I thought I had sent you comments on this. Please can you review the below and provide a response.

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The proposal impacts on the arch which is part of the listed viaduct. It appears to involve the internal lining of the arch with a Rockwell lining system, which is not ideal as it will cover up all of the brickwork and lead to a heavily sanitised space with none of the existing original brickwork on show. The brickwork is an important element of the arches character and attempts should be made to keep exposed and only introduce damp control measures in targeted locations, where there might be localised issues of water ingress rather than a total covering up of the arch.

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Please refer to the drawings at Appendix III (d-e)

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ii) The Rockwell lining system is designed to be removable to provide access to the historic fabric as and when required.

iii) Where possible, works should be completed from a mobile access tower scaffold to the Principal Contractors' *Working from Height* policies and procedures.

iv) Rockwell WPC composite battens are to be used and fixed into the Viaduct walls using Rockwell's specified batten fixings (plastic wall plugs) (see specification at **Appendix IV**). **Batten fixings are to be attached only to the mortar joints or areas where cementitious repairs have been undertaken, and not into the bricks.**

v) Power tools used to install fixings will use drill bits no more than 2/3rd the width of the mortar joint to be penetrated.

vi) The Rockwell arch liner system is to extend around the complete surface of the Viaduct brickwork walls.

The Method Statement refers to access scaffold and i'm not sure if there is a separate condition for this, but we'll need to see and agree the scaffold design.

It would also be helpful to see the actual mezzanine design to see how close the structure is to the walls.

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3.2 Access scaffolding

i) To avoid any damage to historic fabric, the erection and support of necessary scaffolding to enable the temporary works and implementation of the repair works must be carefully detailed.

ii) Scaffold access arrangements should be designed to protect masonry features from accidental damage especially during the erection and striking of scaffolding. Scaffold caps to be used throughout and direct contact between scaffold structure (especially ends of scaffold poles) and masonry to be minimized.

iii) The design of all scaffolding will be the responsibility of the scaffolding contractor, subject to the below requirements below and in accordance with the recommendations of BS 5973: 1990 "Code of Practice for access and Working Scaffold and special scaffold staircases in Steel" or as updated. Compliance with the various Acts and regulations listed in BS 5973 is the responsibility of the Contractor. The following minimum requirements will be met. Compliance with all aspects of Health and Safety during erection, using and dismantling is the responsibility of the Contractor.

iv) The scaffolding contractor's task method statement will include proposals which include clear drawings and structural calculations in duplicate sufficient to prove the stability of the proposed temporary structures in accordance with BS 5973: 1990. Drawings will be provided to the project architect, structural engineer, conservation consultant.

v) These drawings will clearly indicate positions and methodology where any scaffold is to be tied back to the fabric of the building. Fixings should aim to either align with mortar joints, previous fixing holes or where cementitious repairs have been undertaken. Where it is necessary to brace the scaffold from the building's structural frame then timber packing and hessian of a minimum thickness of 25mm is to be placed between the scaffolding and the masonry.

The statement refers to samples and we'll need to see those highlighted below as well as a the cleaning sample referred to.

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3.4 Materials and workmanship samples

i) We have outlined below the minimum expected material and workmanship samples that are currently anticipated, as the project develops it may become necessary to develop further trials to ensure an appropriate level of sampling is undertaken prior to commencement.

ii) All samples will be reviewed by the project architect and conservation consultant, and submitted to the local planning authority for approval, to discharge planning conditions.

iii) **Mortar analysis.** Mortar analysis has been undertaken and if further sampling is required in the future this should be undertaken to in line with **Section 3.6**.

iv) **Brick replacement samples.** The appointed contractor will provide samples of replacement brick units prior to placing any orders for purchasing replacement bricks for inspection by the project architect and / or conservation consultant for confirmation that the proposed sample meets the requirements of the 'consented development'. This will include, red, blue, specials and glazed bricks. Where possible brick replacement will be undertaken from dismantled areas of brickwork elsewhere on site.

v) **Paint removal sample (external).** Undertake paint removal trials to the white paint that is applied to the brickwork to the arch for inspection by the project architect and / or conservation consultant and / or conservation officer for confirmation that the proposed sample meets best practice and thus the requirements of the 'consented development'. Paint removal trials are to be undertaken to an inconspicuous area of brickwork or areas which have graffiti.

vi) **Mortar samples for brickwork.** On receipt of the mortar analysis results, prepare 5no. pointing sample mortar biscuits based on the original mortar and any justified need of the brickwork for inspection by the conservation consultant and / or conservation officer. Once inspected, allow for re-pointing 1m^2 of brickwork for inspection by the project architect and / or conservation consultant and / or conservation officer for

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