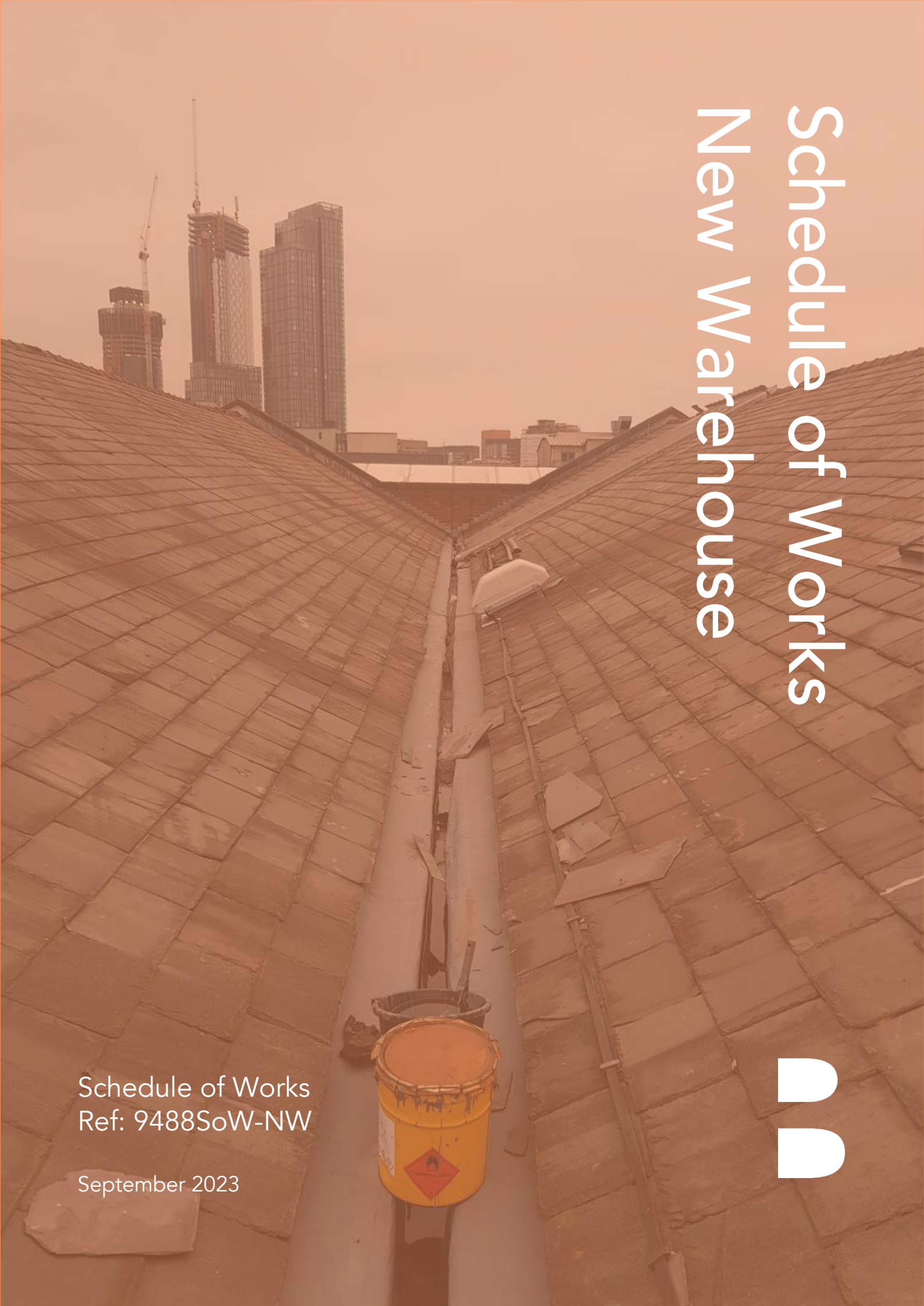


Schedule of Works
New Warehouse

Schedule of Works
Ref: 9488SoW-NW

September 2023

Version history

Project name: Science & Industry Museum

Project number: 9488

Client: Science Museum Group

Rev:	Date:	Status	Name	Description
P1	01/08/2023	PLANNING	Alex Scrimshaw | Associate	Planning
P2	01/09/2023	PLANNING	Alex Scrimshaw | Associate	Planning

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Buttress being obtained. Buttress accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person using or relying on the document for such other purpose agrees and will by such use or reliance be taken to confirm his agreement to indemnify Buttress for all loss or damage resulting therefore. Buttress accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned.

Buttress

Buttress Architects Ltd.
41 Bengal St.
Manchester
M4 6AF

T: 0161 236 3303
W: www.buttress.net

Contents

1.0 Introduction 4

1.1 Definitions 4

1.2 Precedence 4

2.0 General 5

3.0 Schedule of Works 10

1.0 Introduction

This document contains a description of the 'work items' that are to be undertaken as part of the project and it is to be read in conjunction with the Preliminaries and Specification.

A ***Work Item*** is either; a single operation, a series of operations or a complete element of the project and the cost for each 'work item' is to be entered in the Schedule of Works.

The ***Schedule of Works*** quantifies many of the 'work items' contained in this document; reference should be made to separate accompanying pricing document.

The ***Drawings*** that accompany the LBC / tender documentation have, where appropriate, been annotated with the 'work item' references used in this document.

1.1 Definitions

EMPLOYER'S REPRESENTATIVE means the person nominated in the Contract as Employer's Representative, Architect, Contract Administrator or Project Manager.

CA means both Contract Administrator/Accredited Professional. Inspections and approvals are to be dealt with by said representative individual.

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. It does not include removing associated pipework, wiring, ductwork, or other services.

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

REPLACE means remove the stated existing components, features, and finishes. Provide and fit in lieu new components, features or finishes which, unless specified otherwise, must match those which have been removed. Make good as necessary.

REPAIR means carry out local remedial work to components, features and finishes as found in the existing building, resecure or refix as necessary and leave in a sound and neat condition. It does not include:

- Replacement of components or parts of components.
- Redecoration.

MAKE GOOD means carry out local remedial work to components, features and finishes which have been disturbed by other, previous work under this Contract and leave in a sound and neat condition. It does not include:

- Replacement of components or parts of components.
- Redecoration.

The meaning of the term shall not be limited by this definition where used in connection with the defects liability provisions of the Contract.

EASE means make minor adjustments to moving parts of the stated component to achieve good fit in both open and closed positions and ensure free movement in relation to fixed surrounds. Make good as necessary.

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 approval of appearance.

APPRAISE means the contractor is to appraise and carry out own independent assessment of the works detailed here within and update the scope of works as is necessary through consultation with the Architect.

SALVAGED refers to materials that have been *removed* and *kept for reuse* on this job: no second-hand or reclaimed material are to be used on this project.

CONSOLIDATION means the contractor is to make something physically stronger and solid. Returning / combing items into a single / coherent whole. Rake out and repoint / build with an NHL mortar. Return to match original profiles. Rebuild in association with structural ties / wall core gravity grouting etc

1.2 Precedence

General: Where, and to the extent that, documents conflict the following orders of precedence apply:

Preliminaries override contract drawings, which override the Reference specification.

Any conflicts found within the documents: Give notice to the Employer's Representative.

2.0 General

2.1 Project Background

2.1.1 The combined project focuses on a number of areas within Science & Industry Museum complex. The Science and Industry Museum is located to the north-west of central Manchester, to the east of the River Irwell and within the Castlefield Conservation Area.

2.1.2 This schedule of works, focuses on the New Warehouse external envelope, roof and second floor including Special Exhibitions Gallery (SEG), west Yard and internal fabric repairs only.

2.1.3 The New Warehouse is Grade II Listed and is situated to the northeast of the site.

2.1.4 The site is within close proximity to Deansgate, Spinningfields and the Castlefield Basin. The site is well connected with Deansgate train station and Metrolink approximately 550m away. Refer to separate Design and Access Statement for detailed location information.

2.2 Familiarisation

2.2.1 The contractor must fully familiarise themselves with the buildings / assets and their construction, as well as site wide access and logistics, prior to submitting their tender.

2.3 Preliminaries and General Particulars

2.3.1 The contractor must include for all necessary scaffolding (temporary roof), temporary public access, building / asset protection (finishes, exhibits & collections items internally and externally), perimeter hoarding to all scaffold / storage and welfare facilities. Include for protection of historic features and fabric. Include for all necessary internal scaffolding and access provisions, taking into account that the site complex is a live environment and may require alteration to said access components at any given time. Prior to submitting a price, the contractor must have visited the site to assess the logistics and access requirements.

2.4 Drawings

2.4.1 All dimensions are in millimetres unless noted otherwise.

2.4.2 The existing general arrangement base drawings (plans, sections, and elevations) are based upon 2010 data and in some instances, may not reflect the current arrangement. Dimensions and arrangements must be checked for accuracy onsite by the contractor, prior to any works commencing, ordering or manufacture / fabrication of any elements or components.

2.4.3 Any discrepancies / irregularities must be reported to the CA immediately. No work shall commence until any such discrepancies have been resolved.

2.4.4 In any project involving fabric repairs, the tendered drawings may have been prepared well in advance of the contract period and are reflective of the condition / arrangement at the time of survey.

2.4.5 The marked-up drawings are based upon surveys from ground level and other accessible vantage points only.

2.4.6 The contractor and/or subcontractor must allow a period of two weeks in their programme, to reappraise the drawings and confirm the scope of works to each identified area, once appropriate and safe access has been provided.

2.4.7 All areas for repair are to be marked up from the drawings onsite by the contractor and agreed with the Architect, prior to commencing any works.

2.4.8 Quantities / areas identified are for tender purposes only.

2.4.9 Specific drawing references are provided against each of the work items throughout this schedule, however the contractor must read and appraise all drawings, schedules and specifications provided, against those specifically referenced. If the contractor believes that they are not in possession of the correct and/or relevant information, they must advise and report to the CA immediately.

2.5 Limitations

2.5.1 The drawings are based upon existing data and no concealed and / or hidden spaces have been exposed and / or opened up for inspection, unless specifically highlighted. Therefore, the arrangement and interfacing illustrated across details are purely indicative / approximate only. The accuracy of the survey data graphically presented cannot be confirmed. These drawings are for tender purposes only.

2.5.2 Limited and focused opening up works have been undertaken, to inform build-ups as existing. All detail arrangements and build-ups beyond external visible surfaces are purely indicative / approximations only with suggested construction and interfacing arrangements. The contractor must check all existing build-ups once appropriate safe access has been provided and will advise the Architect of any discrepancies.

2.5.3 No hidden or concealed spaces have been assessed or opened up, unless otherwise noted.

2.6 Fabric Repairs Generally

2.6.1 The schedule of works must be read in conjunction with separate Architectural Restoration Specification ref-9488RS, the content of which are summarised by the following headings and document references:

1. Introduction
2. General
3. Specific Requirements
4. Access Scaffolding
5. Asbestos / Hazardous Materials
6. Demolition & Removal
7. Opening up & Building / Asset Protection
8. Masonry Cleaning: General
9. Masonry Cleaning: Removal of Organic Growth
10. Hydraulic Lime Mortar
11. Stone Repairs
12. Brick Repairs
13. Pointing of brickwork
14. Ceiling Repairs
15. Glazing Repairs
16. High Quality Joinery

17. Joinery Repairs

18. Paint, Decorating & Powdercoating

19. Renewal of Rainwater Goods

20. Restoration of Historic Ironwork

21. Roof Repairs – Carpentry/Timber Framing

22. Roof Repairs – Slating

23. Roof Repairs – Leadwork

24. Hotworks

2.7 Internal 'dilapidation' inspection of work areas

2.7.1 In order to record the condition of each internal work area:

2.7.2 Immediately prior to the work commencing in an area, undertake an inspection with the CA in order to record the existing condition of the areas. The inspection is to be limited to the space in and around the work area and the routes to and from the work area.

2.7.3 Provide a report of any significant defects together with a photographic record for each area.

2.7.4 Confirm the scope of work within each area with the CA and agree how any anomalies will be dealt with e.g. occupiers' fixtures and fittings, partition abutments, etc.

2.8 External 'dilapidation' inspection of work areas

2.8.1 Prior to the commencement of any work on site including the erection of scaffolding the contractor is to allow to undertake an inspection with the CA in order to record the existing condition of the existing building (areas not subject to change in particular) including roofs, footpaths, road and other external paved areas.

2.8.2 The contractor is to provide report of any significant defects together with a photographic record of the external areas.

2.9 Photographs

2.9.1 Provide a photographic record of each individual repair with at least one photograph before, during and after. Complex areas such as major rebuilding works will require a series of photographs to record the work properly and fully.

2.9.2 Photographs do not need to be presented in a document; however, each file should be renamed to have a prefix that corresponds with the unique reference number provided on the drawing.

2.10 Cleaning upon completion of works

2.10.1 All parts of the elevations, working areas are to be thoroughly cleaned down on completion of the works. Prior to dismantling the scaffold ensure that it is cleaned and clear of any debris that could damage the face of the building. As the scaffold is dismantled remove debris and brush clean all sills, ledges, and the like.

2.10.2 Clean down all paintwork and windows.

2.10.3 This item is specifically for cleaning upon completion. Cleaning during the works as required for good housekeeping is to be costed elsewhere within the preliminaries.

2.11 Samples / trial works

2.11.1 Prior to the commencement of any works, there may be a requirement to provide samples / trial works in advance of progressing full packages of works.

2.11.2 These must be provided in a timely manner, as outlined within the separate Architectural Restoration Specification.

2.12 Sub-consultants, specialists

2.12.1 General: The schedule of works must be read in conjunction with all available sub consultant / specialists' information, including drawings, schedules, specifications, and reports. Any discrepancies / anomalies identified are to be brought to the attention of the Architect as soon as they become evident.

2.13 Dimensions

2.13.1 Dimensions: Do not rely on scaled dimensions.

2.13.2 All dimensions relevant to the existing buildings and any other assets or features must be confirmed by the contractor before, order, manufacture, and installation.

2.13.3 The contractor must undertake a survey(s) in order to ascertain sufficient information about the structures and their surroundings, prior to undertaking any works.

2.14 Work Items

2.14.1 Work item headings and sub-headings.

- 100 Roofscape – removals & demolition
    - 101 Slate Pitched Roofs
    - 102 Gutters – Valleys & Parapets
    - 103 Rooflights / Skylights
    - 104 Interior
- 200 Roofscape – Proposals
    - 201 Slate Pitched Roofs
    - 202 Gutters – Valleys & Parapets
    - 203 Rooflights / Skylights
    - 204 Roof Level Fabric Repairs
    - 205 Roof Access Equipment
    - 206 Flat Roofs
- 300 Exterior Façade Fabric Repairs
    - 301 Facades

- 302 Interior of SEG

- **600 Special Exhibitions Gallery (SEG) - removals & demolition**
  - 601 External West Yard
  - 602 Internal Entrance Lobby
- **700 Special Exhibitions Gallery (SEG) - proposals**
  - 701 External West Yard
  - 702 Internal Entrance Lobby

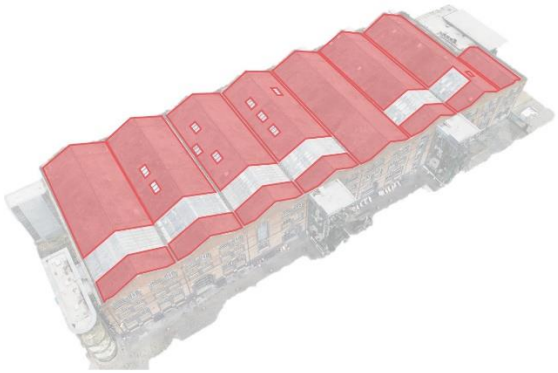
3.0 Schedule of Works

Work Item	*Description*	*£*

100 Roofscape – removals & demolition

101 Slate Pitched Roofs

The below works are to extend across the entire roofscape.



- Read in conjunction with drawing(s): (01) 006, 007, 105, 106, 305, (03) 101-102, (27) 001-006
- See **work item 201** for proposed works.

a. Disconnect, temporarily remove, and store MEP equipment, elements, and components. Note: internal building services are to be maintained throughout the re-roofing project, including but not limited to flues, extracts, vent pipes etc.

b. Temporarily remove / discard existing lightening conductors strips and all associated elements and components.

c. Carefully remove and dispose all loose stacked slates and other waste products across the roofscape.

d. Carefully remove and dispose all soft and woody vegetation growths across the asset.

e. Carefully remove and dispose all existing loose timber access ladders across pitched roofs, including metal ladders.

f. Carefully remove and dispose all existing timber duck boards and framing members.

g. Carefully strip and dispose all existing blue / grey slates and ridge tiles across the entire area of the roofscape, including battens & counter battens, tilt fillets etc.

h. Carefully remove and dispose all existing roofing felts (multiple layers), including insulation

Work Item	*Description*	*£*

boarding (circa 30mm thick) to expose external face of timber sarking boarding.

i. Carefully remove and dispose all existing lead and bituminous flashings, soakers etc across interfaces and abutments.

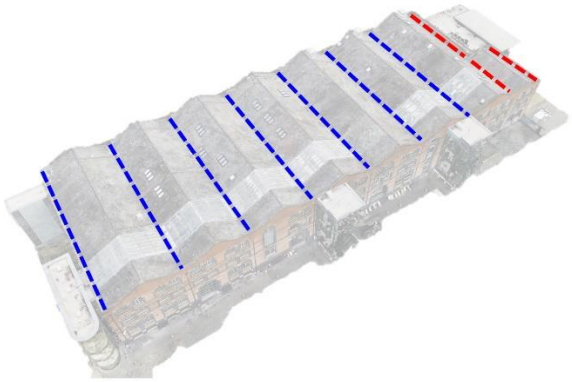
j. Carefully remove and dispose all existing roof access portals, including structure and all associated elements and components.

k. Carefully remove and dispose existing timber access platform (dormer) to east elevation roof access point.

l. Once existing sarking boards have been exposed across the top surface, allow for the CA, structural engineer and timber and damp surveyor to inspect, and reappraise, alongside the roofing contractor.

102 Gutters – Valleys & Parapets

The below works are to extend across the entire roofscape.



- Read in conjunction with drawing(s): (01) 006, 007, 105, 106, 305, (03) 101-102, (27) 001-006
- See **work item 202** for proposed works.

a. Carefully remove all areas of ponding water (if evident), including detritus and silt across all gutters and outlets.

b. Carefully remove and dispose all existing gutter coverings across valley and parapet gutters, including outlets, materials include lead / bitumen and fibreglass.

c. Remove and dispose all hidden and concealed timber battens, sheathing boarding etc to sides and base of gutters.

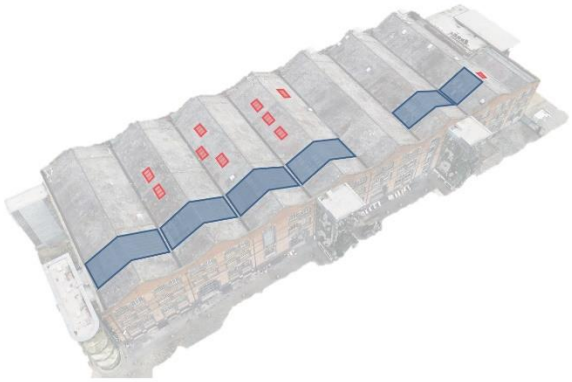
d. Remove and dispose all existing insulation boarding, understood to be circa 30mm thick.

e. Once existing sarking / gutter sole boards have been exposed, allow for the CA and structural engineer to inspect, and reappraise, alongside roofing contractor.

f. Note: Existing gutter sole boards, noggins and supporting structure are to be retained insitu, to maintain internal aesthetic.

103 Rooflights / Skylights

The below works are to extend across the entire roofscape.



- Read in conjunction with drawing(s): (01) 006, 007, 105, 106, 305, (03) 101-102, (27) 001-006
- See **work item 203** for proposed works.

a. Disconnect, temporarily remove, and store MEP equipment, elements, and components.

b. Carefully remove and dispose of all modern Velux rooflights, including all associated elements and components, structure, trimmers etc.

c. Carefully remove and dispose of all existing skylights / patent glazing, including all associated elements and components (lead ridge, flashings, blinds, actuators etc).

104 Interior

The below works are to extend across the entire roofscape.

- Read in conjunction with drawing(s): (01) 005, 006, 105, 305, (03) 001-002

a. Carefully strike and remove existing internal temporary scaffold crash deck including all associated elements and components across the eastern atrium. Crash deck extends across second floor plate east void and skylights.

Work Item	*Description*	*£*

200 Roofscape – re-roofing

201 Slate Pitched Roofs

The below works are to extend across the entire roofscape.

- Read in conjunction with drawing(s): (04) 006, 007, 008, 305, (06) 001, 002, (27) 101, 102, 103, 104, 105

a. The contractor must confirm all setting out and tolerances across all interfaces and advise of any anomalies / discrepancies.

b. Reinstate / reconnect temporarily removed MEP equipment, elements, and components.

c. Supply and install new MEP equipment, elements and components as identified.

d. Supply and install new lightening conductor strips and test.

e. Undertake all required timber and roof structure repairs. Where items require cutting out, full replacement or splice repairs, these are to match the existing arrangement and be sized to match existing.

f. Replace all defective / rotten timber sarking boards with new, to match existing in size and arrangement.

g. Infill all roof apertures and openings where rooflights / skylights / areas of patent glazing etc have been removed and are not to be reinstated. Refer to **structural consultant's** pack for information on new roof structure elements and components. Openings are to be infilled with new treated timber sarking boards and then over slated, to match existing in size and arrangement. Sarking boards are to be finished internally (applied coating) to match existing.

h. Infill and return roof arrangement where existing access platform has been removed to the east end of the roof. Allow for new roof structure and sarking boarding.

i. Construct new roof access portal (single) within valley gutter, sized to match existing. Constructed from treated timber framing members, clad with 18mm WBP / Marine plywood, with breather membrane, treated battens and counter battens, 12mm WBP plywood and code 6 lead sheets to cheeks and roof. Supply and install external grade hardwood door with heavy duty hinges and secure latch / bolt. Access portal to be insulated with wood fibre, with VCL.

j. Build in all structure / fixing points for installation of all roof access equipment.

k. Supply and install all roof access anchor points.

l. Rake out all penny gaps between all sarking boarding to ensure cross ventilation is maintained.

Work Item	*Description*	*£*

m. Supply and install new vapour control layer across all sarking boards to receive wood fibre insulation.

n. Supply and install new wood fibre insulation (varying thicknesses) including all associated elements and components, taped, and sealed as per manufacturers recommendations.

o. Supply and install proprietary eaves and ridge ventilation with a minimum air flow of 25000mm2/m at low level and 5000mm2/m at high level.

p. Supply and install new treated battens, counter battens, and hardwood tilt fillets.

q. Supply and install eaves support tray.

r. Supply and install new breather membrane across wood fibre insulation, dressed over eaves support tray.

s. Set out and construct secret gutter abutment detail at interface between raked gables and pitched roof. Gutter to be lined with code 5 lead sheets with upstand at batten / counter batten interface. Include for insulation upstand at interface with masonry raked gable.

t. Supply and install 100% new blue / grey Welsh slate and ridge tiles. Colour to match existing.

u. Supply and install solid wood rolls and lead ridge capping across skylight ridges as existing arrangement.

202 Gutters – Valleys & Parapets

The below works are to extend across the entire roofscape.

- Read in conjunction with drawing(s): (04) 006, 007, 008, 305, (06) 001, 002, (27) 101, 102, 103, 104, 105

a. Construct new treated timber tapered stepped gutter deck for new lead lined roof coverings, with drips, sump / catchment pit. Refer to **structural consultant's** pack for information on new gutter structure elements and components.

b. Construct new treated timber box gutters to parapets for new lead lined roof coverings.

c. Construct new sumps across all existing external rainwater outlets, to align with existing outlet positions.

d. Build in all structure / fixing points for installation of all roof access equipment.

e. Supply and install all roof access anchor points.

f. Supply and install new code 7 bespoke welded lead overflow chute with weir and spigot to disperse into hopper. Include for the provision of secondary / failsafe overflow pipe within each outlet position.

g. Supply and install new vapour control layer across all sarking boards to receive wood fibre insulation.

h. Supply and install new wood fibre insulation (varying thicknesses) including all associated elements and components, taped, and sealed as per manufacturers recommendations.

i. Supply and install new breather membrane across wood fibre insulation.

j. Supply and install 18mm WBP / marine plywood sheeting (square edged) across timber gutter bearers to all valley and parapet gutters. Extend up roof slope by no less than 2 slate courses, where identified to provide increased walking platform.

k. Supply and install code 8 lead sheets across all valley gutters, onto class A building paper with solid wood rolls, flashed, lapped, and taken up and over tilt fillet to eaves.

l. Supply and install code 8 lead mushroom vents within each of the stepped gutter bays, to provide adequate cross ventilation to roof void below.

m. Supply and install code 8 lead sheets with t-pren joints across all parapet gutters, onto class A building paper. Allow for code 4 lead overcloak to protect t-pren joint. Lead sheeting to box gutters is to be taken up roof slope by no less than 2 slate courses, to provide increased walking platform for routine maintenance access. The underside of the lead is to be cross ventilated, with a zone of no less than 50mm to be maintained, unless otherwise directed.

n. Supply and install lead vents for pitched roof, to be welded to lead covering to roof pitch to provide ventilation point into sub void below lead sheeting.

o. Construct ventilated parapet wall abutment detail, with composite battens fixed to existing masonry and clad in WBP / marine plywood with a proprietary ventilator.

p. Allow for modification of current box gutter which passes through small dormer internally, this arrangement is to be removed. Box gutter to be reinstated to disperse water directly to the external outlet as per original intent.

q. Supply and install code 5 lead cover flashings at interface with masonry walls.

r. Supply new stainless steel removable leaf guards within each of the outlets.

203 Rooflights / Skylights

The below works are to extend across the entire roofscape.

- Read in conjunction with drawing(s): (04) 006, 007, 008, 305, (06) 001, 002, (27) 101, 102, 103, 104, 105
- Refer to **structural consultant's** pack for information on new skylight structure elements and components.

a. Length of skylights has been reduced from existing arrangement, to accommodate for the installation of new tapered stepped valley gutters, which raises the height of valley gutters.

b. Construct skylight verge detail at interface with slate roof coverings, to be coordinated with skylight manufacturer. Verge upstand to be clad with code 5 lead sheets and secret gutter.

c. Supply and install new double glazed heritage style (with solar glass) skylights / patent glazing fixed directly over internal atriums only.

d. Supply and install solid wood rolls and lead ridge capping across skylight ridges as existing arrangement.

204 Roof Level Fabric Repairs

The below works are to extend across the entire roofscape.

- Read in conjunction with drawing(s): (02) 201-210, (04) 007, (05) 201-210

a. Rake out all loose mortar across existing copings which extend across the entire perimeter of the asset. Repoint with a suitable mortar.

b. Remove all existing residue, temporary flashings (flashband) etc from across the surface.

c. Remove algae, moss, and lichen growth across all copings.

d. Allow for checking of all copings for movement and bedding condition. Allow a 20% to be lifted and re-bedded within existing location.

e. Allow for replacement of X number of copings, to match existing in size, texture, and bond.

f. Supply and fixed continuous stainless-steel clips to form drip edge to outer face of all copings which extend around the full masonry perimeter of the warehouse, lay geotextile membrane across all copings, allowing for all copings to be capped with code 6 lead sheets with welted joints.

g. Allow for carrying out localised masonry fabric repairs across the internal face of all parapets, include for cutting out and indenting of defective masonry (say 250 quantity) and raking out and repointing of defective mortar (say 20% of surface area), repoint with a suitable mortar.

h. Cap all existing chimney stacks with ventilated stone capping, with stainless steel insect mesh.

205 Roof Access Equipment

The below works are to extend across the entire roofscape.

- Read in conjunction with drawing(s): (04) 006, 007, 008

a. Supply and install metal vertical hooped access ladder (like-for-like) to the east elevation to replace defective / redundant ladder, which provides primary access from the northeast stair core, out onto the roofscape.

b. Supply and install new metal balustrading / edge protection to flat roof, directly adjacent to the new hooped access ladder.

c. Supply and install metal vertical hooped access ladder internally for roof access portal access, which provides secondary access out onto the roofscape.

d. Supply and install new aluminium access platform at roof level to east primary roof access point.

e. Supply and install new aluminium stepped up and over access gantries, to provide access to each roof pitch and gutter. Gantries are to have fixed handrails to both sides with kick plates.

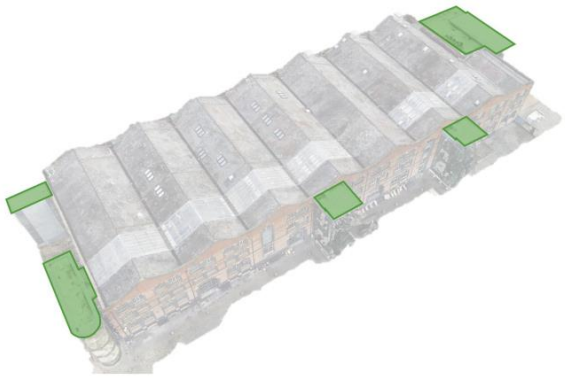
f. Supply and install fall arrest system cabling and secure weathered roof anchor points, to provide safe access to maintain all sump outlets, as well as providing safe access across all parapet and valley gutters where highlighted.

g. Supply and install fall arrest system to provide safe access to access stair cores A, B, C & D from main roof.

h. Supply and install fixed aluminium barriers, where skylights are reinstated, to provide permanent safe edge protection.

206 Flat roofs

The below works are to extend across all flat roofed areas.



- Read in conjunction with drawing(s): (04) 006, 007
- Flat roofs extend across the following areas, stair cores A, B, C & D, East elevation entrance portal *(not shown on graphic above)* and northeast café extension.

a. Remove silt and debris across all flat roofed areas.

b. Remove all vegetation growth.

c. Check all lead flashings at abutments and interfaces. Allow for replacement of 10%.

d. Check lead flashings across skylight to café extension, at abutment with east and south elevations of the masonry facades.

e. Undertake a thorough and detailed inspection across all flat roofed areas, including review of laps, coverings, penetrations, fixing posts, outlets, sumps, gutters, upstands, interfaces, capping's, MEP, weathering's, and abutments. Provide detailed written report with accompanying photographic record and key plans, identifying defects and proposed remedial action.

f. Undertake a thorough inspection across all roof access equipment, fixed across flat roofed areas. Provide detailed written report with accompanying photographic record and key plans, identifying defects and proposed remedial action.

g. Check all outlets, sumps and gutters and ensure all are free flowing.

h. Allow for the removal of aluminium capping's, weathering's across Stair Core C and replace. Inspect substrate, upstand and flashings and carry out any required remedial action.

Work Item	*Description*	*£*

300 Exterior Façade Fabric Repairs

301 Facades

The below works are to extend across the entire masonry external envelope.

- Read in conjunction with drawing(s): (02) 201-210, (05) 201, 202, 203, 204, 205, 206, 207, 208, 209, 210.
- Refer to **Structural consultant's** pack for scheduled structural related works across external facades.

a. Supply and install new lead capping across all existing copings. Note: included within **work item 204**.

b. Carefully remove lightening protection temporarily to facilitate fabric repair works and refix, test upon completion.

c. Carefully rake out defective, open mortar joints and repoint with a suitable mortar.

d. Carefully remove redundant embedded ferrous / steel elements and components and repoint with a suitable mortar.

e. Carefully remove all redundant modern surface mounted vertical roof access ladders to west elevation.

f. Carefully cut out defective / spalled masonry and indent new bricks to match existing in size, texture, and bond.

g. Carefully out all identified resin / plastic repairs where localised repair selected over cutting out and indenting new.

h. Carefully redress spalled / delaminating stonework.

i. Carefully cut out and remove defective stonework across window cills, imposts, features and indent new stone to match existing in type, colour, profile, and bond.

j. Carefully rebuild, consolidate loose and/or defective masonry, to match existing arrangement and repoint with a suitable mortar.

k. Carefully remove and clean away graffiti.

l. Undertake a light conservation clean across heavily soiled locations.

m. Remove moss and algae / lichen growth across all window cills.

n. Remove all existing recessed downpipes including bracketing and all associated elements and components.

Work Item	*Description*	*£*

o. Supply and install new cast aluminium downpipes, sized to match existing, installed within recess inclusive of bracketing, straps and all associated elements and components, include for rodding access to base of all pipes. All new rainwater goods are to be decorated.

p. Carefully remove and dispose all recessed hoppers and associated elements. Note: hoppers suspected to contain ACMs.

q. Supply and install new bespoke cast aluminium hoppers to match existing in size and profile, across all downpipes. All new rainwater goods are to be decorated.

r. Carefully reform, consolidate poor quality masonry recesses, across rainwater pipe locations.

s. Prepare and redecorate all existing metal framed windows, including renewal of putty and mastic seals to perimeter with masonry reveals. Clean, wire brush and decorate.

t. Allow for servicing and overhaul across all metal framed window opening lights, ensuring they are well lubricated and fully operational.

u. Prepare and redecorate all existing basement lightwell grilles.

v. Prepare and redecorate all existing timber louvres, doors, glazing bars, windows, boarding, features, elements, and components etc.

w. Prepare and redecorate exposed steel frame across modern café extension to northeast corner.

x. Prepare and redecorate all existing exposed ferrous metalwork, including wall ties, plates, signage, air bricks, structural elements, lintels, fixtures, and fittings including all associated elements and components.

y. Carefully remove defective UV film across existing windows.

z. Supply and install new UV film across existing windows.

aa. Clean down all existing glazing, across windows and doors. Allow for inspection of all panes and remove and replace defective, cracked glazing panes, like-for-like.

bb. Supply and fix code 5 cover flashing across door thresholds to former high level access doors, with continuous stainless-steel clips. Flashings taken into mortar joints and pointed.

cc. Carefully cut out defective / rotten timber and splice / install new timber member to match existing in type, size, and profile. To extend across doors, panelling, framing members etc.

dd. Replace timber cover beads across all former hoist doors, with hardwood, profiles to match existing.

ee. Carefully remove defective, loose, debonded low level render across facades.

ff. Allow for replacement, modification of rainwater gullies where identified.

gg. Introduce rodding access points to 2nr. hidden and concealed downpipes within cladding to the west elevation, stair cores C & D.

Work Item	*Description*	*£*
	hh. Supply 2nr. stainless steel leaf guards / balloons across roof outlets to stair core C.	
	ii. Build and construct new masonry raked gable, complete with copings. Size and arrangement to match existing to south elevation to shallow east side outrigger roof. Gable required to facilitate new roof insulation build-up, allowing for appropriate flashing and interfacing.	
	jj. Carefully remove all existing timber door weather bars and replace with hardwood, profiles to match existing. Where weather bars do not exist, allow for installation.	

302 Interior of SEG (west end)

The below works are to extend across the entire masonry internal envelope.

- Read in conjunction with drawing(s): (01) 002, 008, 009, (03) 003
- Refer to **Structural consultant's** pack for scheduled structural related works across internal areas.

a. Carefully rake out defective, open mortar joints and repoint with a suitable mortar across elevations and vaulted ceiling.

b. Carefully cut out defective / spalled masonry and indent new bricks to match existing in size, texture, and bond across elevations and vaulted ceiling.

c. Undertake a light conservation clean across heavily soiled locations. Remove moss and algae / lichen growth.

d. Prepare and redecorate all existing exposed ferrous metalwork, plates, signage, structural elements, lintels, fixtures, and fittings including all associated elements and components.

e. Temporarily take down metal suspended ceiling tiles and framing members within toilet areas to facilitate and provide access to the vaulted ceilings above. Reinstate upon completion.

f. Check all seals across internal gutter directly under stair core C main entrance. Remove all debris and silt, renew seals, and ensure free flowing and free draining.

Work Item	*Description*	*£*

600 Special Exhibitions Gallery (SEG) – removals & demolition

601 External West Yard

The below works are to extend across the entire external zone, above the SEG below.

- Read in conjunction with drawing(s): (01) 008, (03) 003, (23) 001, 002
- Refer to **Structural consultant's** pack for scheduled structural related works across SEG area.

a. Note: all existing MEP plant and equipment across the yard is to be retained insitu and maintained as fully operational.

b. Allow for the careful removal of existing perimeter post and rail railings to the north and west sides of the yard. Store for future reinstatement. Remove and tip defective single panel to the north railing.

c. Remove all silt and detritus from across the entire external surface area.

d. Remove all soft (moss/algae) and woody vegetation growth across entire external surface area, including areas of embedment.

e. Allow for the careful removal and lifting of all existing cobble setts and subbase material, store in a safe and protected location for future reinstatement. Remove all snots and residue across all setts. Provide a key plan of cobble sett arrangement, noting coursing, layout and setting out, allowing for future reinstatement to match existing.

f. Remove all embedded steel trims / edges, inset across surface. Store for future reinstatement. Clean up, remove any snots and residue.

g. Allow for the careful removal of remnant sections of railway tracks, set flush within cobble setts. Tag and store in a safe location for future reinstatement. Record the setting out and location.

h. Allow for the careful removal of all miscellaneous key clamp style gates and posts to perimeter of concrete raft.

i. Allow for the careful breaking out of all macadam / concrete screeds and subbase material down to existing concrete slab.

j. Allow for the careful lifting of paving stones from across door threshold. Remove all snots and residue across paving stones and set aside for future reinstatement.

k. Allow for the removal of all existing waterproofing system(s), installed across below ground concrete slab, including flashings and all interfaces, elements, and components. Extent of systems is unknown, assume throughout.

l. Allow for the removal of all above and below ground drainage.

Work Item	*Description*	*£*

m. Allow for the careful removal of glass canopy and structure above stair core c main external entrance door.

n. Allow for the temporary removal of 2 courses of cladding panels including all associated elements and components (trims, rails etc), across the west and east elevations of Stair Core C & D to facilitate the application of waterproofing system across external slab, interfacing with the stair cores. Protect and set aside cladding panels for future reinstatement.

602 Internal Entrance Lobby

The below works are to extend across Stair Core C entrance lobby.

- Read in conjunction with drawing(s): (03) 002 & 003, (04) 001

a. Carefully lift and remove existing matwell across entrance lobby. Tray to remain insitu.

b. Allow for the removal of carpet tiles across entrance lobby.

Work Item	*Description*	*£*

700 Special Exhibitions Gallery (SEG) – proposals

701 External West Yard

The below works are to extend across the entire external zone, above the SEG below.

- Read in conjunction with drawing(s): (04) 003, 009, (06) 003, (23) 101, 102, (32) 001, 101
- Refer to **Structural consultant's** pack for scheduled structural related works across SEG area.

a. Prepare exposed concrete slab for application of waterproofing system. Undertake concrete repairs as per structural engineer design.

b. Supply and install waterproofing system across the entire surface area of the west yard over the SEG below, include for all associated elements and components, flashings, sealants, movement joints etc. Include for drainage layer to be provided over full area of slab.

c. Chase out and provide rebate around entire outer perimeter of concrete raft, to allow for waterproofing interface / flashing.

d. Supply and install new sawn granite kerbs with chambered profiles, concrete haunch / mortar fill. Form retaining wall section to the north and west sides of the boundary line. Kerbs are to be cross lapped on plan at abutments. Kerbs are to be rebated to allow for termination of waterproofing flashing.

e. Supply and install new sawn granite kerb edgings, concrete haunch, which are to be set flush with external surfaces.

f. Supply and install new stainless steel edging strip, inset flush with external surfaces.

g. Reinstate north boundary railings but reposition further south, to accommodate new kerb edging. Allow for modification of railings at interface with west boundary railings. Replace defective railing panel, to match adjacent panels. Allow for wholesale redecoration.

h. Reinstate west boundary railings and gates. Allow for wholesale redecoration.

i. Undertake all required remedial works across below ground drainage connections as directed by civil engineer's design.

j. Supply and install all new below ground drainage as per civil engineer's design.

k. Where macadam has been removed, supply and install new stone cobble setts to match adjacent in colour and bond. Allow cobble setts to be inset flush with no protrusions.

l. Reinstate existing railway tracks as per existing arrangement.

m. Reinstate all existing stone cobble setts as per existing arrangement and layout. Include for bedding layer and repoint with a suitable mortar.

Work Item	*Description*	*£*

n. Reinstate all temporarily removed building cladding panels. Ensuring waterproofing layers are maintained.

o. Make good all disturbed surfaces (like for like) across boundary line and neighbouring properties.

p. Supply and install new steel sheeted fabricated entrance porch, including all associated elements and components.

q. Supply and install external grade inset matwell within the interior footprint of the new entrance porch.

702 Internal Entrance Lobby

The below works are to extend across Stair Core C entrance lobby.

- Read in conjunction with drawing(s): (04) 009

a. Supply and install new barrier matting. Colour and type to be confirmed.

b. Supply and install new carpet tiles. Colour and type to be confirmed.

Buttress

Architects | Masterplanners | Heritage Consultants