Manchester Art Gallery

Heritage Assessment
November 2024

Version history

Project name: Manchester Art Gallery
Project number: 9604
Document number: MAG-BUT-08-B2-RP-A-00-0001

Rev:	Date:	Status	Name	Description
P01	May 24	Preliminary	Hannah Bellerby I Architect	For Planning and Listed Building Consent
P02	November 24	Preliminary	Hannah Bellerby I Architect	For Section 19 application*

*Document note: This heritage assessment has been updated to reflect the revised proposal to retain the existing timber floor. Updates to the document to reflect this change are written in red text for clarity.

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

Manchester Studio + Registered Office

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

T: 0161 236 3303
www.buttress.net

Leeds Studio

Buttress Architects Ltd.
Clockwise, Yorkshire House, Greek St.
Leeds
LS1 5SH

T: 0113 539 7965
www.buttress.net

Cover Image: Photograph of the Athenaeum, c.1895 © Manchester Libraries, GB127.m58923

Contents

1.0	**Introduction**	**5**
1.1	Background	5
1.2	Project Context	5
1.3	Methodology	5
1.4	Authorship & Ownership	5
1.5	Wider Refurbishment Works	5
1.6	Location and Description	6
1.7	Use & Management	6
1.8	Designations	6
2.0	**Policy Context**	**8**
2.1	National Planning Policy Framework	8
2.2	Historic England Guidance	9
2.3	Local Development Plan	9
2.4	Conservation Area Appraisal	9
3.0	**Understanding the Heritage**	**11**
3.1	Description of the Heritage	11
3.2	History & Development	12
4.0	**Assessment of Significance**	**16**
4.1	Significance of the Athenaeum	17
4.2	George Street Conservation Area	22
5.0	**Summary of Proposed Works**	**24**
5.1	Proposed Alterations and Removals	24
5.2	Proposed Works to Floors	24
5.3	Proposed Damp Remediation Works	24
5.4	Proposed Fabric Repair Works	24
5.5	Proposed Works to Improve Environmental Control	24
5.6	Proposed Security Works	24
5.7	Proposed Other Building Services Interventions	24
6.0	**Heritage Impact Assessment**	**28**
6.1	Methodology	28
6.2	Impact on the Athenaeum	29
6.3	Impact on the George Street Conservation Area	41
7.0	**Justification Statement**	**43**
7.1	Continued Viable Use	43
7.2	Conservation & Repair of Historic Fabric	43
7.3	Security	43
7.4	Materials & Design	43
7.5	Public Benefit	43
7.6	Summary of Impact	43
8.0	**Bibliography & Sources**	**44**
9.0	**Appendices**	**46**
9.1	Listing Description	47
9.2	Endnotes	48
9.3	Timber floor survey extract	49

1.0

Introduction

1.0 Introduction

1.1 Background

This Heritage Assessment has been prepared to support the application for Planning and Listed Building Consent for proposed works to the Grade II* listed Athenaeum (i.e. the 'Site'). The following report provides an understanding of the heritage significance of the asset and assesses the potential impacts of the proposed development on this significance.

This assessment has been prepared as acknowledgement of the Site's Grade II* listed status and location within the George Street Conservation Area.

The application for listed building consent addresses the Grade II* listed Athenaeum exclusively.

NOTE: The proximity of the Athenaeum to the adjoining Grade I listed Art Gallery Building is also acknowledged. The proposed scheme will have no material impact on the Art Gallery Building, and due to the small scale and confined nature of the proposals, will not have an impact on the setting or character of the asset overall. Consequently, the potential impact of the scheme on the Art Gallery Building is not considered further within this report.

1.2 Project Context

A number of basement areas at Manchester Art Gallery are being upgraded to allow collections to be stored on-site. Within the Athenaeum Building, these spaces are used for storage but currently do not meet any Museum and Gallery standards. As part of the wider Manchester Galleries reconfiguration, items of the collection which are more fragile in transportation (ceramics), and require higher levels of environmental control (works on paper) are proposed to be stored on-site at Manchester Art Gallery. Whilst other collections, such as sculptures and a proportion of the works on canvas, will be stored at the Conservation Studio off-site.

1.3 Methodology

The document surveys the heritage, providing an overview of important information to foster better understanding of the site and its context. This is done through an assessment of historical development and the surrounding area. This is followed by an assessment of significance, based on the information gathered. Significance is assessed in relation to the heritage interests outlined by Historic England. The aim of the assessment is to understand the site through analysis of physical evidence and desktop research. A description of the site and its history will help to provide context for this significance assessment and inform the basis for heritage impact judgements.

This report has been written in accordance with the *National Planning Policy Framework (2023)*, *Historic England's Statements of Heritage Significance (2019)*, and *Conservation Principles, Policies & Management for the Sustainable Management of the Historic Environment (2008)*, and *BS7913 - British Standards Guide to the Conservation of Historic Buildings.*

The Historic Environment Record (HER) has been consulted as standard and the results of the HER search have been used to inform the contents of the report.

1.4 Authorship & Ownership

This document has been prepared by Hannah Bellerby BA (Hons) MArch ADPPA, Architect at **Buttress**, and reviewed by Freya Needham MA, Heritage Consultant at **Buttress.**

1.5 Wider Refurbishment Works

The proposed works pertaining to this application are part of a wider programme of refurbishment works being undertaken at the gallery. These works will address significant problems with water ingress, and improve several of the gallery's facilities.

The following planning and listed building consent applications have been submitted as part of these works:

- **Ref: 138717/LO/2023**

  Listed Building Consent for the installation of waterproofing system to perimeter walls within basement store areas, removal of coating to external walls, replacement of existing timber floor with concrete slab, drainage improvement works to adjacent lightwells

  Status: Awaiting Decision

- **Ref. 137015/LO/2023**

  Listed building consent for the replacement of the glazed roof lantern to central entrance foyer.

  Status: Approved, not yet implemented

- **Ref: 136235/LO/2023**

  Listed Building Consent for internal and external works comprising repair and renewal of waterproofing system to floor by Atrium entrance and exit doors, refurbishment of staff room, toilets and gallery ceiling and installation/reprogramming of internal phone/ communication lines.

  Status: Approved, under construction

1.6 Location and Description

The Athenaeum is situated in the heart of the city centre. It is bounded by Princess Street, where the building's main entrance was historically located, and George Street. The Art Gallery is composed of 3 connected buildings, with the City Art Gallery facing onto Mosley Street, The Athenaeum along Princess Street and the later extension, connecting the two. The complex occupies a whole city block, without direct neighbours.

1.7 Use & Management

The Athenaeum serves as an annex to the City Art Gallery building following a previous remodelling. Both buildings are owned by Manchester City Council, and are currently in use with most floors open to the public. The ground and basement floors of the Athenaeum are used by gallery staff as office and back of house facilities and are not accessible to the public.

1.8 Designations

The Athenaeum is Grade II* Listed and the Art Gallery is Grade I Listed, and are located in the George Street Conservation Area. It also sits within close proximity to the Whitworth Street and Princess Street Conservation Area, St Peter's Square Conservation Area, Albert Square Conservation Area, and Upper King Street Conservation Area.

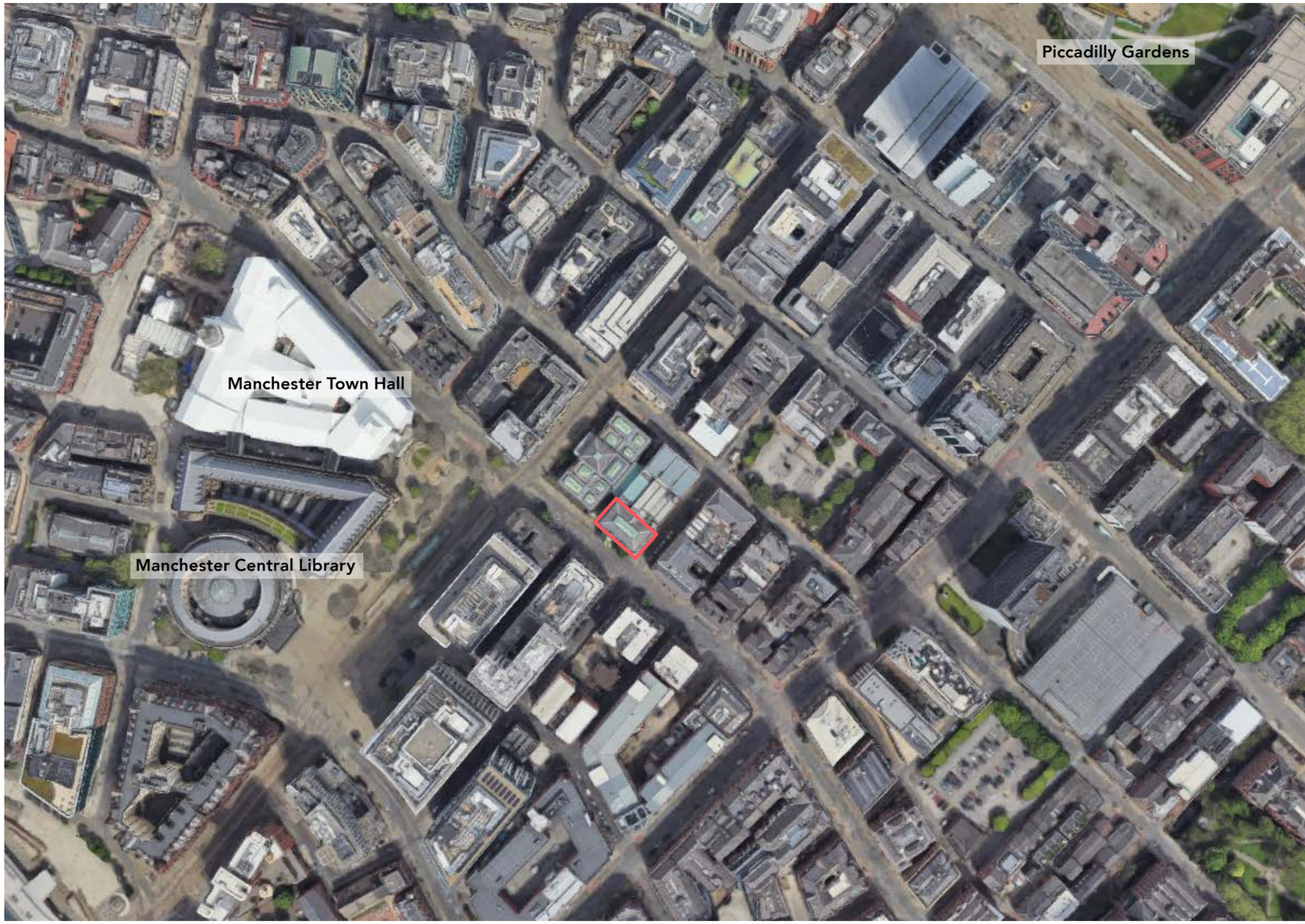


Figure 1 Location Plan

- Site Boundary

2.0

Policy Context

2.0 Policy Context

2.1 National Planning Policy Framework

The National Planning Policy Framework ('the Framework') sets out the Government's planning policies and how these are expected to be applied. At Paragraph 7 it confirms that the purpose of the planning system is to contribute to sustainable development.[1]

It identifies at Paragraph 8 that there are three overarching objectives to sustainable development:

- Economic, building a strong, responsive and competitive economy;
- Social, supporting strong, vibrant and healthy communities; and
- Environmental, protecting and enhancing the natural environment and built and historic environment.

The specific policies and considerations that relate to the core land use principles are outlined in the 17 Chapters of the Framework. The Chapters relevant to the application proposals are; Chapter 12: Achieving well-designed and beautiful places; and, Chapter 16: Conserving and enhancing the historic environment.

Paragraph 135 states that planning decisions should ensure that developments will function well and add to the overall quality of the area, are visually attractive as a result of good architecture, layout and appropriate and effective landscaping and are sympathetic to local character and history.

Paragraph 139 states that development that is not well designed should be refused where it fails to reflect local design policies and government guidance on design. However, significant weight should be given to development which reflects local design policies, and outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings.

Paragraph 200 states that decision makers should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.

Paragraph 201 requires local authorities to identify and assess the particular significance of any heritage asset that may be affected by a proposal.

Paragraph 203 requires local authorities to take account of the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation, the positive contribution that conservation of heritage assets can make to sustainable communities and the desirability of new development making a positive contribution to local character and distinctiveness.

Paragraph 205 states that when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (i.e. the more important the asset, the greater the weight should be).

Paragraph 207 states that where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent.

Paragraph 208 states that where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.

Paragraph 209 relates to the impacts of a proposal on a non-designated heritage asset, and states that in weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

Paragraph 212 states that local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.

2.2 Historic England Guidance

This document has been informed by Historic England's Advice Note 12: Statements of Heritage Significance (2019) and Advice Note 1 (2nd ed.): Conservation Area Appraisal, Designation and Management (2019), as Historic England are the government's statutory heritage advising body. This has informed the understanding of the heritage and assessment of its significance.

2.3 Local Development Plan

The local development plan in Manchester is the Core Strategy (2012-2027).

Policy EN3 (Heritage) states that new developments must be designed to support the Council in preserving or, where possible, enhancing the historic environment, the character, setting and accessibility of areas and buildings of acknowledged importance, including scheduled ancient monuments, listed buildings, registered parks and gardens, conservation areas and archaeological remains. The Core Strategy also states that historic sites and areas of heritage value should be both safeguarded for the future and, where possible, enhanced both for their own heritage merits and as part of wider heritage regeneration proposals. It is expected that developers will carry out an appropriate appraisal of issues relating to heritage assets[2].

2.4 Conservation Area Appraisal

The site is located within the George Street Conservation Area. The Athenaeum is identified as one of the most significant buildings within the conservation area.

The area is described as follows;

"George Street and its environs is an area of great commercial vitality and the desire is to see it prosper. The continued use of existing buildings will ensure that they do not fall into disrepair. Development of businesses will be encouraged and, where appropriate, modern building proposals will be given the freedom to develop as long as they do not detract from the existing quality of the built environment."

3.0

Understanding the Heritage

3.0 Understanding the Heritage

3.1 Description of the Heritage

The following description of the built form has been informed by the Historic England Listing Description, which can be found in full in 9.0 Appendices.

3.1.1 Athenaeum

This building was originally built in 1835, but was damaged by fire in 1874 and underwent internal remodelling, as well as the addition of an attic.

It is constructed from sandstone ashlar and features a slate roof. The building has a rectangular plan with a rear extension and is designed in the Italian Palazzo style.

It is two storeys high with a basement and an added attic. The facade is symmetrical with nine windows and a basement that is treated like a plinth. Rusticated quoins, sill-bands, string-course, and a lettered frieze adorn the building.

There is a prominent mutuled cornice and a high balustraded parapet with four tall chimneys. The entrance is accessed via a flight of stone steps and features a shallow rectangular porch with Roman Doric columns, a triglyph frieze, a moulded cornice, and a balustraded parapet. The first and ground floors have tall 2-light casement windows with moulded architraves, with those on the ground floor having cornices and apron sills and those on the first floor having balustrades and floating pediments.

The frieze is lettered: "INSTUTVTED MDCCCXXXV ATHENAEUM ERECTED MDCCCXXXVIII". The roof is a slated mansard attic roof with wrought-iron cresting. The building also has five-bay side walls in a matching style, with lettered friezes. The frieze on the right side reads: "FOR THE ADVANCEMENT AND DIFFVSION OF KNOWLEDGE". This building is considered a precursor of the Italian palazzo style in Manchester architecture

3.1.2 George Street Conservation Area

The George Street Conservation Area connects several central areas of Manchester city centre. Dating back to the Georgian period when its grid street patterns were formed, its growth centred on cultural and scientific progress throughout the 19th century, with the Manchester Institute of Fine Arts and Athenaeum built in the 1830s.

The area saw residential decline to clear the path for industrial growth throughout the Industrial Age, before encountering a lull with the decline of the cotton industry by the mid-20th century.

Throughout the latter half of the 20th century growth picked up again with the development of 'Chinatown', still popular today as the area continues to attract residential growth.

3.2 History & Development

3.2.1 Construction and Early History

The main gallery building was constructed between 1824 and 1835, designed by Sir Charles Barry, for the Royal Manchester Institution learned society.

The Manchester Art Gallery provides the following summary of it's history:

Following the rapid development of Manchester as an industrial city...

...a small group of reformers pushed for the creation of a free public art gallery. Inspired by Ruskin, it was intended to provide a refuge from the toxic effects of life and work in an industrial city, to provide respite and moral education for the city's working classes through exposure to beauty.

The members of the Royal Manchester Institution for the Promotion of Literature, Science and the Arts offered its building to house the new gallery, and its own collection of 150 artworks – mostly paintings, works on paper and sculpture – to start it off. The RMI had been established in 1823 to counteract Manchester's widely held reputation as a place of commercial philistinism.

Its Mosley Street building, designed by Charles Barry in the Greek Revival style, opened in 1835, housing concerts, lectures, a growing art collection and the newly founded School of Design, later to become the Manchester School of Art. Visitors to the RMI were welcome, on payment of a 6d entrance fee.

By 1882, however, the Institution's finances were in decline and this essentially private enterprise was given over to the city, on condition that the Manchester Corporation spend a minimum of £2000 per year for the next 20 years purchasing new work for the collection.

Manchester City Art Gallery duly opened in January 1883, offering free entry for all.[3]

The Athenaeum building, also designed by Sir Charles Barry, was constructed between 1836 and 1837 as a society for 'the advancement and diffusion of knowledge', with facilities including a library, newsroom, lecture hall, billiard room and gymnasium. The Athenaeum was the centre for literary life in Manchester until the society ceased operations in 1938, at which point it was acquired by the Manchester Corporation and added to the gallery complex to provide additional exhibition space.

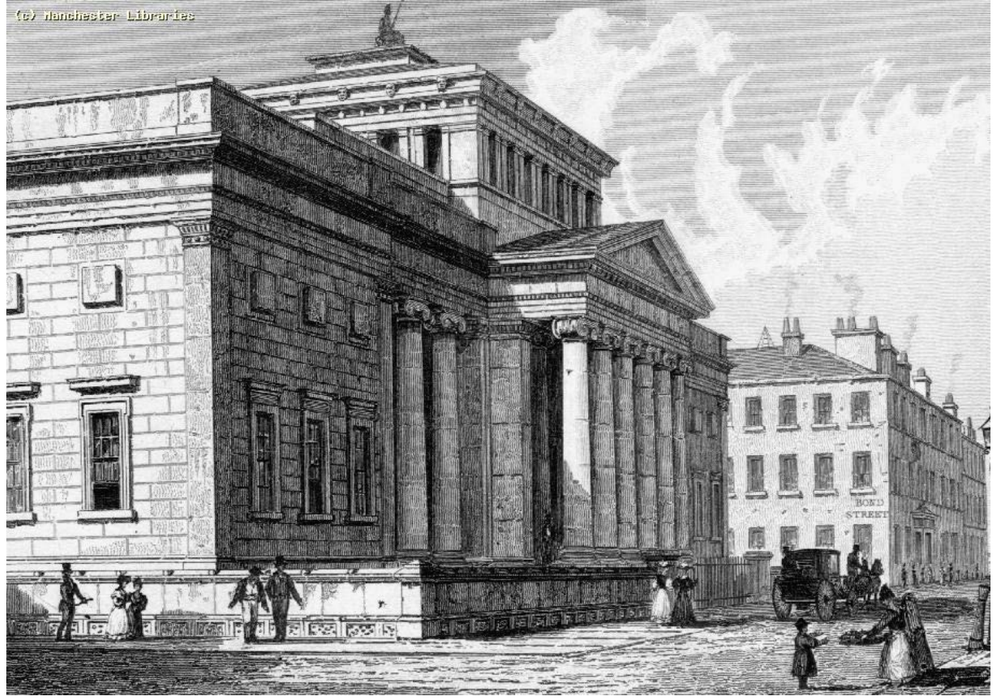


Figure 2 Top: Etching of the Art Gallery, 1936 © Manchester Libraries[4]
Figure 3 Bottom: Athenaeum Building, 1895 © Manchester Libraries[5]

3.2.2 20th Century

During the 20th Century the Art Gallery grew in popularity as the collection continued to expand.

In 1913, the Manchester Art Gallery was the subject of an attack by the Suffragettes. This was the first attack on artwork by the group.

On 3 April 1913 Lillian Forrester and Evelyn Manesta were discovered smashing the glass of paintings in Room 2. Thirteen pictures by artists such as Millais, Burne-Jones and Rossetti received damage estimated at over £100 in total.

Forrester (who had a previous arrest) and Manesta were both associated with the militant suffrage organisation the Women's Social and Political Union (WSPU), formed in Manchester by Emmeline Pankhurst in 1903. In court they explained that they were acting in protest at a recent prison sentence given to Mrs Pankhurst for her own suffragette militancy. While in prison, Forrester and Manesta were covertly photographed using new surveillance cameras and the pictures were circulated to art galleries across Britain to prevent further attacks. Despite this, other women followed their example and there were a spate of similar suffragette strikes on art galleries and museums the following year. [7]

Figure 4 Group of Suffragettes: Annie Briggs, Evelyn Manestra, Lillian Forrester, 1913 © Manchester Libraries[6]

3.2.3 Later History & The Gallery Today

In 1994 RIBA Competitions launched a design competition to refurbish the existing buildings and join the main gallery with the Athenaeum building with a new link block, on the site of the existing car park.

The competition was won by Michael Hopkins and Partners, and the gallery was closed in 1998 for construction. Following the £35 million development, the gallery reopened in 2002.

The Gallery collection continues to expand, currently holding over 46,000 objects, including:

- 13,000 items of fine art
- 13,000 design and craft objects
- 21,000 items of clothing[8]

The museum is open to the public Tuesday - Sunday, and offers free entry to all visitors.

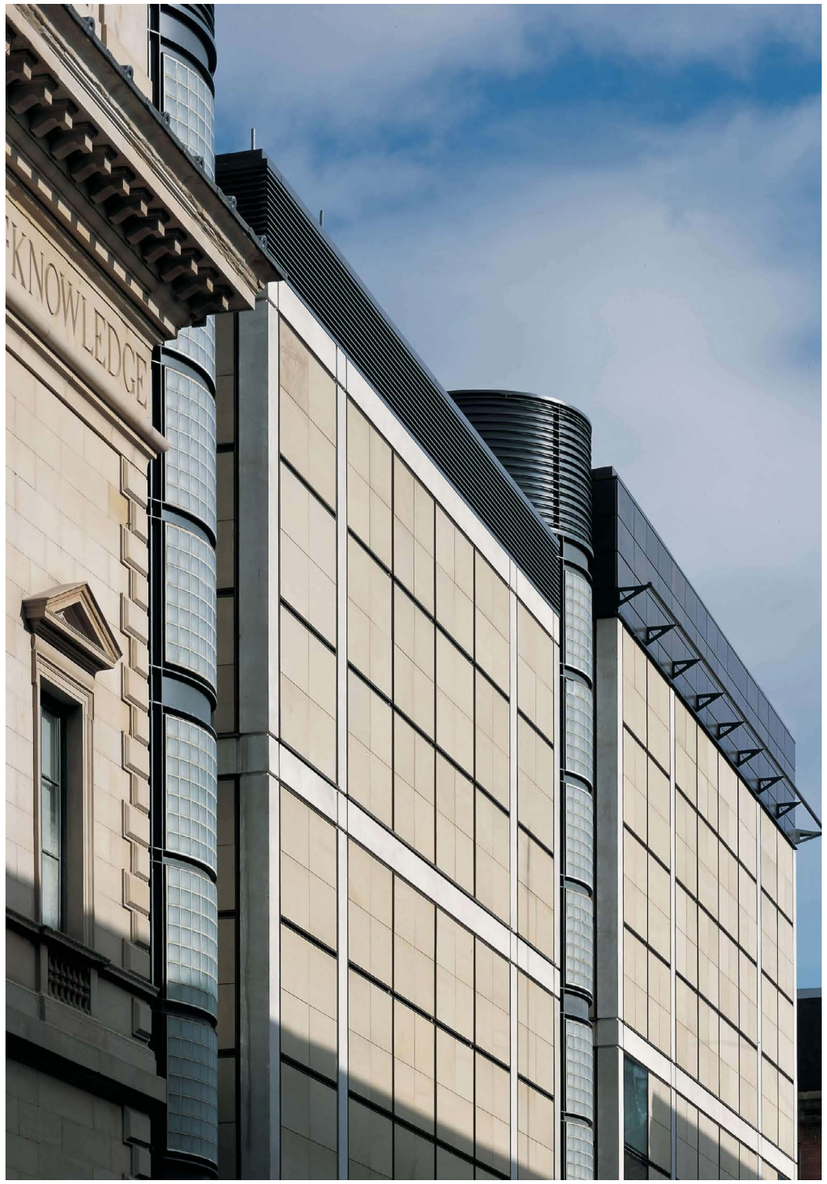


Figure 5 2002 Extension, Exterior © Hopkins Architects[9]

Figure 6 2002 Extension, Interior © Hopkins Architects[10]

4.0

Assessment of Significance

4.0 Assessment of Significance

The following assessment of significance looks at identifying the heritage interests of the Site, as outlined by Historic England's guidance '*Statements of Heritage Significance*,' published in 2019.

These heritage interests (archaeological, architectural/artistic and historical) augment the foundation of "special historic or architectural interest" that underpin designation. Due to the intangible elements that these assessments must incorporate, it is not always possible to directly associate an interest to an element of fabric or space within a heritage asset. Therefore, the significance of fabric cannot be assessed on the same scale as the significance of a place's heritage interests.

Assessing the significance of elements of historic fabric, or historic spaces, should be directly linked to the authenticity and integrity of that which remains. The significance of fabric must be based on what we may learn or understand from how we currently see it. Building fabric can also enhance or obscure the legibility of the significance of a place. It is possible for inappropriate building fabric to obscure physical evidence of heritage interests.

The level of significance will be assessed based on the scale below:

- **Exceptional**: Heritage interests having national or international importance, usually found where assets are designated at grade II*, grade I, scheduled monuments and UNESCO World Heritage sites.

- **High**: Heritage interests having national importance, usually found where assets are designated at grade II*.

- **Medium**: Heritage interests having regional importance, usually found where assets are designated grade II. Also, generally applies to Conservation Areas.

- **Low**: Heritage interests that make a positive contribution to their area, group or setting. Usually, non-designated heritage assets and historic townscapes.

- **Neutral**: Historically unimportant.

These ratings are intended to address the heritage interests outlined below, and do not relate to specific areas of fabric.

4.1 Significance of the Athenaeum

4.1.1 Archaeological Interest

There will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.

There are no significant archaeological finds or excavation sites associated with the Manchester Art Gallery site or Athenaeum building itself. The building was originally constructed in the early 19th century, and while it has undergone several renovations and extensions, there are no indications that any significant archaeological remains were encountered during these works.

Nonetheless, the city centre has a rich archaeological resource, with evidence of human activity dating back to prehistory, and the potential for archaeological activity should be considered more closely when it is deemed necessary.

The archaeological interest of the site is **low.**

4.1.2 Architectural and Artistic Interest

These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved.

More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skills, like sculpture.

Architecturally, the Athenaeum is a exceptionally high-quality example of Victorian Neo-Renaissance design. Constructed in the 1830s, the building hosts a striking facade featuring moulded cornice and inscribed frieze. Over the years, the building has undergone several extensions and renovations, most notably following the fire in 1874, with the most recent being completed in 2002.

4.1.2.1 Sir Charles Barry

The Gallery building and the Athenaeum both hold architectural interest due to their association with architect Sir Charles Barry. Barry was, and still is, nationally renowned for his work including major projects such as the rebuilding of the Houses of Parliament, including the design of the Elizabeth Tower (Big Ben), the remodelling of Trafalgar Square, and the remodelling of numerous significant stately homes such as Highclere Castle, Cliveden House, and Trentham Hall. The Athenaeum is a fine example of his work.

4.1.2.2 Style and Form

The Athenaeum, constructed in the Italian Palazzo style, was the first of its kind in the city and paved the way for the design of many of the city's industrial and civic buildings in this style[11]. The building is of exceptional material quality and makes a positive contribution to its setting.

Figure 7 Sir Charles Barry, photographed by John Watkins[12]

4.1.2.3 Collections

In addition to its impressive architecture, the Manchester Art Gallery is known for its diverse collection of art and artefacts, ranging from pre-Raphaelite paintings to contemporary installations. The collections stored in the Athenaeum includes works by many renowned artists, including LS Lowry and Adolphe Valette. The second floor is home to the design gallery containing various significant furniture, ceramics and fashion designs.

Overall, the architectural and artistic interest of the site is **exceptional.**

Figure 8 Design gallery Interior © Manchester Art Gallery[13]

4.1.3 Historic Interest

An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation's history, but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.

4.1.3.1 Communal Value

The building was used first as a cultural club formed by the Manchester Athenaeum (a society for the "advancement and diffusion of knowledge") at a time when Manchester was a thriving industrial city, with the intention of promoting education in the city for the benefit of it's people.

Since it's opening, the Athenaeum has acted as a place of social and cultural interaction and reflection. The building will hold memories and meaning for many of its visitors, not only due to associations with the building itself but also in association with the collections the galleries hold.

Figure 9 Former dining room located in the Athenaeum basement, 1901 © Manchester Libraries[14]

Figure 10 View from the corner of Princess and George Street, 1866 © Manchester Libraries[15]

4.1.3.2 Cultural Value

Incorporated into the gallery complex in 1938 the Athenaeum shares much of the historic and cultural interest as the Grade I Art Gallery building to which it is connected. Throughout its later history, it housed offices, conservation studios, meeting rooms, and spaces for various cultural and intellectual events. The Athenaeum played a significant role in the intellectual and cultural life of Manchester during the 19th century and beyond with it's aim to promote and enable learning amongst the general public.

Since becoming part of the art gallery it has hosted numerous exhibitions and events, showcasing the work of both local and international artists. The gallery as a whole has been instrumental in promoting the city's artistic heritage, particularly in the fields of painting and sculpture.

4.1.3.3 Political History

The Athenaeum has been involved in many social and political movements throughout its history, both national and international. In September 1859, for example, African American abolitionist campaigner Sarah Parker Remond spoke at the Athenaeum to appeal to mill owners and cotton workers to garner support for the US anti-slavery movement.

Overall, the Manchester Art Gallery has played an essential role in the cultural, social, and political life of Manchester and the UK. Its history is closely linked with the city's development, and it continues to be an important cultural institution.

The historic interest of the site is **exceptional**.

4.1.4 Summary

The Athenaeum's significance is considered to be **high** as evidenced by its designation at Grade II*.

Together, the buildings demonstrate historical and evidential value through their physical form, architectural detailing and aesthetic style. The buildings also possess cultural and communal value through their long-standing relationship with the city and as a publicly accessible art gallery

4.2 George Street Conservation Area

The George Street Conservation Area is considered to be of high significance as a prominent central area within Manchester area city centre, retaining strong evidential and historical value of its Georgian formation and subsequent economic development.

George Street is a busy commercial district with a range of building uses including retail, food and beverage, banking and residential. The conservation area also incorporates China Town. Associated with the cultural and scientific successes of the time, the area is defined by its grid pattern streets and larger commercial and civic buildings.

The Athenaeum makes a positive contribution to the conservation area as a high-quality, landmark building, associated with the cultural rise of Manchester.

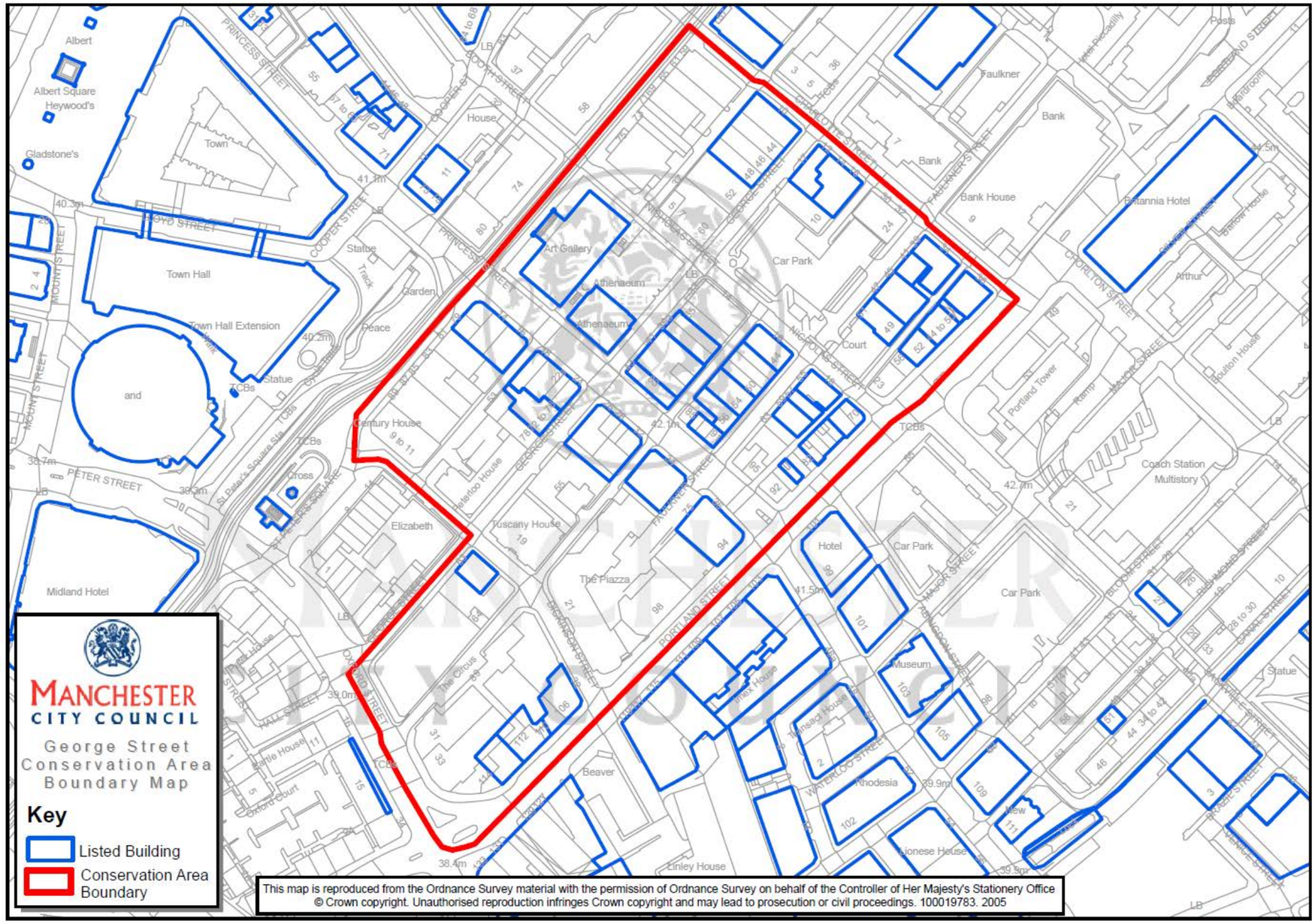


Figure 11 Map showing the boundary of the George Street Conservation Area © Manchester City Council.

5.0

Summary of Proposed Works

5.0 Summary of Proposed Works

The proposed works involve the refurbishment of the Athenaeum basement to provide a fit for purpose art storage facility for Manchester Art Gallery, and to address ongoing building fabric issues associated with water ingress.

The proposal seeks to divide the existing space into two principal areas; one to store works on paper and the other to store ceramics as indicated in Figure 13. The works on paper area will require new fixed roller racking to be installed to contain the delicate paper art works, whilst the ceramics are to be stored in non-fixed glass cabinets.

The proposed works are described under the following categories:

5.1 Proposed alterations and removals

- Remove any decayed elements of the timber floor prior to repair. Remove subfloor MEP services.
  (See Item 1 on Figure 12)
- Investigate reutilisation of existing subfloor drainage sump
  (See Item 2 for approximate location on Figure 12)
- Remove existing modern glazed partitions and screens
  (See Item 3 on Figure 12)
- Remove modern suspended ceilings to allow for removal of MEP services including FCU, heating and cooling pipework, lights and containment prior to reinstatement
  (See Item 4 on Figure 12)
- Remove modern doors prior to reinstatement for upgraded security and fire resistance
  (See Item 5 on Figure 12)
- Remove existing modern radiators prior to replacement with new system
  (See Item 6 on Figure 12)
- Remove damp affected plaster from east wall
  (See Item 7 on Figure 12)

5.2 Proposed works to floors

- Repair the existing timber floor and install insulation between joists. Refurbish periscope vents to ensure subfloor is suitably ventilated
  (See Item 1 on Figure 13)
- Installation of roller racking for works on paper
  (See Item 2 on Figure 13)
- Remediate failed lightwell drainage, install new DPM and replace damaged paving slabs
  (See Item 3 on Figure 13)
- New floor boxes to provide small power and data to ground floor office

5.3 Proposed damp remediation works

- Waterproofing works including new cavity wall membrane, floor drainage channels and sump pumps to north-west corner only.
  (See Item 4 on Figure 13)

5.4 Proposed fabric repair works

- Ceiling plaster repairs to areas of damaged plaster (mix of lath and plaster and fibrous plaster ceilings)
- Wall plaster repairs to areas of damaged lime plaster.
- Window repairs to all existing casement windows.
  (See example Item 6 on Figure 13)
- Replacement skirting boards to original profiles where damaged.
- Redecoration of walls, ceilings and woodwork in breathable paint.
- Repairs to 2no. failed window lintels.

5.5 Proposed works to improve environmental control

- New lobby (located within the 2002 extension building) to provide 'air lock' separation from works on paper area
  (See Item 7 on Figure 13)
- New internal doors to separate works on paper and ceramic areas
  (see Item 8 on Figure 13)
- Infilling metal grilles to downstand beams to reduce uncontrolled air infiltration
- Internal partition infills with access panels to all windows (with the exception of WIN-022) to reduce uncontrolled air infiltration and improve thermal efficiency of windows
  (See example Item 9 on Figure 13)
- Secondary glazing to WIN-022 to reduce uncontrolled air infiltration and improve thermal efficiency of window
  (See Item 10 on Figure 13)
- Extend and amend existing ventilation ductwork from existing plantroom with new VAV and CAV units and extend ductwork runs into space, to be suspended from modern suspended and original ceilings
- New radiator system and LTHW pipework
  (See Item 11 on Figure 13)
- Improve building fabric performance with insulation to external wall
  (See Item 12 on Figure 13)

5.6 Proposed security works

- Installation of new SR4 rated external security bars to all windows
  (See example Item 13 on Figure 13)
- 2no. new SR2 rated entrance doors to the store area
  (See Item 14 on Figure 13)
- MEP interventions including:
  - Stand alone CCTV system with local recording
  - Stand alone + linked intruder detection system
  - Smoke detection and fire alarm layout
  - Access control to entrance doors

5.7 Proposed other building services interventions

- New wall mounted small power requirements for sump pumps, security equipment and access control and new data outlets, with associated surface mounted containment.
- New lighting throughout with local switching

The works above are described in further detail in terms of their heritage impact in Section 6.0

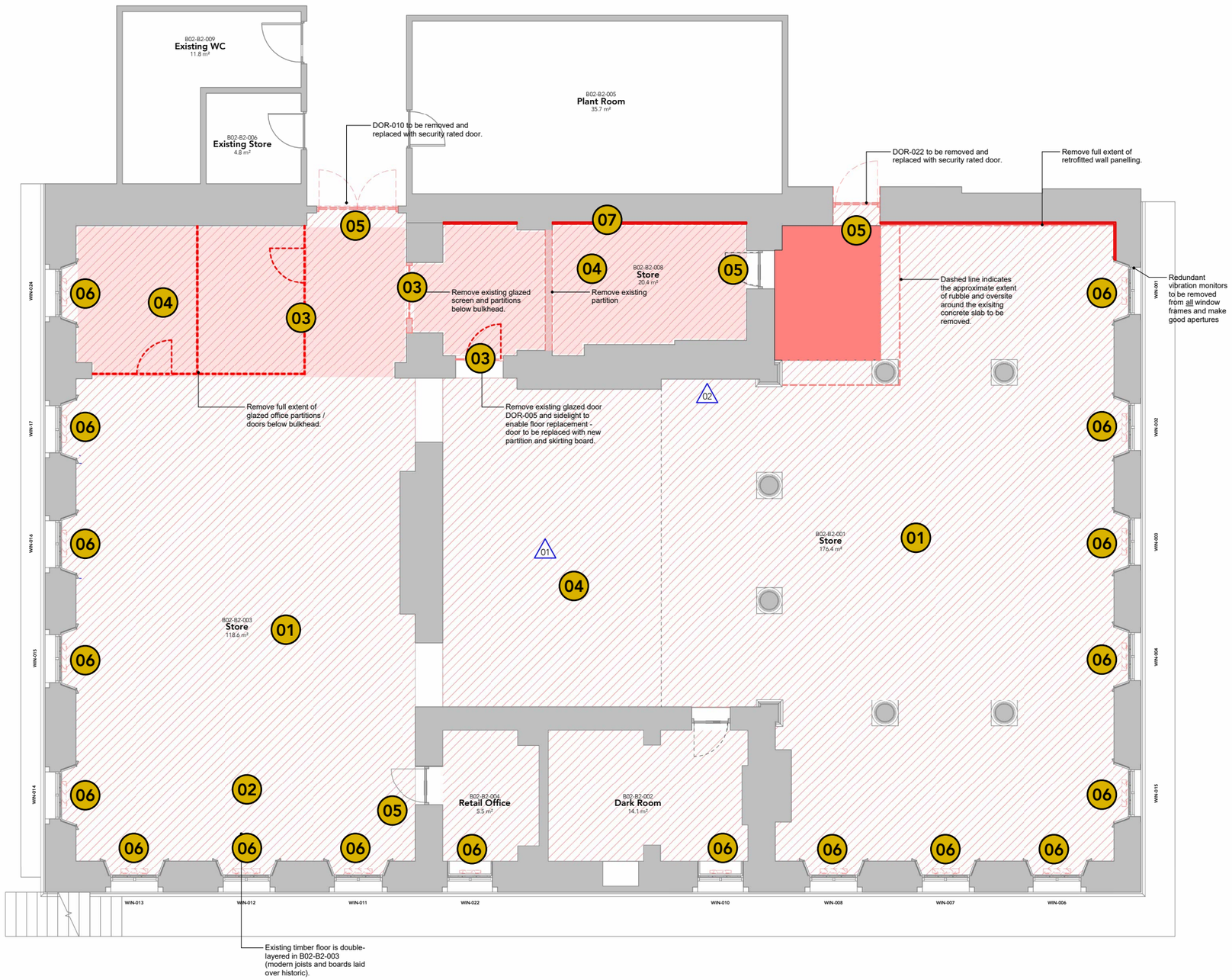
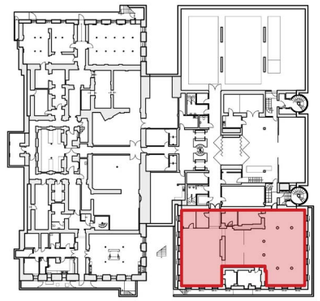


Figure 12 Proposed Alterations Plan

0.5 0 0.5 1 1.5 2 2.5 m
SCALE 1:50

KEY PLAN



KEY

Refer to RS15 for all demolition and removals

Existing floor finishes to be removed including existing plywood substrate where present.

Approximate extent of existing concrete floor to be removed.

Suspended ceilings to be removed to facilitate MEP works, including plasterboard and support system. Bulkhead to be retained.

Elements to be removed/ demolished.

Plaster/plasterboard finishes to part of north wall to be removed

NB:

- Seek client instruction on the removal of existing loose furniture.

- Type and thickness of finishes at reveals is TBC. Following removal of finishes where indicated, brickwork to be repaired as necessary as RS11, repointed as RS12 and cleaned as RS13 (where required) prior to installation of new waterproofing membrane and wall lining system.

- Adjacent fabric to be retained is to be protected as RS1 and RS2 during removals work.

- All fabric to be retained to be made good at interfaces with fabric to be removed.

- All M&E services to be isolated and removed by M&E subcontractor. All existing fire alarms to be disconnected by Marlowe and temporarily provided during the works to Art Store 2. For Security and CCTV details refer to Marlowe documentation.

Design Notes

01 Plasterboard to existing modern suspended ceilings to be overboarded following installation of new MEP equipment, refer to dwg. 35-0001&2.

02 Repairs to feature glazed wall tiles are not included in this scope.

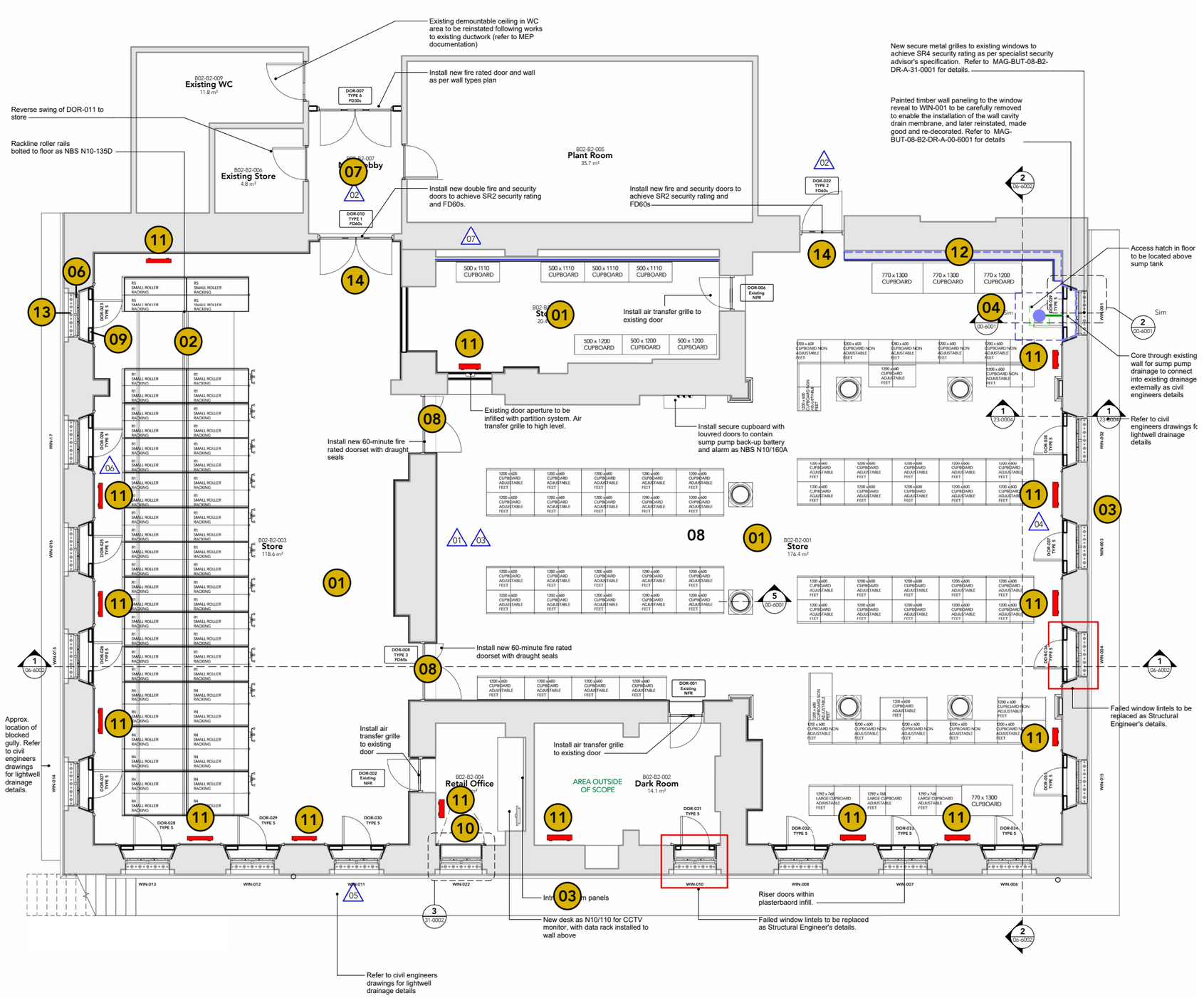
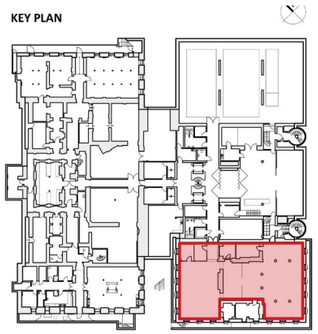


Figure 13 Proposed Basement Floor Plan

KEY PLAN



KEY

- New wall lining system, refer to 22-0001 wall types plan
- Approximate location of sump chamber (dashed line) incorporating 2no. pumps with drainage and electrical outlet to specialist suppliers details.
- Associated wall/ floor flushing ports as specialist supplier's details.
- Approximate extent of cavity drain membrane and drainage channel, refer to specialist suppliers design for details.
- Proposed new radiators to be floor fixed, and additionally tied back to the wall at the top with 'Support TKK' fixing in accordance with manufacturer recommendations.

6.0

Heritage Impact Assessment

6.0 Heritage Impact Assessment

6.1 Methodology

Impacts will be assessed and scaled per British Standards BS7913 guidance for the scale of impacts, which correlates with the ICOMOS Guidance on Heritage Impact Assessments. ICOMOS suggest a 9-point scale spectrum for defining the impacts of proposed changes, which is included here in Figure 14. This scale is a useful tool within the context of the benefit and harm dichotomy of the NPPF. The scale provides the opportunity for beneficial outcomes to be quantified, balanced, and considered alongside the NPPF outcomes of: no harm, less than substantial harm, and substantial harm. Together they create a holistic approach to assessment.

6.1.1 Assessment of Scale of Specific Impact and Change

The **scale of change i**s based on the level of proposed intervention and how much potential the intervention has to alter fundamental principles of significance of the asset. The scale of impact relates this to the significance of the asset in question. It is important to note that impacts can be both direct and indirect, and do not only relate to the physical fabric. Change and impact can also be primary or secondary; temporary or permanent; reversible or irreversible; and may arise as a consequence of construction or operation of the proposed development. For the purpose of this assessment, the following definitions have been applied:

Direct impacts are those that arise as a primary consequence of the Scheme. Direct impacts can result in the physical loss of part or all of an asset, and/or changes to its setting. Setting is, 'the surroundings in which a place is experienced, its local context, embracing present and past relationships to the adjacent landscape.'

Direct impacts resulting in physical loss are usually permanent and irreversible; normally occur as a consequence of construction; and are confined within the development footprint. The magnitude of these impacts will depend on the proportion of the asset affected, and whether its key characteristics would be affected.

Direct impacts that affect the setting of an asset can occur as a consequence of construction or operation of the scheme and can affect assets some distance from the development. Assessment of impacts on setting refers to perceptible visual and aural effects that can be appreciated at a given time. Such impacts may be temporary or permanent, reversible or irreversible depending on the extent to which the cause of the impact can be removed. Impacts may also be transient where occurrence is sporadic or of limited duration, for example related to hours of operation or the frequency of passage of vehicles.

Indirect impacts occur as a secondary consequence of construction or operation of the development, and can result in physical loss or changes to the setting of an asset beyond the development footprint.

Severity of impacts has been judged taking into account their direct and indirect effects and whether they are temporary or permanent, reversible or irreversible. The cumulative effect of separate impacts has also been considered. The magnitude of impact (summation of direct and indirect impacts) is assigned one of the descriptors; impacts may be adverse or beneficial.

VALUE OF HERITAGE ASSET	SCALE & SEVERITY OF CHANGE/IMPACT (EITHER ADVERSE OR BENEFICIAL)				
	No Change	Negligible Change	Minor Change	Moderate Change	Major Change
Very High (Grade I/Scheduled Monument)	Neutral	Slight	Moderate/ Large	Large/Very Large	Very Large
High (Grade II*)	Neutral	Slight	Moderate/ Slight	Moderate/ Large	Large/Very Large
Medium (Grade II/ Conservation Area)	Neutral	Neutral/Slight	Slight	Moderate	Moderate/ Large
Low (Locally Listed)	Neutral	Neutral/Slight	Neutral/Slight	Slight	Slight/ Moderate
Negligible (Non-Designated)	Neutral	Neutral	Neutral/Slight	Neutral/Slight	Slight

Figure 14 Significance/Scale of Impacts Table

No Change	Negligible Change	Minor Change	Moderate Change	Major Change
No material change to the heritage asset or its setting.	A small change or alteration, but unimportant. Having no visual or indirect impacts on the asset or its setting. Slight changes to use or access.	A small change to an element of fabric or setting that results in a noticeable difference. Limited indirect impacts or changes to character.	Changes to an element, including replacement, or insertion of a new element, where the asset or its setting has clearly been modified. Noticeable indirect impacts.	A change of great extent, including the complete removal of an element. Changes to most or all of the asset or its setting. Total alteration of the asset. Extreme indirect impacts.

Figure 15 Definition of types of change

Major beneficial	Moderate beneficial	Minor beneficial	Negligible beneficial	Neutral	Negligible adverse	Minor adverse	Moderate adverse	Major adverse

Figure 16 9-point scale of impact

6.2 Impact on the Athenaeum

6.2.1 Proposed Alterations and Removals

Context for proposals:

The following removal works have been informed by the 'Masonry Moisture Profile Survey'[16] and 'Survey of Timber Floor Structure'[17] undertaken by Hutton and Rostron in February 2023 and October 2024 respectively. The results of the moisture profile survey revealed saturated plaster to the wall in the north-west corner along with some decay to the timber floor (see Figure 17). This was confirmed in the timber survey which found areas of the underside of the timber plates (which sit over the sleeper walls) were decayed in this location, as well as some of the joist bearing ends and high moisture levels to the underside of floorboards. Decay to wall plates and floorboards were found in a couple of other isolated locations where the timber floor abuts the masonry walls. It is believed the east section of floor was constructed earlier than the rest of the floor areas due to the presence of oak wall plates rather than softwood.

In the west side of the store the 'original' timber floor has had a second layer of joists and boards applied over (see Figure 18), suggesting the space was originally divided into two, with the new timber floor installed to provide a consistent level between the two.

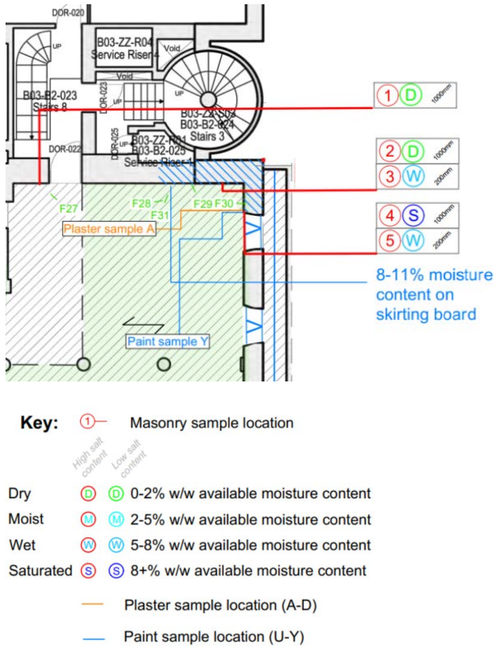


Figure 17 Moisture Masonry Profile Survey extract. [Source: Hutton + Rostron]

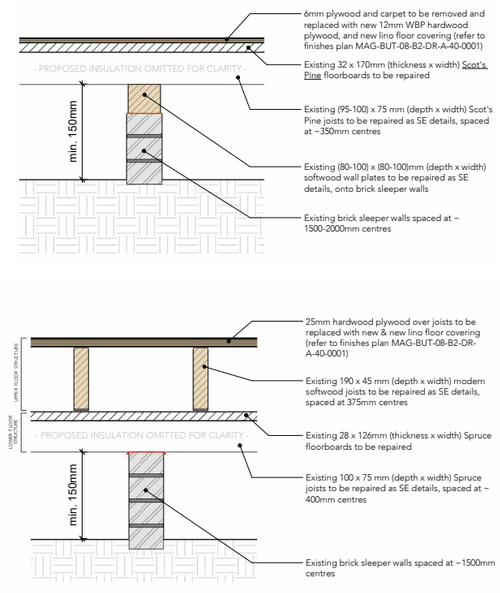


Figure 18 Section details illustrating the build up to the west (top) and east (bottom) sides of the store

6.2.1.1 Intervention:

Remove any decayed elements of the timber floor prior to repair. Remove existing modern timber floor construction in B02-B2-008 due to insufficient loading capacity. Remove subfloor MEP services.

Heritage Impact:

The proposed works will result in a negligible change to the asset, having a slight impact that is minor beneficial in nature.

Justification:

Removal is limited to decayed elements only where replacement will improve the service life of the floor and ensure continued viable use of the space.

6.2.1.2 Intervention:

Remove damp affected plaster from north east wall.

Figure 19 Photograph showing damaged plaster to east corner

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor beneficial in nature.

Justification:

Saturated moisture content readings were taken along the east corner of this wall at 1m from floor level (ref. Hutton and Rostron masonry moisture profile survey), and resultant damage to the lime plaster is visually apparent. Removal of the modern plasterboard finishes are proposed to a further section of the east wall where finishes have been historically water stained (but with no ongoing water ingress detected). There is no adverse change to the existing condition and removal is considered beneficial as removal allows continued safe use of the space.

6.2.1.3 Intervention:

Reutilise existing currently redundant subfloor drainage sump. Note: This item requires further investigation once the flooring has been lifted.

Heritage Impact:

The proposed works will result in negligible change to the asset, having a slight impact that is minor beneficial in nature.

Justification:

No adverse change to the existing condition. Works to reutilise the existing sump will improve drainage of the subfloor, reducing moisture levels and associated risk of decay to the historic timber structure.

6.2.1.4 *Intervention:*

Remove existing modern glazed partitions and screens to allow for construction of new concrete floor slab and space for new roller racking.

Figure 20 Photograph showing modern glazed partitions and screens to be removed

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/ slight impact that is minor beneficial in nature.

Justification:

Removal of the modern glazed partitions and screens reinstates the legibility of the historic layout.

6.2.1.5 *Intervention:*

Remove modern suspended ceilings to allow for removal of MEP services including FCU, heating and cooling pipework, lights and containment prior to reinstatement.

Heritage impact:

The proposed works will result in no change to the asset, having a neutral impact that is neutral in nature.

Justification:

The ceilings are to be reinstated therefore there will be no perceptible change to the existing condition.

6.2.1.6 *Intervention:*

Remove modern doors prior to reinstatement for upgraded security and fire resistance.

Heritage Impact:

The proposed works will result in negligible change to the asset, having a slight impact that is negligible beneficial in nature.

Justification:

There will be no perceptible change to building users however the change is considered beneficial as the new upgraded security and fire doors will enable the continued viable use of the space as an art storage facility.

6.2.1.7 *Intervention:*

Remove existing modern radiators prior to replacement with new system.

Figure 21 Photograph showing existing modern radiators

Heritage Impact:

The proposed works will result in no change to the asset, having a neutral impact that is neutral in nature.

Justification:

The existing radiators are required to be removed as part of the proposals to upgrade heating provision and improve environmental control in the space. New radiators are to be installed to replace the existing (albeit in a new position) therefore there will be no perceptible change to the existing condition.

Overall impact: **Neutral**

6.2.2 Proposed Works to Floors

Context for proposals:

The existing timber floor is proposed to be retained and repaired. Required repairs are informed by a condition survey undertaken by Hutton and Rostron in October 2024. The survey tested moisture levels in timber elements, identified areas decayed by wet rot, assessed strength grading of timbers and identified timber species. Refer to appendix 9.3 for a summary of the report findings.

The report also found that the subfloor was generally dry, and identified that the existing subfloor vents under each window to the east / south side of the space are providing some airflow. Further investigation is required to these vents once they have been cleared/ cleaned to establish remedial works required, it is also proposed to install new cast iron vent covers as the existing are either missing, heavily corroded or deformed (see figure 22). The method of ventilation to the west side of the subfloor requires further investigation - there are no low level vents visible in the lightwell along Back George Street, the subfloor is mostly dry so it is believed ventilation is achieved through alternative means.

Figure 22 Photograph of existing historic corroded cast iron vent cover (photo shows the only remaining intact cover)

Another key intervention is the remediation of drainage defects in the adjacent lightwells. A CCTV survey was undertaken to inform the proposals, alongside site investigations by the civil engineer following some localised opening up works.

6.2.2.1 Intervention:

The following repair and upgrade works are proposed to the timber floors:

- Slice repairs to joist bearing ends and timber wall plates where decayed, in timber species to match existing adjacent
- Localised installation of DPC between masonry sleeper walls and timber wall plates to locations where being repaired
- Isolated areas of new floorboards where existing are missing / decayed in timber species to match existing adjacent
- New timber floor to B02-B2-008 in accordance with increased loading requirements
- Installation of mineral wool insulation between joists
- Localised strengthening of floor via. doubling of joists in accordance with loading requirements (including new roller racking)
- Removal of rubble and debris from subfloor void / excavation where required to provide clear ventilation route
- Refurbishment of existing subfloor vents to ensure sufficient ventilation of the subfloor. New cast iron covers to match existing pattern.
- Further investigation of existing ventilation method to the west side of the subfloor.

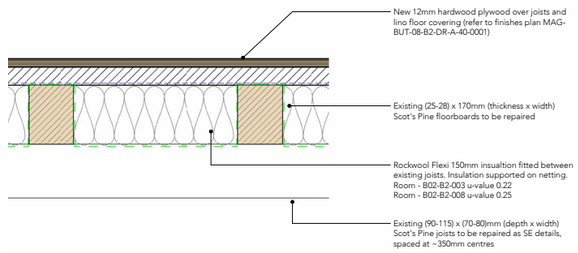


Figure 23 Proposed timber floor details [Source: Buttress]

Heritage Impact:

The proposed works will result in a negligible change to the asset, having a slight impact that is minor beneficial in nature.

Justification:

The changes will be imperceptible to the building users, and will ensure longevity of the existing timber floor structure and viable use of the space.

6.2.2.2 Intervention:

Installation of roller racking to contain works on paper.

Heritage impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor beneficial in nature.

Justification:

The installation of roller racking will allow for the storage of vulnerable works on paper in the store thereby ensuring the continued future use of the space as an art storage facility.

6.2.2.3 Intervention:

Remediate failed lightwell drainage including capping off a collapsed pipe, the rebuilding of a buried manhole adjacent to Princess Street, reinstatement of a yard gully where the existing has been removed adjacent to George Steet, and a corner inspection chamber to connect the two (reference Booth King drawing MAG-BKP-18-ZZ-DR-C-90-0515). Damaged paving slabs will be replaced to match existing as part of the works, and a new DPM installed at the interface with the building. External walls to be core drilled in 1no. location below floor level to allow for connection of sump pump drainage into existing lightwell drainage.

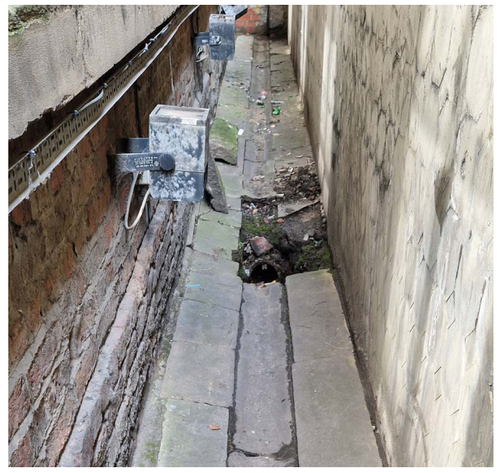


Figure 24 Photograph showing cracked paving slabs and broken out gully

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is moderate beneficial in nature.

Justification:

Works to remediate failed drainage in the lightwell will address a primary cause of water ingress to the building, particularly in the east corner. There is no adverse change to the existing condition and removal is considered beneficial as it prevents continued deterioration of the fabric.

6.2.2.4 Intervention:

New floor boxes to provide small power and data to ground floor office.

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor beneficial in nature.

Justification:

The proposal will involve some cutting-out of timber floorboards to suit however the change is considered beneficial as it will allow for the continued viable use of the space as a staff office for the gallery.

Overall impact: **Moderate Beneficial**

6.2.3 Proposed Damp Remediation Works

Context for proposals:

The damp remediation proposals have been developed by waterproofing specialists and in accordance with BS8102:2022 – Protection of below-ground structures against water ingress, to provide the gallery with a suitable system guarantee for the treated areas, required due to the valuable nature of the works that are to be stored in the space.

The proposed system is for 'Type C waterproofing' which is a cavity drain membrane system, providing robust protection against water ingress that is serviceable and maintainable. The wall membrane is fixed back to the masonry via wall plugs and is reversible. Any water that is present in the wall is able to make its way to the face of the structure, and is then diverted along the new membrane, into drainage channels in a concrete strip installed below the timber floor and then removed via a sump pump.

In order to minimise harm and preserve sound historic finishes the waterproofing is proposed to the north-west corner only where high moisture readings have been recorded.

6.2.3.1 Intervention:

Waterproofing works including floor drainage channel and sump pump.

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor beneficial in nature.

Justification:

The change will be imperceptible to building users, and will provide the gallery with a suitable guarantee against water ingress to the treated area ensuring continued future use of the space as an art storage facility. Where timber linings are required to be removed to window reveals to allow for the membrane to be applied (1no.), these will be removed carefully to avoid damage and reinstated.

6.2.3.2 Intervention:

Waterproofing works including new cavity wall membranes and wall linings.

Heritage Impact:

The proposed works will result in a minor change to the asset, having a moderate/slight impact that is minor beneficial in nature.

Justification:

The change will be imperceptible to building users, and will provide the gallery with a suitable guarantee against water ingress to the treated area ensuring continued future use of the space as an art storage facility. No harm or loss of historic fabric is proposed with the exception of removal of finishes affected by damp.

Overall impact: **Minor Beneficial**

6.2.3.3 Proposed Fabric Repair Works

Context for proposals:

The following internal fabric repair works have been informed by a the following condition surveys:

- Plaster Survey undertaken by Hutton + Rostron in January 2024 [212-98]

  The purpose of the survey was to identify the construction and condition of wall plaster, decorative plaster and ceiling plaster. The plaster was also tested for Bacillus Anthracis and paint samples tested for heavy metal content.

  The survey revealed areas of wall plaster where traditional lime plaster remains, and areas where the walls have been lined with modern plasterboard (these are indicated on submitted internal elevation drawings MAG-BUT-08-B2-DR-A-05-0001-5), alongside areas where finishes have failed/ debonded. Where sound, lime plaster is to be retained and redecorated in breathable paint. Where it has failed it is proposed to be replaced like-for-like in new lime plaster (refer to section RS8 of the restoration specification MAG-BUT-XX-XX-SP-A-00-0001). Where walls have been drylined and the finishes are sound, these are to be retained.

  The survey also identified ceiling construction types, with modern plasterboard ceilings present in the small stores and existing glazed office (B02-B2-004, B02-B2-005, B02-B2-006, B02-B2-007, B02-B2-008, and the northern end of B02-B2-001); lath and plaster ceiling in B02-B2-003; lath and plaster ceiling with decorative panels in the central area of B02-B2-001; and fibrous plaster coffered ceiling in B02-B2-001. The ceilings are generally in a good condition, but where localised areas have failed they are proposed to be repaired like-for-like with traditional materials to suit the ceiling construction (refer to MAG-BUT-08-B2-DR-A-35-4002 and section RS8 of the restoration specification MAG-BUT-XX-XX-SP-A-00-0001).

Figure 25 Photographs showing historic ceiling types (Left: Lath and plaster, Middle: Lath and Plaster decorative panels, Right: Fibrous Plaster)

- Window Survey undertaken by TRC Windows in June 2023

  TRC (historic window restoration and replacement specialist) undertook a survey of the windows in order to identify repair requirements and allowances. The repairs outlined in MAG-BUT-08-XX-SH-A-31-0001 are based on these allowances. Windows are to be repaired in-situ where possible, and are to undergo timber repairs where sections are affected by wet rot; have new hardwood beadings applied; new burnt sand mastic at masonry reveals; and redecoration internally and externally. Internal shutters are also to be repaired as part of the works. These are generally in good condition, with proposed works limited to redecoration and servicing of locking mechanisms to ensure smooth operation.

- Structural Survey undertaken by Booth King Windows in April 2024.

  Booth King undertook a ground level structural survey of the building in April 2024 as part of a wider assessment of external fabric repairs (please note these works do not form part of this application). The survey revealed 2no. failed lintels to the Athenaeum basement windows, the remediation of which is considered urgent and has therefore been included in this work package to prevent further deterioration, and to facilitate the proposed window repairs and security upgrades (refer to 14794-BKP-14-ZZ-TN-S-0003).

Figure 26 Photographs showing failed lintels to WIN-004 on George Street (left) and WIN-010 on Princess Street (right)

6.2.3.4 Intervention:

Plaster repairs to areas of damaged plaster (mix of lath and plaster and fibrous plaster ceilings).

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is moderate beneficial in nature.

Justification:

Proposed repairs sustains the heritage values of the historic fabric, preventing loss through further deterioration.

6.2.3.5 Intervention:

Lime plaster repairs to areas of damaged plaster.

Heritage impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is moderate beneficial in nature.

Justification:

Proposed repairs sustains the heritage values of the historic fabric, preventing loss through further deterioration.

6.2.3.6 Intervention:

Window repairs to all existing casement windows.

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is moderate beneficial in nature.

Justification:

Proposed repairs sustains the heritage values of the historic fabric, preventing loss through further deterioration.

6.2.3.7 Intervention:

Replacement lintels to 2no. failed window lintels (WIN-004 and WIN-010) with stone to closely match the existing in texture and colour.

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is moderate beneficial in nature.

Justification:

Proposed repairs sustains the heritage values of the historic fabric, preventing loss through further deterioration.

6.2.3.8 Intervention:

Redecoration of walls, ceilings and woodwork in breathable paint.

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor beneficial in nature.

Justification:

Proposed redecoration works will improve the general internal appearance.

Overall impact: **Moderate Beneficial**

6.2.4 Proposed Works to Improve Environmental Control

Context for proposals:

The art store will require very close environmental control to ensure the artworks are kept in

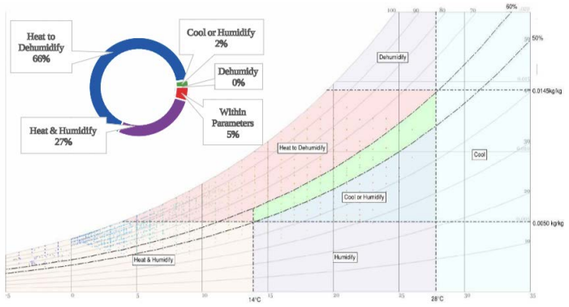


Figure 27 Manchester external weather file plotted on Psychrometric graph [Source: Arup][18]

optimum conditions for their conservation. This is particularly relevant to the vulnerable works on paper which will require low relative humidity in the space to prevent degradation of the items. The graph in Figure 27 shows the annual external weather file for Manchester plotted on a psychrometric chart. The green zone shows the targeted design conditions for the paper store and the surrounding shaded regions show the steps necessary in order to achieve it. As shown, for the majority of the year the primary conditioning required is to either heat and humidify and to heat and dehumidify.

In order to achieve these conditions the strategy developed by Arup follows a conservation heating strategy to control the relative humidity of the space. This approach revolves around relaxing the temperature design conditions to broaden the acceptable range of moisture held within the air. This is approach has been developed as opposed to tight control achieved through mechanical humidification and dehumidification, the installation of which would be space intensive and disruptive to the building fabric.

In order to ensure the acceptable design conditions can be met it is necessary to reduce the amount of unconditioned external air entering the space through uncontrolled means (e.g. through cracks in windows and doors). A number of measures are proposed as detailed in this section to reduce this infiltration.

As this environmental control strategy carries a high heating demand, a number of fabric improvements measures are proposed (as described below) in order to improve thermal performance and reduce operational energy use. Heating will be controlled via new column radiators connected to the building wide CT system. The new pipework is to be supplied from high level to below, where it will be floor fixed and run horizontally around the space at skirting board level. Other heating methods were considered including underfloor heating, radiant panels, fan coil units and convectors however were discounted due to incompatibility with the roller racking; as potentially harmful to the artwork; and not suitable for the character of the space.

Modification and extensions are required to the existing ventilation system in order to achieve the necessary supply ventilation rate. Ventilation ductwork, along with other services that are to be run at high level including heating pipework and electrical containment, have been routed to minimise builder's work openings in the fabric as far as possible. The services are proposed to enter the space via existing openings in the east wall and where possible are concealed within the existing modern suspended ceilings. Where this is not possible, there is a new central services zone running from the west to the east of the space which will be fixed back to the ceilings via unistrut supports and threaded bolts. The condition of the ceiling structure to the fibrous ceilings is to be investigated prior to fixing any services to ensure the structure can carry the weight and the wadding ties are in good condition. Grouping the services together in this zone minimises required apertures and fixing points to the historic fabric.

6.2.4.1 Intervention:

New lobby (located within the 2002 extension building) to provide 'air lock' separation from the works on paper area, and reduce infiltration of unconditioned air.

Heritage Impact:

The proposed works will result in negligible change to the asset, having a slight impact that is negligible beneficial in nature.

Justification:

The intervention enables the proposed use of the space and its location within the extension avoids alteration of the historic fabric.

6.2.4.2 Intervention:

Infilling metal grilles to downstand beams to reduce uncontrolled air infiltration (please refer to MAG-BUT-08-B2-DR-A-06-6002 and section RS8 in MAG-BUT-XX-XX-SP-A-00-0001 for further details). The metal grilles are present to the downstand beams in B02-B2-003 as part of the old redundant heating system and no longer serve a functional purpose. The apertures in the grilles are proposed to have a cover adhered over.

Figure 28 Photograph showing high level metal grilles in B02-B2-003

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor adverse in nature.

Justification:

The intervention seeks to causes the minimise harm to the grille by avoiding direct fixings/ removal whilst reducing infiltration to enable the proposed use of the space.

Refer to section 7.0 for further justification including public benefits of the scheme.

6.2.4.3 Intervention:

Internal partition infills with access panels to all windows (with the exception of WIN-022) to reduce uncontrolled air infiltration and improve thermal efficiency of windows (see Figure 29).

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor adverse in nature.

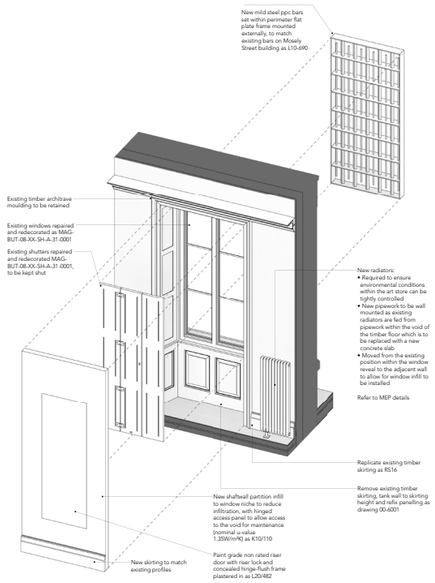


Figure 29 Extract of window proposal drawing showing window infills alongside window repairs (6.2.3.7) and security bars (6.2.5.1)

Justification:

The intervention will result in some fixings to the historic timber panelling to the window reveals but is required for the new use.

Refer to section 7.0 for further justification including public benefits of the scheme.

6.2.4.4 Intervention:

Secondary glazing to WIN-022 to reduce uncontrolled air infiltration and improve thermal efficiency of window. The secondary glazing is proposed to be face fixed to the wall to avoid fixing into the original timber panelling in the reveal. This will require the removal of the architrave.

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor adverse in nature.

Justification:

The intervention will result in some loss of historic fabric (window architrave) however the harm is balanced against the public benefit of continued viable use of the space.

Refer to section 7.0 for further justification including public benefits of the scheme.

6.2.4.5 Intervention:

Extend and amend existing ventilation ductwork from existing plantroom with new VAV and CAV units and extend ductwork runs into space, to be suspended from modern suspended and original ceilings.

Figure 30 Images of proposed duct fittings (Left: Variable air volume unit, Right: Variable air volume diffuser)

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor adverse in nature.

Justification:

Fixings and apertures required to existing fabric, but are needed to ensure long-term viable sustainable use of the space.

Refer to section 7.0 for further justification including public benefits of the scheme.

6.2.4.6 Intervention:

New radiator system and LTHW pipework.
Pipework is proposed to be run above the timber floor as opposed to within the subfloor to allow for easy maintenance access to the pipes, to avoid future disruption to the floor.

Figure 31 Image of proposed column radiator with welded feet

Heritage Impact:

The proposed works will result in negligible change to the asset, having a slight impact that is negligible beneficial in nature.

Justification:

Fixings and apertures required to existing fabric (radiators will require ties back to the wall to prevent overturning), but are needed to ensure long-term viable sustainable use of the space.

6.2.4.7 Intervention:

Improve building fabric performance with insulation to external wall and to timber floor.

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor beneficial in nature.

Justification:

Insulation is proposed to be installed only where existing plaster finishes have failed due to water ingress. Addition of the insulation will result in a slight change in appearance of the corner of the east wall, which is considered beneficial due to improvement in thermal performance of the fabric.

6.2.4.8 Intervention:

New internal doors to separate works on paper and ceramic areas.

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor beneficial in nature.

Justification:

The intervention will result in a minor change to the layout of the space, however the lower height of the original/early floor in B02-B2-003 suggests these spaces were not originally connected. The intervention will reduce infiltration and enable the use of the space to store vulnerable art works.

Overall impact: **Neutral**

6.2.5 Proposed Security Works

Context for proposals:

Due to the valuable nature of the art works that are to be stored in the facility, the gallery's insurance providers set out the necessary security requirements for the space. This included an external perimeter resistance-to-attack rating of SR4 and internal access resistance-to-attack rating of SR2 in accordance with LPS1175. The Manager, Security and Protection Advisor for Arts Council England was consulted in the specification of proposed security measures.

Details of access control and internal security solutions have been developed by a specialist security sub-consultant.

6.2.5.1 Intervention:

Installation of new SR4 rated external security bars to all windows in accordance with LPS1175 (see proposed elevation in Figure 32).

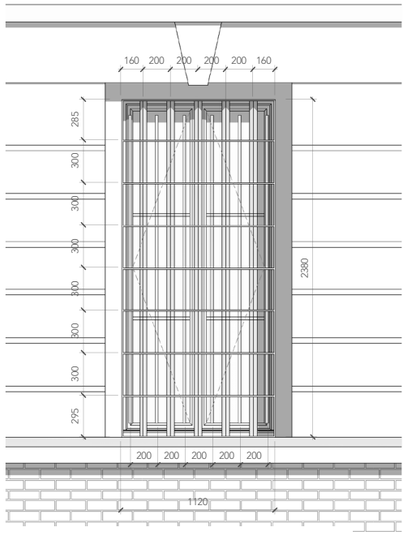


Figure 32 Extract of window proposal drawing showing proposed security bars

Heritage Impact:

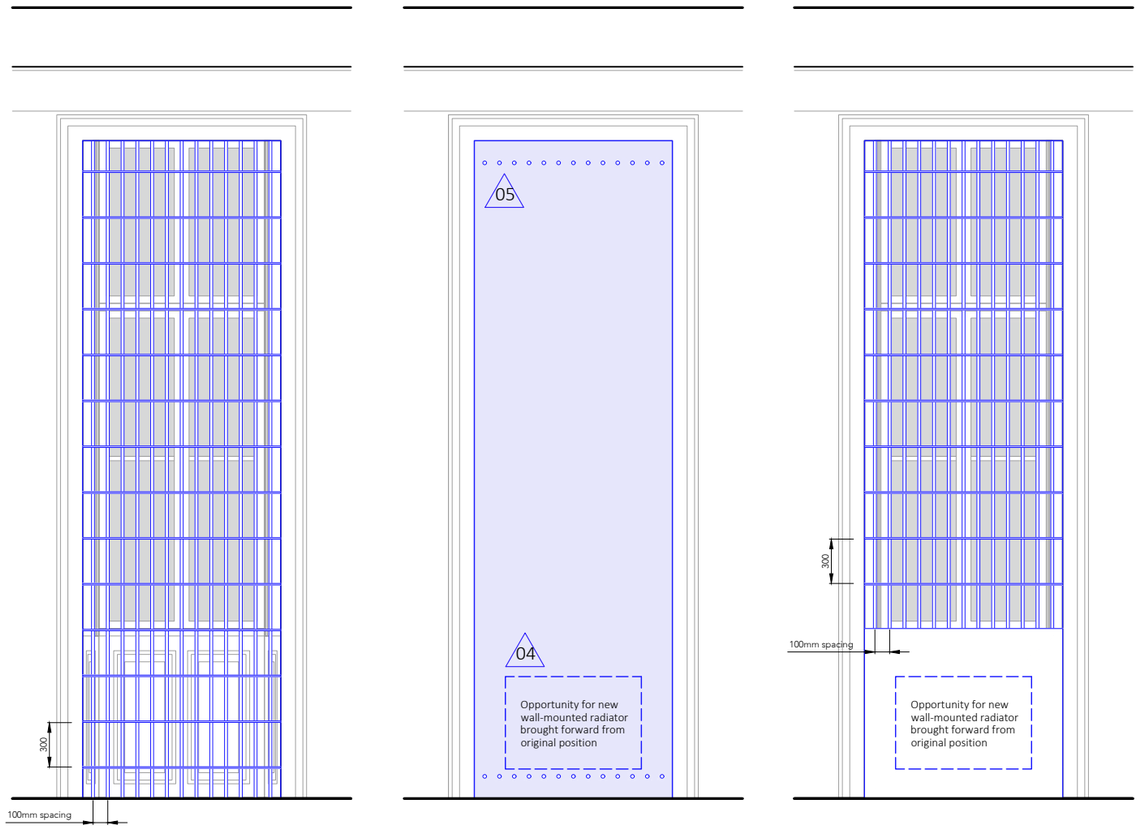
The proposed works will result in moderate change to the asset, having a moderate/large impact that is moderate adverse in nature.

Justification:

The addition of security bars externally on the building will result in a perceptible change to the elevation when viewed from the lightwell, however the intervention is necessary to satisfy the security requirements and to ensure the facility can function viably as required by the gallery.

A number of options were investigated to provide the necessary resistance-to-attack upgrades to the internal side of the windows as outlined in Figure 34 including internal bars; a plywood sandwich panel reinforced with steel mesh; and a hybrid of the two. These options were discounted due to the chemical anchor fixings that would be required to fix through the historic timber panelling back to the masonry substrate which would cause irreversible damage. In order to minimise harm caused by the selected external option the design is aligned with the existing security bars installed on the adjacent Grade I listed City Art Gallery for design coherence across the building group.

Figure 33 Existing security bars installed on the Grade I listed Art Gallery building



Option 01 Full Security Bars

20mm diameter mild steel/iron bars at 100mm centres, passing through 50x10mm flat cross ties at max. 300mm vertical spacing, welded at the perimeter to a 50x50mm angle iron frame which is secured to brickwork with wall bolts/chemical anchors.

Option 02 Full Plywood Sandwich

A sandwich of 2 layers of min. 20mm plywood with an expanded metal grille between. Fixed to surrounding masonry using chemical anchors.

Provision of ventilation and consideration of fire safety to internal unmaintainable void created in alcove should be considered.

Option 03 Partial Bars/Plywood

Hybrid of option 01 and 02 - steel/iron bars with a plywood sandwich at low level to create a fixing surface for new wall-mounted radiators.

NB:
Option for security bars to be full height with plywood sheathing fixed to face to create a fixing surface for a wall-mounted radiator.

Figure 34 Alternative discounted window security options

6.2.5.2 Intervention:

2no. new SR2 rated entrance doors to the store area in accordance with LPS1175.

Heritage impact:

The proposed works will result in negligible change to the asset, having a slight impact that is negligible beneficial in nature.

Justification:

The new doors will replace existing modern doors, and the change is considered beneficial as they are required for the new use as a storage facility for valuable artworks.

6.2.5.3 Intervention:

MEP interventions including:

- Stand alone CCTV system with local recording, to be wall mounted
- Stand alone + linked intruder detection system, motion sensors to be wall mounted throughout with intruder alarm panels wall mounted in the B02-B2-004 store
- Smoke detection and fire alarm layout
- Access control to entrance doors

Containment is to be run at high level.

Refer to Figure 35 for images of the proposed fittings.

Heritage Impact:

The proposed works will result in negligible change to the asset, having a slight impact that is negligible adverse in nature.

Figure 35 Proposed security fittings (from left to right: Wall mounted CCTV camera, CCTV monitor, keypad card reader, wall mounted data cabinet rack)

Justification:

The new equipment and associated containment results in a slight adverse impact on the character of the space due to fixings required to existing fabric but are necessary for the new use as a storage facility for valuable artworks. Harm to the fabric is minimised through the use of surface mounted containment which avoids destructive chasing in of plaster.

Overall impact: **Minor adverse**

Refer to section 7.0 for further justification including public benefits of the scheme.

6.2.6 Proposed Other Building Services Interventions

Context for proposals:

New small power provision and new data outlets to align with the proposed use of the space, to provide power to new sump pumps, security equipment and access control, with associated galvanised containment routed vertically on walls and run in high level cable trays across the ceilings. Each new element of containment is sized to accommodate at least 25% spare capacity, thereby allowing flexibility for future changes.

6.2.6.1 Intervention:

New wall mounted small power requirements and data outlets

Figure 36 Image showing proposed wall mounted socket box and high level containment trunking

Heritage Impact:

The proposed works will result in negligible change to the asset, having a slight impact that is negligible adverse in nature.

Justification:

The new containment results in a slight adverse impact on the character of the space due to fixings and apertures required to existing fabric but are necessary for the new use. Harm to the fabric is minimised through the use of surface mounted containment which avoids destructive chasing in of plaster.

6.2.6.2 Intervention:

New lighting throughout with local switching, including new high quality suspended light fittings and recessed spots to the existing suspended plasterboard ceilings in the paper store.

Figure 37 Images showing proposed light fittings

Heritage Impact:

The proposed works will result in minor change to the asset, having a moderate/slight impact that is minor beneficial in nature.

Justification:

New high quality lighting enhances heritage values of the space, and task lighting is required to enable optimum viewing of artworks.

Overall impact: **Negligible Beneficial**

6.3 Impact on the George Street Conservation Area

6.3.1 External Works

The only external works proposed as part of the works are the installation of the security bars to the basement windows and the proposed lightwell drainage improvement works. The basement windows and lightwells are not visible from street level meaning there will be no visual impact in the context of key views within the conservation area.

The proposed works will result in **negligible change** to the conservation area, having a **slight** impact that is **neutral** in nature.

Overall, the proposed works will result in **no harm** to the significance of the George Street Conservation Area.

7.0

Justification Statement

7.0 Justification Statement

Where elements of the proposed development will result in a level of harm to the fabric of the asset, this harm is offset and outweighed by the following public benefits and other benefits to the asset:

7.1 Continued Viable Use

The proposal will provide a fit-for-purpose storage facility to align with modern standards for museum and gallery storage.

Whilst the current conditions in the space are not good enough for the storage of museum artefacts; other areas in the building are devoted to public galleries, and the collection has been consolidated from its historic locations spread around the borough in buildings that were not suitable for the storage and display of art.

7.2 Conservation & Repair of Historic Fabric

The proposal addresses ongoing issues of maintenance associated with water ingress via the proposed targeted waterproofing system. It is important that the damp penetration is captured and managed. Without this, surface evaporation will accelerate further decay of the plasterwork, and increase the relative humidity in the basement as a whole. If this was not undertaken the dehumidification of the spaces would be trying to constantly dry the damp wall out.

The proposed repairs are considered urgent to halt further deterioration, and are essential for the long-term conservation of the building.

7.3 Security

The proposal will address security needs associated with the use of the space as an art storage facility, as required by the gallery's insurance. This includes measures to upgrade the resistance-to-attack rating of the external perimeter windows and entrance doors in accordance with LPS1175 as outlined in section 6.0.

7.4 Materials & Design

Materials, finishes and colours have been carefully chosen to suit the existing materials, construction, and specific requirements of the building use as a gallery.

Where possible and appropriate to do so materials have been replaced like-for-like.

Where a revision to detail or material has been proposed or new material introduced, this is either; to rectify a known defect for long lasting repair, improve access and/or security, and improve the longevity and maintenance of the asset.

7.5 Public Benefit

The proposed works will provide public benefit through improving staff experience, ensuring that the space and facilities are in satisfactory condition and are fit for modern occupation.

The location of the proposed store in the Athenaeum basement has been chosen as it provides good access for curatorial staff, and a secure environment for the collections – which are both important elements that ensure that the public galleries remain free for the public to access.

Where possible sustainable interventions have been incorporated within the design, including improvement of thermal performance through the introduction of insulation and thermally efficient construction in order to reduce the energy demand of the space.

7.6 Summary of Impact

Overall, the proposed works are considered **neutral** and the combined effect of the proposals are considered to be, '**less than substantial harm**' as defined by the NPPF. NPPF paragraph 205 states that; 'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.'

As well as the heritage benefits of the proposals highlighted in section 6.0 and the public benefits described in this section, the proposals ensure a continued viable use for the space which is consistent with its conservation. In conclusion these benefits are considered, on balance, to outweigh any harm caused by the proposed on the heritage asset.

8.0

Bibliography & Sources

8.0 Bibliography & Sources

Arup. *Manchester Art Gallery Athenaeum Art Store Concept Report.* Manchester: Arup, 2024. MAG-ARP-08-B1-RP-N-XX-0001.

Hartwell, Clare. *Manchester, Pevsner Architectural Guides.* London: Yale University Press, 2001.

Historic England. "Manchester Central Library." The National Heritage List for England. Updated November 25, 1998. Accessed May 2, 2023. https://historicengland.org.uk/listing/the-list/list-entry/1282980?section=official-list-entry.

Hopkins Architects. "Manchester Art Gallery." Last modified 2023. Accessed April 27, 2024. https://www.hopkins.co.uk/projects/civic-and-culture/manchester-art-gallery/.

Hutton + Rostron. *Masonry Moisture Profile Survey.* Manchester: Hutton + Rostron, 2023. 212-98.

Hutton + Rostron. *Manchester Art Gallery: Athenaeum Basement - Survey of Timber Floor Structure.* Manchester: Hutton + Rostron, 2024. 212-98.

Hutton + Rostron. *Manchester Art Gallery – Athenaeum Basement: Plaster Survey.* Manchester: Hutton + Rostron, 2024. 212-98.

Lanes Group plc. *CCTV Survey.* Manchester: Lanes Group Plc, 2023. PJ00470967.

Manchester Art Gallery. "History of the Gallery." Accessed April 27, 2024. https://manchesterartgallery.org/about/history-of-the-gallery/.

Manchester Art Gallery, "Explore," accessed April 27, 2024. https://manchesterartgallery.org/explore/.

Manchester Libraries, Information and Archives. Accessed via Greater Manchester Lives 13th April 2024. https://www.manchester.gov.uk/info/448/archives_and_local_history/7377/search_the_archives_catalogue.

Peter Cox. Peter Cox to Robertson Construction, Manchester, October 23, 2023.

Royal Academy of Arts, "Sir Charles Barry RA," accessed April 27, 2024, https://www.royalacademy.org.uk/art-artists/work-of-art/sir-charles-barry-r-a.

TRC. R*efurbishment of the existing windows to Manchester Art Gallery.* Manchester: TRC, 2023.

9.0

Appendices

9.0 Appendices

9.1 Listing Description

9.1.1 The Athenaeum

Official list entry

Heritage Category: Listed Building

Grade: II*

List Entry Number: 1270889

Date first listed: 02-Oct-1974

List Entry Name: The Athenaeum

Location

Statutory Address: The Athenaeum, 81, Princess Street

The building or site itself may lie within the boundary of more than one authority.

District: Manchester (Metropolitan Authority)

Parish: Non Civil Parish

National Grid Reference: SJ 84077 97991

Details

MANCHESTER

SJ8497NW PRINCESS STREET 698-1/32/335
(North East side) 03/10/74 No.81 The Athenaeum

GV II*

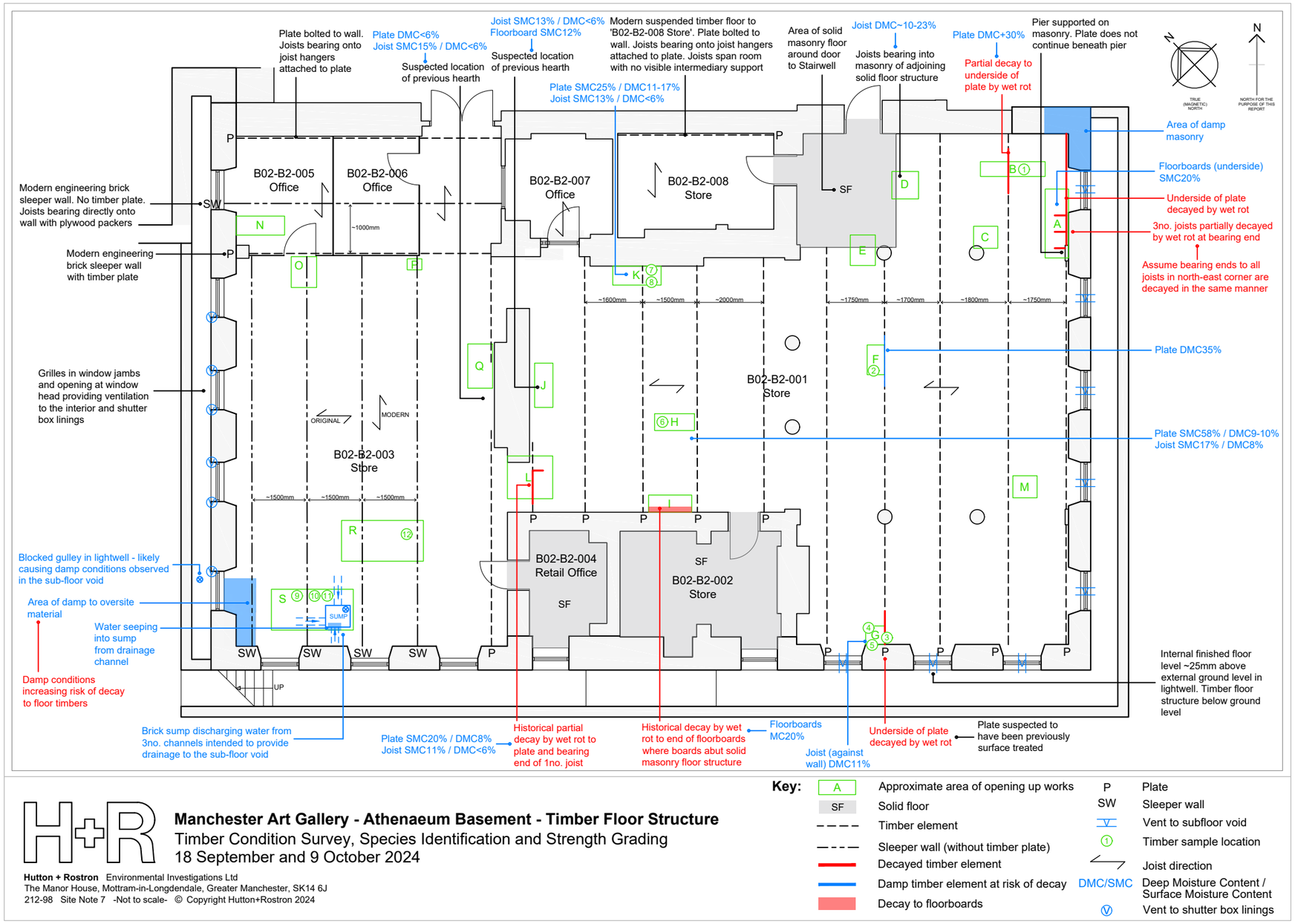
Cultural club, now annex to City Art Gallery. 1837, by Sir Charles Barry; damaged by fire 1874 and then remodelled internally, and attic added. Sandstone ashlar, slate roof. Rectangular plan plus rear extension. Italian palazzo style. Two storeys and basement, plus added attic, a symmetrical 9-window facade, with basement treated as a plinth, raised rusticated quoins, sill-bands, string-course, lettered frieze (see below), very prominent mutuled cornice, and high balustraded parapet with 4 tall chimneys. The entrance, up a flight of stone steps, has a shallow rectangular porch with Roman Doric columns, triglyph frieze, moulded cornice and balustraded parapet, and a round-headed arch to a recessed porch with coffered barrel-vaulted ceiling. Both floors have tall 2-light casement windows with moulded architraves, those at ground floor with cornices and apron sills and those at 1st floor with balustrades and floating pediments. Frieze lettered: "INSTUTVTED MDCCCXXXV ATHENAEUM ERECTED MDCCCXXXVIII". Slated mansard attic roof (added) with wrought-iron cresting. Five-bay side walls in matching style, also with lettered friezes, that on the right side: "FOR THE ADVANCEMENT AND DIFFVSION OF KNOWLEDGE". History; precursor of Italian palazzo style in Manchester architecture.

Listing NGR: SJ8407797991

9.2 Endnotes

1 Department for Levelling Up, Housing and Communities, *National Planning Policy Framework* (London: Department for Levelling Up, Housing and Communities, 2023.
2 Manchester City Council, *Manchester's Local Development Framework Core Strategy Development Plan* Document (Manchester: Manchester City Council, 2012).
3 Manchester Art Gallery, "History of the Gallery," *Manchester Art Gallery,* accessed May 2, 2024, https://manchesterartgallery.org/about/history-of-the-gallery/.
4 Manchester Libraries, Information and Archives. "Galleries, The Royal Institution, City Art Gallery, Manchester" (GB127.m58908)
5 Manchester Libraries, Information and Archives. "Galleries, Manchester City Art Gallery, Mosley Street, Manchester" (GB127.m58923)
6 Historic England, "Manchester Central Library," The National Heritage List for England, updated November 25, 1998, accessed May 2, 2023, https://historicengland.org.uk/listing/the-list/list-entry/1282980?section=official-list-entry.
7 Manchester Art Gallery, "Explore," *Manchester Art Gallery,* accessed May 2, 2024, https://manchesterartgallery.org/explore/.
8 Manchester Libraries, Information and Archives. "Group of Suffragettes: Annie Briggs, Evelyn Manestra, Lillian Forrester" (GB127.m08224)
9 Hopkins Architects, "Manchester Art Gallery," last modified 2023, accessed May 2, 2024, https://www.hopkins.co.uk/projects/civic-and-culture/manchester-art-gallery/.
10 Hopkins Architects, "Manchester Art Gallery," last modified 2023, accessed May 2, 2024, https://www.hopkins.co.uk/projects/civic-and-culture/manchester-art-gallery/.
11 Clare Hartwell, *Manchester, Pevsner Architectural Guides.* (London: Yale University Press, 2001), 182
12 Royal Academy of Arts, "Sir Charles Barry RA," accessed April 27, 2024, https://www.royalacademy.org.uk/art-artists/work-of-art/sir-charles-barry-r-a.
13 Manchester Art Gallery, "Exhibitions," *Manchester Art Gallery,* accessed May 2, 2023, https://manchesterartgallery.org/event/trading-station/)
14 Manchester Libraries, Information and Archives, "The Athenaeum Dining Room, Manchester" (GB127.m64337)
15 Manchester Libraries, Information and Archives, "The Athenaeum, Princess Street, Manchester" (GB127.m84084)
16 Hutton + Rostron, Masonry Moisture Profile Survey (Manchester: Hutton + Rostron, 2023), 39
17 Hutton + Rostron, Manchester Art Gallery: Athenaeum Basement – Survey of Timber Floor Structure (Manchester: Hutton + Rostron, 2024), 69
18 Booth King, *Work Package 8 - Proposed Athenaeum Basement GA* (Manchester: Booth King, 2024), 1
19 Arup, *Manchester Art Gallery Athenaeum Art Store Concept Report* (Manchester: Arup, 2024), 4

9.3 Timber Survey Report Extract [Hutton & Rostron]



Manchester Art Gallery - Athenaeum Basement - Timber Floor Structure
Timber Condition Survey, Species Identification and Strength Grading
18 September and 9 October 2024

Hutton + Rostron Environmental Investigations Ltd
The Manor House, Mottram-in-Longdendale, Greater Manchester, SK14 6J
212-98 Site Note 7 -Not to scale- © Copyright Hutton+Rostron 2024

Key:

A	Approximate area of opening up works	P	Plate
SF	Solid floor	SW	Sleeper wall
– – – –	Timber element	V	Vent to subfloor void
– – – –	Sleeper wall (without timber plate)	1	Timber sample location
	Decayed timber element		Joist direction
	Damp timber element at risk of decay	DMC/SMC	Deep Moisture Content / Surface Moisture Content
	Decay to floorboards	V	Vent to shutter box linings

Buttress