Pre-Construction Phase Health and Safety Plan

For the

Transforming Imperial War Museums London (TIWML), Level 4 Refurbishment.

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SECTION 1

PROJECT DETAILS

Introduction

This Plan is Preliminary and is to form part of the appointment of the Main Contractor as Principal Contractor as defined in the Construction (Design and Management) Regulations 2015.

The Health and Safety Plan is to be developed by the Principal Contractor prior to work commencing and submitted to the Client during the management of the construction phase for consideration. No work is to commence until the Principal Contractor's Health and Safety Plan has been assessed for its adequacy. On receipt of instruction to proceed the Principal Contractor is under a legal duty to administer, implement and update, as required by changes in design or circumstances, the Health and Safety Plan throughout the contract.

Site location

The site of the proposed works is located in a plant room on the roof and on level 4 of the Imperial War Museum, Lambeth Road, London, SE1 6HZ.

Description of Works

The works comprise of the following:-

Level 4

Demolition of existing fixtures and fittings including redundant furniture, ceilings, walls, mechanical and electrical infrastructure. The construction of new walls, floor finishes, doors, wall linings, window refurbishment works, new sections of ceiling, new electrical small power and lighting, new ductwork, fire stopping works and data infrastructure. Decorations to existing walls and floors and the adaptation of the existing heating infrastructure.

Roof plant room

Demolition of all existing mechanical plant, ductwork, grills and mechanical infrastructure. The construction of two new mechanical systems including the installation of new ductwork, forming new openings for new grills in an existing brick wall, forming new openings in an existing brick wall for ductwork to pass through existing wall to adjacent room, installation of one new Air Handling Unit, amendments to electrical infrastructure, fire stopping works, installation of a new BMS panel and amendments to the existing Chilled Water and LTHW infrastructure via new pipe work on the roof.

Programme of Works

The commencement and overall construction period are as follows:

Site Commencement Date: 18th June 2018
Practical Completion: 7th September 2018

Project Directory

A copy of all the contact details for all parties involved with the project can be found in Appendix 1 of this document.

SECTION 2

EXISTING ENVIRONMENT

Adjacent land use

Imperial War Museums (IWM) is set in the grounds of Geraldine Mary Harmsworth Park which is open to the public. To the rear of the Museum there are private dwellings located along Brook Drive which the Museum has a good relationship with and considers their neighbours. For this reason the Principal Contractor will **not** conduct demolition or noisy works before the hours of 8am or after 5pm on any working day.

The Building and the Site

IWM is a Grade 2 listed building. The work site is an extension which was built in the mid 1960s as an extension to provide office space for the Museum's staff.

A plan of the work site boundary can be found in Appendix 2 of this document. The work area is located on the 4th floor and the roof of the building only. To gain access to the roof area the Principal Contractor will be required to sign for keys on a daily basis.

Details of the proposed site setup, emergency escape routes and welfare can be viewed in Appendix 3 of this document. The Principal Contractor is to note and include within their tender return the supply and maintenance of a portable site toilet facility located in the rear yard for the sole use of the Principal Contractor staff and subcontractors.

The Contractor's attention is drawn to the fact that the floor below the works site is the Museum's Art store which will be populated during the works. The Contractor is required to advise the Client a day in advance of noisy and demolition works that could cause disruption this floor, prior to the works commencing.

Existing Structures

The Client has an asbestos register for the building which is a Management Survey**.** The Client has commissioned a site specific survey which relates to the site area, this can be viewed in Appendix 4 of this document.

Museum's Permit to work system and handover of the site area.

The areas for refurbishment (level 4 and roof plant space) will be handed over by the Museum to the Principal Contractor, this will be done using the Museums permit to work system. Please see Appendix 5 for further information regarding this arrangement.

The Principal Contractor's personnel will not be allowed to work outside the work area identified in the Construction Phase Health and Safety plan without a permit to work being approved by the Museum.

The Principal Contractor will provide the site specific Construction Phase Health and Safety plan for the Work area to be refurbished. This will be issued to the Project Manager 1 month prior to works commencing on site and will need to include all RAMS and COSHH data sheets.

The Museum's Project Leader will issue the plan with a permit to work to internal departments of the museum. On the confirmation of the permit to work, the work area will be handed over to the Principal Contractor on the designated start date. The Principal Contractor will then be required to sign the Permit to work, confirming that they are responsible for the work area within the Museum.

Throughout the works, the Principal Contractor will comply with and not deviate from the Construction Phase Health and Safety Plan issued with the permit unless receiving written confirmation from the Project Manager. During the Construction Phase of the project, no Museum staff or Museum incumbent service provider's staff will be allowed to access the works site without a request being received by the Principal Contractor 2 days in advance of the visit. All Museum personnel will need to receive a site induction by the Principal Contractor.

Prior to handover the Principal Contractor must arrange a 'pre handover inspection' with the Facilities Management (FM) representative and the Service provider representative. This inspection shall appraise the Works and include all plant and equipment installed and where appropriate demonstrate its operation. Testing and commissioning certification will need to be provided and signed off by the Contractors commissioning engineer. O&M manuals and the H&S file will need to be provided prior to handover and all relevant statutory consent will need to be in place prior to handover.

On reaching a successful Practical Completion of the works which will be issued by the Project Manager, the permit to work will be signed by a member of the Museum's FM team confirming that the work area is the responsibility of the Museum.

Works in other areas of the building outside the site boundary

During the site programme of works, the Principal Contractor may need to conduct works / access areas outside of the site boundary, to minimise disruption to the wider building, the Principal Contractor will be required to adhere to the following instructions.

If the Principal Contractor needs to complete Works outside the site boundary they will be required to submit a site specific Health and Safety plan for the Work and including a description of the works, all RAMS and COSHH data sheets. These works will then need to be approved by the Museum under the Museums permit to work system as described above.

Works in Riser Cupboards inside the work area

No access to and no works will be undertaken in electrical or mechanical risers without the prior agreement of the Museum's project Leader and FM team and a member of the FM department or a member of the incumbent service provider's team being present. The minimum period of notice will be 3 working days.

The Principal Contractor will need to advise the FM department of the reason access to riser cupboards is required. Depending on this, the FM department may require a permit to work.

Isolation and energisation of Services / Works in Riser Cupboards and access to Plant Rooms outside the work area

If the isolation and energisation of services / works in riser cupboards outside the works area are required to be completed during the construction phase of the project. The Principal Contractor will need to request the works from the Museum's Project Leader. The request will need to be issued 5 working days in advance of the works being required. The Project Leader will organise the permit to work and the isolation / energisation / works with the incumbent service provider.

If the Principal Contractor is required to be present during the works, the Principal Contractor's personnel will be required to conform to the Museums security vetting protocol.

If access to plant rooms or riser cupboards outside the works area is required by the Principal Contractor during the construction phase of the project, to undertake works the Principal Contractor will need to request the access from the Museum's FM team. The request will need to be issued 5 working days in advance of the access being required.

The FM team may organise for a member of the incumbent service provider to escort the Principal Contractors personnel. No works will be undertaken within riser cupboards or plant room areas without an authorisation of a permit to work.

Access to services by Museum staff and Museum incumbent service providers personnel inside the works area

The Principal Contractor is to keep the access to existing Museum mechanical and electrical risers clear at all times during the construction phase of the project.

If access is required by Museum staff to mechanical and electrical risers located inside the works area during the construction phase of the project, the Museum will need to request access from the Principal Contractor. The request will need to be issued 2 days in advance of the access being required. This requirement will need to be waived in the event emergency access is needed.

All Museum personnel will need to receive a site induction by the Principal Contractor prior to accessing the work area.

Maintenance works to be carried out by Museum staff and Museum incumbent service provider's personnel inside the works area

If maintenance works are required to be completed by Museum staff to mechanical or electrical infrastructure located inside the works area during the construction phase of the project, the Museum will need to issue site specific RAMS to the Principal Contractor 1 week in advance of the works being required to be started in the works area.

The RAMS will need to be approved by the Principal Contractor prior to works being started in the work area.

All Museum personnel will need to receive a site induction by the Principal Contractor prior to accessing the work area.

Existing Services

During the site programme of works, the site is located within an extensive building which is populated by the General Public and Museum staff. The site services are fundamentally linked to other areas within the building, to minimise disruption to the wider building the Principal Contractor is required to adhere to the following instructions.

Electrical

The Principal Contractor should not undertake any electrical alteration works until the live electrical services have been isolated by the Museum's FM team.

The Principal Contractor to ensure that all electrical works have been fully tested by an NICEIC electrical contractor prior to energising.

LTHW and Chilled Water and Water services

The Principal Contractor should not undertake any LTHW of chilled water alteration works until the services have been identified and isolated by the Museum's FM team.

Water is available on site for the Principal Contractor's use free of charge.

Mechanical Services in the Roof plant room

The Mechanical services located in the roof plant room are required to be electrically isolated by the Museum's FM team prior to the Principal Contractor starting any demolition Works on site.

Fire Life Safety Systems

The site boundaries fire life safety system is connected to a building wide fire alarm system. The Principal Contractor should be aware that the fire alarm and PAVA speaker system will remain active throughout the duration of the contract works.

The Principal Contractor shall supply caps for all smoke and heat detectors located within the site boundary.

At the start of each working day the Principal Contractor will be required to install caps to **ALL** smoke and heat heads throughout the site.

At the end of each working day the Principal Contractor will complete a fire watch, one hour after works have ended.

On completion of this fire watch the Principal Contractor will remove **ALL** caps installed.

If the Principal Contractor intends to conduct works that could generate dust which could activate the smoke detectors within the site boundary the Principal Contractor shall complete the following prior to works commencing:-

- The Principal Contractors Project Manager will E mail the Museum's Security and other departments 1 day in advance of the dusty works taking place. Contact addresses will be provided by the Museum.
- The Principal Contractors site Forman will phone (on the day the works are due to be done) the Museums security department **prior** to the dusty works commencing.
- The Principal Contractor will ensure that all smoke detectors are covered prior to dusty works commencing.
- 1 hours after the dusty works have been completed, the Principal Contractor will remove all covers from the smoke detectors.
- The Principal Contractor site Forman will phone the Museum's Security Department to confirm that the dusty works have been completed for the day.

The Principal Contractor will be amending the fire alarm infrastructure during the works. The Principal Contractor will need to issue RAMS for the works to the Project Leader for approval 1 week in advance of the works needing to start. Only when the permit to work has been approved can the works be commenced.

Security infrastructure

All Security devises must be decommissioned, installed and commissioned by The Museum's incumbent security contractor ZE Global.

The Principal Contractor is not to alter or amend the Museum's existing Security infrastructure.

Building Security.

The Museum will require all site personnel to complete a disclosure Scotland form prior to being issued with an entrance pass. The form can be filled out on line and costs £25.00 per person, below is a link to the website.

https://www.mygov.scot/basic-disclosure/apply-for-basic-disclosure/

The application form takes approximately 2 weeks to be processed and when completed a certificate will be issued. All site personnel will then be required to get their security passes via the Museum's Security Department.

When operatives have received a pass they will be required to swipe in and out of the building using the existing security readers.

The readers are not solely for security but they are also a vital part of the Museum's emergency evacuation procedures.

The Principal Contractor will be responsible for securing the site works area at the end of each working day.

The Contractor will be required to erect solid timber hoarding including a lockable door to each existing entrance to the site works area.

At the end of each working day, the Contractor is to ensure that the all exist to the site works area are secured and locked.

Access to the Site

Vehicular deliveries to site.

All deliveries to the site are to be by agreement with the Museum's Project Leader. Deliveries should be booked 3 days in advance of the delivery taking place. The Contractor will be able to deliver during normal working hours, deliveries will be via the rear yard at the Museum only. Delivery and removal times are between 8:00am to 5:00pm.

The Principal Contractor is to ensure loading and offloading is managed and conducted without putting members of the Public or Museum staff, who will be frequenting the rear yard and Park Road, at risk. The Principal Contractor will make sure pedestrians cannot be struck by vehicles entering or leaving the rear yard and adjacent Park Road. The Principal Contractor is responsible for managing all loading and unloading and will ensure that the Public and Museum staff are adequately marshalled.

Site personnel access and egress to site.

The Principal Contractors site personnel must only access and egress site through the rear yard entrance. The location of the rear yard is indicated on Appendix 3 of this document.

Roof access

The Principal Contractors site personnel can access and egress the roof area during working hours. The route that site personnel are to take to the roof is indicated on Appendix 3 of this document.

The Principal Contractor will be required to sign keys (in and out) to allow them access to the roof area on a daily basis. These keys will be obtained via the level 0 Security Control Room.

The Principal Contractor will be required to provide tested and rated lanyard harnesses for all site personnel that traverse the roof area.

ALL SITE PERSONELL WILL BE REQUIRED TO WEAR A RATED LANYARD HARNESS AT ALL TIMES WHILST TRAVERSING THE ROOF AREA.

Roof access and egress of materials

The Principal Contractor will be required to move materials from the roof site boundary's to the rear yard via the rout as indicated on Appendix 3 of this document.

The Principal Contractor will be required to move all materials to or from the roof site between the hours of 7:00 am and 9:00 am in the morning only

Waste and rubbish removal

All contractors are responsible for removal of their own waste from site. The Principal Contractor is to provide "Wait and Load" skips for all rubbish generated on site. No static skips are to be delivered without prior Client agreement. The Principal Contractor will be responsible for ensuring a Waste Management Plan is in place and written into the Construction Phase Health and Safety Plan. This must adhere to the Waste Management Regulations 2010 – revised 2013.

General good housekeeping by prompt removal of surplus or waste materials will ensure that access routes are not blocked and that potential trip and fire hazards are removed.

The area to be handed back to the Client, in a clean and tidy condition with all debris and materials removed. Any rubbish left on the Museum site contravening this condition will be removed by the Museum, and costs charged to the contractor concerned after due notice has been given.

Control of Contractors

The Principal Contractor will be responsible for all aspects of duties under the CDM regulations 2015. This includes site safety management and control of all contractors working on their site.

Site Parking

Vehicles owned by the Contractor or his employees may be parked at the Premises with the express permission of the Client, subject to parking facilities being available.

SECTION 3

EXISTING RECORDS

Available Drawings

The existing drawings relevant to the project can be viewed in Appendix 7 of this document. They consist of the following elements:-

Security plan
Mechanical drawings
Electrical small power drawings
Electrical lighting drawings
Data drawing
Fire alarm drawings
Recently conducted electrical surveys
Electrical 5 year periodic test certificate.

SECTION 4

DESIGN INFORMATION

Significant Health and Safety Hazards

In the preparation of this Plan references to the competence of specific operators of plant or equipment requiring specific training either for operation, maintenance or erection, etc., have not been made. The Principal Contractor must maintain such records on site at all times and only employ those persons who are properly qualified or certified and competent to execute those works or operate such plant.

The following is a list of the Health and Safety hazards identified at the pre-construction stage and is not intended to be exhaustive.

Generic risks

The following are likely to be encountered during the project

a) fire risk
b) working at height
c) overhead work, e.g. clash of trades
d) lifting heavy plant, equipment and materials
e) working with live services
f) hot works
g) control of noise and dust
h) working on roof spaces
i) working in confined spaces
j) risk of flooding during water works
k) temporary works collapsing

Specific risks

1. Protection of the Public (Exclusion from Site Area)
The Site is located in a live Museum which contains members of the Public, Museum Staff and the Museum's collection of artefacts..
The Principal Contractor is to submit examples of previous projects where they have worked successfully in a live building environment with their tender return.

2. Live Services (Fire, Electrocution, Disruption to existing Service runs)
The Site area contains live services. Care must be taken to locate/protect/isolate all services to ensure the Health and Safety of all Site Personnel and prevent disruption to adjoining Users.
The Contractor is to ensure that all Existing Services are identified and notified to Site Personnel prior to works commencing on Site.

3. Fire Safety (Prevention of Loss of Life and Injury)

The Fire Life Safety Systems will remain active during the construction phase. Adequate and due regard must to be given to fire protection systems, and the Museum's emergency procedures will need to be adhered to.

The Contractor is to submit his proposals for fire alarm works as part of the Construction Stage Health and Safety Plan, and before any works are commenced on Site

4. Materials handling (Lifting of heavy materials to the Site)

The Management of materials handling with regard to Health and Safety is vital to ensure that materials, their delivery, storage and lifting, do not create hazards to Site Personnel and adjoining Occupiers.

The Contractor is to submit his proposals for the Management of materials handling as part of the Construction Stage Health and Safety Plan, and before any works are commenced on Site.

Safety Method Statements

The Principal Contractor should note that Method Statements may be specifically requested by the Museum's FM department for any given work activity and these are to be submitted prior to the commencement of the named work sequence.

SECTION 5

HAZARDOUS CONSTRUCTION MATERIALS

The following materials and substances have, or may have to be used in the works and are identified as potentially posing special health and/or safety hazards during the project. Appropriate measures will need to be specified in their control.

The following materials may be specified with the design (because of no suitable alternative) and can represent a health hazard. Manufacturer's instructions in their use or application need to be carefully followed.

a) anchor adhesives
b) sealants
c) silicones
d) adhesives and solvent or isocyanate based products
e) grouts and mastics
f) paints and paint sprays

Fragile materials

g) lighting installations

COSHH Assessments

Control of Substances Hazardous to Health assessments must be provided by the Principal Contractor where required.

SECTION 6

SITE WIDE ELEMENTS

Unloading and Storage Areas

The Principal Contractor is to submit his proposals for unloading and the storage of materials on the works site on level 4. Areas outside the side boundaries will not be available for use by the Principal Contractor.

Traffic/Pedestrian Routes

The Principal Contractor is to ensure that escape routes are maintained through the site during construction, that they are kept clear of obstructions, trailing leads etc., and that all working areas have sufficient temporary lighting.

Welfare Facilities

The Principal Contractor is to set up dedicated eating and rest areas within the site boundary's prior to commencing works on site, the location of these areas are indicated in Appendix 3.

It should be noted that the Museum has a no-smoking policy and that smoking is banned within the Museum premises.

Toilet facilities will need to be provided and maintained by the Principal Contractor for use of site operatives. These facilities will be installed by the Principal Contractor in the location as indicated in Appendix 3 of this document.

First Aid

The Principal Contractor is required to provide adequate First Aid cover during all hours of site operations as part of their Health and Safety responsibilities. First-aiders are to be easily recognisable by large stickers or badges. Easily accessible First aid kit(s) are to be provided and an accident report book included. Accident notification (RIDDOR) to be made as required.

Security

The Principal Contractor is responsible for the ensuring that all their employees and any sub-contractors, agents etc. who are due to work at the site, have been security vetted to Basic level, as defined by Disclosure Scotland.

Failure to comply with this requirement could result in the employee not being granted access to IWM.

SECTION 7

OVERLAP WITH CLIENT'S UNDERTAKING

Client's Operations

The Museum is open between 10am - 6pm every day and the Principal Contractor is requested to undertake demolition / noisy works where possible outside of the Museum's opening times to minimise disruption to Visitors. The Principal Contractor is to define noisy / disruptive works with the Museum's Project Leader prior to carrying out these works.

Works by contractors employed directly by the Client may be undertaken during the construction period:

Consistent co-operation and co-ordination at all levels is an absolute requirement to ensure best working practices and effective safety management

Restriction on Times

Site will operate to standard site hours of 07.00 to 17.00. Monday to Friday only. All work outside these times must be pre-agreed with the Museums Project Leader.

All deliveries are to be made between the times of 8:00 to 17;00 and are to be agreed with Museum's Project Leader.

The movement of materials from the roof site will only be allowed between 7.00 and 9.00.

Other Restrictions

All visitors to the site are to be informed of all Safety provisions and procedures requiring their compliance.

SECTION 8

SITE RULES

Client/Project Supervisor Rules

All Contractors shall familiarise themselves and comply with the Client's Health and Safety Policy, copies of which will be made available on request.

All Contractors shall familiarise themselves and comply with the Principal Contractor's Health and Safety Policy, copies of which he will make available to all site personnel and visitors on request.

Hard hats will be worn at all times (and by all personnel and visitors to the designated Site area) unless and until the Principal Contractor establishes that they are unnecessary by virtue of the work activities on Site.

The Principal Contractor is to provide all visitors to site will the appropriate PPE.

Safety Footwear to be worn at all times

It should be noted that the Museum has a no-smoking policy and that smoking is banned within the Museum premises.

Permit to work will apply for the following activities:

Permit to Work systems, administered by the Principal Contractor, will apply to the following:-

Roof works
Works outside the site boundary's
Works in Plant rooms.
Hot works.
Fire alarm alterations.
Works in confined spaces.

Emergency Procedures

Emergency procedures for fire and accident are to be communicated and made known to all site personnel and visitors. A copy of the Emergency Evacuation Plan is to be included in the Principal Contractor's Health and Safety Plan for approval prior to work commencing on Site.

The Muster point in the event of an emergency evacuation will be located in Geraldine Mary Harmsworth Park.

The Principal Contractor is required to provide and maintain all working areas with fire extinguishers and fire exit signage where appropriate.

Personnel must be sufficiently instructed to be able to use the portable firefighting equipment provided on site.

Adequate numbers of suitable types of portable extinguishers must be available throughout the site.

Extinguishers must be located in conspicuous positions near exits.

To protect distribution panels and items of electrical equipment, appropriate extinguishers (such as those containing carbon dioxide) must be provided close to the equipment concerned

The Contractor is to note that the Security Control Room should be the first point of contact in the event of an emergency – Tel 0207 416 5260 they will then co-ordinate the response from emergency services.

Means of escape

It cannot be over-emphasised that the main aim is to ensure everyone reaches safety if there is a fire.

Escape routes need to be available to everyone on the site.

(a) Proper provision is needed for all workers, wherever they are and however transient the activity.
(b) During the course of construction, escape routes are likely to change and possibly become unavailable. It is important that replacement routes are provided and clearly identified as such.
(b) There should normally be at least two escape routes in different directions.

The Principal Contractor will be required to provide additional rules on the following

- Training
- Induction
- Working in Grade 2 Listed Buildings
- Equipment
- Personal Protective Equipment
- Permit to Work procedure
- Accident Reporting

The Principal Contractor will ensure that:

(a) Temporary electrical supplies do not exceed 110v
(b) All openings, holes etc., are adequately guarded and covered
(c) MDF board is not cut on site internally where avoidable and only in conjunction with respiratory protection and vacuum suction equipment.
(d) The site may be readily evacuated at all times to a nominated point of assembly
(e) Site boundaries are clearly marked with hazard warning notices at points of entry
(f) All operatives are briefed on how to conduct work within a Historic Grade 2 listed building

The Principal Contractor will be expected to established additional site rules to accommodate any hazard or precautions not identified in this preliminary Health and Safety Plan.

Specific Site Rules Required by Statutory Provisions, etc.

All site staff and operatives are to be conversant with their general responsibilities under the following:

All Parties:	The Health & Safety At Works Etc Act: 1974
	Provision & Use Of Work Equipment Regulations: 1998
	Control Of Substances Hazardous To Health Regulations: 1999
	Control of Asbestos at Work Regulations:2002
	Manual Handling Operations Regulations: 1992
	Noise At Work Regulations: 1989
	RIDDOR: 1995
	Asbestos at Work Regulations: 1987.
	Electricity At Work Regulations: 1989.
	Confined Spaces Regulations:1997.
Client Activity:	The Management of Health & Safety at Work Regulations: 1999.
	Workplace (Health, Safety & Welfare) Regulations: 1992.
Construction Activity:	The Construction Design & Management Regulations: 1994.
	CDM Approved Code of Practise: 2002.
	The Construction Health Safety & Welfare Regulations: 1996.
	Fire Prevention on Construction Sites:2000

Enforcing Authority

The Construction Inspector
The Health and Safety Executive
Rose Court
2 Southwark Bridge
LONDON
SE1 9HS

SECTION 9

PROJECT LIAISON PROVISIONS

Contractor Design Works:

The following works are considered to be the Principal Contractor Design Works

Design of connections to existing drainage.
Design of connections to existing cold water services.
Design of Electrical wiring and lighting systems.
Temporary works

Any contractor design work to be submitted to the Museum's Project Leader before work commences.

Information to include:

(i) Risk Assessments

(ii) Lists of hazards

(iii) Hazardous substances, materials used COSHH sheets.

Design Alterations:

Any design alterations must be submitted to the Museum's project Leader for approval.

The Health and Safety File

The Principal Contractor is to provide information to form a Health and Safety File at Practical Completion, this File to contain the following:

1. BUILDING ELEMENTS INCLUDING MECHANICAL, ELECTRICAL FIXTURES AND FLOORING ETC

1.1 Introduction/Procedures for the Health and Safety File
1.2 Details of the Project
1.3 Project Directory (Design/Contractor Team)
1.4 List of Subcontractors/Suppliers
1.5 General Arrangement Drawings (as-built)
1.6 Additional Drawn Information (eg sub-Contractor Design elements)
1.7 List of the materials used, together with manufacturer's details / references and maintenance details (set out as Item 1.4 List)

2. OPERATING AND MAINTENANCE INFORMATION ON MECHANICAL, ELECTRICAL AND LIGHTING SERVICES, FLOORING, AND DATA INSTALLATIONS ETC

2.1 As-built drawings in PDF and DWG formats
2.2 Schedules of project specific equipment
2.3 Equipment Cleaning, Repair and Maintenance Details (set out as Item 2.2 List)
2.4 Test/Commissioning Certificates

3. CLEANING INFORMATION

3.1 The Principal Contractor is to create individual data sheets for individual items of equipment, fixtures and fittings, each sheet should contain the following:-
  3.1.1 A plan of the location within the retail area of equipment, fixtures and fittings
  3.1.2 The specific cleaning recommendations of equipment, fixtures and fittings

(NB: The above list is not definitive and may need to be added to at a later date. Prior to Practical Completion the Principal Contractor is to submit to the Principal Designer a draft format of the Health and Safety file)

To carry out this task it helps if procedures are set up for obtaining and collating the information to be included in the Health and Safety File, therefore adequate provision to liase with the Principal Contractor will need to be agreed and arranged.

The Health & Safety File will be completed by the Principal Designer immediately upon receipt of the complete Operation and Maintenance documentation from the Principal Contractor. For the avoidance of doubt, the Contractor will, prior to submission to the Principal Designer, have all documentation approved for issue by the relevant Designer.

The Contractors submission to the Principal Designer will be complete with a comprehensive list of all residual hazards that need to be considered by the Building Owner & FM Manager in the day-to-day running of the establishment.

Documents and drawings etc are required to be issued in hard copy in duplicate and one electronic copy. All electronic copies of drawings will be presented in AutoCAD and Pdf formats.

APPENDICES

APPENDIX 1 Project Directory

Client Project Leader:- Imperial War Museum

Contact :- Ann Carter
Address :- Lambeth Rd,
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SE1 6HZ

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Mail :- acarter@iwm.org.uk

Lead Designer:- Neville Bruton Design Limited

Contact :- Neville Brutonl
Address :- 47 Heneage Street
London
E1 5LJ

Telephone :- 0207 059 0412
Mail :- nbruton@nb-design.co.uk

Mechanical Designer:- Steensen Varming

Contact :- Alan Buckley
Address :- 12-13 Poland Street,
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W1F 8QB

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Mail :- alan.buckley@steensenvarming.com

Project Manager:- Fraser Randall Ltd

Contact :- Richard Ainsworth
Address:- The Ship
228 Long Lane
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SE1 4QB

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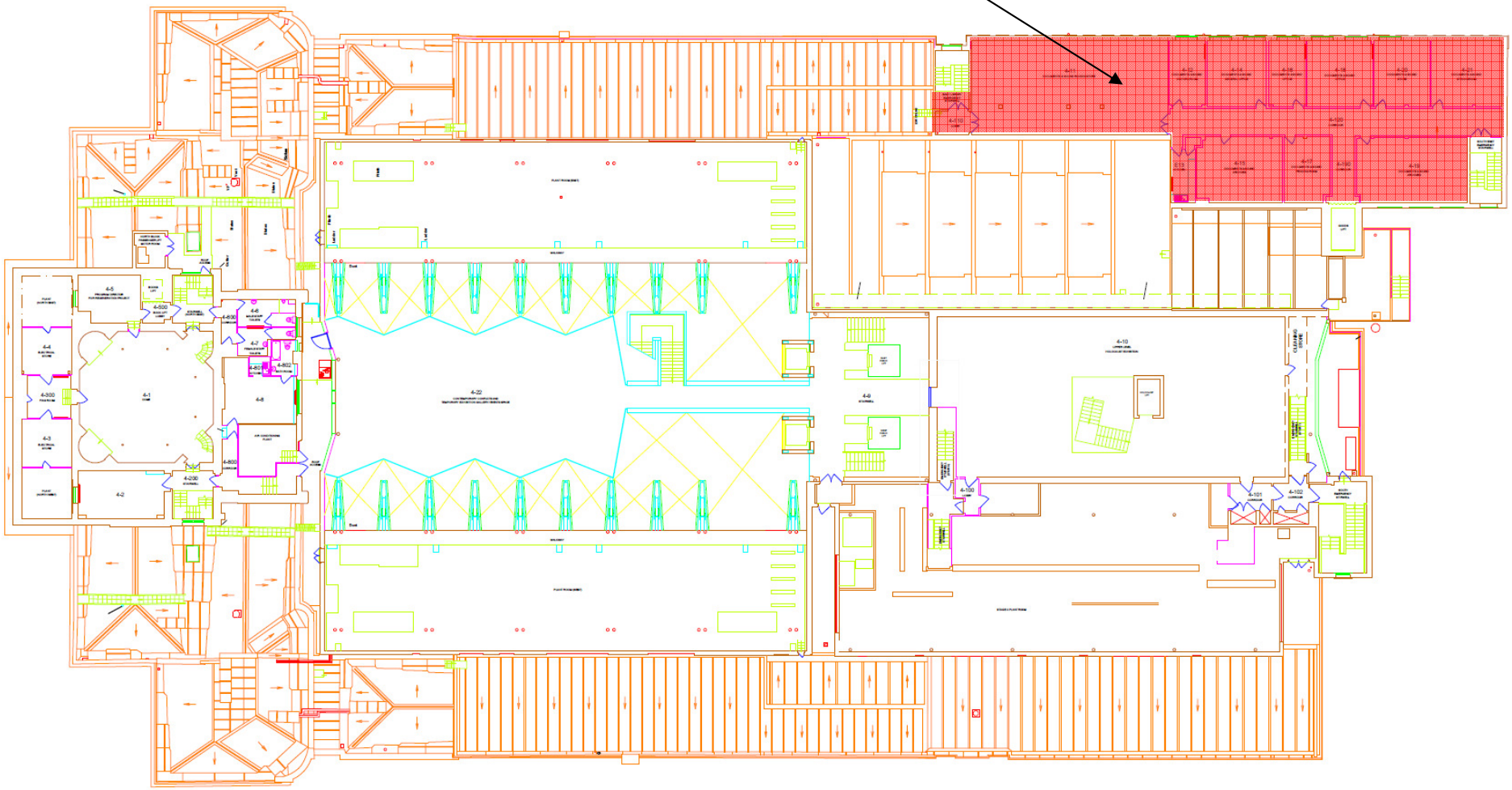
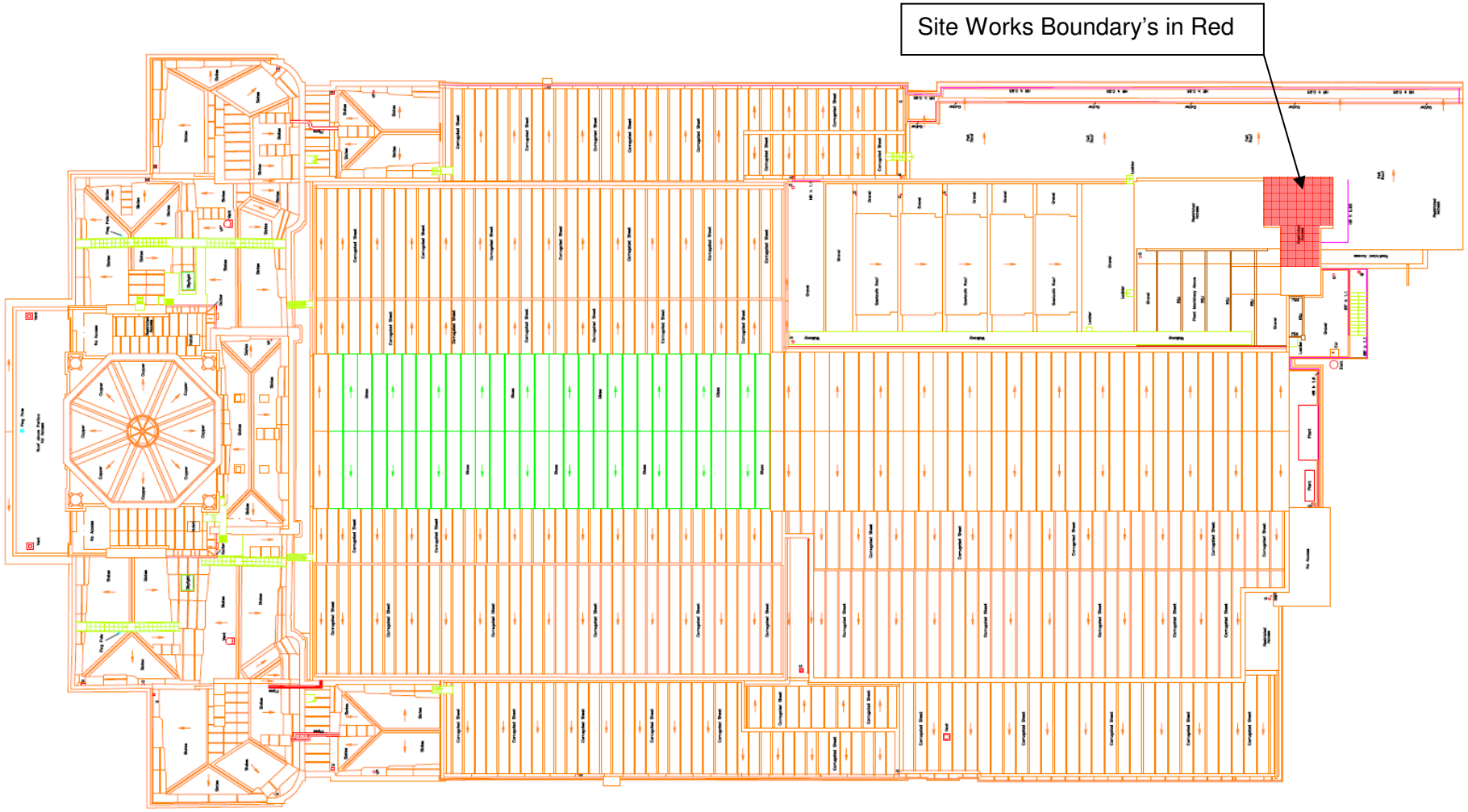
APPENDIX 2 Work Site Boundary

Site Works Boundary's in Red

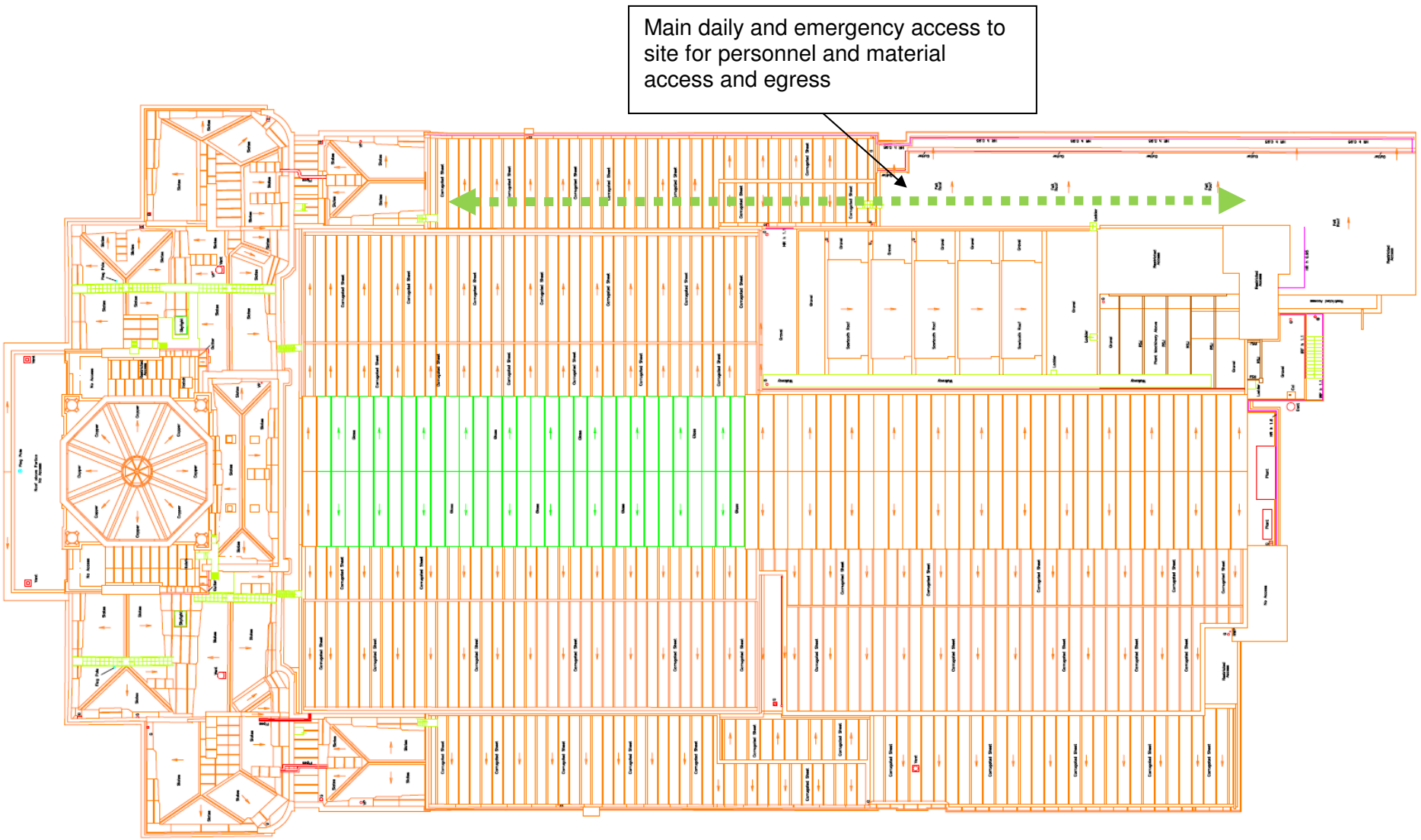


Level 4 Plan.

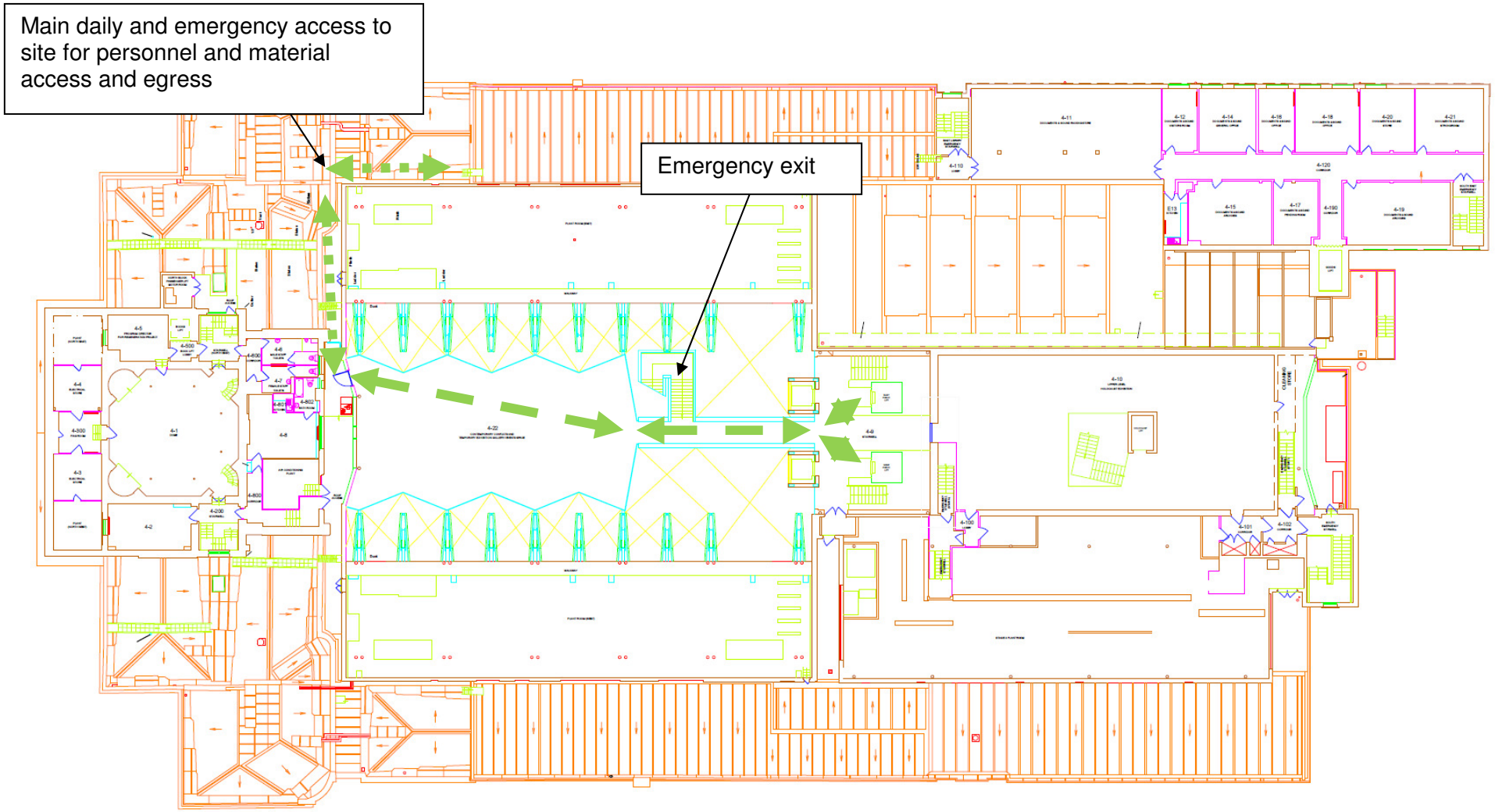


Roof Plan.

APPENDIX 3 Proposed Site Setup

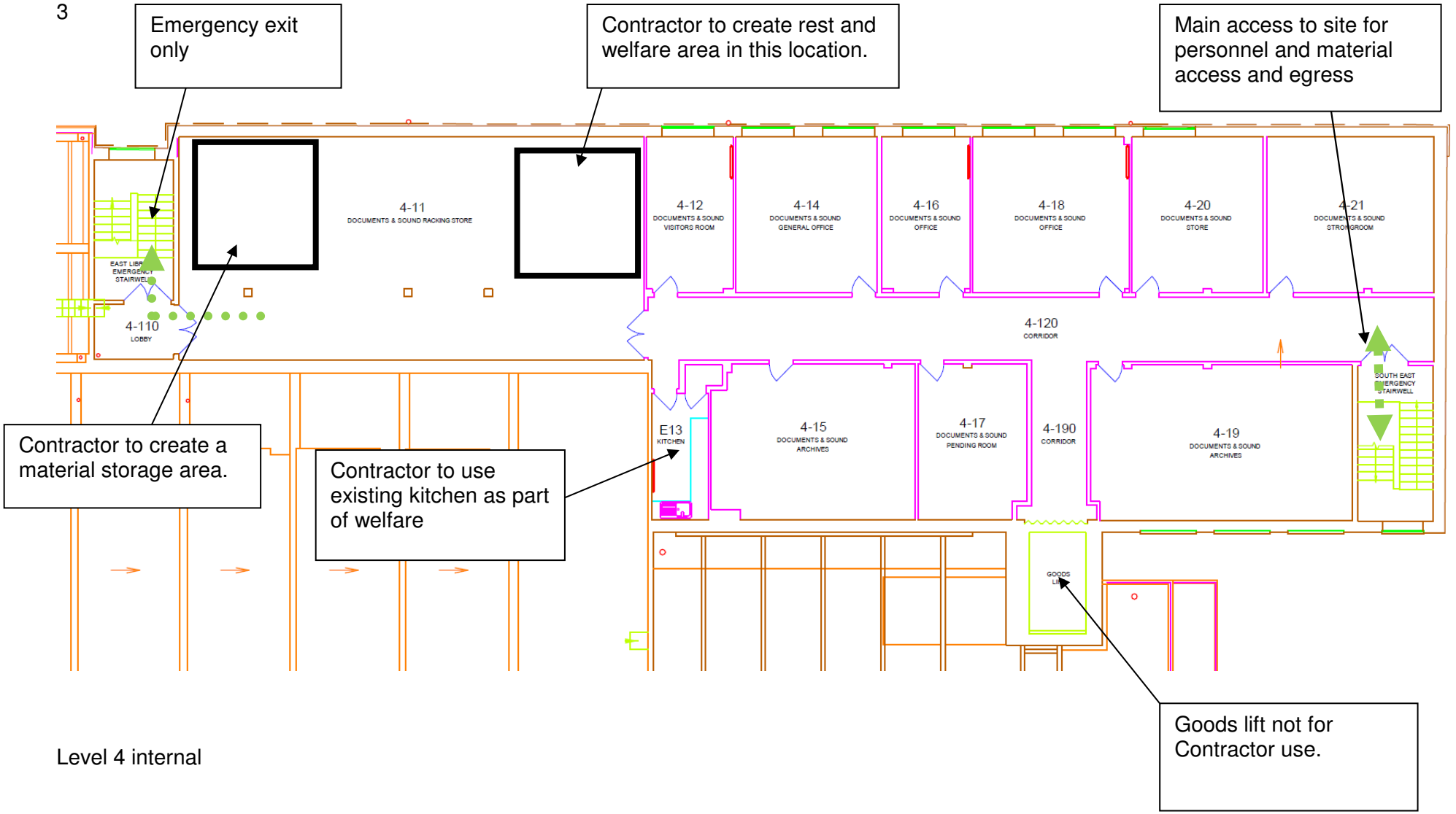


External at Roof level

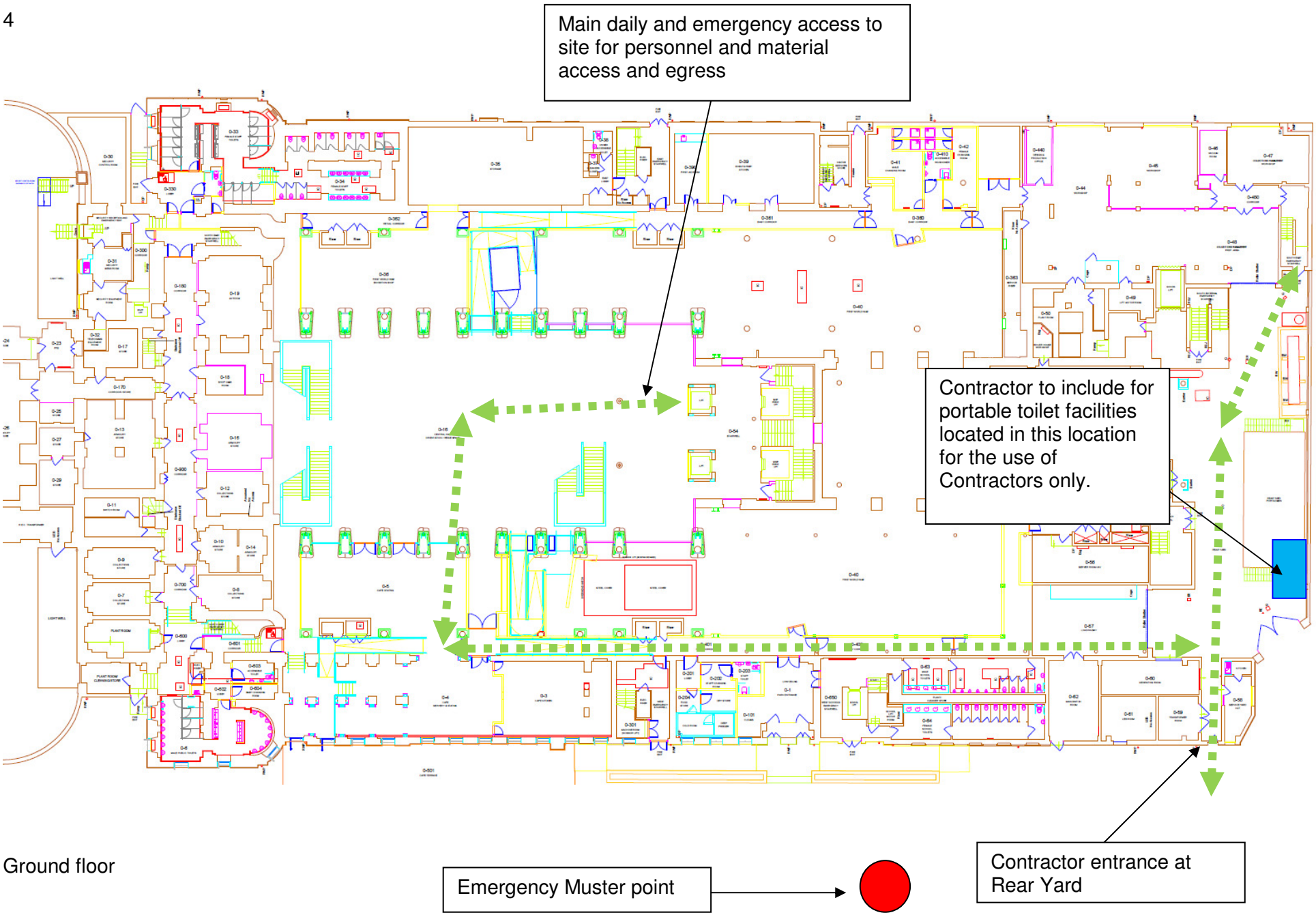


Level 4 and external roof plan

3



Level 4 internal



Ground floor

APPENDIX 4 Site specific Asbestos report.

FIBRE MANAGEMENT LTD

UKAS INSPECTION
8889

● Asbestos Consultants ● Asbestos Training ● Asbestos Surveys
●Asbestos Removal Management ● Asbestos Project Management

Asbestos Refurbishment Survey

Site Address:	**Imperial War Museum**
On Behalf of:	**CityAxis Limited**
Issue No.:	**1**
Survey Date:	**11/10/2017**
Report Issue Date:	**23/10/2017**
Report Reference Number:	**J-02559**
Surveyor(s):	**Sam Watson**
Report Compiled by:	**Sam Watson**

Head Office

Unit 3 Bulrushes Farm Business Park, Coombe Hill Road, East Grinstead, West Sussex, RH19 4LZ

Registered Number 6584791

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Section 1: Executive Summary

Fibre Management Limited were requested by Bruno Van Dyke on behalf of CityAxis Limited to undertake an Asbestos Refurbishment Survey including all necessary sampling to Imperial War Museum, Imperial War Museum, Lambeth Rd,, London, SE1 6HZ. Under the requirements of the Control of Asbestos Regulations 2012 a refurbishment survey is required before any refurbishment work is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACMs in the area where the refurbishment work will take place or in the whole building if refurbishments are planned. The survey will be fully intrusive and involve destructive inspection, as necessary, to gain access to all areas, including those that may be difficult to reach. A refurbishment survey may also be required in other circumstances, e.g. when more intrusive maintenance and repair work will be carried out or for plant removal or dismantling.

The scope of the survey should be noted in conjunction with all agreed exclusions and any additional access limitations. Additional limitations may affect the validity of this report and additional works may be required in order to ensure the report is fit for purpose.

1.1 Summary of Asbestos Materials

No asbestos containing materials were identified during the course of the survey

1.2 Suspect Asbestos Containing Materials (Presumed or Strongly Presumed):

Risk: Low					
Level	**Location / Room**	**Material Position**	**Material Type**	**Sample Ref**	**Action Required**
Imperial War Museum / 4th Floor	002 - Cupboard	Gaskets	Gaskets (compressed)	Presumed	Remove under 'Controlled Conditions'

1.3 Suspect materials that were sampled or visually assessed as Non-asbestos:

Level	Location / Room	Material Position	Material Type	Sample Ref
Imperial War Museum / 2nd Floor	001 - Corridor Void	Internal Wall	Machine Made Mineral Fibre product	Visually assessed
Imperial War Museum / 2nd Floor	001 - Corridor Void	Wall Panel	Timber	Visually assessed
Imperial War Museum / 2nd Floor	001 - Corridor Void	Floor	Timber	Visually assessed
Imperial War Museum / 2nd Floor	001 - Corridor Void	Debris	Cement Product	Sample 001
Imperial War Museum / 4th Floor	001 - Store	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	001 - Store	Pipework Insulation	Insulation	Sample 003

Level	Location / Room	Material Position	Material Type	Sample Ref
Imperial War Museum / 4th Floor	001 - Store	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	001 - Store	Board	Insulating Board	Sample 004
Imperial War Museum / 4th Floor	001 - Store	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	001 - Store	Wall Covering	Textured Coating	Sample 005
Imperial War Museum / 4th Floor	001 - Store	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	001 - Store	Wall Covering	Textured Coating	Sample 002
Imperial War Museum / 4th Floor	002 - Cupboard	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	002 - Cupboard	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	002 - Cupboard	Pipework Insulation	Insulation	Sample 006
Imperial War Museum / 4th Floor	003 - Kitchen	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	003 - Kitchen	Mastic	Mastic and Putty	Sample 007
Imperial War Museum / 4th Floor	003 - Kitchen	Sink Pad	Bituminous Product	Sample 008
Imperial War Museum / 4th Floor	003 - Kitchen	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	004 - Store	Debris	Cement Product	Sample 010
Imperial War Museum / 4th Floor	004 - Store	Boxing	Timber	Visually assessed
Imperial War Museum / 4th Floor	004 - Store	Boxing	Timber	Visually assessed
Imperial War Museum / 4th Floor	004 - Store	Wall	Plastered brick / block / concrete	Visually assessed

Level	Location / Room	Material Position	Material Type	Sample Ref
Imperial War Museum / 4th Floor	004 - Store	Gaskets	Gaskets (rope/woven)	Sample 009
Imperial War Museum / 4th Floor	004 - Store	Internal Wall	Machine Made Mineral Fibre product	Visually assessed
Imperial War Museum / 4th Floor	005 - Store	Ceiling Finish	Textured Coating	Sample 018
Imperial War Museum / 4th Floor	005 - Store	Ceiling	Concrete	Visually assessed
Imperial War Museum / 4th Floor	005 - Store	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	005 - Store	Debris in floor duct	Insulating Board	Sample 011
Imperial War Museum / 4th Floor	006 - Store	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	006 - Store	Pipework Insulation	Insulation	Sample 012
Imperial War Museum / 4th Floor	007 - Corridor	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	007 - Corridor	Wall Covering	Textured Coating	Sample 014
Imperial War Museum / 4th Floor	007 - Corridor	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	007 - Corridor	Wall Covering	Textured Coating	Sample 013
Imperial War Museum / 4th Floor	008 - Store	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	008 - Store	Board	Insulating Board	Sample 017
Imperial War Museum / 4th Floor	008 - Store	Wall	Plastered brick / block / concrete	Visually assessed
Imperial War Museum / 4th Floor	008 - Store	Wall Covering	Paper Product	Sample 016
Imperial War Museum / 4th Floor	008 - Store	Wall	Plastered brick / block / concrete	Visually assessed

Level	Location / Room	Material Position	Material Type	Sample Ref
Imperial War Museum / 4th Floor	008 - Store	Mastic	Mastic and Putty	Sample 015

1.4 Variations to Scope

1.4.1 Areas of No Access

Level	Location / Room	Reason for No Access
Imperial War Museum / 2nd Floor	002 - Gallery	The area was not surveyed as the structural investigations were not due to be undertaken til the following day
Imperial War Museum / 4th Floor	009 - Room	Investigation 10 to be undertaken by engineers out of hours

1.4.2 Areas of Limited Access

No areas of limited access found

N.B. Asbestos should be presumed to be present within all locations not accessed until a further assessment can be undertaken.

1.5 Further Recommendations

Whilst every effort was made to determine all the asbestos containing materials on site it is possible that asbestos based materials may remain unidentified until major demolitions works commence, using plant / machinery to access areas that were previously not accessible within the scope of an Asbestos Refurbishment Survey. It is therefore recommended that during demolition and dismantling operations, operatives are made aware of the possible presence of asbestos. On discovering any suspect materials that have not been identified in the survey report works should be stopped immediately, until further inspection / sampling can be undertaken.

It should be noted that this report is not intended to be used as a bill of quantities for the removal of asbestos containing materials and that it should only be used as a supporting document when accompanied by an appropriate Technical Specification and Scope of Works. These documents can be prepared by Fibre Management Limited upon request.

Section 2: Introduction

2.1 Aims and Objections

The aim of the survey was to ascertain and provide a written report to establish the location, type, extent and accessibility and the condition of any asbestos containing materials (ACMs) all in accordance with HSE Guidance HSG 264.

Any exclusions applicable to the survey are detailed within the Scope Information Table below and have been pre-agreed with the client. Any variations to this will be listed within Section 1.4 of this report. **It should be noted that occupied or operational buildings place certain restrictions on the scope of the survey in respect of intrusive access and sampling strategy.**

2.2 Survey Background and Scope Information

Scope of Survey - Undertake asbestos refurbishment survey within the Imperial War Museum within various locations (15 on lower levels) and

within Level 2 gallery as client supplied documentation.

Works to exclude access holes & reinstatement as specified- to be undertaken by third party.

Refurbishment Survey - Access Allowances – The following access requirements have been agreed at Quotation Stage

Access Allowances – Based on agreed Scope	Areas included within Scope of survey
Cavity walls	No
Partition Walls	Yes
Fixed Ceilings	Yes
Access Glazing	No
Access Window Frames	No
Access Door Frames	No
Floor voids	Yes
Floor ducts (specific details / layout required; specialist lifting equipment; covered or known)	Yes
Slab (specify depth / diameter)	No
Lift shafts	No
Concealed Risers or Voids Known or identified during survey	No

Access Allowances – Based on agreed Scope	Areas included within Scope of survey
Ventilation trunking (fume trunking should be specifically identified and assessed)	No
Confined spaces	No
Height access provision	Yes
Loft spaces (Note: access for management surveys will only be made where safe and sufficient walkways are available)	No
Electrical switchgear	Yes
Plant / equipment	Yes
Beyond suspected or known asbestos installations	No
Above interlocking fixed ceiling tiles	No
Roof -penetration through flat roof or skylights (requiring specialist equipment)	No
Locked locations	Yes
Behind internal or external cladding	Yes
External areas to be surveyed	No
Other details	Works to undertaken with future structural investigation in mind- all opening and reinstatement to be done by third party

Any variations to the scope as identified during the survey are as follows:

No caveats agreed onsite

2.3 Site Description

The building is of solid construction and opened in approximately 1917.

Section 3: Register

Imperial War Museum / 4th Floor												
Location / Room	**Sample Ref**	**Material Position**	**Material Type**	**Extent**	**Identification**	**Condition**	**Surface Treatment**	**Material Assessment**	**Priority Assessment**	**Overall Risk & Rating**	**Date Reviewed**	**Comments / Recommendations**
002 - Cupboard	Presumed	Gaskets	Gaskets (compressed)	7 lin m	Chrysotile	Low Damage	Composite, reinforced or bonded	4	5	9 - Low		Remove under 'Controlled Conditions'

Section 4: Material Assessments

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	2nd Floor	**Sample Ref:**	S001
Area:	001 - Corridor Void	**Lab Ref:**	
Item Description:	Debris - Cement Product	**Drawing Ref:**	
Extent:	1 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-

Picture(s) description:
Debris throughout void.

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S002
Area:	001 - Store	**Lab Ref:**	
Item Description:	Wall Covering - Textured Coating	**Drawing Ref:**	
Extent:	20 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-

Picture(s) description:

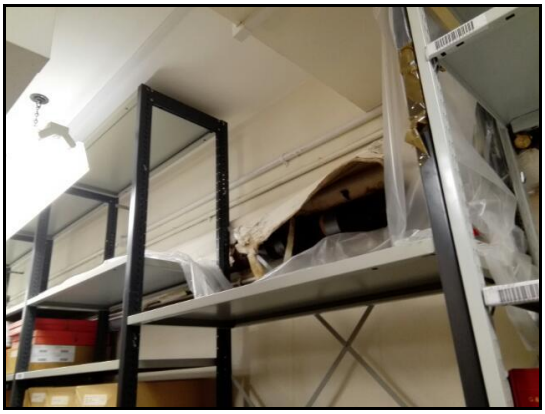
Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S003
Area:	001 - Store	**Lab Ref:**	
Item Description:	Pipework Insulation - Insulation	**Drawing Ref:**	
Extent:	30 lin m	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-



Picture(s) description:

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S004
Area:	001 - Store	**Lab Ref:**	
Item Description:	Board - Insulating Board	**Drawing Ref:**	
Extent:	3 lin m	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	**-**

Picture(s) description:
Inside void

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S005
Area:	001 - Store	**Lab Ref:**	
Item Description:	Wall Covering - Textured Coating	**Drawing Ref:**	
Extent:	30 lin m	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-

Picture(s) description:

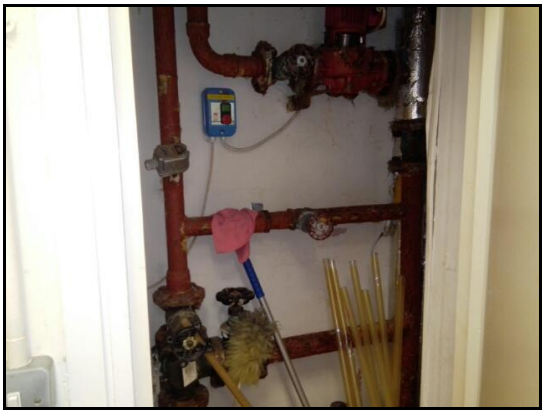
Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S006
Area:	002 - Cupboard	**Lab Ref:**	
Item Description:	Pipework Insulation - Insulation	**Drawing Ref:**	
Extent:	7 lin m	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-



Picture(s) description:

Residue to pipework.

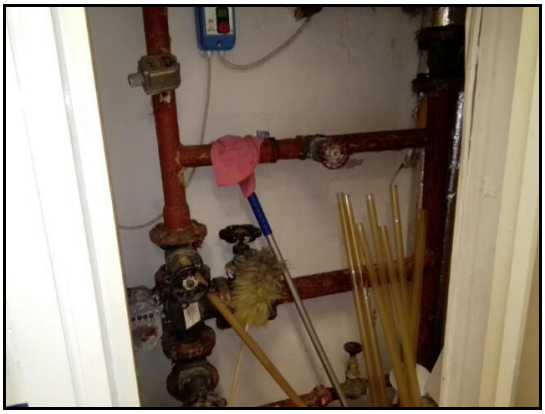
Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	Presumed
Area:	002 - Cupboard	**Lab Ref:**	
Item Description:	Gaskets - Gaskets (compressed)	**Drawing Ref:**	
Extent:	7 lin m	**Action Required:**	Remove under 'Controlled Conditions'
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	Asbestos insulating board, millboards, gaskets & ropes etc.	2
Extent of Damage:	Low Damage	1
Surface Treatment:	Composite, reinforced or bonded	0
Asbestos Type:	Chrysotile	1
	Material Assessment Score:	**4**

Occupant Activity:		**1**
Likelihood of Disturbance:		**2**
Human Exposure Potential:		**1**
Maintenance Activity:		**1**
	Priority Assessment Score:	**5**

Overall Risk Score:	**9**
Risk Rating:	**Low**



Picture(s) description:

Suspected Asbestos gaskets to various pipe valves.

Recommendations: Remove under 'Controlled Conditions'.

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S007
Area:	003 - Kitchen	**Lab Ref:**	
Item Description:	Mastic - Mastic and Putty	**Drawing Ref:**	
Extent:	2 lin m	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-

Picture(s) description:

Mastic to blanking panels.

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S008
Area:	003 - Kitchen	**Lab Ref:**	
Item Description:	Sink Pad - Bituminous Product	**Drawing Ref:**	
Extent:	1 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-

Picture(s) description:

Acoustic pad beneath sink.

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S009
Area:	004 - Store	**Lab Ref:**	
Item Description:	Gaskets - Gaskets (rope/woven)	**Drawing Ref:**	
Extent:	1 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-

Picture(s) description:

Gasket to valve inside service boxing.

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S010
Area:	004 - Store	**Lab Ref:**	
Item Description:	Debris - Cement Product	**Drawing Ref:**	
Extent:	1 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	**-**

Picture(s) description:

Debris throughout void.

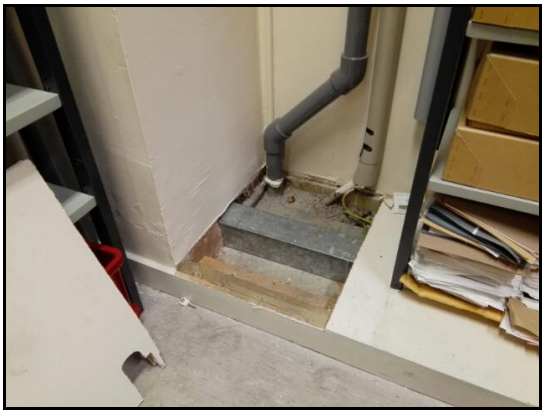
Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S011
Area:	005 - Store	**Lab Ref:**	
Item Description:	Debris in floor duct - Insulating Board	**Drawing Ref:**	
Extent:	1 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	**-**



Picture(s) description:

Inside duct.

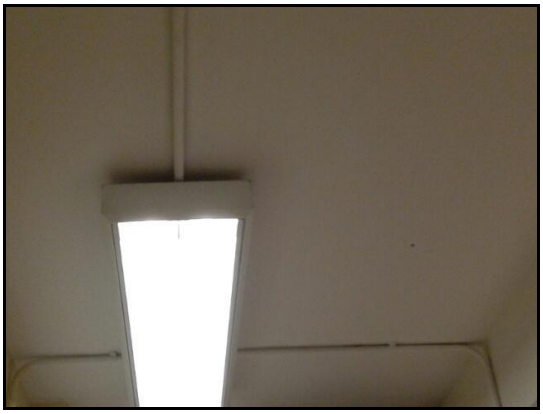
Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S018
Area:	005 - Store	**Lab Ref:**	
Item Description:	Ceiling Finish - Textured Coating	**Drawing Ref:**	
Extent:	15 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-



Picture(s) description:

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S012
Area:	006 - Store	**Lab Ref:**	
Item Description:	Pipework Insulation - Insulation	**Drawing Ref:**	
Extent:	7 lin m	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	**-**

Picture(s) description:

Residue to pipework.

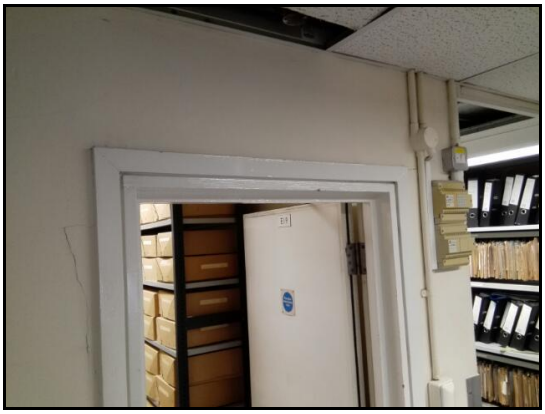
Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S013
Area:	007 - Corridor	**Lab Ref:**	
Item Description:	Wall Covering - Textured Coating	**Drawing Ref:**	
Extent:	15 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-



Picture(s) description:

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S014
Area:	007 - Corridor	**Lab Ref:**	
Item Description:	Wall Covering - Textured Coating	**Drawing Ref:**	
Extent:	15 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-

Picture(s) description:

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S015
Area:	008 - Store	**Lab Ref:**	
Item Description:	Mastic - Mastic and Putty	**Drawing Ref:**	
Extent:	6 lin m	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-

Picture(s) description:
Mastic to window.

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S016
Area:	008 - Store	**Lab Ref:**	
Item Description:	Wall Covering - Paper Product	**Drawing Ref:**	
Extent:	10 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-

Picture(s) description:

Lining behind plasterboard wall.

Recommendations: No Action Required

Facility:	Imperial War Museum	**Date:**	11/10/2017
Level:	4th Floor	**Sample Ref:**	S017
Area:	008 - Store	**Lab Ref:**	
Item Description:	Board - Insulating Board	**Drawing Ref:**	
Extent:	10 m²	**Action Required:**	No Action Required
Reinspection Review Date:	11/10/2018	**MICAD Reference Number:**	

Product Type:	-	-
Extent of Damage:	-	-
Surface Treatment:	-	-
Asbestos Type:	NAD	-
	Material Assessment Score:	**0**

Occupant Activity:		-
Likelihood of Disturbance:		-
Human Exposure Potential:		-
Maintenance Activity:		-
	Priority Assessment Score:	**0**

Overall Risk Score:	**0**
Risk Rating:	-

Picture(s) description:
Lining behind ceiling panel.

Recommendations: No Action Required

Section 5: Laboratory Certificates

INSERT LAB CERT(S)

Section 6: Annotated Site Plans

Section 7: Quality Assurance

Surveyor:	Sam Watson
Date:	19/10/2017
Signed	

Compiled By:	Sam Watson
Date:	19/10/2017
Signed:	

Quality Checked:	Chris Jones
Date:	19/10/2017
Signed:	

Appendix A: Site Work and Observations

Fibre Management Limited undertook the inspection of the property on 11/10/2017. Our Surveying Team undertook 'as far as reasonably practicable' a fully intrusive inspection of all areas of the building structure identified within the scope of works. Where asbestos containing materials were identified sampling was carried out. However, where structures and features of the building were replicated it was not considered reasonably practical to sample every item. Samples were therefore taken at points and intervals, which appeared to be representative of the general location. Samples have not been taken where the act of sampling would endanger the surveyor or hinder the functional integrity of the item concerned.

As it was not practical to expose the entire fabric of the building and its contents, some asbestos materials may have remained obscured at the time of the survey. Unless otherwise stated the following locations would not normally be included in the scope of an Asbestos Refurbishment Survey. Such areas may include:

- Concealed or Bricked up voids/riser
- Within all live electrical cabinets, switch, fuse and distribution boxes (which have not been isolated)
- Concealed pipe and tank gaskets
- Buried/under floor items (buried beneath concrete or live services)
- Within all plant and boiler castings (which have not been isolated)
- Behind all solid walls
- Within all ventilation/extraction/heating and floor ducts (which have not been isolated)
- Above asbestos insulation board ceiling panels, unless otherwise stated
- Behind all fixed asbestos insulation board cladding/boxing panels
- Within lift motors/machinery unless otherwise stated

Following all coring operations and destructive sampling, the area and materials were left in a stable condition.

Appendix B: Methodology and Limitations

B.1 Methodology and Limitations

The survey has been scoped and carried out following the detailed brief provided by the client and/or other parties undertaking works on the clients' behalf. A scope of survey was produced by Fibre management Ltd at quote stage which became the basis of the survey undertaken. The survey has been undertaken in accordance with the HSE publication *HSG 264 Asbestos: The Survey Guide*. The survey involves a thorough visual examination of all building materials, as far as reasonably practicable with representative samples taken to confirm the location and extent of any ACMs. A representation of all materials suspected of containing asbestos were sampled and analysed in line with our UKAS accreditation. Those materials not sampled have been extrapolated from similar samples. These samples are indicated within the Register with an X preceding the sample number. FML are accredited by UKAS for surveying.

If arrangements cannot be confirmed beforehand, access for the surveyor may be restricted for reasons beyond the surveyors control such as height, inconvenience to others, immovable obstacles or confined spaces. Where electrical/gas/water/fluids equipment is to be examined as part of the survey or impacts on the survey, no access will be attempted until proof of isolation is provided.

It is the duty holder's responsibility to ensure that additional refurbishment or demolition surveys are carried out for any works which are additional to, or different from, those described in the brief for this survey. It is presumed that all ACM's identified will be removed imminently as part of the planned works. However, should any ACM's not be removed, or if the related works do not go ahead, then all ACM's identified should be reassessed and risk-scored to bring in line with the assessment that would have been generated for a Management Survey.

All efforts were made during the survey to identity and establish the presence/absence of asbestos-based material and their location. However, this survey does not include those areas where obtaining a sample would cause undue damage to the integrity and security of the building, risk our surveyors or where access could not be gained. Asbestos should be presumed to be present until a further assessment can be carried out. Where a survey is carried out under the guidance of the owner of the property (or his representative) then the scope of survey will be as per their instructions and guidance at the time and will supersede any previously agreed scope of works.

The survey includes taking dust samples from areas where contamination is suspected to be present due to visible signs of damage to asbestos or signs of previous asbestos removal works but does not include random dust sampling.

It is important to note that the degree of inspection performed during an asbestos survey is not as detailed as the inspections and analytical processes carried out following the removal of asbestos containing materials. These 'visual inspections' during clearance procedures involve a detailed examination of all areas and surfaces within an asbestos enclosure and although a survey should identify asbestos containing materials within an area where inadequate asbestos removal activities have been previously undertaken, it is not designed to check on the effectiveness of such inspections. Where previous asbestos removal work has taken place, reference should also be made to clearance documentation when reading this report. Where asbestos removal works have been previously undertaken it is possible that microscopic asbestos debris may remain.

ACM's may be hidden or obscured by other items or covered by one or more finishes (over boarded), which may impair its detection. Asbestos containing materials may be hidden within the structure of the building and may not become visible until the building is dismantled. Where suspect materials are identified as part of any works that do not appear to be detailed within the survey report then these materials should be treated with caution and presumed to contain asbestos until sampled and analysed.

Analysis under Polarised Light Microscopy of textured coating samples may not always reveal the presence of asbestos due to the non-homogeneous nature of asbestos within such coatings; this can lead to a large variance in the probability of identifying asbestos within any sample collected. Identification and sampling of materials beneath any textured coating is limited to the specific location of the textured coating sample point. It should also be noted that asbestos may exist in paint with no obvious textured appearance. Random sampling of such paint is not carried out routinely by Fibre Management Limited unless specifically requested.

It is understood that Fibre Management Limited undertook the survey on the basis that the land on which the building or structure stands including surrounding land is not contaminated.

Materials have been referred to as Asbestos Insulating Board or Asbestos Cement based upon their asbestos content and visual appearance alone. Water absorption testing, as detailed within L143, has not been carried out unless stated otherwise.

Where asbestos gaskets to pipe flanges have been identified it is not practical to trace these throughout the length of pipework within the property. All such gaskets are presumed to contain asbestos.

The term 'Floor Slab' can constitute a floor to any level and is not just limited to the Ground Floor. These areas have not been intrusively inspected to any kind of depth. An inspection has been carried out which will have involved the scraping of any superficial top layer but this does not constitute a full depth intrusive inspection of the slab. Should this level be required then specialist heavy drilling tools will be required Followed by a further inspection on completion.

Unless specifically identified within the report, no responsibility can be accepted by Fibre Management Limited, for non-systematic or random use of asbestos within the property.

Unless specifically identified within the report, no responsibility can be accepted by Fibre Management Limited, for stored or portable items of asbestos.

Whilst Fibre Management Limited have undertaken both a Material and a Priority Assessment to provide an overall risk rating all recommendations contained within this report are based upon the Material Assessment only in line with the scope gf our UKAS Accreditation. Should any changes occur to the usage of a location then a revised assessment should be undertaken. It should be noted that the recommendation is based on controlling the material score and that consideration should also be given to controlling the priority score through actions such as restricting access etc.

It is understood and agreed that no survey can guarantee that all asbestos present in a building has been identified. FML do not accept any liability for; financial loss, injury, damage or penalty issues if there is a negligent misstatement in respect of those specific areas identified as having been tested and or investigated.

Where no plans were provided to Fibre Management Ltd, plans have been drawn up on site by our surveyors, who have designated room names and numbers. These drawings may not be accurate and should not be used for scaling purposes.

Fibre Management Ltd cannot be held responsible for necessary damage caused as part of this survey due to the nature of sampling for asbestos. Owing to the nature and necessity of sampling for asbestos, some damage is unavoidable, but every effort has been made to limit it to that which was necessary for the taking of the sample.

Fibre Management Limited will not accept any form of liability for claims arising from pollution or contamination of any kind associated from works or operations as detailed in the scope of the survey works.

Material extents are approximations only, assigned by the surveyor at the time of the survey. It should be noted that such extents may be for specific, visible amounts of the asbestos item and not for the complete amount. As such, the stated extents should not be used as a basis of any Scope or Specifications of Works for that item.

It should be noted that this report is not intended as a scope of works for asbestos removal and that a detailed technical document could be provided upon request.

B.2 Nominated Laboratory

All samples were analysed by a UKAS accredited laboratory. In this case LAB UK Ltd undertook the analysis of all samples.

B.3 UKAS Accredited Laboratory

LAB UK Ltd are UKAS accredited for asbestos fibre counting and asbestos identification. Laboratories meeting UKAS requirements for calibration and testing comply with the requirements of HSG248/ISO17020.

Appendix C: Definition of Asbestos Materials

Asbestos is a generic term used for fibrous forms of several naturally occurring silicate materials that have been exploited for their unique combination of properties of flexibility, high tensile strength, incombustibility, low-thermal conductivity and resistance to chemical attack.

For Regulatory purposes, in Great Britain, the Control of Asbestos Regulations 2012 (CAR) defines asbestos as any of the following minerals used below, or any mixture of them:

Crocidolite - Blue asbestos	Amphibole mineral group
Amosite - Brown asbestos	
Chrysotile - White asbestos	Serpentine mineral group

Anthophyllite, tremolite and actinolite also belong to the Amphibole mineral group. However, these three asbestos forms have rarely been used commercially in the UK. These forms of asbestos are generally only found as a contaminant or in a mixture with Chrysotile, Amosite, or Crocidolite.

C.1 Health Effects

Past exposure to asbestos is now responsible for about 4000 deaths a year in the UK alone. This figure is expected to rise over the next 10 years and then decline.

Why is Asbestos dangerous?

Asbestos is made up of thin fibres. These can break down into much smaller and thinner fibres. The smallest fibres cannot be seen with the naked eye but they can be breathed in. Asbestos fibres are only dangerous if they are made airborne and inhaled. Fibres that are inhaled can become stuck in the lungs and damage them. This can cause scars that stop the lungs working properly (asbestosis), or it can cause cancer.

The main types of cancer caused by asbestos are cancer of the lung and cancer of the lining of the lung (mesothelioma). These diseases can take from 15 to 60 years to develop and there is no cure for any of them. Whilst exposure to all asbestos fibre types can be potentially fatal, it is generally accepted that exposure to blue and brown (amphibole group) asbestos is more hazardous than white.

Appendix D: Assessment of Risk

The new duty to manage asbestos in non-domestic premises has been included in the Control of Asbestos Regulations. This duty requires duty holders to:

- Assess whether their premises contain asbestos;
- Assess the risk from the asbestos; and
- Take action to manage the risk from asbestos.

Under CAR 2012 the duty holder will be required to produce a written plan specifying the measures to be taken to control and manage the risk from the identified asbestos containing materials as identified in the asbestos survey.

In accordance with HSE Guidance on asbestos surveying HSG 264 it is recommended that the written plan is formulated by using the **Material assessments** (as provided in the Appendices A of the survey report) and carrying out a **Priority assessment** of each element to look at the likelihood of someone disturbing the materials.

The overall risk of the ACM can only be assessed after both assessments have been completed, i.e.

Material assessment score for each ACM	+	Priority assessment for each ACM	=	Risk assessment for each ACM

D.1 Material Assessment

The four main parameters that will determine the amount of fibre release from an ACM when subject to a standard disturbance are:

- Product Type;
- Extent of Damage or Deterioration;
- Surface Treatment; and
- Asbestos Type.

Note:

The material assessments in appendix A identify the high-risk materials; that is those that will most readily release airborne fibres if disturbed. However it does not automatically follow that those materials assigned the highest score in the material assessment will be the materials that should be given priority for remedial action.

Material Assessment Algorithm Table		
Sample Variable	**Score**	**Examples of Scores**
Product Type (or debris from product)	1	Asbestos reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi rigid paints or decorative finishes, asbestos cement etc.)
	2	Asbestos insulating board, mill boards, other low density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt
	3	Thermal insulation (e.g. pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing
Extent of damage / deterioration	0	Good condition: no visible damage
	1	Low damage: a few scratches or surface marks; broken edges on board, tiles etc.
	2	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres
	3	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris.
Surface treatment	0	Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles
	1	Enclosed sprays and lagging, asbestos insulating board (with exposed face painted or encapsulated), asbestos cement sheets etc.
	2	Unsealed asbestos insulating board, or encapsulated lagging and sprays
	3	Unsealed laggings and sprays
Asbestos type	1	Chrysotile
	2	Amphibole asbestos excluding crocidolite
	3	Crocidolite
Total Score		

D.2 Priority Assessment

Management priority must be determined by carrying out an assessment of the likelihood of the ACM being disturbed through: -

- Occupant activity;
- Likelihood of disturbance;
- Human exposure potential.
- Maintenance activity;

The risk assessment can only be carried out with detailed knowledge of both the material assessments and the priority assessments. The asbestos surveyor can contribute to the risk assessment and may be part of an assessment team, however it is the duty holder's responsibility under CAR 2012 to complete the Risk Assessments using the Survey report and his / her own detailed knowledge of the activities carried out within the premises. The risk assessment can then be used to form the basis of the Management Plan. The undertaking of Priority Assessments is outside the scope of our UKAS Accreditation.

For further advice on Priority Assessments the Client should consult HSG Guidance Book HSG 227.

Priority Assessment Algorithm Table		
Assessment parameter	**Score**	**Examples of score variables**
Occupant Activity		
Main type of activity in area	0	Rare disturbance activity (e.g. little used store room)
	1	Low disturbance activities (e.g. office type activity)
	2	Periodic disturbance (e.g. industrial or vehicular activity which may contact ACMs)
	3	High levels of disturbance (e.g. fire door with AIB sheet in constant use)
Likelihood of Disturbance		
Accessibility	0	Usually inaccessible
	1	Occasionally likely to be disturbed
	2	Easily disturbed
	3	Routinely disturbed
Location	0	Outdoors
	1	Large Rooms or well-ventilated areas
	2	Rooms up to 100m²
	3	Confined spaces
Extent	0	Small amounts or items (e.g. strings, gaskets)
	1	<10m² or <10m
	2	≥10m² to ≤50m² or ≥10m to ≤50m
	3	>50m² or >50m
Average Score		

Priority Assessment Algorithm Table		
Assessment parameter	**Score**	**Examples of score variables**
Human Exposure Potential		
Number of occupants	0	None
	1	1 to 3
	2	4 to 10
	3	>10
Frequency of use	0	Infrequent
	1	Monthly
	2	Weekly
	3	Daily
Average time each use	0	<1
	1	>1 to <3 hours
	2	>3 to <6 hours
	3	>6 hours
Average Score		
Maintenance Activity		
Type of maintenance activity	0	Minor disturbance (e.g. possibility of contact when gaining access)
	1	Low disturbance (e.g. changing light bulbs in AIB ceiling)
	2	Medium disturbance (e.g. lifting one or two AIB ceiling tiles to access a valve)
	3	High levels of disturbance (e.g. removing a number of AIB ceiling tiles to replace a valve or for re-cabling)
Frequency of maintenance activity	0	ACM unlikely to be disturbed for maintenance
	1	≤1 per year
	2	>1 per year
	3	>1 per month
Average Score		
Total Score		

D.3 Scoring System

Each of the parameters is scored and added to give a total score between 2 and 12:

- Materials with scores of 19 or more should be regarded as high risk with a significant potential to release fibres if disturbed;
- Those with a score between 13 and 18 are regarded as medium risk;
- Materials with a score between 9 and 12 are low risk; and
- Scores of 8 or less are very low.

Appendix E: Management Plan

On completion of the Risk assessments the duty holder can introduce a management plan that should include:

- A table of priority action
- Decisions about management options including the rationale (Flow charts etc.)
- A timetable for action;
- Monitoring arrangements;
- Employees and their responsibilities;
- Training arrangements for employees and contractors;
- A plan of implementation of new procedures, including those for external contractors;
- The mechanisms for passing information about the location and condition of ACMs to those who need it;
- Who will oversee the quality of the entries made on the management plan;
- A procedure for review of the plan, including a timetable.

For further reference see the HSE published ACOP guidance book 'a comprehensive guide to managing asbestos in premises' - HSG227

Our recommendations for removal / management are based solely on the material risk assessments and the surveyor's interpretation of the usage of the room. Our recommendations should be used for guidance purposes only; it is ultimately the decision of the duty holder who has the detailed knowledge of the activities and usage of the building to confirm the priority assessments provided and decide on the necessary cause of action.

Appendix F: Relevant Legislation and Guidance

The fundamental Legislation governing work with asbestos in the United Kingdom is the Control of Asbestos Regulation 2012:

Regulation 4 of the Control of Asbestos Regulation 2012 applies to those who have responsibilities for the maintenance and repair of non-domestic premises where asbestos-containing materials are or are likely to be present in those premises.

The regulation requires taking reasonable steps to find asbestos containing materials in premises and checking their condition: presuming materials contain asbestos unless there is strong up-to-date evidence that they do not. The duty holder must ensure that the risk from the asbestos is assessed, that a written plan identifying where that asbestos is located is prepared and that measures to manage the risk from the asbestos that are set out in the plan are implemented. Other parties have a legal duty to co-operate with the duty holder.

Relevant legislation:

- The Health and Safety at Work Act etc. 1974
- The Control of Asbestos Regulation 2012
- Construction (Design and Management) Regulations 2007;
- Control of Substances Hazardous to Health Regulations 2002
- Management of Health and safety at Work Regulations 1999
- Hazardous Waste Regulations 2005;
- Working at height Regulations 2005
- Confined Spaces Regulations 1997.

Approved Codes of Practice and Guidance Notes:

- L 143 Managing and working with asbestos. Control of Asbestos Regulations 2012.
- HSG 248 Asbestos: The analysts' guide for sampling and clearance procedures
- HSG 264 Asbestos the survey guide
- HSG 127 A comprehensive guide to Managing Asbestos in Buildings
- HSG 247 Asbestos: The Licensed Contractors' Guide
- HSG 210 Asbestos Essentials Task Manuals
- HSG 213 Introduction to Asbestos Essentials
- HSG 53 Respiratory Protective Equipment at Work amended 2010

(The above documents are available to buy or download for free from the HSE website).

Appendix G: Glossary of Terms

Definition of Terms

Enclosure: Provision of physical barrier to provide mechanical protection of the material so as to prevent it being disturbed / damaged.

Encapsulation: Provision of paint type coating to effect a continuous seal to the surface of the material and thereby prevent fibre release.

Labelling: Fixing of labels – standard 'red A' label as per Schedule 2 of the Control of Asbestos at Work (Amendment) Regulations (CAWR), (Approved Code of Practice for Work with Asbestos Insulation, Asbestos Coatings and Asbestos Insulating Board) to the surface of the material to warn of the hazard.

Manage: Provision of a policy of regular (periodic) inspection together with procedures, including but not exclusively limited to action should deterioration be observed, as well as training for staff and persons who may come into contact with the material.

Periodic Inspection: Inspection of the material at regular (defined) intervals to verify that its condition has not deteriorated such as to necessitate enclosure /encapsulation/ removal.

Registering: Entering of details, including nature / location / extent of material in a register which is brought to the attention of all persons who might plan or undertake works in the building.

Removal: Complete removal of the material under controlled conditions in accordance with the Control of Asbestos Regulations 2012.

Repair: Application of a seal to the material to prevent the further deterioration and breakdown of the Material. (Labelling should be considered)

Man Made Mineral Fibre (MMMF): Glass fibres may be used in insulation's as an alternative to Chrysotile.

Suppression: The application of PVA/ water solution via an airless or killer sprayer to form a fine mist thereby suppressing airborne fibres.

Controlled Conditions: Any measure adapted to control exposure and the spread of asbestos fibres. These measures may range from suppression to full enclosure.

HEPA Filter: is fitted to the exhaust end of the NAPU and specialist vacuums, and is used to provide a high level of air filtration (rated at 99.998% efficiency) where micron sized fibres are collected.

Appendix H: Types of Asbestos Surveys

HSG264 Asbestos: The survey guide is the industry standard for the provision of asbestos surveys and details three types of Survey:

Asbestos Management Survey (without samples – presumptive survey)

This type of survey essentially defers the need to sample and analyse for asbestos until a later time. The Client will therefore bear potential additional costs of managing some non-ACMs. During this type of survey all areas should be accessed and inspected as far as reasonably practicable or must be presumed to contain asbestos. All materials which are presumed to contain asbestos must be assessed.

Asbestos Management Survey (with samples – sampling survey)

The purpose of this type is to positively identify if a material contains asbestos and the procedures used are the same as a presumptive survey, except that representative samples are collected and analysed for the presence of asbestos. Samples from each type of suspect ACM found are collected and analysed to confirm or refute the surveyor's judgement. Sampling may take place simultaneously with the survey, or can be carried out as a separate exercise, after the Presumptive survey is complete.

Refurbishment or Demolition Survey

This type of survey is used to locate and describe, as far as reasonably practicable, all ACMs in the building and may involve destructive inspection, as necessary, to gain access to all areas, including those that may be difficult to reach. A full sampling programme is undertaken to identify possible ACMs and estimates of the volume and surface area of ACMs are made. This type of survey is designed to be used as a basis for tendering for the removal of ACMs from the building before demolition or major refurbishment.