

John Rylands Research Institute and Library. Manchester. University of Manchester.

FIRE ENGINEERING

STAGE 3 REPORT – FIRE STRATEGY OVERVIEW

REVISION 03 – 19 MAY 2023



Audit sheet.

Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
00	16/09/2022	Stage 2 Fire Strategy Overview.	MeH	LB	SB
01	27/04/2023	Stage 3 Fire Strategy	MS	LB	SB
02	12/05/2023	Updated to reflect design team comments	MS	LB	SB
03	19/05/2023	Updated to reflect design team comments	MS	LB	SB

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1. Introduction.

The purpose of this document is to provide a fire strategy review for the proposed refurbishment of the John Rylands Institute and Library building located in Manchester. This report will address issues relating to means of warning and escape, internal fire spread (linings and structure), external fire spread and access and facilities for the fire and rescue service.

For the avoidance of doubt, the scope of this assessment is to review the repurposed lower ground floor level and the reconfigured rooms only. A fire strategy review of the whole building is outside the scope of this document.

It is intended that this report is read in conjunction with the following architectural plans provided by Donald Insall Associates.

Table 1 – Architectural Plans

Drawing Number	Revision	Drawing Name
JRL-DIA-ZZ-00A-D60-ACL-4050	P2	Basement Plan as Proposed – General Arrangement
JRL-DIA-ZZ-01B-D60-ACL-4000	P2	Cellar Floor Plan as Proposed – General Arrangement
JRL-DIA-ZZ-10A-D60-ACL-4051	P2	Ground Floor Plan as Proposed – General Arrangement
JRL-DIA-ZZ-20A-D60-ACL-4052	P2	First Floor Plan as Proposed – General Arrangement
JRL-DIA-ZZ-20B-D60-ACL-4001	P2	Historic Entrance and First Floor as Proposed – General Arrangement
JRL-DIA-ZZ-30A-D60-ACL-4053	P2	Second Floor Plan as Proposed – General Arrangement
JRL-DIA-ZZ-40A-D60-ACL-4054	P2	Third Floor Plan as Proposed – General Arrangement
JRL-DIA-ZZ-50A-D60-ACL-4055	P2	Fourth Floor Plan as Proposed – General Arrangement

The recommendations made within this report relate to the referenced architectural plans above. Any alterations made to the plans may change the fire safety strategy provisions stated within the following sections of this report.

The building wide fire strategy may need to be updated to incorporate the works being undertaken, however, this should be undertaken by others.

Where not explicitly described within this report, it is assumed that the building is designed to comply with Approved Document B – Volume 2, or the supporting British Standards referenced therein.

It is important that the management have a clear understanding of the fire strategy adopted and of the operation and maintenance of the fire safety system and equipment within the development that are designed to protect lives and property.

All recommendations made within this report are subject to approval by the Statutory Authorities.

Therefore, whilst the general refurbishment of several rooms are considered to be no worse than existing, it is considered that due to the introduction of public areas at the lower ground level, this lower ground level should be brought up to regulation standard, where necessary.

2.2 Purpose Group.

In accordance with Approved Document B, the public areas of the building are assessed as Purpose Group 5 – Assembly and Recreation.

2.3 Sprinkler Protection.

The building is not provided with sprinkler protection in the current arrangement and there is no requirement to provide sprinklers in the repurposed areas.

However, it is understood that specialist suppression may be required by the University in the high value areas. This is subject to specialist input from the University and the specialist sprinkler designer.

2.4 Evacuation Strategy and Management Procedures.

It is understood that the existing evacuation strategy has been based on a simultaneous evacuation strategy, whereby upon activation of the alarm system within any area of the building, the whole building will undergo a simultaneous evacuation.

In accordance with the risk assessment report for the building [Ref: John Rylands Library, Deansgate – FRA Document – 10Nov2021], it is understood that the evacuation of the building is reliant on management procedures and the use of fire marshals in the event of a fire.

The existing escape routes from the building are reliant on the route through the historic entrance foyer and external doors. It has been identified within the Evacuation Plan for the building that this route is an exit from the building. Due to the existing nature of the doors, the doors are provided with approximately three locking mechanisms.

Therefore, whilst the management strategy is outside the scope of these works, it is recommended that the management maintain this escape route from the building and the on-site staff facilitate with the evacuation process to ensure that this historic entrance is accessible during the means of escape. This is subject to confirmation from the management of the building.

This escape route is fundamental to the proposed strategy of the lower ground level, however, if the historic entrance is not appropriately managed during the evacuation process this will fundamentally affect the proposal set out in this document.

The management strategy should be updated to reflect the amendments being made within these works.

3. Statutory Guidance.

3.1 The Building Regulations 2010.

The building will be subject to the requirements of the Building Regulations 2010. It will be necessary, therefore, for it to meet the requirements of Schedule 1 of the Regulations relating to:

- B1 (Means of warning and escape),
- B2 (Internal fire spread (linings)),
- B3 (Internal fire spread (structure)),
- B4 (External fire spread),
- B5 (Access and facilities for the fire service).

In England guidance on how to satisfy these functional requirements can be found in Approved Document B (AD-B) Volume 2 – Buildings other than Dwelling. However, whilst AD-B provides guidance for some of the more common building arrangements, there is no obligation to adopt any particular solution contained in the document, as alternative solutions are acceptable, provided that an equivalent level of fire safety to that provided by the standard solutions can be demonstrated.

Where renovation work is being carried out on the existing building, the works will not be defined as a 'material change of use' under the Building Regulations. It is not therefore necessary to upgrade any unaltered aspects of the existing building up to current guidance where the fire safety arrangements are 'no worse than existing'. However, where the design has been altered or made worse, then that element of the design should be designed to satisfy the Building Regulations, where applicable.

3.2 Construction, Design and Management Regulations

Design projects undertaken in the UK are subject to the requirements of the Construction (Design and Management) Regulations 2015 (CDM 2015), the objective of which is to ensure that health and safety issues are properly considered during a project's design and development so that the risk of harm to those who have to construct, use and maintain the building is reduced.

As a designer, in accordance with Regulation 9 of the CDM regulations, Hoare Lea have taken into account the general principles of prevention in the preparation of this report and where reasonably practicable, have eliminated, minimised and/or controlled foreseeable hazards associated with the design.

Where elimination has not been reasonably practicable, Hoare Lea is required to provide 'pre-construction' information in respect of any significant and/or unusual project-specific hazards that remain.

Following our design process, Hoare Lea confirm that there are no significant and/or unusual residual hazards associated with this particular design.

3.3 The Regulatory Reform (Fire Safety) Order

The Regulatory Reform (Fire Safety) Order (the RRO) is based on risk-appropriate compliance and requires a fire risk assessment to be carried out. The fire service will conduct inspections of premises to enforce the regulations. Whilst a guidance document has been produced by the government to assist in the preparation of the risk assessment, it should be noted that this document should not be used to design the building – the building design should be focused on satisfying the functional requirements of the Building Regulations.

The fire strategy detailed in this report does not, therefore, explicitly address the management requirements of the RRO. It will be necessary for effective fire safety management regimes to be developed by the building occupier, and a risk assessment of the premises to be conducted (and updated on an on-going basis).

3.4 Property Protection

This report deals only with Statutory Requirements, and property protection is not, therefore, explicitly addressed, unless otherwise stated. As such, it is recommended that the building insurers are consulted at an early stage to ensure that any additional needs are satisfied.

3.5 Materials and Workmanship

Regulation 7(1) of the Building Regulations requires that all building work should be carried out in a workmanlike manner, with adequate and proper materials that are appropriate for the circumstances in which they are used, are adequately mixed and prepared, and are applied, used or fixed so as to perform the functions for which they are designed.

Further guidance is provided in the Approved Document supporting Regulation 7(1).

Independent certification schemes exist to provide additional confidence that products are manufactured and installed to an appropriate and consistent standard. Such schemes can assist in ensuring that the Material and Workmanship requirements of Regulation 7(1) are satisfied. It is therefore suggested that, where appropriate, manufacturers and installers that are subject to independent certification schemes are specified on this scheme.

4. Means of Warning and Escape.

4.1 Functional Requirement.

The building shall be designed and constructed so that there are appropriate provisions for the early warning of fire and, appropriate means of escape in case of fire from the building to a place of safety outside the building capable of being safely and effectively used at all material times.

4.2 Means of Warning.

It is understood from the risk assessment report [REF: John Rylands Library, Deansgate – FRA Document 10Nov2021], the building is provided with a manually operated fire alarm system, with some areas of the building provided with automatic smoke and heat detectors. The main library has a VESDA type detection system within the ceiling. In addition, the fire alarm is linked to the University Centre and there is a hearing impaired alert system in place.

The existing fire alarm system should be maintained (no worse than existing), however, it is recommended that an automatic fire detection and alarm system is provided in the repurposed Lower Ground level.

4.2.1 Revolving and Automatic Doors

ADB recommends that any automatic and revolving doors provided within the building should not be placed across escape routes, unless:

- They are arranged to fail safely to outward opening from any position of opening; or
- Are provided with a monitored 'failsafe' system for opening the doors if the mains power supply fails; or
- They fail safely to the open position in the event of power failure; or
- Non-automatic swing doors of the required width are provided immediately adjacent to the revolving or automatic door.

It is understood that for security purposes, the sliding doors at the modern main entrance will be programmed to remain closed in the event of alarm activation or power failure during 'out-of-hours'. It has been confirmed that this will only occur when the building is being locked up, with minimal staff members present. As such, this arrangement is acceptable due to the alternative escape routes in close proximity to the main entrance.

4.2.2 Security Controls on Escape Route Doors

Measures incorporated into the design of a building to restrict access to the building or part of the building or part of it should not adversely affect fire safety provisions. Whilst it may be reasonable to secure some escape routes outside normal business hours, the measures left in place should be sufficient to allow safe evacuation of any persons left inside the building. The security controls should be taken into account within the management strategy.

4.3 Horizontal Means of Escape.

4.3.1 Heights on Escape routes.

In accordance with Approved Document B, the head height on escape routes should be a minimum of 2.0m.

It is noted that in the existing arrangement at the Lower Ground floor, the head height in the corridor may not achieve a clear head height of 2.0m. However, the clear headroom has been further discussed in Section 4.3.3. below.

4.3.2 Escape Widths.

The width of an escape route is dependent on the number of occupants required to use them as per the following table:

Table 2 – Escape Widths.

Minimum Width (mm)	Maximum number of persons
750	60
850	110
1050	220
5mm per person	More than 220

4.3.3 Travel Distances.

Travel distances within assembly and recreation building should be limited as follows:

- Single direction travel: 18m
- Multiple direction travel: 45m.

The actual travel distances at the basement level are subject to provision of scaled drawings.

Lower Ground.

The lower ground level is provided with multiple escape routes. Escape is possible via the new ramp which discharges into the shared final exit from the existing toilets at basement level (see Figure 2 below). In addition, the existing access routes are via two stairs (adjacent the existing male and female toilets) which discharge into the historic entrance foyer. As discussed in Section 2.4 above, it is understood that escape from the historic entrance foyer will be managed to allow occupants to escape via the historic entrance doors. Furthermore, it has been identified within the Evacuation plan for the building that this route is a fire escape route from the building.

As previously discussed, due to the existing nature of the doors, they are provided with approximately three locking mechanisms. Whilst the management strategy is outside the scope of these works, it is recommended that the management maintain this evacuation route to ensure that this historic entrance is accessible during the means of escape. This is subject to confirmation from the management of the building.

This is fundamental for the proposed strategy of the Lower Ground level. If the historic entrance is not appropriately managed during the evacuation, this will fundamentally affect the proposals within this strategy overview.

Based on the Evacuation Plan, the evacuation process is a managed evacuation and, therefore, it is considered that based on the evacuation via the new ramp and via the two existing stairs adjacent to the toilets, the proposed routes are reasonable (alternative escape provided) and within the maximum travel distance limits.

It is understood that the occupancy of the lower ground will be limited to less than 60 persons (subject to formal confirmation). As such, all escape routes should be provided with a minimum width of 750mm (850mm where unassisted wheelchair access is necessary).

The pinch point into the female toilets is approximately 620mm (from the corridor into the toilets which provide access to the top right stair). Therefore, the initial proposal is to utilise this route as an alternative escape route to the historic entrance foyer. The toilet would need to be separated from the egress route to the alternative stair and the route should be provided with a minimum clear width of 750mm (850mm where unassisted wheelchair access is necessary). However, if the amendments to the clear width via the female toilets can be achieved, escape is possible via the alternative stair.

Part B, given the existing nature of the lower ground, this would be subject to discussion and agreement with Building Control.

Figure 4 – Proposed Escape at the Lower Ground floor.

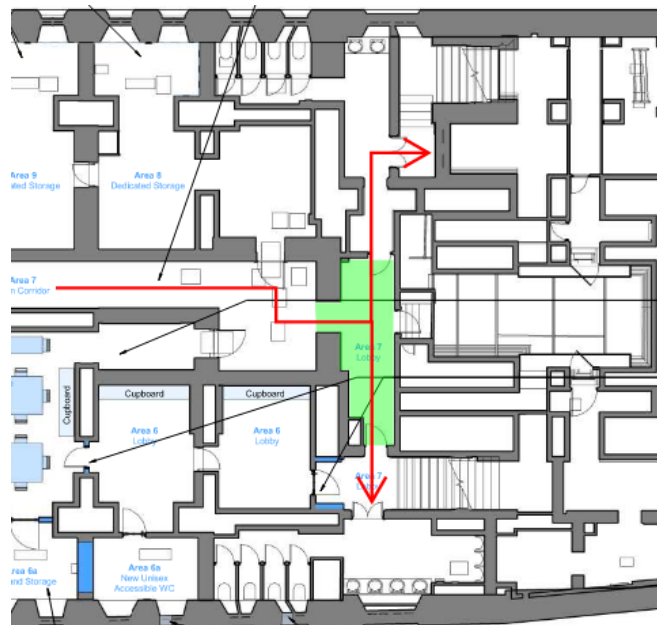
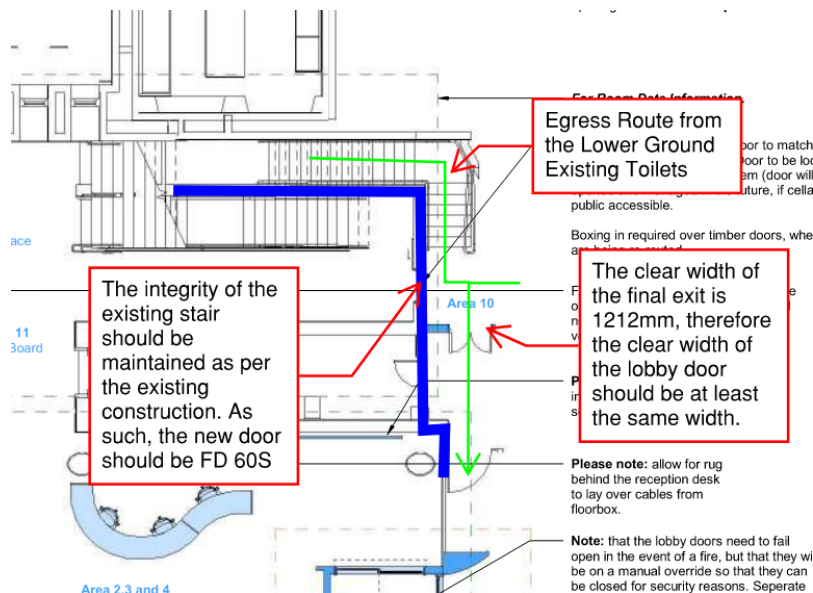


Figure 5 – Proposed Escape at the Ground floor.



The protected escape route from the stairs should not reduce in width at any point and, therefore, any new door along protected route via the new ramp should be at least as wide as the existing stair and final exit. Based on the plans provided this route should be a minimum of 1212mm. All doors should open in the direction of escape.

In accordance with AD-B, corridors greater than 12m in length that provide access to alternative escape routes should be sub-divided by fire doors fitted with self-closing devices. Therefore, it is recommended the corridor

serving the two vertical escape routes are provided with a sub-dividing cross-corridor door (approximate centre-point of the corridor).

4.3.4 Vertical Means of Escape – Lower Ground

It is considered that occupants from the lower ground level have access to the new ramp and potentially two existing stairs. The occupancy at lower ground level is low (less than 60 persons) and, therefore, based on the current vertical escape widths, there is sufficient clear width to accommodate the lower ground floor level occupants.

The final exits from the existing discharge route (from the existing basement toilets) should be maintained.

Elsewhere.

It is considered that the proposed works being undertaken within the several reconfigured rooms have not been made worse and, therefore, the existing escape provisions are no worse than existing. However, the access and protection to the central stair has been further discussed in Section 6.2.3.

4.4 Means of Escape for Disabled Persons.

As there is proposed access for the public at the Lower floor level, disabled refuges are required to be provided.

It has been confirmed that the new ramp is DDA compliant, therefore, there is no requirement to provide a refuge within the stair enclosure containing the ramp.

A disabled refuge should be provided to the one of the two existing stairs, as disabled access is now to be provided for potential public use and therefore constitutes a change of use to this area. The location of the disabled refuge is subject to confirmation to accessibility into each of the stairs. It is noted that the headroom along the route identified in Figure 4 is 1.89m in the corridor (where AD-B recommends 2.0m). However, if the existing headroom is acceptable, it is recommended to create a new lobby in the green highlighted section set out in Figure 4 by introducing a new door separating the adjacent and ensure the surrounding construction and doors achieve a period of 30 minutes fire resistance. As an alternative, “Area 6 Lobby” adjacent the stair could be reconfigured to accommodate a disabled refuge space, however, the “Area 6 Lobby” should be enclosed in 30 minutes fire resistant construction and be fire sterile. This is subject to confirmation.

The disabled refuge should be provided with a minimum area of 900mm x 1400mm. Each refuge should be provided with an emergency voice communication system consisting of Type B outstations in accordance with BS 5839-9. The evacuation of disabled occupants should be incorporated within the management strategy.

The location of the disabled refuges should not restrict the flow of occupants through the escape route. The evacuation of disabled occupants should be included within the management strategy/evacuation procedures for the building.

4.5 Escape Signs.

Every escape route, other than those in ordinary use will be distinctively and conspicuously marked by emergency exit signs of adequate size complying with the recommendations of BS ISO 3864-1 and BS 5499-4.

4.6 Emergency Lighting.

All emergency lighting should be provided with adequate artificial lighting. In addition, all escape routes should be provided with emergency lighting in accordance with Table 5.1 of AD-B and BS 5266-1.

5. Internal Fire Spread (Linings).

5.1 Functional Requirement.

To inhibit the spread of fire within the building the internal linings shall adequately resist the spread of flame over their surfaces; and have, if ignited, either a rate of heat release or rate of fire growth, which is reasonable in the circumstances. In this paragraph 'internal linings' mean the material or products used in any partition, wall or ceiling or other internal structure.

5.2 Wall and Ceiling Linings.

The wall and ceiling linings should meet the following classifications:

Table 4 – Classification of Linings.

Location	Classification (European Class)
Small rooms of not more than 30m ²	D-s3, d2
Other rooms	C-s3, d2
Circulation Spaces	B-s3, d2

For the purposes of this requirement, a wall includes:

- The internal surface of internal and external glazing (except glazing in doors).
- Any part of a ceiling which slopes at an angle greater than 70 degrees to the horizontal.

A wall does not include:

- Doors and door frames
- Window frames and frames in which glazing is fitted.
- Architraves, cover moulds, picture rails, skirtings and similar narrow members.
- Fireplace surrounds, mantle shelves and fitted furniture.

For the purposes of this requirement, a ceiling includes:

- Glazed surfaces
- Any part of a wall at 70 degrees or less to the horizontal
- The underside of a gallery
- The underside of a roof exposed to the room below.

A ceiling does not include:

- Trap doors and their frames
- The frames of windows or rooflights and frames in which glazing is fitted.
- Architraves, cover moulds, picture rails, exposed beams and similar narrow members.

6. Internal Fire Spread (Structure).

6.1 Functional Requirement.

The building shall be designed and constructed so that, in the event of fire, its stability will be maintained for a reasonable period. A wall common to two or more buildings shall be designed and constructed so that it adequately resists the spread of fire between those buildings. Where reasonably necessary to inhibit the spread of fire within the building, measures shall be taken, to an extent appropriate to the size and intended use of the building, comprising either or both the following: subdivision of the building with fire-resisting construction, and installation of suitable automatic fire suppression systems. The building shall be design and constructed so that the unseen spread of fire and smoke within concealed spaces in its structure and fabric is inhibited.

6.2 Fire Resisting Construction.

6.2.1 Connection between Lower Ground and Ground floor.

The arrangement of the new ramp will connect the lower ground to an existing protected escape route at the Ground floor. It is recommended that the ramp is separated by 60 minutes fire resisting construction and enclosed at the base of the ramp.

It is understood at ground floor level, the existing wall will be removed which separated the existing stair discharge route to enable an open route to serve the new ramp. Therefore, this discharge route should be separated by 60 minutes fire resisting construction.

As illustrated in Figure 5 above, it is proposed to provide a FD60S side-hinged fire door (a sliding door is not recommended in this location). Furthermore, as the existing arrangements did not use this route as an escape route at ground floor level, it is proposed to provide emergency signage to the door which states “do not use in an emergency” to ensure the existing arrangements are not affected.

Typically, each stair should either discharge direct to external air or via provide a protected route which leads to external air. The new ramp should be enclosed in fire resisting construction (throughout its height) and form part of the existing stair enclosure from the toilet area, with the route exiting via the existing protected route to outside.

The two existing stairs are open at Ground floor level and discharge via the historic entrance foyer. It is considered that the discharge route via the historic entrance foyer (and via the historic entrance) is reasonable on the basis that this will be a managed space in the event of an evacuation and also the new ramp discharges into a fire separated compartment (i.e. two distinct protected discharge routes). This is subject to agreement with Building Control.

6.2.2 Existing Plant Rooms.

Based on page 70 of the risk assessment report, the plant rooms were separated from the corridor. However, based on an on-site observation, the plant rooms are currently open to the circulation corridor. Due to the introduction of a public space at the Lower Ground floor, all plant rooms should be enclosed in 30 minutes fire resisting construction and accessed by FD 30S fire doors.

6.2.3 Protection to Existing Central Stair.

An additional door is provided from the Ground floor Primary Flexible Events Space into the existing central stair enclosure. In addition, a new route is provided from the imaging suite into the existing central stair at the First Floor. The integrity of this stair enclosure should be maintained during the works and the new door should be provided with an equivalent level of fire performance as the stair (and provided with smoke seals).

In the existing arrangement, it is understood that all rooms accessed off this stair are provided with a protected lobby which separates the stair from the accommodation.

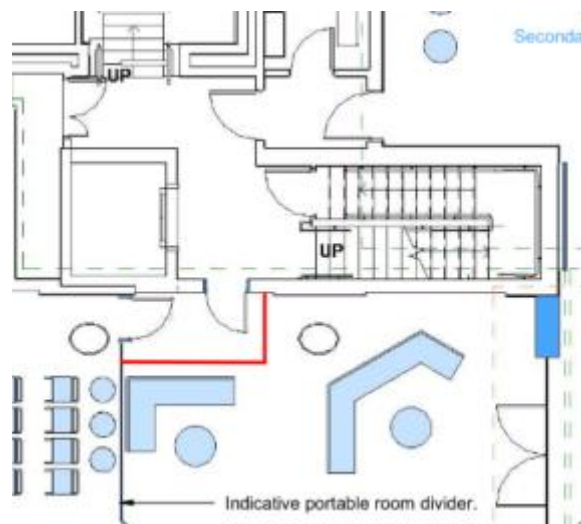
Therefore, at First floor level the door providing access into the imaging suite should be accessed from the protected lobby. The figure below shows the proposed arrangement for access to the First floor imaging suite.

Figure 6 – Proposals for lobby to imaging suite.



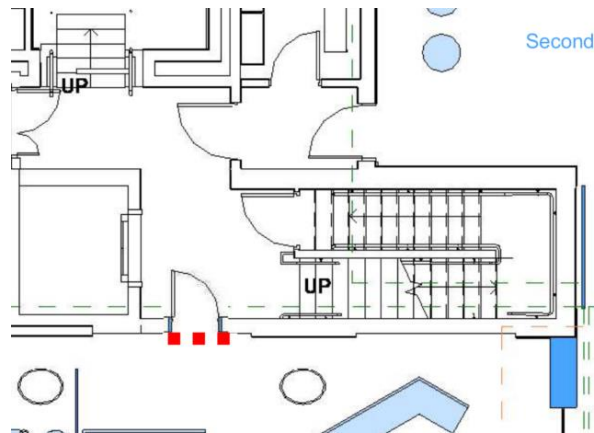
At the Ground floor there are two options for separating the stair from the adjoining events space. The first option is to incorporate a protected lobby as shown, which requires the addition of a fire protected lobby as indicatively shown below.

Figure 7 – Option 1 for Ground floor lobby protection.



Alternatively, a lobby can be created by re-swinging the door as shown below and introducing a fire and smoke curtain in front of the stair door (fire performance is subject to confirmation of survey). The curtain would be required to close on activation of the detection system (creating the “two-door” protection to the stair). This door would not be designated as an escape route in this instance. This proposal is subject input from the specialist fire curtain designer and approval by the Statutory Authorities.

Figure 8 – Option 2 for Ground floor lobby protection.



6.3 Fire Doors in Existing Construction.

Any new fire doors which are fitted in existing fire resisting construction should be provided to ensure the existing condition is not made any worse. Where a new door is provided as part of a protected escape route or a protected lobby, the door should achieve an appropriate fire resistance rating and be provided with smoke seals. It is understood that sliding doors cannot achieve the smoke seal requirement and therefore any such doors should be hinged doors.

This is applicable to the proposed door between the imaging suite and its protected stair lobby, and the door between the main entrance atrium and the existing toilet stair route (which will also include the ramp route).

6.4 Concealed Spaces (Cavities).

Where appropriate, suitable provisions should be made to prevent the unseen spread of fire and smoke through cavities or concealed spaces by the use of cavity barriers. The provision of these barriers should meet the recommendations of Section 9 of Approved Document B.

6.5 Fire Stopping.

Openings in any fire separating elements (e.g., compartment walls, cavity barriers, protected corridors etc.) should be protected with appropriate fire stopping or sealing to ensure that the fire resistance of the element is not compromised. The provision of any such protection should meet the general recommendations of Section 10 of Approved Document B.

7. External Fire Spread.

7.1 Functional Requirement.

The external walls of the building shall adequately resist the spread of fire over the wall and from one building to another, having regard to the height, use and position of the building. The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regard to the use and position of the building.

7.2 Space Separation Analysis.

The refurbishment of the building is not considered to affect the space separation requirements and, therefore, it is not necessary to undertake an external fire spread assessment.

8. Access and Facilitates for the Fire and Rescue Service.

8.1 Functional Requirement.

The building shall be designed and constructed so as to provide reasonable facilities to assist fire fighters in the protection of life. Reasonable provision shall be made within the site of the building to enable fire appliances to gain access to the building.

8.2 Fire Service Access.

Due to the nature of the proposed works, the Fire Service access is not being alter and, therefore, there is no requirement to review these areas i.e. the existing Fire Service access provisions are being no worse than existing.

Appendix – Indicative Compartmentation Plans.

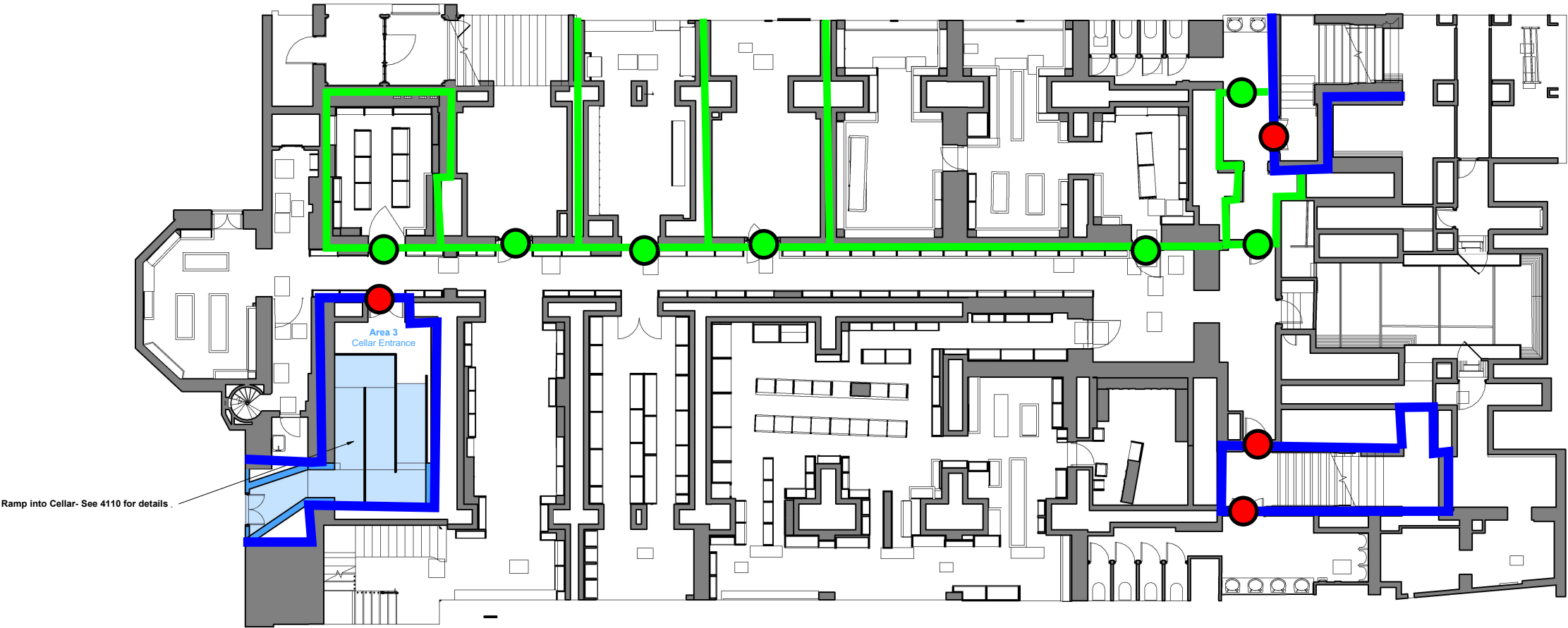
Fire Strategy Legend

Fire Resistance:

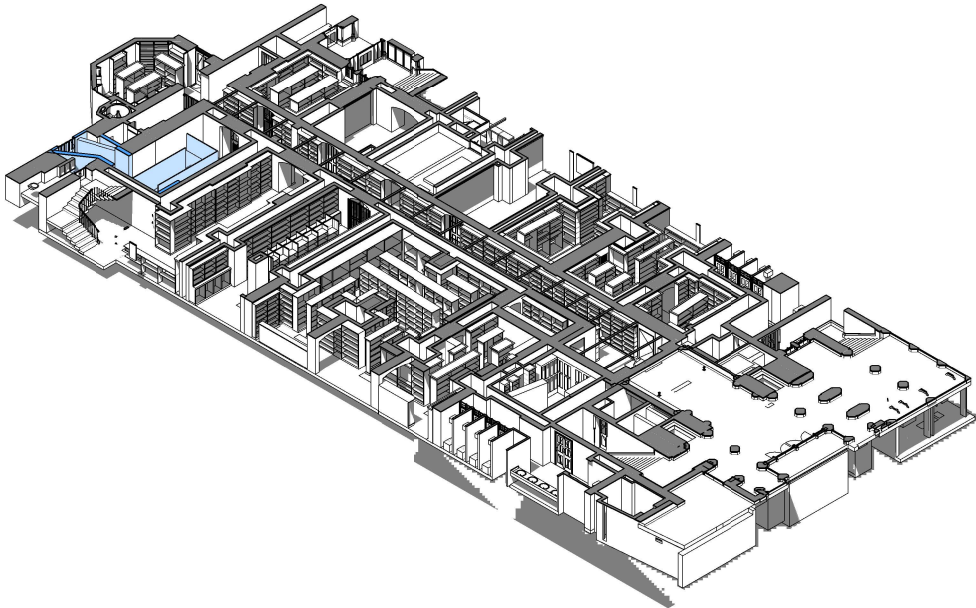
- 240mins
- 120mins
- 90mins
- 60mins
- 30mins

Fire Door:

- FD20
- FD30
- FD60
- FD20S
- FD30S
- FD60S



Cellar Floor Plan as Proposed
SCALB : 100



Axonometric - Cellar as Proposed

P1	16.03.23	JW	ELE	Initial Issue
Rev.	Date	Dim.	Auth.	Description
Purpose of Issue				
Review and Comment				
Project Information				
The John Rylands Research Institute and Library Deansgate, Manchester, UK				
Drawing Title				
Original Library - Level B1 - As Proposed				
Drawing Number				
Project ID	Originator	Functional Breakdown	Spatial Breakdown	Form Discipline Number
JRL	- DIA -	ZZ	- 01B - D60-	ACL - 4000
Project Number				
MAN_JRL_03 As indicated		Scale at A1	Status	Revision
		S3	P1	

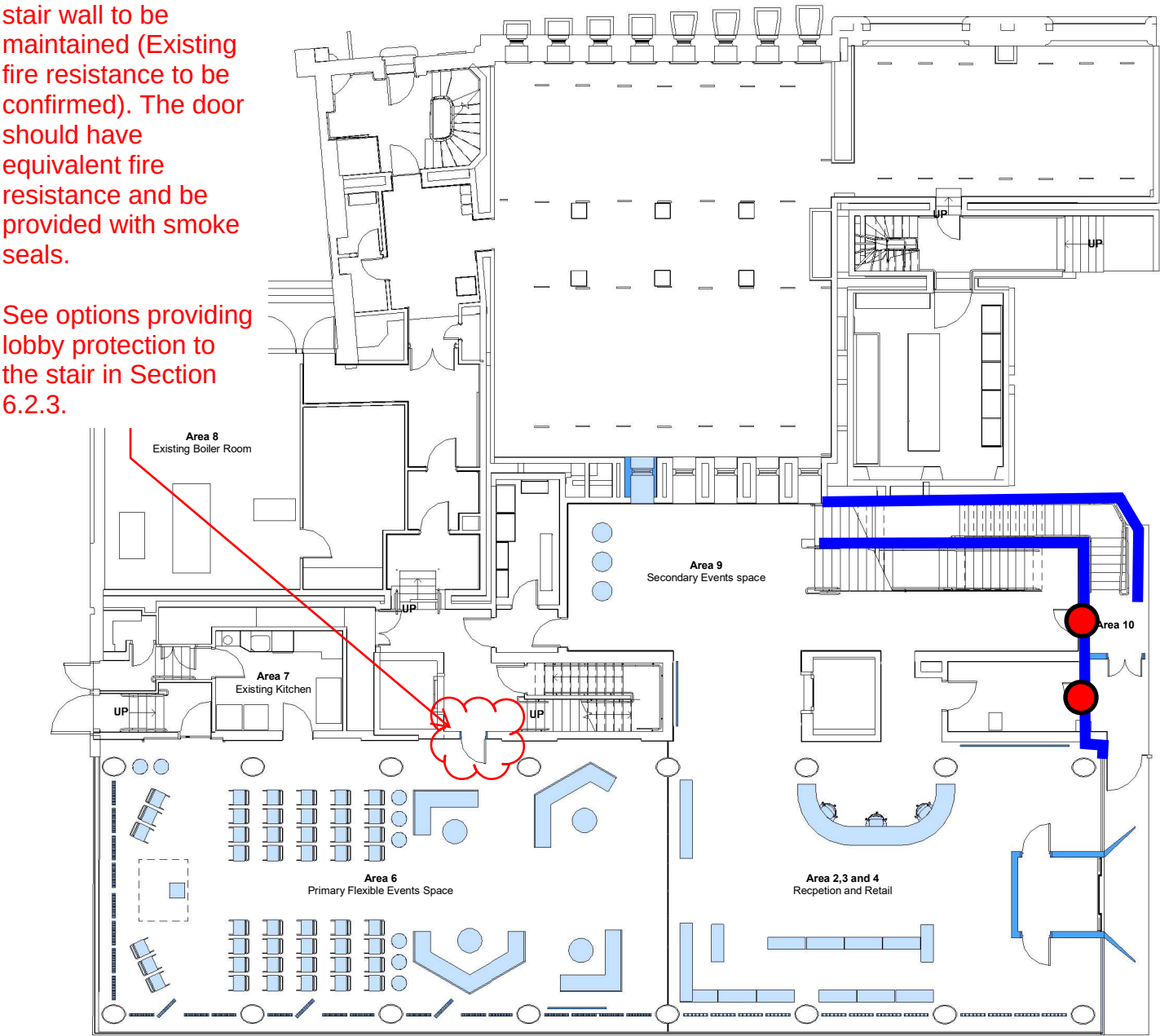
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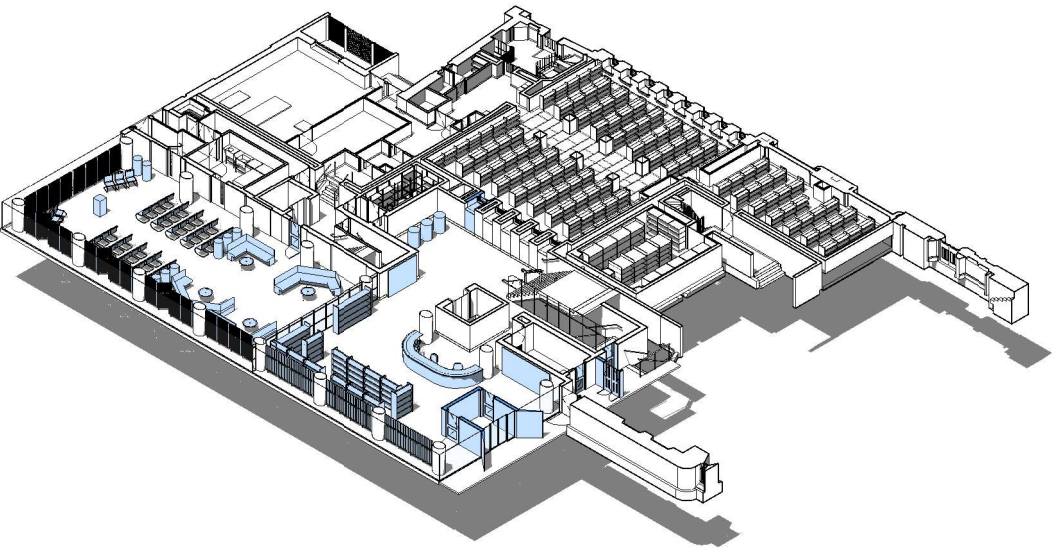
Integrity of existing stair wall to be maintained (Existing fire resistance to be confirmed). The door should have equivalent fire resistance and be provided with smoke seals.

See options providing lobby protection to the stair in Section 6.2.3.



Ground Floor Plan as Proposed

SCALE : 100



Axonometric - Ground Floor Plan as Proposed

Information Note

Any drawing format is to be read in conjunction with and at the scale of accompanying documents.

Where colours other than black or grey are used the drawing must be plotted in colour.

All dimensions are to be checked on site by the Contractor, scaling is for Local Authority purposes only.

Unless otherwise indicated, all dimensions are in millimeters.

All information on this drawing is to be read in conjunction with the relevant Donald Insall Associates (Insall) specification and trade contractors' drawings and information by specialists.

In the event of any discrepancy, please contact Insall immediately.

This drawing may contain survey information by others and is to be used solely for the purposes for which it was issued.

These are uncontrolled documents issued for information purposes only. If you have any queries regarding the drawings, contact Insall immediately.

Insall cannot be held responsible for any errors arising from changes made to an uncontrolled file.



P1	16.03.23	JW	ELE	Initial Issue		
Rev.	Date	Dim.	Auth.	Description		
Purpose of Issue						
Review and Comment						
Project Information						
The John Rylands						
Research Institute and Library						
Manchester						
Drawing Title						
Ground Floor Plan as Proposed						
Drawing Number						
Project ID	Originator	Functional Breakdown	Spatial Breakdown	Form	Discipline	Number
JRL	- DIA	- ZZ	- 10A - D60-	ACL	-	4051
Project Number		Scale at A1		Status		Revision
MAN_JRL_03		As indicated		S3		P1

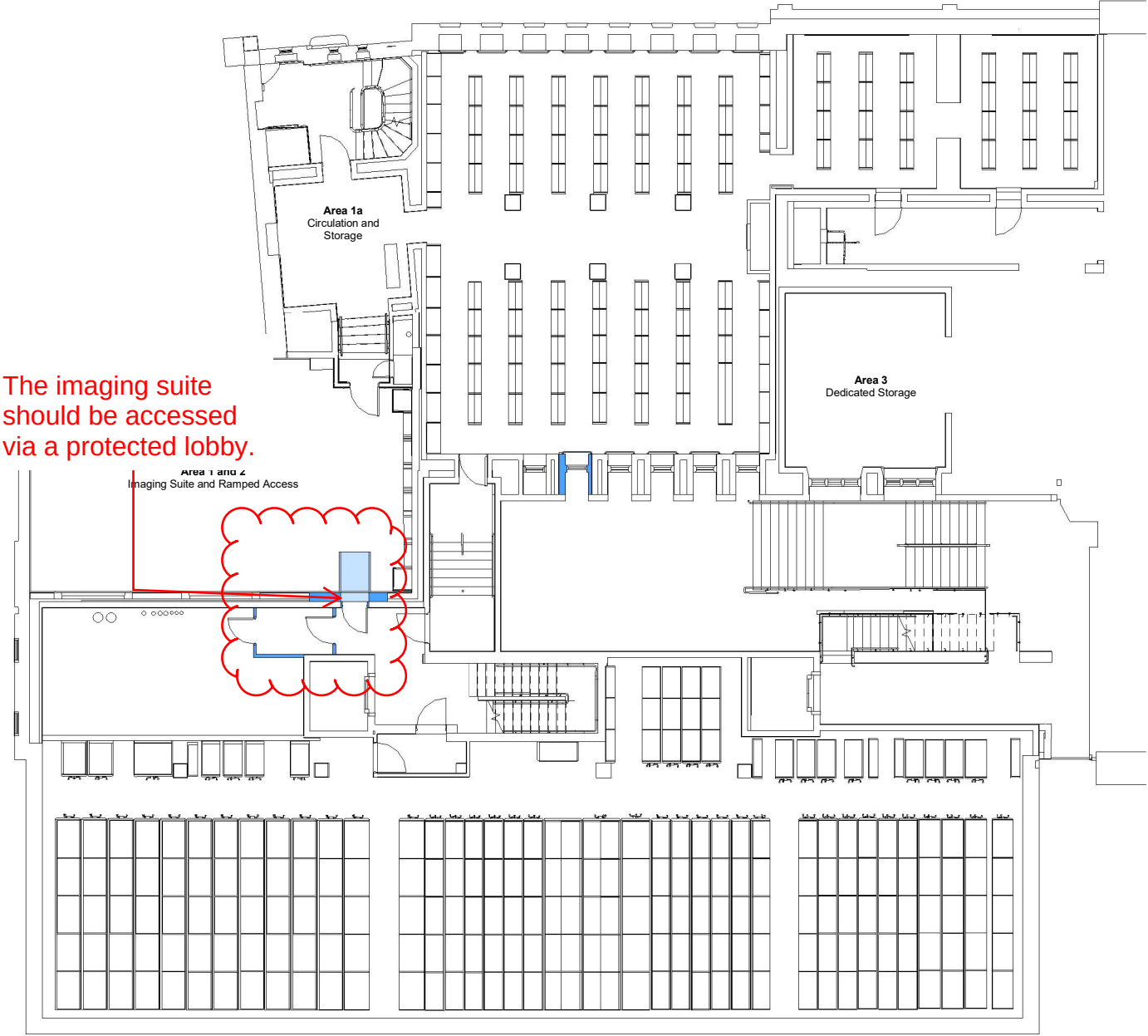
Donald Insall Associates

Chartered Architects and Historic Building Consultants

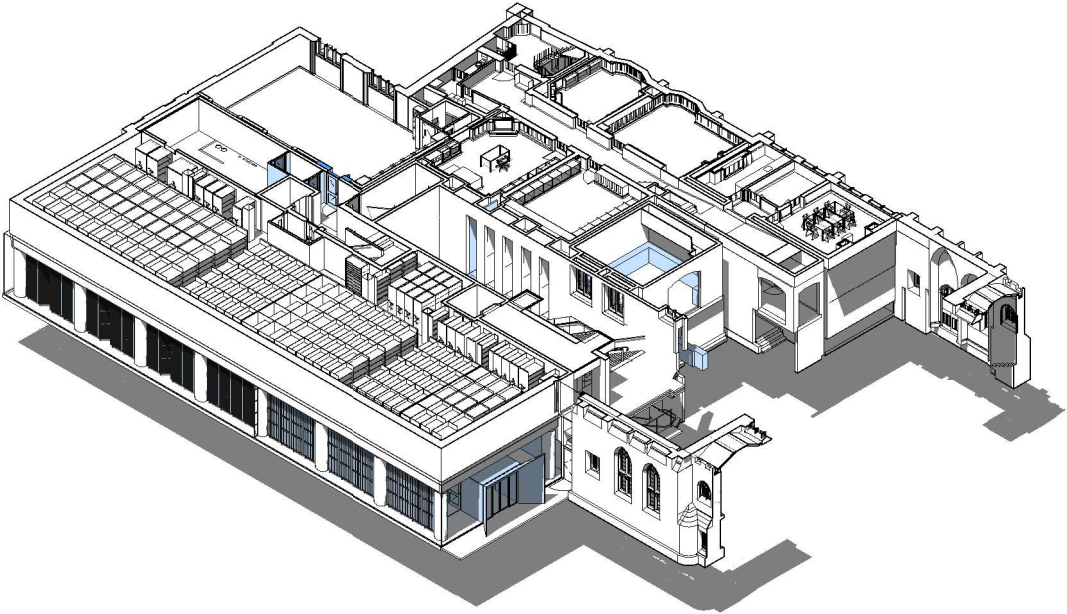
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First Floor Plan as Proposed
SCALE : 100



Axonometric - First Floor Plan as Proposed

Information Note

Any drawing format is to be read in conjunction with and at the scale of accompanying documents.

Where colours other than black or grey are used the drawing must be plotted in colour.

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Unless otherwise indicated, all dimensions are in millimeters.

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P1	16.03.23	JW	ELE	Initial Issue
Rev.	Date	Dim.	Auth.	Description
Purpose of Issue				
Review and Comment				
Project Information				
The John Rylands Research Institute and Library Manchester				
Drawing Title				
First Floor Plan as Proposed				
Drawing Number				
Project ID	Originator	Functional Breakdown	Spatial Breakdown	Form Discipline Number
JRL	- DIA	- ZZ	- 20A - D60-	ACL - 4052
Project Number		Scale at A1	Status	Revision
MAN_JRL_03 As indicated		S3	P1	
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