OUR TOWN HALL

Approach to Fire Safety - LBC 3

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OUR TOWN HALL PROJECT

MANCHESTER CITY COUNCIL

lendlease

Overview

This document outlines the pro-active approach to fire safety that the OTH Project Team have undertaken during the various phases of the project to date and outlines the ongoing commitment to ensure that fire safety is at the forefront of our thoughts throughout the construction stages and in to occupation.

The Team have been engaged with GMFRS on a regular basis during as captured below;

- In the early stages of the OTH Projects life GMFRS inspected the building and instructed MCC to clear the building of all occupants from level 5 upwards.
- During 2018 GMFRS (led by Gabriel Campbell) visited site twice with local fire fighting crews to familiarise themselves with the OTH site.
- During the Competitive Dialogue Phase with Lendlease and Laing O'Rourke MCC focused heavily on Fire Management requirements during the Construction Phase and produced the attached minutes/actions from a meeting attended by OTH Project Team, MCC Health and Safety, MCC Insurance, MCC FM. **(Refer to Appendix A)**
- During RIBA Work Stage 3 (June 2018 - March 2019) Gabriel Campbell GMFRS has attended regular design meetings with the OTH Project Fire Engineers and wider Design Team.
- In early April 2019 prior to Lendlease occupying the building (1st May 2019) and prior to Notre Dame fire Gabriel Campbell and a Fire Fighting crew attended site to familiarise themselves with the site environment and introduce themselves to the Lendlease Team.
- Prior to Lendlease taking responsibility of the OTH Building the attached MCC OTH Fire Management documents were issued to the Lendlease Team from Simon Gardiner MCC Health and Safety Manager; 1. Strategic Fire Risk Assessment. 2. Building Operating Model and Fire Safety arrangements. 3. Manchester Town Hall - Temporary Means of Escape. **(Refer to Appendix B)**
- On 26th April 2019 Lendlease Fire Risk Assessment (prepared by Trenton Fire Limited) was presented prior to taking responsibility for the OTH Building on 1st November 2019. This report was focused on Life Safety, and a follow-up report is being commissioned focused on Asset Protection. **(Refer to Appendix C)**
- On 3rd May 2019 Chris Ruta (Lendlease Project Director) chaired the first OTH Fire Risk Management Meeting (established after Notre Dame) with invites being extended to OTH Design Team, GMFRS, Trenton Fire Engineers, Arup Fire Engineers, MCC H&S, MCC Insurance and MCC Risk and Resilience Manager, this meeting focused on; Fire Management (current state), Fire Management (Construction Phase - which will evolve). Meeting minutes which are attached. **(Refer to Appendix D)**

The Developing Fire Strategy

The early works applied for within this LBC Submission will naturally mean a shift in focus with regards to the developing fire strategy and fire risk assessment. The construction activities which form part of the early works packages, have all been considered in relation to the impact on fire safety.

Principally, the firefighting strategy will not significantly change during the limited scope of the early work packages. The current dry-riser strategy and current access routes to the building will be maintained for the duration of the early works. We will deploy additional fire control and monitoring measures within the localised construction zones during the early works which will be developed further with GMFRS and our appointed Fire Engineer. All works will look to minimise hot works where practicable and where not possible a robust permit system and monitoring / fire watch will be implemented.

Lendlease are in the process of appointing a specialist Fire Engineer who we will work with to develop our detailed Construction Fire Safety Plan and robust project specific control measures, risk reduction strategies and monitoring procedures. In addition to Trenton Fire who will be carrying out fire risk assessments of the projects during the developing stages. It's important to note that these are evolving documents and plans which will be updated in conjunction with the 'OTH Fire Risk Management Group' noted above.

Scaffolding

The most significant aspect of the early works which has the potential to impact on the fire-fighting strategy is the erection of scaffolding. Fire safety was a key criterion when developing the Scaffolding strategy and several steps were taken to reduce any associated risk of fire spread which include;

- All materials will be fire retardant to BS EN 15301-1.
- The scaffold will predominately be decked out with steel scaffold boards, however due to the irregular contour of the building façade fire retardant timber scaffold boards will be required on the inner face. The timber boards will be purchased new for the project and have a life span of 5 years.
- If cutting of the timber boards is required, this will be done either off site or in an agreed area on site away from the building and the exposed ends re-treated with fire retardant coating before being installed on the scaffold.
- Sheeting, if applicable to be flame retardant to BS 7955 and certified to LPS 1215.
- The scaffold has been designed to ensure that it does not breach any existing fire hydrants.
- The scaffolding has been designed to ensure that the fire engine swept analysis is not breached.
- The design of the scaffold will be subject to a Fire Risk Assessment to be carried out by Trenton Fire
- Provision for the installation of a temporary dry riser located on the external elevation of the scaffold will be review with Trenton Fire.
- Temporary fire extinguishers will be located in strategic locations in and around the scaffolding during and after erection. These will be in-accordance with the fire risk assessment.
- Means of escape from the scaffolding will be via a number of haki staircases. These staircases being located as per the fire risk assessment.
- Temporary detection systems will be installed, if required by the fire assessment.
- No flammable materials will be left unattended on the scaffolding during and after erection.

Further to this issue of the Scaffolding design, we have tabled the proposals at the OTH Fire Risk Management Meeting and have received helpful feedback relating to the use of scaffold sheeting. It is now proposed that any sheeting attached to the scaffold will only start from

Level 02 to reduce the risk of fire spread. Engagement with GMFRA and the OTH Fire Risk Management Group' will continue throughout the developing scaffolding phases.

Protection of Vulnerable Spaces

Lendlease are extremely aware of the risk to vulnerable spaces, specifically those that may be exposed to hot works. Whilst the team have been challenged to design-out hot works wherever possible there will be instances during the project where it will be unavoidable.

On the OTH project we will be implementing a Hot Works permit system. Permit's will be required for all work where there is an elevated heat source or where sparks produced have the ignition energy to ignite any combustible material.

Our task specific flow chart shows the steps involved in this system;

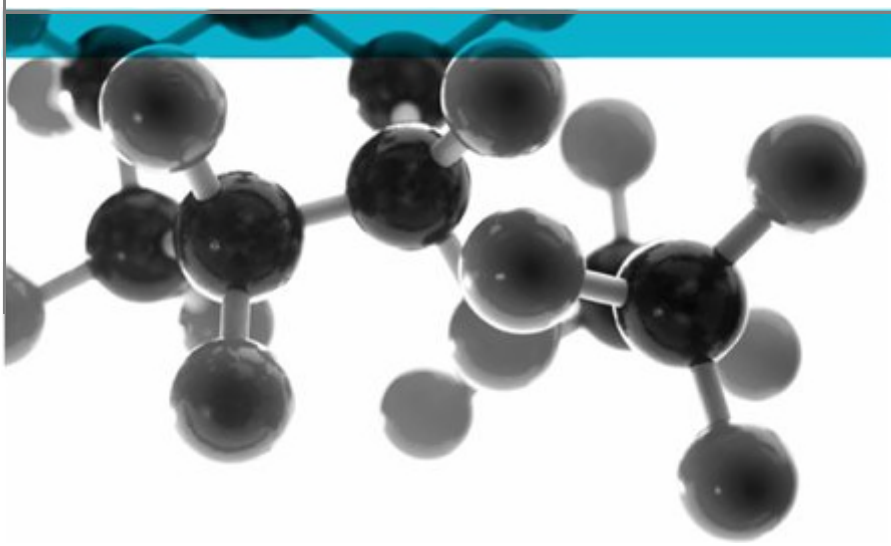


Within the flow chart where vulnerable areas are identified, additional protection may be deemed necessary. Each task specific permit will be assed individually and if temporary covering materials are deemed necessary, they will conform to LPS 1207 (or an equivalent standard).

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Manchester Town Hall Temporary Means of Escape Strategy



A Report to:	Manchester City Council	**Date:**	22/12/17
Project No:	303581	**Issue No:**	01
Document Reference:	AO8191R		

Testing
Advising
Assuring

Registered Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL United Kingdom. Reg No.SC 70429

This report in issued in accordance with our terms and conditions, a copy of which is available on request.

Revision History

Issue No : 01	Issue Date : 22/12/17
Reason for Revision: (Description)	

Prepared by:	 Stephanie Goodchild Consultant (For and on behalf of Exova Warringtonfire)
Reviewed by:	 Neil Woods Fire Risk Assessment & Training Manager (For and on behalf of Exova Warringtonfire)

Validity

This report is formulated on the basis of the information and experience available at the time of preparation. It is applicable to the above-mentioned project only in accordance with the client's instructions. It is only valid provided no other modifications are made other than those for which a formal opinion has been sought and given by Exova Warringtonfire.

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1 INTRODUCTION

Exova Warringtonfire has been requested by Manchester City Council to provide a Temporary Means of Escape Strategy to cover a specific period of time from 15th January 2018 to end of June 2018. During this timeframe Manchester Town Hall will be officially closed for refurbishment work, however, there will be limited occupation of the building for staff and public and not all existing exit and circulation routes will be available for use.

This strategy shows how the means of escape requirement will be adequately maintained during this transitional period.

Note: construction work will not be undertaken during this transitional period.

2 B1 - Requirements

2.1 OCCUPATION

Defined areas of the building will remain occupied over the six month period at levels 1 (ground floor) up to level 4 (3rd floor). Public will only be admitted to level 1.

2.1.1 Level 1

Coroner's Court (public areas)

School Appeals

Project Team

2.1.2 Level 2

Coroner's court (staff only)

2.1.3 Level 3

Project Team

2.1.4 Level 4

Lord Mayor's Suite

2.1.5 OCCUPANCY FIGURES

2.2 MEANS OF ESCAPE

There are currently four main exits from Level 1:

- Albert Square
- Princess Street
- Lloyd Street

- Cooper Street.

It is proposed to temporarily close three of these four exits.

The proposal is to utilise the existing Cooper Street exit, the wheelchair access ramp on the Lloyd Street elevation, the two link bridges into the Town Hall Extension at Levels 2 and 3 and a route through the basement via the inner courtyard and out using the vehicle ramp.

Having walked and reviewed these routes it is considered that the wheelchair access ramp and basement options are not acceptable alternative means of escape.

The wheelchair access ramp is adjacent to the Lloyd Street entrance and has a single leaf door 1200mm wide which opens inwards using a push button. This exit width is not suitable for the maximum number of occupants that may need this route.

The basement route passes through the Councillor's car park and up the vehicle access ramp. This presents many hazards such as: cars blocking the escape route; cars coming down the ramp as people are escaping up the ramp; an uneven cobbled surface which may cause trips and slips and a convoluted route which would need improved exit signage and lighting.

The two link bridges are considered acceptable as they lead from the Town Hall into the Town Hall Extension which is a separate building. The link bridges have fire doors FD30s at either ends are sterile spaces.

Therefore this Means of Escape Strategy is based on two of the main exits from Level 1 remaining available during this transitional period, Cooper Street and Lloyd Street.

2.2.1 Level 1

There are two exits from Level 1, Cooper Street and Lloyd Street. Both exits are large enough to accommodate the total occupancy of Level 1 merging with those exiting from upper levels via the 2 corresponding spiral stairs. It is possible to find alternative routes from all occupied areas at Level 1.

2.2.2 Level 2

There are 4 exits from Level 2, Cooper Street spiral stair, Lloyd Street spiral stair, Lloyd Street Bridge Link East (lower level) and Lloyd Street Bridge Link West (lower level). All the exits are large enough to accommodate the total occupancy of Level 2. It is possible to find alternative routes from all occupied areas at Level 2.

2.2.3 Level 3

There are 4 exits from Level 3, Cooper Street spiral stair, Lloyd Street spiral stair, Lloyd Street Bridge Link East (upper level) and Lloyd Street Bridge Link West (upper level). All the exits are large enough to accommodate the total occupancy of Level 3. It is possible to find alternative routes from all occupied areas at Level 3.

2.2.4 Level 4

There are 2 exits from the Lord Mayor's suite, the Lord Mayor's private stair which is situated within the suite and via the Level 4 corridor to all the previously mentioned exits. The means of escape within the Lord Mayor's suite is an existing condition which is not altered by this strategy.

2.3 MEANS OF WARNING

The existing L2 fire alarm system within the Town Hall will remain operational in all areas throughout this transitional period. As construction work will not be carried out during this period there will be no requirement to isolate any of the smoke detectors. There will be no alterations to the existing fire alarm cause and effect.

2.4 EXIT SIGNAGE

The existing exit signage within the building will need to be modified in line with BS 5499-4:2013 Safety signs – Code of practice for escape route signing, in order to ensure that both staff and public are aware of the escape routes available. This is considered critical as some of the main exit routes people will be familiar with are the ones that are temporarily being closed.

Therefore, prominent wayfinding signage is recommended to provide clear guidance as to the location of the escape routes.

In positioning the signage lines of sight and light interference should be considered.

2.5 MANAGEMENT

During this transitional period the Town Hall will continue to be maintained and managed by the existing building management personnel who are familiar with the layout, systems and procedures relevant to this iconic building. Staff should be made aware of the new arrangements and means of escape strategy.

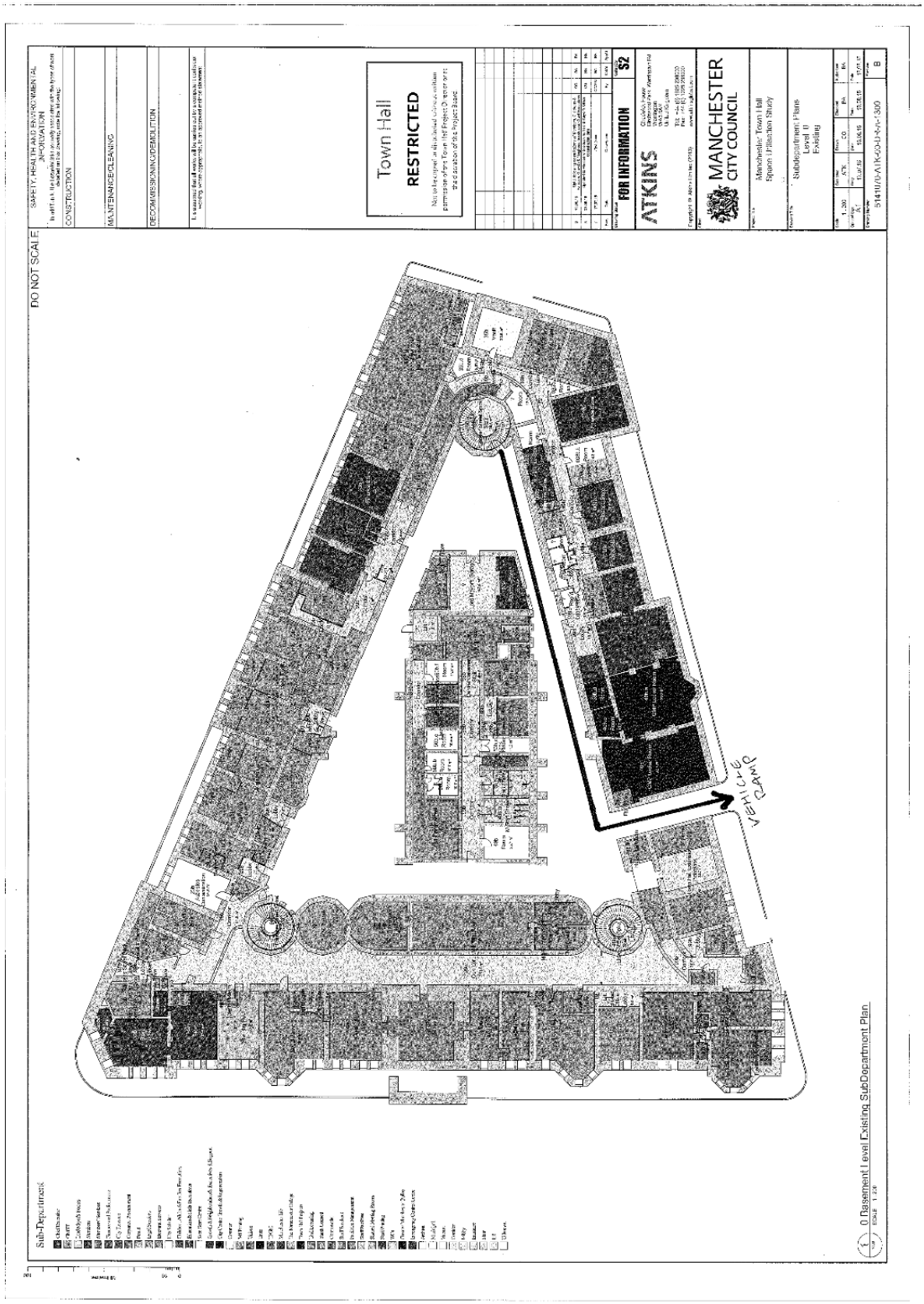
Adequate training should be given to the management team in regard to the interim means of escape arrangements including those who would assist in managing any fire incident.

3 CONCLUSION

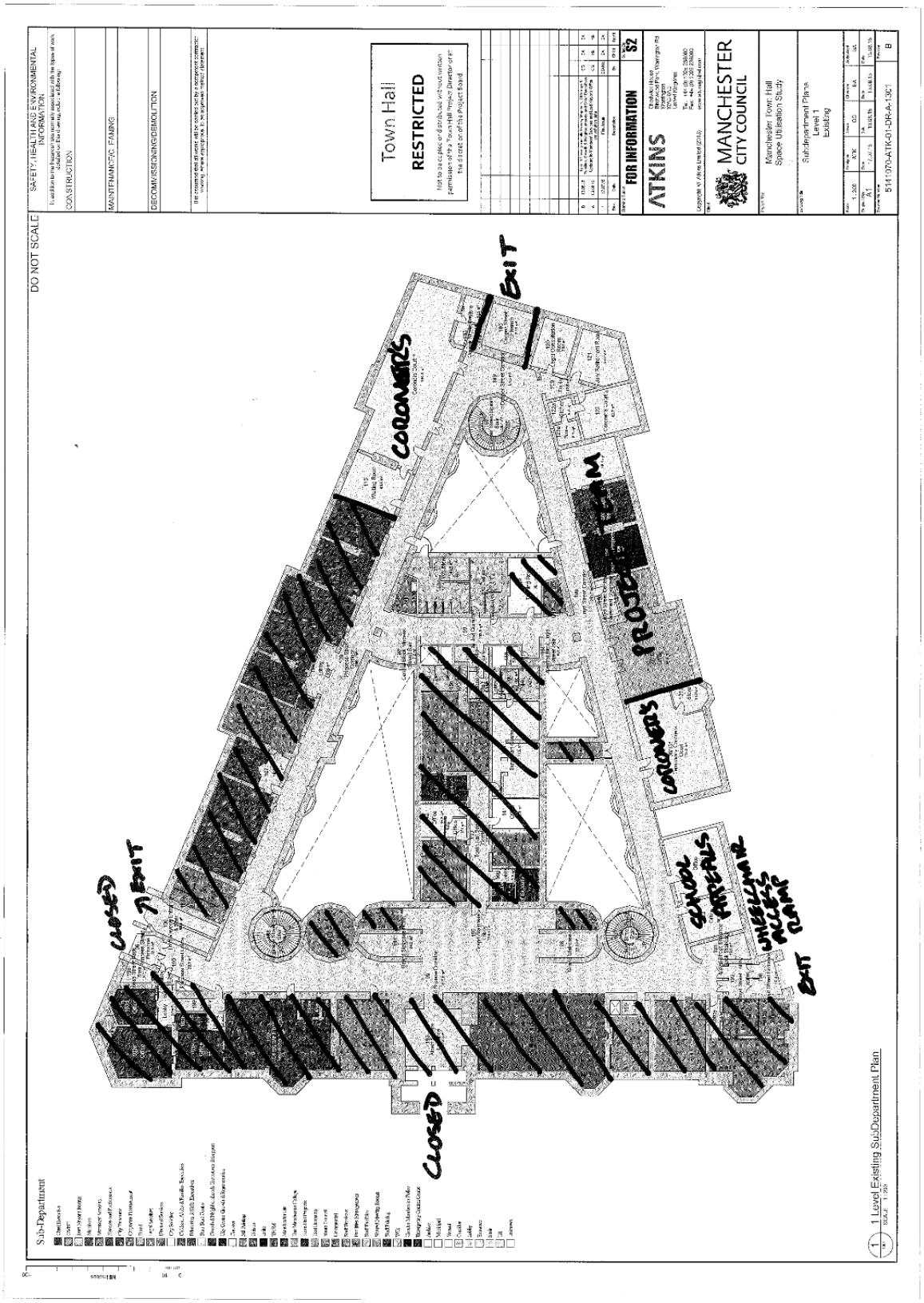
This Temporary Means of Escape Strategy document shows that adequate means of escape for both staff and public will be maintained during this transitional period.

4 Appendix

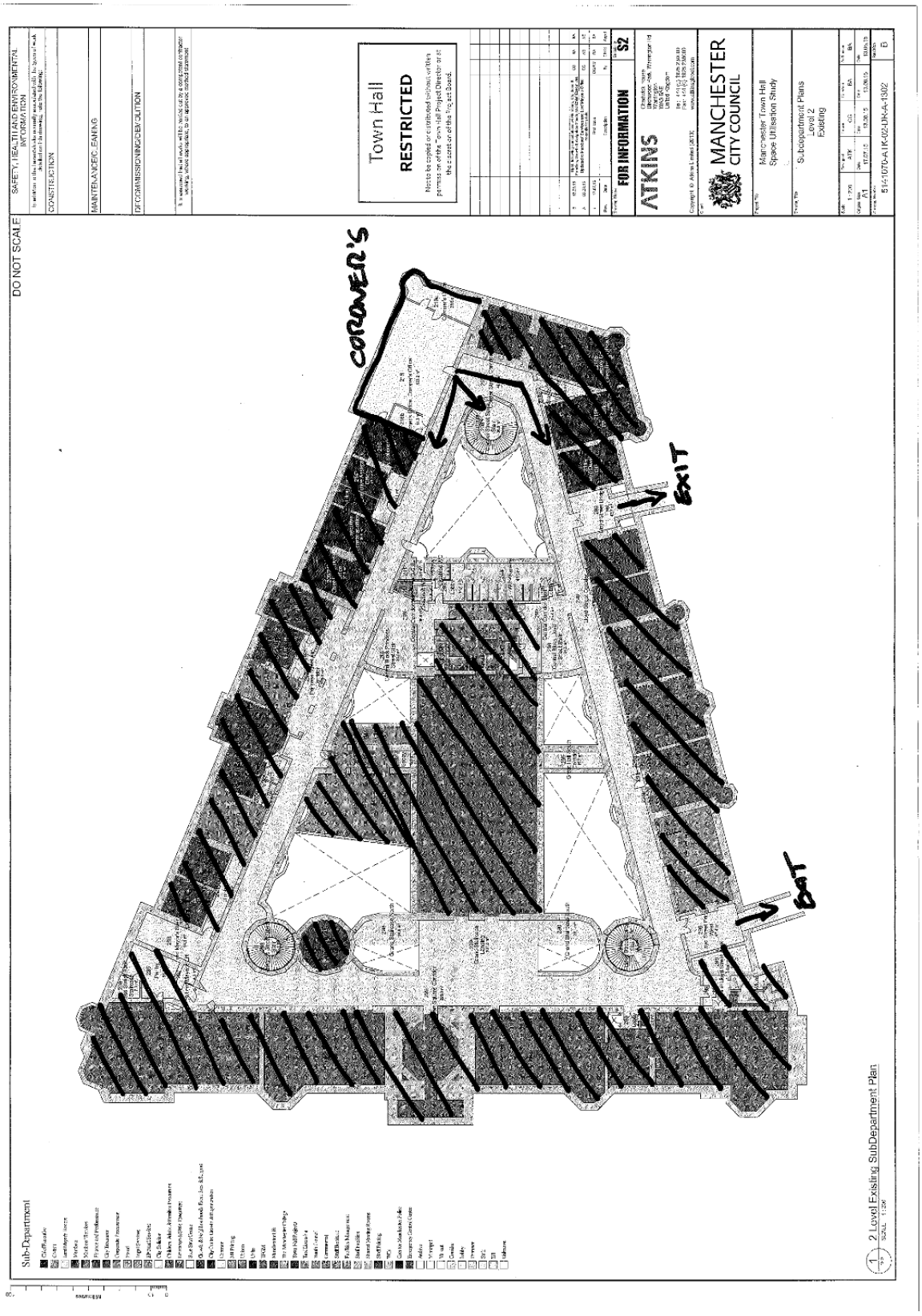
4.1 Level 0



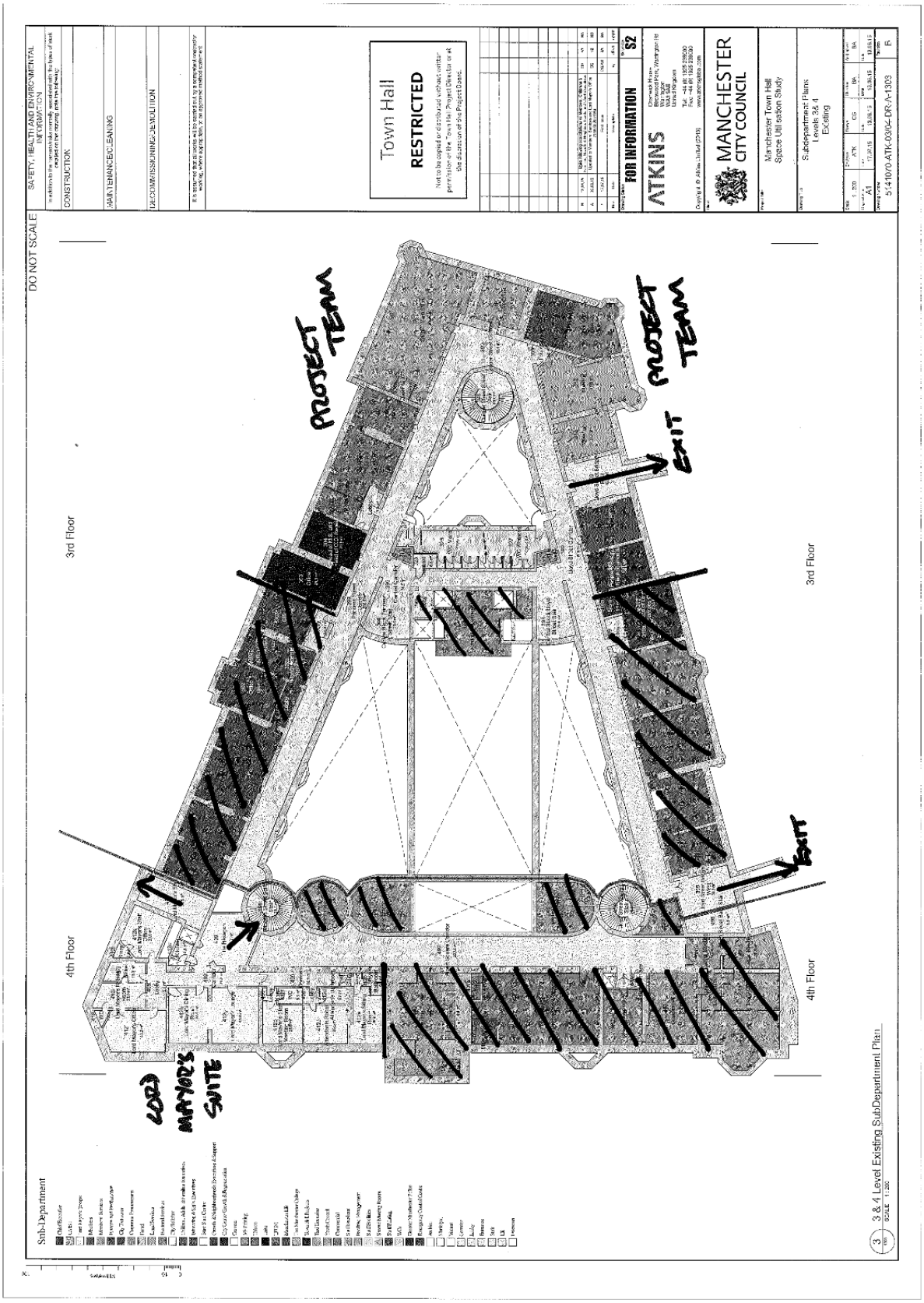
4.2 Level 1


DO NOT SCALE
SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
CONSTRUCTION
MAINTENANCE/CLEANING
DECOMMISSIONING/DEMOLITION
Town Hall
RESTRICTED
FOR INFORMATION
ATKINS
MANCHESTER CITY COUNCIL
Manchester Town Hall
Space Utilisation Study
Sub-Department Plans
Level 1
Existing
B1H1070-ATK-01-DR-A-1301
Sub-Department
CLOSED
EXIT
CORONERS
PROTECTED
CORONERS
JUDGES ENTRANCE
EXIT
CLOSED
1 Level Existing Sub-Department Plan

4.3 Level 2


DO NOT SCALE
SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
CONSTRUCTION
MAINTENANCE/CLEANING
DECOMMISSIONING/DEMOLITION
Town Hall
RESTRICTED
FOR INFORMATION
S2
ATKINS
MANCHESTER CITY COUNCIL
Manchester Town Hall
Space Utilisation Study
Subdepartmental Plans
Level 2
Existing
514-107D-A1F-02-DR-A-1302
CORONER'S
EXIT
EXIT
Sub-Department
2 Level Existing SubDepartment Plan
SCALE 1:250

4.4 Levels 3 & 4


DO NOT SCALE
SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
CONSTRUCTION
MAINTENANCE/CLEANING
DECOMMISSIONING/DEMOLITION
Town Hall
RESTRICTED
FOR INFORMATION
S2
ATKINS
MANCHESTER CITY COUNCIL
Manchester Town Hall
Space Utilisation Study
Sub-Department Plans
Levels 3& 4
Existing
5141070-ATK-0306-DR-A-1303
Sub-Department
3rd Floor
4th Floor
PROJECT TEAM
EXIT
LORD MAYOR'S SUITE
3 & 4 Level Existing Sub Department Plans
SCALE 1:200

Construction Phase
Fire Risk Assessment Report
Manchester Town Hall



Development/Project Title	Manchester Town Hall - Construction Phase - Grade 1 listed Civic building Refurbishment
Address	Manchester Town Hall, Albert Square, Manchester, M60 2LA
Job Number	TX 131197
Date of Assessment	10.04.2019
Review Date	TBC by Principal Contractor
Assessor	Gareth Green

NOTE: The fire risk assessment should be reviewed by a competent person by the date indicated above, or earlier, where there is reason to suspect that it is no longer valid or if a significant change in conditions or arrangements has taken place.

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REQUIREMENT UNDER THE REGULATORY REFORM (FIRE SAFETY) ORDER 2005

The Regulatory Reform (Fire Safety) Order 2005 imposes requirements on the **'Responsible Person'** to take such general fire precautions as will ensure, so far as is reasonably practicable the safety from fire of any of their employees or other relevant persons. The principal requirement is to make a suitable and sufficient assessment of the risks to which relevant persons are exposed.

A relevant person is any person (including the responsible person) who is or may be lawfully on the premises, including any person in the immediate vicinity of the premises who may be at risk from a fire on the premises.

The main duty-holder is the **'Responsible Person'**. The duties imposed on the responsible person cannot be delegated but are extended to every person, who has to any extent, control of those premises, so far as the requirements relate to the matters within his control. If a third party is appointed to carry out the fire risk assessment it is expected that the responsible person will exercise the principles of due diligence in choosing such a contractor.

It is a requirement that the fire risk assessment is reviewed by the responsible person periodically so that it is up to date; particularly if there is reason to suspect that it is no longer valid. Trenton Fire Ltd recommends that a review is carried out at least once per year or if/where significant changes or material alterations have been made. Construction projects by their very nature should prompt more regular reviews in-line with key stages of the works programme.

TRENTON FIRE LTD

Trenton Fire Ltd is a leading, independent fire safety consultancy providing unbiased fire risk assessments and fire engineered solutions both in the UK and overseas. As part of the Butler and Young Group, we operate across all sectors and have an excellent track record of innovation and project support. This includes education, healthcare, residential and industrial buildings, which has provided us with the experience and expertise to ensure clients receive the best support, advice and solutions.

The company are **UKAS Accredited Third Party Fire Risk Assessment Certified** to the **BAFE SP205 Scheme, Gold Standard** and was the first company to receive this award. We are audited annually by National Security Inspectorate (NSI) to ensure our policies, procedures, competency, service delivery standards and quality are maintained.

Businesses that choose NSI approved companies have the reassurance that their contractors will work to the highest industry standards demanded by the Police, Fire and Rescue Services and the insurance industry.

COMPETENCE OF RISK ASSESSOR

Gareth Green of Trenton Fire is considered suitably qualified in all necessary Fire Safety disciplines. A former member of the Fire and Rescue Service and Instructor at the Fire Service College in a range of Fire Safety subject matter. He has completed study through Government Fire Safety establishments, is certified through Nebosh for Health and Safety and Fire Safety/Risk management and has achieved British and European standard Advanced Fire Prevention and Fire safety management qualifications through the Confederation of Fire Protection Associations. Gareth holds Member status of the Institute of Fire Engineers (MIFireE).

FIRE RISK ASSESSMENT METHODOLOGY

The basic purpose of a "Fire Risk Assessment" (FRA) is to identify the general fire precautions the responsible person needs to take. The FRA should only be carried out when a premise is occupied and in normal use. If, in the case of a new or refurbished premises, there is a need to carry out a 'pre-occupation' FRA, a further assessment should be carried out as soon as the premises is in normal use.

This FRA has been conducted with regard to the principles and approach of the latest revision of Publicly Available Specification 79 (PAS 79) 2012, and construction industry guidance "Joint Code of Practice (Construction Industry FPA) Fire Prevention on Construction Sites", 9th Edition October 2015, with the overall mission of ensuring that all has been done to reduce both hazard and risk to a level that can be demonstrated to be as low as reasonably practicable (ALARP).

The assessment, observations and recommendations are only relevant to the conditions within the premises, site or specified area at the time of the survey. This fire risk assessment is non-invasive unless specified otherwise, and the methodology is not intended to address:

- the protection of property (i.e. the premises and its contents)
- environment
- business continuity
- safety of fire-fighters in the event of a fire on the premises

It otherwise covers the relevant occupied areas, common parts, landlord areas and adjacent property risks.

The significant findings arising from the assessment are contained in the report with a summary of the necessary remedial actions being produced in table form. The responsible person should act on these findings to achieve compliance with the Order. Photographs, plan drawings and other relevant documentation may be provided to assist clarity as appropriate.

GUIDANCE NOTES

In accordance with the CDM Regulations 2015 there is a duty placed on all relevant persons (client and client appointed parties) to ensure they are co-operating and discharging their duties, to identify and eliminate hazards, and reduce the likely risk from hazards where elimination is not practicable. In addition and where the project may not be notifiable to the HSE under the CDM Regulations 2015, the client must identify who is responsible for ensuring fire risk and potential for damage has been fully considered, and kept to a minimum during construction and use. Information relating to the above are contained in this document and where appropriate in the construction fire safety strategy document (CFSS).

A key element of managing construction fire safety is the production and ongoing development of the fire safety plan. Suitable records should be maintained to identify persons with responsibilities within the construction phase plan. Relevant parties are duty bound to co-operate and co-ordinate activities where partial control or shared use of site occurs. All persons involved in the process must have received appropriate training and be competent in their roles.

EXECUTIVE SUMMARY

This report has been produced for Lendlease for the refurbishment of Manchester Town Hall as part of the ongoing fire risk assessment process. Manchester Town Hall is a Grade 1 listed premises undergoing a major refurbishment project. Handover from MCC is due on May 1st 2019 and Surveying work will continue throughout the premises. The works are due to be ongoing for the next 5 years.

This report refers to Manchester Town Hall building (Old) and does not include the Town Hall extension. It will however address the link bridges connecting the 2 premises over levels 2 & 3 and the report has been compiled in cooperation and with assistance from the client with regard to access, reference and current construction information pertaining to the premises and company fire policy, strategy and procedures. The findings contained in this report are following a visit to the site, which was conducted on 10.04.2019.

Generally, there appeared to be good awareness of fire safety across the site, which should be maintained during all stages of the project, with periodic audits undertaken by the Primary Contractor Management teams and where agreed between the client and Trenton Fire Ltd. The main categories of hazard requiring attention at this time are; Electrical Sources of Ignition, Fire spread and compartmentation, Fire safety signage, Management of Fire Safety/Records and access to means of escape.

This report does not provide an exhaustive suite of site fire safety precautions. Additional measures may be appropriate, e.g. based on management requirements, periodic audits as agreed and other detailed risk assessments. It is important that the remedial recommendations are not read in isolation but read in context with the findings detailed in the main body of the report. It should be noted that if there are any significant changes that would affect the fire safety during construction, this assessment should be reviewed, and if necessary, specific control measures implemented. Periodic fire safety audits should be undertaken by the Primary Contractor Management teams in addition to, and where agreed between the client and Trenton Fire Ltd.

The following key findings were identified and should be considered as a matter of priority. See Summary of Significant Findings and Remedial Actions, and also the main body of the report for more detail.

KEY FINDINGS

- Fixed electrics and sources of ignition
- Housekeeping
- Means of escape
- Means of giving warning
- Emergency lighting
- Fire signage
- Fire spread and compartmentation issues within all developments.
- Fire safety records and staff training.
- Management

<u>As of 10.04.2019, the level of work is as follows;</u>

- Manchester Town Hall – Old building – The premises are being cleared of all items ready for commencement of work with the exception of the project offices which is where Lendlease will be operating from. For at least the next 6 – 8 months it is only surveying that is being carried out on the premises alongside general maintenance and PPMs to ensure the facilities are maintained in operational conditions.

PREMISES RISK RATING

Moderate Risk rating at the time of this assessment

Tolerable Risk rating following the implementation of the remedial actions

EXCLUDED AREAS

Area of Limitation	Reason	Space / Room Reference (if Applicable)
All areas accessible	N/A	N/A

The above should concur with general Information page, areas that have not been accessed.

GENERAL INFORMATION

Property Address	Manchester Town Hall - Grade 1 listed Civic building, Albert Square, Manchester, M60 2LA
Responsible Person (RP)*	MCC – Currently. Lendlease - Project Director – Chris Ruta (As of May 01st 2019)
Person Consulted	Brian Johnson – Project Manager
Premises Use	Refurbishment project of Manchester Town Hall
Date of Previous Fire Risk Assessment	Previous FRAs carried out under MCC were carried out previously in 2011 (internal MCC) and external – 2008.
Enforcing Authority	Greater Manchester Fire and Rescue Service & Health & Safety Executive.
Current Enforcement Activity	None of which the author is aware
Listed Building Status	English Heritage - 1207469 - Grade 1 Heritage listed - Listing date - 25-February 1952
Description of Site/Works Construction Type, Lifts, Stairs, Special features etc.	Manchester Town Hall is a nineteenth century Gothic style building. The structure comprises brickwork encased in Spinkwell stone (hard sandstone). The premises are of triangular shape covering Albert Square to the front, Princess Street and Lloyd Street to the sides (Bridges to TH extension are on Lloyd St) and Cooper Street to the rear. There are exits available on all 3 faces of the premises normally although for this stage of construction, 2 means of escape doors (primary – Albert Sq. and Lloyd street corner with Albert Sq. have been taken out of use). Centrally on the Albert Square face is the 280-foot-high clock tower. There are 24 bells in the tower including the Great Hour Bell weighing approximately 8 tons. From the main entrance entry is into the sculpture hall and the main corridor area with access to the 2 grand staircases and 3 further spiral stairs to the upper floors. Seven staircases lead from level one to level two. The first two make up the grand staircases leading up from the Sculpture Hall to the Great Hall and state rooms, then there are the two centre block staircases followed by the three spiral staircases. Floors – level 0 – (Basement), 01 (ground) – up to level 08 cover the main occupied areas. Level 09 – 11 covers the bell tower. Premises is linked to an adjoining premise which is also MCC via 2 x link bridges at Levels 02 & 03 Level 02 contains the staterooms - The Lord Mayor's Parlour, The Reception Room, The Banqueting Room, The Conference Hall and The Great Hall itself. Main structure and internal walls are of sandstone with some of the lower sandstone supports concealing steel supports. Floors are of stone and timber joist and floorboard above Level 6. The ceilings are stone vaulted arches, with the higher floors being timber lath and plaster.

	Stairways are open plan and of stone primarily automatic smoke vents at head of stairs (1.0 m^2 equivalent). There are pitched roofs of timber purlins overlaid with slate and flat roof areas of timber construction, overlaid with waterproof membrane (to resemble lead) There is a mixture of stone and brickwork making up the premises including laid marble and granite within the means of escape. All in use exits provide access to the fire assembly point which is located to the premises rear at Cooper Street by the Cenotaph. Current works are surveying ONLY. There are no intrusive works being carried out, and where noted, any breaks in fire safety provisions will have temporary repairs carried out to support surveying work and the means of escape provision.
Areas Excluded from Assessment *Ensure all areas not accessed or assessed are specified in the report*	All areas accessible.
External Areas Included in Assessment	Routes accessing the fire assembly point to the rear of the premises.
Adjacent Property Risk	The premises is linked to the new
Security Provisions	There is 24/7 security covering the town hall. Visitor Sign-in system, Reception Desk, 2 Guards on the Premises 24hr's a day, covering town hall and also monitored form the Town Hall extension. Security Patrols, Monitored and controlled site, the premises are covered externally by CCTV and also internally covering the main access points and routes. and there is internal electronic swipe access and key locks throughout the areas. There are also Portcullis' provided on all access doors which are secured after hours. Cooper street and Princess street portcullises are dropped first thing in the morning ready for work staff, Lloyd street and Albert square barriers remain in place as they are no designated fire escapes.
Fire Loss Experience	None of which the author is aware.
Occupancy Profile	Lendlease workforce, Surveying contractors and escorted visitors. MCC also currently accessing the premises to cover the PPM's and maintenance schedules prior to handover (May 2019). No current public access. No Sleeping Risk. Hours of operation are 8am-5.30pm Mon-Fri, with occasional extended hours.
People Especially at Risk	None (A separate Risk Assessment is conducted when necessary).
Number of Site Personnel - Day	Approximately 100 operators on site
Number of Site Personnel - Night	Only 2 x site security staff are on nights at present
Written Fire Strategy in Place If YES, details to be provided	Fire strategy in Place produced by ARUP - Fire Engineering (RIBA Stage 3) Report dated 07th December 2018. Construction Fire Safety Strategy to be developed to support the refurbishment works.

*Section 18 – "Management of Fire Safety" provides guidance on who should be named as the RP.

FINDINGS AND OBSERVATIONS

1. ELECTRICAL SOURCES OF IGNITION

	Yes	No	N/A
• All temporary and permanent electrical supply installations are in accordance with BS: 7671 & Electricity at Work Regulations 1989?	☐	☒	☐
• Is the use of adapters and extension leads reasonable?	☒	☐	☐
• Are portable electrical appliances inspected & tested periodically (PAT)?	☐	☒	☐
• Are electrical lighting/appliances kept clear of potential fuel sources?	☒	☐	☐
• Are Photovoltaic panels (PV's) being installed, live DC power, inverters and isolators identified on site plans.	☐	☐	☒
• Electrical installations are periodically inspected, tested and maintained by competent persons?	☒	☐	☐
• Records confirming this are available on site?	☒	☐	☐
• Has intrinsically safe electrical equipment been considered for use in flammable storage areas where appropriate?	☐	☐	☒

BS: 7671- Requirements for Electrical Installations. IEE Wiring Regulations.

The Health and Safety Executive (HSE) advocates a proportionate, risk-based approach to the maintenance of portable electrical appliances within the workplace. This guidance is simple and clear to follow and can be found on the HSE website "Maintaining portable electric equipment in low-risk environments".

PV's – PV's should be identified and warning information provided – if installed they should be isolated and not used to produce power during construction phase (suitable coverings or coatings can be used to temporarily disable the production of power from the panels until commissioned).

Observations / Comments

The site remains on on a permanent electrical supply at present, which management state is tested by MCC Facilities. The fixed wiring inspection in accordance with MCCs testing schedule was completed on the 30.04.2015 and is due once more in April 2020. The RCDs are checked on a quarterly basis and were carried out in April 2019.

There was no certification in place to show the current state of the building wiring, only that the inspection has been carried out.

PAT testing was conducted annually on site. MCCs equipment has almost been removed and is no longer a requirement at this stage. Lendlease are commissioning the PAT testing to be completed for their equipment post-building handover after May 1st Once all their equipment is in place.

Significant Findings / Remedial Action

Management are to request a copy of the electrical certification to ascertain the general state of the fixed wiring system to ensure it is safe for use and have any immediate recommended remedial risk related works carried out as soon as possible in support of the surveying work which is ongoing. The electrical installation is to be closely monitored as work progresses particularly in the areas of large open voids which currently house combustible storage and have large untreated timber supports at the upper roof levels.

Management are to arrange PAT testing to be carried out on their portable appliances as soon as possible. Logs of all PAT testing is to be maintained in the fire safety file.

(See also Summary of Significant Findings and Remedial Actions - Action Plan)

2. SMOKING

	Yes	No	N/A
• A smoking policy is established and other information is available for site users?	☒	☐	☐
• If smoking is allowed, are adequate non-combustible facilities provided in a suitable area away from structure, storage, materials and vegetation?	☐	☐	☒
• Information and/or signage prominently displayed?	☒	☐	☐
• Is evidence of smoking confined to authorised areas?	☒	☐	☐
• Adequate fire-fighting equipment is provided?	☐	☐	☒
• Designated area(s) are identified on the Fire Emergency Plan (FEP)?	☐	☐	☒

Observations / Comments

In general, at the time of this inspection the site policy controlling smoking across the site was adhered to by staff and management are aware of the need to enforce the adherence to the policy around the site. Staff are informed that if they wish to smoke, they must do so externally outside in the public space.

Significant Findings / Remedial Action

No action required. In the wake of the Notre Dame fire, staff should be regularly reminded of the risk posed by smoking and other fire hazards within historic buildings.

3. ARSON

	Yes	No	N/A
• Basic security to prevent arson appears reasonable? (note 1)	☒	☐	☐
• Suitable control and management of combustible materials close to buildings?	☒	☐	☐
• As far as the management are aware, is the area or the premises free from a history of arson?	☒	☐	☐
• Boundary security and site illumination considered at all times?	☒	☐	☐
• Competence of security staff complies with relevant standards?(note 3)	☒	☐	☐
• Personnel and management are aware to malicious intent by workforce?	☒	☐	☐

1. Reasonable only in the context of this FRA. Specialist advice on general security (including arson) should be obtained as appropriate.

2. Has a separate RA been undertaken to specifically consider the implications of wilful fire raising?

3. Contracted security staff should be licensed in accordance with Private security Industry Act 2001 (UKAS & SIA Accredited).

Observations / Comments

There is 24/7 security covering the town hall. Visitor Sign-in system, Reception Desk, 2 Guards on the Premises 24hr's a day, covering town hall and also monitored form the Town Hall extension. Security patrols, monitored and controlled site, with the premises are covered externally by CCTV and also internally covering the main access points and routes. There is internal electronic swipe access and key locks throughout the areas. There are also Portcullis' provided on all access doors which are secured after hours. Cooper street and princess street portcullis are dropped first thing in the morning ready for work staff, Lloyd street and Albert square barriers remain in place as they are no designated fire escapes.

The risk of arson is always present; however, it appears suitable control measures have been implemented to guard against any foreseeable risk. There are always issues that could arise, which are not foreseeable and this is considered in day-to-day activities by the means of encouraging staff to monitor and implement fire prevention measures and be vigilant to any malicious actions or intent.

Significant Findings / Remedial Action

No actions required at this time.

4. HEATING INSTALLATIONS

	Yes	No	N/A
• The use of portable heating is avoided as far as possible?	☒	☐	☐
• There is a policy regarding provision and use?	☐	☐	☒
• Where found are fitted with suitable guards and fixed in position away from combustible materials?	☐	☐	☒
• Suitable controls are in place to minimise the risk of igniting combustibles?	☒	☐	☐
• Heating installations are periodically inspected, tested and maintained?	☒	☐	☐
• Records confirming this are available for inspection or use?	☒	☐	☐

Observations / Comments

HVAC systems within Basement level 2 are said to be subject to periodic test and inspection, although no records produced for the MVHR systems at the time of inspection. The gas heating statutory maintenance in accordance with the MCC PPM records was carried out on 30.04.2018 and is due to be carried out this month.

Significant Findings / Remedial Action

No actions required.

5. COOKING FACILITIES

	Yes	No	N/A
• Reasonable measures are taken to prevent fires from use of cooking facilities?	☒	☐	☐
• Installations and equipment is periodically inspected, tested and maintained?	☐	☒	☐
• Appropriate fixed or portable firefighting equipment available for use	☒	☐	☐
• Adequate cleaning routines under management and staff control?	☒	☐	☐
• Records confirming above available for inspection or use?	☐	☒	☐

Wet-chemical extinguishers (Class F) to be considered where appropriate.

Observations / Comments

Lendlease staff have a small kitchen facility to enable staff to prepare snacks and beverages. No cooking takes place. The kitchens are maintained in a clean and tidy state with fire blankets and firefighting extinguishers available as necessary. Kitchen electricals will be included in the portable appliance test schedule when Lendlease bring in a contractor to carry out the testing post May 01st 2019.

Significant Findings / Remedial Action

No actions required.

6. LIGHTNING PROTECTION

	Yes	No	N/A
• The premises has a lightning protection system? (BS EN 62305 - 2006)	☒	☐	☐
• The installation is periodically inspected, tested and maintained?	☒	☐	☐
• Records confirming this are available for inspection or use?	☒	☐	☐

Testing should be carried out by a competent person in accordance with BS EN 62305- 2006 Pt. 2.

Observations / Comments

Lightning protection is fitted to the building and is to be subject to 11 monthly test and inspection. MCC PPM's show the system was tested on 31.01.2019 and is due for a retest in December 2019.

Significant Findings / Remedial Action

No actions required.

7. HOUSEKEEPING

	Yes	No	N/A
• The overall standard of housekeeping is acceptable?	☐	☒	☐
• Storage & waste arrangements are well managed – detail?	☐	☒	☐
• Hazardous waste and license (permit) to burn considered as applicable?	☐	☐	☒
• Escape routes are kept free from obstructions and/or combustible materials?	☐	☒	☐
• Combustibles materials are stored away from all forms of ignition source – security and coverings considered?	☒	☐	☐
• Spaces housing electrical, heating or computing services are free from accumulation of combustible materials and kept secure?	☒	☐	☐
• Remote spaces (voids, stores and risers) kept free from combustibles?	☐	☒	☐
• Containers, bins and chutes are appropriately fire resistant?	☐	☐	☒
• Re-cycling and disposal storage and collection points are suitably located away from structures, stores, combustibles?	☒	☐	☐

Observations / Comments

Generally housekeeping is good although with the current removal of equipment from the Town Hall, storage is finding its way into the escape routes. There are also unoccupied areas of the upper attic areas which have accumulated combustible materials over the years.

Exit routes should always be kept clear and closely monitored as necessary whilst moving equipment around the premises. Combustible materials should be kept away from electrical sources of ignition such as power adaptors and extension leads.

Security personnel have an area beneath the grand staircase on level 1 that has been converted to a rest room with combustibles and electrical items placed within. The enclosure that has been created is not appropriately fire-resisting and is within the current means of escape route.

Central access stairs which run from levels 1 – 5 have had protective coverings fixed to the staircase. The coverings do not appear to be fire-resisting.

Significant Findings / Remedial Action

During the latter end of the removal stages, management are to ensure that the equipment does not continue to find its way into the means of escape, and that designated areas are used. Corridor areas are suitable transit routes for storage but must not be used as storage areas.

Upper attic areas containing large accumulations of combustibles must be monitored by management. As the areas are currently unoccupied, the risk is minimal to personnel. As the areas come into use by the surveying teams, the storage and waste materials are to be removed and either placed into suitable storage areas or disposed of appropriately in order to mitigate the risk of fire spread with staff operating in the vicinity. Where possible, any combustible materials, in areas where a fire can spread unrestricted should be removed as soon as possible mitigating the risk of fire development or accidental ignition even further.

Security staff restroom is to be relocated out of the means of escape area and placed in a location more appropriate for the use and storage of combustible and electrical equipment.

Any protective covering in place within the communal means of escape must be fire-retardant in accordance with LPS 1207. Management should ensure that any protective materials used to cover stairwells accessing through various floors are either non-combustible, or LPS 1207 rated and stamped. Any unsuitable materials should be replaced at the earliest opportunity.

8. DANGEROUS SUBSTANCES

	Yes	No	N/A
• Are dangerous substances stored or used on the premises?	☒	☐	☒
• Are substances stored securely in open compounds?	☐	☐	☒
• Flammable liquids and gasses are stored separately?	☐	☐	☒
• Reasonable distances from site boundary and other occupied buildings (4-10m)?	☐	☐	☒
• Portable FFE or fixed fire protection available as appropriate?	☒	☐	☐
• Permanent gas supplies isolated / installed by competent person?	☒	☐	☐
• Dangerous Substances & Explosive Atmosphere Regulations (DSEAR) 2002 has an assessment been conducted and/or available for use?	☐	☐	☒

DSEAR – Applies to diesel storage, handling and use in the workplace as a flammable substance

June 2015-CLP re-classification – HSE ACOP L138 (2nd edition).

Observations / Comments

There are permanent gas supplies to the premises that are in operation. The gas facilities have been fully maintained by MCC facilities up to date and are due to remain in place for the foreseeable future during the current surveying works which will be ongoing throughout 2019. Upon handover to Lendlease in May 2019, the works will be maintained in situ, and any changes will be made as necessary carried out by competent and certified tradespersons.

Surveying works at present have no requirement to bring any other flammable gases or pressure vessels into the premises. Risks will be readdressed as scope of works on site changes with appropriate safe guards put in place.

Significant Findings / Remedial Action

No actions required at this time

9. ADDITIONAL SIGNIFICANT FIRE HAZARDS or PROCESS RISKS

	Yes	No	N/A
• Are there significant hazards or process risks that are subject to guidance and enforcement by the HSE?	☒	☐	☐
• Details of significant hazards or process risks involved?	☒	☐	☐
• Has the potential for impact on the safety of persons on or near the premises been addressed or mitigated?	☒	☐	☐
• Detail of processes and management controls below?	☒	☐	☐

Observations / Comments

As a construction site, by default, there are ongoing process hazards and risks. Management procedures are in place to monitor, control and mitigate hazard and risk levels to as low as reasonably practicable. Surveying works at Manchester Town Hall is well under way.

Surveying works will be entering all areas of the premises including the towers which have spiral staircases of limited space and single means of escape. Issues within these areas will be raised in Section 10 - Means of escape.

Manchester Town Hall has previously been used as a setting for fireworks displays. It would be recommended that during the refurbishment period, when the protection to the historic fabric is in flux, no fireworks displays are held within the proximity of the building. (where these have been noted previously a causing large construction site fires, famously at the Beijing Television Cultural Centre in 2009).

Significant Findings / Remedial Action

No actions required at this time.

No fireworks displays are to be permitted over or adjacent to the construction site. This should be co-ordinated with Manchester City Council.

10. MEANS OF ESCAPE FROM FIRE

	Yes	No	N/A
• Is the Means of Escape (MoE) from the premises suitable & sufficiently protected?	☐	☒	☐
• Are all escape routes available for use?	☐	☒	☐
• Are all travel distances acceptable?	☐	☒	☐
• Are dead end situations satisfactory regarding travel distance and fire protection?	☐	☒	☐
• Are evacuation routes clearly signed, unobstructed and free from combustibles?	☐	☒	☐
• Sufficient number of exits of suitable width for the people present?	☒	☐	☐
• Where the building has alternative internal escape staircases, are the staircases adequately separated?	☐	☒	☐
• Are temporary fire doors being installed where necessary as construction progresses?	☒	☐	☐
• Reasonable arrangements are in place for disabled people or impaired persons to exit safely in the event of fire - PEEPs?	☐	☐	☒
• Is there a routine in place to ensure that all final exits are unlocked during normal working hours?	☒	☐	☐
• Final exits lead to a place of safety?	☒	☐	☐
• Do temporary fire doors (where installed) meets requirements?	☐	☒	☐
• Are all escape routes adequately illuminated?	☐	☒	☐
• Are external fire escapes and walkways protected where necessary?	☐	☐	☒
• Are assembly points located in a safe position clear of the premises and easily identified?	☒	☐	☐
• Is the Means of Escape (MoE) from the premises suitable & sufficiently protected?	☐	☒	☐

Description of MoE

Manchester Town Hall is a nineteenth century Gothic style building. The structure comprises brickwork encased in Spinkwell stone (hard sandstone). The premises are of triangular shape covering Albert Square to the front, Princess Street and Lloyd Street to the sides (Bridges to TH extension are on Lloyd St) and Cooper Street to the rear. There are exits available on all 3 faces of the premises normally although for this stage of construction, 2 means of escape doors (primary – Albert Sq. and Lloyd street corner with Albert Sq. have been taken out of use).

From the main entrance entry is into the sculpture hall and the main corridor area with access to the 2 grand staircases and 3 further spiral stairs to the upper floors.

Seven staircases lead from level one to level two. The first two make up the grand staircases leading up from the Sculpture Hall to the Great Hall and state rooms, then there are the two centre block staircases followed by the three spiral staircases.

Floors – Level 0 (Basement), 01 (ground) – up to level 08 cover the main occupied areas. Level 09 – 11 covers the bell tower. The premises is linked to an adjoining premise via 2 x link bridges over Levels 02 & 03.

There is a mixture of stone and brickwork making up the premises including laid marble and granite within the means of escape. All in use exits provide access to the fire assembly point which is located to the premises rear at Cooper Street by the Cenotaph.

Under normal conditions all staff onsite make their way from Level '0' via the underpass access routes beneath Lloyd Street to the Town Hall extension where they pass through the main security access point for MCC.

Means of escape throughout the site could be improved and as the major works and surveys beginning in May 2019 management must ensure that all major means of escape are fully signed in conspicuous locations.

As works progress and enter the various areas means of escape are to be maintained under constant review and changes where necessary are to be implemented in order to maintain the minimum of 2 means of escape from all areas.

Areas such as on Level '0' where there is a means of escape through a brick wall requiring use of hand tools to excavate brick work to facilitate an escape are not to be used and management must ensure that suitable alternatives are put into place during these phases of work

Current works are surveying ONLY. There are no intrusive works being carried out, and where noted, any breaks in fire safety provisions will have temporary repairs carried out to support surveying work and the means of escape provision.

Observations / Comments

There are access points to various points in the premises which are restricted access, confined space and single direction of travel. When staff are to operate within these areas management are to ensure, without exception that these are permit to work areas and when staff are , for instance, operating within the spiral staircases, attic areas etc that a banksman, fire warden is in place on fire watch below ant the various access points at the access points and that staff in the upper areas can be contacted via radio in the event of a fire on the premises on fire watch below.

At the current point in time, the occupancy of the building is low and the fire hazards (ignition risks and combustible items) have largely been removed. As the site works progress, a developed Means of Escape strategy for the construction site will be required to take account of the works and the increase occupancy and hazards within the building.

Significant Findings / Remedial Action

Management are to have a monitoring system implemented to control access to certain areas around the premises. Any staff entering the upper areas, confined spaces, single directions of travel are to be logged on a permit to work access control system, and fire watch personnel are to be in place at the access points to these areas when they are in use e.g. towers, attics etc. (this is due to the current expected state of compartmentation – pre surveys).

Management are to check that when operating within these restricted areas, such as the towers and spiral staircases etc, that staff are in contact e.g. via radio. Radio checks to be carried out periodically when staff operate within these areas.

Management are to make sure that the Level '0' means of escape requiring the use of hand tools to excavate a stone wall to facilitate a new escape route is not used in the planning for the refurbishment and that a minimum of 2 alternative and appropriate means of escape routes are used.

11. LIMITING FIRE SPREAD & DEVELOPMENT

	Yes	No	N/A
• Does compartmentation, where completed and visible, appear to be of a reasonable standard?	☐	☒	☐
• Permanent or temporary fire stopping has been considered as far as reasonably practical?	☒	☐	☐
• Linings or materials that may contribute to fire spread are limited or specially treated?	☐	☒	☐
• Coverings enclosing scaffolding/temporary external escape or protecting materials are fire retardant (Conforming to LPS 1207 or equivalent standard)?	☐	☐	☒
• Fire dampers as far as can be reasonably ascertained, are provided to protect critical means of escape?	☐	☒	☐
• Are installations and equipment periodically inspected, tested and maintained?	☒	☐	☐

Based on visual inspection of readily accessible areas and a degree of sampling where appropriate.

Full investigation of the design of HVAC and similar systems is outside the scope of this assessment.

Fire doors should meet the requirements of BS 476 parts 21, 22 & 31 BS EN 1634/8214 applies.

Observations / Comments

Compartmentation within the town hall is currently below standard although in major areas such as the main access corridors, doors leading off them are upgraded original doors fitted with intumescent strips. This is considered to be suitable and sufficient for the current surveying work for the safety of the staff inside as the works are not intrusive. As major works progress, the current provision of fire protection will need to be improved as ignition sources on site will increase dramatically and temporary fire-stopping works will need to be implemented to support the fire strategy as it develops.

Current issues are with staff entering areas where means of escape is restricted and needs to be controlled (raised in Section 10 means of escape).

Doors were noted as being wedged open within the premises

There are areas of ceiling which are becoming exposed (noted in the Lord Mayor's Parlour) where metal supports are butted against wood and are exposed to the rooms below.

Significant Findings / Remedial Action

Management are to ensure that doors within the premises are not wedged open. If there is a need to hold doors open to facilitate the moving of equipment this must be done in a managed way and ensure the wedges are removed immediately. Management are to monitor this issue moving forward as works develop on site. Once Lendlease officially take over the site, management are to implement management procedure to have the means of escape routes walked and ensure that all doors leading onto the means of escape are closed.

Areas where metal floor/ceiling supports are currently exposed (noted in the Lord Mayors parlour) the rooms are to be cleared of any combustible materials to ensure any fire starting cannot easily spread into the ceiling voids.

12. EMERGENCY ESCAPE LIGHTING

	Yes	No	N/A
• Is Emergency Escape Lighting provided (Low voltage festoon & free standing?	☐	☒	☐
• Does lighting, where used, provide adequate cover in necessary areas?	☐	☒	☐
• Does the system appear to conform to BS 5266 Part1?	☐	☒	☐
• Are lighting units clean, and visually, appear in good condition?	☒	☐	☐
• Is the installation and equipment periodically inspected, tested and maintained?	☒	☐	☐
• Are records confirming this available for inspection or use?	☒	☐	☐

Based on visual inspection only. No test of illuminance levels or verification of full compliance with relevant British Standards carried out.

Observations / Comments

There is emergency lighting said to be fitted throughout the work areas, access to the stairwells and throughout the escape routes leading to the fire exits. The systems are subject to periodic test and inspection. Installation according to records was serviced on 30.04.2018 and 28.02.2019 for their annual inspections. All monthly inspection records produced by MCC.

There was emergency lighting within the premises which was not fitted with LEDs and could not be confirmed as emergency luminaires. Also, with the changes in the means of escape provision for Lendlease. Management also need to ensure that escape route coverage remains sufficient.

Significant Findings / Remedial Action

Management are to have a full inspection of the current emergency lighting set up to ensure that means of escape coverage is sufficient including all areas which will be accessed for surveying purposes. If areas are due to be accessed, they must be provided with emergency lighting (handheld torches may be used during surveys of infrequently accessed voids). Management to ensure that all lighting is tested monthly as a minimum and recorded in the fire safety logs.

(See also Summary of Significant Findings and Remedial Actions - Action Plan)

13. FIRE SIGNAGE AND NOTICES

	Yes	No	N/A
• Do signs conform to relevant BS EN standards?	☐	☒	☐
• Do “Fire Exit” signs direct occupants towards the means of escape?	☒	☐	☐
• Are fire escape routes and fire exits provided with illuminated signs, which are part of the emergency lighting system?	☐	☒	☐
• Are all fire doors and final exit doors provided with the appropriate signage?	☐	☒	☐
• Are fire extinguisher signs sited correctly and visible?	☒	☐	☐
• Are fire/evacuation plans displayed and available for use in the premises?	☐	☒	☐
• Are fire action notices (FANs) and other information prominently displayed in a consistent format and fixed position throughout the building?	☐	☒	☐
• Photovoltaic (PV) – signs to warn of live power supplies and location of isolators, where in use?	☒	☐	☐
• Dangerous substances stores and compounds display appropriately worded warning signs (Highly Flammable, No Smoking, No Naked Flames)?	☒	☐	☐

BS 5499-4:2013 Code of practice for escape route signing & BS EN ISO 7010:2012+A5:2015

Graphical symbols - Safety colours and safety signs - Registered safety signs (ISO 7010:2011)

Observations / Comments

The provision of fire safety signage throughout the development appeared to be lacking in areas:

Text only signage within the premises.

Some manual call points missing fire action notices.

Dry riser inlet points on the premise’s exterior are not conspicuously highlighted with signage.

Significant Findings / Remedial Action

Text only signage within the premises. Lendlease are to ensure that when they review ALL signage in the premises that it is pictographic in form and that they are not text only, to allow this to be easily understood by those for whom English is not their first language. Signage is to reflect the current fire strategies due to the removal of 2 fire exits. Management are to continually monitor the provision of fire exit signage and update and add / remove as required.

Management are to ensure that all the fire action notices on all major escape routes are supported by fire action notices that are up to date and reflect the CURRENT evacuation strategy listing and showing the current evacuation routes and availability to staff dependant on where they are in the building.

Dry riser inlet points on the premise’s exterior are not obviously highlighted with signage and require obvious signage to be erected in place as so not to delay any firefighting operations.

(See also Summary of Significant Findings and Remedial Actions - Action Plan)

14. MEANS OF GIVING WARNING - Fire Alarm System (FAS)

	Yes	No	N/A
• Is there adequate means for raising the alarm?	☐	☒	☐
• A Fire Alarm System (FAS) is in place covering all relevant areas?	☐	☒	☐
• An Automatic Fire Alarm Detection (AFD) System is provided and appears to conform to BS 5839:1 or BS EN 54-25?	☒	☐	☐
• Does the extent of AFD (if fitted) appear appropriate for the occupancy and risk?	☒	☐	☐
• Is a fire alarm plan (suitably orientated) displayed adjacent to the alarm panel(s) and or available at fire points?	☒	☐	☐
• Where a manual system is installed, are there sufficient call points, and are they sited correctly?	☒	☐	☐
• Can persons alert all others of the presence of fire without being put at risk?			
• Can the alarm be heard clearly from any point of the premises?	☒	☐	☐
• Is the sound of the fire alarm significantly different to any other alarms in the premises?	☒	☐	☐
• Is the fire alarm tested regularly at weekly intervals, using a different call point each time (if appropriate) and details of tests recorded?	☒	☐	☐
• Where people have impaired hearing or wear ear protection, have adequate measures been adopted to ensure they receive warning in the event of fire?	☒	☐	☐
• Is a contract in place covering regular inspections and maintenance of the entire alarm system and are the results recorded?	☒	☐	☐
• Is the alarm monitored (ARC – automated receiving centre) by an outside contractor?	☐	☒	☐
• Are staff and any other relevant persons aware of the setup and procedures to be followed on activation/communication with the ARC etc?	☒	☐	☐

Wireless fire alarm systems may also conform to BS EN 54-25 or BS 5839-1.

Based on visual inspection only with no audible testing or verification of full compliance with relevant British Standards carried out.

BS5839-1:2013 states that zone plans are required on every system of any size, and should also be noted as a major non-compliance during routine maintenance, when they are not displayed on existing installations.

Observations / Comments

The current fire detection system on the premises is fitted to a standard of L2. The control and indication equipment are located on Level 01 (ground) by the security desk. There are numerous rooms which have no fire detection. The large double height + rooms such as the great hall and the Albert Sq. side state rooms have no or limited fire detection capacity in them currently. The current FM provider which is Manchester Moving and is subject to periodic test and inspection.

Where the existing detection system is decommissioned and replaced by a temporary construction-phase system, this would be recommended to maintain a high level of automatic detection given the stature of the building. Wireless smoke detectors could be provided in hazardous or high-value areas (such as the upper-floor rooms, state rooms, etc.). This should be developed as part of the temporary fire safety strategy for the construction site.

The system is tested once a week (up to date). The system is tested by MCC along with site security. All system alerts are monitored from the main control panel. The system is tested and management will check all alarm points. The system is checked daily, tested weekly and is currently serviced 6-monthly with the previous service logged on 31.01.2019 and is next due in July 2019.

Significant Findings / Remedial Action

No SD in the state rooms. Management are to monitor the state rooms and advise security to make periodic inspections of these areas and have management procedures in place should a fire be discovered in these areas.

The temporary detection and alarm system to support the construction site would be recommended to be specified in support of the high-value premises to offer a degree of property protection benefit.

15. PORTABLE FIRE FIGHTING EQUIPMENT

	Yes	No	N/A
• Do extinguishers conform to BS EN3 for new extinguishers, or BS 5423 for existing?	☒	☐	☐
• Overall there appears to be an adequate type & number for the premises & risks?	☒	☐	☐
• Are extinguishers fixed in position – brackets, stands, fire points?	☒	☐	☐
• Fire points and other FFE available for use is marked on the FE Plan?	☒	☐	☐
• Ride-on or mechanically propelled machinery has been considered?	☒	☐	☐
• Specific Hazards and risk (Hot Works) have been considered?	☒	☐	☐
• As work progresses this the provision of extinguishers adequately reviewed?	☒	☐	☐
• Extinguishers are periodically inspected, tested and maintained?	☒	☐	☐
• Records confirming this are available for inspection or use?	☒	☐	☐

Observations / Comments

There are fixed fire points containing fire extinguishers located throughout the development at key points and at storey exits. Appropriate extinguishers and blankets available in kitchen facilities. The fire extinguishers have been subject to test and inspection in November 2018 and on May 1st, Lendlease will take over the control, distribution and maintenance of the fire extinguishers.

The fire extinguishers and blankets should be serviced in accordance with the recommendations and frequencies of BS 5306.

Significant Findings / Remedial Action

No actions required at this time.

16. RELEVANT AUTOMATIC EXTINGUISHING SYSTEMS

	Yes	No	N/A
• Details of relevant equipment or installations?	☐	☐	☒
• Installations and equipment is periodically inspected, tested and maintained?	☐	☐	☒
• Records confirming this are available for inspection or use?	☐	☐	☒

Observations / Comments

There are no automatic extinguishing systems in place in the premises.

Significant Findings / Remedial Action

No actions required at this time.

17. OTHER FIXED FIRE SAFETY SYSTEMS & EQUIPMENT

	Yes	No	N/A
• Details of safety systems and equipment – type, location, purpose if known?	☒	☐	☐
• Installations and equipment is periodically inspected, tested and maintained?	☒	☐	☐
• Records confirming this are available for inspection or use?	☒	☐	☐
• Are staff aware of the location of any fixed installations, and procedures to be followed on their activation?	☒	☐	☐

Note: Including firefighting switches for high voltage luminous discharge tubes where installed. Projects may consider installing temporary fixed suppression systems or where possible make available the building installation available for use.

Observations / Comments

There are dry risers fitted into the premises which are currently operational and are due to remain operational throughout. The dry risers were subject to test and inspection on March and September with the last service inspections on 30.09.18 and visual inspections in March 2019.

There are smoke vents fitted into the stairwells which are serviced periodically. The last inspections were carried out annually and they are checked and tested weekly. The previous annual service was carried out on 31.07.2018.

Significant Findings / Remedial Action

No actions required.

18. MANAGEMENT OF FIRE SAFETY

To be identified and as appropriate any hierarchy of management levels detailed.

The *Responsible Person is: MCC – Currently. Lendlease - Project Director – Chris Ruta (As of May 01st 2019)

Note: This should refer to the relevant person as defined in article 3 (employer). Article 5 (persons other than the RP) persons may be named or any hierarchy identified below. The responsibility/management line should be clarified where this is not easily distinguished with supporting documentation attached if available.

Fire Safety is managed by: Tracey Herrick – Health and Safety Manager supported by Brian Johnson – Project Manager

Competent persons nominated to assist in undertaking general fire precautions: Fire marshals and site management

Note: This is not intended to represent a legal interpretation of responsibility (as above) but merely reflects the managerial arrangements in place at the time of this assessment. These are persons recruited by management to assist, support and, as appropriate, develop fire management arrangements for the premises – Fire Wardens, Marshalls, Coordinators etc.

	Yes	No	N/A
• Is a copy of the fire risk assessment kept on the premises?	☒	☐	☐
• Are all issues from the previous fire risk assessment now resolved?			
• Adequate arrangements in place to review fire risk assessment findings?	☐	☐	☒
• Adequate procedures for calling the fire service at all times?	☒	☐	☐
• Adequate arrangements to brief the fire service on arrival and provide plans of the building or site and other hazard information?	☒	☐	☐
• Fire service liaison considered and confirmed with local crew familiarisation visits arranged?	☒	☐	☐
• Access to site and vehicle marshalling considered and being managed?	☒	☐	☐
• Water supplies (i.e. hydrants) available nearby and easily accessible?	☒	☐	☐
• Does the site have a written fire evacuation procedure/plan?	☒	☐	☐
• Are procedures or systems in place to monitor building/site users entering and leaving?	☒	☐	☐
• Is there an effective procedure to ensure that no one is left in the building on evacuation?			
• Have Fire Wardens/Marshalls/Coordinators been appointed and trained in their specific duties?	☒	☐	☐
• Are procedures in place for providing visitors with information regarding the action to be taken in the event of fire?	☒	☐	☐
• Are fire safety conditions imposed on outside contractors and effectively controlled?	☒	☐	☐
• Is there a “Permit to Work” system in operation for all hot work and other fire-hazard work?	☒	☐	☐
• Are hot works areas monitored, kept clear of stored materials and combustibles and checked one hour following?	☒	☐	☐
	☒	☐	☐
• Has business continuity/contingency plan been considered where appropriate?	☒	☐	☐
• Has salvage work and heritage protection been considered where appropriate? (refurbishment work or adjacent property)	☒	☐	☐

Observations / Comments

A fire plan is produced and maintained by the Site Management team and maintained up to date in liaison with MCC and other members of the M&E and H&S team. A response folder is kept with staff and security which is available to brief fire service on arrival.

Management confirmed that GMF&RS have attended site previously to review incident response, firefighting requirements, potential rescues etc. They confirmed that GMF&RS are happy with works ongoing moving forward. Management are to request a further attendance later in the year once plans are being implemented to ensure firefighting and means of escape plans in place are still effective operationally for them.

Greater Manchester Fire and Rescue Service will meet Lendlease staff on Albert Sq./Lloyd Street and will liaise with the designated fire marshal(s) and construction managers.

Significant Findings / Remedial Action

Further invites should be made to GMF&RS to visit the site for a familiarisation tour and to review access, water supplies and firefighting arrangements and possible rescue scenarios.

(See also Summary of Significant Findings and Remedial Actions - Action Plan)

19. STAFF TRAINING & FIRE DRILLS

	Yes	No	N/A
• Have all staff received site fire safety induction training?	☒	☐	☐
• Have staff been trained in fire procedures in the last 12 months?	☒	☐	☐
• Do staff receive adequate training in the use of firefighting equipment annually?	☒	☐	☐
• Fire Wardens receive adequate training for the role?	☐	☒	☐
• Persons charged with specific fire safety roles are trained and familiar with the emergency plan?	☒	☐	☐
• Evacuation drills carried out at least once or preferably twice annually, or as construction phases or personnel change?	☒	☐	☐
• Observations are collated, recorded and procedures revised accordingly?	☒	☐	☐
• Suitable arrangements are in place for organising all staff training?	☒	☐	☐

Observations / Comments

Induction - All staff receive an MCC induction which is an in-depth induction covering the premises and all fire procedures. Fire awareness training for staff is to follow, with particular regard to the high-value premises being worked on and similarities in stature and risk to the recent Notre Dame fire.

Fire marshal training is being arranged for April 2019 – through Lendlease and supplementary training to be organized through MCC. Lendlease will provide approximately 20 fire marshals.

FM Services – Security training carried out through MCC FM services

Fire drills – Fire drills have not yet been conducted although they are currently being arranged. Alarm has activated previously causing an evacuation – False alarm – Good intent – No further action required. Evacuation logged as occurring in March 2019.

Permits to work – as required although not at present. Health and Safety covers the issuing of work permits covering numerous items including hot works.

Written fire procedures – Part of the MCC induction package

Significant Findings / Remedial Action

Management must ensure that fire drills are conducted on a 3 monthly basis and logged in full in the fire safety files. Management to monitor drills and training moving forward.

(See also Summary of Significant Findings and Remedial Actions - Action Plan)

20. MISCELLANEOUS INFORMATION

Note: This section may be used for additional reporting or other non-FRA specific projects as appropriate

Observations / Comments

Premises is still being cleared of equipment and surveying is beginning. Work areas unconfirmed to begin surveys.

Significant Findings / Remedial Action

Management are to monitor and control known work areas, and log locations of staff throughout the premises at all times with control of access permits signed off and returned as necessary. As areas are brought into occupancy, the work areas must be suitable for occupation and reviewed and fitted out as necessary with the necessary fire precautions including management procedures, fire watch etc

21. HIGH RISE CONSTRUCTION SITES

	Yes	No	N/A
• Fire door-sets installed to protect staircases use for escape?	☐	☒	☐
• Openings to floors from atria, stairs, lift and crane shafts fitted with FD 30?	☒	☐	☐
• At least one stair designated as firefighting stair?	☐	☒	☐
• Firefighting lifts commissioned and in service (at earliest opportunity)?	☐	☒	☐
• Where reasonably practicable, horizontally compartmented every 10 floors?	☐	☐	☒
• Temporary fire stopping (min 30 FR) in use until permanently installed?	☐	☒	☐
• All holes shafts and openings (risers, lift shafts & stairwells) closed off?	☐	☒	☐
• All openings with Fire Door protection managed reasonably (only open when work is being undertaken then closed off)?	☐	☒	☐
• Electrically operated fire alarm system installed throughout building (see section 14)?	☒	☐	☐
• FAS has back-up power supply capability to ensure operation at all times?	☒	☐	☐
• On reaching height deemed high-rise, wet riser provided (BS 9990)?	☐	☐	☒

Note: This section contains specific JCOP information regarding high fire risk sites for consideration.

High rise generally defined as beyond reach of fire service aerial capability (>30M) from nearest access.

BS 9990:2015 – Non Automatic Firefighting Systems in Buildings – Code of Practice.

Observations / Comments

Occupied floors are below the 30m point. As works progress to the upper floors, fire stopping and full protection of the means of escape is a necessity and will need to be carried out.

Risers for fire service use to the premise's exterior are said to be wet risers although they appear to be dry. Management to confirm with MCC and use service and maintain as necessary.

Significant Findings / Remedial Action

Risers for fire service use to the premise's exterior are said to be wet risers although they appear to be dry. Management to confirm with MCC whether wet or dry and service and maintain as necessary.

22. LARGE TIMBER FRAME STRUCTURES – 4 + STOREYS AND/OR AGGREGATE FLOOR AREA >2500m

	Yes	No	N/A
• Has a FE Risk assessment been conducted as part of the design?	☐	☐	☒
• Has phased construction been considered with above?	☐	☐	☒
• Adjacent temporary buildings (<20m) are non-combustible structures?	☐	☐	☒
• Consideration of fire protection & treatment to the structure?	☐	☒	☐
• Compartmentalised and fire stopped at earliest opportunity?	☐	☒	☐
• Permanent fire resisting protected routes secured as early as possible?	☐	☒	☐
• Vertical shafts, ducts, risers and other openings fire stopped?	☐	☒	☐
• Final cladding & coverings in place as early as possible?	☐	☒	☐
• Heat producing plant, equipment and works kept from exposed timber?	☐	☒	☐
• Refuelling of plant and equipment is in designated areas only (20m)?	☐	☐	☒
• Heating, drying and de-humidifying equipment is removed from building outside working hours (110V only)?	☐	☐	☒
• FAS and AFD for enclosed spaces installed?	☐	☒	☐
• FAS is linked to alarm receiving centre (ARC) or 24 hr on-site security?	☐	☐	☒
• Use of foam plastic materials is minimal?	☐	☐	☒
• Fall arrest systems using polystyrene materials not in use?	☐	☐	☒
• Hot works minimised (section 18) or additional controls employed?	☐	☐	☒

Observations / Comments

There are large timber framed areas of the structure to the upper levels of the building and towers, which are weight-bearing and unprotected from fire.

Significant Findings / Remedial Action

There are large timber framed areas of the structure to the upper levels of the building and in the towers. As the work progresses, consideration is to be given to fire protecting these areas to prevent unrestricted fire spread and protect the historic fabric of the roof structure.

CONCLUSIONS

This report presents the significant findings of the fire risk assessment which took into account the occupancy profile, the fire hazards and risks present while evaluating the general fire precautions in the premises at the time. The measures highlighted in the following table of remedial actions are recommendations which it is considered should be put in place to achieve compliance with the Regulatory Reform (Fire Safety) Order 2005 and reduce the risk to people from fire in these premises to a level which may be considered as low as reasonably practicable (ALARP).

Trenton Fire cannot condone the continuance of contraventions which became evident as a result of this fire risk assessment. Therefore the significant findings and relevant actions recommended in this report should be remedied without delay to ensure compliance.

This form of quantification serves purely as a broad indication of the situation for the benefit of the "Responsible Person" to then determine how best to achieve and manage the actions to be taken/recommendations contained in this report.

Where appropriate remedial actions may be recorded in red text as outstanding from the previous assessment (where this has been made available to the assessor) and still require action in accordance with their remedial action risk rating.

RISK MATRIX

The category of fire risk for any premises can be determined by combination of the likelihood of fire and the likely consequences of fire, using a matrix; this is a method of risk assessment commonly adopted in the field of health and safety (BS:8800).

		Potential Consequences of Fire		
		Slight harm	Moderate harm	Extreme harm
Likelihood of Fire	Low	Adequate risk	Tolerable risk	Moderate risk
	Medium	Tolerable risk	Moderate risk	Substantial risk
	High	Moderate risk	Substantial risk	Intolerable risk

LIKELIHOOD OF FIRE

Taking into account the fire prevention measures observed at the time of this risk assessment, it is considered that the hazard from fire (likelihood of fire) at these premises is:

☐ **Low:** Unusually low likelihood of fire as a result of negligible potential sources of ignition.

☒ **Medium:** Normal fire hazards (e.g. potential ignition sources) for this type of occupancy, with fire hazards generally subject to appropriate controls (other than minor shortcomings).

☐ **High:** Lack of adequate controls applied to one or more significant fire hazards, such as to result in significant increase in likelihood of fire.

CONSEQUENCES FOR LIFE SAFETY

Having assessed the fire hazards present, the occupancy profile and having evaluated the general fire precautions in place at the time of this fire risk assessment, it is considered that the consequences for life safety in the event of fire would be:

☐ **Slight Harm:** Outbreak of fire unlikely to result in serious injury or death of any occupant (other than an occupant sleeping in a room in which a fire occurs).

☒ **Moderate Harm:** Outbreak of fire could foreseeably result in injury (including serious injury) of one or more occupants, but it is unlikely to involve multiple fatalities.

☐ **Extreme Harm:** Significant potential for serious injury or death of one or more occupants.

OVERALL RISK TO LIFE FROM FIRE

Accordingly, it is considered that the overall risk to life from fire at these premises at the time of the assessment is:

Adequate ☐	Tolerable ☐	Moderate ☒	Substantial ☐	Intolerable ☐

RISK-BASED CONTROL PLAN

A suitable risk-based control plan should involve effort and urgency that is proportional to risk. The following risk-based control plan is based on one that has been advocated for general health and safety risks:

Risk Level	Action and Timescales
Adequate	No action is required and no detailed records need be kept. Management and staff to monitor and maintain existing measures.
Tolerable *(Months)*	No major additional fire precautions required. However, there might be a need for reasonably practicable improvements that involve minor or limited cost. Management and staff to monitor to ensure controls are maintained.
Moderate *(Weeks)*	It is essential that efforts are made to reduce the risk. Risk reduction measures, which should take cost into account, should be implemented within a defined time period. Where moderate risk is associated with consequences that constitute extreme harm, further assessment might be required to establish more precisely the likelihood of harm as a basis for determining the priority for improved control measures.
Substantial *(Days)*	Considerable resources might have to be allocated to reduce the risk. If the premises is unoccupied, it should not be occupied until the risk has been reduced. If the premises is occupied, **urgent action should be taken.** *Consider issuing Risk Critical Report
Intolerable *(Immediate)*	Premises (or relevant area) should not be occupied until the risk is reduced. *Risk Critical Report Required

Note: Non-specific time periods of completion of risk reduction measures are indicative only.

REMEDIAL ACTION RISK RATINGS:

1 - 4 Recommended as a means of achieving best practice – Low Risk (Green)

5 - 7 May not directly affect the safety of people but compromises fire safety of the premises – Medium Risk (Amber)

8 - 10 Directly affects the safety of people – High Risk (Red)

NB: The Enforcing Authority may consider the deficiencies to constitute an offence.

*The risk ratings recorded in the remedial actions table are intended to give clients an indication of the severity of the associated risk and assist with prioritisation of work. They should not be taken to imply any specific time period for completion or legal immunity in any intervening period.

APPENDIX A

FIRE SAFETY PLAN GUIDANCE.

The details of a fire safety plan are contained in the JCOP (Section 6.2 A to Q). Items should detailed pictorially where possible as part of a plan drawing.

The Fire Safety Plan must be based on the Fire Safety Strategy, be specific to site and reviewed periodically as circumstances change. To be included (not an exhaustive list):

- Fire alarm system and any automatic detectors as appropriate.
- Fire Points, Firefighting Equipment and Emergency Escape Lighting.
- Escape routes identified with unambiguous, conspicuous signage displayed.
- Designated smoking areas identified and equipped.
- Location of temporary buildings and/or accommodation with indicative distances.
- Boundary conditions and protection from arson.
- Material and waste storage arrangements/locations identified.
- Hazardous materials and substances stored and used on site identified.
- Solar Photovoltaic (PV) Panels where used – location of invertors and isolation switch gear.
- Significant plant, machinery and equipment as required.
- Fire service access and water supplies as required.
- Firefighting shafts, escape stairs and lift or hoist facilities.
- Sprinkler installations, risers (wet/dry) and water supplies (hydrants).
- Significant construction hazards – deep works, confined spaces, toxic atmospheres etc.

QUALITY STATEMENT

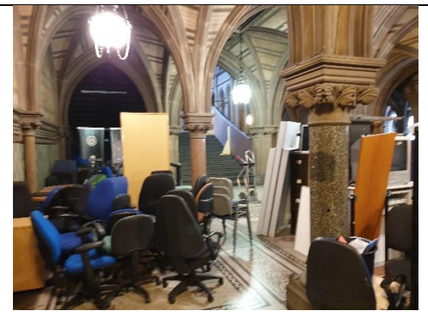
All reasonable skill and care has been taken in the preparation of this report.

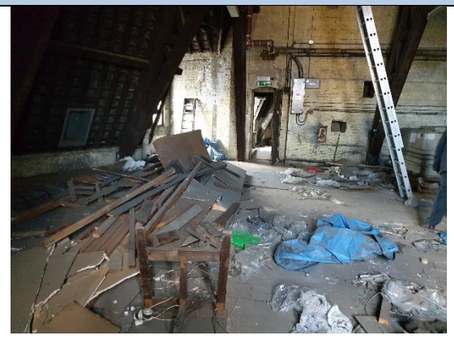
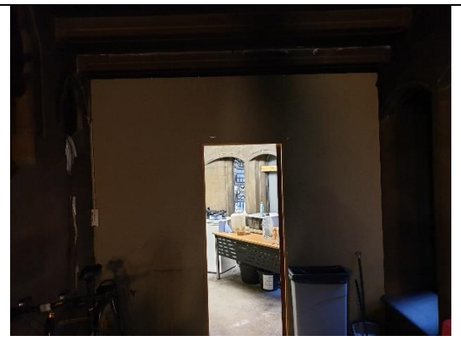
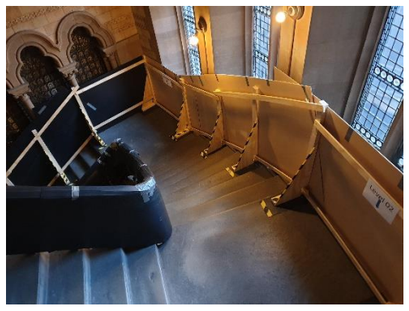
	Prepared:	Checked:	Authorised:
Signature:			
Name:	Gareth Green	Simon Vickers	Andy Ballantyne
Title:	Fire Risk Assessor	Fire Safety Practice Manager	Associate
Date:	18.04.2019	25.04.2019	26.04.2019

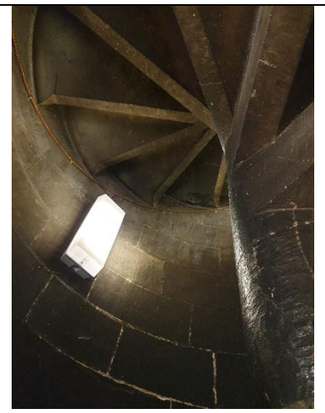
SUMMARY OF SIGNIFICANT FINDINGS AND REMEDIAL ACTIONS (ACTION PLAN)

A suitable risk-based control plan should involve effort and urgency that is proportional to risk that is based on one advocated by BS 18004:2008 for general health and safety risks:

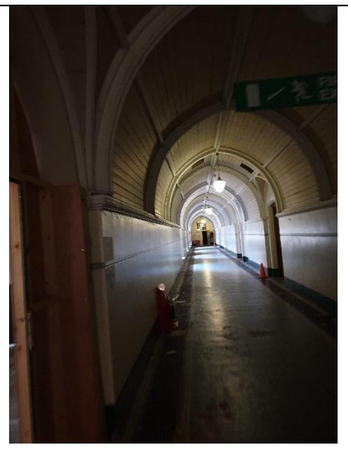
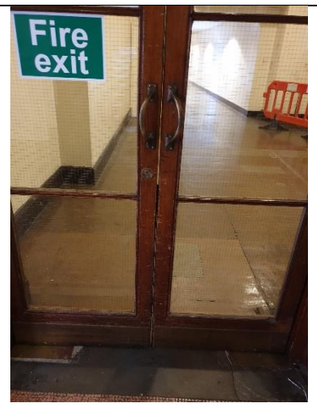
Note that, although the purpose of this section is to place the fire risk in context, the above approach to fire risk assessment is subjective and for guidance only. All hazards and deficiencies identified in this report should be addressed by implementing the recommendations contained in the action plan. The fire risk assessment should be reviewed regularly.

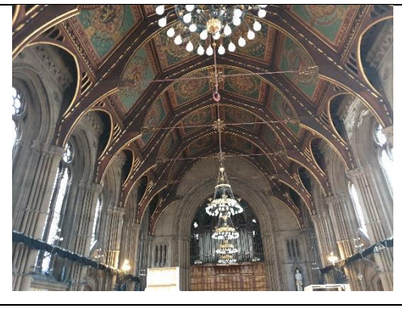
Significant Findings (Section of Report & Details)	Remedial Actions/ Recommendations	Location(s)	Photograph or Reference	Risk Rating	Remedial Action Type	Timescales	Action Taken by (Client)	Signature & Role
1.Sources of ignition No certification available	Management are to request a copy of the electrical certification to ascertain the general state of the fixed wiring system to ensure it is safe for use and have any immediate recommended remedial risk related works carried out as soon as possible in support of the surveying work which is ongoing. The electrical installation is to be closely monitored as work progresses particularly in the areas of large open voids which currently house combustible storage and have large untreated timber supports at the upper roof levels.	Throughout premises		Med 7	Management Action	Weeks		
1.Sources of ignition PAT testing	Management are to arrange PAT testing to be carried out on their portable appliances as soon as possible. Logs of all PAT testing is to be maintained in the fire safety file.	Throughout premises	No Photo	Med 7	Provide	Weeks		
7. Housekeeping Storage in the means of escape area	During the removal stages, latter end, management are to ensure that the equipment does not continue to find its way into the means of escape, and that designated areas are used. Corridor areas are suitable transit routes for storage but must not be used as storage areas.	Level 1		Med 5	Relocate	Weeks		

Significant Findings (Section of Report & Details)	Remedial Actions/ Recommendations	Location(s)	Photograph or Reference	Risk Rating	Remedial Action Type	Timescales	Action Taken by (Client)	Signature & Role
7. Housekeeping Large accumulations of combustibles in atria area	Upper attic areas containing large accumulations of combustibles must be monitored by management. As the areas are currently unoccupied, the risk is minimal to personnel. As the areas come into use by the surveying teams, the storage and waste materials are to be removed and either placed into suitable storage areas or disposed of appropriately in order to mitigate the risk of fire spread with staff operating in the vicinity. Where possible, any combustible materials, in areas where a fire can spread unrestricted should be removed as soon as possible mitigating the risk of fire development or accidental ignition even further.	Attic areas		Med 5	Management Action	Weeks		
7. Housekeeping Storage in the means of escape area	Security staff restroom is to be relocated out of the means of escape and placed in a location more appropriate to the use and storage of combustible and electrical equipment.	Beneath the grand staircase		Med 5	Relocate	Weeks		
7. Housekeeping Non fire-retardant coverings in stairwells.	Any protective covering in place within the communal means of escape must be fire-retardant (LPS 1207 rated or non-combustible). Management are not to cover stairwells accessing through various floors with timber and plastic. This is to be replaced at the earliest opportunity.	Stairwells to upper floors		Med 5	Replace	Weeks		

Significant Findings (Section of Report & Details)	Remedial Actions/ Recommendations	Location(s)	Photograph or Reference	Risk Rating	Remedial Action Type	Timescales	Action Taken by (Client)	Signature & Role
10. Means of escape – Control of access required.	Management are to have a monitoring system implemented to control access' around the premises. Any staff entering the upper areas, confined spaces, single directions of travel are to be logged on a permit to work access control system, and fire watch personnel are to be in place at the access points to these areas when they are in use e.g. Towers, attics etc (this is due to the current state of compartmentation – pre surveys).	Upper confined space areas, towers attics etc		Med 6	Management Action	Weeks		
10. Means of escape – Phones and/or radios to be checked for operational usage in areas on the upper floors/towers etc to check for suitable signals.	Management are to check that when operating within these restricted areas, such as the towers and spiral staircases etc, that staff are in contact e.g. via radio. Radio checks to be carried out periodically when staff operate within these areas.	Confined space and upper areas		Med 5	Management Action	Weeks		

Significant Findings (Section of Report & Details)	Remedial Actions/ Recommendations	Location(s)	Photograph or Reference	Risk Rating	Remedial Action Type	Timescales	Action Taken by (Client)	Signature & Role
10. Means of escape –	Management are to make sure that the Level '0' means of escape requiring the use of hand tools to excavate a stone wall to facilitate an escape on the Cooper Street end of the premises is not used in the planning operational stages for the refurbishment and that a minimum of 2 appropriate means of escape are available and used only.	Level '0' escape hatch	 	Med 6	Management Action	Weeks		
11. Limiting fire spread and development Doors wedged open	Management are to ensure that doors within the premises are not wedged open. If there is a need to hold doors open to facilitate the moving of equipment this must be done in a managed way and ensure the wedges are removed immediately. Management are to monitor this issue moving forward as works develop on site. Once Lendlease officially take over the site, management are to implement management procedure to have the means of escape routes walked and ensure that all doors leading onto the means of escape are closed.		No Photo	Med 6	Management Action	Weeks		

Significant Findings (Section of Report & Details)	Remedial Actions/ Recommendations	Location(s)	Photograph or Reference	Risk Rating	Remedial Action Type	Timescales	Action Taken by (Client)	Signature & Role
11. Limiting fire spread and development. Exposed wood and metal supports in ceilings/	Areas where metal floor/ceiling supports are currently exposed (noted in the Lord Mayor's Parlour) the rooms are to be cleared of any combustible materials to ensure any fire starting cannot easily spread into the ceiling voids.	Upper levels – noted in mayors suite		Med 6	Provide	Weeks		
12. Emergency lighting Unconfirmed emergency lighting at upper levels and restricted access areas.	Management are to have a full inspection of the current emergency lighting set up to ensure that means of escape coverage is sufficient including all areas which will be accessed for surveying purposes. If areas are due to be accessed, they must be provided with emergency lighting. Management to ensure that all lighting is tested monthly as a minimum and recorded in the fire safety logs.	Throughout upper levels		Med 6	Management Action	Weeks		
13. Fire signage and notices	Text only signage within the premises. Lendlease are to ensure that when they review ALL signage in the premises that it is pictographic in form and that they are not text only. Signage is to reflect the current fire strategies due to the removal of 2 fire exits. Management are to continually monitor the provision of fire exit signage and update and add/remove as required.	Numerous locations		Med 5	Replace	Weeks		

Significant Findings (Section of Report & Details)	Remedial Actions/ Recommendations	Location(s)	Photograph or Reference	Risk Rating	Remedial Action Type	Timescales	Action Taken by (Client)	Signature & Role
13. Fire signage and notices	Management are to ensure that all the fire action notices on all major escape routes are supported by fire action notices that are up to date and reflect the CURRENT evacuation strategy listing and showing the current evacuation routes and availability to staff dependant on where they are in the building.	Numerous locations		Low 4	Provide	Weeks		
13. Fire signage and notices	Dry riser inlet points on the premise's exteriors are not obviously highlighted with signage and require obvious signage to be erected in place as so not to delay any operations.	External points	 	Low 4	Provide	Weeks		
14. Means of giving warning	No SD in the state rooms or great hall. Management are to monitor the state rooms and advise security to make periodic inspections of these areas and have management procedures in place should a fire be discovered in these areas.	State rooms, halls and numerous other rooms.		Med 5	Management Action	Weeks		

Significant Findings (Section of Report & Details)	Remedial Actions/ Recommendations	Location(s)	Photograph or Reference	Risk Rating	Remedial Action Type	Timescales	Action Taken by (Client)	Signature & Role
18. Management of fire safety	Further invites should be made to GMF&RS to visit the site for a familiarisation tour and to review access, water supplies and firefighting arrangements and possible rescue scenarios.	Throughout premises	No Photo	Low 4	Provide	Weeks		
19. Staff training and fire drills	Management must ensure that fire drills are conducted on a 3 monthly basis and logged in full in the fire safety files. Management to monitor drills and training moving forward.	Throughout premises – all staff	No Photo	Low 4	Provide	Weeks		
20. Miscellaneous Information.	Management are to monitor and control known work areas, and log locations of staff throughout the premises at all times with control of access permits signed off and returned as necessary. As areas are brought into occupancy, the work areas must be suitable for occupation and reviewed and fitted out as necessary with the necessary fire precautions including management procedures, fire watch etc	Upper attic areas and restricted access zones to towers etc.		Med 6	Provide	Weeks		
21. High rise construction sites	Risers for fire service use to the premise's exterior are said to be wet risers although they appear to be dry. Management to confirm with MCC whether wet or dry and service and maintain as necessary.	Risers accessed externally		Low 4	Management Action	Weeks		

Significant Findings (Section of Report & Details)	Remedial Actions/ Recommendations	Location(s)	Photograph or Reference	Risk Rating	Remedial Action Type	Timescales	Action Taken by (Client)	Signature & Role
22. Large timber frame structures unprotected from fire	There are large timber framed areas of the structure to the upper levels of the building and in the towers. As work progresses, consideration is to be given to fire protecting these areas to prevent unrestricted fire spread during the construction works.	Tower bell supports and roofing timbers		Med 6	Provide	Weeks		