

MAYOR OF LONDON

# THE LONDON PLAN



THE SPATIAL DEVELOPMENT  
STRATEGY FOR GREATER LONDON  
**MARCH 2021**

provide adequate protection, do not compromise good design, do not shift vulnerabilities elsewhere, and are cost-effective. Development proposals should incorporate measures that are proportionate to the threat of the risk of an attack and the likely consequences of one.

- 3.11.4 By drawing upon current Counter Terrorism principles, new development, including streetscapes and public spaces, should incorporate elements that deter terrorists, maximise the probability of their detection, and delay/disrupt their activity until an appropriate response can be deployed. Consideration should be given to **physical, personnel and electronic security** (including detailed questions of design and choice of materials, vehicular stand off and access, air intakes and telecommunications infrastructure). The Metropolitan Police (Designing Out Crime Officers and Counter Terrorism Security Advisors) should be consulted to ensure major developments contain appropriate design solutions, which mitigate the potential level of risk whilst ensuring the quality of places is maximised.

## Policy D12 Fire safety

- A In the interests of fire safety and to ensure the safety of all building users, all development proposals must achieve the highest standards of fire safety and ensure that they:
- 1) identify suitably positioned unobstructed outside space:
    - a) for fire appliances to be positioned on
    - b) appropriate for use as an evacuation assembly point
  - 2) are designed to incorporate appropriate features which reduce the risk to life and the risk of serious injury in the event of a fire; including appropriate fire alarm systems and passive and active fire safety measures
  - 3) are constructed in an appropriate way to minimise the risk of fire spread
  - 4) provide suitable and convenient means of escape, and associated evacuation strategy for all building users
  - 5) develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in

- 6) provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.

**B** All major development proposals should be submitted with a Fire Statement, which is an independent fire strategy, produced by a third party, suitably qualified assessor.

The statement should detail how the development proposal will function in terms of:

- 1) the building's construction: methods, products and materials used, including manufacturers' details
- 2) the means of escape for all building users: suitably designed stair cores, escape for building users who are disabled or require level access, and associated evacuation strategy approach
- 3) features which reduce the risk to life: fire alarm systems, passive and active fire safety measures and associated management and maintenance plans
- 4) access for fire service personnel and equipment: how this will be achieved in an evacuation situation, water supplies, provision and positioning of equipment, firefighting lifts, stairs and lobbies, any fire suppression and smoke ventilation systems proposed, and the ongoing maintenance and monitoring of these
- 5) how provision will be made within the curtilage of the site to enable fire appliances to gain access to the building
- 6) ensuring that any potential future modifications to the building will take into account and not compromise the base build fire safety/protection measures.

- 3.12.1 The **fire safety of developments** should be considered from the outset. Development agreements, development briefs and procurement processes should be explicit about incorporating and requiring the highest standards of fire safety. How a building will function in terms of fire, emergency evacuation, and the safety of all users should be considered at the earliest possible stage to ensure the most successful outcomes are achieved, creating developments that are safe and that Londoners can have confidence living in and using.
- 3.12.2 The matter of fire safety compliance is covered by Part B of the Building Regulations. However, to ensure that development proposals achieve the

**highest standards of fire safety**, reducing risk to life, minimising the risk of fire spread, and providing suitable and convenient means of escape which all building users can have confidence in, applicants should consider issues of fire safety before building control application stage, taking into account the diversity of and likely behaviour of the population as a whole.

- 3.12.3 Applicants should demonstrate on a site plan that space has been identified for the **appropriate positioning of fire appliances**. These spaces should be kept clear of obstructions and conflicting uses which could result in the space not being available for its intended use in the future.
- 3.12.4 Applicants should also show on a site plan **appropriate evacuation assembly points**. These spaces should be positioned to ensure the safety of people using them in an evacuation situation.
- 3.12.5 Developments, their floor layouts and cores need to be **planned around issues of fire safety and a robust strategy for evacuation from the outset**, embedding and integrating a suitable strategy and relevant design features at the earliest possible stage, rather than features or products being applied to pre-determined developments which could result in less successful schemes which fail to achieve the highest standards of fire safety. This is of particular importance in blocks of flats, as building users and residents may be less familiar with evacuation procedures.
- 3.12.6 Suitable **suppression systems** (such as sprinklers) installed in buildings can reduce the risk to life and significantly reduce the degree of damage caused by fire, and should be explored at an early stage of building design.
- 3.12.7 The provision of **stair cores** which are suitably sized, provided in sufficient numbers and designed with appropriate features to allow simultaneous evacuation should also be explored at an early stage and provided wherever possible.
- 3.12.8 Policy D5 Inclusive design requires development to incorporate **safe and dignified emergency evacuation** for all building users, by as independent means as possible. In all developments where lifts are installed, Policy D5 Inclusive design requires as a minimum at least one lift per core (or more, subject to capacity assessments) to be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building. Fire evacuation lifts and associated provisions should be appropriately designed and constructed, and should include the necessary controls suitable for the purposes intended.
- 3.12.9 **Fire statements** should be submitted with all major development proposals. These should be produced by a third-party independent, suitably-qualified



assessor. This should be a qualified engineer with relevant experience in fire safety, such as a chartered engineer registered with the Engineering Council by the Institution of Fire Engineers, or suitably qualified and competent professional with the demonstrable experience to address the complexity of the design being proposed. This should be evidenced in the fire statement. Planning departments could work with and be assisted by suitably qualified and experienced officers within borough building control departments and/or the London Fire Brigade, in the evaluation of these statements.

- 3.12.10 **Fire safety and security measures** should be considered in conjunction with one another, in particular to avoid potential conflicts between security measures and means of escape or access of the fire and rescue service. Early consultation between the London Fire Brigade and the Metropolitan Police Service can successfully resolve any such issues.
- 3.12.11 **Refurbishment** that requires planning permission will be subject to London Plan policy. Some refurbishment may not require planning permission; nevertheless, the Mayor expects steps to be taken to ensure all existing buildings are safe, taking account of the considerations set out in this policy, as a matter of priority.

## Policy D13 Agent of Change

- A The Agent of Change principle places the responsibility for mitigating impacts from existing noise and other nuisance-generating activities or uses on the proposed new noise-sensitive development. Boroughs should ensure that Development Plans and planning decisions reflect the Agent of Change principle and take account of existing noise and other nuisance-generating uses in a sensitive manner when new development is proposed nearby.
- B Development should be designed to ensure that established noise and other nuisance-generating uses remain viable and can continue or grow without unreasonable restrictions being placed on them.
- C New noise and other nuisance-generating development proposed close to residential and other noise-sensitive uses should put in place measures to mitigate and manage any noise impacts for neighbouring residents and businesses.

## Appendix 27 – Fire Statement

## Appendix 28 – Relabelled Proposed Floor Plans



Title: Great Russell Street, Hotel - Fire Statement  
Revision: 04  
Date: 2<sup>nd</sup> August 2022  
Author: Richard Baker BEng(Hons)  
Approver: Steven Marshall BEng(Hons) MSc CEng MIFireE MIET

**Marshall Fire Ltd.**  
Great Russell Street, Hotel - Fire Statement

Revision	Description	Author	Approver	Date
00	First Issue	Richard Baker	Steven Marshall	7 <sup>th</sup> July 2022
01	Revised to suit Design Teams Comments.	Richard Baker	Steven Marshall	22 <sup>nd</sup> July 2022
02	Minor revisions.	Richard Baker		22 <sup>nd</sup> July 2022
03	Minor revisions.	Richard Baker	Steven Marshall	
04	Revised to suit comments.	Richard Baker	Steven Marshall	2 <sup>nd</sup> August 2022



## **Contents**

1.	Introduction	4
1.1	Overview	4
1.2	Purpose of this report	4
1.3	Scheme description	4
2.	Fire Statement	5
2.1	Section 1: Site address	5
2.2	Section 2: Description of proposed development including any change of use	5
2.3	Section 3: Name of person completing the fire statement and relevant qualifications and experience	8
2.4	Section 4: State what, if any, consultation has been undertaken on issues relating to the fire safety of the development; and what account has been taken of this	8
2.5	Section 5: Site layout plan as per building schedule referred to in section 6	8
2.6	Section 6: Building schedule	9
2.7	Section 7: Specific technical complexities	10
2.8	Section 8: Issues which might affect the fire safety of the development	11
2.9	Section 9: Local development document policies relating to fire safety	11
2.10	Section 10: Fire service site plan	13
2.11	Section 11: Emergency road vehicle access	14
2.12	Section 12: Siting of fire appliances	14
2.13	Section 13: Suitability of water supply for the scale of development proposed	14
2.14	Section 14: Fire service site plan	15
2.15	Section 15: Signature	15
2.16	Section 16: Date	15
2.17	Conclusion	15
3.	References	15

# **1. Introduction**

## **1.1 Overview**

Marshall Fire has been appointed by Central London Investments Limited, to provide a fire statement for the proposed works at 112A Great Russell Street, London, WC1B 3NQ. Our role is therefore to assist in steering the scheme towards meeting the requirements of the London Plan Policy D12 and part of Policy D5 where applicable to fire safety.

This Fire Statement will consider the evolution of the development and the principles of the golden thread concept and will form the basis of the developing Fire Strategy.

The 'Golden Thread' refers to a concept where the fire safety information of a building is to be updated and maintained through the whole life cycle of the building. The fire safety information should be maintained and updated as the development evolves in line with the principles of the golden thread. The fire safety information provided at planning application stage should be developed to inform the overall fire strategy for the development. When passing fire safety information to subsequent development stages, consideration should be given to the accessibility, accuracy, and relevance of the information to ensure the development is constructed as it has been designed and originally specified.

## **1.2 Purpose of this report**

The purpose of this report is to review the proposals in terms of the London Plan requirements and to demonstrate the development meets the highest standards of fire safety, proportionate to the size and nature of the development.

It is considered a planning requirement to provide a fire statement and best practice to follow the structure given in guidance to the London Plan requirements.

It should be noted that the project will still need to comply with the requirements of the Building Regulations and therefore the information presented herein may be developed further such that compliance with the requirements of the Building Regulations is demonstrated.

The contents of this report should therefore not be considered sufficient to form a part of the Building Regulations submission for the project and Building Regulation approval should be considered a risk until such time that approval in principle has been granted by the appointed Building Control Body.

The findings of this statement are based on the information available at the time of review. Marshall Fire cannot be held responsible for any subsequent changes to the design that we are not made aware of.

## **1.3 Scheme description**

The proposed scope of works relates to the conversion of existing basement levels 4 and 5 to provide hotel accommodation with access via an entrance at ground floor on Great Russell Street. The basement floors were previously arranged as car park space connected to the ground floor car entrance on Adeline Place with pedestrian access from Great Russell Street. The proposal is for change of use of basement levels 4 and 5, with part of the ground floor to C1 hotel use. There will also be works to create an entrance at ground floor on Great Russell Street together with some changes to provide a service access off Adeline Place.

The main access to the hotel will be from an entrance at ground floor, off Great Russell Street which provides access to an existing stair in the Lift Core that leads to Basement levels 4 and 5 as well as providing escape from basement levels between. The stair and lift will take guests to Basement Level 4 where the main hotel lobby reception is located. Guests will be able to access their room from the main lobby at Basement 4 or continue to Basement 5 to access their rooms at that level. The Basement 4 and 5 levels are also served by two other protected stairs for means of escape, that are designated as Escape Stair 02 and Escape Stair 03.

The main access stair and lift (entered from Great Russell Street) are arranged as part of a firefighting shaft. There are two other escape stairs that serve basement levels 4 and 5 with one discharging at ground to Bedford Avenue and the other to Adeline Place. The existing commercial units at ground and YMCA building at floors above that do not form part of this planning application.

This planning statement has been prepared referencing the Concept Fire Strategy Report prepared by FDS Consult: 112A Great Russell Street, London – Concept Fire Strategy Report (Job number 1173) dated July 2020.

The deepest basement level is Basement 5 at is about 15.47m below ground with Basement 4 at about 12.8m below ground.



Figure 1: Site Location (Courtesy of Google)

## 2. Fire Statement

### 2.1 Section 1: Site address

The development is located at 112A Great Russell Street, London, WC1B 3NP, with the site bounded by Adeline Place to the South East, Bedford Avenue to the North and Tottenham Court Road to the West.

### 2.2 Section 2: Description of proposed development including any change of use

The project consists of a change of use from car park (sui generis) to a Class C1 hotel use providing 110 bedrooms at Basement 5 and 98 bedrooms at Basement 4 providing accommodation for 459 guests. Ancillary spaces are limited to rooms for plant, storage, refuse and cycle parking, and ancillary uses at ground and basement levels.

In accordance with Approved Document B to the Building Regulations the building will be designated as Purpose Group 2(b) Residential (other).

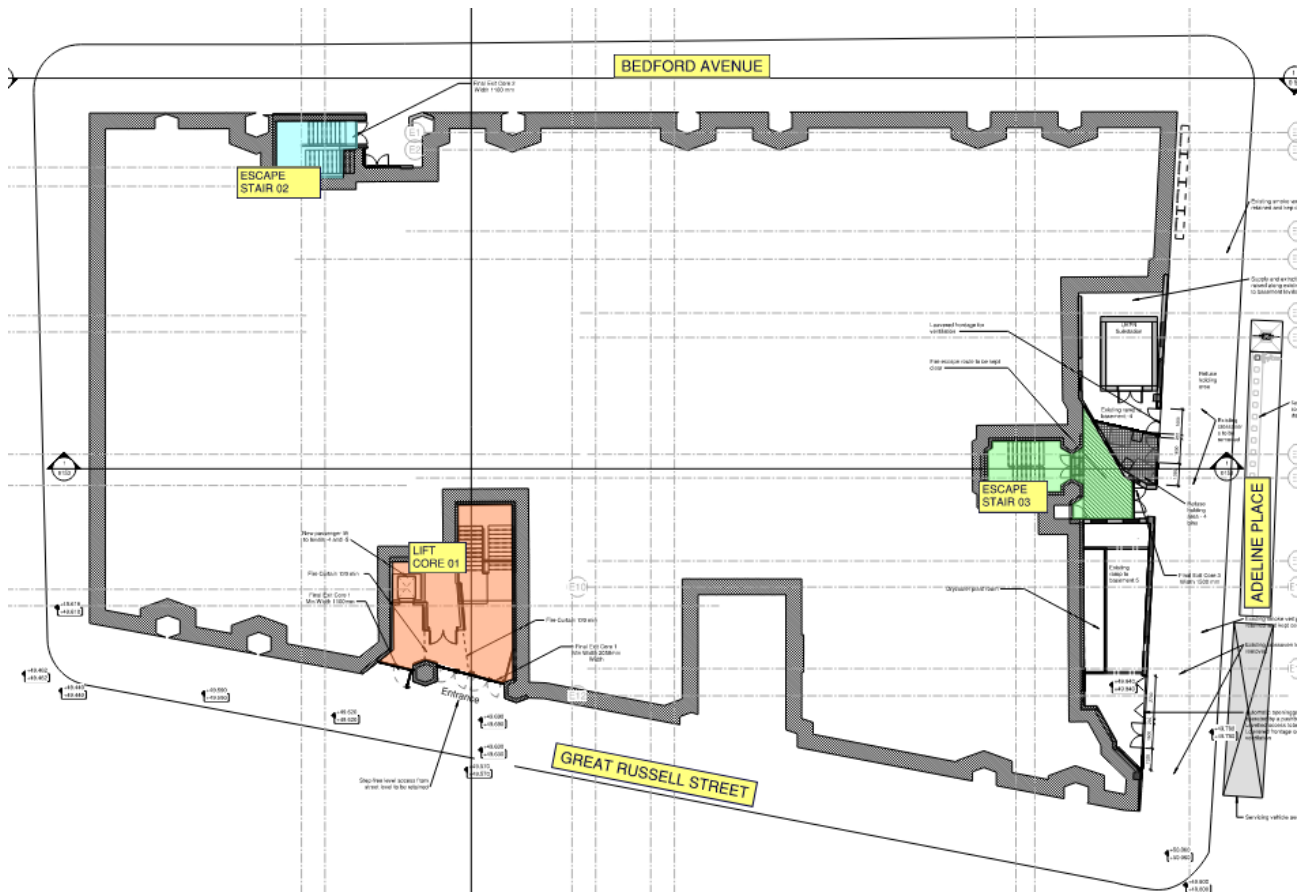


Figure 2: Proposed Works at Ground Floor





Figure 3: Proposed Works at Basement 4



Figure 4: Proposed Works at Basement 5

The following tables provide a summary of the buildings fire strategy and key parameters.

Table 1: Building Fire Strategy Summary

Description	Provision
Design guidance	Design development will be based on guidance given in 2019 Edition incorporating 2020 amendments. It is noted that the concept Fire Strategy by FDS was based on Approved Document B – Volume 2, 2006 Edition incorporating 2010 and 2013 amendments.
Purpose Group	Hotel: 2(b) Other residential accommodation.
Building height	Basement 5 : -15.47mm Basement 4 : -12.8m Note: There are 3 existing basement floors between ground and Basement 4.
Evacuation strategy	Simultaneous evacuation of Hotel. Hotel evacuation will be arranged as a separate stage to other uses.
Fire detection	BS 5839-1 Category L1
Fire alarm notification	Sounders with visual alarm devices and capacity to provide tactile alarm devices such as vibrating pillows.



Description	Provision
Structural fire resistance rating	120 minutes (assumed as existing building)
Compartment floors	Yes, 120 minutes throughout.
Sprinkler protected	A commercial water mist suppression system will be provided in both the levels of the building in accordance with BS 8489-1 :2016 and arranged to a life safety standard.
Firefighting shaft	Yes, serving Basement 4 and 5.
Mobility impaired evacuation	Firefighting lift will be arranged as a firefighting/evacuation lift in the Lift Core. Refuges with emergency voice communication systems provided in the other two escape stairs in accordance with BS 5839-9.
Dry/wet riser	Yes, dry riser (falling) mains system in the firefighting shaft Lift Core) and additional dry riser in Escape Stair 03 entered from Adeline Place.

**Table 2: Building Key Parameters**

Floor	Bedrooms per floor	Occupants	Escape Provision
Basement 4	98 bedrooms	215	Lift Core and Stair Cores02 and 03
Basement 5	110	244	
Total		459	

### 2.3 Section 3: Name of person completing the fire statement and relevant qualifications and experience

This document was completed by Richard Baker. He has a BSc (Hons) in Fire Safety Engineering and has more than 25 years experience in Fire Safety Engineering and is a Technical Director at Marshall Fire Ltd.

Richard has a high level of understanding of the functional requirements to the Building Regulations and how to develop designs to achieve compliance. He has worked on a wide range of projects including commercial, mixed use and residential developments across the UK and internationally from project conception (RIBA Stage 2) through all design and construction phases to commissioning and completion.

This document was reviewed by Steven Marshall. He is a chartered engineer and member of the Institute of Fire Engineers and has been involved in fire safety for over twenty years. He is the Managing Director of Marshall Fire Ltd, and has a high level of understanding Part B compliance and has worked on a wide range of projects including mixed use and residential developments schemes across the UK of varying scales, within the public and private sectors.

### 2.4 Section 4: State what, if any, consultation has been undertaken on issues relating to the fire safety of the development; and what account has been taken of this

No pre-app has been undertaken on Fire Safety. We are not aware of any other consultation to date that have been undertaken.

### 2.5 Section 5: Site layout plan as per building schedule referred to in section 6

Refer to Figure 1 of this Fire Statement

**Marshall Fire Ltd.**

Great Russell Street, Hotel - Fire Statement

**2.6 Section 6: Building schedule****Table 3: Buildings Schedule Table***Notes: The principle guidance will follow that given in Approved Document B – Volume 2.*

Site Information				Building Information		Resident Safety Information		
Floors	Block height (m)	No. of Beds	Proposed use	Balconies	External Wall Systems	Evacuation approach	Sprinklers	Accessible housing provided
Ground	0m	None	Entrance	None	Concrete frame with curtain wall infill walls.	Simultaneous		None
Basement 4	-12.8m	215	Hotel Purpose group 2 (b) Residential Other	None	Basement level so no external wall to report.	Simultaneous	Water mist to BS 8489-1.	4 accessible bedrooms provided with access to Lift Core.
Basement 5	-15.47m	244	Hotel Purpose group 2 (b) Residential Other	None	Basement level so no external wall to report.	Simultaneous	Water mist to BS 8489-1.	6 accessible bedrooms provided with access to Lift Core.

Note: \* Existing structure reinforced concrete floors, columns and shear walls, masonry/stone external walls, proposed internal walls plasterboard dry lining wall systems.

## **2.7 Section 7: Specific technical complexities**

The Fire Strategy will be further developed using guidance from Approved Document B – Volume 2: Buildings other than dwellings: 2019 Edition incorporating 2020 amendments. The evacuation will be based on a simultaneous evacuation. An investigation delay period can be introduced by the operator providing there is a robust management plan in place to support such a strategy.

The automatic fire detection and alarm system will be designed and installed in accordance with BS 5839-1:2017 and arranged as a Category L1 system. With this type of system, automatic fire detectors are provided in all areas. Areas where the atmosphere could cause false activation of smoke detectors, such as plant rooms will be provided with heat detectors. The system will also be provided with manual call points generally located adjacent to each storey exit. A fire alarm signal will be broadcast via electronic sounders and visual alarm devices where audibly impaired occupants could be occupied in isolation. The system shall also have capacity to support tactile alarm devices such as vibrating pillows.

An automatic water fire suppression system is to be provided as a water mist system designed and installed in accordance with BS 8489-1: 2016. The system will be designed to suit the risk and also incorporate additional measure to improve reliability and availability of the system.

Each floor level will be a compartment floor, having a fire resistance achieving not less than 120 minutes fire resistance as equal to the elements of structure. Corridors and storage areas will all be fire separated with 30 minutes fire resistant construction including fire doors rated as FD30S with self-closers.

Travel distances within bedrooms with a single escape will generally be no more than 9m. Travel distances within dead end areas of protected corridors will be no more than 9m from bedroom door to a storey exit. For areas where escape is available in more than one direction the maximum distance for travel to the nearest storey exit will be no more than 35m. Each protected corridor connecting two storey exits will be provided with a cross corridor door set, with a FD30S within a 30 minute fire rated enclosure.

The existing structure is reinforced concrete floors, columns and shear/retaining walls. The proposed internal walls will be of plasterboard dry lining wall systems. The existing elements of structure (floors/columns/beams) to the areas of works provide a minimum period of fire resistance of not less than 120 minutes.

As the works are mainly within the basement areas there are no external walls associated with these works. Any new external wall/infill panels at ground floor that are associated with the hotel entrances within the external wall will be of materials achieving Class A2-s1, d0 or better.

Fire service access to the building is from Great Russell Street providing access to the main entrance and into the Lift Core that is arranged as a firefighting shaft. The firefighting shaft will consist of a firefighting lift and firefighting stair that are approached at each level by a firefighting lobby. The firefighting lobby will be further protected with a mechanical smoke ventilation system. There will also be a dry fire main with an outlet within each firefighting lobby. Fire service vehicle access is provided to at least 18m of the dry fire mains inlet breaching that is located in the main entrance. An additional dry riser is provided in the Escape Stair 03 with an inlet in the entrance to the core on Adeline Place.

The two Escape Stairs are to be 120 minutes fire resistant construction with access via FD60S door sets.

The basement alterations will provide back of house spaces such as cycle storage, plant rooms, waste and linen stores. All areas will be provided with 60 minutes fire resistant construction and FD30S fire doors, and doors to waste store and plant rooms being FD60S. The existing basement areas are served by a number existing break-out pavement panels that would provide smoke clearance. These will be reviewed to confirm suitable smoke clearance provision is provided to all basement areas.

Any ventilation services to or crossing protected escape routes will have smoke detector operated Type ES fire dampers.

The firefighting lift serving hotel areas only, will be in accordance with BS 81-72 and also arranged for assisted evacuation operation as given in BS EN 81-20, and BS EN 81-76. This is based on the building characteristics as having onsite management to assist with the evacuation.

Ongoing maintenance and management of the lift will be in line with BS EN 81-72, BS EN 81-20, BS EN 81-76, and any other applicable codes of practice and manufacturer's recommendations. A backup power supply will be provided to all life safety systems in accordance with guidance.

A muster point is to be identified so that in the event of a fire the occupants can escape to a safe place away from the building. This will need to be outside of the building and lead to an ultimate place of safety. It is recommended that this is positioned in a safe place at the front of the building. The deep pavement in front of

the garden in Bedford Square at the junction with Adeline place would be suitable, and exact location will be developed by the operator by considering safe locations to cross the road and further directions to the location.

All fire safety features, both passive and active, that have been introduced to reduce the risk to life in event of fire will be subject to ongoing management operation plan for the premises. This will set out the details of operations and maintenance plans as well as ongoing monitoring activities.

## **2.8 Section 8: Issues which might affect the fire safety of the development**

There are no significant departures from guidance and so no issues affecting the approving authorities sign off.

## **2.9 Section 9: Local development document policies relating to fire safety**

The project is located within the Greater London Authority (GLA) region and therefore should support the design intent of the London Plan Policy D12 and part of Policy D5 where applicable to fire safety.

To this, the appendices of the draft Fire Safety, London Plan Guidance contain template forms for Fire Statements. The forms serve as checklists for compliance for the GLA's fire safety policies (D5 and D12). To check whether compliance with D5 has been achieved, these forms state:

*"Where a lift core is provided, at least one lift is an evacuation lift" (pages 29 and 30).*

This clarifies the meaning of "as a minimum at least one lift per lift core...should be a suitably sized fire evacuation lift" – i.e. it confirms to the requirements for evacuation lifts and applies only to lift cores and would not apply to escape stairs that do not include a lift.

The proposed development will meet London Plan Policy D5 Part B5 for safe and dignified emergency evacuation, through provision of a firefighting lift that can be deployed for managed evacuation. The Lift Core within proximity to the accessible bedrooms that are accessed along protected corridors. Escape Stairs 02 and 03, will be provided with a disabled refuge including an emergency voice communication outstation on the main landing.

Dignified escape from basement is available via the firefighting lift that connects to ground floor entrance to Basements 4 and 5. Should there be a fire event in the basement, disabled occupants would cross to the evacuation lift in the Lift Core and with assistance from management will be able to make their escape.

Based on a 8 to 13 person lift a single wheelchair user and assistant can be accommodated at one time. With approximately 12 second travel time and 7 second door open/close cycle each person will take 30 seconds to evacuate. With assistant/management returning to floor and repeating cycle, we would estimate evacuation 6 disabled occupants at Basement 5 to take about 7 minutes and evacuation of 4 disabled occupants at basement 4 to 5 minutes. The management plan will adopt a Personal Emergency Evacuation Plan (PEEP) for all occupants who may require assistance in evacuation so their likely location can be identified, and assistance can be deployed at earliest opportunity. This would reduce the pre-movement time, from detection, and movement time to the refuge with occupants being assisted to assemble at the lift lobby. With an evacuation time to the protected escape route of 8-9 minutes and then evacuation of disabled occupants from the fire floor should be completed in 15 to 16 minutes. With Fire Service response, arrival and set-up time expected to be greater than 15 minutes then the lift would be available for firefighting use when required. .

Wayfinding signage which will benefit occupants and firefighters will be provided at all main landings and lobbies to stairs.

As part of a planning request, a London Plan Fire Statement is required to identify the fire safety preliminary design. As part of planning request, a London Plan Planning Fire Statement Strategy is sought by draft fire safety guidance to identify compliance with Policy D12 Part A. This is set out below:

*"1) identify suitably positioned unobstructed outside space:*

*a) for fire appliances to be positioned on*

*b) appropriate for use as an evacuation assembly point"*

The fire appliance will approach the hotel main entrance on Great Russell Street. As demonstrated in Figure 4.

An evacuation assembly point will be identified at a safe place at the front of the building as noted in Section 7 above. A location along the deep pavement in front of the garden in Bedford Square at the junction with

Adeline Place would be considered suitable, and exact location will be developed by the operator by considering safe locations to cross the road and further directions to the location.

*“2) are designed to incorporate appropriate features which reduce the risk to life and the risk of serious injury in the event of a fire; including appropriate fire alarm systems and passive and active fire safety measures”*

The fire strategy for the site will incorporate the appropriate features to reduce risk in the event of a fire. Detail on fire detection and alarm systems, other active fire safety systems and passive fire safety provisions are set out in Section 7 and are sufficient to meet this policy requirement.

*“3) are constructed in an appropriate way to minimise the risk of fire spread”*

The existing building is constructed to have 120 minutes fire resistance, and corridors are to have 30 minutes fire resistance. Section 7 sets out further details of how fire spread is minimised by compartmentation.

*“4) provide suitable and convenient means of escape, and associated evacuation strategy for all building users”*

A simultaneous evacuation strategy is proposed for the Hotel that will be a separate evacuation stage from other uses. The means of escape routes are shown on Planning issue drawings by MY Construction as:

- GRS-0101 Rev P6 – Proposed GA Plan Basement 5 Planning
- GRS-0102 Rev P2 – Proposed GA Plan Basement 4 Planning
- GRS-0103 Rev P5 – Proposed Plan Ground Floor Planning

*“5) develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.”*

The evacuation strategy set out in the fire strategy drawings will be periodically updated and published.

*“6) provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.”*

The provision of a single firefighting shaft as set out in the Concept Fire Safety Strategy is suitable for the size and use of the development with the main firefighting access entered through the main hotel entrance on Great Russell Street. The fire strategy drawings identify any firefighting equipment. Figure 4 demonstrates the hydrant locations and fire service vehicle siting. Further detail on firefighting access and equipment is set out in Section 10 to 12.

Policy D12 Part B requires that all major development proposals should be submitted with a Fire Statement, which is an independent fire strategy, produced by a third party, suitably qualified assessor. This statement details how the development proposal will function in terms of:

*“1) the building’s construction: methods, products and materials used, including manufacturers’ details”*

Construction methods, products and materials used will be developed by the design team in strict accordance with guidance to the Building Regulations. Manufacturer’s details and installations will be continually monitored through the procurement.

*“2) the means of escape for all building users: suitably designed stair cores, escape for building users who are disabled or require level access, and associated evacuation strategy approach”*

The building design has suitably located and sized escape stairs to accommodate safe escape routes from the building along with a Lift Core that will accommodate disabled users with assistance from management.

*“3) features which reduce the risk to life: fire alarm systems, passive and active fire safety measures and associated management and maintenance plans”*

The hotel is to be fitted out with a suite of fire safety systems including water mist suppression, detection and alarm system, emergency lighting, and signage. These together with the passive measures (fire rated walls and doors) and ongoing management and maintenance plans will provide a robust life safety strategy for the occupation of the building.

*“4) access for fire service personnel and equipment: how this will be achieved in an evacuation situation, water supplies, provision and positioning of equipment, firefighting lifts, stairs and lobbies, any fire suppression and smoke ventilation systems proposed, and the ongoing maintenance and monitoring of these”*



Sections 2.10 – 2.14 set out the strategy with regards to firefighting access and equipment to undertake firefighting operations.

*“5) how provision will be made within the curtilage of the site to enable fire appliances to gain access to the building”*

Access to and around the site is available directly by public highways with an access point into the Lift Core as the firefighting shaft and also access directly into the escape stairs from Adeline Place that is provided with a dry rising main.

*“6) ensuring that any potential future modifications to the building will take into account and not compromise the base build fire safety/protection measures”*

A robust management operation plan will be put in place to ensure that the building is maintained during its use and that any future modifications are assessed against existing provisions prior to being undertaken.

## **2.10 Section 10: Fire service site plan**

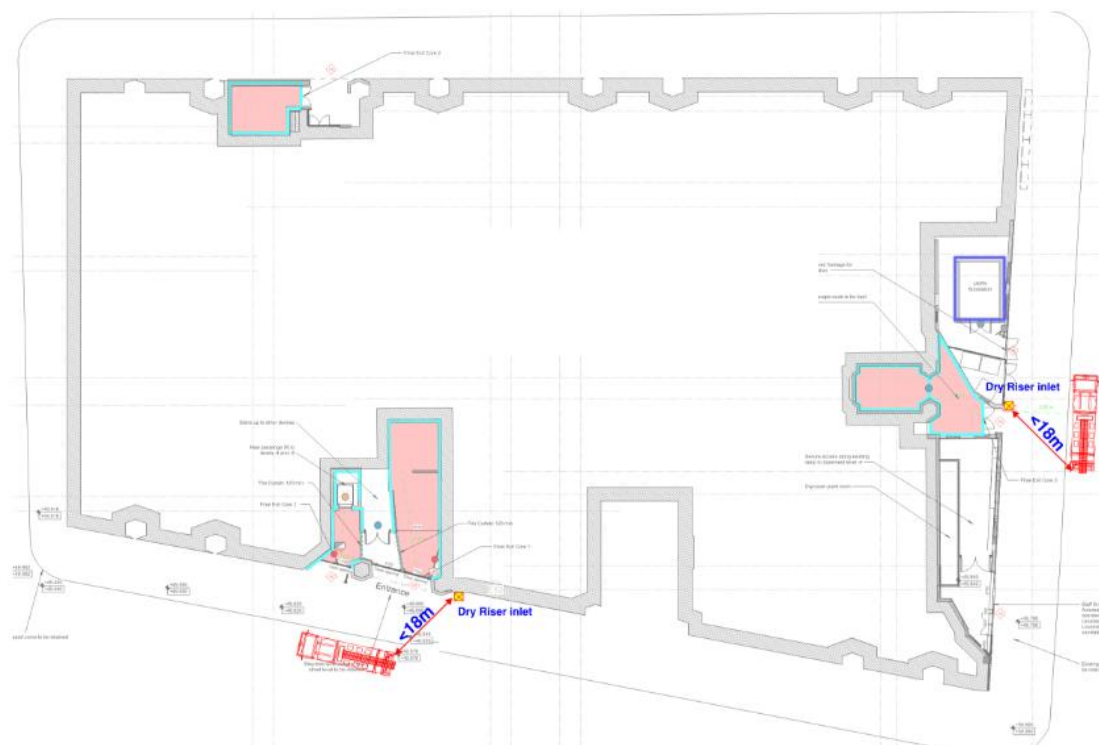
Existing fire service access to the building is from Great Russell Street providing access to the main entrance. Hotel and the YMCA use having separate entrances. Internal firefighting access to the building will be provided via the Lift Core which will be arranged as a firefighting shaft that will be designed in accordance with BS9999. The firefighting shaft will include:

- Firefighting staircase enclosed in 120 minutes fire resisting construction and be at least 1100mm wide,
- Firefighting lift (provided with dual power supply, water protection, etc.) enclosed in 120 minutes fire resisting construction,
- Ventilated Firefighting Lobby (achieved via the fan assisted smoke shaft),
- Outlet from the fire main at each storey that the firefighting shaft serves (within the firefighting lobby),
- Protected access (at least 120 minutes) onto firefighting shaft at access level.
- A 1.0m<sup>2</sup> vent on the top of the staircase.

A dry riser main will be available in the firefighting shaft to ensure that all parts of the accommodation are accessed within 60m from the dry riser outlet located within the firefighting lobby (Lift Core). However, currently all parts of the accommodation cannot be accessed within 60m from the dry riser outlet located within the firefighting lobby. Therefore, it is proposed to provide an additional dry riser within the Escape Stair 03 that is entered from Adeline Place to ensure that all parts of the accommodation are accessed within 45m from the dry riser outlet located in the Escape Stair and 60m from the dry riser outlet located within the firefighting lobby (Lift Core) .

The works associated with the hotel do not have any effect on the retail units at ground or the YMCA building above with regards to existing firefighting provisions so the rest of the building will remain as existing.

The mechanical and electrical engineers will develop the detail design, providing a site plan with the hydrant locations for the site/area and will identify the dry riser inlet/outlet locations as part of Section 12 and Section 14. Figure 4 indicates the existing hydrant location to the main firefighting access point.



**Figure 4: Indicative Fire Service Vehicle Access and Hydrants**

## 2.11 Section 11: Emergency road vehicle access

Firefighting access is key for successful firefighting and therefore the appropriate provisions must be made regarding site access.

The main hotel entrance on Great Russell Street and Lift Core entrance on Adeline Place is within 18m of the fire service vehicle access.

Firefighting vehicle access is available directly from adjacent roads with no dead-end conditions or access gates imposed.

**Table 5: Pump appliance access route requirements**

Appliance Type	Min. width of road between kerbs	Min. width of gateways	Min. turning circle between kerbs	Min. turning circle between walls	Min. clearance height	Min. carrying capacity
Pump	3.7	3.1	16.8	19.2	3.7	12.5*
High Reach	3.7	3.1	26.0	29.0	4.0	17.0*

**Note:** \* The minimum carrying capacity should be checked with the local fire brigade.

## 2.12 Section 12: Siting of fire appliances

Siting of the fire appliances will be in front of each buildings main entrance. This has been illustrated in Figure 4.

The design team (Mechanical and Electrical Engineers) will provide a site plan with the above items which will support the design intent, this is part illustrated in Section 10.

## 2.13 Section 13: Suitability of water supply for the scale of development proposed

Existing hydrant locations around the site appear to be satisfactory. Further checks shall be made around the site to ensure existing hydrants are located within 100m of each entry point to the building and not more than 90m apart. The water supplies will be via the towns mains.

**2.14 Section 14: Fire service site plan**

The design team will provide a site plan as stated in Section 12. See also Figure 4.

**2.15 Section 15: Signature**

The following overview has been produced by Richard Baker.



**2.16 Section 16: Date**

The following fire safety statement is dated **22/07/2022**.

**2.17 Conclusion**

Having reviewed the documentation issued to Marshall Fire Ltd, we agree with the overall design proposals and conclusion presented in the drawings for the works at Great Russell Street are deemed to satisfy the preliminary fire safety design.

It is considered the scheme meets London Plan Policy D12 and part of Policy D5 where applicable to fire safety. The evolution of the design development and the principles of the golden thread concept and will form the basis of the developing Fire Strategy through further design, construction and operating of the building.

We would however reiterate that the findings are limited to the information reviewed and subject to further findings/investigations to the existing as built conditions.

### **3. References**

- i.** Approved Document B – Volume 2: Buildings other than dwellings, 2006 Edition incorporating 2010 and 2013 amendments.
- ii.** Approved Document B – Volume 2: Buildings other than dwellings, 2019 Edition incorporating 2020 amendments.
- iii.** BS 9999: 2017, Fire safety in the design, management and use of buildings – Code of practice.
- iv.** Fire Statement Guidance, Annex D Gov.co.uk
- v.** BS 5839-1:2017, Fire detection and fire alarm systems for buildings. Part 1: Code of practice for design, installation, commissioning, and maintenance of systems in non-domestic premises.
- vi.** BS 8489-1: 2016 Fixed Fire Protection Systems – Industrial and commercial watermist systems, Part 1: Code of practice for design and installation.
- vii.** FDS Consult: 112A Great Russell Street, London – Concept Fire Strategy Report (Job number 1173) dated July 2020





0 5.00m 10.0m

Project Stage  
**For Planning**

Client  
**Criterion Capital Ltd.**

Project  
**GRS**

Title  
**Proposed GA Plan Basement 5 Planning**

REV	DATE	PURPOSE	BY
P1	27/03/20	For Planning	MH
P2	29/06/20	For Planning	MH
P3	27/10/21	For Planning	MR
P4	18/11/21	For Planning	MR
P5	18/11/21	For Planning	MR
P6	09/12/21	For Planning	MR

Drawing No.  
**GRS-0101**

Rev.  
**P6**

Project No.  
**003**

Scale  
**1 : 125 @ A1 1 : 250 @ A3**

Drawn  
**MV**

Checked  
**MH**

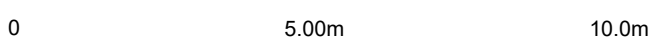
Date  
**03/26/20**

Do not scale from this drawing. All dimensions should be checked and confirmed on site before the commencement of work. All discrepancies must be reported. Subcontractors must verify all dimensions on site before making a shop drawing or commencing manufacturing. This drawing is subject to copyright. ©

**MY CONSTRUCTION**

Unit 5, Sayer House  
Horseshoe Close, London, NW2 7JN  
T +44 (0)20 8450 5747  
E info@myconstruction.co.uk





Project Stage  
**For Planning**

Client  
**Criterion Capital Ltd.**

Project  
**GRS**

Title  
**Proposed GA Plan Basement 4 Planning**

REV	DATE	PURPOSE	BY
P1	27/03/20	For Planning	MH
P2	28/06/20	For Planning	MH

Drawing No.  
**GRS-0102**

Rev.  
**P2**

Project No.  
**003**

Scale  
**1 : 125 @ A1 1 : 250 @ A3**

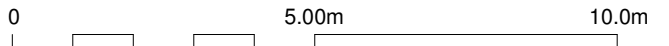
Drawn  
**MH**

Checked  
**MH**

Date  
**03/26/20**

Do not scale from this drawing. All dimensions should be checked and confirmed on site before the commencement of work. All discrepancies must be reported. Subcontractors must verify all dimensions on site before making a shop drawing or commencing manufacturing. This drawing is subject to copyright. ©





Project Stage  
**For Planning**

Client  
**Criterion Capital Ltd.**

Project  
**GRS**

Title  
**Proposed Plan Ground Floor Planning**

REV	DATE	PURPOSE	BY
P1	27/03/20	For Planning	MH
P2	29/06/20	For Planning	MH
P3	07/08/20	For Planning	MH
P4	27/10/21	For Planning	MR
P5	19/11/21	For Planning	MR

Drawing No.  
**GRS-0103**

Rev.  
**P5**

Project No.  
**003**

Scale  
**1 : 125 @ A1 1 : 250 @ A3**

Drawn  
**MH**

Checked  
**MH**

Date  
**03/26/20**

Do not scale from this drawing. All dimensions should be checked and confirmed on site before the commencement of work. All discrepancies must be reported. Subcontractors must verify all dimensions on site before making a shop drawing or commencing manufacturing. This drawing is subject to copyright. ©

## Appendix 29 – Extract of Draft Fire Safety London Plan Guidance



**MAYOR OF LONDON**

# London Plan Guidance

## **Fire Safety**

**February 2022**

## Appendix 3 Template Forms

### A3.1 Form 1 – Fire Statement template (London Plan Policy D12B) for major development

<b>Form 1 – Fire Statement template (London Plan Policy D12B) for major development</b>	
<b>Site address</b>	
<b>Description of development</b>	
<b>Name, qualifications, professional memberships and experience of author</b>	
<b>Has a Gateway One Statement been submitted?</b>	
<b>Policy considerations (D12B)</b>	<b>Potential Gateway One cross reference</b>
<b>The building's construction: methods, products and materials used</b>	Gateway One Q6f&g
<b>Means of escape for all building users and the evacuation strategy</b>	Gateway One Q6h
<b>Passive and active fire safety measures</b>	Gateway One Q6i
<b>Access and facilities for the fire and rescue service</b>	Gateway One Q10, 11, 13 & 14
<b>Site access for the fire and rescue service</b>	Gateway One Q10 & 11
<b>Modifications to the development and the 'golden thread' of information</b>	

<b>Where a lift core is provided, at least one lift is an evacuation lift</b> See Form 3	London Plan Policy D5B5
<b>Declaration of Compliance by a competent person<sup>16</sup></b>	

**A3.2 Form 2 – Planning Fire Safety Strategy template (London Plan Policy D12A) for non-major development as set out in Appendix 1**

<b>Form 2 – Planning Fire Safety Strategy template (London Plan Policy D12A) for non-major development</b>	
<b>Site address</b>	
<b>Description of development</b>	
<b>Name, qualifications, professional memberships and experience of author</b>	
<b>Has a Gateway One Statement been submitted?</b>	
<b>Policy considerations</b>	<b>Potential Gateway One cross reference</b>
<b>Identifies suitably positioned unobstructed outside space for fire appliances to be positioned on</b>	Gateway One Q12
<b>Identifies suitably positioned unobstructed outside space appropriate for use as an evacuation assembly point</b>	Gateway One Q6h
<b>Designed to incorporate appropriate features which reduce the risk to life and the risk of serious injury in the event of a fire, including appropriate fire alarm systems and passive and active fire safety measures</b>	Gateway One Q6i (part)
<b>Constructed in an appropriate way to minimise the risk of fire spread</b>	Gateway One Q6g

<sup>16</sup> See Sections 5.2 and 7 for further details

<b>Provides suitable and convenient means of escape, and associated evacuation strategy for all building users</b>	Gateway One Q6h
<b>A robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in</b>	Gateway One Q6h
<b>Suitable access and equipment for firefighting which is appropriate for the size and use of the development</b>	Gateway One Q10 &11
<b>Where a lift core is provided, at least one lift is an evacuation lift</b> See Form 3	London Plan Policy D5(B5)

### A3.3 Form 3 - Provision of evacuation lift (Policy D5(B5))

(to supplement Forms 1 or 2, where a lift is provided)

<b>Form 3 - Provision of evacuation lift (Policy D5(B5))</b>	
<b>Site address</b>	
<b>Description of development</b>	
<b>Name, qualifications and / or experience of author</b>	
<b>Policy considerations Policy D5(B5)</b> Potential cross reference London Plan Policy D12A(4&5) and Policy D12B(2)	
<b>Details of the evacuation lift and shaft</b>	
<b>Capacity Assessment</b>	
<b>Evacuation Strategy</b>	

