PLANNING FIRE STATEMENT

Project:	63-66 Hatton Garden	**Subject:**	Fire Statement
Project No.:	P24-113		
Document Ref.:	241119DN0D1	**Date:**	04/12/2024
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1 INTRODUCTION

1.1 Project Description

This Fire Statement has been prepared by The Fire Surgery on behalf of Hatton Garden Properties Ltd ('the Applicant') in support of an application for full planning permission for the refurbishment of 63-66 Hatton Garden, London, EC1N 8LE (herein referred to as 'the Site').

The Fire Surgery Ltd are the Fire Consultant for the proposed refurbishment of 63-66 Hatton Garden in London. The refurbishment works planned for the building includes:

- Lower ground floor - cycle facilities housing and plant equipment as well as a new office space.
- Ground floor providing a reception lobby, two independent retail units and an office space.
- First floor to seventh floors providing office accommodation.
- Eighth floor to provide a new roof terrace, lounge area and open plant.
- Roof level provided with a green roof.
- Infill one existing stair with a new external escape stair.

The main entrance to the building is to be through the reception lobby on the ground floor, accessed from Hatton Garden. Final exits from upper floors are to be provided at ground floor and lower ground floor level. Fire service access to firefighting shafts is to be provided via Hatton Garden. The building height is to be increased from 21.8m on the seventh floor to 25m on the new occupied eighth floor.

1.2 London Plan Policy D12

London Plan Policy D12 requires development proposals to achieve the highest standards of fire safety, embedding these at the earliest possible stage. Policy D5 also requires specific consideration of the requirements for evacuation lifts, which form part of the fire safety features of the project.

Therefore, all development proposals should be submitted with a Fire Statement.

A Fire Statement is a standalone document which defines the fire safety objectives and performance requirements of a development, and the methods by which these objectives will be provided/ satisfied. This is based on the Draft Fire Safety Guidance provided by the GLA for the London Plan Policy D12 with regards to fire safety.

The Fire Statement is to evidence the provisions made for the safety of occupants and protection of property as well as the provision of suitable access and equipment for firefighting in light of the London Plan fire safety policy requirements and the justification for these measures.

The Fire Surgery Ltd confirm that the fire safety of the proposed development and the fire safety information satisfies the requirements of London Plan Policy D12 as laid out below:

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:*	Section Ref.
	1. identify suitably positioned unobstructed outside space:	
	a. for fire appliances to be positioned on	8
	b. appropriate for use as an evacuation assembly point	6.8
	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.	7
	3. are constructed in an appropriate way to minimise the risk of fire spread	5
	4. provide suitable and convenient means of escape, and associated evacuation strategy for all building users	6
	5. develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in	6
	6. provide suitable access and equipment for firefighting which is appropriate for the size and use of the development	8
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	5
	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	6
	3. features which reduce the risk to life: fire alarm systems, passive and active fire safety measures and associated management and maintenance plans	7
	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	8
	5. how provision will be made within the curtilage of the site to enable fire appliances to gain access to the building	8
	6. ensuring that any potential future modifications to the building will take into account and not compromise the base build fire safety/protection measures	9
Policy D5 Inclusive Design		
B	*5. be designed to incorporate safe and dignified emergency evacuation for all building users. In all developments where lifts are installed, as a minimum at least one lift per core (or more subject to capacity assessments) should be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building.*	6.7

1.3 Declaration

In accordance with the draft London Plan Guidance – Fire Safety, consultation version, February 2022, The Fire Surgery hereby confirm that the technical content produced for the planning application complies with all relevant legislation and requirements of London Plan Policy D12(A) and D5(B5).

2 COMPETENCY STATEMENT

Paragraph 3.12.9 of Policy D12 explains that Fire Statements should be produced by someone who is: "third-party independent and suitably-qualified". The Fire Surgery competence along with the fire engineers working on the scheme is provided below.

The Fire Surgery is an award-winning independent Fire Engineering design consultancy based in London. The company is a proud member of the Fire Engineering Council for the Fire Industry Association by virtue of the Chartered Engineering status of its engineers and also its ISO 9001 accreditation for Quality Management.

The specialist fire and risk consultancy team come from a varied background including chartered engineers, physicists and management consultants who specialise in business continuity. Members of the Fire Surgery team also contribute regularly to the development and writing of fire safety standards and industry best practice guidance, including *BS7974; Application of fire safety engineering principles to the design of buildings – Code of practice (2019)*, in which competency plays a fundamental part.

The Fire Surgery specialises in the development of fire strategies for innovative buildings, particularly commercial and entertainment venues in London. The Fire Surgery has a proven track record for securing Building Regulations approvals on a number of high-profile projects in London and having a strong working relationship with Local Authority Building Control and London Fire Brigade Fire Engineering Team.

2.1 The Fire Engineers

Rumaan Qureshi MEng, graduated from the University of Huddersfield with a master's degree in Chemical Engineering in July 2019.

He later joined Michael Slattery Associates in 2020 as a fire engineer where he spent 2 years developing fire strategies for various buildings including residential, office, educational and mixed-use buildings.

Rumaan has technical experience in developing holistic fire strategies and performance-based and prescriptive-based fire safety design.

Yen Luong BSc, MSc (Fire Eng.), CPhys, MInstP, MIFireE is a qualified fire engineer and Chartered Physicist. She obtained a Master's degree in fire safety engineering and has over 28 years of experience in providing fire, safety and risk consultancy services in the UK and internationally.

Yen has worked in the UK, Hong Kong, Australia and America for a diverse group of companies including CSIRO (the Australian government research and testing organisations), WS Atkins and Buro Happold (multi-disciplinary engineering companies) and Goldman Sachs (a global investment bank), thus providing her with an engineering knowledge and experience that reflects design and operational aspects of fire safety.

3 BUILDING DESCRIPTION

The proposed redevelopment comprises of an extension and refurbishment of the existing office building. A new eight floor terrace extension, provision of an office space at lower ground level and provision of a terrace at level 7 will be implemented.

The current site extends approximately 1072m^2 to the north west side of the street in the block bound by Hatton Garden. The site is within the Hatton Garden Conservation Area of the London Borough of Camden. The height of the building for fire strategy purposes is measured from the lowest fire tender access level at ground floor to the finished floor level of the new 8th floor, measured at 25.0m, as shown in **Figure 1**.

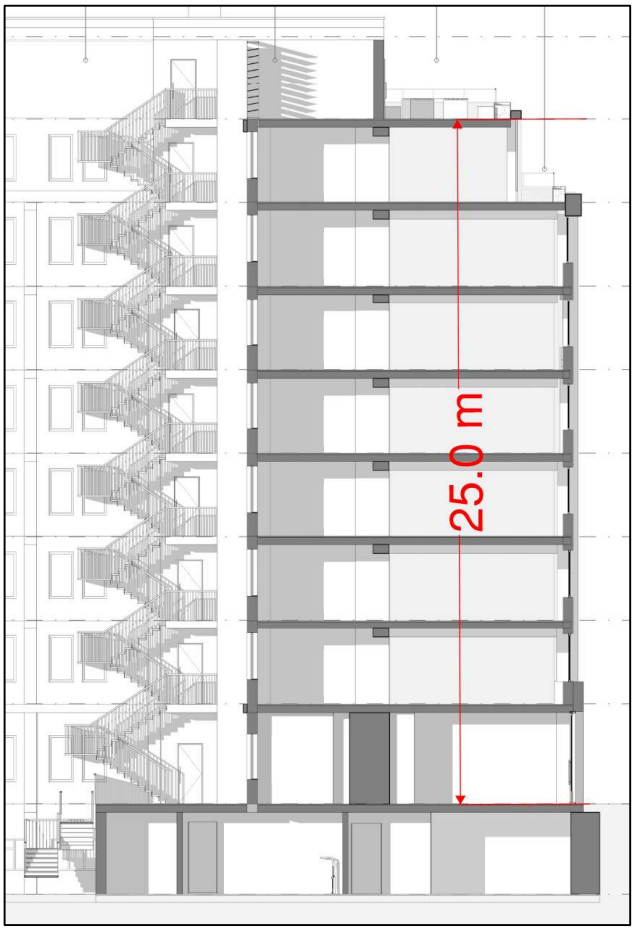

Figure 1: Building height

The new building has been reviewed for fire safety and is provided in this report.

Table 1: Building use

Floor	Use
Lower Ground floor	Cycle facilities housing and plant equipment as well as a new office space
Ground floor	Reception lobby, two independent retail units and an office space
First to Seventh floor	Office accommodation, seventh floor terrace
Eighth floor	New roof terrace, lounge area and open plant
Roof	Green roof

4 GUIDANCE DOCUMENTS AND BUILDING REGULATIONS APPROVAL

BS 9999: 2017 has been applied as the principal fire safety design guidance benchmark for this project. This is supplemented by Greater London Authority (GLA) London Plan Policy 2021 and Draft Supplementary Planning Guidance.

5 THE BUILDING'S CONSTRUCTION METHOD AND PRODUCTS AND MATERIALS USED

5.1 Materials for structural elements

According to BS 9999, a non-sprinklered building more than 18m (measured to the topmost floor), with a risk profile of A2, the load bearing elements of structure require a minimum of 90 minutes fire resistance. The elements of structure in the proposed building will therefore have 90 minutes fire resistance.

Where existing elements of structure will be retained by the project these will be surveyed and upgraded where necessary to meet the minimum required fire resistance.

5.2 External wall materials

External wall surfaces are to be provided to meet European class B-s3, d2 to BS EN 13501-1. This provision meets BS 9999 guidance recommendations.

As the building is over 18m in height, any insulation product or filler material used in the external wall construction will be provided to meet European class A2-s3, d2 or better to BS EN 13501-1, in accordance with BS 9999 guidance.

5.3 Roof materials

The roof coverings and terraces located within 6 m of the site boundary will be designed to have a B_{roof}(t4) rating. In other locations, the roof coverings will be designed to have a C_{roof}(t4) rating or better.

6 MEANS OF ESCAPE FOR ALL BUILDING USERS AND EVACUATION STRATEGY

6.1 Evacuation strategy

The building is to be designed on a simultaneous evacuation strategy. This means that for a confirmed fire anywhere in the building all areas will evacuate.

6.2 Fire detection and alarm

The building is to be provided with an automatic fire detection and alarm system to a minimum Category L2 level of coverage to BS5839-1. Manual break call points will also be provided in accordance with BS 5839-1. Sounders are to be provided on the external terrace areas, linked to the main fire alarm system.

6.3 Occupant loading

The occupancy of the building has been based upon relevant BS 9999 guidance. The upgraded firefighting shaft and external escape stair serve all floors of the building.

The occupancy in each area has been calculated and is summarised in

Table 2 below:

THE FIRE SURGERY

Table 2: Estimated building occupancy figures

Level	Location	Area (m^2)	Floor Space Factor (m^2/person)	Occupancy (people)	Total occupancy per floor (people)
Lower ground	Cycle store and plant spaces	110.9	30	4	**34**
	Office space	176.1	6	30	
Ground floor	Retail	108.8	2	55	**117**
	Reception	65.1	2	33	
	Office	171.6	6	29	
First floor	Office space	440.0	6	73	**73**
Second floor	Office space	440.0	6	73	**73**
Third floor	Office space	440.0	6	73	**73**
Fourth floor	Office space	440.0	6	73	**73**
Fifth floor	Office space	440.0	6	73	**73**
Sixth floor	Office space	440.0	6	73	**73**
Seventh floor	Office space	364.8	6	61	**61**
Eighth floor	Terrace	129.9	1	130	**161**
	Lounge space	61.2	2	31	
				Total occupants in the building	**811**

The assessed design occupancies give a total lower ground occupancy of 34 people, a total ground floor occupancy of 117 people and a total above ground occupancy of 660 people.

The occupancy numbers can be accommodated with the available exit widths (as described in section 4), based on the typical factors used.

Areas used for circulation and toilets are not included in the occupancy calculations as these are transient spaces and can be treated as notionally unoccupied.

6.4 Evacuation strategy

The building is to be designed on a simultaneous evacuation strategy. This means that for a confirmed fire anywhere in the building all areas will evacuate.

6.5 Horizontal means of escape

Storey exits are to provide minimum clear widths adequate to allow an exit capacity of the estimated occupant loading. Exit width factors of 3.06 and 5.1mm per person are to be applied for areas with risk profiles of A2 and B3, respectively, in accordance with BS 9999 guidance.

Exits are to be provided to have a minimum clear width of 850mm to allow for the unassisted egress for people with mobility impairments.

Provision of storey exits is to be such that travel distances will be limited according to risk profile as outlined in Table 3 below. Where the internal layout is not indicated, direct distance limits (3rd of the actual prescribed limit) are used.

Table 3: Travel distance limits

	One direction of escape		More than one direction of escape	
Risk profile	**Direct (m)**	**Actual (m)**	**Direct (m)**	**Actual (m)**
A2	16.9	25.3	42.2	63.3
B3	31.1	12.7	38.3	46

The travel distances for the lower ground, ground and 1st floor (typical for upper floors) are shown below in the figures below.

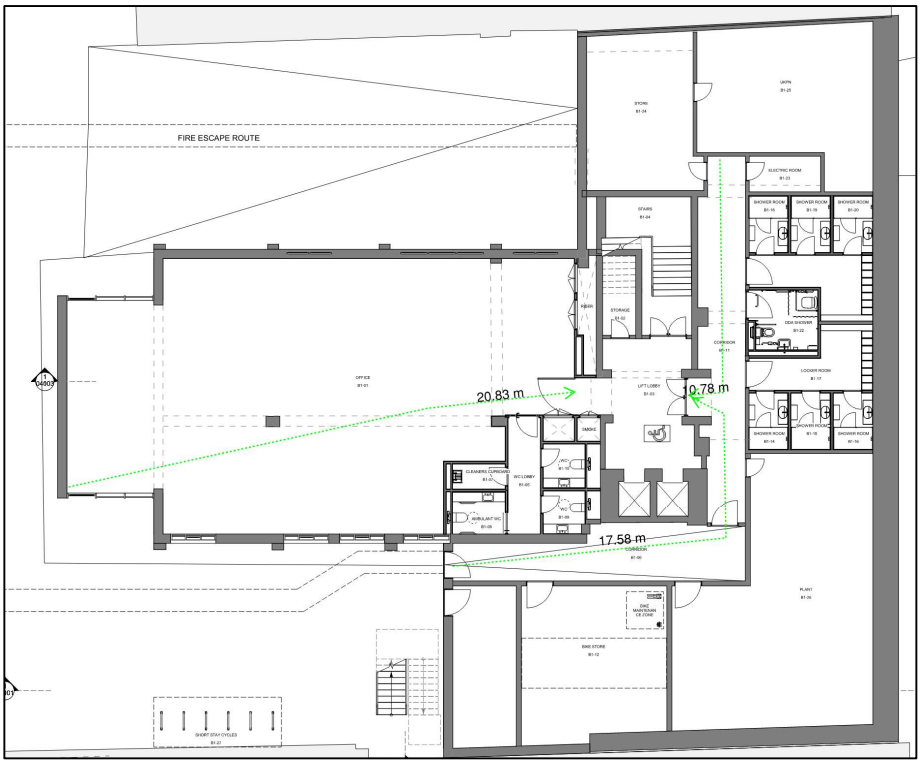

Figure 2: Travel distances on the lower ground floor

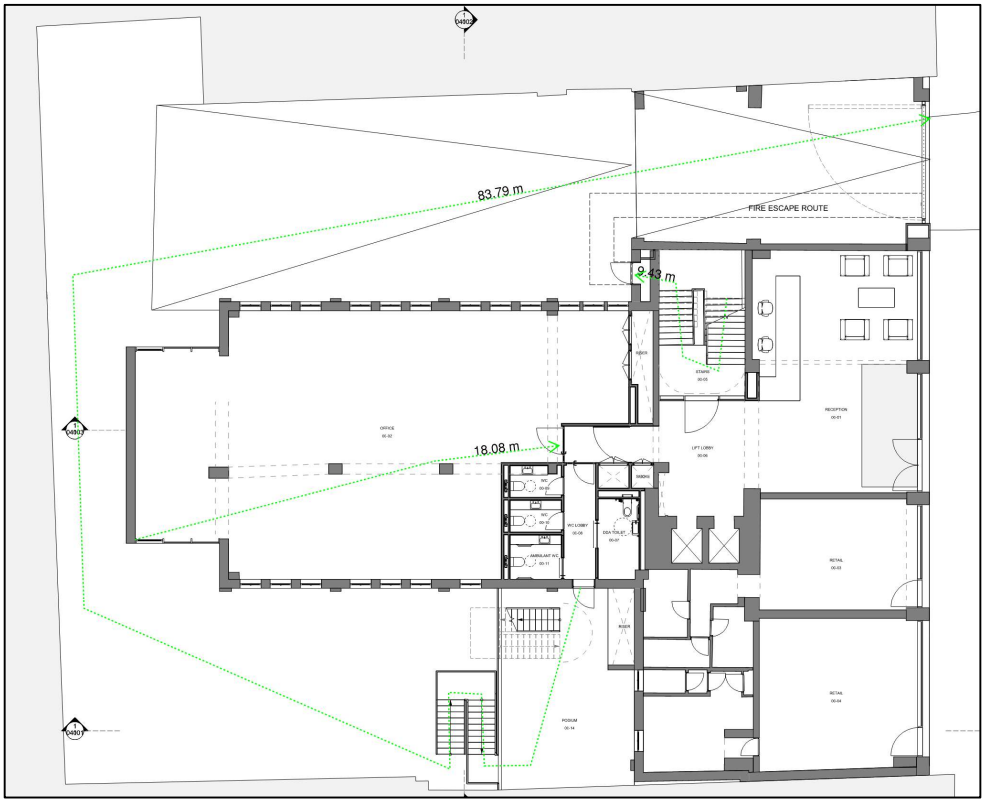

Figure 3: Travel distances on the ground floor

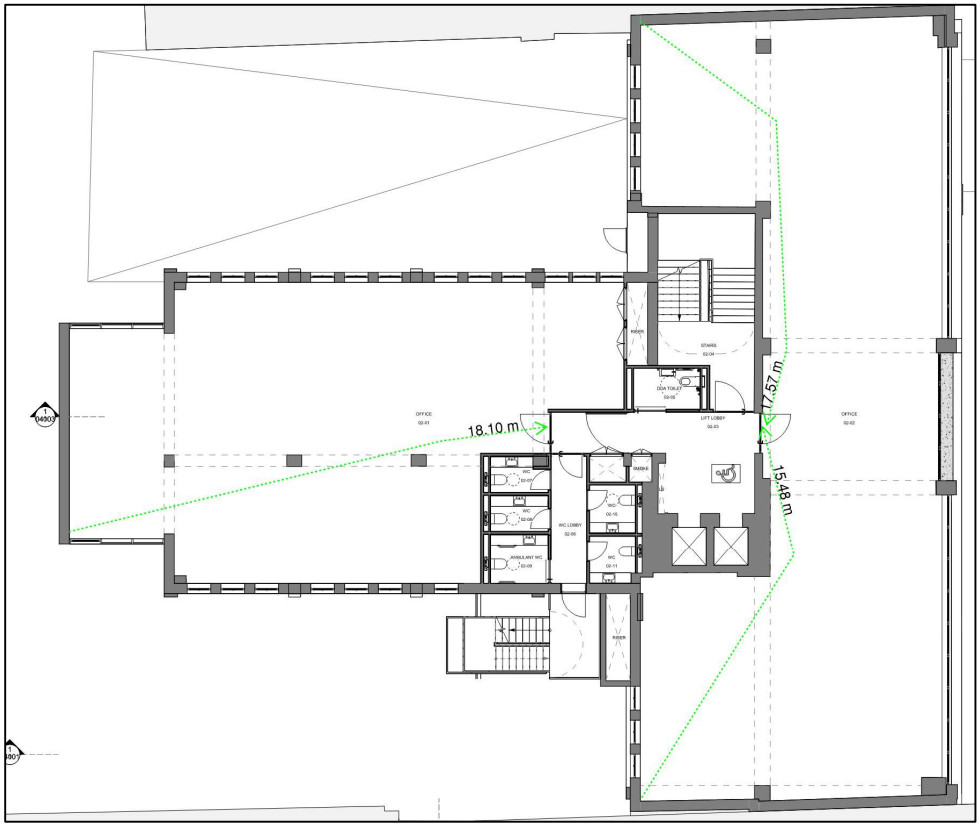

Figure 4: Travel distances on a typical upper floor

THE FIRE SURGERY

The west office travel distance is over the 16.9m actual distance for the A2 risk profile. However, it is expected that this will be compliant once the direct travel distance is determined.

6.6 Vertical means of escape

The building is to be provided with two escape stairs as detailed below.

- Stair 1 is an existing internal FF stair located within the building and extends from lower ground to eighth floor. This existing stair has a clear width of at least 1400mm.
- Stair 2 is a new external stair to extend from lower ground to eighth floor. This stair is to be provided with a clear width of at least 1000mm.

6.6.1 *Vertical exit capacity*

All escape stairs are to be provided with lobby protection on all floors, hence there is no requirement to discount any stair when evaluating the vertical escape capacity.

Stair capacity is determined by the risk profile and number of floors served. The worst-case risk profile served by the stairs is A2 (office). The capacity of the stairs is shown in Table 4.

Table 4: Vertical escape assessment

Stair	Stair width (mm)	Floors served	Stair width factor (mm per person)	Stair capacity
Firefighting stair	1400	8th, discharging at ground.	A2 risk profile over 8 floors, **1.90**	736
External stair	1000*	8th, discharging at lower ground.	A2 risk profile over 9 floors, **1.70**	529

*If there is upward travel, the external stair width must be a minimum of 1200mm. Otherwise the external stair width is required to be a minimum of 1000mm.

These capacities are more than sufficient for the maximum expected occupancy.

The stairs are to be provided with lobby protection at all levels. The FF stair discharges directly to outside at ground floor level whereas the external stair discharges at lower ground floor. Each stair core is shown in **Figure 5**.

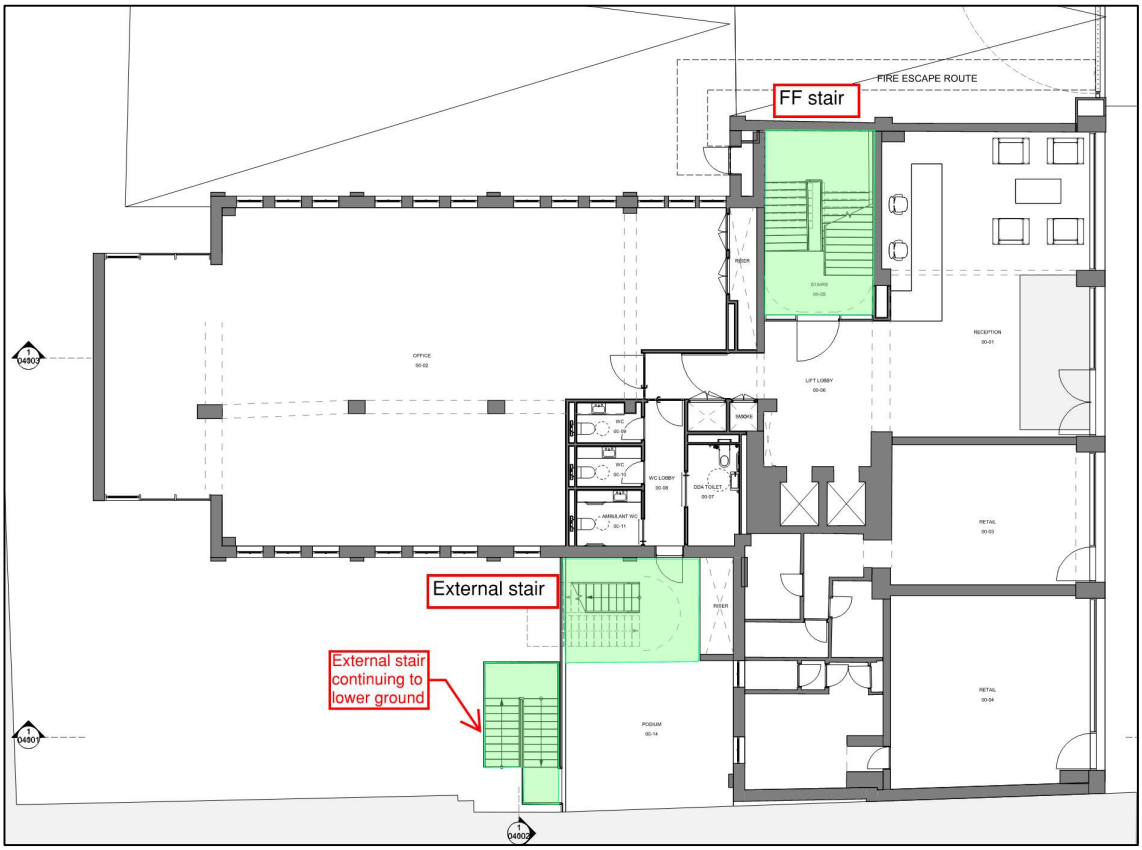

Figure 5: Ground floor escape stairs

THE FIRE SURGERY

6.7 Evacuation for people with disabilities and the use of evacuation lifts

Policy D5 of the London Plan requires the highest standards of accessible and inclusive design to be met.

Policy D5(B5) asks that development proposals to be designed to incorporate safe and dignified emergency evacuation for all building users. In all developments where lifts are installed, as a minimum at least one lift per core (or more subject to capacity assessments) should be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building. The policy also requires for the provision of evacuation lifts to be independent of firefighters' lifts.

The building is to be provided with refuge points in the lobbies of all escape stairs. Refuge points are to measure at least 900mm by 1400mm to allow wheelchair users to manoeuvre into position. Each refuge point is to be provided with an emergency voice communication (EVC) system to BS 5839-9 to allow mobility impaired occupants to call for assistance.

Each escape stair is to be associated with an evacuation lift in accordance with recommendations of BS 9999, BS EN 81-20 and BS EN 81-70. These provisions are compliant with Policy D5(B5) of the London Plan. This has been provided in the main stair core lobby.

6.8 Evacuation assembly point

A suitably sized evacuation assembly point will be identified in an area that can accommodate the building's occupancy. Open public spaces in the area can be used. An assembly point location will be chosen in coordination with the management and security requirements for the building, so that a safe, efficient method can be developed to manage a full-scale evacuation. This will form part of the Fire Safety Management procedures for the building and an Emergency Evacuation Plan will be developed with the building management team and responsible person as defined under the Regulatory Reform (Fire Safety) Order.

7 PASSIVE AND ACTIVE FIRE SAFETY MEASURES

BS 9999: 2017 has been used in the choice of active and passive fire safety systems in the building. A list of those measures is provided below:

- A Category L2 automatic fire detection and alarm system coverage to BS 5839-1. Sounders are also to be provided on the external terrace areas, linked to the main fire alarm system.
- Emergency Voice Communication systems on refuge points to BS 5839-9.
- Emergency lighting in accordance with BS 5266.
- Loadbearing elements of structure protected to a minimum 90 minutes fire resistance.
- Internal fire compartmentation is specified in accordance with BS 9999.
- Dry fire main to BS 9990 2015.

8 ACCESS AND FACILITIES FOR THE FIRE AND RESCUE SERVICE

Appropriate firefighting provisions and means of access to and within the proposed building for firefighting personnel will be provided.

Access is available to the building entrance for fire appliances from Hatton Garden. This is approximately 1 mile and a 8-minute drive from the nearest fire station, Cease Fire C 5 Fire Station.

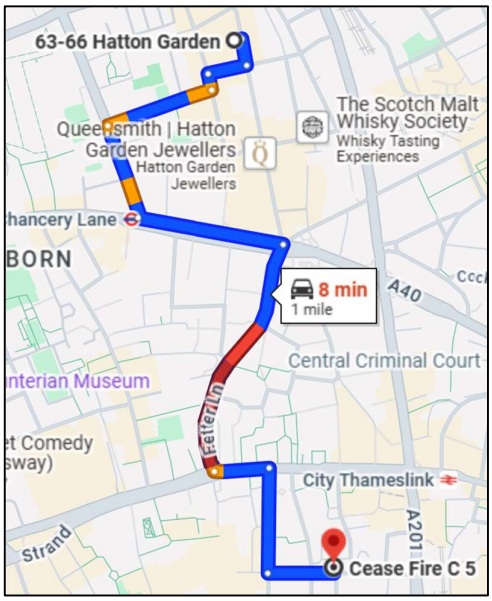

Figure 6: Vehicle route to 63-66 Hatton Garden

The building is to be provided with a FF shaft consisting of FF stair, lift and a ventilated lobby, that will extend to all floors. Firefighting shafts are to be provided such that all areas of the floor plan will be within 60m (45m direct distance) of a dry fire main outlet. These provisions are compliant with BS 9999 guidance.

The primary means of internal firefighting will be using the FF stair. A dry rising fire main will be provided within the FF stair, with landing valves provided within the firefighting lobby at each floor. Hose laying to all areas will be achievable to within 45m of the landing vales on each floor.

Dry riser inlet connections will be provided in the façades adjacent to entrances to the firefighting stairs. These inlet connections will be within 18m of the fire appliance parking locations along Hatton Garden.

9 FUTURE DEVELOPMENT OF THE ASSET AND THE 'GOLDEN THREAD' OF INFORMATION

The Independent Review of Building Regulations and Fire Safety was commissioned by government following the Grenfell Tower fire to make recommendations on the future regulatory system. The report, chaired by Dame Judith Hackitt, is entitled *Building a Safer Future (2019)* and provides recommendations in section 5 on the competency of those operating within the fire safety framework and requires overall consistency in fire safety from initial design through to occupation and future management. This is commonly referred to as the "Golden Thread".

Whilst this report is primarily written in the context of high rise residential and complex buildings, there are common recommendations which are applicable throughout the fire safety and construction industries.

The following information outlines how The Fire Surgery will consider the Golden Thread in the context of fire safety for the building.

9.1 RIBA design stages

The Fire Surgery were appointed at RIBA Stage 2 to provide fire safety input into the concept design and develop an outline fire strategy to highlight the main concerns and coordinate the design with the design team. In RIBA Stage 3, a more detailed fire strategy will be produced to outline the detailed design and coordinate with the design team.

The Fire Surgery will have a continued appointment through RIBA Stage 4 Technical Design to maintain the agreed principles of the fire strategy.

Should the project be successful through planning, then services of The Fire Surgery are likely to be retained for RIBA Stage 4.

9.2 Construction Monitoring & Practical Completion

For fire safety design in buildings, it is important to monitor the procurement and construction of the fire strategy to ensure that the approved fire strategy is designed and actually constructed as intended.

The detailed design of active fire systems will be important, including the commissioning and testing of the systems.

Locations of passive fire protection and the active system specifications sometimes change. Therefore, having the project fire engineer appointed during the tender, contractor lead designs and construction can ensure a smoother route to practical completion. The contractor has an obligation under Regulation 38 of the Building Regulations 2010 to hand over all fire related information for the project to the client, in order to allow them to manage the building successfully under the Regulatory Reform (Fire Safety) Order 2005.

This will require an as built fire strategy report that reflects the actual building constructed. It will be necessary for the contractor to update the design fire strategy as this stage.

The Fire Surgery is expected to undertake a monitoring role on behalf of the client during the construction period and will work with the contractor to ensure any changes to the design comply with the established fire strategy principles.

9.3 Fire Safety Management

Management procedures will play a critical function in both the prevention and associated containment of fires and the evacuation of occupants in an emergency situation. The fire safety strategy has been developed on the assumption that the building will be properly managed. This includes pre-planning, training, maintenance and ongoing risk assessment in order to meet the requirements of the Regulatory Reform (Fire Safety) Order 2005.

Managing fire safety is a process that lasts throughout the life of a building, starting with the initial design, which is intended both to minimize the incidence of fire and to ensure that if a fire does occur,

appropriate fire safety systems (including active, passive and procedural systems) are in place and are fully functional.

Effective management of fire safety can contribute to the protection of the building occupants in many ways:

- By working to prevent fires occurring in the first place,
- By monitoring the fire risk on an on-going basis and taking appropriate action to eliminate or reduce risk,
- By being aware of the types of people in the building (such as disabled people, elderly people, children, pregnant women, etc.) and any special risks or needs associated with particular events,
- By ensuring that all the fire safety measures in the building are kept in working order and that the means of escape are always available,
- By training staff and organizing the evacuation plan, to ensure that occupants leave quickly if a fire occurs,
- By taking command in the event of a fire until the Fire Service arrives.

Upon completion, the building owners or managers (including tenants) will need to undertake fire risk assessments as required under the Regulatory Reform (Fire Safety) Order 2005 and have these available for inspection by the Fire Service at any time. This should typically be undertaken annually by a competent person or when there are significant changes in the building and is carried out to ensure that the fire strategy is upheld throughout the life of the building and that the risk of fire is kept low.

For this specific building, management areas that are of particular importance for the longevity of the proposed fire safety design solution include:

- Implementation and maintenance of an 'Adequate' fire safety management Level 2 system to BS 9999: 2017 by all responsible persons for the building.
- Disabled person evacuation procedures.
- Allocation of appropriate assembly points.
- Management, monitoring, and maintenance of all fire safety systems, and in particular the automatic fire detection and alarm systems, and the fire main and fire and smoke curtains.
- Provision of appropriate premises information for the fire service.
- Co-operation and co-ordination between the responsible persons for the building (landlord/ tenants) in regard to fire safety matters relevant to the building, including ensuring that emergency plans are co-ordinated and consistent with one another.

10 SUMMARY

This report has been produced to support the planning application for 63-66 Hatton Garden. The report is a fire statement as required by the London Plan Policy D12 which requires development proposals to achieve the highest standards of fire safety, embedding these at the earliest possible stage.

This Fire Statement is a standalone document which defines the fire safety objectives and performance requirements of the development, and the methods by which these objectives will be provided/ satisfied.

This Fire Statement has evidenced the provisions made for the safety of occupants and protection of property as well as the provision of suitable access and equipment for firefighting in light of London Plan fire safety policy requirements and the justification for these measures as described below:

- The fire statement and subsequent fire strategy for 63-66 Hatton Garden has been developed by competent and experienced fire engineers, including an engineer Chartered with The Institution of Fire Engineers.
- The key fire safety objective of satisfying the Building Regulations performance requirements has been determined.
- The principal fire safety guidance document used has been identified, which will be BS 9999: 2017 for this development.
- The building materials have been identified which include a precast concrete frame for the existing construction and steel elements with metal decks for the two-storey extension. Elements of structure will not consist of combustible materials.
- The safe means of escape has been documented. Sufficient stair capacity is available for all occupants to escape via the available escape routes according to a phased evacuation strategy.
- The means of escape for mobility impaired occupants will be available through the use of evacuation lifts (one for each escape core). These provisions are compliant with Policy D5(B5) of the London Plan.
- Access and facilities for the fire service has been outlined including a dry fire main in the firefighting stair.
- The consistency in fire safety has been demonstrated to meet the Golden thread by virtue of The Fire Surgery's involvement in the development of the fire strategy and the expected future appointments through construction to support regulation 38 of the building regulations and allow the users of the building to execute their responsibilities for fire safety under the Regulatory Reform (Fire Safety) Order 2005 which is the legislation for fire safety in occupied buildings.

The Fire Surgery believe this fire statement meets the requirements of the London Plan Policy D12.

11 SCHEDULE OF RELEVANT DRAWINGS

A list of the relevant plan titles and reference numbers used in the production of this Fire Statement is provided in the schedule below.

Drawing No.	Title	Date	Revision No.
2406-EMR-HG-B1-DR-A-02001	Lower Ground Floor Plan	19/08/24	P01
2406-EMR-HG-00-DR-A-02002	Ground Floor Plan	19/08/24	P01
2406-EMR-HG-01-DR-A-02003	First Floor Plan	19/08/24	P01
2406-EMR-HG-02-DR-A-02004	Second Floor Plan	19/08/24	P01
2406-EMR-HG-03-DR-A-02005	Third Floor Plan	19/08/24	P01
2406-EMR-HG-04-DR-A-02006	Fourth Floor Plan	19/08/24	P01
2406-EMR-HG-05-DR-A-02007	Fifth Floor Plan	19/08/24	P01
2406-EMR-HG-06-DR-A-02008	Sixth Floor Plan	19/08/24	P01
2406-EMR-HG-07-DR-A-02009	Seventh Floor Plan	19/08/24	P01
2406-EMR-HG-08-DR-A-02010	Eighth Floor Plan	19/08/24	P01
2406-EMR-HG-RL-DR-A-02011	Roof Floor Plan	19/08/24	P01