FIRE STATEMENT

ROSTRACK LIMITED
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Copy No:- 1 *of*

PROPOSED DEVELOPMENT

AT

26 ROSSLYN HILL, HAMPSTEAD NW3 1PD

FIRE STATEMENT

BASED ON THE LONDON PLAN GUIDANCE AND BS 9991

Report Produced For: Rostrack Limited

Report Produced By: Vemco Consulting

Report Date: January 2024

	Name	Signature	Date
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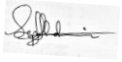
Prepared by	Divine Sepah		03/01/2024
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0.0 SCOPE AND LIMITATIONS

0.1 Scope

0.1.1 This report considers the 6 headings of the London Plan guidance document (London Plan Policy D12 (A1 – A6)). This report also refers to BS 9991:2015.

0.1.2 The development under consideration is a 4-storey building. It involves the expansion and conversion of an existing police station into a mixed-use building comprising office and residential demises as part of the Applicants' Proposed Development of 26 Rosslyn Hill, Hampstead NW3 1PD (the "Site").

0.2 Limitations

0.2.1 The scope of this report is strictly limited to that set out in Section 1.1.

0.2.2 This report is formulated on the basis of information and industry experience available at the time of preparation.

0.2.3 It is applicable to the named project only in accordance with the Client's instructions.

0.2.4 This report may only be distributed in its entirety, without amendment. However, the Client may redact names of those involved in the production of the report, product trade names and other material that they consider sensitive.

0.2.5 The report does not constitute a certification of the project assessed.

0.2.6 This assessment is based on information provided by the client. This may include (but is not limited to) architectural drawings, data sheets, etc. Our advice is limited to the information given in those documents and is necessarily dependent upon the accuracy and completeness of that information.

1.0 INTRODUCTION

1.1 Overview

1.1.1 This Fire Statement has been prepared by Vemco Consulting and is submitted in support of the planning application made by Rostrack Limited (the applicant) for a proposed mixed-use development comprising the expansion and conversion of an existing police station into a mixed-use building comprising office and residential demises. This Fire Statement is written in accordance with London Plan Policy D12 and BS 9991/BS9999 has been used to determine compliance.

1.2 London Plan

1.2.1 The London Plan is the overall strategic plan for London, setting out framework for the development of London over the next several years. The London Plan must be considered when planning decisions are made in Greater London.

1.3 Policy D12(A)

1.3.1 Policy D12 (A) states the following:

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.*

1.4 Policy D12(B)

1.4.1 Policy D12 (B) states the following:

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*

2.0 CONSTRUCTION MATERIALS

2.1 External Wall Details

2.1.1 External wall details are not known at the current design stage. However, the building is existing and it is understood that the external surface material is brickwork. The full build-up of external walls and attachments will be confirmed at a later date.

3.0 MEANS OF ESCAPE

3.0.1 The following section demonstrates how the building will achieve compliance in respect of means of escape in line with BS 9999 and BS 9991.

3.1 Means of Escape – Lower Ground Floor to Second Floor.

3.1.1 The building under assessment is a mixed-use building comprising residential and office demises. The lower ground and ground floors of the building are mostly occupied by the office areas. A relatively smaller office space is also located on the 1st floor. The residential areas on the lower ground and ground floors comprise amenity areas and access areas leading to the apartments located on the 1st to 2nd floors of the building.

3.1.2 The residential demise is serviced by a main central stair and has a floor level above 11m. It will therefore comply with Figure 6 of BS 9991. Protected ventilated lobbies will be introduced between every flat and the protected stair. The travel distance within the protected lobbies will be no more than 7.5m in accordance with Figure 6 of BS 9991.

3.1.3 Clause 30.2 of BS9991 stipulates that, *"if a stair forms part of the only escape route from an upper storey or part thereof, the stair should not continue down to the basement".* This provision excludes small single stair buildings. The residential demise of the building cannot be classified as a small single stair building as its height exceeds 11m. Therefore, strictly speaking, the stair serving the residential apartments should terminate at ground floor level. However, it should be noted that there is a residential entrance at both the ground level and lower ground level. Therefore, occupants of the residential floors can escape at ground level without entering the lower ground level. Furthermore, a significant proportion of the lower ground level is above the adjacent ground. As such, the lower ground level has many external windows and doors which reduces the risk to life safety posed by the lower ground level in comparison to a Lower ground level which is closed on all sides with no external windows or doors. In addition, clause 32a of BS 9991 states "*If a stair in a mixed-use building, having not more than three storeys above ground or access level, serves both dwellings and other non-residential occupancies, then a protected lobby should be provided between each occupancy and the stairway at all levels*". The Lower ground floor complies with this requirement as there are lobbies between the stair and the accommodation at all levels.

3.1.4 The travel distances (direct) from within the office spaces (risk profile A2) to the nearest exit should be no more than 15m for one direction of travel and 37m for more than one direction of travel in accordance with Table 11 of BS9999. However, sprinklers will be provided within the building. Table 11 of BS9999 permits the risk profile of a building to be reduced by one level if sprinklers are introduced. On this basis, with a risk profile of A1, the permitted travel distance (direct) is increased to 17m for one direction of travel and 44m for more than one direction of travel. The travel distances on the lower ground and ground floor are compliant as they are no more than 17m (one direction) or 44m (more than one direction). The travel distance within the office demise on the 1st floor is marginally over 17m (17.6m). The additional 0.6m is not deemed to present a significant risk to life safety and is deemed to be acceptable on this basis.

3.1.5 BS9999 and BS9991 does not permit a lift shaft to continue to Lower ground level if it is in a building (or part of a building) served by only one escape stair. The office lift serves part of the building which is served by one stair. Therefore, strictly speaking, it should be omitted. However, it should be noted that there are office entrances at both the ground level and lower ground level. Therefore, occupants of the ground floor office demise can escape at ground level without entering the lower ground level. It should also be noted that a significant proportion of the lower ground level is above the adjacent ground. As such, the lower ground level has many external windows and doors which reduces the risk to life safety posed by the lower ground level in comparison to a Lower ground level which is closed on all sides with no external windows or doors. As a mitigation for the non-compliant layout, a lobby has been introduced in front of the lift shaft at ground level to prevent smoke blocking the escape route at ground level in the event of a fire on the lower ground floor. This is deemed to be acceptable mitigation given that the lower ground floor is not a basement level and has external openings to the outside.

3.1.6 A fire curtain will be introduced within the central stair enclosure to separate the seating area from the stair area. The secondary stair leading to the flat on the 1st floor connects to the offices via a protected lobby. This complies with clause 32a of BS 9991 which states "*If a stair in a mixed-use building, having not more than three storeys above ground or access level, serves both dwellings and other non-residential occupancies, then a protected lobby should be provided between each occupancy and the stairway at all levels*".

3.1.7 There are 3 apartments on the 1st floor. Apartments 1 and 2 (1st floor) and Apartments A and B (2nd floor) will be designed with protected entrance halls. This complies with clause

9.4.2(b) of BS 9991. Apartment 3 (1st floor) will be an open plan flat with the master bedroom as an inner room. As such, the flat should comply with Clause 9.7 of BS 9991 as follows: "*Open-plan flats that do not have protected corridors or hallways but have bedrooms that are inner rooms without having an alternative means of escape, and that are accessed directly from a lounge or similar type accommodation, should be fitted throughout with a Grade D LD1 fire alarm and fire detection system in accordance with BS 5839-6:2013, and an AWFSS. Open-plan flats should meet the following specific recommendations.*

a. The size of the open-plan flat should not exceed 16 m × 12 m.

b. Open-plan flats should be situated on a single level only.

c. The ceilings within the open-plan flat should have a minimum height of 2.25 m.

d. *The kitchen should be enclosed in open-plan flats having an area exceeding 8m × 4m. Cooking appliances in open-plan flats having an area smaller than 8 m × 4 m should not be adjacent to the entrance of the flat*".

3.1.8 The flat will be provided with a Grade D LD1 alarm system and a sprinkler system. The flat will also comply with points a to c. The kitchen will be open which does not comply with point d. Therefore, strictly speaking the kitchen should be enclosed. However, it should be noted that the cooking hob (main fire risk) within Apartment 3 is more than 2m from the escape route within the kitchen. There is also an escape route via an external terrace leading into the hall area which allows residents of the bedroom to travel away from a fire occurring within the kitchen or dining area. This means that residents are likely to bypass a fire in the kitchen.

3.1.9 Clause 34 of BS9991 requires that protected stairways should discharge either directly to a final exit; or into a protected corridor leading to a final exit which is itself lobbied from any accommodation. The main residential stair leads to a final exit at the lower ground floor via a small lobby. This is compliant. The main residential stair also leads directly to a final exit at ground floor. This exit complies with clause 34 of BS 9991 as it is lobbied from the office accommodation. Clause 17.2.5 of BS 9999 (for non-residential buildings) states "*Every protected stairway should discharge directly to a final exit, or by way of a protected exit passageway to a final exit*". The non-residential stairs discharge directly to the outside and are compliant in this regard.

3.1.10 The building will comprise a fire evacuation lift for mobility impaired persons in line with Policy D5(B5). See appendix C.

3.2 Evacuation Strategy

3.2.1 The evacuation strategy from all residential apartments will be stay-put. This means that in the event of a fire in one flat, only the occupants of the fire flat will evacuate. All other occupants in the remaining compartments will stay-put. There will be an evacuation lift for use by mobility impaired persons. The evacuation strategy from the office demise will be simultaneous evacuation.

4.0 FIRE ALARM SYSTEM AND PASSIVE AND ACTIVE FIRE SAFETY MEASURES

4.1 Active fire protection systems – fire alarm system

4.1.1 Residential means of escape is somewhat different to many other types of buildings in that only the particular apartment that has a fire in it is immediately evacuated. This is due to the level of compartmentation between each of the apartments and to reduce false alarms affecting all the people within the building. The Fire Service carries out evacuation of the other apartments if necessary. This philosophy is reflected by the stand-alone detectors / sounders, which are required in each apartment but not necessarily in the common corridors or escape routes. A smoke detection system may be required within the common areas but this is only to operate the life safety systems within that area if required i.e., automatic opening vents (AOVs).

4.1.2 The requirement is given in Part B of Schedule 1 to the Building Regulations 2010 in that 'The building shall be designed and constructed so that there are appropriate provisions for the early warning of fire and appropriate means of escape in the case of a fire from the building to a place of safety outside of the building capable of being safely and effectively used at all material times.

4.1.3 In terms of early warning, a minimum of Grade D2 Category LD2 (owner-occupied) or Grade D1 Category LD2 (rented) fire detection and fire alarm system is required within all flats (except Apartment 3) in accordance with BS 5839-6:2019. Apartment 3 will be provided with a Grade D1 Category LD1 fire detection and fire alarm system as it is an open-plan flat and should meet the requirements of clause 9.7 of BS 9991. The minimum requirement for the office demise is Category M fire detection and alarm system in accordance with BS 5839-1.

4.1.4 The smoke and heat alarms will be mains operated and conform to BS EN 14604 and BS 5446-2 respectively. The detectors will have a standby power supply in the form of a rechargeable battery. The positioning of the smoke and heat detectors is to accord with the guidance given in BS 5839-6.

4.2 Active fire protection systems – Sprinkler system, residential

4.2.1 Automatic Fire Suppression System (AFSS) is required in properties with floors more than 11m above ground level. The building at Rosslyn Hill is above11m in height (approximately

16.2m) and should therefore be provided with a sprinkler system throughout.

4.2.2 All residential compartments will be fitted with sprinklers in accordance with BS 9251:2021. BS 9251 defines blocks of flats above 11m but below 18m in height as requiring a Category 2 sprinkler system (see Figure 4.1).

Figure 4.1 Extract from BS 9251:2021, Table 1 – Category of Sprinkler System

Table 1 — *Category of system*

Category of system	Description of building/occupancy
1	Single family dwellings such as: • dwelling house; • individual flat[A]; • individual maisonette; and • transportable home Houses of multiple occupation (HMOs) [B] Bed and breakfast accommodation [B] Boarding houses [B]
2	Blocks of flats [C], [D] Small residential care premises with 10 residents or fewer [D] Sheltered and extra care housing [C], [D]
3	Residential care premises with more than 10 residents [D], [E], [F] Student accommodation [E], [F] Dormitories (e.g. attached to educational establishments) [D], [E] Hostels [D], [E]
4 [F]	All residential buildings 18 m or higher

4.2.3 The minimum design discharge densities, number of design sprinklers that should be capable of operating simultaneously in a compartment, and duration of supply should be in accordance with Table 2 of BS 9251 (see Figure 4.2).

Figure 4.2 Extract from BS 9251:2021, Table 2 – Minimum Sprinkler Design Parameters

Table 2 — *Minimum design parameters*

Category of system (see Table 1)	Minimum design discharge density	Number of design sprinklers (see 5.3.2)	Minimum duration of supply
	mm/min		min
1	2.10 [A]	1 or 2	10
2	2.80 [B]	1 or 2	30
3	2.80 [C]	2 to 4 [D]	30
4	2.80 [C]	2 to 4 [D]	60 [E]

4.2.4 It is noted that there are some non-residential areas (ancillary accommodation such amenities rooms) within the building. BS 9251:2021 allows for limited areas of non-residential use to be included in a residential sprinkler system with “Residential” BS EN 12259-14 sprinkler heads. This will be provided to the ancillary areas.

4.2.5 The office demise will be fitted with sprinklers in accordance with BS EN 12845:2015. BS EN 12845:2015 categorises offices under Ordinary Hazard 1 (OH1) with regards to sprinkler system requirements. However, Clause 6.2.2 of BS EN 12845:2015 permits LH systems where the compartment size is no greater than 126 m^2 with a fire resistance of at least 30 min. A Light Hazard (LH) water sprinkler system will therefore be installed within the office demise since no office compartment will have a floor area of more than 126m^2.

Figure 4.2 Extract from BS EN 12845:2015, Table 9 – Minimum water volume pre-calculated LH and OH systems.

Group	Height h of the highest sprinkler above the lowest sprinkler (see NOTE) m	Minimum water volume m^3
LH – (Wet or pre-action)	h ≤ 15	9
	15 < h ≤ 30	10
	30 < h ≤ 45	11
OH1 – Wet or pre-action	h ≤ 15	55
	15 < h ≤ 30	70
	30 < h ≤ 45	80
OH1 – Dry or alternate OH2 – Wet or pre-action	h ≤ 15	105
	15 < h ≤ 30	125
	30 < h ≤ 45	140
OH2 – Dry or alternate OH3 – Wet or pre-action	h ≤ 15	135
	15 < h ≤ 30	160
	30 < h ≤ 45	185
OH3 – Dry or alternate OH4 – Wet or pre-action	h ≤ 15	160
	15 < h ≤ 30	185
	30 < h ≤ 45	200
OH4 – Dry or alternate	Use HH protection	
NOTE Excluding sprinklers in the sprinkler valve room.		

4.3 Active fire protection systems – Smoke control

4.3.1 The residential demise of the building is serviced by a single stair with a floor level over 11m above ground level. It will therefore comply Clause 14.1.3 of BS9991 with regards to smoke control which states the following*: For protected corridor or protected lobby access dwellings […], the smoke control system should have one of the following:*

a) *AOVs to the exterior of the building with a minimum free area of 1.5m^2, fitted in the common corridor or lobby directly adjacent to the stair at as high a level as is practicable, and an AOV that is sited at as high a level as is practicable on the top storey of the stairway, having a minimum free area of 1m^2; or*

b) *a smoke shaft that is fitted in the protected lobby or corridor, and an AOV that is sited at as high a level as is practicable on the top storey of the stairway, having a minimum free area of 1m^2; or*

c) *a mechanical smoke ventilation system that is fitted in the protected lobby or protected corridor, directly adjacent to the staircase enclosure, and an AOV that is sited at as high a level as is practicable on the top storey of the stairway, having a minimum free area of 1m^2; or*

d) *a pressure differential system* [1].

4.3.3 The residential demise will comply with either point a or c above as there will be two communal lobbies, one either side of the stair enclosure. One communal lobby will comprise 1.5m2 external wall AOVs. The other communal lobby will comprise a mechanical ventilation system smoke shaft. A 1.0m2 AOV will be provided at the head of the protected stair enclosure.

4.3.4 Smoke control will not be provided in the office demise as it is not required in line with BS 9999.

4.4 Active fire protection systems – Manual Fire Fighting / Extinguishers

4.4.1 Manual firefighting equipment is not necessary for residential floors of buildings under Building Regulations. Whilst the Fire Safety Act 2021 requests that first aid firefighting facilities should be provided, this is only relevant to in places of work.

4.4.2 The office areas require manual firefighting equipment.

4.4.3 Selection and positioning of fire extinguishing equipment shall comply with BS5306-8:2012. The office areas have floor areas greater than 400m^2, therefore the minimum quantity of extinguishers with an A rating should be as follows:

- at least two extinguishers with a Class A rating; having a combined minimum total fire rating of 0.065 × floor area of the storey. Table 6.2 below demonstrates the combined total rating of fire extinguishers per floor.

Table 6.2: Combined minimum total rating

Floor	Floor Area (m^2)	Total Rating
Lower Ground floor	427	0.065 x 427 = 27.75 = 28A
Ground floor	433	0.065 x 433 = 28.14 = 28A
First floor	102	26A

4.4.4 Extinguishers should be sited in such a way that it is not necessary to travel from the site of any fire to reach an extinguisher further than the maximum distance stipulated for a Class A fire. Extinguishers should be located no more than every 30m along an escape route [2]. (Note that a 9 litre (2 gallon) water extinguisher can achieve a 13A rating).

4.4.5 Extinguishers should be available for immediate use at all times and should be located:

- in conspicuous positions on brackets, on floor stands or within cabinets;
- where they will be readily seen by persons following an escape route;
- most suitably, near to room exits, corridors, stairways, lobbies and landings;
- in similar positions on each floor, where floors are of similar appearance; and,
- where they are visible and mounted so as to position the handle approximately 1.5m from the floor.

4.5 Passive fire protection systems

4.5.1 Compartment floors will be introduced on all floors as required in residential blocks of flats.

4.5.2 All doors serving as the front doors to flats will be FD30S doors with self-closing devices. Doors to the protected shafts will be FD30S. These provisions are in accordance with Table 12 of BS 9991.

4.5.3 Flats comprising entrance halls will be designed as protected entrance halls with a fire resistance of no less than 30 minutes each side separately. The doors within the flats that give access to the protected entrance hall will be FD30 doors.

4.5.4 Every internal escape stair will be a protected stair. The lift shafts will be designed as protected shafts. Protected shafts in buildings with a height greater than 5m above ground level but below 18m should be provided with a 60-minute protected enclosure with FD30S doors. Any other shaft penetrating compartment floors should be provided with 60-minutes fire resistance. These provisions will be implemented. Compartment walls will be provided with 60 minutes fire resistance.

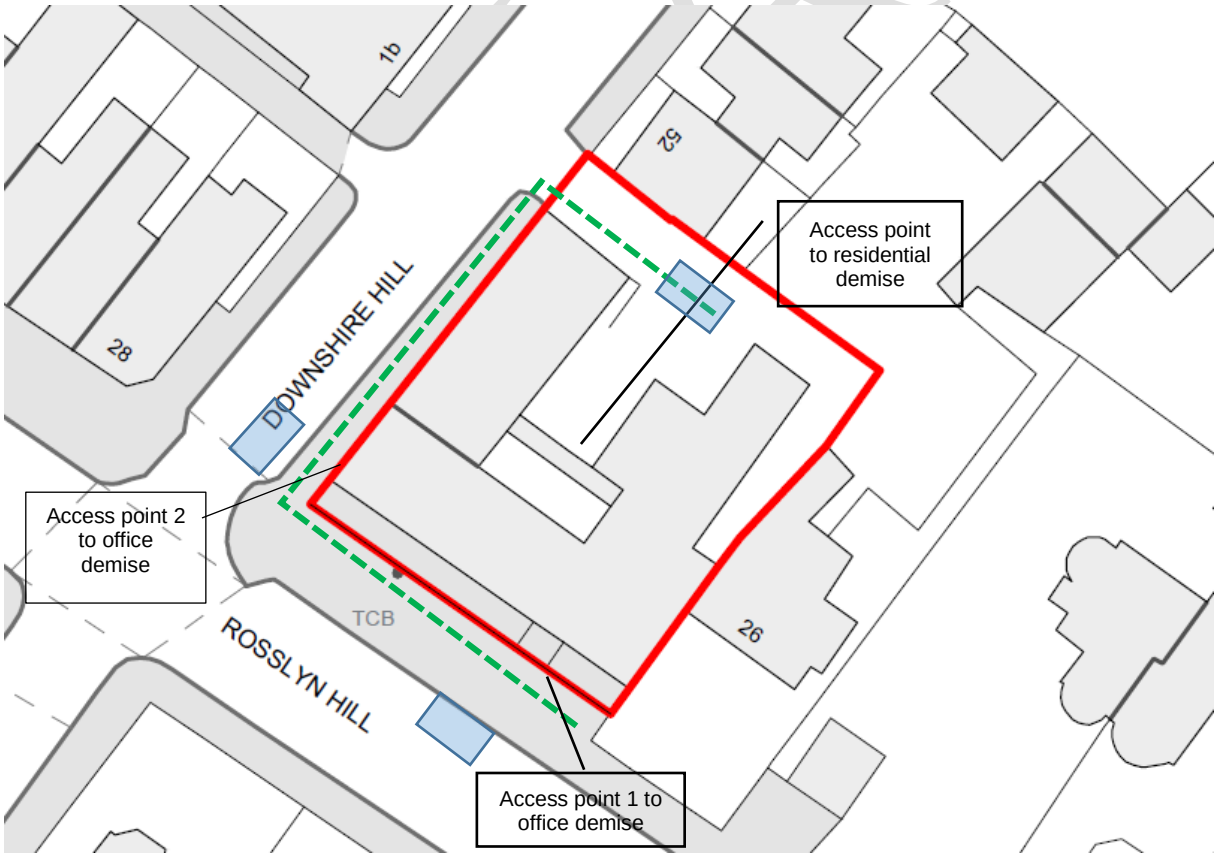
4.5.5 The offices on the lower ground and ground floors will be separated from the residential demise with construction with fire resistance of no less than 60 minutes in accordance with Clause 17 of BS 9991.

5.0 OUTSIDE SPACE FOR FIRE APPLIANCES

5.1 Areas where the Fire and Rescue Service pump appliance can be sited

5.1.1 The site plan shown in Figure 5.1 demonstrates that the Fire and Rescue Service (F&RS) pump appliance is provided with access to the majority of the perimeter of the building. The pump appliance can park anywhere along the perimeter of the building highlighted in green in Figure 5.1 below to gain access to both the office and residential demises of the building. The blue rectangles as shown in Figure 5.1 are indicative of the proposed parking positions of the pump appliance. The access roads to the building are wide enough to accommodate a pump appliance (i.e., at least 3.7m wide). From the access roads, the F&RS can access dry riser inlets which will be sited on the face of the building at relevant points adjacent to the respective protected stairs.

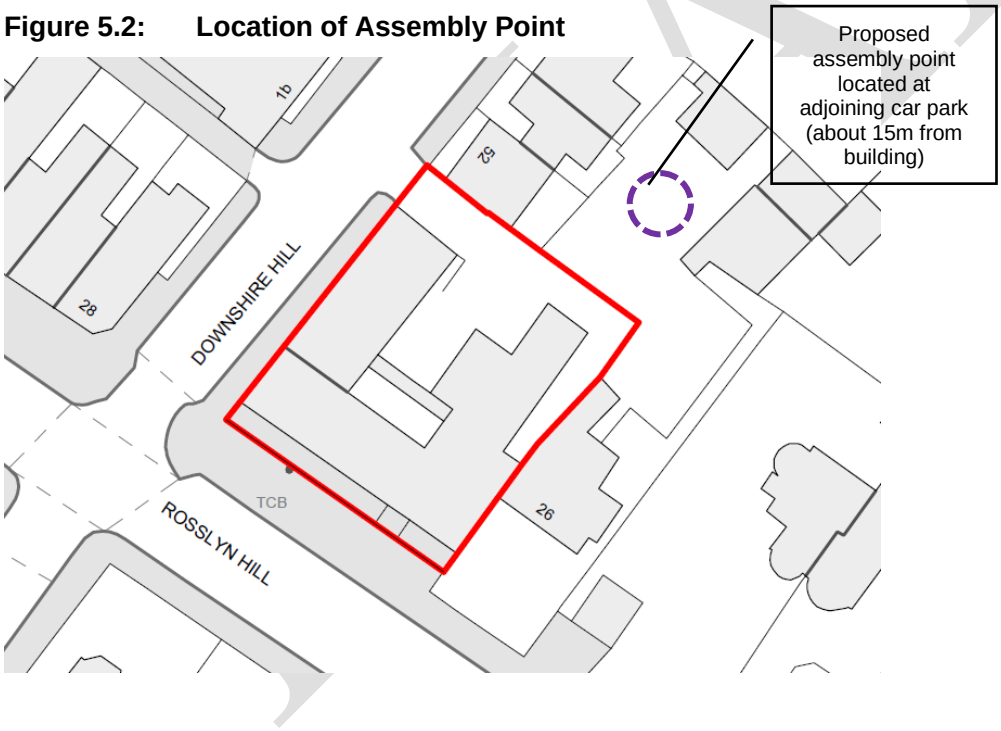
Figure 5.1: Location of Pump Appliance



5.2 Evacuation assembly point

5.2.1 The building under consideration is a mixed-use building comprising residential and office demises. The residential demise does not require an assembly point as it will be designed as individual flats with compartment walls and a stay-put evacuation strategy. Only occupants of the fire flat within the residential parts of the building will evacuate. The office demise will be provided with an assembly point (proposed assembly point shown in Figure 5.2) in accordance with Clause 44.8 of BS9999 which requires that assembly points be sufficiently distanced from the building to prevent evacuees from interfering with the operations of the fire and rescue service and also to avoid the danger from falling debris. Fire drills will be conducted occasionally to ensure occupants are conversant with the location of the assembly point.

Figure 5.2: Location of Assembly Point



6.0 FIREFIGHTING EQUIPMENT AND WATER SUPPLY

6.1 Fire Mains and Hydrants

6.1.1 Clause 50.1.2, BS9991 states that "*Blocks of flats not fitted with fire mains should have vehicle access for a fire appliance not more than 45 m from all points within each dwelling, measured on a route suitable for laying hose*." This requirement is not met within the residential demise of the building and the east wing of the office demise, therefore a fire main will be provided within the stair core of the residential demise and east wing of the office demise. These will be dry fire mains as the building is below 50m [3].

6.1.2 Clause 50.2.2 of BS9991 stipulates that *"If the building is not fitted with sprinklers, then every part of every storey should be no more than 45 m from a fire main outlet contained in a protected stairway and 60 m from a fire main in a fire-fighting shaft, as measured on a route suitable for laying hose".* The building complies with this provision.

6.1.3 Access will be provided for the pumping appliance to within 18m of each inlet connection point. The inlets will be on the face of the building and should be visible from the pump appliance [4], "*typically on the face of the building close to the entrance point leading to the* [protected stair]." The inlet will be within 18m of the approximate parking position of a fire appliance.

6.1.4 BS 9991 states:

a) For buildings provided with dry fire mains, hydrants should be provided within 90m of dry fire main inlets.
b) For buildings not provided with fire mains (or where the building is fitted with a wet fire main), hydrants should be provided within 90m of an entry point to the building and not more than 90m apart [5].

6.1.5 The location of the nearest fire hydrant is not known.

6.2 Fire Tender Vehicular Access

6.2.1 Access routes, hardstandings and turning facilities should comply with the guidance in Table 7.1 below in accordance with Table 20 of BS9999.

Table 6.1: Typical fire and rescue service vehicle access route specification

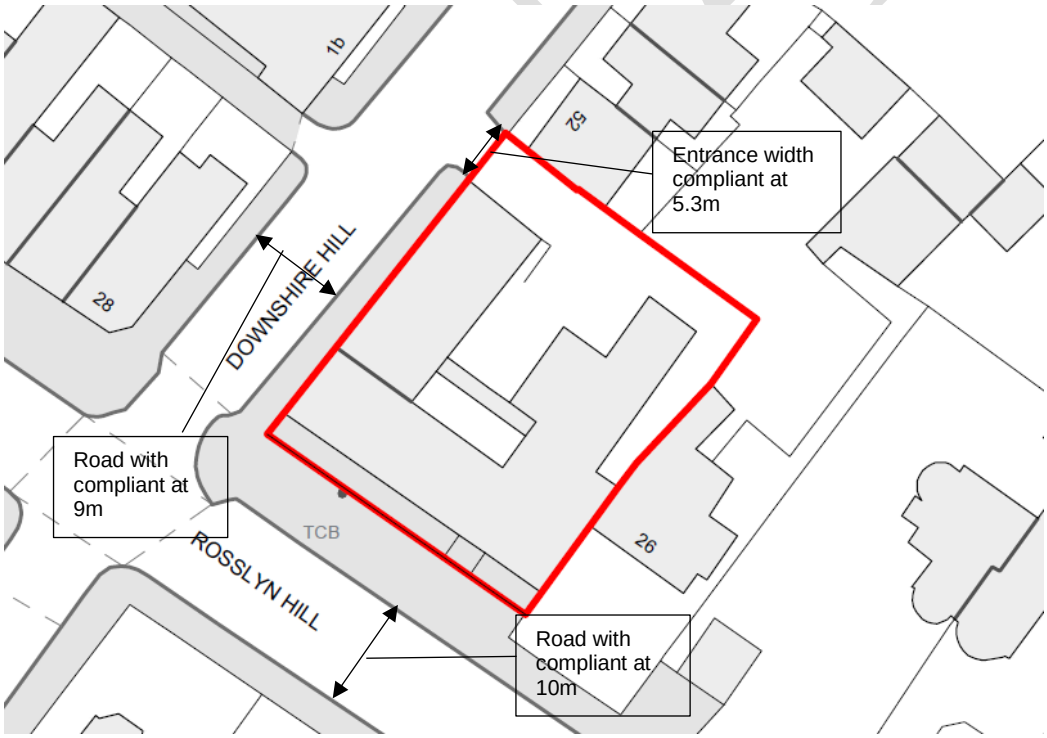
Appliance type	Minimum width of road between kerbs (m)	Minimum width of gateways (m)	Minimum turning circle between kerbs (m)	Minimum turning circle between walls (m)	Minimum clearance height (m)	Minimum carrying capacity (tonnes)
Pump	3.7	3.1	16.8	19.2	3.7	12.5
High Reach	3.7	3.1	26.0	29.0	4.0	17.0

Notes:

- Fire appliances are not standardised. The building control body may, in consultation with the local fire and rescue service, use other dimensions.
- The road base can be designed to 12.5 tonne capacity. Structures such as bridges should have the full 17-tonne capacity. The weight of high reach appliances is distributed over a number of axles, so infrequent use of a route designed to accommodate 12.5 tonnes should not cause damage.

6.2.2 The access roads (Downshire Hill Road and Rosslyn Hill Road) to the development comply with the minimum road width as shown in Figure 7.3 below.

Figure 6.1: Width of access road



A.0 Appendix A – List of drawings

Site Plan

dMFK_2268_A1_Site Plan

Plans

dMFK_2268_A10_Existing Plans-A9
dMFK_2268_A10_Existing Plans-A10
dMFK_2268_A10_Existing Plans-A11
dMFK_2268_A10_Existing Plans-A12
dMFK_2268_Proposed Plans_Scheme C_Layouts-A99
dMFK_2268_Proposed Plans_Scheme C_Layouts-A100
dMFK_2268_Proposed Plans_Scheme C_Layouts-A101
dMFK_2268_Proposed Plans_Scheme C_Layouts-A102
dMFK_2268_Proposed Plans_Scheme C_Layouts-A103

B.0 Appendix B – Form 1

Form 1 – Fire Statement (London Plan Policy D12B) for major development
Site address: 26 Rosslyn Hill, Hampstead NW3 1PD
Description of development: Refurbishment of existing building to create a mixed use building comprising offices on the lower ground, ground and part of the 1st floor, and residential flats on the 1st and 2nd floor.
Name, qualifications, professional memberships and experience of author Basil Jackson has completed this fire statement. Basil is a Chartered Engineer with the UK Engineering Council and holds full member grade with the Institution of Fire Engineers. Basil has over 25 years' experience dealing with infrastructure and has developed significant expertise in fire engineering responding to some technically challenging projects including the production of external wall assessments and CFD smoke modelling on 30m high rise apartment blocks. He has provided valuable contributions to clients through the delivery of major commissions, providing strategy and leadership to prevent project failure. His competence, qualifications and experience are amongst the best in the industry and will bring great value to any project he is involved in. Professional Memberships: UK Engineering Council - Reference No: 479398 Institution of Fire Engineers - Registration No: 00063872 Institution of Civil Engineers - Registration No: 47200782 Chartered Association of Building Engineers - Registration No: 67123747 Qualifications: BEng - Bachelor's degree in Civil Engineering MSc (Fire) - Master's degree in Fire Safety Engineering CEng - Chartered Engineer MIFireE - Member of the Institution of Fire Engineers MICE - Member of the Institution of Civil Engineers MCABE - Member of the Chartered Association of Building Engineers

Has a Gateway One Statement been submitted? No (n/a – top storey is below 18m above ground level)	
Policy considerations (D12B)	**Potential Gateway One cross reference**
The building's construction: methods, products and materials used	Gateway One Q6f&g
Means of escape for all building users and the evacuation strategy	Gateway One Q6h
Passive and active fire safety measures	Gateway One Q6i
Access and facilities for the fire and rescue service	Gateway One Q10, 11, 13 & 14
Site access for the fire and rescue service	Gateway One Q10 & 11
Modifications to the development and the 'golden thread' of information	
Where a lift core is provided, at least one lift is an evacuation lift See Form 3	London Plan Policy D5(B5)
Declaration of Compliance by a competent person	The technical content produced for this planning application complies with all the relevant legislation and requirements of London Plan Policy D12 and D5(B5). Signature:  Basil Jackson BEng(hons), MSc(Eng), MSc(Fire), DMS, CEng, C Build E, MICE, MIFireE, MCABE Date: 24.07.23

C.0 Appendix C – Form 3

Form 3 – provision of evacuation lift	
Site address	26 Rosslyn Hill, Hampstead NW3 1PD
Description of development	Refurbishment of existing building to create a mixed use building comprising offices on the lower ground, ground and part of the 1st floor, and residential flats on the 1st and 2nd floor.
Name, qualifications, professional memberships and experience of author	Basil Jackson has completed this fire statement. Basil is a Chartered Engineer with the UK Engineering Council and holds full member grade with the Institution of Fire Engineers. Basil has over 25 years' experience dealing with infrastructure and has developed significant expertise in fire engineering responding to some technically challenging projects including the production of external wall assessments and CFD smoke modelling on 30m high rise apartment blocks. He has provided valuable contributions to clients through the delivery of major commissions, providing strategy and leadership to prevent project failure. His competence, qualifications and experience are amongst the best in the industry and will bring great value to any project he is involved in. Professional Memberships: UK Engineering Council - Reference No: 479398 Institution of Fire Engineers - Registration No: 00063872 Institution of Civil Engineers - Registration No: 47200782 Chartered Association of Building Engineers - Registration No: 67123747

	Qualifications: BEng - Bachelor's degree in Civil Engineering MSc (Fire) - Master's degree in Fire Safety Engineering CEng - Chartered Engineer MIFireE - Member of the Institution of Fire Engineers MICE - Member of the Institution of Civil Engineers MCABE - Member of the Chartered Association of Building Engineers
Policy considerations Policy D5(B5) **Potential cross reference London Plan Policy D12A(4&5) and Policy D12B(2)**	
Details of the evacuation lift and shaft	
Details of lift not known	
Capacity assessment	

- Likely number of occupants and visitors

No. occupants = 3 persons per flat, 5 flats

- Nature of occupancy

All dwellings will be visitable dwellings (M4(1)). Based on 2011 census data showing that 1.9% of the population are wheelchair users, it is assumed that at least one occupant within the building will require evacuation in a wheelchair. No occupants will require evacuation via a bed as the residential demise comprises flats, i.e., the building is not a hospital or residential care home.

- Calculation of the evacuation lift capacity required

For the residential demise, the evacuation strategy is stay-put. Only one fire is assumed to occur at one time in one compartment. Therefore, in the event of a fire in the building, only the occupants of the fire flat will evacuate. The other occupants will remain in their flats. The largest occupant number in any one flat is 3 persons. Assuming the worst-case scenario whereby a fire occurs in a flat with 3 occupants, there will be 3 occupants evacuating at one time. Only one of those occupants is assumed to be a wheelchair user. Thus, only one person, plus a carer, will be required to use the evacuation lift at any time.

The required evacuation lift capacity = 2.

- Evacuation lift capacity that would be provided

The provided evacuation lift capacity = 2.

- Potential risks during evacuation due to the anticipated capacity.

No risks expected during evacuation due to anticipated capacity since the required evacuation lift capacity is no less than 2 and the capacity that will be provided will be no less than this.

Evacuation strategy

- Proposed measures that support the evacuation of the development.

Clause G.2.1 of BS 9999 requires lobbies to be provided in front of evacuation lifts. Communal ventilated lobbies will be provided in front of evacuation lifts. The lobbies will be surrounded by 60 minute compartment walls and self-closing fire doors with smoke seals.

Clause G.2.1 of BS 9999 requires evacuation lifts to be associated with a refuge. Clause G.1, BS 9999 states that the space provided for a wheelchair in a refuge should be not less than 900 mm × 1400 mm. The floor plans should be revised to provide a 900mm × 1400mm refuge within the protected stair on each upper floor. The refuge should not block the flow of escaping occupants (Clause G.1, BS 9999). Clause G.2.1 of BS 9999 requires refuges within the building to have an emergency voice communication system (EVC). Each refuge will have an EVC conforming to BS 5839-9:2011. The EVC will consist of type B outstations which communicate with a master station located in the building control room (where one exists) or some other suitable control point at fire and rescue service access level.

- Risks to the safe use of the evacuation lift during evacuation

There is a risk that wheelchair users may wait within the ventilated communal corridor for the lift to be called to the fire floor. This is not deemed an appropriate location for wheelchair users to wait in the event of a fire emanating from a flat while smoke is being vented via the ventilation smoke shaft. Therefore, wheelchair users should wait within the refuge located within the stair enclosure. Communication should always take place through the EVC system to ensure rapid and effective evacuation of the wheelchair user.

Evacuation lift management plan

There will not be a competent person on site to operate the evacuation lift immediately. Therefore, those managing the building will be responsible for ensuring that people know how to use the evacuation lift. The Responsible Person keeps a Health and Safety File containing a number of key documents relating to the building, including O&M Manuals relating to evacuation lifts and any limitations associated with their operation. The Responsible Person will ensure that the necessary information/training is available to the expected users of the evacuation lift.

Operation of the evacuation lift will be as follows:

1. Operation of the “Evacuation Lift” switch or signal from a fire detection system will return the evacuation lift to final exit level and park with its doors open.
2. When the evacuation lift is at final exit level and the “Evacuation Lift” switch has been operated, the car controls will be enabled. The evacuation lift will operate only in response to the car controls. The communication system provided will be in operation.
3. The lift car will be taken to the level where a wheelchair user is waiting for assistance.
4. Emergency voice communication system will be provided to enable the quick and clear identification of the locations that the wheelchair user is waiting for assistance. The communication will occur from a control point, and the information will be relayed to the person operating the evacuation lift car and to communicate with the person waiting for assistance.
5. The communication system should have a back-up power supply sufficient to operate it for the planned evacuation time, or be fed from the secondary supply.
6. At final exit level, help should be available to assist passengers from the lift to allow quick evacuation from the lift car and avoiding blockage of the escape route near the final exit.
7. If an evacuation lift fails to arrive at the required floor for any reason, evacuation should be carried out via the stairs.
8. The features and facilities of the evacuation lift will be maintained and kept up to date by the building management. Maintenance will occur as follows:
    a. The Responsible Person will keep a Health and Safety File containing a number of key documents relating to the building, including the fire strategy for the building, O&M Manuals and this Fire Statement that identify how the building is to operate and any limitations associated with its operation.
    b. The Responsible Person will have a process in place to ensure that decisions are not made without reference to key documents like the fire strategy, and uses experts to assist with decision making.
    c. The Health and Safety file will be continually updated with information which will ultimately include the improved fire safety features planned for implementation.
    d. As built drawings will form an important part of the file. If the building was to be redeveloped in in the future, the Health and Safety file documentation will be reviewed to inform decisions in relation to any changes to be made, and the Fire Strategy will be updated to identify the constituent elements of the building that, if modified, have the potential to adversely affect the original fire safety strategy.

Declaration of compliance by a competent person

The technical content produced for this planning application complies with all the relevant legislation and requirements of London Plan Policy D12 and D5(B5).

Signature:	Basil Jackson BEng(hons), MSc(Eng), MSc(Fire), DMS, CEng, C Build E, MICE, MIFireE, MCABE
Date:	10.01.24

REFERENCES

[1] BRITISH STANDARDS INSTITUTION, 2015. *BS 9991: 2015 – Fire Saferty in the design, management and use of residential buildings – code of practice.* London: British Standards Institution Clause 14.1.3
[2]Fire extinguishing installations and equipment on premises. London: British Standards Institution; 2012. BS5306-8:2012
[3] BRITISH STANDARDS INSTITUTION, 2015. *BS 9991: 2015 – Fire Safety in the design, management and use of residential buildings – code of practice.* London: British Standards Institution Clause 51.1
[4] BRITISH STANDARDS INSTITUTION, 2015. *BS 9991: 2015 – Fire Safety in the design, management and use of residential buildings – code of practice.* London: British Standards Institution Clause 50.1.3
[5] BRITISH STANDARDS INSTITUTION, 2015. *BS 9991: 2015 – Fire Safety in the design, management and use of residential buildings – code of practice.* London: British Standards Institution Clause 51.2