

PLANNING FIRE SAFETY STRATEGY IN LINE WITH LONDON D12A – REV 1.0

76 Strawberry Vale, TW1 4SE, Twickenham

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4th August 2024

Author Credentials


Nadim has a first-class honors MEng in Aerospace Engineering, an international Diploma in Risk Management including having studied at Oxford University (Exploring the Universe) and Imperial College Business School (Business Economics).

Nadim is ex Technical Director of Arcadis and ex Associate Director of Arup (both global engineering design firms) where he headed up the Safety Risk and Human Factors teams. Nadim is dual Chartered through the Institute of Mechanical Engineers (IMechE) and Chartered Institute of Building Service Engineers (CIBSE).

Nadim became a Chartered Engineer in an unprecedented three years and then followed this up by becoming one of IMechE's youngest Fellows. Nadim is a full member of the Institute of Fire Engineers (IFE) and has specialist experience in Safety, Reliability, Fire and Risk having worked in this field for over 15 years. His experience covers a range of industries including rail, nuclear, defence and the built environment. Nadim has established himself as a technical risk leader and has won numerous industry awards (4-won, 8 finalist positions) testifying to this including being nominated for the prestigious, Royal Academy of Engineering (RAE) Silver Medal Prize.

Nadim has served as a Non-Executive Director on 2 separate Risk and Audit boards, written numerous technical publications and has frequently spoken at international conferences including being invited on to expert panels. Nadim currently sits on the Institute of Fire Engineers working group for fires in electric vehicles.

Revisions

Revision	Date	Prepared By	Comments	Signature
1.0	04.08.2024	Nadim Choudhary	Issued for Comment	

This report has been prepared for the sole benefit, use and information of the client named in this report only and the liability of Rockland Safety Services Ltd, its directors, and Employees in respect of the information contained in the report will not extend to any third party.

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

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Table of Contents

Author Credentials	2
Revisions	3
1. Purpose of Document	6
2. Introduction	7
2.1. Description	7
3. Policy D12A Provisions	9
3.1. Unobstructed External Space	9
3.2. Reduce the Risk to Life	10
3.3. Minimise the Risk of Fire Spread	11
3.4. Means of Escape	11
3.5. Strategy for Evacuation	11
3.6. Equipment for Firefighting	11
4. Summary	12

1. Purpose of Document

Rockland Safety Services Ltd trading as Fire Safety Services have been instructed to develop a Planning Fire Safety Strategy (this document) in line with Policy D12A.

1. **Identify suitably positioned unobstructed outside space:**
 - For fire appliances to be positioned on
 - Appropriate for use as an evacuation assembly point
2. **Be 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. **Be 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.**

To demonstrate the development proposed has met the highest standards of fire safety, proportionate to the development, the following information has been provided and addressed in line with Policy D12 part A.

The details provided within this document are based at the early planning stage, and the fire safety provisions will need to be revisited at later stages. This should be captured in a full fire safety strategy, which will detail the specific provisions covering B1-B5 of the Building Regulations.

2. Introduction

2.1. Description

1. The property address is 76 Strawberry Vale, TW1 4SE, Twickenham.
2. The works proposed are the conversion of a ground storey garage into a habitable room. It will not be used for the storage of any vehicles.
3. The building in its existing condition consists of a ground and first floor.
4. It is proposed to use Approved Document (ADB Vol 1).

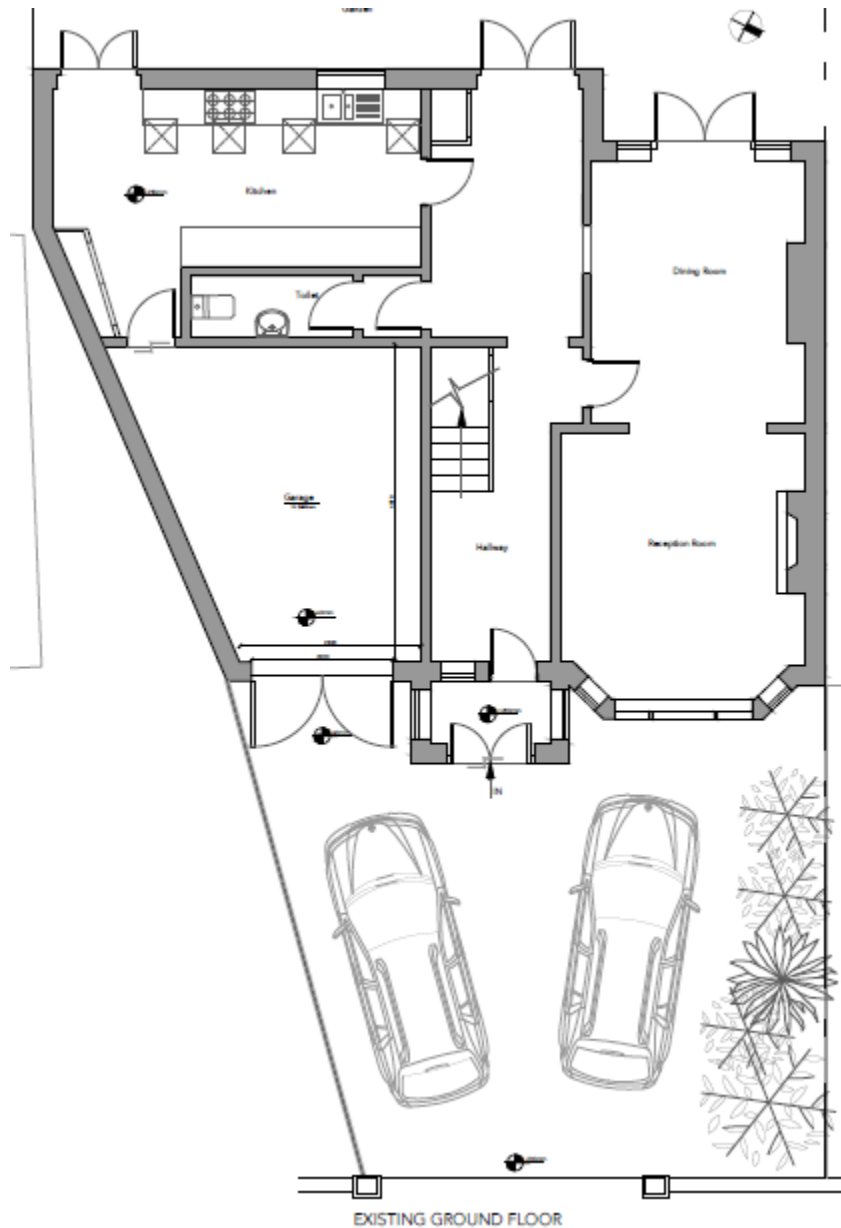


Figure 1 - Existing Ground Floor Plan

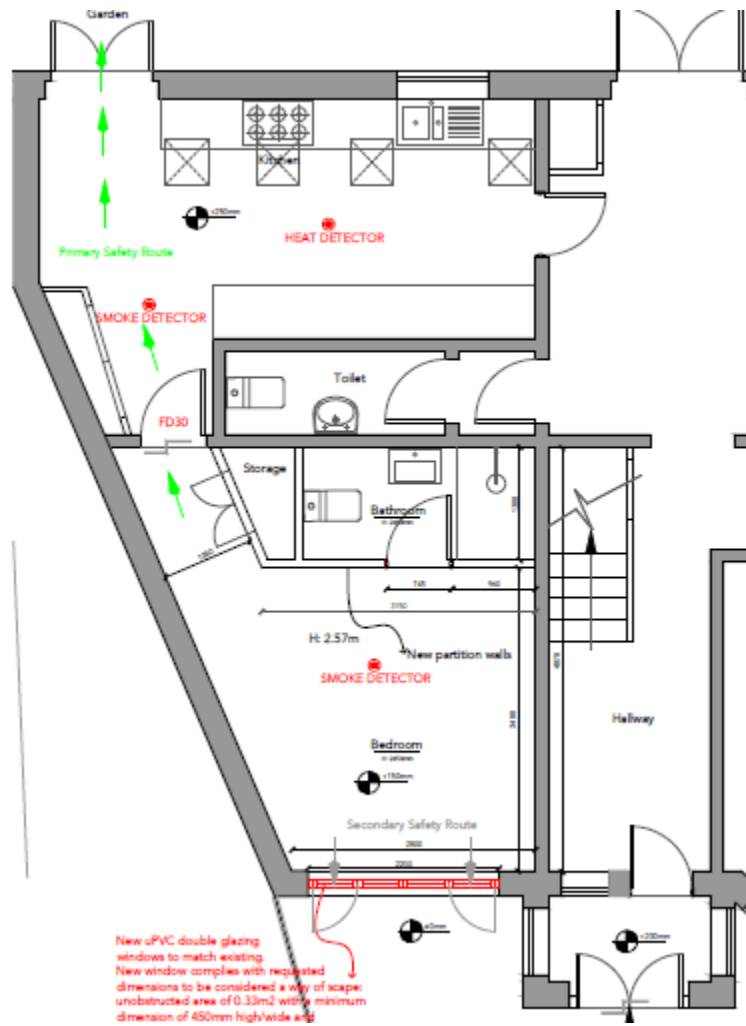


Figure 2 - Proposed Ground Floor Layout



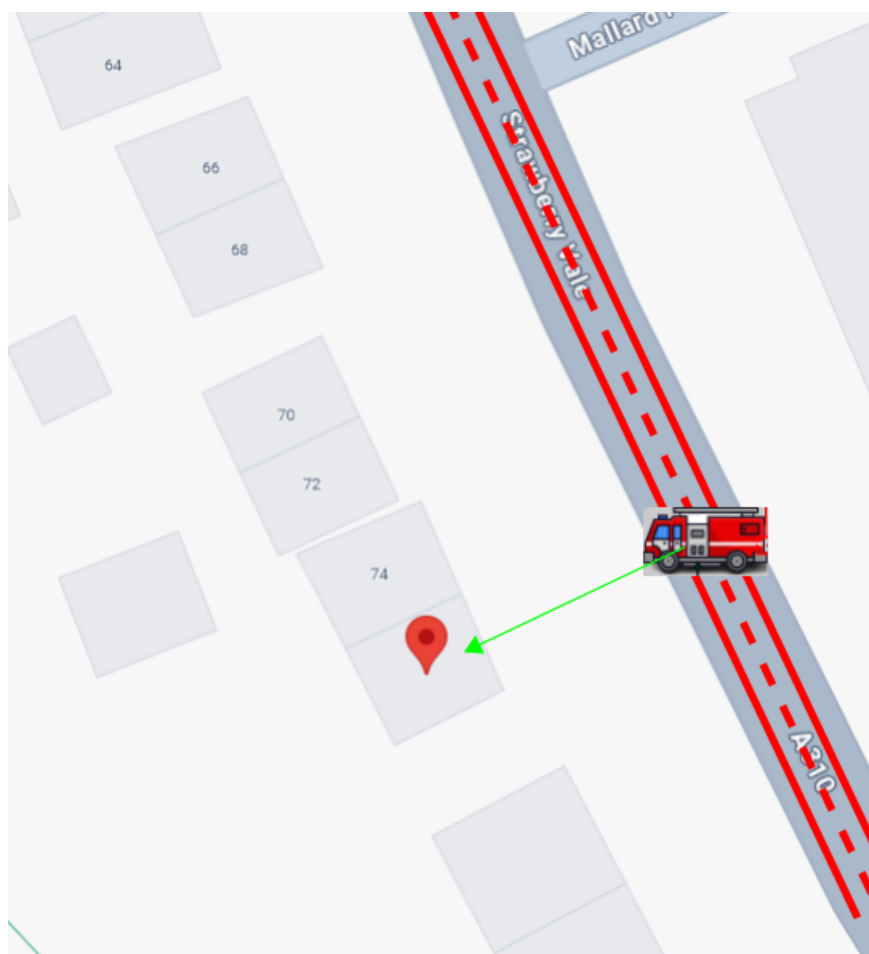
Figure 3 - Elevations.

3. Policy D12A Provisions

3.1. Unobstructed External Space

Identify suitably positioned unobstructed outside space for fire appliances to be positioned on.

The property is located at 76 Strawberry Vale, TW1 4SE which is served by existing road Strawberry Vale and as per the figure below, demonstrates that emergency vehicles in the event of a fire can park near the property to fight the fire. It should be noted that the changes being made do not impact the fire service access.



Identify suitably positioned unobstructed outside space appropriate for use as an evacuation assembly point.

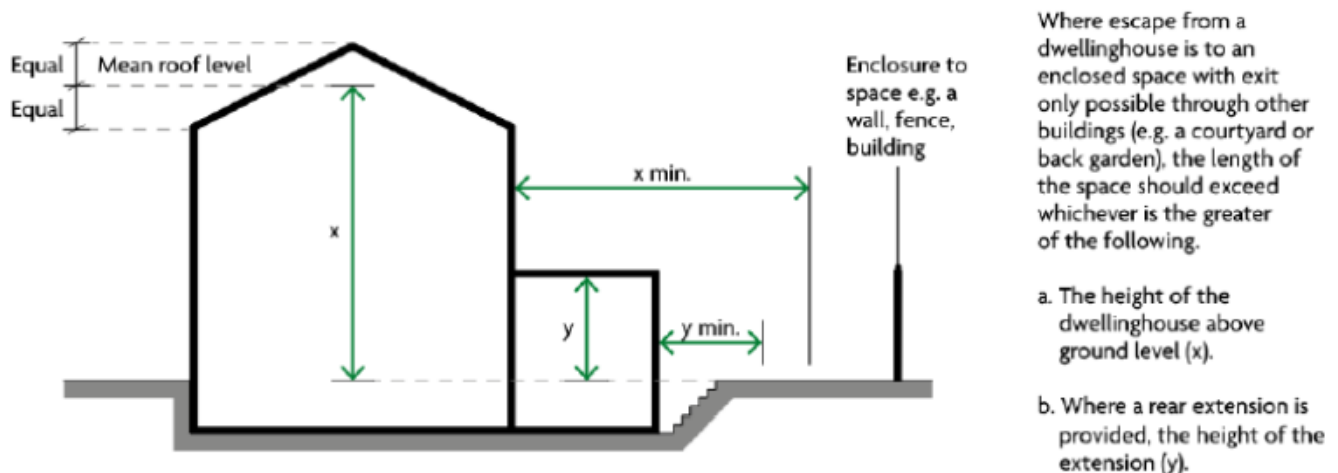
There is ample space at the front of the property to act as an evacuation assembly point. This is applicable for both the construction and occupation phases of the project.

3.2. Reduce the Risk to Life

The development is 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 features.

According to ADB Vol 1, Table 0.1, the property is considered to be a residential dwelling, of the type 1(b), namely “Dwellinghouse that contains a habitable storey with a floor level a minimum of 4.5m above ground level up to a maximum of 18m.”

1. As the building does not have two or more stories more than 4.5m above ground level, a sprinkler system is not necessary.
2. Smoke detectors shall be fitted within the new habitable room as well as within the kitchen including heat detectors as appropriate.
3. As the new habitable room becomes an inner room, emergency escape windows are to be provided as alternative means of escape to the front of the property.
4. Emergency escape windows and doors shall comply with all of the following:
 - a. Emergency escape windows shall not be used for rooms that are more than 4.5m above the lowest adjoining ground outside the building.
 - b. Windows shall have an unobstructed openable area that complies with all of the following:
 - i. A minimum area of 0.33m².
 - ii. A minimum height of 0.45m.
 - iii. A minimum width of 0.45m.
 - iv. The bottom of the openable area is a maximum of 1100mm above the floor.
 - v. People escaping should be able to reach a place free from danger of fire. Courtyards or inaccessible back gardens should comply with Diagram 2.5 (as extracted below).
 - vi. Windows should be capable of remaining open without being held.



3.3. Minimise the Risk of Fire Spread

The development is constructed in an appropriate way to minimise the risk of fire spread.

The development shall follow the design principles in Approved Document B Vol 1 for the residential areas. The materials used will comply with the requirements of the amendments to Regulation 7 of the Building Regulations.

1. All new electrical wiring will meet current IET National Wiring Regulations to BS 7671.
2. Consumer units/ meters located within the stairway should be enclosed with a secure cupboard which is separated from the escape route with fire resisting construction and intumescent strips where appropriate.
3. The use of combustible materials shall be avoided on the external walls.

3.4. Means of Escape

Provide suitable and convenient means of escape, and associated evacuation strategy for all building users.

The property should employ a simultaneous evacuation strategy, whereby the entire residential unit of fire origin should evacuate immediately upon activation of the fire alarm therein.

3.5. Strategy for Evacuation

Develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence.

In line with the Fire Safety Policy 12D(A) Pre-consultation Draft 2021 Table A1.1, Planning Applications, and Information Requirements for D12 (A) criteria 5 is not applicable for householder or full Planning Applications.

3.6. Equipment for Firefighting

Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.

As this proposed development is for changes to residential property i.e., conversion of a garage to a habitable space, there is no requirement to install firefighting shafts, lifts, or fire mains.

Fire blankets and extinguishers will be used in line with requirements for single family dwellings. All locations will be accessible within 45m of the rescue service pumping appliance.

4. Summary

The PFSS is outlined as required by the New London Plan Policy D12A, which requires development proposals to achieve the highest standards of fire safety, embedding these at the earliest possible stage.

The PFSS has evidenced the provisions made for the safety of occupants 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.

Fire Safety Services believe this PFSS meets the requirements of the London Plan Policy D12A. This will be ensured with the development of the RIBA Stage 3 Fire Strategy, where each part of the policy is addressed in more detail within the Part B Functional Requirements. The Fire Strategy will be developed further during the detailed design and other relevant guidance documents will be agreed with the approving authority ahead of submission to the fire service.