



FIRE SAFETY STRATEGY – THE BOATHOUSE, TWICKENHAM

Introduction

The following outlines a strategy for the provision of adequate fire safety in connection with the planning application for the demolition of the existing residential building consisting of three residential units and the provision of three new family sized residential dwellings including alterations to landscaping and the public realm.

The fire safety information provided is to inform the overall detailed fire strategy for the development.

All works are subject to approval under the Building Regulations. Reference is made to the information contained in the Fire Safety Policy D12(A) guidance and the 'golden thread' approach expressed therein.

Fire Brigade Access

The location of the property on Ranelagh Drive offers convenient access for fire brigade vehicles and equipment.

In the event of a fire, vehicular access from Ranelagh Drive would be the point of entry for the fire brigade. Fire and rescue services pumping appliances can be sited on the hard standing available on the front of the houses or on street. The forecourt areas fall within the boundary of the site, allowing suitable space and clear of obstruction.

Moreover, the property is accessible from the rear along the Thames public footway via foot, as an alternative in the event of an emergency. Access should, therefore, be compliant with Building Regulation Approved Document B Part 1, Section B5. As the project is domestic and the fire service access to the scheme is compliant, there is no requirement to consult the Fire Service, although as LPA, the Council might choose to do so.

Means of Escape

The means of escape for all occupants or visitors to the building has been considered and planned from the initial design of the development and meets the requirements set out in Building Regulation Approved Document B Part 1, Section B1. As an addition, each residential dwelling will have mains fed sprinklers in all kitchen, dining areas and living areas which will be connected to the fire alarms and this will run into the ground floor corridors in addition to the protected stair.

In particular, provision is to be made for safe escape from all floor levels in compliance with the requirements of the Building Regulations 2010. The floors offer escape via a protected stair to a final exit at ground floor level. All habitable rooms will have direct access to a protected stairway, and a protected stair is to be provided extending to a final exit. The stair construction/enclosure shall be of 30-minute fire-resisting construction. In the event of a fire, a fire assembly point will be designated on Ranelagh Drive on the opposite side of the road, allowing a safe distance from the property in case of fire.

Heat and Smoke Detection

The property will incorporate heat and smoke detection systems that comply with applicable Fire Safety Regulations. In particular, the property will have a fire detection system minimum Grade D2 Category LD3 standard, in accordance with the relevant recommendations of BS 5839-6. Smoke alarms are to be mains



operated and conform to BS EN 14604 and heat alarms should be mains operated and conform to BS 5446-2.

Internal Fire Spread

Internal construction shall be compliant with Building Regulation Approved Document B Part 1 Sections B2 and B3, including protection of loadbearing elements of structure.

External Fire Spread

The external envelope of the building should not contribute to undue fire spread from one part of a building to another part. This will be achieved by complying with Building Regulation Approved Document B Part 1 Section B4.

Lifts

No lifts are proposed for the proposed development as part of this application.

Fire Safety at Construction Stage

Acknowledging the 'golden thread' approach suggested in the London Plan Fire Safety Policy D12(A), fire safety at construction stage will be encouraged through the imposition of obligations by the chosen contractor to comply with prevailing regulations at construction stage including Health and Safety standards and the Construction Design and Management Regulations 2015.

During construction works, a Site Fire Management Plan and Risk Assessment will be implemented, setting out site procedures and active fire safety measures.

Conclusions

Under the Building Regulations, a building owner is required to provide an adequate level of life safety to the building by providing suitable means of escape, means of warning occupants of a fire, limiting internal fire spread, protecting adjacent property from fire and facilitating fire service operations.

This can be achieved by the adoption of standard guidance as documented within Building Regulation Approved Document B. As the property is considered to be a dwelling, the guidance document that has been considered is Building Regulation Approved Document B Part 1: Dwellings. The design of the building meets the prescriptive requirements set out therein.

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