ROBSON FRANKHAM

Belvedere

Fire Statement

Policy D12

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Client	**Bellway Homes Limited**

Revision	Date	Comments
1	07/08/2023	Draft issue to client

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Summary

Robson Frankham have been commissioned by Bellway to provide a Fire Statement for the planning application for Belvedere residential development in Kent.

The development comprises 11 residential tower blocks and houses ranging in top storey height from 6m to 12m.

The ground floor level consists of the ancillary spaces to the residential use in all blocks of flats. There are commercial units on ground level only in Block B. All upper levels consist solely of residential flats.

This Fire Statement has been developed to satisfy the requirements of the New London Plan (March 2021) by documenting strategic fire safety provisions for the development. This fire statement confirms that the building design complies with policies D12A, D12B, & D5(B5).

This Fire Statement outlines the minimum fire safety provisions required for the proposed new residential building which is to be compliant with the functional requirements of the Building Regulations, using the guidance in Approved Document B Volume 1 2022.

This Fire Statement has been written by Elodie Maurice Christy who is a Fire Safety Engineer full-time employee by Robson Frankham. Elodie is an Associate Member of the Institution of Fire Engineers (IFE). Elodie Joined Robson Frankham in October 2020 and she is currently working on new build residential projects for various clients.

Elodie has over 5 years' experience working for SNC Lavalin Atkins where she worked her way from Graduate up to Fire Engineer level prior to joining Robson Frankham.

Elodie has taken lead on commercial projects (existing and new build) and has worked in various sectors including education, nuclear, aviation and rail. Full CV and CPD records available on request.

This fire statement has also been reviewed and approved by Shaun McKeever, who is a Member of the Institute of Fire Engineers and has over 35 years' experience as a fire engineer.

1 Report scope and objective

This document constitutes a Fire Statement for the planning application for Belvedere development, located in Kent as required by the London Plan – adopted March 2021.

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 size and of the development.

Policy D12 of The London Plan, states in section B 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”. Policy D12 goes on to state that “the statement should detail how the development proposal will function in terms of:

1) The building 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 of these.
5) How provision will be made within the curtilage of the site to enable fire appliances to gain access to the building. And
6) Ensuring that any potential future modifications to the building will take into account not compromise the base build fire safety/protection measures.

2 Drawing References

The below are the Illustrative scheme drawings that have been used to form this fire statement:

Drawing Ref.	Drawing Title	Date
3499_PL(20)101_	Block A Ground Floor Plan and Typical Floor Plan	03.07.23
3499_PL(20)102_	Block B Ground Floor Plan	03.07.23
3499_PL(20)103_	Block B First and Second Floor Plan	03.07.23
3499_PL(20)104_	Block B Third and Fourth Floor Plan	
3499_PL(20)105_	Block C Ground Floor Plan	03.07.23
3499_PL(20)106_	Block C - First, Second, Third and Fourth Floor Plan	03.07.23
3499_PL(20)107_	Block E - Ground Floor Plan	03.07.23
3499_PL(20)108_	Block E - Typical Floor Plan	03.07.23
3499_PL(20)108_	Block F Ground Floor Plan and Typical Floor Plan	03.07.23

3 Project Overview

Figure 1 - Ground floor site plan of all Blocks

Belvedere development is a collection of 11 block of flats and houses. The proposed blocks of flats consist of solely residential use except for Block B. The ground floor of Block B is for commercial use and the floors above ground are residential.

All blocks of flats are single-stair buildings.

Buildings A1-A5 and building F are designated as small single stair buildings as they consist of ground and 3 upper floors.

Buildings B, C & E are split into two blocks a with a single stair configuration. These blocks do not have internal access between each other. Buildings B and C consist of duplex flats at ground and first floor only.

All blocks of flats are accessed from an entrance lobby at ground floor level, with access to a vertical core that continues to upper levels. Flats are currently proposed to comprise of a single or double storey with protected entrance halls.

The site access is set out to ensure that the fire tenders can drive to within 18m of and in sight of the dry riser inlets, typically positioned on the face of the building.

The houses across the site are 3-storey properties.

The proposed 11 Blocks of flats and houses range in top storey height from 6m to 12m and have either 3, 4 or 5 storeys including ground floor.

Building	Storeys	Approximate top storey height*
A1	4	9m
A2	4	9m
A3	4	9m
A4	4	9m
A5	4	9m
B	5	12m
C	5	12m
D1(houses)	3	6m
D2(houses)	3	6m
D3(houses)	3	6m
D4(houses)	3	6m
D5(houses)	3	6m
D6(houses)	3	6m
D7(houses)	5	12m
E3&E4	5	12m
E5&E6	5	12m
F	4	9m

*Based on the assumption of 3m floor to floor height

4 Building Construction

The development will follow the design principles in Approved Document B Volume 1 2019 including amendments up to June 2022.

The materials used will comply with the requirements of the amendments to Regulation 7 of the Buildings Regulations. This includes all external wall materials and roof coverings.

5 Means of Escape

The residential areas are designed to adopt a 'stay-put' strategy. A 'stay put' policy involves the following approach:

- When a fire occurs within a flat, the occupants alert others in the flat, make their way out of the building and summon the fire and rescue service.
- If a fire starts in the common parts, anyone in these areas makes their way out of the building and summons the fire and rescue service.
- All other residents not directly affected by the fire would be expected to 'stay put' and remain in their flat unless they feel unsafe or are directed to leave by the fire and rescue service.

Any ancillary spaces, such as the cycle stores, refuse stores and plant areas will operate a simultaneous evacuation strategy where any occupants of these spaces will evacuate immediately once they become aware of a fire.

There are commercial units provided on the ground floor in Building B. There is no internal access or shared escape routes between the commercial and residential areas in this building. The commercial areas will operate a simultaneous evacuation strategy where any occupants of these spaces will evacuate immediately once they become aware of a fire.

6 Features which reduce the risk to life

As the height of top occupied storey of buildings A1 to A5 and building F are less than 11m, sprinklers are not required. However, sprinklers are required for all other blocks of flats.

All buildings fitted with a sprinkler system will have a fire detection alarm system in with accordance with BS 5839-6 2019 and require a minimum of Grade D2 category LD1 and LD2 for non-sprinklered buildings. This will comprise of detection and sounders throughout each dwelling, with the exception of bathrooms.

Sounders must be provided on all private balconies.

7 Access for fire service personnel and equipment

Buildings A1-A5 and houses are not fitted with fire mains and should have vehicle access for a fire appliance not more than 45m from all points within each flat, measured on a route suitable for laying hose.

All other blocks of flats are fitted with dry rising mains. The Fire service vehicle access must be available via the main entrance of the buildings via the surrounding roads. The site access will be set out to ensure that the fire tenders can drive to within 18m of and in sight of the dry riser inlets, typically positioned on the face of the building.

The fire service access meets the functional requirements of Part B5 of the Buildings Regulations, utilising the design guidance in Approved Document B Volume 1 2019 including amendments up to June 2022.

8 Future Modifications

The design of the building takes into account the current building regulations and guidance, as well as the further guidance provided within the London Plan.

Future changes to the design and/or structure of the buildings should be undertaken following the relevant guidance in force at that time.