

Fire Statement

Client	Rider Levett Bucknall
Project	Vantage Quay, Manchester
Discipline	Fire Safety Design
Revision	02
Author	Shauna Jameson
Date	29 March 2024

1. Application information

1.1 Site address

Site address line 1	Vantage Quay,
Site address line 2	Brewer Street,
Town	Manchester
County	Greater Manchester
Site postcode (optional)	M1 2ER

1.2 Description of development

The development consists of 2 residential blocks. Both blocks are 6 storeys above ground level, both of which are 20m in height measured from ground to finished floor level of the highest occupied floor.

The ground floor of each block comprises residential accommodation and a bin store. The basement floor contains a plant room, bike store and resident’s car park. All floors above basement level contain residential apartments.

Block 1 is provided with one means of escape stair highlighted in green below. The single stair serves 8 flats on the ground floor and fifth, 9 flats on the first, second, third and fourth floor, and 5 flats on the 6th.

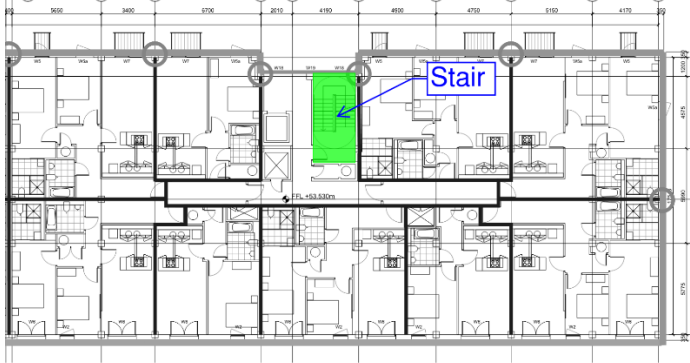


Figure 1.1 Block 1 stair location

Block 2 is provided with one means of escape stair highlighted in green below. The single stair serves 9 flats on the ground floor, 10 flats on the First, second, third and fourth floor, 7 flats on the fifth floor and 5 flats on the 6th.

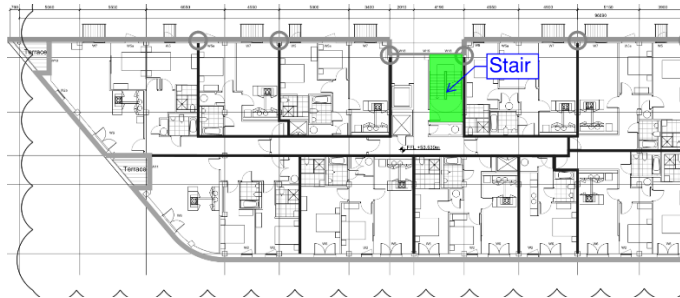


Figure 1.2 Block 2 stair location

1.3 Qualifications of the author

This report has been prepared by Shauna Jameson, a qualified professional with BSc (Hons), MSc and an Associate grade membership with the Institution of Fire Engineers.

The report has been approved by Les Kirkbride, a qualified professional with BSc (Hons), and holds an Associate Member grade membership with the Institution of Fire Engineers. Les has over 10 years' experience working professionally within the fire safety industry and currently holds the role of Associate Fire Engineer for BB7.

1.4 Consultation

Design Fire Consultants (DFC) produced a report on the fire safety of the external wall in March 2019 which recommended further works are required to improve the fire safety.

DFC recommended the following works are carried out:

- Install adequate cavity barriers within the brickwork construction.
- Contact external wall specialist in respect of options for remediation for the render. Remediation is likely to require as a minimum the installation of adequate cavity barriers and full-depth fire breaks within the polystyrene.

BB7 reviewed the DFC report and agreed with the findings but recommended additional works as following:

- Stair cladding: we would recommend that it is checked that the cavity within this build up is adequately separated from cavities in adjacent wall build ups, especially the brick with combustible insulation within it.
- Removal of the timber trellis was not mentioned within the DFC/Thomason report. We would agree with the proposed plans in relation to removal of the timber and replacing it with metal alternative.
- Review the balcony build ups and the materials on each elevation. Replace some or all combustible boarding or provide a barrier (see section 3.4 for more details).

For the render system to comply with ADB table 10.1, the client decided that the render system is to be replaced with a complete non-combustible system.

1.5 Site layout plan

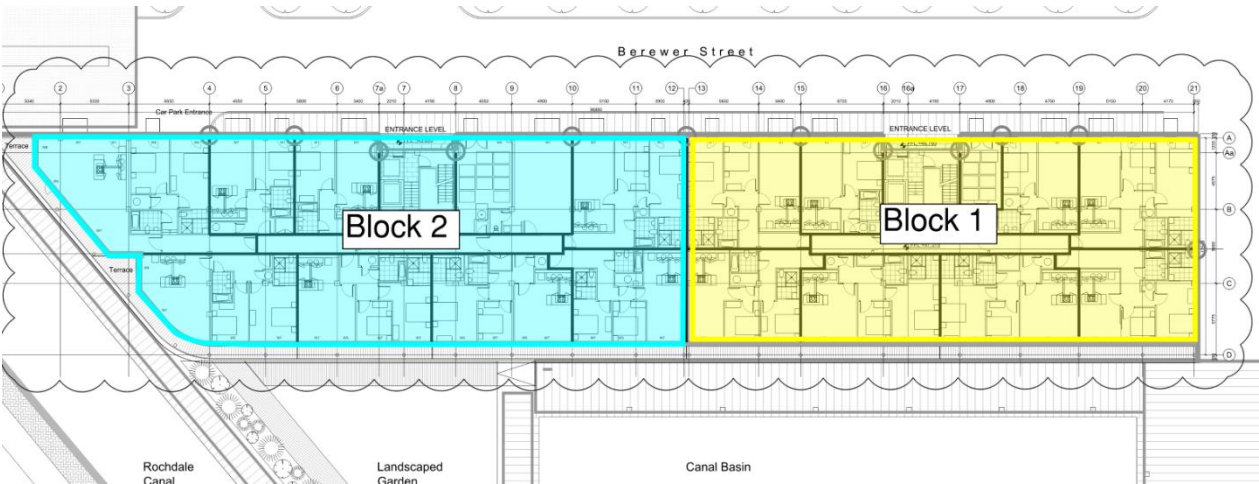
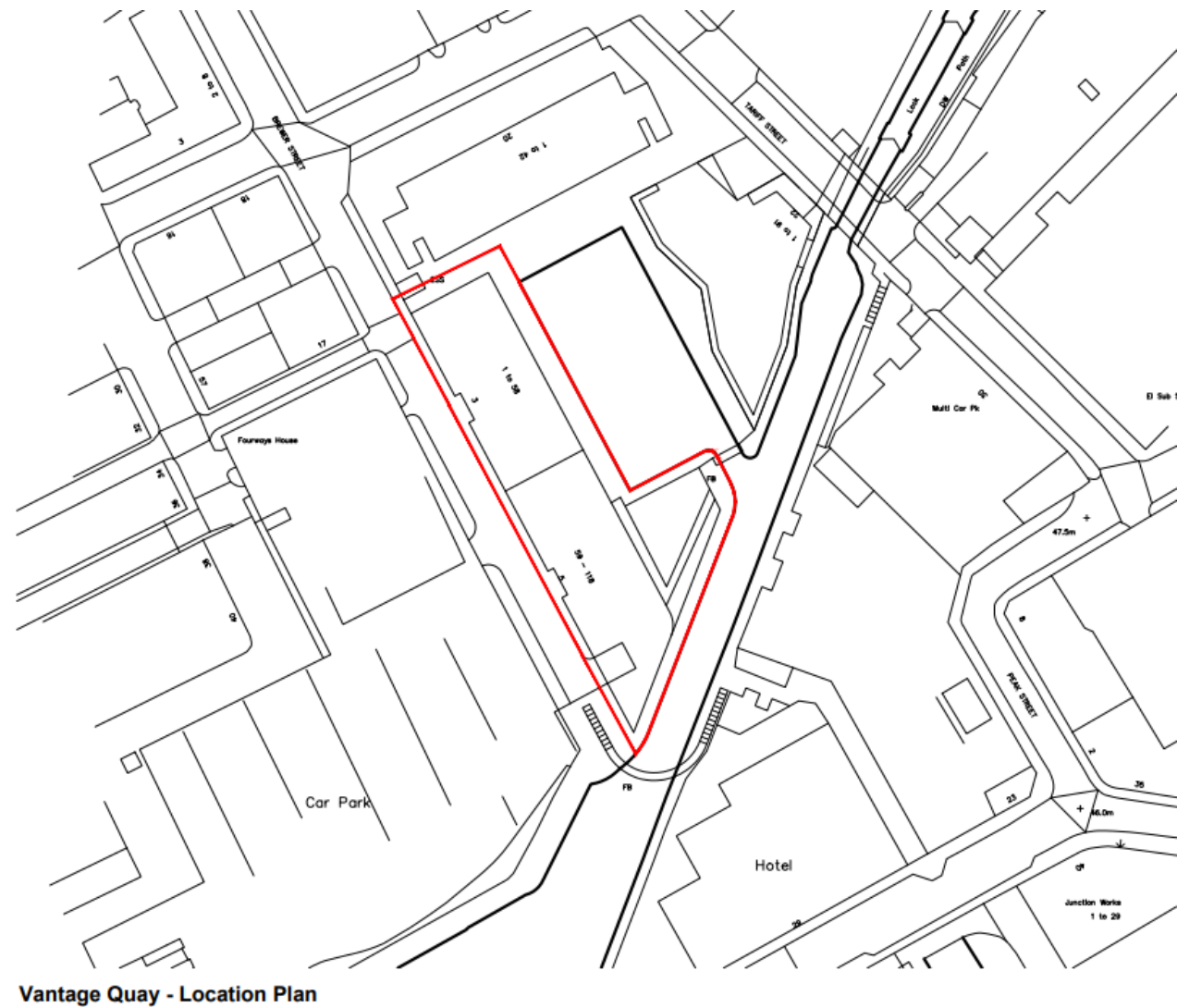


Figure 1.3 Site layout plan

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2. Fire safety principles

Site information		Building information			Resident safety information				
a) block no. as per site layout plan above	b) block height (m) number of storeys excluding those below ground level number of storeys including those below ground level	c) proposed use (one per line)	d) location of use within block by storey	e) standards relating to fire safety/ approach applied	f) balconies	g) external wall systems	h) approach to evacuation	i) automatic suppression	j) accessible housing provided
Block 1	20m 7 (G+6) No storeys below ground	residential flats, maisonettes, studios	Throughout	Approved document B vol 1	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	none	none
Block 2	20m 7 (G+6) No storeys below ground	residential flats, maisonettes, studios	Throughout	Approved document B vol 1	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	none	none

2.1 Specific technical complexities

The building is existing and BB7 were not involved in the design or construction stages. The guidance at the time of construction has been broadly used with consideration given to later 2013 guidance to determine compliance and to allow some flexibility in approach for an existing building.

Where refurbishment works have been carried out, and as the original strategy was used partly to undertake upgrades to the external walls, the latest guidance is used for that element.

There is considered to be no specific technical complexities with regards to fire safety matters that relate to land use / planning matters (e.g. emergency vehicle access and water supplies for firefighting purposes).

2.2 Issues which might affect the fire safety of the development

The building is existing, therefore, it is considered likely that any risks identified are likely to have been approved by the regulatory authority at the time of construction.

Some items that were raised as part of the 'as-built' fire strategy report and identified on site are provided in the following table. There is no legal obligation to rectify the risk items, however, some elements / deficiencies may be enforceable under the Regulatory Reform Fire Safety Order. Therefore, BB7 would recommend where reasonably practicable items are actioned.

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Table 2.1 Risk items identified on site

Risk Items	BB7 Commentary
Travel distances in common corridor exceeds 7.5m	There is no legal requirement to alter the design as it has been likely approved by the regulatory authority at the time of design / construction. The risk of this is limited.
Travel distances in flats exceed 9m	There is no legal requirement to alter the design as it has likely been approved by the regulatory authority at the time of design / construction. The risk of this is limited.
Fire doors do not appear to be installed within flat internal halls (apartment 118) as non-fire rated glazing was identified within fire doors and was significantly greater than the maximum % allowable.	BB7 would recommend fire doors between rooms and the internal hallway were ideally solid and not glazed. The main risk of this is to the occupant and it is unlikely to have a significant impact of other occupants. It is understood that the changes may be dependent on the tenancy agreement but it is recommended that tenants be made aware that internal fire doors are there for their safety.
Balcony extends across more than one room	There is no legal requirement to alter the design as it has been approved by the regulatory authority, however if this was a new building, BB7 would recommend a sounder and/or flashing beacon to be installed on the balcony. As people do not generally sleep on their balconies and, in most instances, they would hear the alarm from the house, the risk does not necessitate further requirements or remedial works.
Fire foam identified to fire stop service penetrations within carpark	It is recommended that fire foam is removed/cut back and replace with suitable fire stopping method.
No ventilation in the basement stair.	There is no legal requirement to alter the design as it has been approved by the regulatory authority, however powering the door open on detection of smoke in the basement stair could be considered.

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2.3 Local development document policies relating to fire safety

The building is located in Manchester, therefore, the London Plan policies are not applicable.

The building is greater than 18m though and, therefore, the Building Safety Act 2022 should be considered.

The Building Safety Act 2022 amends the Building Act 1984 and applies to buildings greater than 18m in height or with 7 or more storeys. The following guidance has been provided for reference.

Building Safety Cases will require the client to:

- Register the building with the Safety Regulator (BSR)
- Perform a building safety risk assessment.
- Introduce measures to manage building safety risk
- Prepare a safety case report for their buildings to give to the BSR on request.

The act requires the accountable person or duty holder. The information that they will require is as follows:

- Design and specification. It is interpreted that this includes:
 - Plans (including compartmentation/fire strategy plans and inclusive of details such as cavity barriers within voids above ceilings and below floors)
 - Elevations (including provision of cavity barriers)
 - Standard details
- Fire strategy
- Fire risk assessment
- Supporting information for its fire risk assessment E.g.:
 - Proof that the compartmentation appears to be adequate and at least notional
 - Proof of adequate fire doors (Ideally tested door set but at the very least solid and to provide notional fire and smoke rating)
 - Adequate fire stopping with a records library.

The duty holder will need to confirm all the measures described were installed correctly, work as intended and have been properly maintained. This includes for updates to the building including cladding provisions, extensions.

This is something that the client needs to be aware of and BB7 can support with any registration.

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The scope of this report does not include assured compliance with the Building Safety Act 2023, indeed this is outside our scope. The scope the requirements of the Act are significant and much more detailed and wide reaching than the limits of this retrospective fire strategy. The requirements of the act are still being understood by industry, however, the fire strategy will form a good foundation in which to build the case.

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3. Fire and Rescue Service access and water supplies

3.1 Fire Service access

The following provisions are included in the building:

- Dry riser inlets are adjacent to the front entrance doors of Block 1 & 2
- Dry riser outlets are provided on each level within the lift lobby
- Common areas service flats are provided with mechanical smoke shafts for ventilation (Anecdotal confirmed on site)
- Each stairwell is provided with a vent at the head of the stair
- Stair treads are 1100mm in width
- The lift lobbies are provided with AOVs
- Induction fans are provided to the car park which is accessed via a protected lobby
- A Firefighting lift is provided to each block

3.2 Emergency road vehicle access

Brewer Street provides access to the main elevation of Vantage Quay which has entrances to both buildings.

Is the emergency vehicle tracking route within the site to the siting points for appliances clear and unobstructed?

yes

3.3 Siting of Fire Appliance

The road giving access to both blocks is an existing road and, therefore, considered adequate for an appliance to access and park.

The road should be suitable to take the weight of a typical fire appliance i.e. 7.5 tonnes.

Fire Statement**3.4 Suitability of water supply for the scale of the development**

The entrances of Block 1 & 2 were no more than 100m from a statutory hydrant and hydrants were provided within 90m of the dry fire main inlets of Blocks 1 & 2.

Nature of water supply:

hydrant- public

Does the proposed development rely on existing hydrants and if so are they currently usable / operable?

yes

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3.5 Fire service site plan

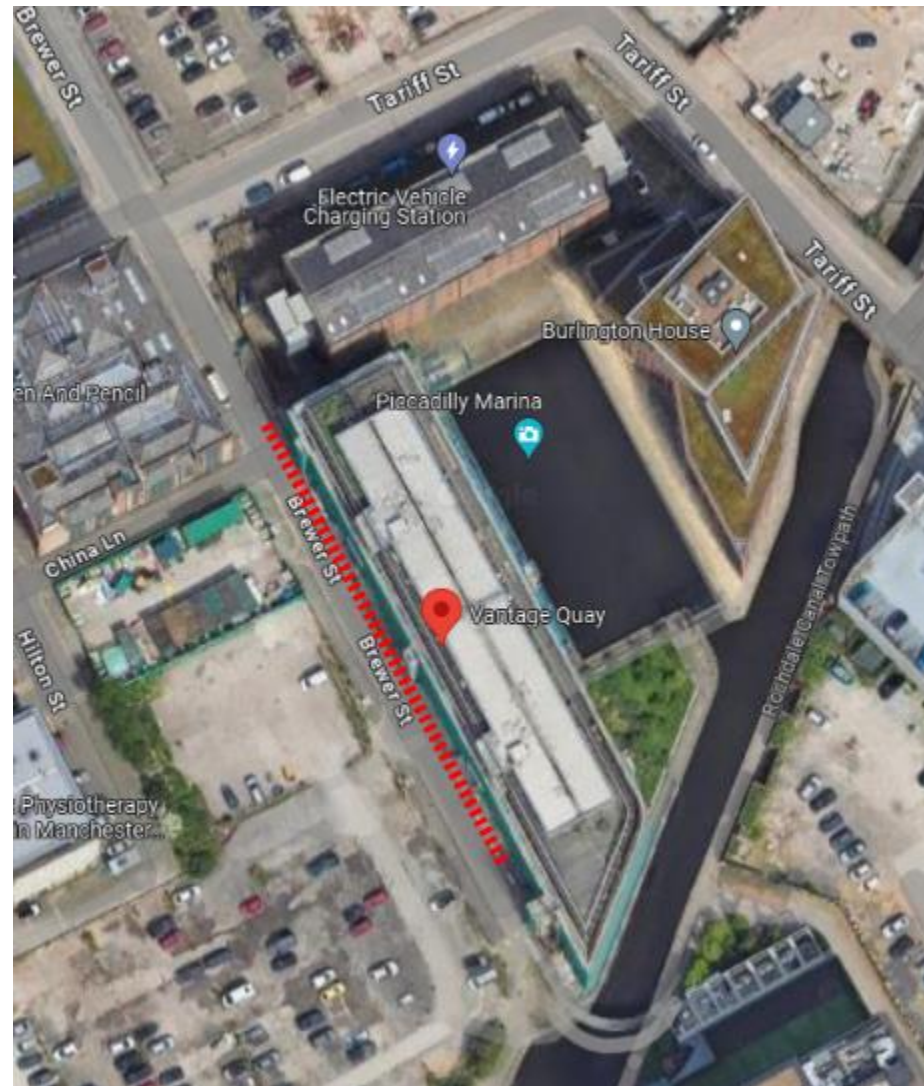


Figure 3.1 Fire Service site plan

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Fire statement completed by

Fire statement completed by	
Signature	<i>Shauna Jameson</i>
Date	27/03/2024
Reviewed by	Les Kirkbride
Date	28/03/2024

