

Fire Statement – FS 001.2

Project: Block C, Plot 11, First Street South
Subject: The Town and Country Planning Order - Fire Statement
Date: 22 November 2023
Author: Stuart Crick
Checked: Merl Forrer



1 Introduction

This Fire Statement has been prepared by Design Fire Consultants (DFC) and is submitted in support of the planning application made by Downing Living (Manchester South) Limited Partnership Incorporated for the Block C, Plot 11, First Street South student residential development located in Manchester.

The purpose of this Fire Statement is to evidence that fire safety matters, as they relate to planning, have been considered at an early stage of the project.

This Fire Statement includes a concise summary of the approach to the fire safety design, site layout, access and facilities for firefighting, and details of any consultation undertaken on fire safety and consideration of local development documents.

This Fire Statement forms part of the planning application information only. It is not intended for formal Building Regulations submission and should not be used as such.

1.1 Town and Country Planning Order

The requirement for a Fire Statement is requested under The Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended)¹.

The regulatory regime also establishes the Health and Safety Executive as a statutory consultee.

A Fire Statement is required to be submitted as part of a full planning application (or with the reserved matters planning application) for:

- A development which involves the provision of one or more relevant buildings;
- A development of an existing relevant building; or
- A development within the curtilage of a relevant building.

A relevant building is currently defined as:

- A building that contains two or more dwellings; and is 18m or more in height, or contains 7 or more storeys.
- A building that constitutes educational accommodation; and is 18m or more in height, or contains 7 or more storeys.

Educational accommodation is defined as:

¹ UK Government, 'The Town and Country Planning (Development Management Procedure and Section 62A Application (England) (Amendment) Order 2021', July 2021

- Residential accommodation for the use of students who are boarders at school in connection with them attending a school; or
- Residential accommodation for use of students attending higher education courses, further education courses, or course at 16 to 19 Academies.

The height of a building is measured from ground level to the top floor surface of the top storey of the building (ignoring any storey which is a roof-top machinery or plant area or consists exclusively of machinery or plant rooms).

When determining the number of storeys a building has: any storey which is below ground level is to be ignored; and any mezzanine floor is a storey if its internal area is at least 50% of the internal floor area of the largest storey in the building which is not below ground level.

A storey is treated as below ground level if any part of the finished surface of the ceiling of the storey is below the ground level immediately adjacent to the part of the building.

1.2 Relevant Documents

Table 1: Relevant documents used to inform the Fire Statement

Name	Reference
Site Plan – Ground Floor	10474-SHP-Z0-A-B5D8-G100-PL-00-001
General Arrangement Plan – Ground Floor	10474-SHP-ZC-A-B5D8-G200-PL-00-001
General Arrangement Plan – Level 01	10474-SHP-ZC-A-B5D8-G200-PL-01-001
General Arrangement Plan – Level 28 (Roof Level)	10474-SHP-ZC-A-B5D8-G200-PL-28-001
General Arrangement Plan – Typical Level	10474-SHP-ZC-A-B5D8-G200-PL-TY-001
General Arrangement Section AA	10474-SHP-ZC-A-B5D8-G200-SE-AA-001
General Arrangement Section BB	10474-SHP-ZC-A-B5D8-G200-SE-BB-002
General Arrangement East Elevation	10474-SHP-ZC-A-B5D8-G200-EL-EE-001
General Arrangement North Elevation	10474-SHP-ZC-A-B5D8-G200-EL-EN-001
General Arrangement Elevation South Elevation	10474-SHP-ZC-A-B5D8-G200-EL-ES-001
General Arrangement Elevation West Elevation	10474-SHP-ZC-A-B5D8-G200-EL-EW-001

2 Fire Statement Form

The Fire Statement form includes a concise summary of the approach to fire safety taken, the site layout, access and facilities for firefighting, details of consultation undertaken on fire safety and consideration of local development documents.

Table 2: Application information

Application information		
1.	Site Address line 1	West of Newcastle Street
	Site Address Line 2	East of Medlock Street
	Site Address Line 3	South of Hulme Street
	Town/City	Manchester
	County	Greater Manchester
	Site Postcode (Optional)	
2.	Description of proposed development including any change of use (as stated on the application form)	Full Planning Permission for a 28-storey building comprising purpose-built student accommodation (Sui Generis) and other associated works including public realm, secure cycle parking, car parking access and servicing arrangements.

Application information		
3.	Name of person completing the Fire Statement (as Section 15), relevant qualifications and experience.	<p><i>No more than 200 words</i></p> <p>Author's Name: Stuart Crick</p> <p>Post-Nominals: BEng (Hons), MSc</p> <p>Relevant Qualifications and Experience: Stuart graduated with a BEng in Fire Engineering in 2014 and with a Masters in Fire Safety Engineering in 2016. He has over 9 years of experience working as a fire engineer in the UK, specifically working with building design and construction. This has included a large number of purpose built residential developments.</p> <p>Checker's Name: Merl Forrer</p> <p>Post-Nominals: MEng (Hons), CEng, FIFireE, MSFPE</p> <p>Relevant Qualifications and Experience: A chartered fire engineer and an active member of the Institution of Fire Engineers, 22 years' experience working in the fire and rescue service and consulting experience, specialising in residential, commercial and heritage developments.</p>
4.	State what, if any, consultation has been undertaken on issues relating to the fire safety of the development; and what account has been taken of this.	<p><i>No more than 200 words</i></p> <p>Building Control are not engaged at this stage due to the transition to the new regime therefore it has not been possible to consult. The local fire service have been contacted directly regarding specific aspects of fire service access around the site, in order to ensure that these are suitable for their use.</p> <p>Pre-application has been submitted to the HSE Gateway One team and commentary is awaited.</p>

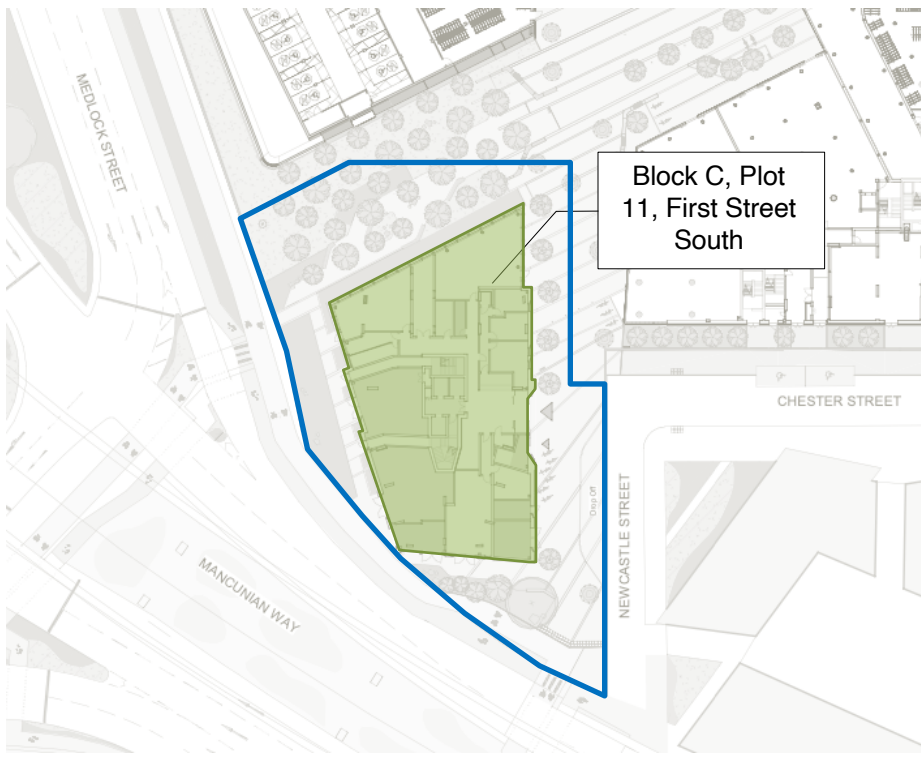
Application information		
5.	<p>Site layout plan with block numbering as per building schedule referred to in 6.</p> <p><i>(consistent with other plans drawings and information submitted in connection with the application)</i></p>	<p>Site layout is:</p> 

Table 3: The principles, concepts and approach relating to fire safety

The principles, concepts and approach relating to fire safety	
6. Building Schedule	
Site Information	
a) Block no. as per site layout plan above	Block C, Plot 11, First Street South
b) Block height (m) Number of storeys excluding those below ground level Number of storeys including those below ground level	<p>79m from lowest adjacent ground to highest occupied floor</p> <p>29 storeys (Level 00 to Level 27 + Roof)</p> <p>There are no below ground storeys.</p>

The principles, concepts and approach relating to fire safety	
c) Proposed use (one per line)	<p>Student accommodation consists of studio flats and cluster flats.</p> <p>Ancillary areas (refuse store, plant rooms, storage rooms)</p> <p>Amenity areas (residential reception, amenity rooms, cycle store)</p>
d) Location of use within block by storey	<p>Level 00: Ancillary and Amenity areas</p> <p>Level 01: Amenity areas, studio flats and cluster flats.</p> <p>Levels 02 to 27: Studio flats and cluster flats.</p> <p>Level 28: Roof plant areas.</p>
Building Information	
e) Standards relating to fire safety/ approach applied	Approved Document B (ADB): 2019 ² BS 9991:2017 ³
f) Balconies	No Balconies
g) External wall systems	Class A2-s1, d0 or Class A1
Residential Safety Information	
h) Approach to evacuation	<p>Simultaneous evacuation approach for Amenity and Ancillary areas.</p> <p>Stay Put evacuation approach for studio flats and cluster flats. (With BS 8629 EAS)</p>
i) Automatic suppression	Yes – Residential Sprinklers (Category 4 to BS 9251 ⁴ throughout the building)
j) Accessible housing provided	<p>The building will provide 26 accessible studio flats and 26 accessible bedrooms in cluster flats. 2% of studio's are fitted out from outset, 5% of the total bedspaces will be M4 (2) adaptable to be tailored to specific needs when requested.</p> <p>The building and the accessible bedrooms will be designed in accordance with Approved Document M – Volume 2 (ADM)⁵.</p>

² HM Government, The Building Regulations 2010, Approved Document B (Fire Safety), Volume 1 – Dwellings 2019 edition incorporating 2020 amendments (for use in England).

³ BS 9991, 'Fire safety design, management and use of residential buildings', 2015

⁴ BS 9251, 'Fire sprinkler systems for domestic and residential occupancies – Code of practice', 2021

⁵ HM Government, The Building Regulations 2010, Approved Document M – Access to and use of buildings, Volume 2 – Buildings other than dwellings, 2015

The principles, concepts and approach relating to fire safety

7. Specific technical complexities

Explain any specific technical complexities in terms of fire safety (for example green walls) and/or departures from information in building schedule above

Guide: no more than 500 words

Compliance with guidance is not mandatory for compliance with Part B to Schedule 1 of the Building Regulations, and alternative solutions can be acceptable. There are several minor elements of the fire safety design requiring alternative solutions due to the constraints of the building, and the adequacy of the solutions will be demonstrated during detailed design.

The building height exceeds 50m therefore a qualitative design review will be required to determine whether the recommendations of BS 9991 are appropriate. Initial considerations of this have included a second stair to serve all floors, an evacuation lift alongside firefighting lift and mechanical ventilation to common corridors as opposed to natural ventilation.

Studio flat layout: The proposed studio rooms will be designed in accordance with the recommendations in BS 9991 for open plan flat design. Guidance notes that the cooking appliances in an open plan apartment should not be adjacent to the entrance of the flat. Cooking facilities have been located away from the apartment entrance and away from escape routes. In the later stages of design, where required, the locations will be assessed with radiative heat assessment to verify that the locations are suitable.

Cluster flat layout: The proposed cluster rooms will be designed in accordance with the recommendations in BS 9991.

Corridor/Lobby Ventilation: Corridor ventilation strategy comprised of mechanical extract smoke shafts. Subject to further design team input, computational fluid dynamics (CFD) assessment and stakeholder approval (e.g., approvals authorities).

Evacuation from roof terraces through amenity spaces: The roof terrace at Level 1 of building has two escape routes, one of which passes through an Amenity space. This is considered reasonable as it is not the only escape from the area. There is a smaller terrace access from the study areas which only escape through the study rooms, which is considered reasonable due to the very limited area and occupancy. This terrace will be considered as an inner room and treated accordingly.

Cycle lift enclosure: The cycle store is located on Level 01 with access to a platform lift from Level 00. This type of lift cannot be enclosed directly in fire resisting construction, therefore the entire area has been enclosed to create a protected double height space to preserve the compartmentation strategy within the building.

Management Suite: The management suite is shown indicatively and creates a series of inner rooms which varies from the prescriptive guidance. The occupancy is limited and the use is by occupants familiar with the space. The layout will be reviewed as the design develops and changes to internal arrangement are not expected to affect land use and planning.

8. Issues which might affect the fire safety of the development

Explain how any issues which might affect the fire safety of the development have been addressed.

Guide: no more than 500 words

The main variations to guidance detailed in Section 7 above, these are to be developed further and fully assessed at the next stage of design.

The principles, concepts and approach relating to fire safety
<p>9. Local development document policies relating to fire safety</p> <p><i>Explain how any policies relating to fire safety in relevant local development documents have been taken into account.</i></p> <p><i>Guide: no more than 200 words</i></p> <p>Not applicable.</p>

Table 4: **Emergency road vehicle access and water supplies for firefighting purposes**

Emergency road vehicle access and water supplies for firefighting purposes
<p>10. Fire service site plan</p> <p><i>Explanation of fire service site plan(s) provided in 14. including what guidance documents have informed the proposed arrangements for fire service access and facilities?</i></p> <p><i>Guide: no more than 200 words</i></p> <p>As Block C, Plot 11, First Street South exceeds 18m in height and internal floor area is circa 725m², one firefighting shaft has been provided in accordance with BS 9991. It consists of:</p> <ul style="list-style-type: none"> • A firefighting stair with a minimum width of 1100mm, design in accordance with BS 5359-1⁶. • An AOV providing a minimum of 1.0m² geometric free area, in accordance with BS EN 12101-2⁷ at the head of the stair. • A firefighting lift in accordance with BS 9999⁸ and BS EN 81-72⁹. • The firefighting stair and lift will be accessed via a protected lobby. The lobby will be provided with a mechanical smoke ventilation system that achieves a performance that is equivalent to or better than a 1.5m² natural smoke shaft as per BS 9991. • A wet fire main to be provided in accordance with BS 9990¹⁰ in the stair. <p>Vehicle access to the building is possible via the existing public road: on the Level 00 the firefighting stair can be accessed from the West (Route 1) and East (Route 2) sides of the building. Route 1 allows the fire service to access the building directly into the firefighting stair, within 18m hose laying distance from a fire service vehicle parked on Medlock Street. Route 2 allows the fire service to access the building through the Entrance Lobby from a fire service vehicle parked on Newcastle Street.</p>

⁶ BS 5395-1, 'Stairs. Code of practice for the design of stairs with straight flights and winders,' 2010

⁷ BS EN 12101-2, 'Smoke and heat control systems. Specification for natural smoke heat and exhaust smoke ventilators,' 2003

⁸ BS 9999: 'Code of practice for fire safety in the design, management and use of buildings,' 2017

⁹ BS EN 81-72, 'Safety rules for the construction and installation of lifts. Particular applications for passenger and goods lifts. Fire fighting lifts,' 2015

¹⁰ BS 9990, 'Non automatic fire-fighting systems in buildings,' 2015

Emergency road vehicle access and water supplies for firefighting purposes**11. Emergency road vehicle access**

Specify emergency road vehicle access to the site entrances indicated on the site plan

Guide: no more than 200 words

Fire service vehicles will approach via Medlock Street from the West side of the building or via Chester Street before entering site on Newcastle Street from the East side of the building. Both Medlock Street and Newcastle Street are existing roads expected to meet the following requirements for a pump appliance:

- Min. width of road between kerbs = 3.7m.
- Min. width of gateways = 3.1m.
- Min. clearance height = 3.7m.
- Min. carrying capacity = 12.5 tonnes.

Newcastle Street is not a through road for vehicle access, due to a section having been pedestrianised, therefore a turning facility has been provided for vehicles.

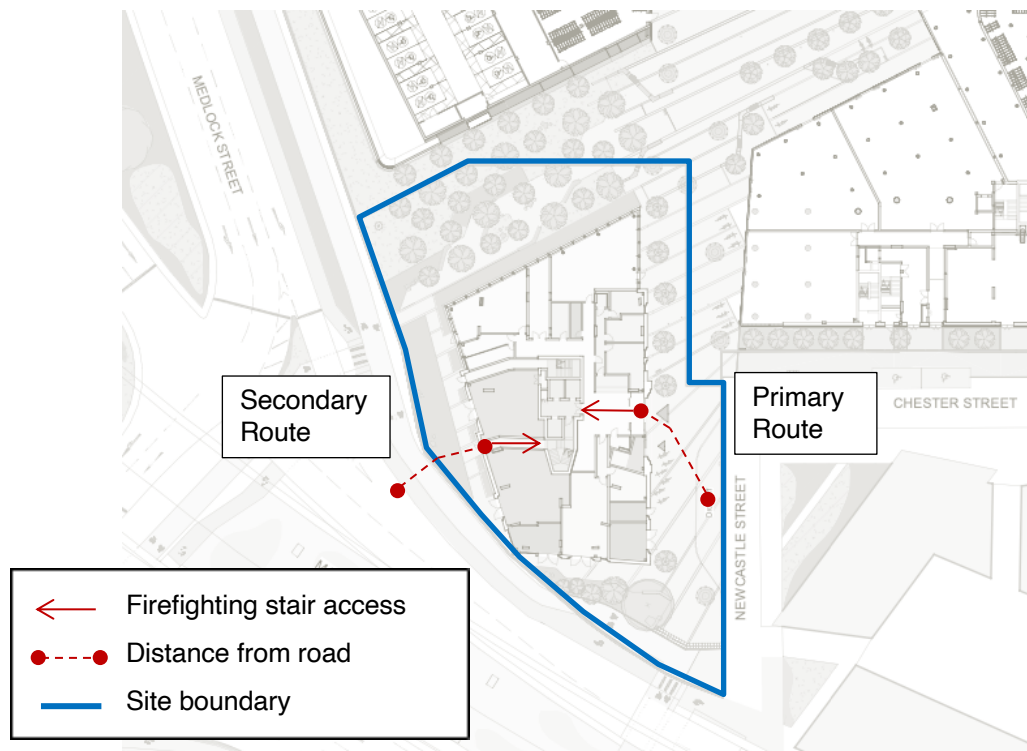
Is the emergency vehicle tracking route within the site to the siting points for appliances clear and unobstructed?

Yes

Emergency road vehicle access and water supplies for firefighting purposes**12. Siting of Fire Appliances**

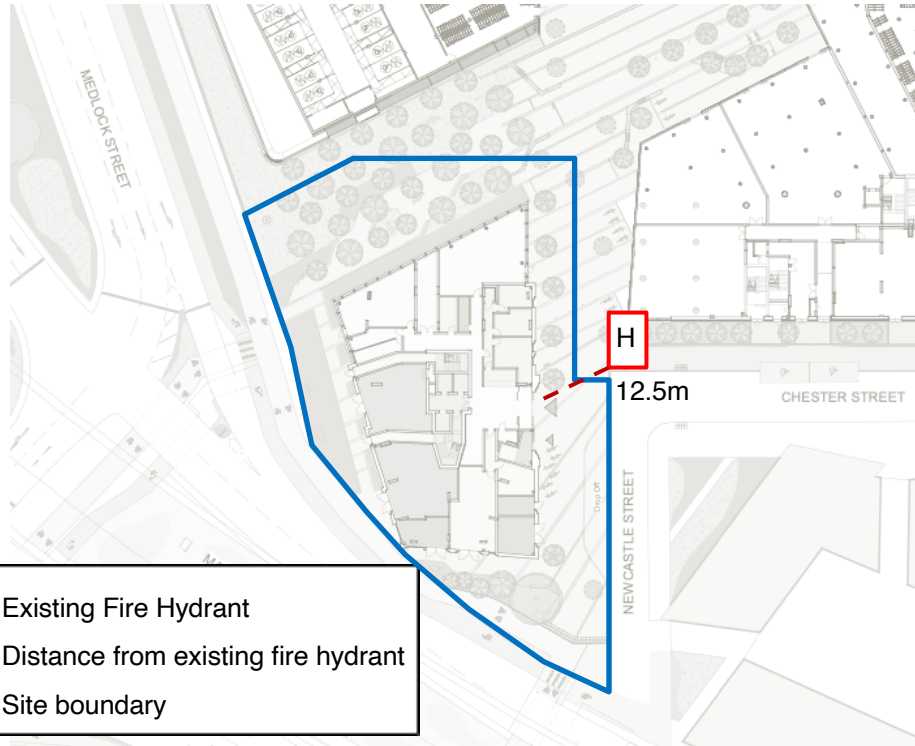
Guide: no more than 200 words

The building is provided with a wet main. The fire main inlet for the firefighting shaft will be located facing Newcastle Street on the Level 00. The inlet will be within 18m hose laying distance from Medlock Street, where the fire service vehicle can access and park.



Emergency road vehicle access and water supplies for firefighting purposes**13. Suitability of water supply for the scale of development proposed**

Guide: no more than 200 words



Nature of water supply (Choose one below):

Hydrant – Public

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

Yes.

Emergency road vehicle access and water supplies for firefighting purposes
14. Fire service site plan

Fire service site plan is as follows:

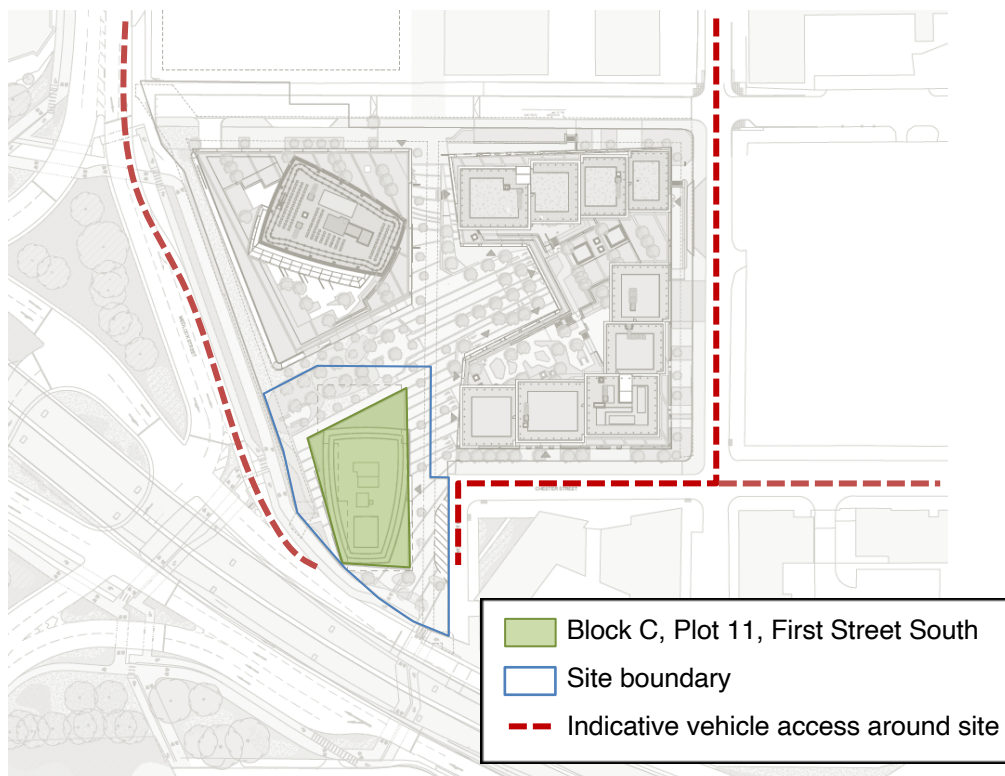


Table 5: Fire Statement completed by

Fire Statement completed by	
15. Signature	<p>Author: Stuart Crick</p>  <p>Checker: Merl Forrer</p> 
16. Date	22 November 2023