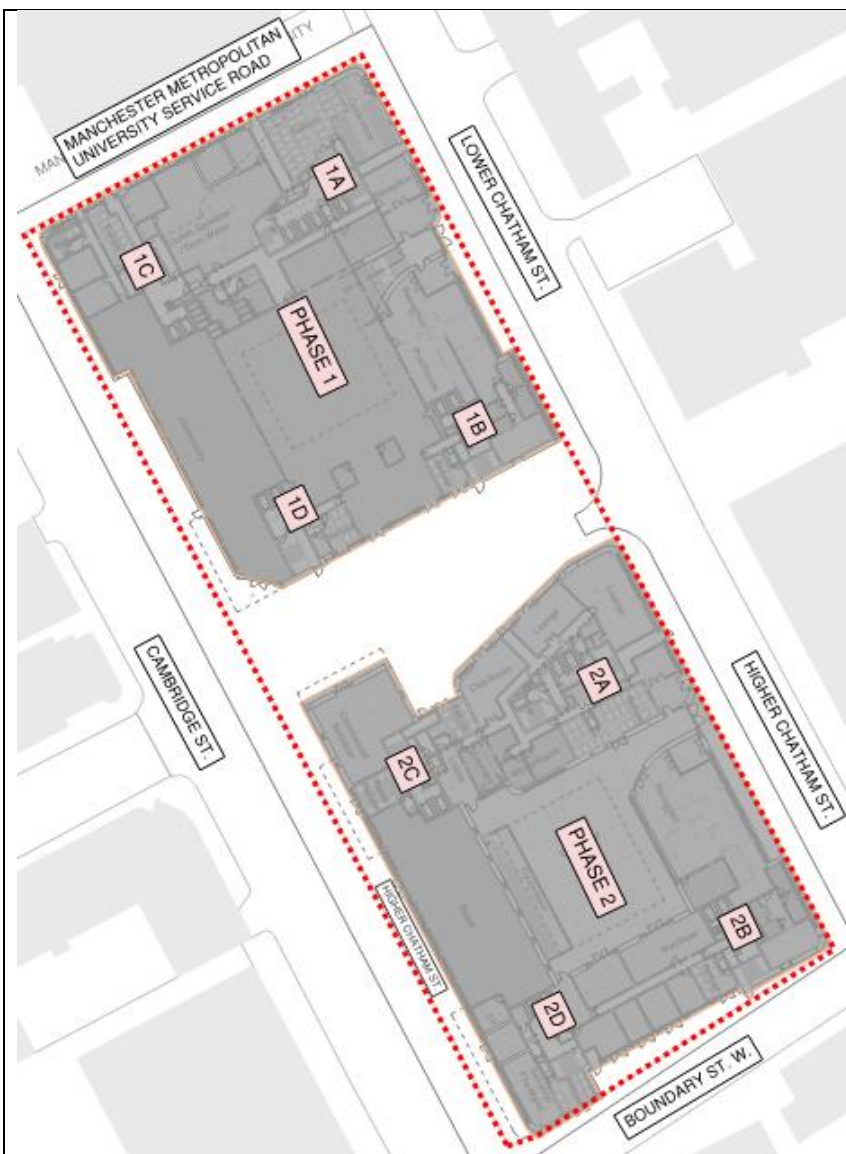


Fire statement form

Application information	
1. Site address line 1	Cambridge Halls of Residence,
Site address line 2	41 Cavendish Street,
Site address line 3	
Town	
County	Manchester
Site postcode (optional)	M15 6TT
2. Description of proposed development including any change of use (as stated on the application form):	Demolition of existing halls of residence and erection of two buildings of 30 and 24 storeys above ground, plus basement and rooftop plant levels, comprising purpose-built student accommodation with internal and external rooftop communal amenity spaces (Sui Generis). Ground floor commercial and community uses (Flexible Use Classes E, F1 or F2). Hard and soft landscaping and associated highway works.
3. Name of person completing the fire statement (as section 15.), relevant qualifications and experience. Guide: no more than 200 words	Drafted: Name: Claire Doherty Role: Fire Engineer Qualifications: Beng(Hons) Fire Safety Engineering Experience: 2.5 years in the design of fire strategies for residential buildings (including high-rise buildings). Membership of professional bodies: Associate Member of the Institute of Fire Engineers (AIFireE), Member of Engineers Ireland (MIEI) Checked: Name: Stephen Dickson Role: Associate Director – Fire Engineering Qualifications: MEng (Hons) Structural with Fire Safety Engineering Experience: 14 years in fire safety and fire protection engineering with at least 8 of these being in design and construction of fire strategies for residential buildings. Membership of professional bodies: Chartered Engineer with the UK Engineering Council (CEng), Member of Institution of Fire Engineers (MIFireE), Professional Member of the Society of Fire Protection Engineers (PMSFPE)

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. Guide: no more than 200 words	Ashton Fire have reviewed the proposed arrangement and provided initial technical advice for the fire strategy to be adopted for the scheme to satisfy the requirements of the functional requirements of the Building Regulations 2010 (as amended) via application of • BS 9991:2024 for the residential, amenity and ancillary areas of the building • BS 9999:2017 for areas which will be utilised as short-term lets for the summer months • BS 9999:2017 for any non-residential areas outside the scope of BS 9991:2024 The fire safety design in support of the planning application is documented in the fire safety strategy report (AF4357a-CS-I02) and corresponding fire safety marked-up drawings. The scheme has not yet been reviewed by a building control body, nor received comments from the local fire and rescue service at this stage.
5. Site layout plan with block numbering as per building schedule referred to in 6. (consistent with other plans drawings and information submitted in connection with the application) Site layout plan is: inserted in the form	



The principles, concepts and approach relating to fire safety that have been applied to the development									
6. Building schedule									
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
Phase 1	23 storeys (G+22) 66.9m	Plant rooms	Ground Floor	BS9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 1	23 storeys (G+22) 66.9m	Amenity	Ground Floor	BS9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 1	23 storeys (G+22) 66.9m	Commercial	Ground Floor	BS9999	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none

Phase 1	23 storeys (G+22) 66.9m	Ancillary	Ground Floor	BS9991	no balconies	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	none
Phase 1	23 storeys (G+22) 66.9m	Residential flats - Student	Level 01 – Level 06	BS9991	no balconies	class A2-s1, d0 or better	stay put	yes-residential sprinklers, full	none
Phase 1	23 storeys (G+22) 66.9m	Amenity	Level 01 – Level 06	BS 9991	no balconies	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	none
Phase 1	23 storeys (G+22) 66.9m	Residential flats - Student	Level 07	BS 9991	no balconies	class A2-s1, d0 or better	stay put	yes-residential sprinklers, full	none
Phase 1	23 storeys (G+22) 66.9m	Amenity	Level 07	BS 9991	no balconies	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	none
Phase 1	23 storeys (G+22) 66.9m	External Plant	Level 07	BS 9991	no balconies	class A2-s1, d0 or better	simultaneous	none	none
Phase 1	23 storeys (G+22)	Residential flats - Student	Level 08 – Level 09	BS 9991	no balconies	class A2-s1, d0 or better	stay put	yes-residential	none

	66.9m							sprinklers, full	
Phase 1	23 storeys (G+22) 66.9m	Amenity	Level 08 – Level 09	BS 9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 1	23 storeys (G+22) 66.9m	Residential flats - Student	Level 10 – Level 22	BS 9991	no balconies	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	none
Phase 1	23 storeys (G+22) 66.9m	Plant room	Level 23	BS 9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 2	29 storeys (Basement, G+28) 84.5m	Plant rooms	Basement	BS 9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 2	29 storeys (Basement, G+28) 84.5m	Plant rooms	Ground	BS 9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 2	29 storeys (Basement, G+28) 84.5m	Commercial	Ground	BS 9999	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 2	29 storeys (Basement, G+28)	Ancillary	Ground	BS 9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none

	84.5m								
Phase 2	29 storeys (Basement, G+28) 84.5m	Amenity	Ground	BS 9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 2	29 storeys (Basement, G+28) 84.5m	Residential flats - Student	Level 01	BS 9991	no balconies	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	none
Phase 2	29 storeys (Basement, G+28) 84.5m	Amenity	Level 01	BS 9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 2	29 storeys (Basement, G+28) 84.5m	Commercial	Level 01	BS 9999	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 2	29 storeys (Basement, G+28) 84.5m	Residential flats - Student	Level 02 – Level 11	BS 9991	no balconies	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	none
Phase 2	29 storeys (Basement, G+28) 84.5m	Amenity	Level 02 – Level 11	BS 9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none
Phase 2	29 storeys (Basement, G+28) 84.5m	Plant room	Level 12	BS 9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none

Phase 2	29 storeys (Basement, G+28) 84.5m	Residential flats - Student	Level 12 – Level 28	BS 9991	no balconies	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	none
Phase 2	29 storeys (Basement, G+28) 84.5m	Plant room	Level 29	BS9991	no balconies	class A2-s1, d0 or better	simultaneou s	yes- commercial sprinklers, full	none

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

Each building features residential floors at greater than 18 m above ground level. As such, all residential accommodation is to have access to at least two stairs (one of which should be a firefighting stair). Where the floor area exceeds 900m², an additional firefighting shaft will be provided, comprising a firefighting stair, firefighting lobby provided with a fire main and a firefighting lift installation.

For an inclusive design and to afford appropriate means of escape for all occupants, evacuation lifts are provided in support of vertical evacuation. The evacuation lifts are accessible from dedicated lift lobbies which are separated from accommodation by mechanically ventilated lobbies. The performance of the smoke control system will be demonstrated through Computational Fluid Dynamics (CFD).

Short term lets are proposed in the summer month within the student accommodation. The short term lets fall under BS 9999:2017. As such, BS 9999:2017 has been considered with a C1 risk profile assigned to the areas of short term lets. Consideration has been provided in the form of travel distances, the minimum clear width of doors, stair and corridors etc. The design is based on the most onerous conditions.

Residential sprinklers in accordance with BS 9251:2021 will be used throughout the above-ground floors of the development, while the Ground Floor will be protected utilising a BS EN 12845:2015+A1:2019 system to support ancillary uses with compartments of >100 m². The basement will also be provided with a sprinkler system provided in accordance with BS EN 12845:2015+A1:2019 in support of the mechanical smoke ventilation system.

The common residential corridors (studio flats) will be protected by a mechanical smoke control system based on the guidance of BS 9991:2024, with travel distances being limited to no greater than 15 m in a single direction within the ventilated common corridors.

The cluster accommodation will have travel distances up to a maximum of 15m in a single direction of travel and 35m in multiple directions. The cluster accommodation will be separated from the firefighting shafts by a lobby with a mechanical smoke ventilation system (MSVS).

The design of the smoke control system is also developed to facilitate a protected lobby between the firefighting stair and common corridors in support of a suitable waiting area for the evacuation lift, including the provision of inlet air to the lift lobby areas.

All mechanical smoke control systems will be designed and substantiated by means of CFD modelling, the CFD analysis will be subject to review and approval by the Approving Authorities.

The external walls and attachments will be non-combustible in accordance with the expectations of Regulation 7(2), with terrace and roof areas to be either BROOF(t4) or green roofs in accordance with Green Roof Organisation guidance.

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 fire strategy for the proposed development utilises:

- BS 9991:2024 for the residential, amenity and ancillary areas
- BS 9999:2017 for the designated short term lets for summer use
- BS 9999:2017 for non-residential areas outside of BS 9991:2024

Where the floor area of the storeys above 18m is below 900m², BS 9991:2024 recommends a minimum of one firefighting shaft. However, for added resilience and redundancy within the design, each core should also be provided with the capacity to be operated as a firefighting shaft (e.g. a fire main, fire resistance of 120 minutes, firefighting stair and at a firefighter's lift. As the blocks exceed 50m, every lift should be designed as a firefighters lift programmed to function as an evacuation lift, until the lift is recalled using the firefighters lift switch. All stairs will be arranged to discharge to outside either directly or via a protected exit.

As the proposed blocks will have heights greater than 18m, they will be classed as 'Relevant Buildings', in accordance with Regulation 7(4). External fire spread over the walls will be addressed by the provision of external walls with all materials achieving a rating of Class A2-s1, d0 or better and undertaking external fire spread assessments to the relevant boundaries.

For this development, the following aspects are considered to be uncommon and as such a Qualitative Design Review (QDR) will be provided in support of the following points;

- The blocks incorporate multiple uses, including residential (student) and commercial. Additionally, the residential accommodation is intended to be used as student residential (typical clusters and affordable clusters), while in the summer time, the use is intended to become 'short-lets'. Therefore, triggering two guidance documents to be incorporated for the residential elements (BS 9991:2024 and BS 9999:2017).
- The cluster accommodation is separated into typical clusters and affordable clusters. Typical clusters comprise of accommodation and a kitchen within each cluster, found throughout P1. P2 comprises a mix of typical and affordable clusters, with the inclusion of kitchens within each cluster but also a 'Super Kitchen' on the ground floor which incorporates multiple cooking hobs and dining spaces.

- The structural system for P2 has a significant portion of the load transferred through the external walls, given that the internal partitions do not vertically align.
- The height of the blocks are in excess of 50m, which is typically associated with a CC3 structure for a residential building, and requires a systematic risk assessment of all foreseeable risks, including fire under Approved Document A).

9. Local development document policies relating to fire safety

Explain how any policies relating to fire safety in relevant local development documents have been taken into account.

Guide: no more than 500 words

N/A

Emergency road vehicle access and water supplies for firefighting purposes

10. Fire service site plan

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?

Guide: no more than 200 words

Vehicle Access

As the blocks exceed 50m, they will be provided with wet fire mains. Fire Service vehicle access should be provided as follows:

- Within 18m of each access point to the firefighting shafts.
- To cover 15% of the commercial area on the ground floor of each block.
- Within 18m of any inlet points (e.g., wet riser tank replenishment inlet).

Fire Service Personnel Access

Access and facilities for the Fire Service have been informed by BS 9991:2024 and BS 9999:2017.

As the Fire Service access level to the topmost occupied storeys exceed 18m in each block, a minimum of one firefighting shaft is proposed in each core. However, for added resilience and redundancy within the design, each core should also be provided with the capacity to be operated as a firefighting shaft.

The firefighting shafts will be enclosed in fire resisting construction as recommended in BS 9991:2024/BS 9999:2017.

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

The site is located at Cambridge Halls of Residence, Cavendish Street. The site is bounded to the north by Boundary Street and to the east by Cambridge Street. The site is bounded by the south by a University Service Road and the west by Lower and Higher Chatham Street.

Access to the site will be via Cambridge Street and Higher Chatham Street.

Please see Fire Service Access Plan.

Arrangements will be in accordance with Table 18 of BS 9991:2024.

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

yes

12. Siting of fire appliances

Guide: no more than 200 words

Fire appliances will have access via Cambridge Street and Higher Chatham Street to the residential development. Hard standing parking areas for fire appliances are to be within 18m of and within sight of the indicative wet riser tank replenishment inlet.

Adequate turning facilities are to be provided to ensure that the tender does not have to reverse more than 20m.

Perimeter access to the commercial units will be in accordance with BS 9999:2017.

13. Suitability of water supply for the scale of development proposed

Guide: no more than 200 words

Nature of water supply:

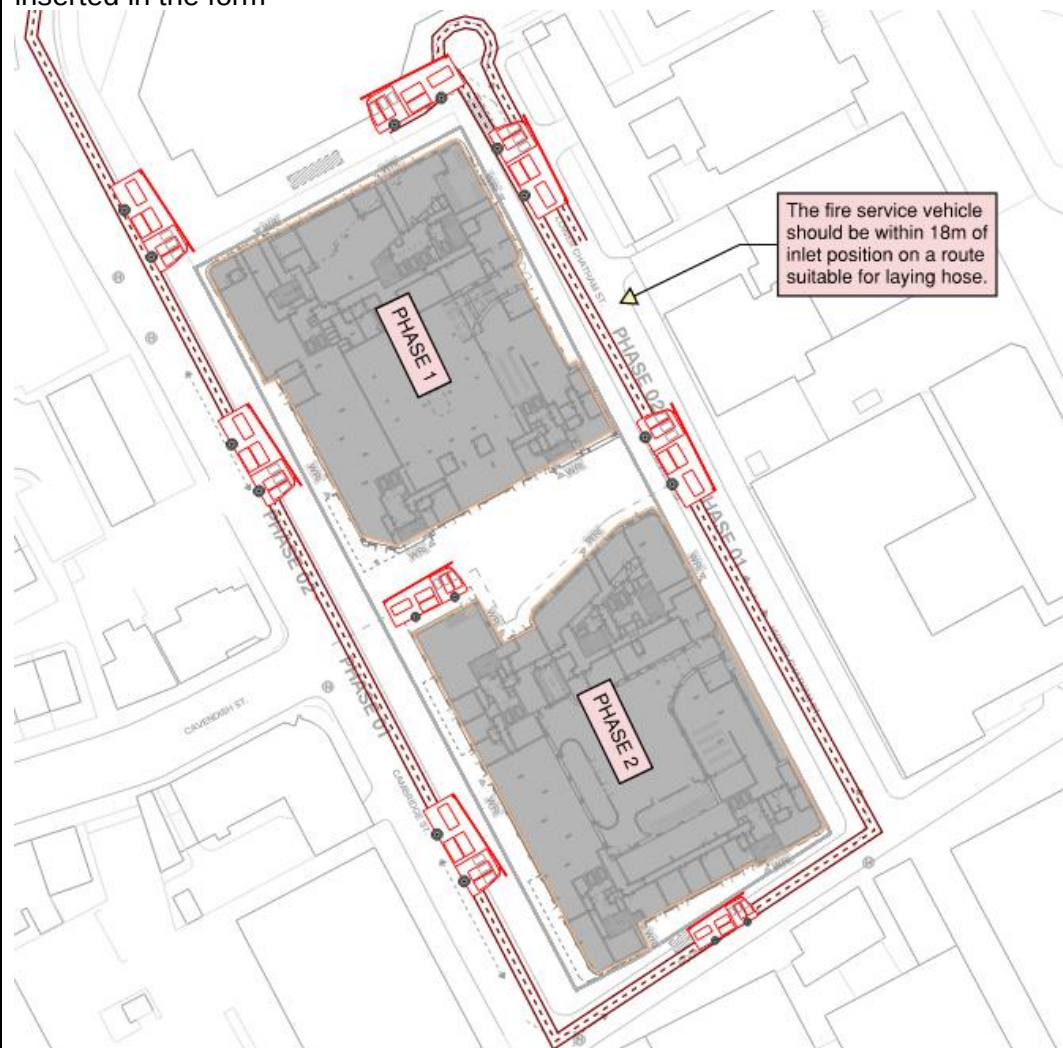
hydrant- public

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

yes

14. Fire service site plan

Fire service site plan is:
inserted in the form



Fire statement completed by

15. Signature	Claire Doherty
16. Date	17/04/2025