

Fire statement form

Application information	
1. Site address line 1	Bridgewater Heights
Site address line 2	1 Great Marlborough Street
Site address line 3	
Town	Manchester
County	
Site postcode (optional)	M1 5NR
2. Description of proposed development including any change of use (as stated on the application form):	Bridgewater Heights is an existing student accommodation providing accommodation and ancillary spaces to 520 students. The building consists of ground, mezzanine plus 35 floors (37 floors) with the topmost floor at circa 100m above ground. This Fire Statement relates only to the external wall remediation works at this development. The external wall currently contains material of worse than Euroclass A2-s1,d0; the proposed remediation replaces the majority* of materials to suitable alternatives which achieve Euroclass A2-s1,d0 or better (as noted in 6g below) with exception of those materials which are considered exempt under Regulation 7. Also the remediation will address issues around workmanship, and provision of cavity barriers within the external wall build-up. * The main materials being removed are the combustible insulation. The existing sheathing board (cement particle board) with an applied EPDM are proposed for retention. The existing sheathing board and applied EPDM has been tested to give an indicative calorific (combustibility) value. The samples tested do not achieve Euroclass A2 and so confirmed as combustible, and will be subject to a risk assessment following the methodology set out in PAS 9980, with suitable mitigation by partial encapsulation, to the agreement of stakeholders and the appointed Building Control. It should be noted that the consideration within this Fire Statement is provided for the aforementioned remediation only. It is considered that by providing remediation to these external walls, the fire safety of the development is not being made any worse than existing condition – and is in fact being made significantly better.

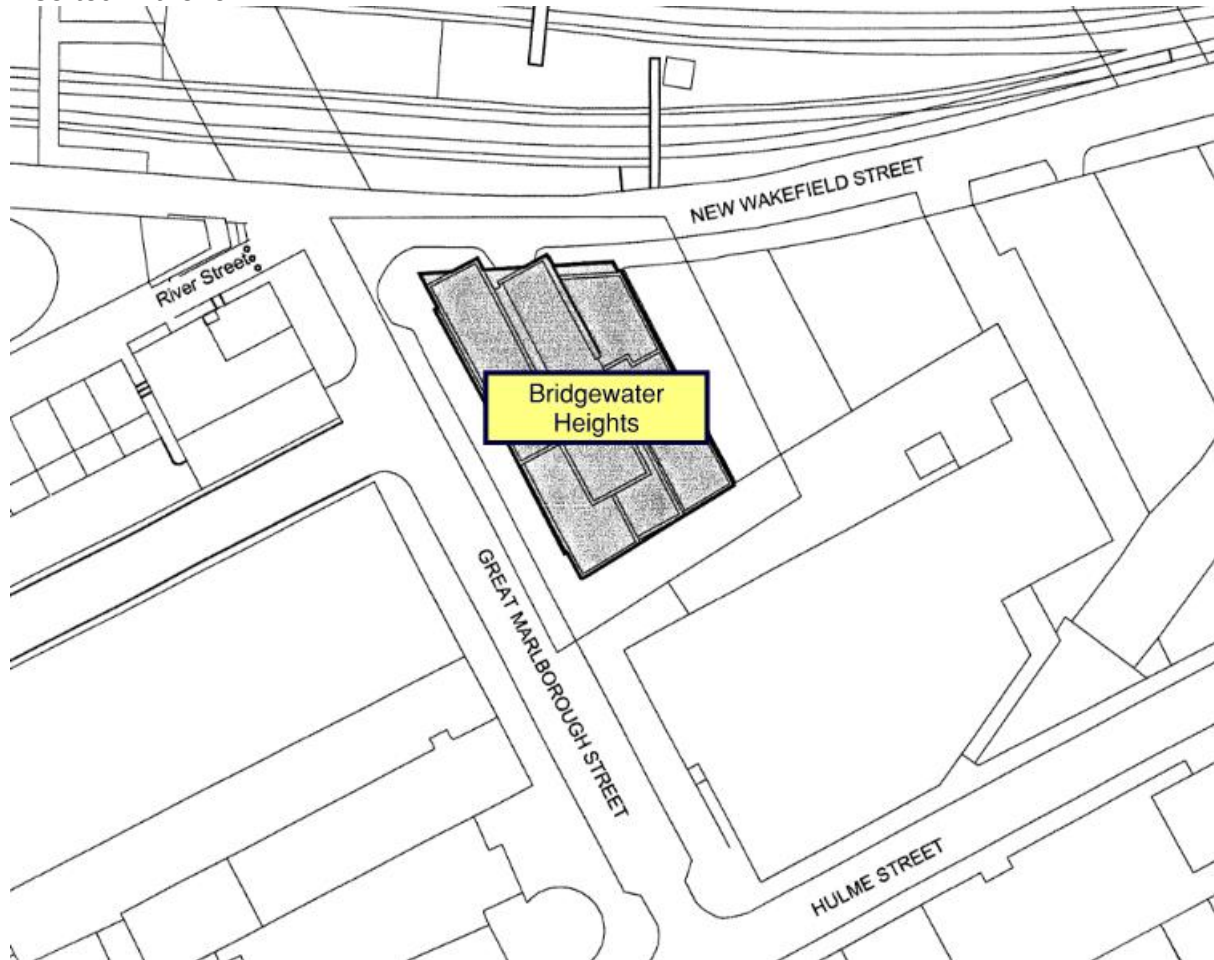
3. Name of person completing the fire statement (as section 15.), relevant qualifications and experience. Guide: no more than 200 words	This document was completed by Richard Baker. He has a BEng (Hons) in Fire Safety Engineering and has more than 25 years experience in Fire Safety Engineering and is a Technical Director at Marshall Fire Ltd. Richard has a high level of understanding of the functional requirements to the Building Regulations and how to develop designs to achieve compliance. He has worked on a wide range of projects including commercial, mixed use and residential developments across the UK and internationally from project conception (RIBA Stage 2) through all design and construction phases to commissioning and completion. This fire statement has been reviewed and checked by Steven Marshall BEng (Hons) MSc CEng MIFireE MIET as Managing Director of Marshall Fire Ltd and is a Chartered Engineer with the Institution of Fire Engineers having 20 years experience in the Fire Safety Design of buildings.
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	The existing building is supported by a Fire Strategy Report prepared by WSP Fire Safety Strategy, Great Marlborough Street Student Accommodation, Shepherd Construction, November 2010, Revision 4 Dated 29/06/12. The Fire Strategy Report states that it demonstrates how the detailed fire safety design can meet the requirements of Part B of the Building Regulations 2000 (incorporating 2006 amendments) and supporting guidance given in Approved Document B (ADB), with any deviations from ADB being justified using guidance given in PD 7974. The Fire Strategy is silent as to which edition of the Approved Document was used and it is assumed that the most current version at the time would have been Approved Document B, Volume 2 – Buildings other than dwellinghouses, 2006 edition incorporating 2007 and 2010 amendments. It is assumed that the building was considered and approved through the Building Regulations application process at the time of construction, and so given consent by an Approving Authority following consultation with the local Fire and Rescue Service. An External Wall assessment has been carried out by Hydrock (External Wall Survey For Unite Students, Revision 01, Formal, Date: 12 October 2021, Doc ref: 18492-HYD-XX-ZZ-RP-FE-1033). This recommended that all combustible products to be replaced with insulation achieving Euroclass A2-s3, d2 and with external surfaces achieving Euroclass A2-s1, d0. The Hydrock report also picked up deficiencies with cavity barriers in external wall (types EW02, EW03, and EW05). This Fire Statement relates only to the external wall remediation at the development, the scope of which will be supported by a PAS 9980 2022 Fire Risk Assessment of the External Walls. The works will be considered under a full plans Building Regulations submission by an Approved Inspector (Independent Building Control Authority) who are appointed to oversee that building works to be undertaken as part

of the remediation to the external walls, and undertake statutory consultations with the local Fire and Rescue Authority.

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
Bridgewater Heights	Circa 100m 36 floors above ground. No basements.	student accommodat ion	Mezzanine – 33 rd floor = student accommodatio n. 34 th floor – 36 th floor = triplex apartment (residential)	Approved document B vol 2	no balconies	Choose an item. Currently worse than Euroclass A2-s1, d0. Insulation to be replaced with Euroclass A1 with existing sheathing board (confirmed as not achieving Euroclass	staged Initial evacuation of apartment only with further managed evacuation (floor by floor) via control panel at ground floor.	yes- residential sprinklers, full	none Unknown – considered not to change based on this Fire Statement.

						A2 to be cut out at slab (floor) level and partially encapsulate with Euroclass A1 sheathing board with galvanised steel angles sealing at abutments.			
		Choose an item.		Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.
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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

The external walls currently contain material of worse than Euroclass A2-s1,d0 including combustible insulation; the proposed remediation replaces the majority of these materials to ones which achieve Euroclass A2-s1,d0 or better, other than the existing sheathing board that consists of a cement particle board with an applied EPDM. This has been tested to give an indicative calorific (combustibility) value and is confirmed that the samples tested do not achieve Euroclass A2 and so confirmed as combustible.

The proposed remediation will replace all existing combustible insulation back to the existing sheathing board. Test results of the existing sheathing board have come back as combustible, and so the proposed works are as:

- Cut the existing sheathing board away along the slab edge in order that cavity barriers (horizontal) can be correctly installed back to the concrete slab.
- Overclad the existing sheathing board and bonded EPDM (external facing side) with a new sheathing board achieving Euroclass A1 so partially encapsulating the existing sheathing board.
- Sealing at top and bottom of the existing sheathing board with 2mm galvanised steel angles at slab edges sealed with fire resistant mastic at the abutments.

These works are considered as acceptable given the location and extent of coverage of the combustible material is such that the likelihood of ignition and or consequences of fire spread are sufficiently low. Likelihood of ignition is reduced by over cladding with a Euroclass A1 sheathing board and galvanised steel angles sealing at abutments, that will be covered with mineral wool slab insulation also achieving Euroclass A1. Consequences of fire spread are reduced by interrupting (removing) the existing sheathing board at slab edge and installing new horizontal cavity barriers back to the slab edge.

During the design stages and on completion a review of the building will be undertaken using PAS 9980:2022 which is a code of practice which sets out a method for competent professionals to conduct Fire Risk Appraisals of External Wall construction (FRAEW) for existing multi-storey, multi-occupied residential buildings, with the review confirming the risk as tolerable (lower end of medium or low).

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

This Fire Statement relates only to the external wall remediation at the development. The external walls currently contain materials that are worse than Euroclass A2-s1,d0. The proposed remediation replaces the insulation material to one which achieves Euroclass A1 and so better than Euroclass A2-s1,d0, encapsulates the existing sheathing board and membrane, and also remediates cavity barrier installation. Under the scope of this Fire Statement there are no specific technical complexities.

It is considered that by undertaking the described remediation to these external walls, the fire safety of the development is not being made any worse than existing condition – and is in fact being made significantly better.

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

A full assessment will be undertaken in accordance with the methodology outlined within PAS9980:2022 for materials retained within the external walls which do not achieve Euroclass A2-s1,d0 or better.

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

As noted above, this Fire Statement relates only to the external wall remediation at the development.

It is considered that by providing remediation to these external walls, the fire service access to the building is not being changed.

During the remediation works and construction site set-up the main firefighting access/building entry point to the firefighting shaft on Great Marlborough Street should be maintained and measures put in place to secure its availability. Firefighting access to and around the site should be considered as part of the construction site fire risk assessment, with special attention to ensure deliveries and storage of materials do not obstruct fire service or other emergency service access to and around the site

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

As per the original Fire Safety Strategy there is good access to the site with firefighting vehicle access available on two sides with direct access from Great Marlborough Street and New Wakefield Street .

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

The development is surrounded on two main elevations by public roadways (Great Marlborough Street and New Wakefield Street) with the main firefighting building entry point directly into the firefighting shaft off the pavement on Great Marlborough Street. Siting of fire appliance access is therefore considered sufficient.

It is noted the consideration within this Fire Statement is provided for the external wall remediation only. By providing remediation to these external walls, the Fire service access to the development is not being made any worse than existing condition.

During the remediation set up and works, firefighting access to and around the site should be considered as part of the construction site fire risk assessment, with special attention to ensure deliveries and storage of materials do not obstruct fire service or other emergency service access to and around the site

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

Guide: no more than 200 words

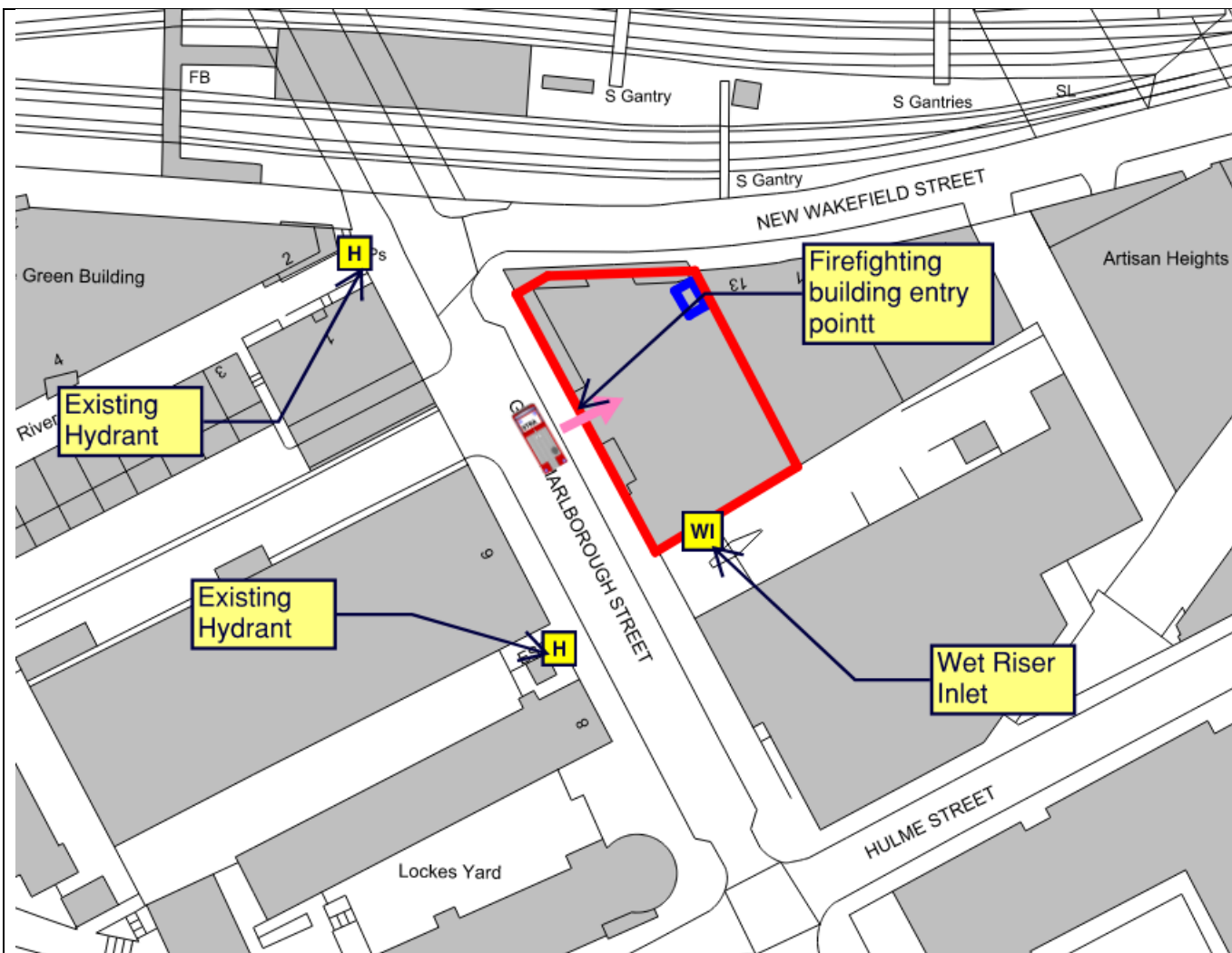
The original Fire Safety Strategy notes that there are 4No hydrants in adjacent streets within 100m of the development of which two are located in Great Marlborough Street on opposite side of road to development as illustrated in Section 14 below. The building having a wet riser system has a Wet Riser Inlet Valve that the fire service will connect to before commencing firefighting operations. The wet Riser Inlet Valve is located on the south façade on the entrance to the rear courtyard (adjacent car park access). During the remediation set up and works, firefighting access to the Wet Riser Inlet Valve should be maintained as part of the construction site fire risk assessment.

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

Richard Baker

16. Date	07/06/2023
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