

Fire statement form

Application information	
1. Site address line 1	Albert Bridge House (ABH)
Site address line 2	No 1
Site address line 3	Bridge Street
Town	Manchester
County	Greater Manchester
Site postcode (optional)	M60 9AF
2. Description of the proposed development, including any change of use (as stated on the application form):	Albert Bridge House consists of a residential tower and commercial office building within a new public realm, within the site of the existing Albert Bridge House and Bridge Street Car Parks, in central Manchester. The two principal building components are; Building A, a residential tower located in the western part of the site, and Building B, a large-scale commercial office located in the eastern part of the site. At ground, a new high-quality public realm will be provided with new landscape features planted alongside existing retained trees and riverside ecological bankside. The accessible landscaped public realm will augment the green space and biodiversity of this part of the City of Manchester while promoting permeability and sustainable transport as well as the local economy. At the ground floor, within the two building components, there will be shops, food & beverage, and a new restaurant to provide amenities adjacent to and framing the new public realm. A basement is proposed to provide necessary operational plant space, accessible parking and management areas. The basement will be split between the residential and commercial buildings, with a single point of access created via a ramp from Bridge Street. Building A (Residential Tower): This statement focuses on the high-rise multi-occupied residential tower. The building is set over 45 storeys and is classified as a Relevant Building as defined by Building Regulations 2010 (as amended). The block features 1, 2 & 3-bed homes with private winter gardens (enclosed).
3. Name of person completing the fire statement (as section 15.), relevant qualifications and experience.	Gavin Jones MEng (Hons) CEng MIFireE MSyl – Urban Change Group Ltd. Gavin is a Chartered Engineer registered with the Engineering Council UK by the Institution of Fire Engineers (Registration Number 00036205). He has 19 years of experience in fire safety engineering, including in the planning, design, construction, and management of high-rise multi-occupied residential buildings. As well as extensive project experience as a consulting engineer, Gavin has held senior positions in assurance services at the Building Research Establishment (BRE) and in planning policy and safety & security enforcement at the Abu Dhabi Urban Planning Council (UPC).

Guide: no more than 200 words

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 applicant has engaged Urban Change to provide pre-planning fire safety input to the development proposals. The applicant and the design team have had initial consultations with Manchester City Council Planning in Q2 & Q3 of 2022. Urban Change developed a Fire Engineering Brief (FEB) to address the fire safety needs of the project and the agreed planning and design aspirations of the Planning Authority and the applicant. This has involved an iterative design process engaging many professional disciplines that have produced the proposals submitted in this Gateway 1 application. The FEB is a working document, continuing to inform statutory consultations with the Health & Safety Executive (HSE) and as a record of ongoing design development towards Gateway 2 and beyond.
---	--

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:
provided as a separate plan

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 below ground level(s). • number of storeys, including below ground level(s).	c) proposed use (one per line)	d) location of use within the 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 A	Height = c.140m (45	Ancillary Plant & Car Parking Facilities.	Basement Level -1	BS9999	no balconies	class A2-s1, d0 or better	simultaneous	yes- commercial sprinklers, full	N/A non resi

Guide: no more than 500 words

1. **Building A - Scissor Stair** - Rather than implement a single stair design (pressurised), as permitted by BS9991 (2017), for increased redundancy, the plan incorporates two stairs that are separated from each other with robust construction (120min fire resistance rating). The proposal has carefully considered lessons learnt following the Grenfell enquiry and the anticipated recommendations in the next edition of BS9991 (2022/23). The design will offer clear wayfinding signage, floor identification labels, emergency floor plans, apartment numbering & wayfinding tags, and a stair colour coding & naming system (avoiding confusion in emergencies). A firefighting lift lobby separates storey exits serving each stair core (c.8.0m apart). The common areas benefit from automatic mechanical smoke ventilation via smoke shafts. A wet rising main is positioned in the firefighting lobby, enabling the FRS to conduct firefighting without affecting the integrity of the stairs (closed-door condition). The tower features a fixed automatic suppression system throughout, satisfying a Category 4 level of coverage (sprinkler protection within common corridors). Disabled/reduced mobility occupants can exit the tower via the emergency evacuation lifts. The proposed residential RVPs are within 18m of the building main entrance.

Building B - The commercial tower features two RVPs allowing fire vehicles to stop and set up in response to fire emergencies (away from any immediate hazard at the tower base and such that conflict with the flow of occupants exiting the building is avoided). RVP 1 is located c.27m from the main entrance door, while RVP 2 is located c.35m from the nearest firefighting stair entrance – **refer to the accompanying fire service access plan**. These distances are driven by the desire for unimpeded pedestrian flows at the base of the buildings as part of the public realm design. To ensure this does not impact firefighting, the wet riser infill point is to be located within the recommended distance of the parking point at RVP 2, both vehicle stopping locations are within direct sight of the entrance points, and the commercial tower will be equipped with a fixed automatic sprinkler system and will offer two firefighting shafts that limit hose reach distances(<60m).

During construction of the building, a temporary substation (adjacent to RVP 2) will prevent the use of the ultimate fire appliance parking location indicated in the plan. As such, temporary arrangements will need to be made by the contractor to ensure adequate access in the event of a fire emergency at the site.

2. **Building B** features a **rectangular-shaped atrium** passing through compartment floors. The current design concept reflects an approach in accordance with Exemplar C.6 of Annex 6 of BS9999. The solution will include a combination of passive and active measures (fire-resisting glazing / fire & smoke curtains, alongside a dedicated heat & smoke clearance system (for use by the responding fire & rescue service)).

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

An appraisal of the site, buildings and the characteristics of occupants is outlined within the project's Fire Engineering Brief, which highlights the following:

- The development involves two high-rise towers (Buildings A & B) connected by a basement level – High-rise buildings present significant challenges for the fire service in response to fire emergencies. The developing fire strategies have considered the available precautions that work effectively and robustly (provisions such as wet rising mains and non-combustible construction backed by fixed sprinkler protection).

- **Sleeping risk – Building A (Residential Tower)** – Inherent higher fire risk profile as a significant portion of occupants would likely be sleeping at the time of a fire emergency. The fire strategy has recognised the benefits of a fixed automatic sprinkler installation paired with primary & secondary fire compartmentation subdivisions. These provisions, alongside active smoke & heat ventilation within common corridors, offer a robust package of fire safety that is layered to support a stay-put policy. The strategy also offers the fire service the ability to evacuate building portions (as required) via the Evac Alert System (EAS).
- **Large Single Storey Basement – Building A & B** – The basement features ancillary plant hazards & car parking facilities. A proportion of the parking spaces feature electric vehicle chargers. The strategy has incorporated multiple access points for the responding fire service. A mechanical smoke & heat ventilation system and a fixed automatic sprinkler installation offer a failsafe defence against accidental fire outbreaks in the basement. Automatic sprinklers will not protect electrical vehicle charging bays – a suitable fire intervention strategy needs to be discussed with Greater Manchester Fire Service (car fire covers, electrical cut-off switches etc.).
- **Building A – Resident amenity spaces** – Residents & their guests can utilise a set of communal gathering/social spaces. Amenity spaces have been formed with an increased number of occupants in mind (some occupants may be unfamiliar). Large amenity spaces are to feature alternative escape routes within the maximum recommended travel distance limits. Amenity spaces feature automatic sprinkler protection (the maximum area of operation is required to align with the hazard category stated within BS9251, c.100m²).
- **Building B** features a **rectangular-shaped atrium** passing through compartment floors. – See the previous discussion in 7 above.

9. Local development document policies relating to fire safety

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

Guide: no more than 500 words

Manchester City Council | Manchester Core Strategy 2012 to 2027:

Notwithstanding the national requirements for Relevant Buildings, no local policy requirements relate specifically to fire safety.

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

The proposal meets the guidelines cited within BS9999 / BS9991 for access roadways & vehicle-stopping facilities (assuming a pumping appliance specification). Despite the marginally extended distance recommended between the fire appliance parking location and the main entrance (previously described in 7 above), the proposal offers direct & dedicated emergency access that complements the scale of Buildings A & B.

Building emergency entry points offer a direct line of sight from vehicle parking locations to the building entry & wet main infill points.

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

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

yes – Refer to tracking analysis shown in the Design & Access Statement.

12. Siting of fire appliances

Guide: no more than 200 words

The fire service is afforded direct access to Building A (on Bridge Street). The fire appliance parking point is directly outside the main entrance & located within c.18m of the wet main tank replenishment point. The replenishment points are located adjacent to the entrance door to the firefighting stairs & visible from the appliance-stopping locations. See the previous discussion in 7 above.

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

Guide: no more than 200 words

Hydrants will be provided within 90m of fire appliance parking locations. Existing public hydrants will be utilised for this purpose.

Existing fire hydrants are located within the pavements surrounding the development site. Please refer to the attached drawing numbers 0412-SEW-ZZ-00-DR-A-PL1000 & 80823 CUR XX 00 D TP 05001 P03.

Wet Rising Mains – The buildings are more than 50m in height, so both Buildings A & B benefit from wet rising mains installed following BS9990. Replenishment is possible using existing public hydrants – which involves topping up the storage tank in the basement of each building.

Nature of water supply:

tank supply

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 as follows:

provided as a separate plan

See the attached drawings:

Dwgs 0412-SEW-ZZ-00-DR-A-PL1000 & 80823 CUR XX 00 D TP 05001 P03 – Site Layout & Vehicle Tracking

Dwgs 80823 CUR XX 00 D TP 05005 P01 - Swept Path Analysis 12m Rigid HGV

Dwgs 0412-SEW-AA-05-DR-A-PL1105– Typical Residential Floor Fire Safety Mark-up

Fire statement completed by**15. Signature****16. Date**

02/12/2022