

Fire statement form

Application information	
1. Site address line 1	Trinity Islands
Site address line 2	Trinity Way
Site address line 3	
Town	Manchester
County	Lancashire
Site postcode (optional)	
2. Description of proposed development including any change of use (as stated on the application form):	Trinity Islands is a split site development, providing four independent residential towers (Buildings C1, C2, D1 and D2) across two adjacent sites (Sites C and D) separated by Trinity Way. Building C1 will comprise of a 39 storey residential tower, providing residential apartments at Levels 04 to 38, ancillary and residents' amenity accommodation across Ground floor to Level 03, and a retail/commercial unit at Ground floor, located above two floors of basement car parking and plant. Building C2 will comprise of a 48 storey residential tower, providing residential apartments at Levels 04 to 47, ancillary and residents' amenity accommodation across Ground floor to Level 03, and a retail/commercial unit at Ground floor, located above two floors of basement car parking and plant Building D1 will comprise of a 60 storey residential tower, providing residential apartments at Levels 04 to 59 and ancillary and residents' amenity accommodation across Ground floor to Level 03, located above two floors of basement car parking and plant Building D2 will comprise of a 55 storey residential tower, providing residential apartments at Levels 04 to 54 and ancillary and residents' amenity accommodation across Ground floor to Level 03, located above two floors of basement car parking and plant.
3. Name of person completing the fire statement (as section 15.), relevant qualifications and experience. Guide: no more than 200 words	Alec Storey – Technical Director at Hoare Lea Fire Engineering BSc (Hons) CEng MIFireE Alec has worked within the Fire Safety Engineering sector for over 18 years since obtaining a first class degree in Fire Science from the University of Leeds and is a Chartered Engineer with the Institution of Fire Engineers. He has led the Fire Engineering design for projects across all sectors and sizes, both within the UK and internationally, including a significant number of high-rise residential buildings.
4. State what, if any, consultation has been undertaken on issues	No formal consultation with the Statutory Authorities has taken place to date. However, the current plan proposals and fire strategy have been developed based upon recent consultations on similar developments.

relating to the fire safety of the development; and what account has been taken of this.

Guide: no more than 200 words

Furthermore, consultations and design development will be implemented as the detailed design progresses prior to formal Building Regulations submission.

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

Trinity Islands is a split site development, providing four independent residential towers Buildings C1, C2, D1 and D2 across two adjacent sites separated by Trinity Way, as highlighted on the site plan below:



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
Building C1	113m to top finished floor level. 39 storeys (excluding basement). 41 storeys including basement floors.	residential flats, maisonettes, studios	Levels 04 to 38	BS9991	no balconies	class A2-s1, d0 or better	stay put	yes-residential sprinklers, full	none
Building C1	113m to top finished floor level. 39 storeys (excluding basement).	flexible use	Ground to Level 03	BS9999	class A2-s1, d0 or better	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi

	41 storeys including basement floors								
Building C1	113m to top finished floor level. 39 storeys (excluding basement). 41 storeys including basement floors.	shop	Ground floor	BS9999	no balconies	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi
Building C1	113m to top finished floor level. 39 storeys (excluding basement). 41 storeys including basement floors.	car parking	Basement Levels B1 and B2	BS9999	no balconies	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi
Building C2	139m to top finished floor level. 48 storeys (excluding basement). 50 storeys including basement floors.	residential flats, maisonettes, studios	Levels 04 to 47	BS9991	no balconies	class A2-s1, d0 or better	stay put	yes-residential sprinklers, full	none

Building C2	139m to top finished floor level. 48 storeys (excluding basement). 50 storeys including basement floors	flexible use	Ground to Level 03	BS9999	class A2-s1, d0 or better	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi
Building C2	139m to top finished floor level. 48 storeys (excluding basement). 50 storeys including basement floors	shop	Ground floor	BS9999	no balconies	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi
Building C2	139m to top finished floor level. 48 storeys (excluding basement). 50 storeys including basement floors	car parking	Basement Levels B1 and B2	BS9999	no balconies	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi
Building D1	173m to top finished floor level. 60 storeys (excluding basement).	residential flats, maisonettes, studios	Levels 04 to 59	BS9991	no balconies	class A2-s1, d0 or better	stay put	yes-residential sprinklers, full	none

	62 storeys including basement floors.								
Building D1	173m to top finished floor level. 60 storeys (excluding basement). 62 storeys including basement floors.	flexible use	Ground to Level 03	BS9999	class A2-s1, d0 or better	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi
Building D1	173m to top finished floor level. 60 storeys (excluding basement). 62 storeys including basement floors.	car parking	Basement Levels B1 and B2	BS9999	no balconies	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi
Building D2	159m to top finished floor level. 55 storeys (excluding basement). 57 storeys including basement floors.	residential flats, maisonettes, studios	Levels 04 to 54	BS9991	no balconies	class A2-s1, d0 or better	stay put	yes-residential sprinklers, full	none

Building D2	159m to top finished floor level. 55 storeys (excluding basement). 57 storeys including basement floors.	flexible use	Ground to Level 03	BS9999	class A2-s1, d0 or better	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi
Building D2	159m to top finished floor level. 55 storeys (excluding basement). 57 storeys including basement floors.	car parking	Basement Levels B1 and B2	BS9999	no balconies	class A2-s1, d0 or better	simultaneous	yes-commercial sprinklers, full	N/A non resi

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

Whilst the external wall construction for each of the buildings will meet the requirements of Regulation 7(2) with regards to the external wall construction, each of the buildings will include stepped external terraces at the residents' amenity levels (Ground to Level 03) – the furniture, finishes and materials of the terraces are subject to further development.

For each building, it is not possible for the mechanical smoke extract shaft system serving the above Ground floors to continue down to serve the core lobbies at the two basement floors. It is proposed that the lobbies accessing the escape stairs at basement levels will not be provided with smoke ventilation, on the basis that the car parking will be provided with sprinklers and an impulse jet fan mechanical smoke ventilation system (providing 10ACH), which will be designed to prevent smoke from entering the escape stairs. The effectiveness of the impulse jet fan mechanical smoke ventilation system at preventing smoke from entering the stairs will be demonstrated by means of computational fire dynamics modelling, as part of the specialist design. In addition, it is proposed that the main core will be provided with additional access lobbies, such that there is three door protection between the stair and the car parking.

For each building, it is proposed that basement plant rooms and ancillary rooms will not be provided with dedicated smoke ventilation provisions, but will be provided with access doors directly from the ventilated car parking, such that smoke within these rooms may be ventilated via the car parking smoke ventilation system.

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

Within each building, all residential apartments will implement a 'stay put' evacuation strategy, whilst the residents' amenity and ancillary accommodation at Levels 03, 02 01 and Ground and the two basement levels will implement simultaneous evacuation strategies.

Although the provision of more than one stair to serve the upper apartment floors of each building is not a requirement of BS 9991, as part of the developer specification it is proposed that the central core of each building will be provided with two protected escape stairs that are accessed from the same ventilated lift lobby common corridor; namely, a main firefighting stair and a secondary escape stair. The central core lift lobby (common corridor) in each building will be ventilated at each floor above Ground floor by means of a single mechanical smoke extract shaft system subject to specialist design.

Within each building, the residents' amenity accommodation at Levels 01, 02 and 03 (i.e. co-working, lounge, gym, etc) will be provided with escape via the central main core that serves the residential apartments above.

As noted above, for each building, the lobbies accessing the escape stairs at basement levels will not be provided with smoke ventilation, on the basis that the car parking will be provided with sprinklers and an impulse jet fan mechanical smoke ventilation system (providing 10ACH), which will be designed to prevent smoke from entering the escape stairs. In addition, it is proposed that the main core will be provided with additional access lobbies, such that there is three door protection between the stair and the car parking.

Secondary power for life safety systems in each building will be provided by means of a dedicated standby generator.

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

No specific local development documents relevant to fire safety are applicable. Therefore, the design will follow latest Building Regulations guidance documents.

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 indicated via the red dashed lines on the Fire Service site plan in 14 below, Fire Service vehicle access to the buildings will be provided via the site roadways, with access to the sites provided from the surrounding public highways (Water Street and Trinity Way), in accordance with the recommendations of BS 9991 and BS 9999. Fire Service vehicle parking will be provided adjacent to each building via the site roadways and from these parking locations access will be possible to the main building entrance (principal arrival point - see green arrows on the Fire Service site plan in 14 below), the external access doors to the firefighting stair discharge corridor, site fire hydrant, and the wet fire main inlet valve.

Existing statutory fire hydrants are located in proximity to each site within the surrounding public highways – the exact locations and flow rates are subject to confirmation.

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 indicated in the Fire Service site plan in 14 below, Fire Service vehicle access will be provided to the buildings via the site roadways, with access to the sites provided from the surrounding public highways (Water Street and Trinity Way). From these parking locations access will be possible to the main building entrance (principal arrival point - see green arrows on the Fire Service site plan in 14 below), the external access doors to the firefighting stair discharge corridor, site fire hydrant, and the wet fire main inlet valve.

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

As described above and in the Fire Service site plan in 14 below, Fire Service vehicle parking will be provided adjacent to each building via the site roadways.

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

Guide: no more than 200 words

Whilst existing statutory fire hydrants are located within the surrounding public highways, in order to provide adequate firefighting water supplies to each tower, new private hydrants will be located on each site. A fire hydrant outlet will be located in proximity to each tower, as indicatively shown via the yellow 'H' markers on the Fire Service site plan in 14 below.

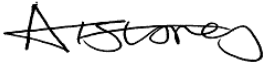
Nature of water supply:
hydrant- private

Does the proposed development rely on existing hydrants and if so are they currently usable / operable?
no

14. Fire service site plan

Fire service site plan is:
inserted in the form



Fire statement completed by	
15. Signature	
16. Date	28/10/2021