Fire statement form

Application information	
1. Site address line 1	Stag Brewery Site
Site address line 2	Mortlake
Site address line 3	
	Richmond Upon Thames
Town	London
County	Greater London
Site postcode (optional)	
2. Description of proposed development including any change of use (as stated on the application form):	This Fire Strategy Gateway 1 statement has been prepared by Hoare Lea Fire Engineering on behalf of Reselton Properties Limited ("the Applicant") in support of two linked planning applications ("the Applications") for the comprehensive redevelopment of the former Stag Brewery Site in Mortlake ("the Site") within the London Borough of Richmond Upon Thames (LBRuT).
	Proposals
	The applications seek planning permission for
	Application A
	"Hybrid application to include the demolition of existing buildings to allow for comprehensive phased redevelopment of the site:
	Planning permission is sought in detail for works to the east side of Ship Lane which comprise: a) Demolition of existing buildings (except the Maltings and the façade of the Bottling Plant and former Hotel), walls, associated structures, site clearance and groundworks b) Alterations and extensions to existing buildings and erection of buildings varying in height from 3 to 9 storeys plus a basement of one to two storeys below ground c) Residential apartments d) Flexible use floorspace for: i. Retail, financial and professional services, café/restaurant and drinking establishment uses ii. Offices iii. Non-residential institutions and community use iv. Boathouse

- e) Hotel / public house with accommodation
- f) Cinema
- g) Offices
- h) New pedestrian, vehicle and cycle accesses and internal routes, and associated highway works
- i) Provision of on-site cycle, vehicle and servicing parking at surface and basement level
- j) Provision of public open space, amenity and play space and landscaping
- k) Flood defence and towpath works
- I) Installation of plant and energy equipment
- m) Planning permission is also sought in outline with all matters reserved for works to the west of Ship Lane which comprise:
 - i. The erection of a single storey basement and buildings varying in height from 2 to 8 storeys
 - ii. Residential development
 - iii. Provision of on-site cycle, vehicle and servicing parking
 - iv. Provision of public open space, amenity and play space and landscaping
 - v. New pedestrian, vehicle and cycle accesses and internal routes, and associated highways works"

Application B

"Detailed planning permission for the erection of a three-storey building to provide a new secondary school with sixth form; sports pitch with floodlighting, external MUGA and play space; and associated external works including landscaping, car and cycle parking, new access routes and other associated works"

Together, Applications A and B described above comprise the 'Proposed Development'.

Background for submission

Two applications for planning permission were submitted to the London Borough of Richmond upon Thames ('LBRuT') on 11 March 2022 for the masterplan redevelopment of the Site and are currently pending determination. Consultation with statutory and public consultees has been ongoing throughout this period.

On 19 July 2023 both applications were heard at LBRuT's Planning Committee. The LBRuT's Planning Committee resolved to approve both applications, subject to the provisions set out in the Officer's Report.

On 24 July 2023 the Secretary of State made a statement confirming the Government's intention to mandate second staircases in new residential buildings above 18 metres. This followed consultation on this matter where expert bodies advocated support for this threshold.

Matters for Substitution

Although no formal transition arrangements or legislation has been announced at this stage, the Applicant has taken the decision to make amendments to the scheme which will allow it to adhere to the forthcoming changes announced on the 24 July 2023 by the Secretary of State in relation to the Government's intention to mandate second staircases in new residential buildings above 18 metres.

In summary the proposed changes to the scheme relate to Application A only and comprise changes to

Building 1 (Cinema): Three levels of office changed to residential use (creating 17 new residential units) and decrease in building height by 2.6m. The cinema floor plans remain relatively similar with changes made to accommodate the residential core, refuse and cycle stores, risers and extending the cinema café. The third floor has changed from glazed to bronze cladding to suit the change of use, a cycle store has been added to ground floor and recessed balconies added to accommodate the introduced residential use in this building;

Building 2: Internal layout changes only (including removal of top floor of duplex) – increase in 1 residential unit; Building 4 (The Maltings): Removal of residential floorspace on floor levels 6 and 7 and internal re-configuration to include only one core with two stairs and two lifts – overall decrease in 1 residential unit. Minor elevation changes to the Maltings to re-position the double height windows and change in the layout of the ground floor flexible use areas; Building 7: Internal layout changes only (including removal of top floor of duplex) – no change in residential unit numbers;

Building 8: Re-arrangement of internal layout to accommodate core changes (no change in residential unit mix). Mansard roof stepped out around the southern staircase to accommodate dual staircases to the 8th floor;

Building 10: Floor to ceiling heights changed very slightly to bring building under 18m;

Building 11: Internal layout changes only (third lift and second stair added affecting number of habitable rooms) – no change in residential unit numbers;

Building 12: Internal layout changes only (third lift and second stair added affecting number of habitable rooms) – no change in residential unit numbers;

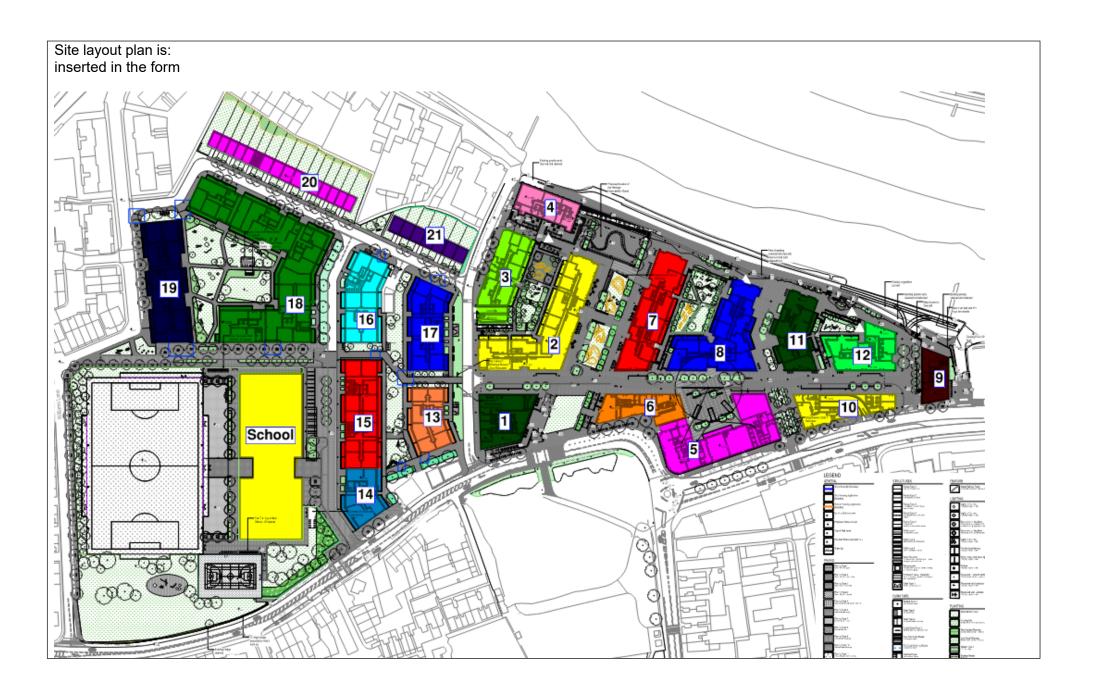
Buildings 15 and 17: These buildings are in Development Area 2 and are only in outline. Changes will be internal only; Overall increase in residential floorspace by +1,722 sqm GIA and increase in 7 private residential units (increase in 17 residential units in Development Area 1 and decrease in 10 residential units in Development Area 2). No change in affordable residential unit numbers;

Decrease in office floorspace by -2,571 sqm GIA, increase in cinema floorspace (+149 sqm GIA), and increase in flexible use (+125 sqm GIA);

Internal re-configuration of the basements to accommodate second stairwells, changes to waste stores, partitions and enlarged sprinkler tanks to satisfy updated electric vehicle fire regulations resulting in a reduction of 15 car parking spaces across the Development;

Fire strategy amended, resulting in two stairs to all residential buildings over 18m in height and re-introducing connections to the basement car park for the two stair buildings. The basement car park fire strategy has also been updated to provide fire safety enhancements to account for the introduction of EV charging in the basement car park; Waste strategy amended, to return the refuse and recycling stores for Buildings 2, 7, 8, 11 and 12 to the basement level. For these buildings, holding stores at ground level have been provided in Buildings 3, 8 and 12 to support the

	collection process. Buildings 1, 3, 4, 5, 6, 9, 10 and all buildings in Development Area 2 maintain refuse and recycling stores at ground level; and Landscaping updates associated with changes to ground floor entrances for Blocks 8, 11 and 12, with amendments to the length of private gardens, additional planting and steps moved.
3. Name of person completing the fire statement (as section 15.), relevant qualifications and experience. Guide: no more than 200 words	All Hoare Lea design projects are headed by chartered engineers with proven experience on a wide range of fire safety consultancy projects. All work produced at Hoare Lea has been reviewed and approved by a senior chartered fire engineer. This statement has been produced, reviewed and approved by the following key individuals. The design and development of the fire safety strategy will be undertaken by the same individuals. - Miller Hannah BEng (Hons), CEng, MIFireE – Director - Brad Rockell BSc (Hons) CBuildE MCABE – Senior Associate - Eric Swainson MEng (Hons), AIFireE – Associate
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	A formal consultation was taken with the Health and Safety executive as part of the Planning Gateway One process. As part of this process several concerns were raised by the HSE as part of their substantive response. The design was then updated to address these comments and was then resubmitted to the HSE. Subsequently following the proposed introduction of the two stair threshold for buildings over 18m in height the scheme has been redesigned to incorporate two stairs into all residential buildings over 18m in height. The scheme and proposed fire strategy will be developed in greater detail following this planning application at which point the Statutory Authorities will be fully engaged. A fire statement was issued to the local authority as part of the previous planning application for this scheme, however, no fire specific comments were provided on this application.
	numbering as per building schedule referred to in 6. rings and information submitted in connection with the application)



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
1	13.3 4 6	residential, cinema	Level 1 and above is residential use, Ground Floor and Basement for Cinema	BS9991 BS 9999 for the cinema	class A2-s1, d0 or better	worse than class A2-s1, d0	stay put (simultaneou s in the cinema)	yes- residential sprinklers, full Commercial sprinklers for the cinema	M4(3)
2	• 24.1 • 8 • 9	residential flats, maisonettes, studios	residential with flexible space at ground	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)

3	■ 17.5 ■ 5 ■ 6	residential flats, maisonettes, studios	residential use throughout	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)
4	• 19.2 • 6 • 6	residential flats, maisonettes, studios	residential with flexible space at ground	BS9991	no balconies	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)
5	■ 8.6 ■ 3 ■ 4	Hotel, office	Hotel levels Ground-3, office levels Ground -3	Approved document B vol 2	worse than class A2-s1, d0	worse than class A2-s1, d0	simultaneou s	none	N/A non resi
6	• 15.1 • 5 • 6	residential flats, maisonettes, studios	residential with flexible space at ground	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)
7	• 24.1 • 8 • 9	residential flats, maisonettes, studios	residential with flexible space at ground	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)
8	• 27.4 • 9 • 10	residential flats,	residential with flexible	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- residential	M4(3)

		maisonettes, studios	space at ground					sprinklers, full	
9	15.755	residential flats, maisonettes, studios	residential with flexible space at ground	BS9991	worse than class A2-s1, d0	worse than class A2-s1, d0	stay put	yes- residential sprinklers, full	M4(3)
10	17.9566	residential flats, maisonettes, studios	residential with flexible space at ground	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	none
11	• 24.1 • 8 • 9	residential flats, maisonettes, studios	residential with flexible space at ground	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)
12	24.189	residential flats, maisonettes, studios	residential with flexible space at ground	BS9991	class A2-s1, d0 or better	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)
13	 17.95 6 7 (note total storeys is 6 under the definition of storeys for HRBs) 	residential flats, maisonettes, studios	residential throughout ancillary residential at ground	BS9991	class A2-s1, d0 or better (if balconies are provided)	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)

14		17.95 6 6	residential flats, maisonettes, studios	residential throughout ancillary residential at ground	BS9991	class A2-s1, d0 or better (if balconies are provided)	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)
15		27.0 8 9	residential flats, maisonettes, studios	residential throughout ancillary residential at ground	BS9991	class A2-s1, d0 or better (if balconies are provided)	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)
16	•	17.95 6 7 (note total storeys is 6 under the definition of storeys for HRBs)	residential flats, maisonettes, studios	residential throughout ancillary residential at ground	BS9991	class A2-s1, d0 or better (if balconies are provided)	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)
17	•	23.6 7 8	residential flats, maisonettes, studios	residential throughout	BS9991	class A2-s1, d0 or better (if balconies are provided)	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)
18	•	17.95 6 6	residential flats, maisonettes, studios	residential throughout	BS9991	class A2-s1, d0 or better (if balconies are provided)	class A2-s1, d0 or better	stay put	yes- residential sprinklers, full	M4(3)

19	• 1 • 2	_	residential flats, maisonettes, studios	residential throughout	BS9991	worse than class A2-s1, d0	worse than class A2-s1, d0	stay put	yes- residential sprinklers, full	M4(3)
20		9.4 3 3	residential flats, maisonettes, studios	residential throughout	BS9991	worse than class A2-s1, d0	worse than class A2-s1, d0	stay put	yes- residential sprinklers, full	none
21		9.4 3 3	residential flats, maisonettes, studios	residential throughout	BS9991	worse than class A2-s1, d0	worse than class A2-s1, d0	stay put	yes- residential sprinklers, full	none
School		<18 3 3	school	school	BB100	worse than class A2-s1, d0	worse than class A2-s1, d0	simultaneou s	yes- residential sprinklers, full	N/A non resi

Note 1: For blocks 13-21 are currently designed as outline only and do not yet have set floor levels. As such the height of the top occupied storey has been assumed based on 3m below the parapet height provided by Squire & Partner Architects. Buildings 13, 14, 16 and 18 are currently proposed to be designed to be under 18m in height (to the top occupied storey), although as it is noted that they are close to the 18m. As such if the final top storey height exceeds this threshold they will be provided with firefighting shafts and a minimum of two stairs serving all residential levels.

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

All blocks (both residential and non-residential) with a top occupied storey 18m above fire service access level will be provided with fully fitted firefighting shafts, and a minimum of two stairs. Where a block has a storey which is both in excess of 18m in height and has a floor area of 900m² or more two firefighting shafts will be provided. This is case for Blocks 2, 7, 8, 15 and 17.

It is recommended that the development is to have management on site 24/7. This could be provided via a fire control centre that covers the whole development. In order to facilitate the use of the evacuation lift all of the residential stairs should be provided with refuge spaces with minimum dimensions of 900mm x 1400mm outside of clear escape width of the stair. The refuge should be provided with an emergency voice communication (EVC) system, designed and installed in accordance with BS 5839-9:2011.

All stairs serving the basement carpark will be completely independent from the stairs serving the residential levels with no internal connections. The lifts serving the basement carpark are independent from the lifts serving the residential levels. The lifts serving the basement carpark will open into a lobby which is fire separated from the areas in which the lifts serving the above ground levels open into. This is in line with the recommendations in current guidance and comments from the HSE.

Residential blocks:

- Building 1 will contain a cinema at ground and basement levels and residential levels above. The access to the residential at ground floor level is separated from the cinema and there is no communication between the residential and the cinema
- Blocks No. 2, 4 and 6-12 are provided with flexible space at ground level. These spaces will adopt a simultaneous evacuation strategy and will not communicate with the means of escape facilities for the residential areas. The apartments will operate a stay-put evacuation strategy.
- Common corridors will be provide mechanical smoke ventilation system. Currently extended travel distances are provided in the dead ends of the following buildings. In all of these buildings an enhanced smoke ventilation system will be provided consisting of a double reversible mechanical extract system with mechanical smoke ventilation shafts at either end of the common corridor (note this fire engineered solution has been discussed in greater detail in the separate interim QDR report submitted with this application:
 - o Block 1 (single stair building) travel distances up to 20m;
 - o Block 3 (single stair building) travel distances up to 18m; Block 3 is provided with a door in the centre of the corridor this door will open automatically on detection in either section of the corridor to enable reversible smoke ventilation system to function.
 - o Block 8 (two stair building) travel distances up to 20m;
 - o Block 13 (single stair building) travel distances up to 19m;
 - o Block 18 (single stair building) travel distances up to 19m;

As noted above blocks 13-21 are currently designed as outline only and do not yet have set floor levels and as such the travel distance in these blocks may reduce as the design is developed.

Hotel/Office: The hotel/office building (Block 5) will be served by a minimum of two means of escape stairs and will operate a simultaneous evacuation strategy. The final escape route from each stair will lead directly to the outside or via a fire sterile corridor afforded the same level of fire resistance as the stair itself.

Cinema: The cinema building (Block 1) is to be provided with two protected means of escape stairs. One of these will discharge via the cinema foyer in line with Section D.2 of BS 9999. Disabled refuges are to be provided on all escape routes where level egress to the outside is not available. The final escape routes from each stair will lead directly to the outside or via a fire sterile corridor afforded the same level of fire resistance as the stair itself.

School: The school will be provided with a minimum of two escape stairs serving every level. These stairs will be provided with a protected lobby separating them from the accommodation on every level. The final escape routes from each stair will discharge directly to the outside or via a fire sterile corridor afforded the same level of fire resistance as the stair itself and disabled refuges are to provided on all escape routes where level egress to the outside is not available.

Carpark: Each of the carparks will be provided with a smoke ventilation system and will operate a simultaneous evacuation strategy independent from the residential levels above. It is proposed to provide EV charging within the basement carparks as such the following additional fire safety enhancements are provided to the basement carpark:

- Mechanical ventilation designed in accordance with BS 7346-7 with an enhanced extract rate of 14 ACH.
- Structural fire resistance of the car park will be at least 120 minutes (REI).
- Car park separated from surrounding accommodation by 120 minutes (REI) compartment walls.
- Sprinkler system designed as a category HHP3 system in accordance with BS EN 12845:2015.
- The car park drainage design will allow for drainage of water during a car park fire.
- Car bays where EV charging is provided and between EV charging bays and regular bays should be separated by a distance of at least 1200mm, where this is not possible, to limit fire spread fire resisting walls are provided to group EV charging bays into groups of a maximum of three.
- EV charging points will be linked to the fire detection system, for automatic shut-off of the power supply in the event of a fire. Manual shut-off switches will be provided at the Fire Brigade access points.

The carpark will be located below ground and connected to blocks 2, 3, 6, 7, 8, 11 and 12. A second carpark will be located below ground and connected to blocks 13, 15, 16 and 17. The carpark ramp is accessed underneath block 10 but the stairs in block 10 do not extend down to the carpark. Single stair blocks 1, 3, 6, 9, 10, 13, 14, 16, 18 and 19 will not connect with the basement carpark. In buildings with two stairs (2, 4, 5, 7, 8, 11, 12 15 and 17) there are internal connections the stairs serving the basement however these are fire separated at ground floor level with no internal connections. The lifts serving the basement carpark are independent from the lifts serving the residential levels in single stair blocks. In single stair blocks the lifts serving the basement carpark will open into a lobby which is fire separated from the areas in which the lifts serving the above ground levels open into.

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

- Certain residential blocks contain flexible use areas at ground level and are therefore to be fully separated from residential without sharing means of escape facilities.
- Residential buildings will be provided with smoke ventilation in the common corridors in order to ensure that the corridors remain tenable in case of a fire in a flat. Certain corridors have extended travel distances (refer to section above for details of which blocks have these extended distances) in a single direction and is addressed with a fire engineered justification including the provision of additional smoke ventilation. It is noted that the HSE raised concerns with proposed extended travel distances and as such a preliminary QDR focusing on the extended travel distances has been carried out and submitted with this application. As the design for the building develops a full QDR can be carried out considering all aspects of the development (not just the extended corridor travel distances).
- Residential flats will be designed as open plan and a fire engineered justification on the basis of sprinkler protection and enhanced detection will be developed to address this.
- Final exits serving stairs will be accessed via protected passageways. These will be treated as an extension of the stair and if they form a reception area, this area will be kept fire sterile, with any post boxes provided being fire resisting (equal to the structural fire resistance of the building.
- Within the single stair buildings all stairs serving the basement carpark will be completely independent from the stairs serving the residential levels with no internal connections. For buildings with more than one stair serving all upper levels there may be internal connections to the basement but these are fire separated at ground floor level

- In single stair buildings (refer to the blocks numbered above) the lifts serving the basement carpark are independent from the lifts serving the residential levels. In these blocks the lifts serving the basement carpark will open into a lobby which is fire separated from the areas in which the lifts serving the above ground levels open into. For buildings with more than one stair serving all upper levels the lifts serving the basement levels will continue to the above ground levels although these will in all cases open into a smoke ventilated lobby at basement level
- The hotel/office building is a multi-use building and as such the means of escape from the hotel will be simultaneous with the office accommodation in the same block.
- All refuse stores in single stair buildings are accessed from external only. There are some refuse stores located within the basement carpark also on the basis that the basement will only have internal connections to buildings with more than one stair serving all upper residential levels.
- Block 1 is a multi-use building with a cinema on the lower levels and residential on upper levels. There is no communication between the cinema and residential parts of the building and hence they are considered separated parts of the building. The means of escape from the cinema will be simultaneous with the residential accommodation operating on a separate stay put policy.

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

Full application of the recommendations of the London Plan (March 2021) Policies D12 and D5, with a separate fire statement produced for that purpose.

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

Access for fire-fighting appliances is provided to all buildings. Guidance of BS 9991, ADB Volume 2 and BB100 has been used for this aspect of the fire strategy and access to the dry riser inlets will be provided within 18m from the fire tender locations.

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

Public roads serving all buildings. The building entrances will be located in such a way that access is available as close to the road as possible. All access to firefighting shafts is within 18m of the fire appliance parking position in line with code guidance

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

12. Siting of fire appliances

Guide: no more than 200 words

Directly adjacent to the blocks, within either 45m of all points within the building, or within 18m of dry riser inlet points where the 45m hose laying distances from the fire tender parking positions are not achieved.

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

Guide: no more than 200 words

Some existing public hydrants are provided within 90m of all blocks. Where this is not the case, additional private hydrants will be provided.

The locations of the existing hydrants are provided and attached to this document. It is noted that the design has not yet progressed to a stage where the location of new hydrants has been provided as the general landscape design is still in an early stage. However, the provision of hydrants within the requirements of current code guidance; within 90m of the dry riser inlet to each block can be made a condition of the planning application.

Note that as the design is developed further new hydrants will be provided such that the maximum distance of 90m to all blocks is not exceeded.

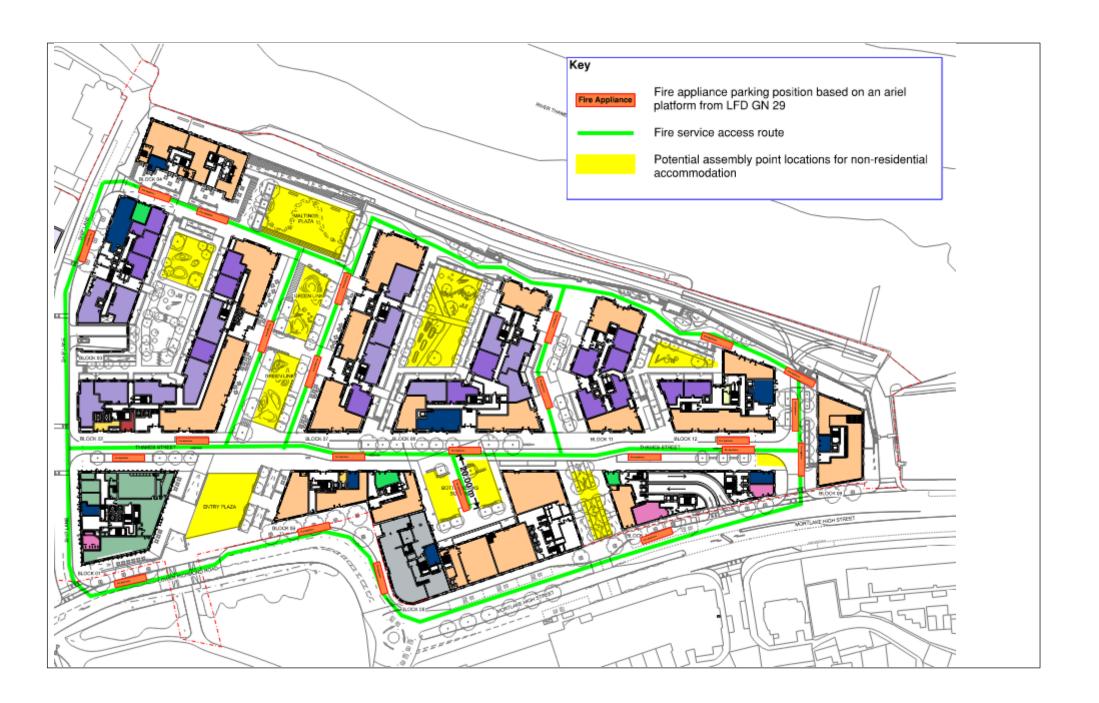
Nature of water supply:

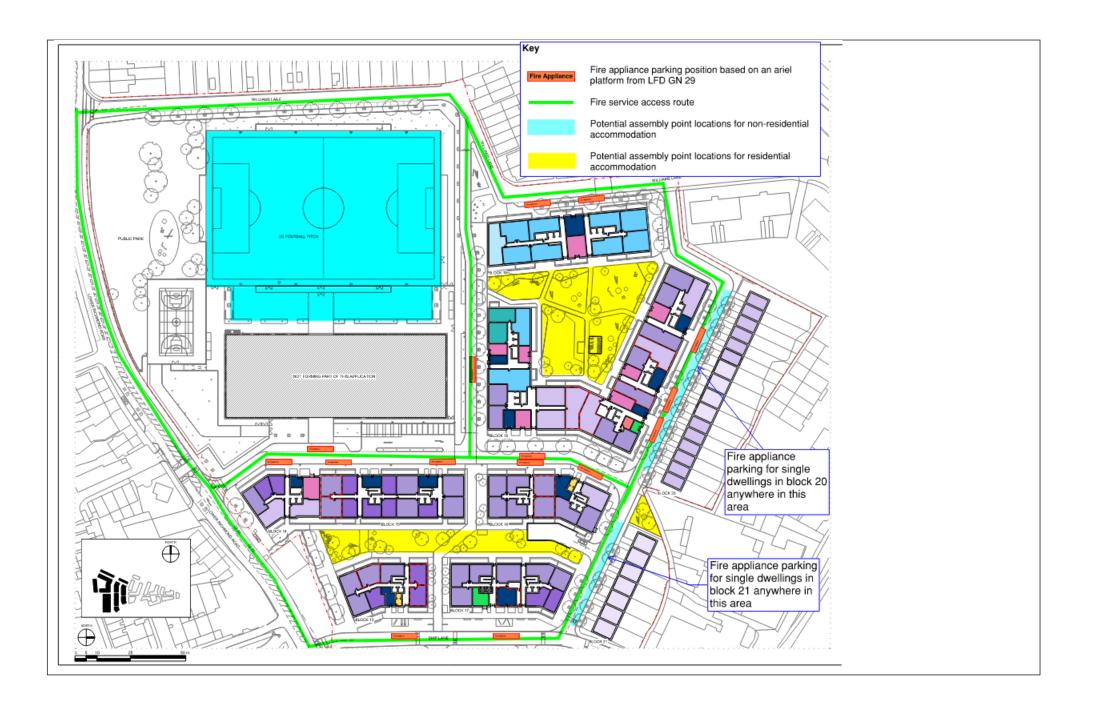
hydrant- public

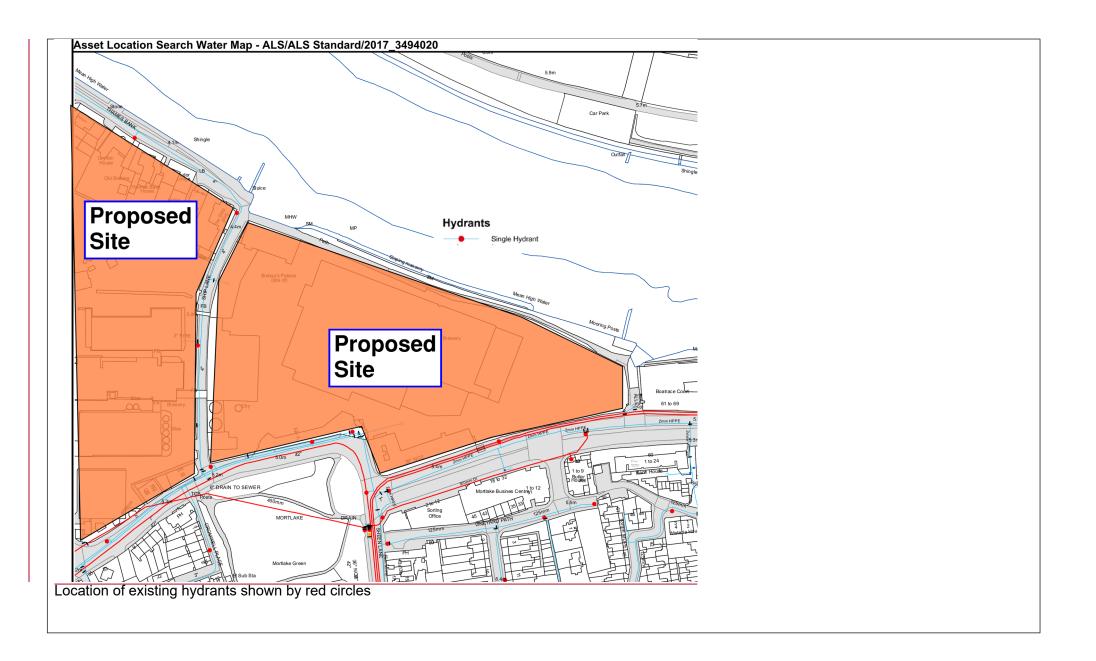
Does the proposed development rely on existing hydrants and if so are they currently usable / operable? don't know

14. Fire service site plan

Fire service site plan is: inserted in the form See following page







Fire statement completed by	ру
15. Signature	Mille Haml
	Miller Hannah BEng (Hons), CEng, MIFireE
16. Date	02/11/2023