



Title: Stag Brewery Fire Statement
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Marshall Fire Ltd.
Stag Brewery Fire Statement

Revision	Description	Author	Approver	Date
00	Fire Statement	Daniel Taylor	Steven Marshall	27 th May 2022
01	Project description amended in Section 1.3 and 2.2.	Daniel Taylor	Steven Marshall	7 th June 2022
02	Building 15 has been added to the Fire Statement.	Daniel Taylor	Steven Marshall	8 th June 2022

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1. Introduction

1.1 Overview

Marshall Fire has been appointed by Dartmouth Capital Advisors Ltd to provide a fire statement for the Stag Brewery development. Our role is therefore to assist in steering the scheme towards meeting the requirements of the London Plan, Policy D12 and Policy D5.

This Fire Statement will consider the evolution of the development and the principles of the golden thread concept and will form the basis of the developing Fire Strategy.

The 'Golden Thread' refers to a concept where the fire safety information of a building is to be updated and maintained through the whole life cycle of the building. The fire safety information should be maintained and updated as the development evolves in line with the principles of the golden thread. The fire safety information provided at planning application stage should be developed to inform the overall fire strategy for the development. When passing fire safety information to subsequent development stages, consideration should be given to the accessibility, accuracy and relevance of the information to ensure the development is constructed as it has been designed and originally specified.

1.2 Purpose of this report

The purpose of this report is to review the proposals in terms of the London Plan requirements and to demonstrate the development meets the highest standards of fire safety, proportionate to the size and nature of the development.

It is considered a planning requirement to provide a fire statement and best practice to follow the structure for Planning Gateway One which also covers the London Plan requirements.

It should be noted that the project will still need to comply with the requirements of the Building Regulations and therefore the information presented herein may be developed further such that compliance with the requirements of the Building Regulations are demonstrated.

The contents of this report should therefore not be considered sufficient to form a part of the Building Regulations submission for the project and Building Regulation approval should be considered a risk until such time that approval in principle has been granted by the appointed Building Control Body.

The findings of this statement are based on the information available at the time of review. Marshall Fire cannot be held responsible for any subsequent changes to the design that we are not made aware of.

1.3 Scheme description

The project consists of approximately 353,000sq ft of existing accommodation, of which the site as a whole has 16 buildings. This planning application relates to all buildings on the site, but with full details at this stage only provided for buildings 11, 12, 14 and 15. The proposed site is to be used as a temporary filming use and the erection of a temporary film set for a period of 5 years for film production operations and ancillary activities. The proposals also include the erection of temporary external film sets.

At this stage, only buildings labelled as 11, 12, 14 & 15 are to be used for film production works, but further buildings may be used for film production in due course, subject to the submission and approval of further detailed information. At this stage, buildings 11, 12, 14 and 15 will undergo a change of use but without change to the existing layouts and fire service provisions such as access and firefighting (perimeter access).

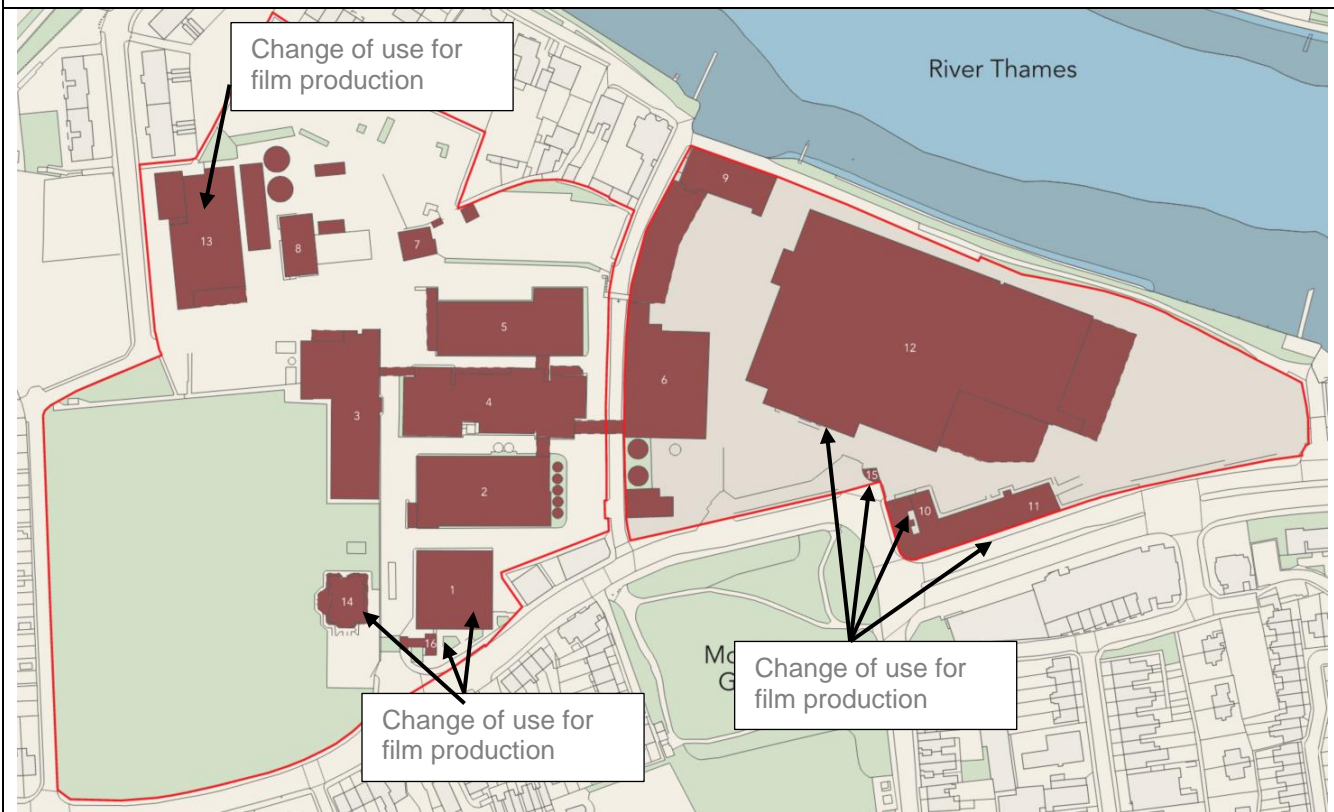
The topmost storey height varies as each block is different but can be classified as under 11m in height and not sprinkler protected.

See Figure 1 for the current design proposals.

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Building	Existing Use	Sq m GIA	Sq ft GIA
1	P.O.B	2,216	23,853
2	Brewhouse	3,990	42,948
3	Process Building	3,488	37,549
4	Chip Cellar	2,319	24,956
5	Finishing Cellar	2,045	22,019
6	Power House	2,848	30,660
7	Powder Store	169	1,823
8	Effluent Treatment	228	2,454
9	Maltings	1,174	12,634
10	Former Hotel	1,088	11,721
11	Former Bottling Hall	709	7,631
12	Packaging	9,461	101,844
13	Stable Court	2,240	24,115
14	Sports Club	672	7,233
15	East Gatehouse	23	249
16	West Gatehouse	79	847
		32,749	352,507

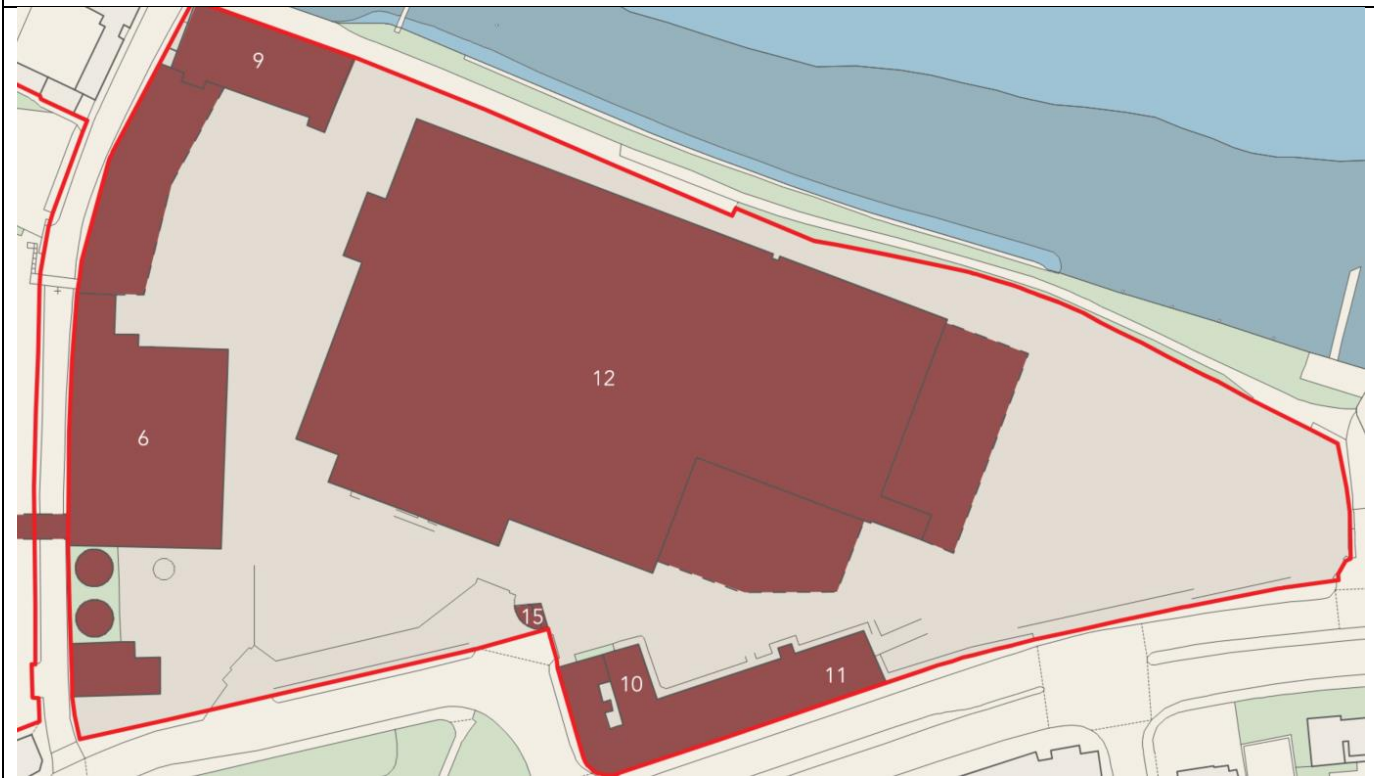
Building List and Reference Names



Site Plan (1, 10, 11, 12, 13, 14, 15& 16)



Site Plan for Buildings 1, 13, 14 & 16



Site Plan for Buildings 10, 11, 12 & 15

Figure 1: Design intent drawings

2. Fire Statement

2.1 Section 1: Site address

The development is located at Stag Brewery, Lower Richmond Road, Mortlake, London, SW14 7ET.

2.2 Section 2: Description of proposed development including any change of use

The project consists of approximately 353,000sq ft of existing accommodation, of which the site as a whole has 16 buildings. This planning application relates to all buildings on the site, but with full details at this stage only provided for buildings 11, 12, 14 and 15. The proposed site is to be used as a temporary filming use and the erection of a temporary film set for a period of 5 years for film production operations and ancillary activities. The proposals also include the erection of temporary external film sets.

At this stage, only buildings labelled as 11, 12, 14 & 15 are to be used for film production works, but further buildings may be used for film production in due course, subject to the submission and approval of further detailed information. At this stage, buildings 11, 12, 14 and 15 will undergo a change of use but without change to the existing layouts and fire service provisions such as access and firefighting (perimeter access).

The topmost storey height vary as each block is different and are no greater than 4 storey in height but can be classified as being under 18m in height and not sprinkler protected.

A 3D view of the proposed development is provided below.



Figure 2: Proposed Site

The following is a summary of the buildings key parameters:

Table 1: Building key parameters

<i>Designation</i>	<i>Designated purpose group</i>	<i>Topmost Story Height</i>	<i>Number of Storeys</i>	<i>Sprinklers</i>	<i>Firefighting Shaft</i>	<i>Elements of structure</i>
<i>Building 1</i>	Commercial (Purpose Group 4)	Under 18m	4 storey	No	No	60 minutes*
<i>Building 10</i>	Commercial (Purpose Group 4)	Under 11m	3 storey	No	No	60 minutes*
<i>Building 11</i>	Commercial (Purpose Group 4)	Under 18m	4 storey	No	No	60 minutes*
<i>Building 12</i>	Commercial (Purpose Group 4)	Under 11m	2 storey	No	No	60 minutes*
<i>Building 13</i>	Commercial (Purpose Group 4)	Under 11m	Part 1 storey, Part 3 storey	No	No	60 minutes*
<i>Building 14</i>	Commercial (Purpose Group 4)	Under 18m	4 storey	No	No	60 minutes*
<i>Building 15</i>	Commercial (Purpose Group 4)	Under 11m	1 storey	No	No	30 minutes*
<i>Building 16</i>	Commercial (Purpose Group 4)	Under 18m	3 storey	No	No	60 minutes*

Note: *The existing elements of structure are deemed to be satisfactory with the building height not changing and therefore is no worse than before the change of use.

#: Elevational height is based on storey height of approximately 3m per storey and courtesy of Google Maps. (subject to design team confirmation).

2.3 Section 3: Name of person completing the fire statement and relevant qualifications and experience

This document was completed by Daniel Taylor. He has a BSc (Hons) in Fire Safety Engineering and is an Associate member of the Institution of Fire Engineers. He is a Senior Fire Engineer at Marshall Fire and has 4 years' experience in the industry.

Daniel has a high level of understanding Part B compliance and has worked on a wide range of projects including commercial projects such as industrial and assembly use buildings across the UK of varying scales whilst acting as the lead fire engineer leading projects from RIBA Stage 2 to RIBA Stage 6 successfully.

This document was reviewed and approved by Steven Marshall. Steven is a Chartered Engineer registered with the Engineering Council by the Institution of Fire Engineers, of which he is a full member (membership number 00037507). Steven has in excess of 20 years' experience working the fire safety design of buildings and has been responsible for the development of fire safety strategies for a very large number of building projects, of which include industrial and assembly use. Having reviewed the proposals confirm that I believe that they exceed the minimum requirements of Part B of the Building Regulations and the London Plan.

2.4 Section 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

The project team have not undergone any pre-app or other consultations to date regarding Fire Safety.

2.5 Section 5: Site layout plan with block numbering as per building schedule referred to in section 6

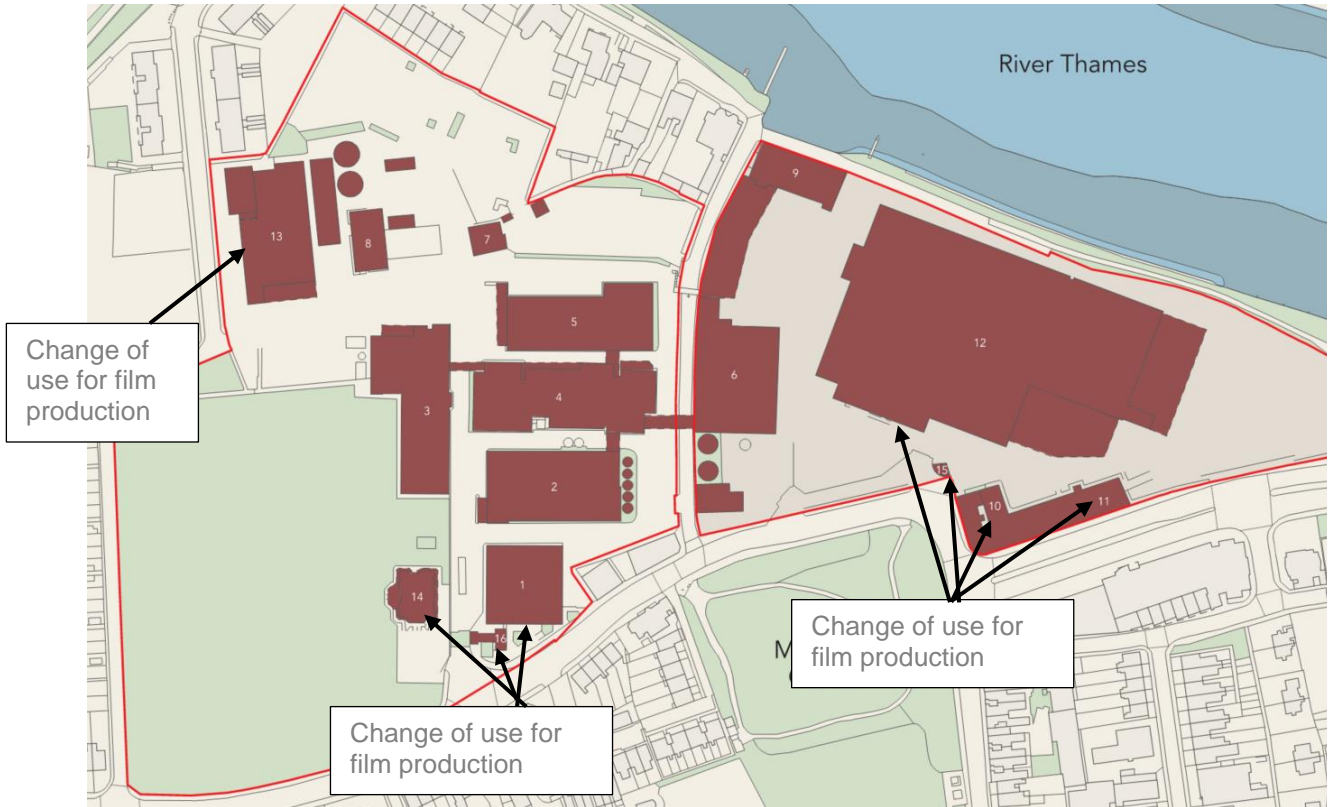


Figure 3: Site layout plan with block numbering

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2.6 Section 6: Building schedule

Table 2: Buildings Schedule Table

Notes: The proposed guidance will be adopted from Approved Document B, Volume 2 (2019 + 2020 amendments) for the non-residential areas.

<i>Site Information</i>			<i>Building Information</i>			<i>Resident Safety Information</i>		
No.	Block height (m)*	No. of Storeys*	Proposed use	Balconies	External Wall Systems	Evacuation approach	Sprinklers	Accessible housing provided
<i>1</i> <i>(Building 1)</i>	Less than 18m	4 storey	Commercial	No	Limited Combustibility, or Class B-s3, d2 or better.	Simultaneous Evacuation Policy	No	N/A
<i>Building 10</i>	Less than 18m	3 storey	Commercial	No	Limited Combustibility, or Class B-s3, d2 or better.	Simultaneous Evacuation Policy	No	N/A
<i>Building 11</i>	Less than 18m	4 storey	Commercial	No	Limited Combustibility, or Class B-s3, d2 or better.	Simultaneous Evacuation Policy	No	N/A
<i>Building 12</i>	Less than 11m	2 storey	Commercial	No	Limited Combustibility, or Class B-s3, d2 or better.	Simultaneous Evacuation Policy	No	N/A
<i>Building 13</i>	Less than 18m	Part 1 storey, Part 3 storey	Commercial	No	Limited Combustibility, or Class B-s3, d2 or better.	Simultaneous Evacuation Policy	No	N/A

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<i>Building</i> 14	Less than 11m	2 storey	Commercial	No	Limited Combustibility, or Class B-s3, d2 or better.	Simultaneous Evacuation Policy	No	N/A
<i>Building</i> 15	Less than 11m	1 storey	Commercial	No	Limited Combustibility, or Class B-s3, d2 or better.	Simultaneous Evacuation Policy	No	N/A
<i>Building</i> 16	Less than 18m	4 storey	Commercial	No	Limited Combustibility, or Class B-s3, d2 or better.	Simultaneous Evacuation Policy	No	N/A

Note: * Elevational height is based on storey height of approximately 3m per storey and courtesy of Google Maps. (subject to design team confirmation).

2.7 Section 7: Specific technical complexities

The fire strategy will be developed using guidance from Approved Document B, Volume 2 for non-residential buildings. The buildings will adopt a Purpose Group 4 (Commercial), being a change from Purpose Group 6 (Industrial).

The buildings will have an evacuation approach defined as 'Simultaneous Evacuation' with all occupants within that particular building escaping upon activation of the fire alarm. Other buildings on the same site are independent and would not be required to evacuate unless affected by the fire and smoke.

The minimum level of fire detection and alarm is to be a Category M system, however, a Category L2 fire alarm and detection system is proposed and is to be designed and installed in accordance with BS 5839 Part 1.

The buildings are under 30m in height and therefore are not required to have sprinkler protection.

Self-evacuation will be available on the ground floor with ramps at 1:12 or step-free access into the buildings.

The existing buildings relevant to this planning application are formed from either steel frame or reinforced concrete with brick facades or corrugated metal cladding. All internal partitions will be constructed from lightweight metal stud walls and gypsum plasterboard facings.

In accordance with Approved Document B, the external wall surface classifications allow for 'No Provision' however the external wall should not be a medium for fire spread or growth therefore it is recommended that the units achieve a Class B, s3, d2 or better is provided. For the existing buildings, it is deemed that the wall construction is robust but to be confirmed by the design team.

The elements of structure are assumed to achieve 60 minutes fire resistances and is to be confirmed by the design team.

Building 10 is labelled as a former hotel and is therefore assumed to have compartment floors equal to the elements of structure. No other building is assumed to have compartment floors. The existing stair construction should achieve 60 minutes with FD30S fire doors.

All other buildings where stairs are provided are assumed to have a stair achieving no less than 30 minutes fire resistance with a self-closing door rated to FD30S. This is subject to confirmation and remediation where necessary.

Based on the current information, it is unknown if any lifts are present within the buildings. If works are to be carried out then it is recommended to make the building compliant with Policy D5, however, no enhancement or changes are proposed at this time. A refuge will be provided within the stair or protected lobby on the upper floor level with two-way communication and a 1400mm x 900mm clear refuge. Building management/trained staff members will assist the person with reduced mobility to reach an ultimate place of safety.

A muster point is to be identified so that in the event of a fire, all building occupants can escape to a fixed location. This will need to be outside of the building and in an ultimate place of safety. It is recommended that this is positioned in a safe place at the front of the building.

Firefighting access will be achieved using either 15% of the perimeter access or 45m hose coverage taken from the fire tender hardstanding area to the furthest point, whichever is the least onerous for buildings under 2000m².

For buildings that exceed 2000m² but less than 8000m², 15% perimeter access is to be provided with a height less than 11m and 50% for buildings over 8000m² and under 11m in height.

2.8 Section 8: Issues which might affect the fire safety of the development

The following issues are noted as departures that require gaining the approving authorities sign-off.

1. Because the buildings have a change of use they will need to be reviewed and approved under the requirements of the Building Regulations. They will therefore be subject to a detailed review and remedial works as necessary.

2.9 Section 9: Local development document policies relating to fire safety

There are no specific fire safety policies within Richmond's adopted or emerging Local Plans.

The project is located within the Greater London Authority (GLA) region and therefore should support the design intent of the London Plan Sections D12, Policy D5 (Inclusive Design Part B (5), and Policy D11 (Safety, Security, and resilience to emergency).

2.10 Section 10: Fire service site plan

The fire service will have the ability to park on hardstanding directly outside the building, with sufficient perimeter access and hose coverage limited to 45m for small buildings under 2,000m².

Larger buildings exceeding 2000m² will adopt the same strategy but will require 15% - 50% perimeter access. Hose laying routes from the fire service tender to reach the furthest point on the plan, when measured on suitable ground. From inspection of the plans, this is achieved.

The design team will provide a site plan with the hydrant locations for the site/area as part of Section 12 and Section 14. Figure 4 below shows the indicative hardstanding area and approximate building entrance points.

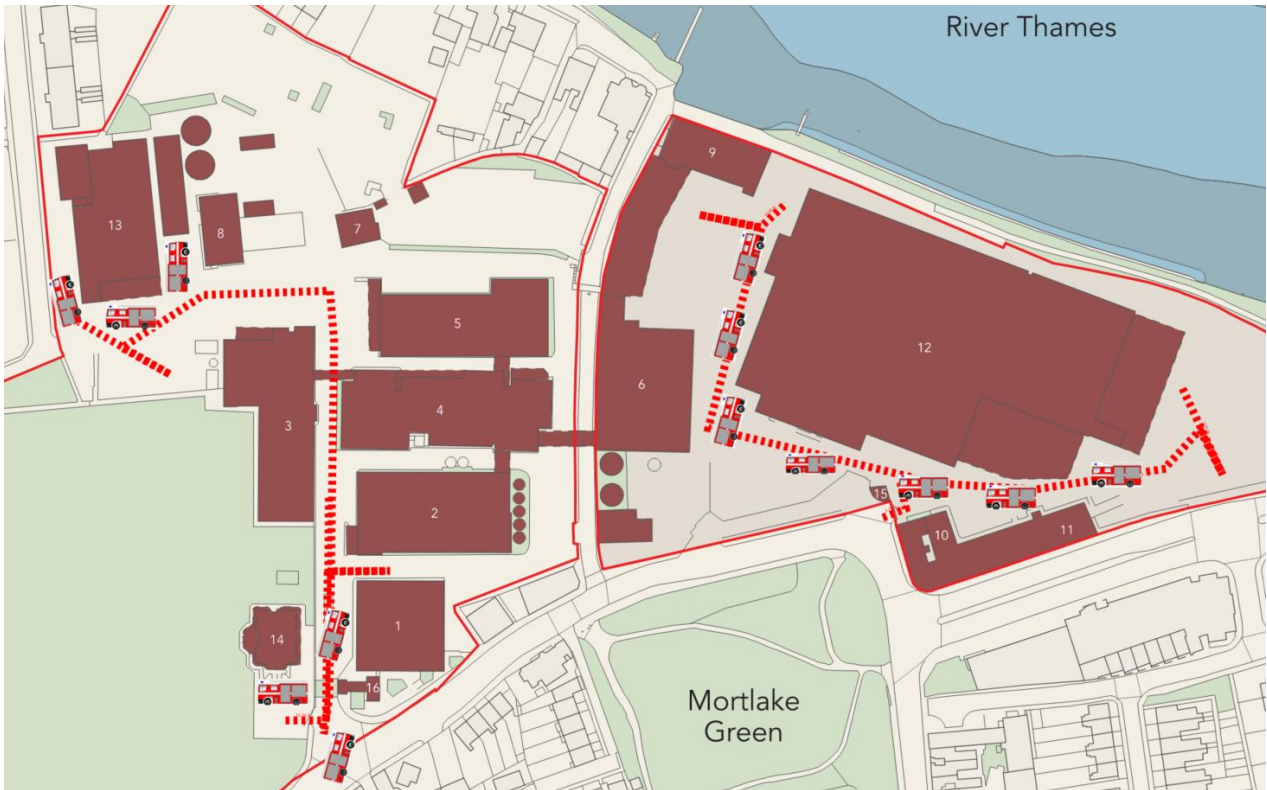


Figure 4: Indicative fire tender access points with perimeter access

2.11 Section 11: Emergency road vehicle access

Firefighting access is key for successful firefighting and therefore the appropriate provisions must be made regarding site access.

Table 3: Pump appliance access route requirements

<i>Appliance Type</i>	<i>Min. width of road between kerbs</i>	<i>Min. width of gateways</i>	<i>Min. turning circle between kerbs</i>	<i>Min. turning circle between walls</i>	<i>Min. clearance height</i>	<i>Min. carrying capacity</i>
<i>Pump</i>	3.7	3.1	16.8	19.2	3.7	12.5*
<i>High Reach</i>	3.7	3.1	26.0	29.0	4.0	17.0*

Note: * The minimum carrying capacity should be checked with the local fire brigade.

Any access gates that the fire and rescue service vehicle must pass required to be provided with a fire brigade lock only (no other padlocks or locking devices are permitted).

Every elevation to which vehicle access is provided should have a door no less than 750mm wide, to give access into the building. The maximum distance between doors, or between a door and the end of the elevation, is 60m (e.g. a 150m elevation would need a minimum of two doors).

For small buildings up to 2000m² in floor area (i.e. Buildings 11, 14, 15 & 16) having a top occupied storey less than 11m above ground level, vehicle access for a pump appliance should be provided to whichever is the less onerous:

- a. 15% of the perimeter.
- b. Within 45m of every point of the footprint of the building

For Buildings 1 & 13, with a sum of floor areas greater than 2000m² but less than 8,000m², 15% perimeter access is to be achieved.

For Building 12 with a sum of floor areas greater than 8000m² but under 16,000m², 50% perimeter access is to be achieved.

Due to the nature of the buildings having large open plan floor plates and with a top occupied floor less than 11m, then no less than 15% perimeter access will be achieved for buildings with a floor area less than 8000m² and 50% for buildings less than 16,000m².

Building 10, being a former hotel is considered to have a fire main serving all floor levels. This will allow for a dry riser with a 45m hose coverage allowance on each floor level. The dry riser inlet position is to be within 18m of the fire engine and is to be visible from the fire tender hardstanding location and designed and installed in accordance with BS 9990.

Table 15.1 Fire and rescue service vehicle access to buildings not fitted with fire mains

Total floor area ⁽¹⁾ of building (m ²)	Height of floor of top storey above ground (m) ⁽²⁾	Provide vehicle access to:	Type of appliance
Up to 2000	Up to 11 Over 11	See paragraph 15.1 15% of perimeter	Pump High reach
2000–8000	Up to 11 Over 11	15% of perimeter 50% of perimeter	Pump High reach
8000–16,000	Up to 11 Over 11	50% of perimeter 50% of perimeter	Pump High reach
16,000–24,000	Up to 11 Over 11	75% of perimeter 75% of perimeter	Pump High reach
Over 24,000	Up to 11 Over 11	100% of perimeter 100% of perimeter	Pump High reach

NOTES:

1. The sum of the area of all storeys in the building (excluding basements).
2. For storage buildings (purpose group 7(a)), measure height to mean roof level (see Appendix D).

Figure 5: Fire Service Perimeter Access Requirements (ADB- Vol2)

2.12 Section 12: Siting of fire appliances

Siting of the fire appliances will be in front of the main entrance to each building. This has been illustrated in Figure 4. This is the current firefighting access which is satisfactory for the proposed change of use.

2.13 Section 13: Suitability of water supply for the scale of development proposed

Existing public hydrant locations for the site are required to be checked and new hydrants provided if required to ensure hydrants are located within 90m of an entry point to the building and not more than 90m apart. From inspection of the received markup, the hydrants are considered within satisfactory distance from the building entrance.

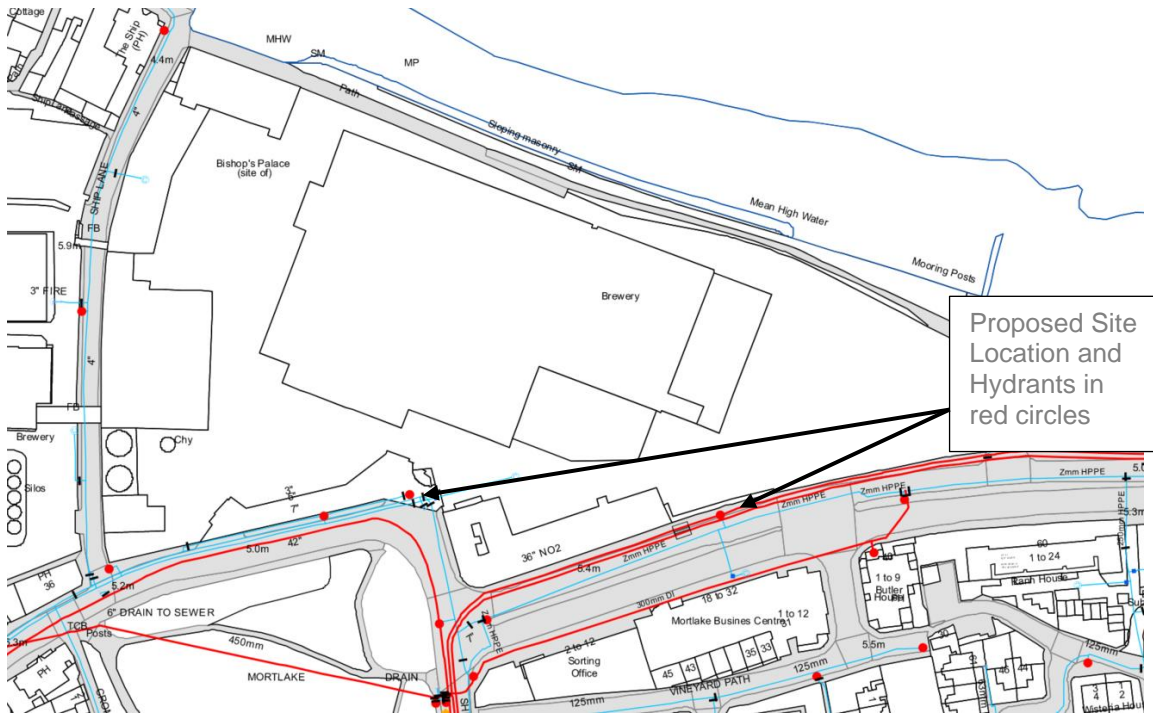


Figure 5: Approximate fire hydrant points (Provided by Site Team)

2.14 Section 14: Fire service site plan

The design team will provide a site plan as stated in Section 12. See also Figure 4.

2.15 Section 15: Signature

The following overview has been produced by Daniel Taylor.

D. Taylor

2.16 Section 16: Date

The following fire safety statement is dated **08/06/2022**.

2.17 Conclusion

Having reviewed the documentation issued to Marshall Fire Ltd by Squire & Partners LLP Architects and Dartmouth Capital Advisors Ltd, we agree with the overall design proposals and conclusion presented in the Stag Brewery brochure and survey plans are deemed to satisfy the preliminary fire safety design and comply with Policy D12 with respect to an existing building and for the change of use from Industrial to Commercial Use.

The London Plan requests that the 'Highest Standards of Fire Safety' be considered and therefore property protection whilst not a Building Regulation requirement may be considered to increase the life safety and fire safety of the building.

The existing firefighting access will be retained and supported by perimeter access.

There are no proposed works to be carried out on the buildings and therefore no change to the life safety provisions with external film sets and internal sets being created. (Set layouts are outside of the scope of works and are unknown but will adhere to the outline fire safety for the building(s)).

We would however reiterate that the findings are limited to the information reviewed only and the installation, maintenance and ongoing maintenance are not our responsibility.

3. Fire Safety Management

The primary focus of this strategy is on two groups, the persons present in the building (and the provisions associated with ensuring safe egress), and on fire-fighter protection.

Regulation 38 of the Building Regulations requires that the Fire Strategy be brought to the attention of building management and incorporated into the risk assessment that will have to be carried out post occupation under the Regulatory Reform (Fire Safety) Order together with staff training, systems maintenance etc. and documented.

The Regulatory Reform (Fire Safety) Order 2005 requires that systems provided for fire safety are maintained in good working order at all times. This includes firefighting equipment together with other facilities to be provided for the safety of people in the building and to help firefighters.

At completion of the project the following information is recommended to be passed onto the responsible person where applicable:

- The Fire Strategy
- All design assumptions relating to the management of the building (where not included in the Fire Strategy)
- Escape routes, escape strategy and muster points
- Details of all passive fire safety measures including compartmentation, cavity barriers, fire doors, self-closing fire doors and other doors equipped with relevant hardware (e.g. access controls), duct dampers and fire shutters.
- Fire detector heads, smoke detector heads, alarm call-points, detection/alarm control panels, alarm sounders, emergency communication systems, CCTV, fire safety signage, emergency lighting, fire extinguishers, wet risers and other firefighting equipment, other interior facilities for the fire service, emergency control rooms, location of hydrants outside the building, other exterior facilities for the fire service.
- Details of all active fire safety measures including:
 - Smoke control system(s) (or HVAC system with a smoke control function) design, including mode of operation and control systems.
 - Any high risk areas (e.g. heating machinery) and particular hazards
 - As built plans of the building showing the locations of the above items.
 - Specifications of any fire safety equipment provided, including operational details, operators manuals, software, system zoning and routine inspection, testing and maintenance schedules. Records of any acceptance or commissioning test.
 - Any provision incorporated into the building to facilitate the evacuation of disabled people.
- Any other details appropriate for the specific building.

This information is mainly provided in the form of as built plans, but supplemented in this case by the Fire Strategy, i.e. this document. Using this information the “responsible person” should ensure a fire risk assessment is carried out for the building. It is recommended that this is recorded, kept with the other information indicated in this document and updated on a regular basis or when any significant change is made to the fire risk or facilities in these areas.

4. References

- i.** Approved Document B, Volume 2, 2019 + 2020 amendments – Other than Dwellings
- ii.** Fire Statement Guidance, Annex D Gov.co.uk
- iii.** BS 5839-1:2017, Fire detection and fire alarm systems for buildings. Code of practice for system design, installation, commissioning and maintenance.
- iv.** BS 9990:2015, Non automatic fire-fighting systems in buildings. Code of practice.
- v.** BS 476 series: 1987, Fire tests on building materials.
- vi.** BS EN 1366-3:2009, Fire resistance tests for service installations. Penetration seals.
- vii.** BR 187: 2014 External Fire Spread Building Separation and Boundary Distances.
- viii.** London Plan Guidance, Fire Safety Policy D12(A), March 2021 Pre-consultation draft