BURO HAPPOLD

The AELTC Wimbledon Park Project

Fire Statement

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Revision P04

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1 Introduction

1.1 Overview

This Fire Statement has been prepared by Buro Happold on behalf of the All England Lawn Tennis Ground PLC (AELTG) ('the Applicant') in support of a hybrid planning application relating to Wimbledon Park Golf Course, Home Park Road, London, SW19 7HR ('the Site'). The AELTG herein are referred to as The All England Lawn Tennis Club (AELTC) and the proposed development is referred to as the AELTC Wimbledon Park Project, herein shortened to 'WPP'.

The AELTC acquired Wimbledon Park Golf Club in the 1990s and, in December 2018, it bought the remaining term of the lease from the golf club. This has significantly increased the clubs' landholdings and provides the opportunity to host the Wimbledon Qualifying Event at the expanded site. Currently, the Wimbledon Qualifying Event is hosted at the Bank of England Sports Centre in Roehampton; however, with use of this facility relying on a short fixed term lease, the AELTC are seeking to bring Qualifying to the SW19 site to assist with delivering their long-term vision and strategy, which is centred on two core objectives:

1. To maintain the Wimbledon Championships as the premier tennis tournament in the world and on grass; and
2. To deliver a positive impact for their local, national, and international communities.

In summary, the proposed development is an ambitious and significant expansion of the AELTC's grounds into the neighbouring golf course, which aims to provide an unrivalled player and spectator experience. Alongside this, the proposal aims to deliver significant benefits and a positive impact for the clubs local, regional, and national communities. Further details of the proposed development and the public benefits that will be delivered are set out within the Planning Statement and the Design and Access Statement.

The planning application is submitted in hybrid format, which means that some elements of the proposed development are applied for in detail, whilst others are in outline with certain elements reserved for future consideration.

Following discussions with the GLA in June 2024, further information has been provided as part of the P04 update. These changes are shown in blue for clarity and ease of reference.

This is summarised below:

Detail:

- Provision of 38 grass tennis courts and associated infrastructure.
- Associated reprofiling of the landscape and the removal, retention, and re-planting of trees.
- Provision of 7no. satellite maintenance buildings.
- Construction of a boardwalk around the perimeter of and across Wimbledon Park Lake.
- Improvements to the water quality of Wimbledon Park Lake through de-silting and enhancements to biodiversity of the lake edge.
- Consolidation of pedestrian access points at the northern and southern ends of the site.
- Creation of a new area of parkland with permissive public access.

Outline:
The erection of new buildings and structures including

- 8,000-seat Parkland Show Court incorporating qualifying hub and guest facilities.
- A Central Grounds Maintenance Hub.
- Service and utility tunnel under Church Road, and
- 2no. players hubs.

Further detail of the proposed development is set out within the supporting documentation, including the Design and Access Statement, existing and proposed plans and Design Codes.

1.2 Development description

The AELTC grounds are located in Wimbledon in the north-west of the London Borough of Merton.

The AELTC's new Estate Master Plan site extends to 76 hectares and comprises the existing AELTC grounds along Church Road, Wimbledon Park Golf Course and Wimbledon Lake, with the latter coming under the freehold ownership of LB Merton. Most of the site is in LB Merton, with a section to the north situated in LB Wandsworth.

Notwithstanding the location and extent of the wider AELTC landholding, the proposals submitted herewith relate only to Wimbledon Park Golf Course, with the existing AELTC grounds on the opposite side of Church Road excluded from the application boundary. Wimbledon Park Lake and a section of Church Road also fall within the application boundary but are controlled by LB Merton as Landowner. The application Site extends to approximately 39.7 hectares, as shown in Figure 1—1. The figure also shows proposed tunnel (Church Road Service Tunnel) and basements (Parkland Show Court and Central Grounds Maintenance Hub) that are part of the development.

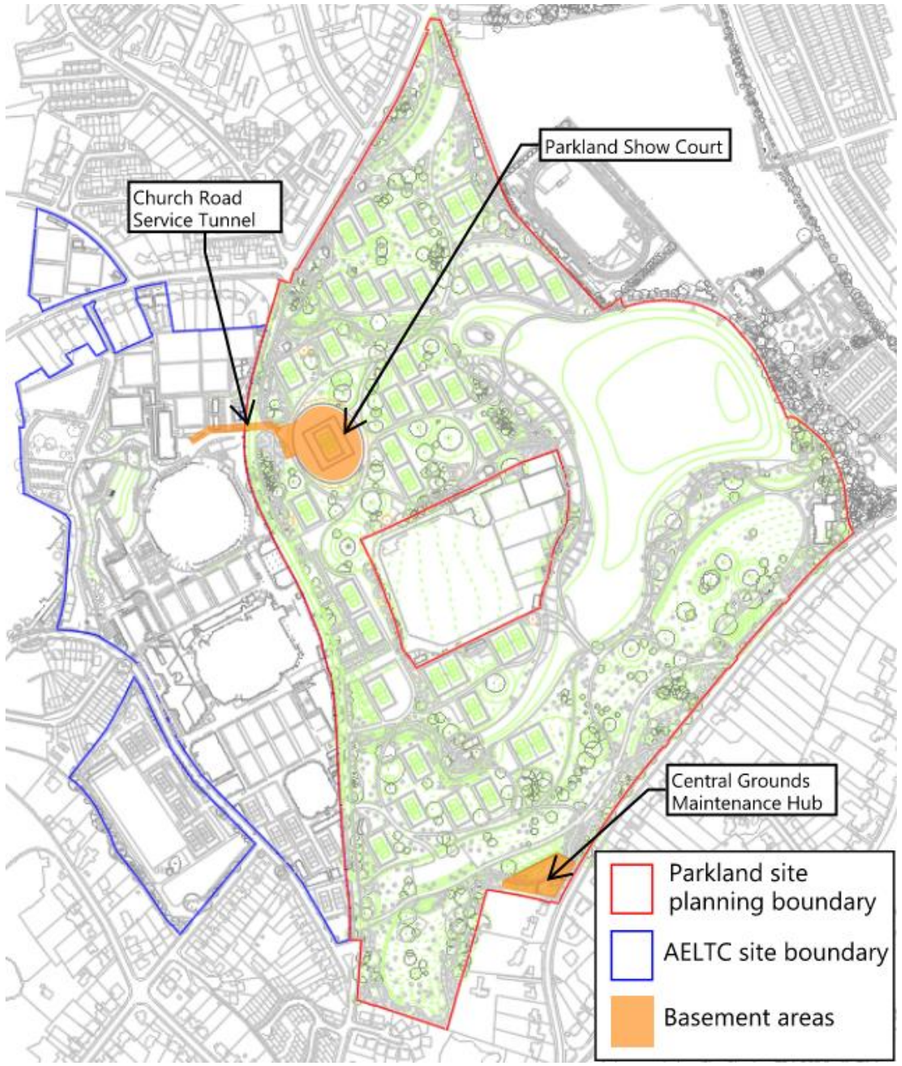

Figure 1—1 The Site

1.3 Fire Statement

By virtue of the overall site area, the scheme will be classified as a 'major development' under the London Plan 2021[1] (see below). Accordingly, this report documents the Fire Statement required for compliance with Policy D12 of the London Plan, and is intended as a supporting document to be provided as part of the client's planning application for the scheme.

As part of the Fire Statement, this report describes the key site-wide strategic fire safety measures that will need to be considered during design development. The principles set out are intended to be commensurate with the level of detail required at RIBA Work Stage 2. As such, this report is not intended to provide a detailed specification or design, and reference should be made to the relevant guidance documents (e.g. Approved Document B, the Green Guide, applicable British Standards, etc.) during design development.

In some cases, The London Plan requests information – such as details of specific construction materials or products – that is more detailed than that which is typically available at the planning application stage. In these cases, this report instead sets overall objectives and highlights aspects that will require further specific, review as the scheme progresses.

1.4 The London Plan

The London Plan sets out the Mayor's overall strategy for development in London to meet with the requirements of the Greater London Authority Act 1999 and the Town and Country Planning (London Spatial Development Strategy) Regulations 2000.

The London Plan is legally part of each of London's Local Planning Authorities' Development Plan and must be taken into account when planning decisions are taken in any part of Greater London.

The Plan is divided into chapters covering items such as housing, transport, infrastructure, and building design. Each chapter comprises a number of policies intended to deliver the Plan's overall objectives for that specific aspect. Fire safety is covered under Policy D12 in Chapter 3. Means of escape for mobility impaired persons is also covered under Policy D5(B5).

1.4.1 Policy D12 Fire Safety

Due to the size of the site, the scheme will be classed as a 'major development' and thus both parts A and B of Policy D12 will apply. The requirements of parts A and B are set out in the tables below, along with the sections of this report which address each item.

Draft guidance on compliance with Policy D12 has been published by the Greater London Authority[2, 3] and has been used as the basis for this report.

1.4.2 Policy D5(B5) Inclusive Design – Evacuation lifts

Policy D5(B5) applies to all development proposal applications. Draft guidance published by the Greater London Authority[4] has been referenced when developing the recommendations in sections 4 and 6 of this report.

Table 1—1 Requirements under Policy D12(A) and corresponding report sections

London Plan Policy D12(A) *In the interests of fire safety and to ensure the safety of all building users, all development proposals must achieve the highest standards of fire safety and ensure that they:*	**Report section(s)**
1) identify suitably positioned unobstructed outside space: *a) for fire appliances to be positioned on.* *b) appropriate for use as an evacuation assembly point.*	Section 8.1 Section 4.9 Section 5
2) are designed to incorporate appropriate features which reduce the risk to life and the risk of serious injury in the event of a fire; including appropriate fire alarm systems and passive and active fire safety measures	Section 4 Section 6 Section 7
3) are constructed in an appropriate way to minimise the risk of fire spread.	Section 6 Section 7
4) provide suitable and convenient means of escape, and associated evacuation strategy for all building users.	Section 4
5) develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.	Section 4 Section 5
6) provide suitable access and equipment for firefighting which is appropriate for the size and use of the development	Section 8

Table 1—2 Requirements under Policy D12(B) and corresponding report sections

London Plan Policy D12(B) *All major development proposals should be submitted with a Fire Statement, which is an independent fire strategy, produced by a third party, suitably qualified assessor. The statement should detail how the development proposal will function in terms of:*	**Report section(s)**
1) the building's construction: methods, products and materials used, including manufacturers' details.	Section 2.2 Section 6.4 & 6.5 Sections 7.1 & 7.4
2) the means of escape for all building users: suitably designed stair cores, escape for building users who are disabled or require level access, and associated evacuation strategy approach.	Section 4
3) features which reduce the risk to life: fire alarm systems, passive and active fire safety measures and associated management and maintenance plans.	Section 4 Section 6 Section 7
4) access for fire service personnel and equipment: how this will be achieved in an evacuation situation, water supplies, provision and positioning of equipment, firefighting lifts, stairs and lobbies, any fire suppression and smoke ventilation systems proposed, and the ongoing maintenance and monitoring of these.	Section 8 (also Sections 5 & 6)
5) how provision will be made within the curtilage of the site to enable fire appliances to gain access to the building.	Section 8.1
6) ensuring that any potential future modifications to the building will take into account and not compromise the base build fire safety/protection measures.	Section 2.3 Section 5 Section 8.4

[1] The London Plan – The Spatial Development Strategy for Greater London. Greater London Authority, March 2021
[2] London Plan Guidance – Fire Safety Policy D12(A). Greater London Authority, Pre-consultation draft March 2021
[3] Draft London Plan Guidance Sheet – Policy D12(B) Fire Statements. Greater London Authority, July 2020
[4] Draft London Plan Guidance Sheet – Policy D5(B5) Evacuation Lifts. Greater London Authority, July 2020

2 Description of Proposals

2.1 Site Layout and Buildings

As noted above, Wimbledon Park Project site extension will comprise: a new Wimbledon show court; a series of satellite hub buildings providing maintenance and player / public facilities; a Central Grounds Maintenance Hub building; and a number of open-air tennis courts, as shown in Figure 2—1.

The characteristics of the new buildings are summarised in Table 2—1. The Parkland Show Court is described at 2.1.3.

Table 2—1 Summary of new maintenance and player buildings on site

Reference: (see Figure 2—1)	Name	Use	Storeys	Maximum dimensions on plan (excluding yards)
H1	Maintenance Hub 1	Electrical plant, storage, toilets. External yard.	Single storey	10m x 9m Footprint: 80m²
H2	Maintenance Hub 2	Electrical plant, storage, toilets. External yard.	Single storey	23m x 13m Footprint: 208m²
H3	Maintenance Hub 3	Electrical plant, pump room, storage, toilets. External yard.	Single storey	11m x 8m Footprint: 70m²
H4	Maintenance Hub 4	Electrical plant, storage, toilets. External yard.	Single storey	10m x 9m Footprint: 80m²
H5	Maintenance Hub 5	Electrical plant, pump room, storage, toilets. External yard.	Single storey	11m x 10m Footprint: 103m²
H6	Maintenance Hub 6	Electrical plant, pump room, storage, toilets. External yard.	Single storey	24m x 5m Footprint: 99m²
H7	Maintenance Hub 7	Electrical plant, storage, toilets. External yard.	Single storey	19m x 8m Footprint: 87m²
CMH	Central Grounds Maintenance Hub	Workshops, storage for maintenance equipment / vehicles at lower level. Offices and staff welfare facilities above.	Lower & upper ground – see section 2.1.2	80m x 55m Footprint: 2400m² (lower ground); 530m² (upper ground)
PHN	Northern Player Hub	Player changing / welfare facilities including lounge	Single storey	30m x 13m Footprint: 275m²
PHS	Southern Player Hub	Player changing / welfare facilities including lounge	Single storey	20m x 9m Footprint: 185m²

2.1.1 Access points, circulation routes and open-air tennis courts

The main pedestrian access points to the site during events will be via canopied 'Gateway' areas to the north and south, where ticket / security checks will be carried out.

Several other vehicular and/or pedestrian access points will be available via Church Road & Wimbledon Park Road to the west and north; and Home Park Road to the east and south.

The open-air tennis courts and site buildings will be connected by a series of pathways and open park areas. The new open-air courts will host the Qualifying Event as well as provide practice courts for The Championships. Branches from the paths will extend along one side of each court to provide viewing spaces for spectators.

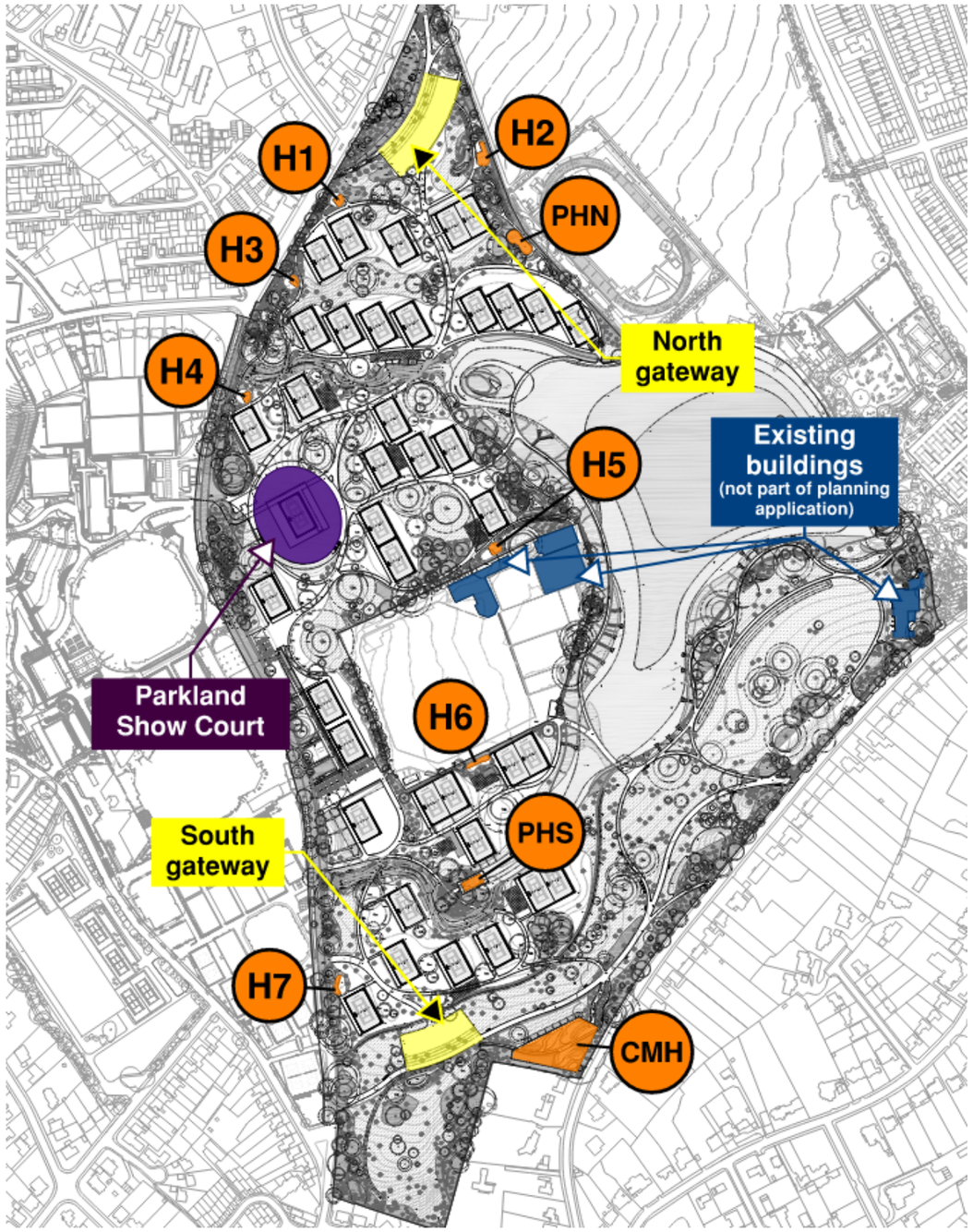

Figure 2—1 Schematic plan of site showing building locations for reference with Table 2—1

Note: The existing buildings marked in Figure 2—1 are not in scope of the planning application. They are included in this report only for the purpose of demonstrating that their fire service access and external fire spread provisions will not be adversely affected by the works.

2.1.2 Central Grounds Maintenance Hub (CGMH)

The Central Grounds Maintenance Hub (CGMH) building will comprise two levels built into a natural hill. Both floors will have level access direct from outside along the front elevations of the building to the north. However, both levels will also be below the adjacent ground level to the south and south-east (-4.5m for the upper level; -9m for the lower level).

Due to the presence of maintenance tractors, buggies, mowers, etc. the lower ground level will be treated as a car park for the purposes of the fire strategy and smoke ventilation design.

The CGMH is at the outline stage but – as initial drawings have been made available and the building will be based on similar design principles to the smaller Hub buildings – the key strategic fire safety measures for the CGMH are also included in this report.

2.1.3 Parkland Show Court

The new Parkland Show Court will have a seating capacity of up to 8,000 persons and will also include ancillary plant, storage, and staff facilities at a basement level.

Current proposals indicate that the stadium will have dimensions on plan of approximately 95m x 80m, with a footprint of ~6,100m^2 and a façade height of approximately 18m.

The Show Court design is at the outline massing stage and will be the subject of a subsequent detailed planning application and outline fire strategy. As such, it is not covered in detail by this report beyond its impact on the surrounding Hub buildings (e.g. in terms of space separation for external fire spread and the potential impact on pathway widths). It is expected that further information regarding the fire strategy for this building will be provided at reserved matters stage.

2.2 Building Materials and Construction Methodology

Details regarding specific construction materials and methodology are still in development. However, indicative information and commentary is provided below.

2.2.1 Satellite Maintenance Hubs and Player Hubs

Given the presence of electrical distribution plant such as transformers and HV switchrooms, it is likely that structure and walls of the Maintenance Hub buildings will be formed from blockwork / concrete.

Sedum roofs are proposed and - although not part of the building fabric itself - timber screening is also proposed around each hub building and associated yard. These items are discussed further in section 7.

The structure of the Player Hubs will likely be formed from blockwork / concrete with timber elements, including parts of the facade. The Northern Player Hub will also likely incorporate a sedum roof. These elements are discussed further in section 7.

2.2.2 Central Grounds Maintenance Hub

It is likely that structure of the Central Grounds Maintenance Hub will be formed from blockwork / concrete. The upper level offices may incorporate a timber and glazed façade which is discussed further in section 7.

2.2.3 Parkland Show Court

The structure of the new Show Court will likely be formed from concrete. However, it is understood that elements of timber frame structure and ‘green wall’-type screening are also being considered. This is discussed further in sections 6 and 7.

2.3 Future Development and Usage Control

On project completion, in accordance with Building Regulation 38, an as-built fire safety strategy and associated drawings, systems information, etc. must be provided to the occupier. This will provide a basis for the Responsible Person’s ongoing fire risk assessment and Fire Safety Management Plan for the site.

Any future material alteration, change of use or building work on the site will be subject to a separate Building Regulations application and, potentially, planning consent. This will again involve consultation with the approvals / enforcement bodies.

Whether or not a modification to the site is subject to Building Regulations or planning consent, its impact on the fire risk assessment must be reviewed and recorded by the operator under The Regulatory Reform (Fire Safety) Order 2005.

It is understood that the park grounds may use temporary structures during The Championships and Qualifying Event. Details are not available at this stage but any such structures and other temporary events will be the subject of separate Building Regulations / planning applications / specific fire risk assessments, as necessary, and must be subject to a specific Event Management Plan.

3 Fire Safety Objectives and Design Guidance

The principal aim of the fire safety strategy will be ensuring an adequate level of life safety for occupants within the development to meet with statutory requirements.

3.1 Satellite Hub Buildings and Central Grounds Maintenance Hub

3.2 Building Regulations

For the Maintenance & Player Hub Buildings and Central Grounds Maintenance Hub the main fire safety requirements will be derived from Part B of the Building Regulations of England and Wales[5].

3.2.1 Guidance

Standard guidance on compliance with the requirements of Part B of the Building Regulations is presented in Approved Document B (ADB)[6]. However, there is no obligation to adopt the recommendations given in ADB if the functional requirements of the Regulations are met in some other way.

In this case, the fire safety strategy for the smaller Hub buildings and the Central Grounds Maintenance Hub will be based on the alternative guidance in BS 9999[7]. This guidance allows for a more flexible but codified approach to fire safety design which takes into account the occupancy characteristics, fire loading, physical properties (i.e. size and height) and the additional fire safety features that will exist within a development. In our opinion, this will allow a pragmatic design to be developed whilst providing a level of safety consistent with the functional requirements of the Building Regulations.

Where the prescriptive solutions in BS 9999 are considered to be unduly restrictive or inappropriate, performance-based solutions will be development using fire engineering judgement and methodologies (e.g. the BS 7974 series of documents). The above approach will need to be agreed with the approvals bodies at the earliest opportunity.

3.3 Regulatory Reform (Fire Safety) Order

The Regulatory Reform (Fire Safety) Order 2005 (RRO)[8] is the primary legislation that controls fire safety in buildings once they are completed.

Responsibility for compliance with the RRO will rest with the "Responsible Person". This will usually be the main employer (e.g. the site operator) together with persons who may have control of other parts of the premises (e.g. an estates and facilities contractor). The RRO requires that the Responsible Person maintains an adequate level of fire safety on the premises by fulfilling duties such as:

- carrying out a fire risk assessment;
- implementing suitable fire safety management controls and staff training;
- providing appropriate first-aid fire-fighting equipment and evacuation aids; and
- ensuring that fire safety systems and those with an impact on fire safety (e.g. electrical installations) are inspected and maintained by competent persons.

In order to comply with the RRO the Responsible Person must ensure that a fire risk assessment is in place following handover of the site, which considers the elements above.

3.4 Non-Life Safety Issues

Most fire safety legislation is concerned only with protecting the health and safety of people in and around a building. It is not specifically intended to provide protection of property or business continuity. However, the guidance to Policy D12 of the London Plan also refers to providing fire safety systems to ensure the protection of property.

Measures for life safety will often provide an element of property protection. In this case, the nature of the Hub buildings and the design guidance adopted mean that there will be a significant degree of fire compartmentation and enclosure of fire risk rooms in construction having a higher period of fire resistance than the minimum required by the statutory guidance in ADB (see section 6). Additionally, automatic fire detection and alarm systems are proposed for these buildings which in most cases exceeds the minimum recommendations of BS 9999 and ADB.

In our opinion, in accordance with the London Plan, these measures will increase the levels of property protection during a fire. Nonetheless, it is recommended that the client and other stakeholders (e.g. insurers) give consideration to a separate study regarding property protection, business continuity and environmental impact in the event of a fire.

3.5 Parkland Show Court

As well as the Building Regulations and RRO, the Show Court will also be subject to the Safety of Sports Ground Act (SGSA). Standard guidance on compliance with the SGSA is available in the 'Green Guide'[9]. The outline fire strategy based on this guidance will be provided as part of a subsequent detailed planning application for the Show Court, and will be developed in detail as the scheme progresses

[5] The Building Regulations 2010 (as amended). SI 2010 No. 2214. The Stationery Office Limited. 2010
[6] The Building Regulations 2010, Approved Document B: Fire Safety – Volume 2: Buildings other than dwellings, 2019 edition incorporating 2020 amendments. RIBA Publishing. 2020
[7] BS 9999:2017. Fire safety in the design, management and use of buildings – Code of practice
[8] Regulatory Reform (Fire Safety) Order 2005. SI 2005 No. 1541. The Stationery Office Limited. 2005
[9] Guide to Safety at Sports Grounds, Sixth Edition. Sports Grounds Safety Authority. 2018

4 Means of Escape and Assembly Points

4.1 Risk Profile of Buildings

BS 9999 recommends different fire safety measures based upon an assessment of the 'risk profile'. The risk profile for a given building or area takes into account both the nature of the occupancy, and the anticipated severity and potential spread of any fire in its early stages.

In accordance with Table 2 and Table 3 of BS 9999, the risk profile within the various buildings / areas will be as follows:

4.2 Table 4—1 Risk profile of buildings / areas

4.3 Building	4.4 Area	4.5 Risk profile	4.6 Comments
Maintenance Hubs	Storage and plant	**A3**: awake and familiar occupants; fast fire growth rate.	-
	Public / player toilets	**B1**: awake and unfamiliar occupants; slow fire growth rate.	-
Central Grounds Maintenance Hub	General maintenance equipment parking areas and offices	**A2**: awake and familiar occupants; medium fire growth rate.	Based on classification of lower ground as a car park.
	Storage and workshop rooms	**A3**: awake and familiar occupants; fast fire growth rate.	-
Player Hubs	Player changing / welfare facilities including lounge	**B3**: awake and unfamiliar occupants; fast fire growth rate.	Worst case assumption based on locker / storage of player equipment.

4.7 Evacuation Strategy

Each standalone building will operate a separate and independent evacuation strategy. The means of escape from the Hub buildings and CGMH will be based on a simultaneous evacuation strategy.

The fire alarm protocol for the CGMH may incorporate an investigation period subject to further review.

4.8 Exit Widths and Travel Distances

The number of exits, minimum clear escape widths and travel distances will be in accordance with Section 5 of BS 9999, taking account of the provision of an automatic fire detection and alarm system.

4.8.1 Maintenance Hub Buildings

The minimum escape provisions for the Maintenance Hub Buildings are outlined in Table 4—2.

Table 4—2 Summary of key escape provisions for Maintenance Hubs

Building	Area (risk profile)	Number of exits and minimum clear width	Maximum (internal) travel distances (m)
Maintenance Hubs	Store rooms (A3)	Single exit indicated: 850mm	Single direction: 18m
	Plant rooms (A3)	Single exit indicated: 850mm	Single direction: 18m (reduced to 9m in places of special fire hazard)
	Public / player toilets (B1)	Single exit indicated: 850mm	Single direction: 27.6m

4.8.2 Central Grounds Maintenance Hub

The maximum travel distances from the general lower ground parking areas and upper ground offices will be 25.3m in a single direction, and 63.25m where more than one direction is available. The maximum travel distances within individual workshops and storage rooms will be reduced to 18m and 45m, respectively.

Based on a standard floor space factor for storage areas (30m^2/person), the total design occupancy for the lower ground of the CGMH will be **80 persons**.

The maximum design occupancy for the upper ground floor will depend whether (and to what extent) the ancillary staff changing / welfare facilities are used at the same time as the offices and meeting room. At this stage, the design occupancy is based on applying a floor space factor of 6m^2/person to the main office and ancillary facilities; and a floor space factor of 1m^2/person to the meeting room. On this basis, the total design occupancy for the upper ground floor will be approximately **120 persons**.

Therefore, a minimum of two exits will be required from each level, each having a minimum clear width of 850mm.

Doors from individual rooms should have a minimum clear width of 850mm.

It is expected that details for the CGHM will be subject to further review and will be covered in more detail at the reserved matters stage.

4.8.3 Player Hubs

The maximum travel distances will be 16m in a single direction and 40m where more than one direction is available.

Assuming a design occupancy of approximately 60 persons, at least two exits will be required from a Player Hub, each having a minimum clear width of 6mm/person, or 850mm overall (whichever is greater). This will provide exit capacity for up to approximately 80 persons.

It is expected that details for the Player Hubs will be subject to further review and will be covered in more detail at the reserved matters stage.

4.8.4 Parkland Show Court

The widths required for each part of the exit system from the Show Court will depend upon factors such as the Green Guide risk classification of the spectator areas and escape routes, the number of vomitories discharging into a route, whether the routes are level or stepped, and whether or not a route needs to be discounted.

The arrangements will be subject to a separate review and detailed planning application at the reserved matters stage. However, for the purposes of the site-wide fire strategy, indicative overall exit width requirements are outlined below.

For a spectator capacity of 8,000 persons, stepped vomitories, and assuming that all routes are available, the required aggregate escape width from the stadium could be in the order of at least:

- 16m - based on a 'low risk' classification (see Green Guide Section 15.8 et seq.) with an 8-minute escape time;
- 21m - 'medium risk' / 6-minute escape time; or
- 49m - 'high risk' / 2.5-minute escape time.

The exit widths should be distributed proportionately around the stadium.

4.9 Assembly Points and External Escape Routes

4.9.1 General recommendations

There is very little specific guidance regarding assembly points in BS 9999 and other fire safety design codes. However, further information is available in the series of risk assessment guides published by HM Government[10, 11]. Our general recommendations for assembly points are as follows:

- An assembly point should be in the open air and remote from the building it serves and any associated fire risks;
- Assembly points should be clearly identifiable by appropriate signage;
- The routes from final exits to the assembly points should be well-defined and ensure a safe and rapid dispersal of occupants from the vicinity of the building;
- External escape routes and assembly points should have sufficient artificial lighting that will continue to illuminate the route should main power supply fail;
- External escape routes and assembly points should not hinder emergency services access or staging areas;
- Assembly areas should be sized to accommodate the likely number of occupants evacuated in a fire scenario and, for the Show Court in particular, a non-fire related evacuation; and
- For external events the assembly points should be outside the event boundary, where this is appropriate.

The location and use of assembly points should be contained within the operator's Fire Safety Management Plan and Emergency Plan, as required under the RRO.

4.9.2 Hub Buildings and Central Grounds Maintenance Hub

Given their size and the nature of their layout and use, dedicated assembly areas should not be necessary for the individual satellite Maintenance Hub buildings, and the significant open park spaces around each Hub will be more than sufficient to accommodate any occupants who may be in these buildings during a fire alarm activation.

Nonetheless, the operator's Fire Safety Management Plan should include a means of accounting for staff, maintenance contractors, etc. in the event of a fire. This may involve reporting to a specific location in each case and/or the use of radio communication.

For the CGMH, a suitable assembly area for staff will be available on the far side of the main pathway to the north and/or near the Southern Gateway as shown in Figure 4—1.

For the Northern Player Hub, a suitable assembly point may be on the grass opposite the pathway to the south of the building. The grounds in the immediate vicinity of the Southern Player Hub appear to have a high density of trees and bushes, so a suitable assembly point may be further along the paths to the north or south of the Hub. Possible assembly locations for both Northern and Southern Player Hubs are shown in Figure 4—2.

4.9.3 Parkland Show Court

A possible range of required escape widths from the Show Court is set out in 4.8.4 above. The width of the escape routes serving the Show Court will need to be maintained by the onward routes through the Parkland site until crowds reach an area where they can disperse.

For sports stadia, it is more common for the egress design to encourage spectators to disperse via, for example, external public realm areas such as roadways (in this case primarily Church / Wimbledon Road). However, current plans indicate significant (~11,000m^2) open park areas and pathways in the immediate vicinity of the stadium which could be used to form crowd reservoir areas, subject to further review. See also section 5 below.

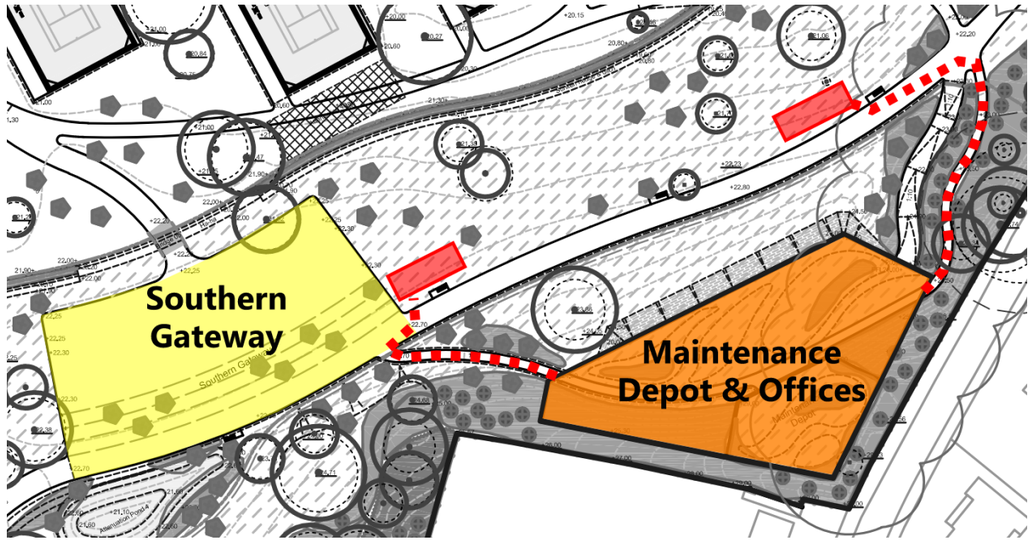

Figure 4—1 Possible assembly point locations, shaded red, for Central Grounds Maintenance Hub

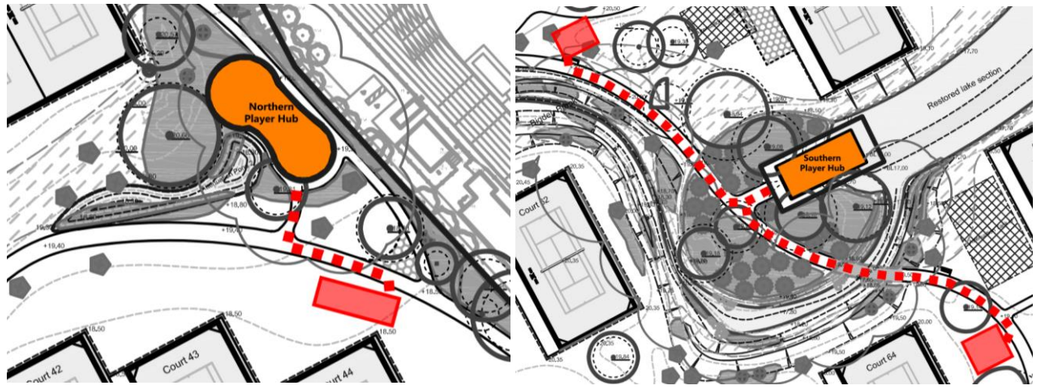

Figure 4—2 Possible assembly point locations, shaded red, for Northern (left image) and Southern (right image) Player Hubs

4.9.4 Impact on Existing Buildings

The main pathways and hardstanding areas around the existing Golf Clubhouse and Wimbledon Club buildings will be retained or extended such that their external escape routes and current assembly points remain available. (Note that the buildings themselves are not in scope of the planning application.)

4.9.5 Occupant and Fire Service Interaction

During a fire incident, the interaction between attending firefighting appliances and crowd flow is required to be carefully managed. The provision of multiple vehicle access points to the site (see section 8), combined with the strategic location of the Maintenance / Player Hub and CGMH assembly points off the main pathways should ensure that fire service access to

[10] Fire risk assessment – Large places of assembly. Department for Communities and Local Government. 2006

[11] Fire risk assessment – Open air events and venues. Department for Communities and Local Government. 2007

any one building is not compromised by occupant evacuation. The arrangements for the Show Court will be subject to a separate detailed review as the scheme progresses.

4.10 Mobility Impaired Occupants

For the single-storey Maintenance Hub buildings, level access direct to outside will be provided for wheelchair users.

4.10.1 Evacuation Lifts

To comply with Policy D5(B5) of the London Plan: if escape from the Central Grounds Maintenance Hub requires use of the rear stair, then at least one evacuation lift should be provided in the escape core of this building.

Each evacuation lift should be accessed via a protected lobby containing a wheelchair refuge which include:

- a clear space of at least 900mm x 1400mm, which does not impede the evacuation of other occupants (e.g. see Figure 4—3); and
- a two-way emergency communication device complying with BS 9999 which communicates with a central monitoring station.

Figure 4—3 Example of wheelchair refuge in lobby

A similar approach will be followed for the Parkland Show Court as part of the detailed design. The number of lifts and refuge spaces will need to be commensurate with the anticipated number of mobility impaired occupants.

4.10.2 Management

In order to meet Building Regulations, a suitable management plan should be put in place to aid evacuation for wheelchair users. Wheelchair user refuges are to be located within each protected stair/lobby, or occupants will evacuate to a point of relative safety into a protected route where refuges are available. A suitable two-way communication system complying with BS 9999 recommendations will be provided to each wheelchair user refuge. Management will need to be aware of wheelchair users within the building and be adequately trained to direct and assist occupants to an appropriate final exit. This might include carry down procedures where there is not an evacuation lift, or procedures where management would wait until the fire has been extinguished, and then, if safe to do so, reach a lift to evacuate.

An appropriate Personal Emergency Evacuation Plan (PEEP) should be put in place to enable staff to be aware of disabled occupants/staff member within the building and be trained on how to assist in evacuating them to safety.

The PEEP should include:

- Individual PEEP for disabled people who are regularly in the premises, for example staff and regular visitors. Following discussions with an individual, a plan can be developed for their specific needs which should contain details of how they will evacuate the premises. By taking into account the individual needs of a person when preparing a PEEP, management are able to make any reasonable adjustments to the premises or procedures that are necessary.

- PEEPs for visitors to the site who will make themselves known to staff. Visitors who are likely to require assistance in the event of an evacuation should be encouraged to make themselves known to staff on arrival. Management should be encouraged to have available, especially at reception, staff who are trained in disability awareness. This makes the process more comfortable for disabled people and more effective for management. The generic PEEPs should provide a wide range of guidance for differing disabilities and be adapted for the individual premises. They should include what the visitor needs to do in an evacuation, and what the management response will be. They should also reflect what specific fire safety provisions are provided for disabled people on the premises, e.g. use of lifts etc. The generic PEEP should be discussed with each visitor and their particular needs taken into account where possible.

- PEEPs for visitors not previously identified to staff. The standard evacuation plan should include measures to make evacuations suitable for all persons on the premises. Information for disabled people should be noted in fire action notices and in the fire management plan. Staff should be trained so that they are aware of the facilities and their responsibility to evacuate disabled people, and know how to use features such as evacuation lifts or refuges. Enough staff should be available at all times to make sure that evacuation plans are viable, such as the use of the evacuation lift to evacuate mobility-impaired people.

5 Other Considerations – Crowd Movement

Although not strictly in scope of the London Plan fire safety policies, some additional items are set out below which can often overlap with fire safety requirements. These items are included for consideration by the design team, operator and other relevant stakeholders.

The Parkland site appears to be able to accommodate sufficient spectator numbers independently of the existing access roads and Wimbledon site. However, the movement of large numbers of spectators into, around and out of the site – under both emergency and normal conditions – will need to be assessed in detail as the scheme develops, particularly as the buildings submitted in outline (principally the Show Court) move into the detailed stage.

These items should be developed in co-ordination with the relevant organisations including police, local authorities, highways agency and property owners.

5.1 Site Ingress

The main pedestrian access points to the site during events will be via canopied 'Gateway' areas to the north and south, where ticket / security checks will be carried out.

The layout of the Gateway entry areas should be subject to a detailed assessment by crowd movement specialists which takes into account factors such as:

- the number of (and possible range of flow rates through) security and ticket checkpoints during different events;
- the impact on existing Championship crowd flows along Church Road, Wimbledon Road and Home Park Road;
- the likely arrival rate profile;
- available stewarding;
- the possible use of the space for merchandising kiosks, displays, etc.;
- the onward routes from the checkpoint areas into the Parkland grounds;
- site security / segregation requirements (e.g. player areas); and
- co-ordination with routes used by emergency services.

5.2 Parkland Show Court – Site Egress

The exit width / reservoir requirements outlined for the Show Court in section 4 will need to be considered alongside the relevant factors listed in 5.1 above - in particular:

- the potential impact of a site-wide evacuation including the other Championship show courts;
- available stewarding;
- the use of Gateways or other areas in the event of a partial evacuation or where re-entry into the stadium is a prospect; and
- co-ordination with routes or staging areas used by emergency services.

5.3 Movement Around Site

Aside from the Parkland Show Court during the Championship, the possible use of the site by large numbers of people at other times – e.g. during the Qualifying Event or other one-off events – will need to be considered, including movement between different event spaces and the other factors outlined above.

6 Site-Wide Fire Protection Systems

6.1 Introduction

The following section outlines the minimum recommended fire safety system performance specifications in terms of Building Regulations and London Plan requirements.

The measures below relate to predominantly to the Maintenance and Player Hub buildings and the Central Grounds Maintenance Hub (CGMH). However, it is expected that the provisions for the Player Hubs and CGMH will be subject to further review at the reserved matters stage. The arrangements for the Parkland Show Court will be subject to a separate specific review and design development.

6.2 Fire Alarm and Detection

Manual fire alarm call points in accordance with BS EN 54-11[12] will be provided at all storey and final exits.

To meet with the minimum functional statutory requirements, an automatic fire alarm and detection system would not normally be required in most of the satellite buildings, apart from in higher fire risk areas. Nonetheless, it is proposed that automatic fire detection (AFD) in accordance with BS 5839-1[13] be provided throughout the buildings.

The enhanced provision of AFD will enable fires to be detected more quickly and provide earlier warning for escaping occupants. This will also likely reduce the overall fire service response time and allow most fires to be tackled more quickly, improving the level of property protection, which is consistent with the aims of the London Plan.

The buildings will operate separate and independent evacuation strategies, but it is recommended that activation of a detector initiate an alert on the main fire alarm panel in the site control room.

6.3 Smoke Ventilation

The lower level of the CGMH should be classified as a car park in our opinion, and be provided with a means of smoke clearance in accordance with BS 7346-7[14].

6.4 Structural Fire Resistance

The minimum period of structural fire resistance for each building to accord with Table 23 of BS 9999 will be as shown in Table 6—1. However, in some cases the period of fire resistance will need to be increased to support the enclosure of certain higher risk rooms (see section 6.5).

Elements of structure which support only a roof and do not fulfil any other structural role (e.g. bracing) will not require any fire resistance, unless the roof support heavy items of plant. In the case of the lower ground floor of the CGMH, the roof will form part of the escape route from the Offices above and its structure will need to be protected accordingly.

Table 6—1 Minimum periods of structural fire resistance

Building	Most onerous risk profile	Height of top storey / depth of lowest storey from access level	Minimum period of structural fire resistance to BS 476[15]
Maintenance Hubs	A3	Single storey	60 minutes
Central Grounds Maintenance Hub	A3	<5m[Note 1]	60 minutes
Player Hubs	B3	Single storey	60 minutes

Note 1: The CGMH lower and upper ground floors will be below the adjacent ground level to the south at a maximum depth of 9m and 4.5m, respectively. However, direct access from outside will be available to both levels along their front elevations. Therefore, it is considered unduly onerous to treat these areas as basements for the purposes of structural fire resistance, and both have been considered as being within 5m of an access level.

6.4.1 Note on Impact of Parkland Show Court Structure

It is understood that elements of timber frame structure are being considered for the Parkland Show Court.

The use of combustible elements of structure in stadia impacts the Green Guide risk classification and, by extension, the target evacuation time and required exit widths (see section 4.8.4).

Notwithstanding the above, it is recommended that the structure comprise materials of limited combustibility unless subject to a specific detailed risk assessment. This is also required to comply with the London Plan where the structure forms part of an external wall (see section 7).

6.5 Compartmentation and Other Fire-resisting Construction

A compartment floor will be provided between the upper and lower levels of the CGMH building.

All high fire risk rooms / areas such as plant rooms, store rooms will be enclosed in fire resisting construction in accordance with Table 29 of BS 9999. For some electrical rooms, the utilities provider may require a higher period of fire resistance.

Refuse stores will be enclosed in fire resisting construction and accessed either externally or via a lobby provided with 0.2m² of permanent ventilation.

6.5.1 Protection of escape routes

Onward escape from the Offices will be via bridge links over the trench surrounding the lower level of the CGMH. The bridge links will be well separated by distance, but the external walls in the vicinity of the links may need to be fire resisting – or other measures provided – in order to reduce the risk of multiple routes being affected by fire and smoke. This will be subject to further assessment as the design progresses.

For the Hub buildings, where escaping occupants must travel within 1.8m of an external wall – e.g. from dead-ends within Maintenance Hub yards or to access the yard's gate – the external walls will provide a minimum of 30 minutes fire resistance up to at least 1.1m above floor level.

Internal linings to be in accordance with BS 9999.

[12] BS EN 54-11:2001. Fire detection and fire alarm systems. Manual call points
[13] BS 5839-1:2017. Fire detection and fire alarm systems for buildings. Code of practice for system design, installation, commissioning and maintenance of systems in non-domestic premises (Incorporating Corrigendum No. 1)
[14] BS 7346-7:2013. Components for smoke and heat control systems. Code of practice on functional recommendations and calculation methods for smoke and heat control systems for covered car parks
[15] BS 476-21:1987. Fire tests on building materials and structures. Method for determination of the fire resistance of loadbearing elements of construction

6.5.2 Passive Fire Protection: General Provisions

All penetrations and openings through fire-resisting construction will be appropriately sealed to maintain the fire resistance of that construction.

The fire performance of all passive fire protection systems should be demonstrated through appropriate test or assessment evidence prepared by competent persons (e.g. a UKAS-accredited laboratory).

7 External Fire Spread

7.1 External Wall Construction

7.1.1 Hub buildings and Central Grounds Maintenance Hub (CGMH)

There will generally be no restriction on the external wall surfaces or materials to accord with the minimum guidance in Figure 47 of BS 9999.

However, notwithstanding the above, the guidance to Policy D12(A) of the London Plan states that applications for major developments:

> "*must include a commitment that the development will not incorporate combustible* materials in its external walls…*
>
> ** That is, only materials that are Class A2-s1 rated and above under the European classification system, as set out in the standard BS EN 13501-1 and as reflected in UK Building Regulations will be used except for the exempt elements as set out under Regulation 7(3) of Approved Document B.*"

This guidance will be followed with the exception of the items discussed below.

7.1.2 Elements of Timber Screening / Construction

Although not part of the building fabric itself - timber screening is proposed around each Maintenance Hub building and its yard. The external walls of the Hub buildings themselves will likely be of concrete or blockwork construction.

The use and size of each individual Maintenance Hub building means that they would not constitute a 'major development' in their own right. This classification is achieved only by virtue of the overall site area, and the buildings are well separated from one another by distance.

Therefore, the risk and impact of external fire spread via the timber screening will not be significant in our opinion, and restrictions should not be required in order to meet with either functional life safety objectives, or the objectives of the London Plan. Timber screening around the hubs will be treated to achieve Euroclass B-s3,d2 or better, which can be achieved using a pressure treatment or coatings (such as Thermoguard coating or similar), suitable for the proposed timber.

Timber façade elements are also proposed for the Player Hubs. However, in our opinion, restrictions should not be required in order to meet with either functional life safety objectives, or the objectives of the London Plan for the same reasons set out above. Timber will be treated to achieve Euroclass B-s3,d2 or better, using a pressure treatment or coatings (such as Thermoguard coating or similar), suitable for the proposed timber.

The upper level offices in the CGMH may incorporate a glazed façade with timber framing. The limited footprint and nature of this part of the building (i.e. set into the hill and isolated from the level below) mean that there will be no significant impact in terms of fire spread via timber elements in the office façade. In our opinion, restrictions should not be required in order to meet with either functional life safety objectives, or the objectives of the London Plan in this case. Timber will be treated to achieve Euroclass B-s3,d2 or better, using a pressure treatment or coatings (such as Thermoguard coating or similar), suitable for the proposed timber.

7.1.3 Parkland Show Court

Current proposals indicate that elements of timber structure and a 'green wall' screening feature may be incorporated into the new Show Court.

As noted above, the guidance to Policy D12(A) of the London Plan states that major developments should not incorporate combustible materials in their external walls. The presence of combustible materials in the structure will also impact upon the Green Guide risk classification for the Show Court and the required evacuation time and escape widths (see section 4.8.4).

The Show Court is submitted in outline with the final details to be confirmed under Reserved Matters. The baseline approach will be to use traditional steel or concrete construction for the primary bowl superstructure, supporting the stands and concourses, and timber only for the perimeter structure. This perimeter structure is not intended to support internal concourses or stands, but may support the outer edge of the roof structure. Any timber structure will meet at least Euroclass B-s3, d2, or better, of which the following products are examples of what could be used to meet this standard at this time (pressure treatment or coatings such as Thermoguard or similar).

It is noted that the roof structure is likely to be exempt from structural fire protection requirements. However, surface spread of flame treatment will be applied where timber elements are part of an external wall, or are exposed to an escape route, and will achieve Euroclass B-s3, d2, or better.

It is clarified that the 'green wall' is not a vertically built structure in this instance but climbing plants (such as Virginia Creeper or similar), planted at the base of the structure, and as such are easily irrigated from the bottom; supporting plant health. Timber lattice may be used as part of the system, and will be treated to achieve Euroclass B-s3, d2, or better. Any additional materials used to allow the plants to climb will achieve A2-s1, d0. This is a similar arrangement to the long-established planting arrangement on Centre Court.

The applicant supports the inclusion of a planning condition(s) that confirms the need for the planting to be appropriately irrigated and maintained.

7.2 Cavity Barriers

Cavity barriers should be provided within the external walls and to sub-divide extensive cavities. They should also be in line with every compartment floors and walls, and at the edges of the cavity. This would include around each opening. Please refer to BS 9999 for further information.

7.3 Space Separation

The external walls of each building must have sufficient fire resistance to prevent fire spread across the relevant boundaries to other buildings, including those on the same site.

An initial assessment of the space separation and allowable unprotected areas (UPA) for each building has been carried out using the enclosing rectangle method in BR 187[16]. It will be possible to refine the results of the initial assessment through a more detailed review at the next design stage. Where restrictions on UPA apply this could be addressed through protecting the external walls or adding internal compartmentation.

Table 7—1 External fire spread assessment

Building / compartment	Fire load	Maximum enclosing rectangle (width x height)	Boundary distance on plan (worst case)	Allowable UPA
Maintenance Hub 1	Standard	10m x 4m	11m	100%
Maintenance Hub 2	Standard	22m x 4m	4m	40% Note 1
Maintenance Hub 3	Standard	7m x 4m	12m	100%
Maintenance Hub 4	Standard	13m x 4m	24m	100%
Maintenance Hub 5	Standard	10m x 4m	4m	54% Note 2
Maintenance Hub 6	Standard	25m x 4m	3.5m	38% Note 3
Maintenance Hub 7	Standard	20m x 4m	17m	100%
CGMH Lower level	Standard	75m x 3.5m	>17m Note 4	100%
CGMH Offices	Reduced	15m x 3.5m		
Northern Player Hub	Reduced	27m x 4m	3.8m (site boundary)	65% Note 1
Southern Player Hub	Reduced	20m x 4m	>8m	100%
Parkland Show Court	Reduced	95m x 18m	56m	100%

Note 1: Applies only to north-east elevation – others are unrestricted

Note 2: Applies only to south elevation – others are unrestricted

Note 3: Applies only to north elevation – others are unrestricted

Note 4: Below ground on south and east elevations which are closest to the site boundary, thus only front elevations considered

7.4 Roof Coverings

Sedum roofs are proposed for the Maintenance Hub and Northern Player Hub buildings. The sedum roof construction will follow the guidance in *Fire Performance of Green Roofs and Walls*, published by DCLG. This guidance will also be followed for the turfed areas over the Central Grounds Maintenance Hub.

The roof construction proposed for the other buildings is not yet confirmed, but the fire performance should – as a minimum – comply with Table 36 of BS 9999 and Section 15 of the Green Guide (for the Show Court), as applicable.

[16] BR 187. External fire spread: Building separation and boundary distances, Second edition. Building Research Establishment. 2014

8 Fire Service Access and Facilities

This section outlines the appropriate access routes and firefighting facilities necessary proposed across the site. The arrangements will be subject to agreement with London Fire Brigade (LFB). It is necessary to ensure that adequate access routes are provided for Fire Service vehicles from beyond the site to the exterior of each building. The key factors influencing the Fire Service arrival and their ability to control an incident are:

- The fire service Pre-Determined Attendance (PDA) and route to site;
- Access points to the site;
- Command and control facilities available to the fire service on site;
- Access routes around the site and constraint (e.g. during construction phasing); and
- Access and facilities within individual buildings.

8.1 Fire Tender Access

8.1.1 Site Access Points

It can be seen from Figure 8—1 that several vehicular site access points will be available from Church Road / Wimbledon Road and Home Park Road. Footpaths will also be available from the main public road to Maintenance Hubs 1, 3 and 4.

8.1.2 Vehicle Access Requirements for Each Building

The Hub buildings will require fire tender access to either: at least 15% of the building perimeter; or within 45m of all parts of the building footprint. The Central Grounds Maintenance Hub building will require fire tender access to at least 15% of the exposed building perimeter (i.e. 15% of its front elevation, approximately 15m).

At least one door will be provided along the length of any perimeter access segment. Suitable footpaths and access gates will be provided between the fire tender parking position and a given building.

For Maintenance Hubs 1, 3 & 4, the footpaths will connect to the fire tender parking position on the main road. The other buildings will be accessed via internal site roads.

The main site access routes are shown in Figure 8—1.

Fire service access requirements for the Parkland Show Court will be determined as part of a separate review and detailed planning application. It is anticipated that firefighting shafts will be required to serve this building, and vehicle access to within 18m of these firefighting shafts will be ensured.

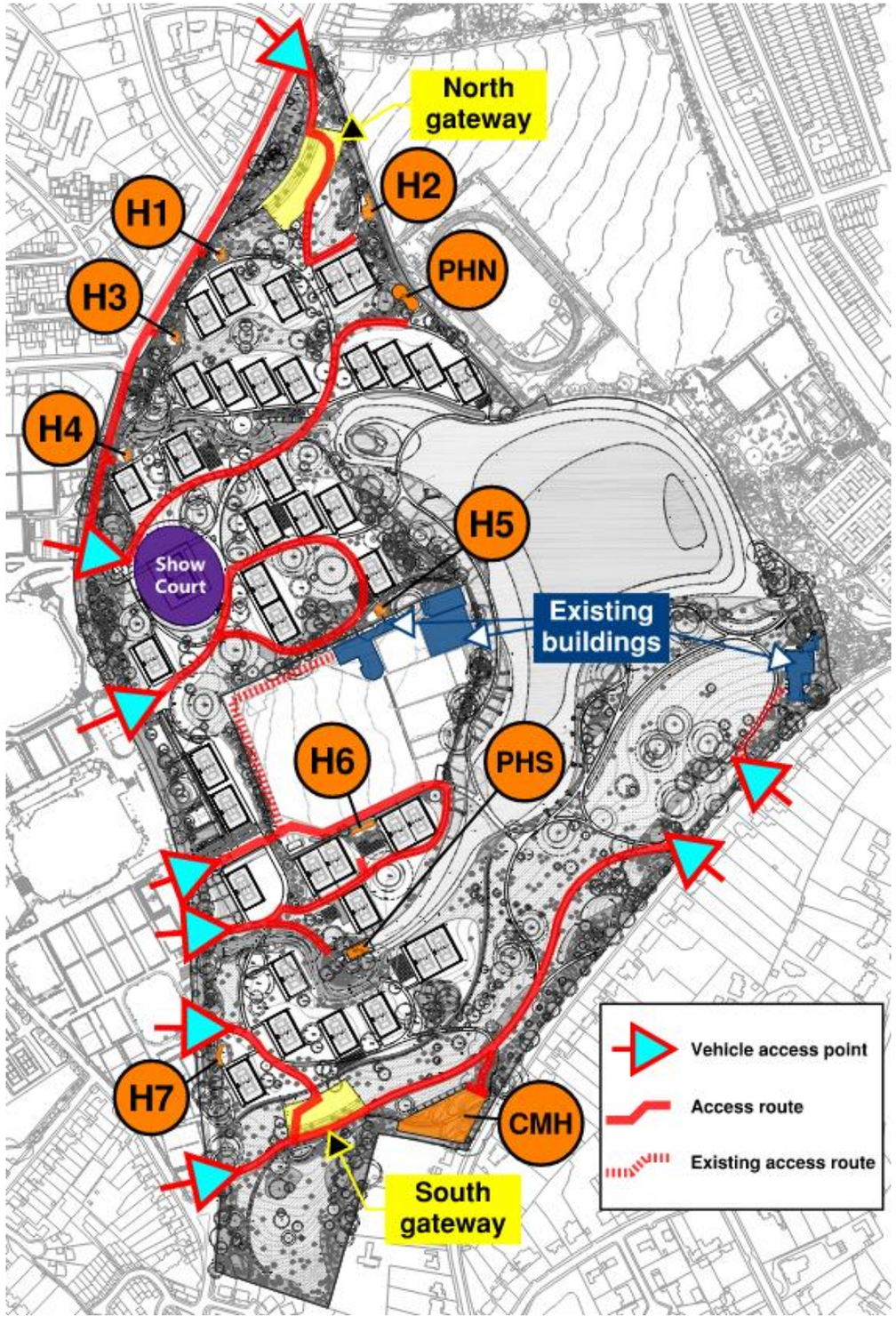

Figure 8—1 Fire tender access (Parkland Show Court provisions to be developed as part of the specific Show Court strategy)

8.1.3 Road / Pathway Requirements

With the possible exception of the new Show Court, all buildings will require access for a pump appliance. However, it is recognised that the PDA may include stations that have high reach appliances. Consequently, all access routes (including any associated hard-standing areas) should be designed in close consultation with LFB.

The following requirements are taken from London Fire Brigade Fire Safety Guidance Note 29 (GN29):

- Carrying capacity of 23 tonnes (high reach weight) for bridges and 14 tonnes for other roads / pathways (in accordance with clause 3.2 of GN29);
- A minimum clear width of 3.7m between kerbs (3.1m between gates);
- Headroom not less than 4m;
- Minimum turning circle of 26m between kerbs (29m between walls) or alternatively shown by computer aided tracking to be suitable for a fire appliance; and
- Fire service vehicles should not have to reverse more than 20m from the end of an access road and should be capable of reaching any fire mains within 18m of the parking position.

8.2 Fire-fighting Water Supplies

The Maintenance and Player Hub buildings will not have a compartment area exceeding 280m² and thus additional fire hydrants or other water supplies should not be required for these buildings.

8.2.1 Fire Hydrants

Both the Show Court and the Central Grounds Maintenance Hub (CGMH) will have a compartment area in excess of 280m², therefore unless an existing fire hydrant is available within 100m of the buildings, private fire hydrants will be required.

Private fire hydrants should be provided in accordance with BS 9990[17] and:

- within 90m of an entrance to the building; and
- a maximum of 90m apart.

Subject to further review, it could be feasible to use the lake as the water supply for a private hydrant system, providing that hydrant points are available within the distances set out above. It may also be feasible to extend the public hydrant system to serve the site, subject to consultation with Thames Water and LFB's Water Officer.

8.3 Fire-fighting Smoke Ventilation

A smoke clearance system for fire-fighting will be provided in the lower level of the Central Grounds Maintenance Hub as described in section 6.

Requirements for the Parkland Show Court will be determined as part of a separate review and detailed planning application.

8.4 Phasing and Other Considerations

Once details of the project phasing are developed, the interim fire service access arrangements will need to be reviewed at each stage to ensure that adequate facilities are available for the operational parts of the site.

Considerations should be given early installation and commissioning of life safety systems and facilities for firefighting operations such as fire mains.

Access routes will need to be co-ordinated with the crowd management arrangements during large events and use of the Show Court.

The erection of temporary structures (e.g. marquees) for events should trigger a review of the fire service access provisions, both for that event and for the impact on the wider site. This must form part of the Responsible Person's Fire Safety Management Plan and a specific Event Management Plan.

Reference should be made to HSG 168 – Fire Safety in construction, and in particular where timber materials are proposed.

8.5 Fire Service Command & Control Points

Effective command and control for the fire service at the fire scene is essential to ensure firefighter safety when dealing with incidents. This section outlines the various levels of fire service command and control that are currently assumed within the site and the proposed facilities that will support these levels of command and control.

The measures below are likely to be less significant for the Hub buildings and CGMH, but will likely need to be considered for the site as a whole – particularly for the Show Court and during large events.

8.5.1 Premises Information Box

The Premises Information Box (PIB) is an initiative by the LFB to provide them with secure, up to date, information on the fire protection measures available at a given site. Where a PIB is recommended then this should be provided adjacent to the main fire alarm panel for the site (e.g. in a control room) and located at agreed main arrival point(s).

A PIB would typically include the following information:

- Plans of the site and buildings including the location of fire-fighting access points, disabled refuges, system override controls, etc.
- Details of active fire measures within the buildings.
- Evacuation strategy used in the buildings.
- Brief details of building construction highlighting any unusual features.
- Location of service intakes.
- Alternative access into buildings.
- Gas cut-off valve locations.
- Specific Control Of Substances Hazardous to Health (COSHH) information.

The above list is not exhaustive and the final contents, number and location of these plans boxes will need to be agreed with LFB.

[17] BS 9990:2015. Non automatic fire-fighting systems in buildings. Code of practice

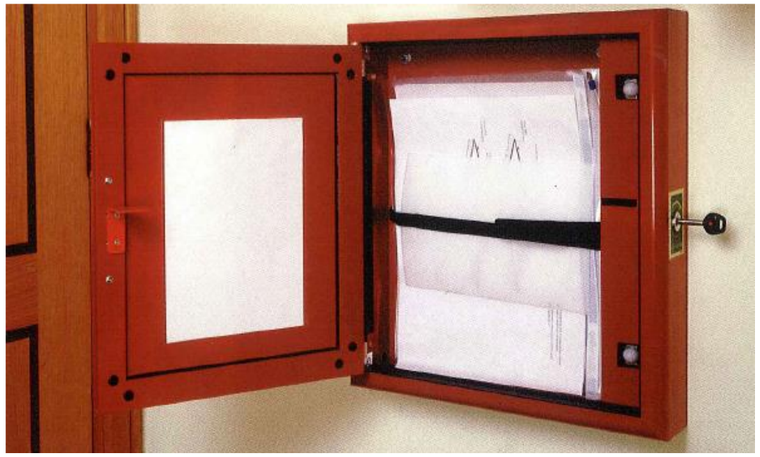

Figure 8—2 Example of a Premises Information Box

8.5.2 Fire Command Centre

A physical site 'control room' will likely be required (installed as part of the Show Court). The content will be driven by the discussions with LFB to ensure that necessary equipment or information is provided. However, at this stage the following list outlines the likely requirements within any of the proposed control rooms:

- All control and indicating equipment for the fire alarm and other fire safety systems within the building / site. This should include the facility to take control of the evacuation protocol.
- A visual indication which can show the status of evacuation in parts of the building / site where an evacuation signal has been given.
- Control systems showing the location of the incident and status of all automatic fire protection installations and facilities.
- Override/switch provision associated with all automatic fire safety systems.
- Override controls for shutting off the normal HVAC and recirculation systems.
- A communication system (to BS 5839) providing direct link to disabled refuge points.
- An exchange telephone for making external calls, and communication system to other fire command centres.
- Premises Information Box (PIB).

It is recommended that the following additional items are also be provided:

- The fire emergency plan for the building / site.
- Any specific Event Management Plans.
- Keys or other devices required to facilitate access throughout the buildings / site, and to operate any mechanical and electrical systems.
- Facilities to contact key staff/building services engineers.
- Floor plans of the buildings and site plans.
- A wall mounted writing board with suitable writing implements.
- Facilities for the personnel in control centre to rest and refresh themselves.
- The control room, and access route from external air, should be separated from all adjoining accommodation with 120-minute fire resisting construction and located at grade level. The locations of any repeater panels will be determined in consultation with LFB.

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