

APPLICATION INFORMATION		
1	Site Address Line 1	Hillingdon Water Sports Facility and Activity Centre (HWSFAC)
	Site Address Line 2	Broadwater Lake, Moorhall Road
	Town	Harefield
	County	London
	Site Postcode (optional)	UB9 6PE
2	Description of Proposed Development Including Any Change of Use (as stated on the application form):	Redevelopment of the site to create the Hillingdon Water sports Facility and Activity Centre, including demolition of existing Broadwater Lake Sailing Club (BSC) Clubhouse at the north of the lake and erection of 1 no. building to be occupied by HOAC and BSC including changing facilities, meeting rooms, storage, workshop and seasonal worker accommodation (sui generis); 3 no. activity shelters; 3 no. pontoons; 1 no. concrete slipway; boat parking areas; camping area and outdoor activity area; ecological enhancement throughout the site; new pedestrian routes through the peninsula; landscaping including new woodland, dense vegetation screens and boundary treatment; new access and access road; localised dredging, relocation of existing sailing area and creation of floating and fixed islands within the lake; coach drop off and turning area; vehicle parking; cycle parking; and associated works.
3	Name of Person Completing the Fire Statement (as section 15), Relevant Qualifications and Experience. Guide: no more than 200 words.	This Fire Statement has been written by Subiraj Doraisingam BEng (Mech) MIFireE CEng, Bachelor of Mechanical Engineering and Member of the Institution of Fire Engineers, as well as Chartered Engineer with the Engineering Council UK and Member of the Institute of Mechanical Engineers (IMechE). Subiraj has been working with Osborn Associates Ltd since 2012. Prior to joining he was successful in leading teams on complex fire engineering projects from concept inception to delivery on-site, including project management to testing, commissioning and handover to the client. Subiraj is a director responsible for managing and coordinating Osborn Associates' Fire Engineers. Subiraj has wide-ranging experience in fire engineering design of projects from educational establishments, residential buildings and commercial offices to hotel and manufacturing projects.
4	State what, if any, consultation has been undertaken on issues relating to the fire safety of the development; and what account has been taken of this. Guide: no more than 200 words.	Local Authority Building Control (Hillingdon Council Building Control) are to be consulted on all designs within the context of fire safety and ensure appropriate construction throughout the build process via site inspections. All aspects of the fire safety design require statutory consultation with the local fire and rescue service (London Fire Brigade [LFB]).

APPLICATION INFORMATION

5	<p>Site Layout Plan is provided as a separate plan.</p> <p>(Consistent with other plans, drawings and information submitted in connection with the application).</p>	
---	---	--

THE PRINCIPLES, CONCEPTS AND APPROACH RELATING TO FIRE SAFETY THAT HAVE BEEN APPLIED TO THE DEVELOPMENT

6 Building Schedule									
Site Information				Building Information			Resident Safety Information		
a) Block No. as Per Site Layout Plan Above	b) • Block Height (m) • No. of Storeys Excluding Those Below Ground Level	c) Proposed Use (One Per Line)	d) Location of Use Within Block by Storey	e) Standards Relating to Fire Safety / Approach Applied	f) Balconies	g) External Wall Systems	h) Approach to Evaluation	i) Automatic Suppression	j) Accessible Housing Provided
Block A (Main Building).	3.3m 2 stories.	Flexible use.	Ground Floor.	Approved Document B Vol 2.	No balconies.	Class A2- s1,d0 or better.	Simultaneous	None	N/A Non- Residential
Block A (Main Building).	3.3m 2 stories.	Other Residential accommodation.	First Floor.	Approved Document B Vol 2.	Class A2- s1,d0 or better.	Class A2- s1,d0 or better.	Simultaneous	None	M4(2) and M4(3)
Block B (Boatshed).	1 storey.	Flexible use.	Ground Floor.	Approved Document B Vol 2.	No balconies.	Class A2- s1,d0 or better.	Simultaneous	None	N/A Non- Residential
Block C (Workshop).	1 storey.	Flexible use.	Ground Floor.	Approved Document B Vol 2.	No balconies.	Class A2- s1,d0 or better.	Simultaneous	None	N/A Non- Residential
Block D (Toilet Block).	1 storey.	Flexible use.	Ground Floor.	Approved Document B Vol 2.	No balconies.	Class A2- s1,d0 or better.	Simultaneous	None	N/A Non- Residential

THE PRINCIPLES, CONCEPTS AND APPROACH RELATING TO FIRE SAFETY THAT HAVE BEEN APPLIED TO THE DEVELOPMENT									
Block E (Energy Centre).	1 storey.	Flexible use.	Ground Floor.	Approved Document B Vol 2.	No balconies.	Class A2-s1,d0 or better.	Simultaneous	None	N/A Non-Residential
Block F (Anglers Hut).	1 storey.	Flexible use.	Ground Floor.	Approved Document B Vol 2.	No balconies.	Class A2-s1,d0 or better.	Simultaneous	None	N/A Non-Residential
Block G (Activity Shelters).	1 storey.	Flexible use.	Ground Floor.	Approved Document B Vol 2.	No balconies.	Class A2-s1,d0 or better.	Simultaneous	None	N/A Non-Residential
7	<p>Specific Technical Complexities</p> <p>Explain Any Specific Technical Complexities in Terms of Fire Safety (For Example Green Walls) and / or Departures from Information in Building Schedule Above</p> <p>Guide: no more than 500 words</p> <p>An accommodation area is to be provided within Block A, giving seasonal workers sleeping provisions on site and denoting a purpose group of 2(b) - residential (other). The accommodation will be designed to Approved Document B Vol. 2 under a boarding house style arrangement with protected corridors and stairs. This will give the occupants suitable provisions to escape in a fire scenario, given they will also be familiar with the building and evacuation procedures.</p> <p>Where balconies are provided to Block A, they are limited in extent and serve a single fire compartment. Due to the make up of the building envelope and separation between stories, where sleeping risks are present, the presence of balconies should not have an impact on external fire spread. To meet the requirements of the London Plan, all external walls and balconies should meet the criteria of Class A2-s1,d0 or better.</p> <p>On-land boatyards are provided as part of the scheme. Though not enclosed by any structure, thought is to be given to the safe storage of boats within the yard as they represent a considerable fire load. There should be sufficient distance between boats, a cluster of boats should be stored in blocks, and there should be sufficient spacing between blocks also. There should also be an appropriate spacing between any boatyard and building. The local fire and rescue service (LFB) should be consulted on the siting of boatyards.</p>								

THE PRINCIPLES, CONCEPTS AND APPROACH RELATING TO FIRE SAFETY THAT HAVE BEEN APPLIED TO THE DEVELOPMENT

No automatic suppression systems are required for the Building Regulation compliance as part of the build, though the client may deem it relevant to review the need, in order to promote property protection and the environment, given the ecological status of the project.

Green roofs are under consideration for blocks to enhance the ecological context of the site. Of the buildings highlighted for green roofs, they comprise of a single storey and one fire compartment. It is therefore considered that the risk of fire spread is low. When completing the design, DCLG guidance *Fire Performance of Green Roofs and Walls*, is to be taken into consideration.

Photovoltaic (PV) systems are under consideration into the site design, with their location being on roofs of particular buildings, or separated from other structures in an enclosed dedicated space. Where PV systems are to be installed, this should be in consultation with the local fire and rescue service (LFB), with any installation undertaken to national standards and subject to suitable risk assessment.

Activity shelters and various other small structures are planned as part of the project, as noted in the above schedule. These are typically less than 80m², comprising of a single compartment and storey. In some instances, structures are open sided shelters. These structures may not always be directly accessible from the access road, though due to their small size and separation to other buildings, the risk to life is deemed to be low.

8 Issues Which May Affect the Fire Safety of the Development Explain How Any Issues Which Might Affect the Fire Safety of The Development Have Been Addressed Guide: No more than 500 words

No relevant buildings are proposed as part of the project, with the largest structure having a total of two storeys. As seasonal accommodation is provided on the second storey of the main building, three protected escape routes, meeting a minimum criterion of REI 30, are to be provided to ensure safe egress from the building.

Where all proposed buildings either are solely classified as, or contain an element of, assembly and recreation (Purpose Group 5), 60-minutes' fire resistance is to be provided to all elements of structure and to separate occupancies and any differing purpose groups. To achieve compliance with the London Plan, as the development is considered to be a major development due to the size of the site, external walls will not incorporate combustible materials - being classified as less than Class A2-s1 against BS EN 13501-1:2018 criteria.

THE PRINCIPLES, CONCEPTS AND APPROACH RELATING TO FIRE SAFETY THAT HAVE BEEN APPLIED TO THE DEVELOPMENT

From plans submitted, the notional boundaries observed would generally support fully unprotected areas, with the distance being greater than 12.5m. For Block C, small out buildings are within the vicinity and will be subject to appropriate calculation to ensure the provision of unprotected area is acceptable. Where portal frames are proposed for Blocks B and C, fire protection of the rafter members of the frame as well as the column members will be reviewed, and stipulated where necessary, to prevent unwanted fire spread between buildings or premature structural collapse. All other buildings are noted as being of traditional brick and block construction, and therefore constitute a low risk to external fire spread.

To ensure occupant safety, a simultaneous evacuation strategy will be incorporated across all buildings. The development contains significant space for the appropriate siting of assembly points for all proposed structures. Given the space is to be utilised as an activity centre, there is the potential for a majority of the occupants to be minors. Consideration is to be given to the typical occupancies and included within relevant risk assessments. There should be a suitable provision of staff who are appropriately trained in fire safety precautions and the safeguarding of minors.

Where the design is inclusive for all occupants, refuges are to be provided on all upper stories with protected stairways. Their design will meet the minimum 900 x 1400mm in size, appropriately sited and accessible by someone in a wheelchair. Associated emergency voice communication points will also need to be provided for the refuges. Furthermore, where a lift is proposed for Block A, means to ensure this is an evacuation safe lift are to be given, as required under the London Plan. The safe use of this lift in a fire scenario is to be detailed within a specific plan.

The site is considered a major development, being greater than 1 hectare, though only a limited portion is to be developed for fixed structures, with the majority of the area remaining an open woodland for outdoors activities. To ensure adequate warning given the openness of the site, the entire development will be provided with a comprehensive fire alarm and detection system with appropriate zoning for the different entities and areas.

EMERGENCY ROAD VEHICLE ACCESS AND WATER SUPPLIES FOR FIREFIGHTING PURPOSES

9	<p>Local Development Document Policies Relating to Fire Safety</p> <p>Explain How any Policies Relating to Fire Safety in Relevant Local Development Documents Have Been Taken into Account</p> <p>Guide: no more than 500 words</p> <p>The development is within Greater London, where the London Plan applies. It should be ensured the following criteria is met to achieve compliance with the plan and promote the highest standards of fire safety (Policy D12 Fire Safety).</p>														
	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 50%; text-align: center;">LONDON PLAN REQUIREMENT</th> <th style="width: 50%; text-align: center;">FIRE SAFETY INFORMATION PROVIDED WITHIN</th> </tr> </thead> <tbody> <tr> <td>1. Identify suitably positioned unobstructed outside space for fire appliances to be positioned on and appropriate for use as an evacuation assembly point.</td> <td>Sections 10, 11, 12 and 14.</td> </tr> <tr> <td>2. Be 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.</td> <td>Sections 6, 7 and 8.</td> </tr> <tr> <td>3. Constructed in an appropriate way to minimise the risk of fire spread.</td> <td>Sections 6, 7 and 8.</td> </tr> <tr> <td>4. Provide suitable and convenient means of escape, and associated evacuation strategy for all building users.</td> <td>Sections 6, 7 and 8.</td> </tr> <tr> <td>5. Develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.</td> <td>Sections 6, 7 and 8.</td> </tr> <tr> <td>6. Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.</td> <td>Sections 10, 11, 12, 13 and 14.</td> </tr> </tbody> </table>	LONDON PLAN REQUIREMENT	FIRE SAFETY INFORMATION PROVIDED WITHIN	1. Identify suitably positioned unobstructed outside space for fire appliances to be positioned on and appropriate for use as an evacuation assembly point.	Sections 10, 11, 12 and 14.	2. Be 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.	Sections 6, 7 and 8.	3. Constructed in an appropriate way to minimise the risk of fire spread.	Sections 6, 7 and 8.	4. Provide suitable and convenient means of escape, and associated evacuation strategy for all building users.	Sections 6, 7 and 8.	5. Develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.	Sections 6, 7 and 8.	6. Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.	Sections 10, 11, 12, 13 and 14.
LONDON PLAN REQUIREMENT	FIRE SAFETY INFORMATION PROVIDED WITHIN														
1. Identify suitably positioned unobstructed outside space for fire appliances to be positioned on and appropriate for use as an evacuation assembly point.	Sections 10, 11, 12 and 14.														
2. Be 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.	Sections 6, 7 and 8.														
3. Constructed in an appropriate way to minimise the risk of fire spread.	Sections 6, 7 and 8.														
4. Provide suitable and convenient means of escape, and associated evacuation strategy for all building users.	Sections 6, 7 and 8.														
5. Develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in.	Sections 6, 7 and 8.														
6. Provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.	Sections 10, 11, 12, 13 and 14.														

EMERGENCY ROAD VEHICLE ACCESS AND WATER SUPPLIES FOR FIREFIGHTING PURPOSES

9	Continued ...	
	Further to Policy D12, further recommendations are given with the London Plan, applicable to the development in terms of fire safety.	
	a) All buildings proposed should be of an inclusive design, providing suitable access and facilities for all, with suitable provision for their safety in the event of a fire. Where lifts are provided, at least one per core should be a suitably sized evacuation lift.	Section 8.
	b) External walls of major developments will not incorporate combustible materials in their design.	Sections 6, 7 and 8.
	c) All pertinent fire safety information must be accurately recorded and provided on handover to support the golden thread of building safety information.	Sections 7 and 8.
	From the information provided within this Statement, all criteria of the London Plan have been considered and where practicable, incorporated in design or noted for future incorporation within the project.	
10	Fire Service Site Plan Explanation of Fire Service Site Plan(s) Provided in 14, Including What Guidance Documents Have Informed the Proposed Arrangements for Fire Service Access and Facilities? Guide: no more than 200 words <p>The site plan shows the development of a water sports activity area on a small peninsula within the Colne Valley Regional Park. Three main structures are proposed to accommodate users, along with various small outbuildings providing ancillary accommodation. No relevant buildings are proposed under the scheme.</p> <p>A new access road is proposed as part of the development to ensure all significant structures are provided with suitable access for firefighting activities. The provision of a private hydrant system, designed to BS 9990:2015, is to be considered as part of the design, though additional alternative supplies of water are also provided through static lakes surrounding the peninsula.</p>	

EMERGENCY ROAD VEHICLE ACCESS AND WATER SUPPLIES FOR FIREFIGHTING PURPOSES

Block A, being a two-storey building with a floorplate of less than 3000m², will be provided with protected stairs to facilitate egress of occupants and firefighting activities within the building, designed to Approved Document B Vol. 2. Where a small portion of the construction contains sleeping facilities, such areas will be designed in accordance to Approved Document B Vol. 2 purpose group 2(b).

Blocks B and C will be accessed directly from the roadway provided as part of the scheme, being small single storey buildings, as per the requirements of Approved Document B Vol. 2.

11 Emergency Road Vehicle Plan

Specify Emergency Road Vehicle Access to the Site Entrances Indicated on The Site Plan

Guide: no more than 200 words

Access to the site will be available for pumping fire appliances via Moorhall Road, with the new access road provided under the scheme giving access to the peninsula. The emergency road vehicle access will not be affected by the proposed works and will need to be maintained during the construction period.

At this time there are no pinch points or landscape features observed that would prevent or delay emergency vehicle access.

Is The Emergency Vehicle Tracking Route Within the Site to The Siting Points for Appliances Clear and Unobstructed?

Yes - to be maintained over the duration of the construction works.

12 Siting of Fire Appliances

Guide: no more than 200 words

To meet the requirements of Approved Document B Vol. 2, a minimum 15% of Block A's perimeter will be accessible for pumping appliances. If deemed necessary, the building will be fitted with a dry rising main to ensure suitable provisions for firefighting within the building.

All other buildings associated with the scheme are considered small buildings, where every point of the building's floorplate is accessible within 45m of the entrance.

EMERGENCY ROAD VEHICLE ACCESS AND WATER SUPPLIES FOR FIREFIGHTING PURPOSES

	The access road designed within the scheme will allow firefighting appliances to be sited within suitable proximity to the proposed buildings and water sources.
13	<p>Suitability of Water Supply for the Scale of Development Proposed</p> <p>Guide: no more than 200 words</p> <p>The water supply for firefighting to the development is to be provided through a private hydrant system as part of the scheme. Consideration is to be given to the installation of the hydrant system in conjunction to building works, to ensure there is always suitable provision over the course of construction. Guidance for the installation of the hydrant system is to be taken from BS 9990:2015.</p> <p>In addition to the hydrant system, an alternative supply of water is available for firefighting by means of static lakes, where the site is located on a small peninsula within the Colne Valley Regional Park. A minimum 45,000l of water is expected to be always available, at a distance no greater than 90m to building entrances. The local fire and rescue service should confirm whether they consider this alternative supply as appropriate but note this is an additional water supply surplus to requirements.</p> <p>Nature of Water Supply</p> <p>Hydrant - private.</p> <p>Does the Proposed Development Rely on Existing Hydrants and if so, are They Currently Usable / Operable?</p> <p>No, open water source to be confirmed.</p>
14	<p>Fire Service Site Plan</p> <p>New roadways are to be provided as part of the scheme, which are highlighted on the outline plan below. Access routes will be maintained at all times to ensure firefighting access to all significant areas of development.</p> <p>Access routes are to be designed to table 15.2 of Approved Document B Vol. 2, to accommodate suitable fire and rescue service vehicles, in terms of required weight and widths for appliances.</p>

EMERGENCY ROAD VEHICLE ACCESS AND WATER SUPPLIES FOR FIREFIGHTING PURPOSES



FIRE STATEMENT COMPLETED BY		
15	Signature:	
16	Date:	11-07-2023