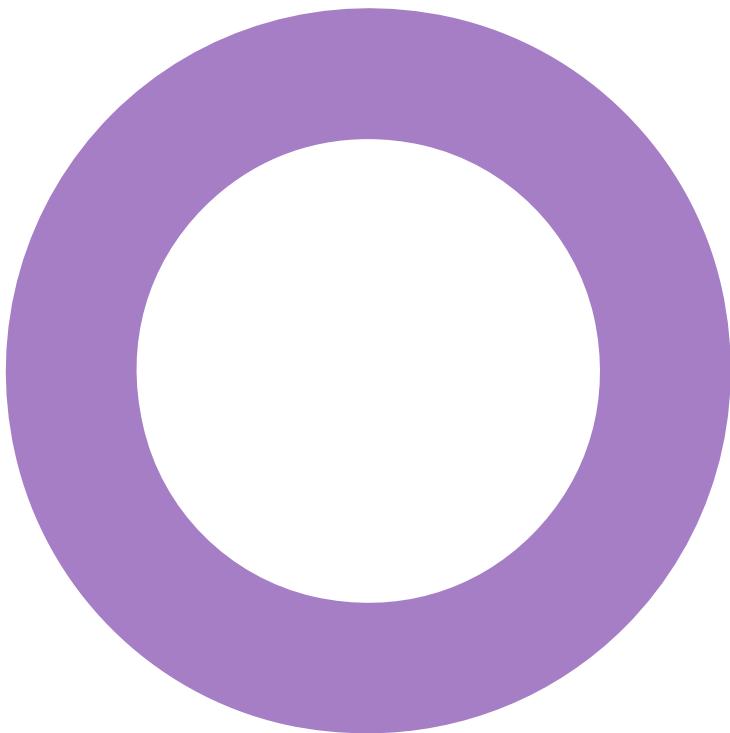


**Nestle Hayes.  
London.  
DNA Real Estate.**

**FIRE ENGINEERING**  
GATEWAY ONE FIRE STATEMENT

REVISION 00 – 11 MARCH 2024



### Audit sheet.

Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
00	11/03/2024	First issue for planning	SA	JA	MH

This document has been prepared for DNA Real Estate only and solely for the purposes expressly defined herein. We owe no duty of care to any third parties in respect of its content. Therefore, unless expressly agreed by us in signed writing, we hereby exclude all liability to third parties, including liability for negligence, save only for liabilities that cannot be so excluded by operation of applicable law. The consequences of climate change and the effects of future changes in climatic conditions cannot be accurately predicted. This report has been based solely on the specific design assumptions and criteria stated herein.

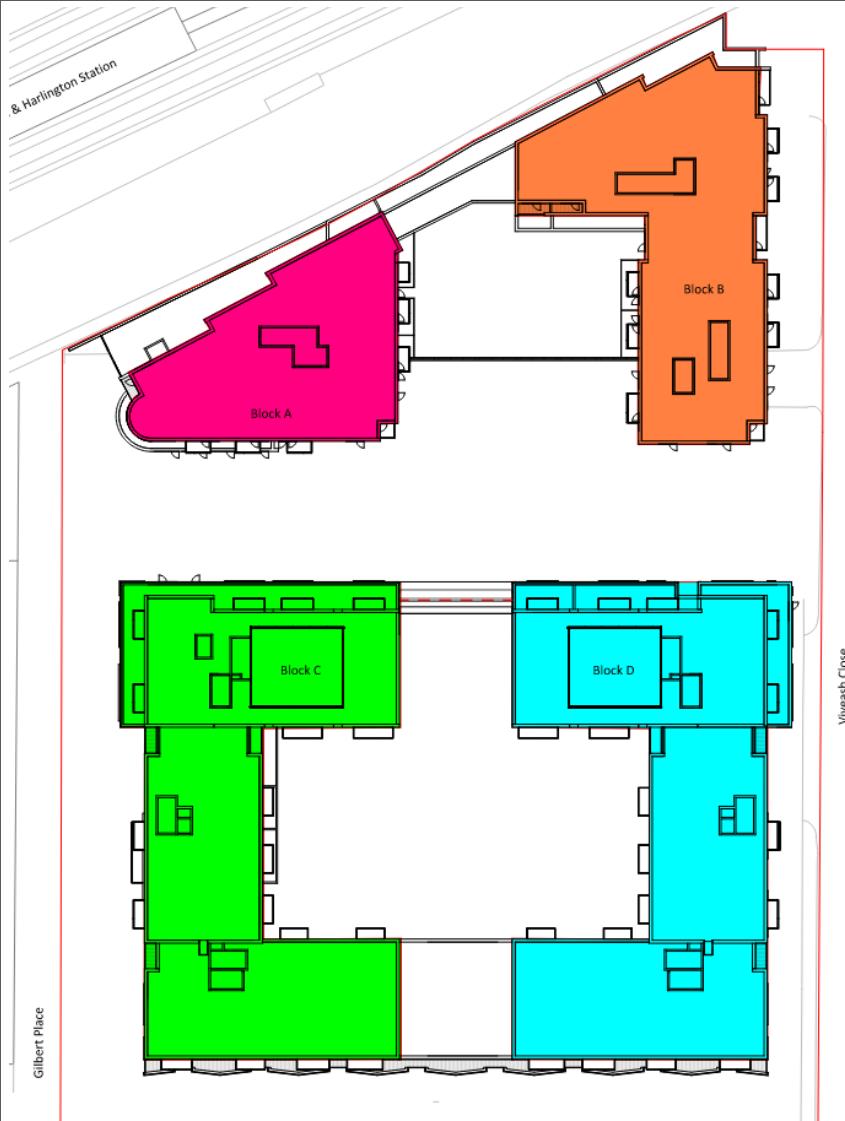
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## Fire Statement form.

<b>Application information</b>	
1. Site address line 1	233-236 Nestles Avenue
Site address line 2	Hayes
Site address line 3	N/A
Town	Hillingdon
County	Middlesex
Site postcode (optional)	UB3 4QG
2. Description of proposed development including any changes of use (as stated on the application form).	Demolition of the existing buildings and redevelopment of the site to provide 4 new blocks A, B, C and D. Block A and B has a height of 31.4m with car parking, residential ancillary and commercial spaces at Ground and First Floor. Blocks C and D has a height of 28.1m with car parking, residential ancillary and commercial spaces at Ground and First Floor.
3. Name of persons completing the fire statement (as section 15), relevant qualifications and experience.  Guide: no more than 200 words	Miller Hannah – BEng (Hons), CEng, MIFireE Director  Sangeerth – MEng (Hons), Affiliate Member of the IFE. Senior Fire Engineer
4. State what, if any, consultation has been undertaken on issues relating to the fire safety of the development; and what account has been taken of this.  Guide: no more than 200 words.	A previous fire strategy was discussed with Sweco building control when the design was a single stair design. Following a design rework to incorporate for a two-stair design in all the blocks, the fire strategy will be updated to reflect the latest design changes at which point the Approving Authorities will be re-engaged (in this case HSE).
<b>5. Site layout plan with block numbering as per building schedule referred to in 6.</b> (Consistent with other plans, drawings and information submitted in connection with the application)	
Site layout plan:	

### Application information



### The principles, concepts and approach relating to fire safety that have been applied to the development

#### 6. Building schedule

a. Block no. as per site layout plan above	b. Block height (m) Number of storeys excluding those below ground levels Number of storeys including	c. proposed use (one per line)	d. location of use within block by storey	e. standards relating to fire safety approach applied	f. balconies	g. external wall systems	h. approach to evacuation	i. automatic suppression	j. accessible housing provided
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The principles, concepts and approach relating to fire safety that have been applied to the development									
	below ground level								
A, B, C and D(4 blocks)	<ul style="list-style-type: none"> <li>- Blocks A and B have a height of 31.4m from the lowest adjacent ground level to the topmost occupied storey.</li> <li>- Blocks C and D have a height of 28.1m from the lowest adjacent ground level to the topmost occupied storey.</li> </ul>	<ul style="list-style-type: none"> <li>- Mixed use: residential flats, commercial premises (i.e. retail), workspaces, car park and residential amenity.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Blocks A and B</b> <ul style="list-style-type: none"> <li>- Residential flats at L01 – L10.</li> <li>- Car park at L00-L01</li> <li>- Workspace at L00-L01</li> <li>- Commercial retail at L00</li> <li>- Residential amenity at L00, L01 and L02.</li> </ul> </li> <li>- <b>Blocks C and D</b> <ul style="list-style-type: none"> <li>- Residential flats at L01 – L09.</li> <li>- Car park at L00</li> <li>- Workspace at L00-L01</li> <li>- Commercial retail at L00</li> <li>- Residential amenity at L00, and L01.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- BS 9991:2015 for residential areas.</li> <li>- BS 9999:2017 for non-residential areas.</li> <li>- ADB Vol 1 as required to account for new updates to the guidance (i.e. sprinklers, wayfinding signage, etc.).</li> </ul>	<ul style="list-style-type: none"> <li>- Class A2-s1, d0 or better.</li> </ul>	<ul style="list-style-type: none"> <li>- Class A2-s1, d0 or better.</li> </ul>	<ul style="list-style-type: none"> <li>- Stay put evacuation strategy for the residential flats.</li> <li>- Simultaneous evacuation strategy for the residential ancillary, community, workspaces and retail spaces.</li> </ul>	<ul style="list-style-type: none"> <li>- Yes to residential areas: residential sprinklers, full.</li> <li>- Yes to non-residential areas: commercial sprinklers, full.</li> </ul>	<ul style="list-style-type: none"> <li>- M4(3)</li> </ul>
7. Specific technical complexities									
Explain any specific technical complexities in terms of fire safety (for example green walls) and/or departures from information building schedule above. Guide: no more than 500 words									
A fire engineered approach will be used to justify the following aspects of the design relating to the means of escape:									
<ul style="list-style-type: none"> <li>- Open plan apartments exceeding the maximum dimensions (i.e. 8m x 4m) outlined in BS 9991. It is noted that all residents will be capable of independent evacuation.</li> <li>- Where common corridor travel distances exceed the guidance single direction travel distance of 15m to up to 30m, a Double Reversible Mechanical Extract (DRME) system i.e. two 0.6 m<sup>2</sup> free area mechanical shaft located on opposing corridor ends is proposed and will need to be validated.</li> <li>- Residential ancillary rooms that open directly into the car park to be smoke ventilated via the car park smoke ventilation system.</li> </ul>									
8. Issues which might affect the fire safety of the development									
Explain how any issues which might affect the fire safety of the development have been addressed. Guide: no more than 500 words									
<ul style="list-style-type: none"> <li>- Common corridors will be provided with a mechanical or natural smoke ventilation system.</li> <li>- Open-plan apartments exceeding the recommended dimensions outlined in BS 9991 will be provided with an enhanced automatic fire detection and alarm system and will be protected by sprinklers.</li> <li>- A computational fluid dynamics (CFD) assessment may be undertaken at RIBA Stage 3 to demonstrate the safety of open-plan apartments (as requested by the BSR).</li> <li>- Where common corridor travel distances exceed the guidance single direction travel distance of 15m to up to 30m, a Double Reversible Mechanical Extract (DRME) system i.e. two 0.6 m<sup>2</sup> free area mechanical shaft located on opposing corridor ends is proposed and will need to be validated. A computational fluid dynamics (CFD) assessment may be undertaken at RIBA Stage 3 to demonstrate the common corridor smoke ventilation system will work efficiently (as requested by the BSR).</li> <li>- Refuse storage areas will be separated from the rest of the accommodation by REI 60 fire-resisting construction.</li> <li>- Any accommodation that opens into the stair discharge routes will be provided with a protected lobby and where required; smoke ventilation will be provided to the lobby.</li> </ul>									

### **The principles, concepts and approach relating to fire safety that have been applied to the development**

#### 9. Local development document policies relating to fire safety

Explain how any policies relating to fire safety in relevant local development documents have been taken into account.

Guide: no more than 500 words

- A dedicated evacuation lift will be provided in each residential block in order to ensure the safe and dignified evacuation of persons with reduced mobility and in satisfaction of policy D5 of The London Plan (2021). This lift should serve all levels typically inhabited by residents, including the terrace at L18, and should be designed and installed in accordance with Annex G of BS 9999, BS EN 81-20:2020+A1:2021 and BS EN 81-70:2021.
- Further to the above, in order to achieve full satisfaction of policy D5 of The London Plan, it has been proposed to use the firefighting lift for the evacuation of residents if necessary to provide a level of redundancy within the building. The management procedures for the evacuation lifts will be developed during the detailed design stage.
- A separate fire statement has been produced by Hoare Lea to demonstrate compliance with policy D12 of The London Plan.

### **Emergency road vehicle access and water supplies for firefighting purposes**

#### 10. Fire service site plan

Explanation of fire service site plan(s) provided in 14. including what guidance documents have informed the proposed arrangements for fire service access and facilities?

Guide: no more than 200 words

- The development has been designed in accordance with the guidance in BS 9991:2015 and BS 9999:2017. As such, a firefighting shaft will be provided in each block serving all upper storey levels, designed in accordance with the recommendations outlined in BS 9999.
- A dry rising main will be provided within the firefighting shaft and where required, in the means of escape stairs, to ensure all parts of the building will be either within 45m of a dry riser in a protected stair or 60m for a dry riser in a firefighting shaft.
- Access routes for the Fire and Rescue Service (FRS) have been highlighted in the figure below (item 14), along with the dedicated layby opposite the entrance into the firefighting shaft. Access points into the building for the FRS have also been highlighted.

#### 11. Emergency road vehicle access

Specify emergency road vehicle access to the site entrances indicated on the site plan

Guide: no more than 200 words

- Access for the FRS will be provided at L00 into both the protected staircase and the firefighting shaft via dedicated protected passageways. A dedicated layby will be provided within 18m of the entrance into the firefighting shaft.
- All access roads around the site (i.e. Gilbert Place, Viveash close, Nestles Avenue) are existing thoroughfares. These roads are considered suitable for FRS appliances.

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

- Yes, the fire service access to the site is proposed to be provided to within 18m from a dry riser fire main inlet, placed at the ground floor façade of each block near the entry point to the firefighting shafts.
- In the event they attend a fire on the commercial/workspaces premises vehicle access will be provided to within 45m of every point on the projected plan area or to 15% of the perimeter, whichever is the less onerous.

#### 12. Siting of fire appliances

Guide: no more than 200 words

- A dedicated layby will be provided opposite the entrance into the firefighting shaft. This layby will be located within 18m of the entrance as shown in the figure below (item 14).

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

Guide: no more than 200 words

- If existing external fire hydrants are not provided within 100m of the building, then a new external hydrant will be provided within 90m of the dry fire main inlets.

Nature of water supply:

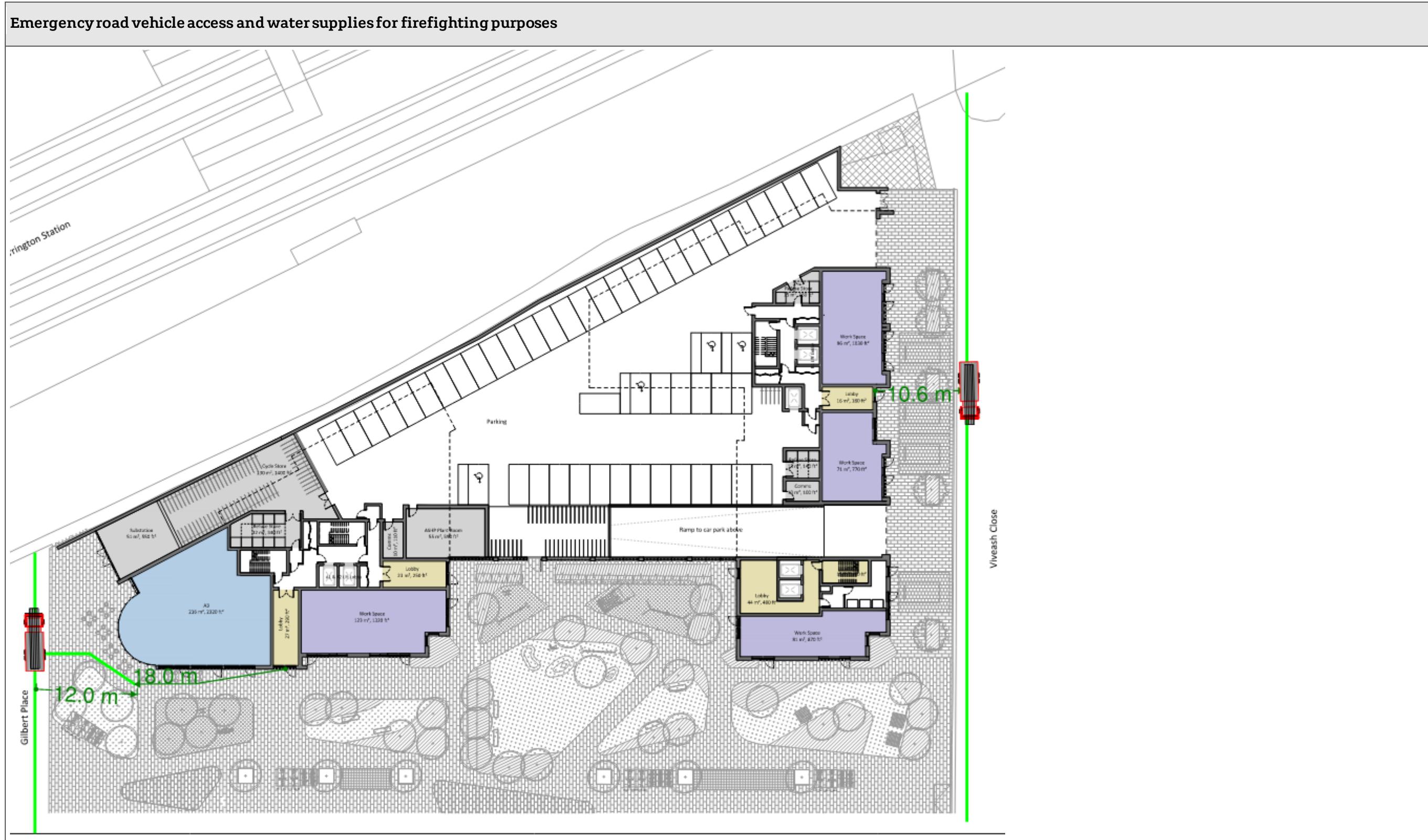
- Hydrant (public).

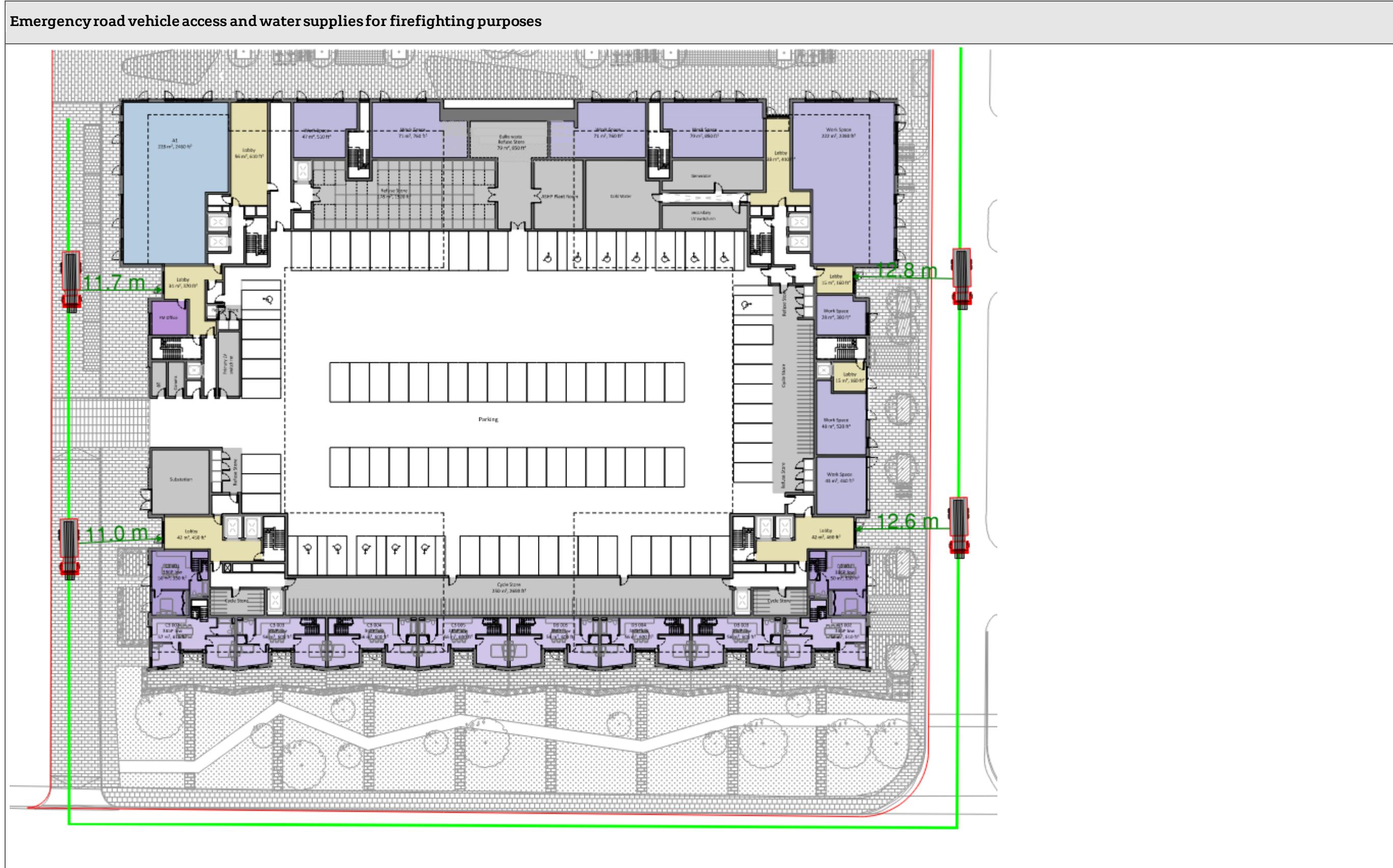
Does the proposed development rely on existing hydrants and if so, are they currently usable / operable?

**Emergency road vehicle access and water supplies for firefighting purposes**

- Not confirmed, but new hydrants are proposed if existing hydrants are not provided, not currently confirmed.

14. Fire Service site plan  
Fire Service site plan:





**Emergency road vehicle access and water supplies for firefighting purposes**

**Fire statement completed by**

1. Signature	Miller Hannah BEng (Hons), CEng, MIFireE 
2. Date	11/03/2024



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