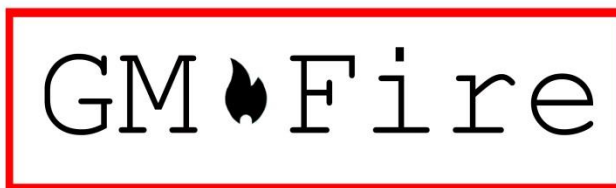


To

London Borough of Richmond
Planning Service



GM Fire Ltd
EMP Building
Unit 1
4 Solent Road
PO9 1JH
07981 426561

Premises: 42 High Street, Teddington, London, TW11 8SE

Application for redevelopment of site to provide a mixed-use development comprising ground floor and basement retail and eight residential units above.

Response to London Plan 2021 Policy D12

Dear sir / madam

GM Fire have been appointed by Unico Developments to produce a response to demonstrate compliance with the London Plan 2021 as part of the planning application at the above address.

This response is based on the information provided by Unico Developments via email and plans 01_A_23_0320 Basement, 01_A_23_0321 Ground plan, 01_A_23_0322 First Floor, 01_A_23_0323 Second Floor, 01_A_23_0324 Third Floor Plan and 01_A_23_0325 Roof Plan. No site visit has been carried out.

Background

The development will comprise a new build in line with the requirements of Approved Document B Volume 1: Dwellings 2019 edition incorporating the 2020 and 2022 amendments and Approved Document B Volume 2: Buildings other than dwellings 2019 edition incorporating the 2020 and 2022 amendments.

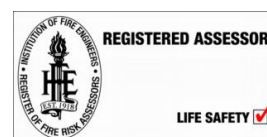
The existing site consists of an end of terrace property of 2 storeys above ground formerly used by HSBC Bank.

The plans are to replace the property to provide a new mixed use development of commercial and residential use units.

Ground floor and basement level commercial unit accessed from High Street with alternative rear exit at ground floor level. In addition there is a refuse area and a bike store, both are fire compartmented and neither needs to be accessed as part of an escape route.

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Independent accessed residential accommodation from Cedar Road. Ground floor lift to upper floors 1 and 2 and lobby to stairs. The stairs are lobbied at each internal level. First floor access to flats 1, 2, 3 and 4. Second floor access to flats 5, 6, 7 and 8. Flats 7 and 8 are duplex flats which extend to the third floor via individual private internal stairs.

Response

1) identify suitably positioned unobstructed outside space:

a) for fire appliances to be positioned on

Hard standing for a fire appliance is provided on High Street or Cedar Road.

There is a fire hydrant outside Starbucks at 70 High Street which is approximately 40m from 42 High Street. This is within the required 90m.

Any incident at the property would require a Fire Service cordon, which would be deployed by the appliances in attendance.

Entry for firefighters to the commercial unit would be provided via the entrance on High Street.

Entry for firefighters to the residential units would be via the entrance foyer on Cedar Road.

b) appropriate for use as an evacuation assembly point

Flats

The alarm systems will not be interlinked between flats, or between the commercial and domestic properties. Only the flat which has had an alarm activation will evacuate. As per all single, private domestic dwellings, there is no requirement to provide an evacuation assembly point, however, the occupants of the flats would be able to evacuate to a place of ultimate safety in Cedar Road car park opposite, outside the Fire Service cordon.

Commercial unit

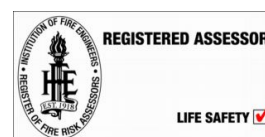
The commercial unit will have to undertake a suitable and sufficient risk assessment to confirm the location of the evacuation assembly point for its staff once occupied. It is proposed this will be within the car park on Cedar Road, opposite.

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

Detection and alarm

Flats

The individual flats will be installed with a minimum BS5839-6 system Grade D2 category LD3 consisting of mains powered, interlinked smoke detectors within flats 1, 2, 3, 4, 5 and 6 and BS5839-6 system Grade D2 category LD1 consisting of mains powered, interlinked smoke detectors within multistorey flats 7 and 8.



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Commercial Unit

The commercial unit requires a minimum BS 5839-1 L4 system with detection and alarm within the circulation spaces on the ground floor and within the basement with manual call points on exits.

The alarm systems will not be linked between flats, or between the commercial use and residential use due to 60 minutes fire resisting compartmentation being provided.

Passive and Active Systems

The individual flats will be separated by 60-minute fire rated walls and floors. The stairs and lift will form a protected shaft providing 60 minutes fire resistance.

The commercial unit will be separated from the flats by 60-minute fire rated walls and floors.

The refuse storage room will be fire separated by 60 minutes fire resisting construction.

The building will be fire separated from adjoining properties by an imperforate 60-minute fire rated wall which continues to the true roof line.

Flats 1, 2, 3, 4, 5 and 6

These are single storey flats which will be constructed with an internal protected hallway accessing the lounge / diner, single bedroom and bathroom. The bedrooms and lounge / diner will be installed with a minimum FD20 doorset. Bathrooms do not need to have fire doorsets as the bathroom will be separated by fire resisting construction from the adjacent rooms.

Flat 7 and 8

These are multi-storey flats without independent external entrance at ground level. Therefore, they will have:

- a protected internal stairway with all doors opening onto the stair to be a minimum FD30. (Bathrooms do not need to have fire doorsets provided that the bathroom is separated by fire resisting construction from the adjacent rooms.); and
- a BS5839-6 system Grade D2 category LD1 fire alarm and detection system. This aligns with ADB para 3.21 approach 4.

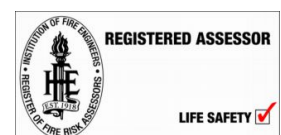
Communal areas

The internal communal stairs will be a protected route, with self-closing FD30S doors to all flat entrances.

The communal stairs are provided with a lobby (FD30S doors) on each floor.

Commercial unit

The commercial unit will have independent egress on the ground floor with an alternative exit to the rear. The basement area has no means of escape to an external place of safety, so a protected stair will be provided with an FD30S fire resisting door at the base of the stair and a lobby on the ground floor.



3) be constructed in an appropriate way to minimise the risk of fire spread

The walls and ceiling linings will meet the requirements of table 4.1, achieved via plasterboard finish.

Table 4.1 Classification of linings	
Location	Classification
Small rooms of maximum internal floor area of 4m ²	D-s3, d2
Garages (as part of a dwellinghouse) of maximum internal floor area of 40m ²	
Other rooms (including garages)	C-s3, d2
Circulation spaces within a dwelling	
Other circulation spaces (including the common areas of blocks of flats)	B-s3, d2 ⁽¹⁾

NOTE:
1. Wallcoverings which conform to **BS EN 15102**, achieving at least class C-s3, d2 and bonded to a class A2-s3, d2 substrate, will also be acceptable.

Cavity barriers will be installed as per the requirements of Approved Document B volume 1.

Fire stopping will be installed as per the requirements of Approved Document B volume 1.

External and party walls will be constructed to provide a minimum of 60 minutes fire resistance in accordance with table B4 of Approved Document B.

4) provide suitable and convenient means of escape, and associated evacuation strategy for all building users

Flats

The means of escape from the flats is via a communal internal protected stairway and hallway. The stair and means of escape corridor run to a final exit to fresh air.

The flats will be designed in line with the small single stair buildings approach at para 3.28 of ADB. The travel distance is less than 4.5m as per table 3.1 of ADB.

Due to the compartmentation, the appropriate evacuation policy is to stay put within the residential flats. Only the flat which has had an alarm activation will evacuate as per any traditionally constructed block of flats with adequate fire separation, as there will be no alarm raised communally.

The flats are installed with a lift to allow access for non-ambulant persons to the upper floors. Any residents of the upper floors will need to have a person-centred fire risk assessment prior to occupation. The lift is not intended to be used as an emergency egress in case of fire.

The communal stairs will be provided with a high-level openable vent with a free area of at least 1m² at each storey. Vents can be manually operable.

The residential and commercial areas will not share any means of escape.

Commercial Unit

The travel distance on the ground floor is in 2 directions and within 45m. The travel distance within the basement in a single direction is less than 18m.

The evacuation strategy within the commercial unit will be simultaneous evacuation on activation of the alarm.

There is no lift to the basement, it is therefore assumed all persons entering are capable of self-evacuation using the stairs.

The maximum occupancy of the basement will be 50 persons due to the floor space; and 60 persons on the ground floor due to the inward opening exits to the front opening onto the High Street.

5) develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in

The evacuation strategy is stay put within the flats. Only the flat in which a fire has been detected and the alarm has sounded will evacuate.

The evacuation strategy within the commercial unit will be simultaneous evacuation on the sound of the alarm.

It will not be necessary to update this strategy as the Building Regulations will not permit any material alteration to make the fire safety provisions no more unsatisfactory in relation to the requirements of Approved Document B than before the work was carried out. At such time the strategy would require review.

The building users can have confidence in the alarm and detection system providing early warning of fire occurring, and the provision compartmentation between flats to allow the stay put policy. Once within the communal areas, the protected stairway will allow safe egress.

6) provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.

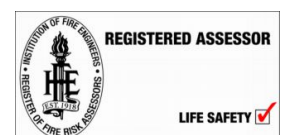
Vehicle access is provided via High Street. The property is existing and therefore access is not made any worse by the alterations. High Street is not a dead-end therefore no turning point is required for fire service vehicles.

There is a fire hydrant outside Starbucks at 70 High Street which is approximately 40m from 42 High Street. This is less than the required 90m.

Firefighter access will be via the front communal entrance for the flats and via the front door for the commercial ground floor.

There is no requirement to provide portable first aid firefighting equipment in blocks of flats.

The commercial unit will have to undertake a suitable and sufficient risk assessment to confirm the type, quantity and location of portable fire fighting equipment.



The contents of this report are specific to the above premises and should not be applied to any other building. The contents should not be changed without the consent of GM Fire Ltd.

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Fire Safety Consultant

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