APPENDIX C



The Licensing Unit

Floor 3 160 Tooley Street London SE1 2QH

Metropolitan Police Service

Licensing Office Southwark Police Station, 323 Borough High Street, LONDON, SE1 1JL

Tel: 020 7232 6756 Email: SouthwarkLicensing@met.police.uk

Our reference:	MD/21/ 2938/17		
Date:	11/04/2017		

Dear Sir/Madam

Re:- Belushis & StChristophers Village

Police are in possession of an application from the above for a variation to the premises licence. The application request the removal of condition 307 on the licence which stipulates the accommodation limit allowed within the premises. The current Operating hours for the venue are as follows.

Opening Hours	
Sun – Thurs	0700hrs - 0300hrs
Fri - Sat	0700hrs - 0400hrs

No explanation is contained within the application for the removal of this condition or a condition stipulating the new accommodation limit. We would like to see a limit to avoid overcrowding and problems associated with this. The limit should be set in conjunction with relevant legislation around fire safety and the technical standards for place of entertainment.

The Following is submitted for your consideration, Police would welcome the opportunity to conciliate should the need arise.

Yours Sincerely Pc Graham White 288MD Southwark Police Licensing Unit Tel: 0207 232 6756

MEMO: Licensing Unit

То	Licensing	Date	07 April 2017
Copies			
From	David Franklin	Telephone	020 7525 5800
Email	david.franklin@southwark	. <u>gov.uk</u>	

Subject Belushis & St Christophers Village, 161-165 Borough High Street SE1 1HR

I make this representation with regards to the variation application for a premises licence by Interpub Limited for the premises Belushis & St Christophers Village, 161-165 Borough High Street SE1 1HR.

My representation is based on the licensing objective for the promoting public safety, the prevention of crime and disorder and the prevention of public nuisance.

The application seeks to remove condition 307 from the premises licence that relates to the accommodation limits for the separate sections/rooms of the premises.

• 307 - That the maximum number of persons that may be accommodated within the premises at any one time shall not exceed 527 (Five Hundred and Twenty Seven), comprising 177 (One Hundred and Seventy Seven) on the Ground Floor Bar and 350 (Three Hundred and Fifty) in the Basement Area of the premises

The application does not offer any explanation or reasons why they propose to remove the accommodation figures for the premises or address the licensing objectives, no alternative accommodation figures have been offered.

There are a number of reasons why it is reasonable and proportionate to set maximum accommodation limits on premises licences to promote the licensing objectives.

- Floor space and usage setting maximum accommodation figures based on floor space and usage helps prevent overcrowding issues that can lead to crushing injuries or trip hazards, also assisting with crowd control to prevent disorder issues associated with overcrowding.
- Localised maximum capacity figures setting maximum capacity figures for individual areas and rooms help to prevent localised crushing problems, particularly in premises where one particular area is the main draw for patrons and other areas are less used, fill the venue to a single capacity figure could created localised overcrowding in the main draw area.
- Ventilation setting maximum setting maximum accommodation figures based on the ventilation, heating and cooling for the premises helps ensure that adequate fresh air for the number of person present can be maintained reducing injury from a lack of oxygen, particularly with patrons who may have pre-existing repertory problems.

- Heating and cooling maintaining the optimal temperature for premises, particularly where active participation such as dancing is involved, not only provides patron comfort but helps to prevent overheating problems with patrons such as heat stress.
- Sanitary accommodation restricting the accommodation in line with the sanitary
 accommodation provided not only assists with patron comfort and prevent excessive queuing,
 but helps prevent public nuisance from patrons from using the outside areas, streets and
 doorways to urinate when they cannot access the premises toilets in time due to under
 provision.

I note that the plans to the premises were changed in 2016, if it is the opinion of the applicant that the current accommodation figures do not reflect the current layout of the premises then I would recommend that, rather than just removing the current condition, the applicants work out the new maximum accommodation figures for each area and submit this to promote the licensing objectives.

The Technical Standards for Places of Entertainment <u>http://www.technical-standards-for-places-of-entertainment.co.uk/</u> can provide technical guidance for setting maximum accommodation figures, for smaller premises the document "RU SAFE?" is an introductory guide free to download from <u>http://www.rusafe.org.uk/</u> may give sufficient guidence.

David Franklin Licensing Authority as a Responsible Authority From: Farrington, Ian
Sent: Thursday, March 30, 2017 4:04 PM
To: Tahir, Sarah; Regen, Licensing
Cc: Tear, Jayne
Subject: RE: RE: Belushis, 161 - 165 Borough High Street, LDO = 11/04/2017

Dear Licensing Team,

I write in relation to the above application to vary an existing Licence - LDO 11/4

I wish to make an objection on the grounds of Public Protection:-

The applicant has not offered any justification for the removal of the accommodation limit, nor have they proposed an alternative condition to replace the agreed accommodation limit.

The existing accommodation limit will form part of the System of Management of Health and Safety at the premises, and any variation will have an impact on the management of health and safety in areas such as; safe capacity limits, prevention of localised over crowding, crowd control and management of work related violence. No supplementary paperwork or updated risk assessments have been submitted indicating how these risk will be managed in the absence of the agreed accommodation limit.

The applicant has not stated under the licencing objectives how they would promote the licensing objectives in the absence of this agreed accommodation limit. The premises is in the saturation zone and so the removal of this condition may further impact on the effectiveness of the saturation zone.

Kind Regards

Ian Farrington - Principal Enforcement Officer (Health and Safety) Postal address:Community Safety & Enforcement, Floor 3, Hub 1, PO Box 64529, London SE1P 5LX Office Address (for meetings and deliveries), 160 Tooley Street, London, SE1 2TZ From: Sharpe, Carolyn On Behalf Of Public Health Licensing
Sent: Monday, April 10, 2017 9:53 AM
To: Regen, Licensing
Cc: Public Health Licensing
Subject: RE: RE: Belushis, 161 - 165 Borough High Street, LDO = 11/04/2017

To whom it may concern:

Re: Belushis, 161-165 Borough High Street, London SE1 1HR

On behalf of the Director of Health and Wellbeing (incorporating the role of Director of Public Health) for Southwark (a responsible authority under the Licensing Act 2003) I wish to make representation in respect of the above.

The representation is made in respect of the following licensing objective(s):

- The prevention of crime and disorder
- Prevention of public nuisance
- Public safety

General Comments

The applicants requests a variation to their current licence to remove condition 307: 'That the maximum number of persons that may be accommodated within the premises at any one time shall not exceed 527 (Five Hundred and Twenty Seven), comprising 177 (One Hundred and Seventy Seven) on the Ground Floor Bar and 350 (Three Hundred and Fifty) in the Basement Area of the premises'. This condition is imposed to ensure the capacity of the venue remains at a safe level and the applicant has not provided an alternative condition as to what the new capacity limit would be.

Recommendations

I recommend this application is rejected

If you have any further questions, please do not hesitate to contact me.

Yours faithfully,

Carolyn Sharpe on behalf of Professor Kevin Fenton, Director of Health and Wellbeing (incorporating the role of Director of Public Health) 20 Gresham Street London EC2V 7JE T +44 (0)333 006 0300 F +44 (0)333 006 0311 DX 431 London Chancery Lane

www.TLTsolicitors.com

Our ref 303L/JS21/053384/000145 Your ref



Mr Ian Farrington; PC Graham White; Mr David Franklin and Ms Carolyn Sharpe

By email only to: lan.Farrington@Southwark.gov.uk; SouthwarkLicensing@met.police.uk; David.Franklin@Southwark.gov.uk; and Dorcas.Mills@Southwark.gov.uk (for onward transmission to Ms Sharpe)

Direct tel	+44 (0)333 006 1357	Date	12 April 2017
Direct fax	+44 (0)333 006 0011	Email	julian.skeens@tltsolicitors.com

Dear Sirs and Madam

Belushis and St Christophers Village - 161 to 165 Borough High Street, London SE1 1HR - Application to vary a premises licence

Given the common theme which runs through your separate representations, we hope that you do not think it discourteous to address them collectively.

May we start by explaining some of the history to this application? These premises have been licensed for a considerable amount of time. The present licence was issued by Southwark Borough Council on conversion under the Licensing Act 2003, when the Council was obliged to issue a new Premises Licence in exchange for the old, with the old conditions endorsed upon it.

Following the relatively recent grant of planning consent, an application was made for a variation of the Premises Licence. This was granted and the varied licence issued on 8 December 2017. When it was received, we were surprised to find that condition 307 was still included. Our research and instructions had suggested that the condition had been put on the old licence as a result of representations from the Fire Service. If we had been right, condition 307 should have been removed from the varied licence under The Regulatory Reform (Fire Safety) Order 2005 Article 43 (the order), which is why we included a request in the notice of application for a variation that:

"any conditions that ought to be removed as a result of the Regulatory Reform (Fire Safety) Order should be removed from the Premises Licence as part of this variation".

The order came into force on 1st October 2006 and stated that:

39664248.1

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"any term, condition or restriction imposed by the Licensing Authority has no effect insofar as it relates to any matter in relation to which requirements or prohibitions are or could be imposed by or under this order".

Guidance issued at that time advised that such conditions should be ignored on a Premises Licence until such time as the licence was varied or a duplicate issued when the premises licence could be issued without the "offending" condition.

We therefore wrote to the Principal Licensing Officer, inviting her to remove condition 307. She replied, possibly with better records than our own, that the condition had not been imposed purely at the request of the Fire Authority and therefore the condition must remain on the Premises Licence.

This caused a problem because the approved changes to the layout of the licensed premises rendered the capacities set out in condition 307 inappropriate. If condition 307 was to remain on the licence, condition 307 should have been amended at the same time as the approval was given to the changes to the layout, it wasn't.

May we now address the fact that we have not suggested a replacement condition. As you will know all businesses now have to undertake risk assessments and operate in accordance with those risk assessments.

The latest Fire Safety Strategy and Risk Assessment has been prepared by Fire Skills Limited. At Appendix A, a safe occupancy calculation has been made in respect of the ground floor and basement accommodation following the approved changes to the layout of the premises, and we enclose both documents.

You will see at item 2.1 of the Appendix that the "exit capacity" i.e. the number of people that can be safely evacuated from the premises (which rely principally on the widths of exits) is 330 persons. The "space capacity" is 329 which would include a maximum of 39 staff. As you will be aware when assessing capacities as a Licensing Authority, staff should be excluded from the calculation on the basis that they will be trained and will assist in the safe evacuation should that need arise. It is thought inappropriate to ask operators to decide whether they can cut down on staff and allow an extra paying guest to be accommodated. Licensed premises should have more supervision not less.

In relation to the ground floor the "safe exit capacity" is either 560 or 550 (and we will therefore use 550). The document then deals with the amount of space available on the ground floor and concludes that 470 persons can be accommodated at any one time.

The premises licence holder will therefore be required to operate within those capacities of 470 for the ground floor and 329 for the basement.

Guidance advises amongst other things that there should not be duplication, in particular, in repeating restrictions from other legislation which is why we have not invited the Council's Licensing Committee to impose a condition duplicating the risk assessment, the premises licence holder must comply with the assessment in any event.

With the benefit of hindsight it might have been helpful if we had written to you explaining the above; we apologise for not having thought of that when lodging this application for variation. We hope it helps now.

Our position is therefore that we do not think that condition 307 should be amended with the new capacities substituted. Nor would it be appropriate to substitute it with a condition requiring compliance with a risk assessment

Perhaps we should mentioned that the toilet provision exceeds the approved maximum "space occupancy". In view of that, and in the spirit of compromise, may we suggest entirely on a without prejudice basis the following condition:

"No more than 799 patrons shall be accommodated on the ground and basement areas."

If you would like to discuss any of the above please do not hesitate to contact the writer.

Yours sincerely

Julian Skeens			
Partner			
for TLT LLP			
	a there is a state of the		

enc Fire risk assessment



Fire Safety Strategy

St Christopher's Village

161 to 165 Borough High Street

London SE1 1HR

Prepared on behalf of: Beds and Bars Ltd

V2.1

21 February 2017

NOTE: This report should not be manipulated, changed or presented without the consent of FireSkills Ltd



Version and review history table

Version	Date	Changes made
1.0	03/02/17	Draft issued
2.0	17/02/17	Document issue
2.1	21/02/17	Amendment to front page and inclusion of Occupancy calculation for Ground and Basement as Appendix A



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Terms and Definitions

- BS: British Standard
- **Compartment:** Space defined by fire resisting boundary elements.
- **Combustible:** A material capable of been ignited or burned
- **Combustion:** Exothermic reaction of a substance with an oxidizing agent.
- **Escape time:** time interval between the time of a warning of fire being transmitted to the occupants and the time at which the occupants of a specified part of a building or all of the building are able to enter a place of safety.
- Fire risk: product of: probability of occurrence of a fire to be expected in a given technical operation or state in a defined time; and consequence or extent of damage to be expected on the occurrence of a fire
- **Fire scenario:** Set of circumstances, chosen as an example, that defines the development of fire and the spread of combustion products throughout a building or part of a building.
- **Natural ventilation:** Ventilation resulting from the exploitation of the thermal buoyancy of the smoky gases to exhaust them to be replaced at inlets by ambient air.
- NOTE These are usually based upon the design fire burning steadily at its largest size.
- **Place of safety:** location that is free from danger and from which it is possible to move freely without threat from a fire.
- **Purpose Group;** A classification of a building according to the purpose to which it is intended to be used; example Office, Industrial...
- RSET: Required Safe Escape Time

* Note: BS EN ISO 13943:2010 (Fire Safety Vocabulary) should be referred to for any clarification necessary



1 Introduction

1.1 Fire Engineering

Fire Engineering is the application of scientific and engineering principles. Expert judgment is used, based on an understanding of the reactions of materials to fire and human behaviour in a fire, to develop unique fire safety solutions to protect people, property and the environment from the destructive effects of fire.

1.2 Scope

The purpose of this report is to analyse the fire precautions for the proposed extension of accommodation on the second, third, fourth and fifth floor of No. 161 Borough High street; the change of use of the upper floors of No. 161 Borough High street from office accommodation to sleeping accommodation and the renovation of numbers 163 and 165 Borough High Street.

This report identifies the measures needed to meet the functional requirements of the Building Regulations 2010 and The Regulatory Reform [Fire Safety] Order 2005 only.

Property protection and business continuity are not covered within this report. Where measures exceed the requirements for compliance with the FSO, the minimum standard required to comply will be stated unless the over provision of the measure is to be used to compensate for a deficiency elsewhere. Where this is the case, the interaction will be described.

1.3 Statutory Requirements

1.3.1 The Building Act 1984

The Building Act 1984 is the principal legislation, which enables the control of all building work within England and Wales. The principal function of the Act is to:

- Protect the health, safety and welfare of persons in and around buildings
- To conserve fuel and power
- To promote the use of sustainable development
- To prevent the waste, undue consumption and contamination of water
- To help prevent and detect crime

1.3.2 The Building Regulations 2010

The Building Regulations 2010 are created under the powers of The Building Act 1984.

The function of the 2010 regulations is to:

- Control the design and construction of buildings
- Control the provision of services, fittings and equipment in relation to the construction of building work

1.3.3 The Regulatory Reform (Fire Safety) Order 2005

The Regulatory Reform (Fire Safety) Order 2005 is an order to provide powers to regulate the provision of fire precautions in premises throughout England and Wales. Its effect has been to consolidate previous fire legislation. The Order is applicable to nearly all commercial buildings,



structures, open spaces and the common parts of residential buildings. The Order requires any person who has a level of control within a building to take reasonable steps to reduce the risk from fire and to ensure that people can safely escape from the building in the event of a fire.

To meet the relevant requirements of the Order, the responsible person must carry out a suitable fire risk assessment and, using the significant findings of the assessment, provide suitable fire precautions to enable the safe occupation of the building, structure or open space. The risk assessment is a living document that should be up to date at all times and take into account any changes within the building, structure or open space.

A Fire Risk Assessment should be carried out;

- On the completion of the building process, and before the building becomes occupied
- When any changes occur such as changes in the use or occupancy of the building, any building work or process changes.
- Annually, if not reviewed due to the above.



2 Project Characteristics

2.1 General

St Christophers Village is an existing seven storey premises consisting of three adjoining terraced properties. The three properties are currently internally connected at basement and ground floor levels to form a single premise. The basement and ground floors are used as Bar and Restaurant accommodation and incorporate the reception and access to hostel accommodation on the floors above.

First, second and third floors are currently used as high density hostel accommodation and are provided with two fire escape stairs; one stair to the rear of No. 163 (stair 3), the other to the left side of No. 165 (stair 2) which has been provided with a pressurisation smoke control system conforming to BS12101 part 6 (see report 1702: 28/07/16). Both stairs exit directly to open air, in Mermaid Court at ground floor level.

The fourth floors of 163 and 165 are currently used as staff accommodation and are accessed by a separate stair running from third to fourth floor only. The fifth-floor level is currently roof void over No's 163 and 165. No. 161 is currently used as office accommodation from first to fourth floor levels, served by a single stir (stair 1) and is fully separated from the adjacent properties other than at basement and ground levels.

The proposed re-development will extend the area of accommodation available within 161 Borough High Street and connect the upper floors of 161 Borough High Street with the upper floors of 163 and 165 Borough High Street to enlarge the area available for use a hostel accommodation. An additional fifth floor level is to be added over the front portion of all three properties, with hostel accommodation being extended to the fourth and fifth floors. To provide adequate means of escape for the additional hostel accommodation, the existing stairs in No. 161 and 165 are to be extended to the fifth floor.

2.2 Occupant Characteristics

The premises will be mixed use on completion of the renovation project.

The basement and ground floors will be predominantly put to use as Bar and Restaurant accommodations, purpose group 4: Shop and commercial [ADB, Table D1], while the first, second, third fourth and fifth floors will be put to use as Hostel accommodation, purpose group 2b: Residential Other(2b) [ADB, Table D1].

Staff and guests are expected to be predominantly fit active individuals, however the renovation will include provision of measures to facilitate the accommodation of disabled people, both in accessing services and in safely evacuating in the event of a fire.

2.3 Evacuation Strategy

The evacuation strategy is to be based on full simultaneous evacuation. On activation of the fire detection system in any part of the premises, all occupants will be alerted and start to evacuate immediately to a place of safety.



2.4 Guidance

Approved Document B: Buildings other than dwelling houses Volume 2, (2013) UK: TSO is the primary guidance document used in this report and where departures are necessary Fire Engineering will be used as a methodology to show compliance.

2.5 Drawing Plans Schedule

All quoted plans are as supplied by the client. The refurbishment is divided into two projects. Plans for the basement and ground floor refurbishment are provided by Allen Associates (AA) while plans for the extension and refurbishment of the hostel accommodation on the upper floors are provided by Daniel Hurd Associates (DHA).

Drawing Number	Description	Revision	Ву
642 / 140	Proposed Basement Plan	Rev F	DHA
642 / 141	Proposed Ground Floor Plan	Rev F	DHA
642 / 142	Proposed First Floor Plan	Rev N	DHA
642 / 143	Proposed Second Floor Plan	Rev L	DHA
642 / 144	Proposed Third Floor Plan	Rev L	DHA
642 / 145	Proposed Fourth Floor Plan	Rev K	DHA
642 / 146	Proposed Fifth Floor Plan	Rev L	DHA
264 / P01	Proposed ground floor GA Plan	Rev F	AA
264 / P03	Dugout plan GA inc reflected fire strategy & A/C		AA

Table 1: Drawing Plans Schedule



3 Means of Warning and Escape

Schedule 1 of the Building Regulations requires the following functional requirement to be met in respect of B1, means of warning and escape;

"The Building shall be designed and constructed so that there are appropriate provisions for the early warning of fire, and appropriate means of escape in case of fire from the building to a place of safety outside the building capable of being safely and effectively used at all material times"

3.1 General

This part of the report deals with the requirements for means of escape for the Hostel accommodation to be provided on the first second, third, fourth and fifth floors of the premises. The requirements for means of escape for the ground and basement bar areas have previously been detailed in a Technical Note entitled "Occupancy calculation for: The Village, 161 – 165 Borough High Street, Southwark, London SE1 1HR" dated 21 August 2016. A copy of this Technical Note has been included as Appendix A of this report.

3.2 Means of escape - Vertical

Vertical means of escape for the hostel accommodation on the 1st to 5th floors is provided by 3 stairs:

- Stair 1 is situated to the front of 161 Borough High Street;
- stair 2 is situated to the front of 165 Borough High Street and
- stair 3 is situated to the rear of 163 Borough High Street.

All three stairs are enclosed within 30-minute fire resisting construction at all levels. All doors accessing the stair enclosures are 30-minute fire resisting doors with overhead self closing devices. All doors are equipped with cold smoke seals and intumescent fire seals.

All three stairs offer final exit direct to fresh air at street level.

Additional fire protection is provided to stair 2 by the installation of a pressurisation smoke control system conforming to the British Standard BS12101 part 6 to prevent smoke from a fire entering the stair and preventing occupants from using the stair to evacuate safely. (See section 3.3 for the specification of this system).

Stair	Minimum width	Stair Capacity ADB [1]	Stair capacity per floor [2]
Stair 1	1050mm	360	200
Stair 2	950mm	245	125
Stair 3	1100mm	380	220

Table 2 below shows the exit capacities of the three stairs serving the upper floors.

Table 2: Current stair capacity

[1] ADB Table 7: capacity of stairs for simultaneous evacuation of the building. Analysis of the figures given in table 7 of the ADB shows that for both 1000mm stairs and 1100mm stairs, 40 people are accommodated on each floor level the stair passes through, in addition to the capacity quoted for a single floor. The capacity of the 1050 stair has therefore been calculated by adding 40 persons per floor level served by the stair, while the capacity of the



950mm stair has assumed a lower figure of 30 people per floor level, based on personal observation.

[4] ADB Table 6 'Minimum widths of escape stairs' allows for a minimum escape stair width of 800mm for which an escape capacity of 50 is allowed, while a stair of width 1000mm allows for 150 people. The escape capacity of 125 people for a stair of width 950mm in table 2 above is arrived at by linear extrapolation.

The maximum escape capacity provided by the three stairs can be calculated by discounting a stair, where appropriate, to simulate a worst-case fire scenario compromising a stair during the evacuation. Taking into consideration that the additional protection provided for stair 2 described above means this stair is very unlikely to be compromised by a fire and therefore can be assumed to be available throughout the evacuation period, and that stair 3 offers the largest escape capacity and therefore represents the worst case if discounted, the two remaining stairs still offer a capacity of 605 people. The expected maximum occupancy is 411 people, which is well below this figure.

3.2.1 Lifts

The premise is provided with two existing lifts:

- Lift 1 is located behind Stair 1 to the centre of No. 161 Borough High Street and provides accesses from basement to fifth floor.
- Lift 2 is located to the centre of No. 163 Borough High Street and provides accesses from basement to fourth floor.

The Approved Document B, Volume 2 requires that all lift wells should either be contained within the enclosure of a protected stair, or else enclosed throughout their height in fire resisting construction if they are sited so as to prejudice the means of escape. Both lifts within the premises are so sited.

Lift 1 appears to be open to the basement level accommodation and ground floor reception area.

It is enclosed within fire resisting construction at first, second third fourth and fifth floor levels, however at first and second floor levels the enclosure incorporates sanitary accommodation. This is considered to be acceptable provided there is no significant fire load or ignition source provided as part of the sanitary accommodation. However, at third floor level, the enclosure of lift 1 incorporates similar sanitary accommodation and a store. The inclusion of a store within a lift enclosure is not considered to be satisfactory.

The corridor arrangement at third floor level should be amended to remove the proposed store from the enclosure of lift 1.

Lift 2 appears to be open to the means of escape and bar accommodation at all levels from basement to fourth floor. There appears to be a door proposed at second floor level. Provision of a fire resisting door in this position would separate the lift well from the means of escape.

The lift well for lift 2 should be enclosed throughout its height in fire resisting construction. This may be either as a fire resisting lobby or by the provision of fire resisting doors to separate the lift well from the rest of the accommodation



3.3 Means of Escape - Horizontal

Horizontal means of escape is provided by protected corridors accessing storey exits to the three stairs. All doors giving access on to these corridors are 30-minute fire resisting self closing doors equipped with cold smoke seals and intumescent fire seals. Cross corridor doors are provided on each floor to ensure that smoke from a fire cannot spread to compromise the route to adjacent storey exits.

3.3.1 Exit capacities

The dimensions of doors accessing the protected stairs in the hostel accommodation are shown in table 3 below.

Floor	Door	Width (mm) (Stair 1)	Door	Width (mm) (Stair 2)	Door	Stair 3	Current storey capacity: ADB [1]	Current storey occupancy
1	D1.9	900	D1.3	800	D1.49	800	200 [2]	142
2	D2.12	800	D2.26	800	D2.44	800	200[2]	98
3	D3.12	800	D3.22	800	D3.34	800	200 [2]	83
4	D4.4	800	D4.16	800	n/a		100 [3]	50
5	D5.3	800	D5.8	800	n/a		100 [3]	38

Table 3: Storey exit widths and capacities

[1] Minimum door width quoted as 850mm for 110 occupants. Door width of each doorway is 850mm, however all door frames have 2 x 25mm rebates fitted giving a minimum clear opening of 800mm. The figure of 100 persons per 800mm door has therefore been used to calculate the exit capacity, to account for the decrease in exit width. This figure has been used as the capacity quoted for a 750mm width door in the HMG guide to Fire safety risk assessment: sleeping risk.

[2] Figure quoted is the capacity of 2 storey exits, the 3rd storey exit having been discounted to represent the worst case fire scenario for each floor.

[3] Figure quoted is for a single storey exit, the 2nd storey exit having been discounted to represent the worst-case fire scenario for each floor.

From table 3 above it can be seen that the maximum expected occupancy of each floor is below the escape capacity provided by the available exits, taking into account the discounting of the largest storey exit on each floor to simulate the exit route to the relevant stair being blocked by a fire and therefore unavailable to the occupants.

3.3.2 Travel distances

The Approved Document B allows a maximum of 9m travel within a room, then 9m onward travel to a storey exit if there is only a single direction of escape (total 18m) or 26m onward travel to a storey exit if there is a choice of escape routes (total 35m).

3.3.3 First Floor

Bedrooms A and B have only a single direction of escape. For bedroom A, the travel distance within the room is 5m. The total distance to the exit to stair 2 is 15.5m. For bedroom B, the travel distance



within the room is 6.5m. The total distance to the exit to stair 2 is 15.5m. Stair 2 is pressurised and therefore is very unlikely to be compromised by a fire on another floor.

Bedrooms 1.1 and 1.2 have only a single direction of escape. For bedroom 1.1, the travel distance within the room is 8m. The total distance to the exit to stair 1 is 10m. For bedroom 1.2, the travel distance within the room is 11m. This exceeds the 9m advised by the Approved Document B, however the total travel distance to the storey exit is 13m, which is well within the 18m allowed.

Should stair 1 become compromised by a fire on a lower floor, the route past this stair is protected by the fire resisting construction enclosing the stair, allowing occupants of the room to safely bypass the stair to an alternative exit.

All other parts of the floor are provided with alternative escape routes and have travel distances to storey exits of less than the recommended maximum.

3.3.4 Second floor

Bedrooms 19 and 21 have only a single direction of escape. For bedroom 19, the travel distance within the room is 3m. The total distance to the exit to stair 2 is 5m. For bedroom 21, the travel distance within the room is 7.5m. The total distance to the exit to stair 2 is 9.5m. Stair 2 is pressurised and therefore is very unlikely to be compromised by a fire on another floor.

Bedrooms 2.1, 2.2, 2.3, 2.4 and 2.5 all have only a single direction of escape. The worst case is room 2.3 which has a travel distance within the room of 4.5m then an onward travel distance of 9m to the storey exit. All are therefore within the recommended travel distances.

Should stair 1 become compromised by a fire on a lower floor, the route past this stair is protected by the fire resisting construction enclosing the stair, allowing occupants of the room to safely bypass the stair to an alternative exit.

All other parts of the floor are provided with alternative escape routes and have travel distances to storey exits of less than the recommended maximum.

3.3.5 Third floor

Bedrooms 26, 27 and 28 have only a single direction of escape. The worst case is room 28 which has a travel distance within the room of 7.5m then an onward travel distance of 2.5m to the storey exit to stair 2. All are therefore within the recommended travel distances. Stair 2 is pressurised and therefore is very unlikely to be compromised by a fire on another floor.

Bedrooms 3.1, 3.2, 3.3 and 3.4 all have only a single direction of escape. The worst case is room 3.3 which has a travel distance within the room of 5.5m then an onward travel distance of 8m to the storey exit. All are therefore within the recommended travel distances.

Should stair 1 become compromised by a fire on a lower floor, the route past this stair is protected by the fire resisting construction enclosing the stair, allowing occupants of the room to safely bypass the stair to an alternative exit.

All other parts of the floor are provided with alternative escape routes and have travel distances to storey exits of less than the recommended maximum.



3.3.6 Fourth floor

Bedrooms 4.1, 4.2, 4.3 and 4.4 all have only a single direction of escape. The worst case is room 4.1 which has a travel distance within the room of 5.5m then an onward travel distance of 3m to the storey exit. All are therefore within the recommended travel distances.

Should stair 1 become compromised by a fire on a lower floor, the route past this stair is protected by the fire resisting construction enclosing the stair, allowing occupants of the room to safely bypass the stair to an alternative exit.

Bedrooms 4.8, 4.9 and 4.10 have only a single direction of escape which is compounded by there not being a means of by-passing stair 2. The worst case is room 4.10 which has a travel distance within the room of 3m then an onward travel distance of 3m to the storey exit to stair 2. However, as Stair 2 is pressurised it is very unlikely to be compromised by a fire on another floor. All are therefore within the recommended travel distances.

All other parts of the floor are provided with alternative escape routes and have travel distances to storey exits of less than the recommended maximum.

3.3.7 Fifth floor

Bedrooms 5.1, 5.2, 5.3 and 5.4 all have only a single direction of escape. The worst case is room 5.1 which has a travel distance within the room of 4.5m then an onward travel distance of 3.5m to the storey exit. All are therefore within the recommended travel distances.

Should stair 1 become compromised by a fire on a lower floor, the route past this stair is protected by the fire resisting construction enclosing the stair, allowing occupants of the room to safely bypass the stair to an alternative exit.

All other parts of the floor are provided with alternative escape routes and have travel distances to storey exits of less than the recommended maximum.

3.3.8 Provision of refuges

A refuge for disabled occupants is proposed on the first floor in the lobby to stair 1, outside room 6. Plan 642 – 142 rev N shows this lobby to be 1650mm in width. The minimum width required for a waiting wheelchair is 900mm. The minimum width allowed for an escape route is 750mm, allowing 60 persons to use the route. Therefore, the positioning of a refuge in this lobby is acceptable. However, it is recommended that the door to the lobby be hung from the right wall (as viewed approaching the lobby from the exit from room 6) to encourage a smooth flow of occupants past any waiting wheelchair user.

No other refuge spaces have been identified within the current floor layout proposals.

Within the buildings addressed as 163 and 165 Borough High Street, the proposed renovation work does not represent any change to the use or occupation of an existing building. As such, the principle of the proposed work not making the situation worse can be applied to the achievement of compliance with the Building Regulations Part B. However, in 161, the proposals represent a change of use from office to sleeping accommodation.

It is therefore recommended that consideration be given to the provision of a refuge for disabled within the lobby approach to stair 1 from the new accommodation in 161 Borough High Street, at each floor level, with accessible accommodation being provided as part of the accommodation within this area. This would have the added benefit of easy access to Lift 1.



Any such refuges provided should be clearly indicated by appropriate signage, and provided with an emergency voice communication system complying with BS 5839-9:2011, consisting of Type B outstations communicating with a master station located adjacent to the main fire alarm indicator panel.

3.4 Smoke control system in Stair 2

A class D pressurisation system has been provided in stair 2 in place of smoke lobbies to ensure that this stair is available for means of escape throughout the evacuation phase of a fire in the building.

The renovation work proposed will extend Stair 2, which currently serves up to the third floor. In the new arrangement, this stair will serve all floors up to the fifth floor.

The smoke control system is to be extended to ensure that the protection currently offered is maintained in the new arrangement.

3.4.1 Airflow criteria

The airflow through the doorway between the pressurised stair and the accommodation on the fire floor should is not less than 0.75 m/s when:

- The door between the accommodation and the stairwell on the fire storey is open and/or
- All doors within the accommodation on the fire storey between the pressurised stair and the air release path are open and/or
- All doors between the pressurised stair and the final exit are open and/or
- The final exit door is open and/or
- The air release from the accommodation on the fire floor is open.

3.4.2 Pressure differential

The pressure difference across the door between the pressurised stair and the accommodation area on the fire storey is a minimum of 10 Pa when:

- The door between the accommodation area and the pressurised stair on the fire storey is closed and
- All doors between the pressurised stair and the final exit door are open and
- The final exit door is open and
- The air release path from the accommodation area on the storey where the pressure difference is being measured is open and
- A door to a floor other than the fire floor is open.

The pressure difference across the door between the pressurised stair and the accommodation area on the fire storey is a minimum of 50 Pa when:

- The doors between the accommodation area and the pressurised stair are closed on all storeys
- All doors between the pressurised stair and the final exit door are closed
- The air release path from the accommodation area on the storey where the pressure difference is being measured is open
- The final exit door is closed.



• All figures above have a ± 10 % tolerance on the measurement within the performance criteria for acceptance.

3.4.3 Door opening forces

The system is designed so that the force on the door handle will not exceed 100 N.

3.5 Fire Detection and Alarm

The fire alarm for the premises is being upgraded as part of the renovation work. As the hostel accommodation on the upper floors represents the highest risk use within the building, the fire alarm and detection system should be installed to meet the requirements of Category L2 of British Standard BS5839-1: 2013, that is, providing early warning of fire in escape routes, rooms off escape routes and other defined risk rooms. This provision should extend to the whole of the premises, to include all of the hostel accommodation, the ground floor reception and checking in area and the ground and basement accommodation.

Audible alarms should be provided to ensure the following minimum sound pressure levels:

- 65 dB(A) throughout all accessible parts of the building
- This may be reduced to 60 dB(A) in stair wells.
- 75 dB(A) at each bed head in all sleeping accommodation.
- Not more than 120 dB(A) at any normally accessible location
- In locations where the ambient sound level is expected to exceed 60dB(A) for a period of greater than 30s at any time (public entertainment venues / plant rooms etc.) then a minimum sound pressure level of 5 dB(A) above the expected maximum ambient level is required.

Measurements of these levels should be confirmed with all doors in the closed position.

In premises designed for public entertainment, retail and similar premises, in which the sound pressure level of music is likely to be greater than 80 dB(A), the music should be muted automatically when a fire alarm signal is given.

In addition to normal audible alarms, additional visual and /or tactile alarm systems should be installed or provided throughout areas which could be accessed by persons with hearing impairments.

3.6 Protection of escape routes

All corridors providing access to sleeping accommodation are designed as protected corridors. All doors to rooms offering sleeping accommodation and all doors to storage cupboards giving on to the means of escape corridors serving sleeping rooms, are provided as 30-minute fire resisting doors with overhead self-closing devices and 25mm hardwood rebates. These doors incorporate cold smoke seals and intumescent fire seals.

Stairs 1 and 3 are enclosed within substantial construction providing a minimum of 30 minutes of fire resistance between the stairs and the rest of the accommodation. All doors onto the stairs at all hostel levels are 30-minute fire doors which effectively self-close and incorporate cold smoke seals and intumescent fire seals.



The basement kitchen should be enclosed within fire resisting construction providing a minimum of 30 minutes of fire resistance between the kitchen and any accommodation to which the public have access.

3.7 Emergency Lighting

The emergency lighting system for the premises was originally provided to meet the requirements of the Fire Precautions Act 1971, and is recorded in the archived Fire Certificate issued under that legislation as complying with BS 5266-1: 1999.

The existing accommodation provided in 163 and 165 High Street at 1st, 2nd and 3rd floor levels remain to this standard, however the renovation of the Basement and Ground floor; all new hostel accommodation in 161 High Street at 1st, 2nd and 3rd floor levels, and all accommodation at 4th and 5th floor levels should be provided to conform to BS 5266-1: 2016.

3.8 Fire Safety Information

Escape signage should be provided to clearly indicate all escape routes other than those used as normal access and egress routes.

Fire instructions should be prominently displayed in all sleeping rooms.

Fire action notices should be prominently displayed at each storey exit.

All fire doors provided with self closing devices should have 'Fire door – keep shut' signs on both faces.

All fire doors not fitted with self closing devices due to their normally being locked have 'Fire door keep locked' signs on their outer face.

Signage should be provided to indicate the location and operation of any non-automatic fire safety devices whenever the location and or operation is not obvious.

All signs provided throughout the premises in connection with the provision, use or location of fire precautions and means of escape from the building should comply with the requirements of The Health and Safety (Safety Signs and Signals) Regulations 1996. Following the guidance given in BS 5499-4: 2013 will usually ensure compliance with these regulations.



4 Internal Fire Spread (linings)

Schedule 1 of the Building Regulations requires the following functional requirement to be met in respect of B2, Internal Fire Spread (linings);

"(1) To inhibit the spread of fire within the building, the internal linings shall;

adequately resist the spread of flame over their surface; and

have, if ignited, a rate of heat release or a rate of fire growth, which is reasonable in the circumstances.

(2) In this paragraph 'internal linings' mean the materials or products used in lining any partition, wall, ceiling or other internal structure."

4.1 Internal linings

Surface linings of walls and ceilings should meet the requirements set out in Table 10 of the Approved Document B, Volume 2.



5 Internal Fire Spread (Structure)

Schedule 1 of the Building Regulations requires the following functional requirement to be met in respect of B3, Internal Fire Spread (Structure);

"(1) The building shall be designed and constructed so that, in the event of fire, its stability will be maintained for a reasonable period.

(2) A wall common to two or more buildings shall be designed and constructed so that it adequately resists the spread of fire between those buildings. For the purpose of this sub-paragraph a house in a terrace and semi-detached house are each to be treated as a separate building.

(3) Where reasonably necessary to inhibit the spread of fire within the building, measures shall be taken, to an extent appropriate to the size and intended use of the building, comprising either or both of the following;

(a) sub-division of the building with fire-resisting construction

(b) installation of suitable automatic fire suppression systems.

(4) The building shall be designed and constructed so that the unseen spread of fire and smoke within concealed spaces in its structure and fabric is inhibited."

5.1 Compartmentation

All floors are to be constructed or made up to provide adequate fire resistance to perform as compartment floors as described in Table A2 of the Approved Document B, Volume 2.

Walls common to two or more properties are to be constructed as compartment walls and meet the requirements set out in Table A2 of the Approved Document B, Volume 2.

The Ground and Basement accommodation, as purpose group 4, should be separated from the rest of the accommodation, as purpose group 2b, by a minimum of 60 minutes of fire resisting construction.

All places of special fire risk hazard are to be separated from the rest of the accommodation by a minimum of 60 minutes of fire resisting construction.

All construction and finishing should be completed in accordance with the guidance set out in Section 8 of the Approved Document B, Volume 2.

All fire stopping of openings in fire resisting construction should be completed in accordance with the guidance set out in Section 10 of the Approved Document B, Volume 2.

In particular, the point at which a pipe, utility or cable passes through a fire resisting element of structure, or fire resisting construction, should be protected by the installation of a proprietary fire sealing system which has been shown by test to maintain the minimum fire resistance of the element or construction it is passing through. Where a proprietary system is not available, fire stopping may be used provided the diameter of pipe does not exceed that shown in Table 14 of Approved Document B, Volume 2 (page 85). Such fire stopping should be installed by a competent person and in accordance with the manufacturer's instructions. A certificate of conformity with these instructions should be provided by the installer and kept available for reference by premises managers and fire risk assessors throughout the life of the building.



Where vents or flues pass through fire resisting elements of structure or fire resisting construction provided as part of the overall fire safety strategy, such ducts or flues should be protected from fire by either the use of fire resisting duct work, or by protecting existing duct work with fire resisting construction to provide a level of protection of no less than that of the construction through which it passes.

Alternatively, provided the ductwork is not serving a kitchen extract system, fire dampers may be installed. If installed, a suitable means of access should be provided to enable routine testing and maintenance to be carried out on the damper and its actuating mechanism. As the premises provides sleeping accommodation, all such fire dampers should be actuated by smoke detector-controlled automatic release mechanisms in addition to being actuated by thermally actuated devices.



6 External Fire Spread

Schedule 1 of the Building Regulations requires the following functional requirement to be met in respect of B4, External fire spread;

"(1) The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building.

(2) The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regards to the use and position of the building."

6.1 Construction of external walls

Construction of the new external walls to form the new accommodation at 4th and 5th floor levels should be completed in accordance with the guidance set out in Section 12 of the Approved Document B, Volume 2.

6.2 Roof coverings

All roof coverings should meet the requirements set out in Section 14 of the Approved Document B, Volume 2.

7 Access and Facilities for the Fire and Rescue Service

Schedule 1 of the Building Regulations requires the following functional requirement to be met in respect of B5, Access and facilities for the fire service;

"(1) The building shall be designed and constructed so as to provide reasonable facilities to assist firefighters in the protection of life.

(2) Reasonable provisions shall be made within the site of the building to enable fire appliances to gain access to the building."

7.1 Vehicle Access for a pumping appliance

There will be no change to the existing arrangements for Fire Service access or water supplies. The extension of the accommodation to the 5th floor does not create a floor level at greater than 18m above Fire Service access level. There is therefore no need for a firefighting shaft to be provided as part of the renovation work.



8 Regulatory Reform (Fire Safety) Order

8.1 Fire Risk Assessment

To comply with the Fire Safety Order, the fire risk assessment must be reviewed following completion of the renovation work as the work represents a significant change to the fire precautions and fire risks on the premises.

Guidance on the risk assessment process is given in a series of DCLG guides entitled Fire Safety Risk Assessment. Please see the following link; <u>https://www.gov.uk/government/collections/fire-safety-law-and-guidance-documents-for-business</u>.

8.2 Fire Safety Management Procedure

This fire safety strategy has been developed on the assumption that the building will be properly managed. Procedures for the management of fire safety should be documented in a fire safety manual.

Guidance on fire safety management procedures is given in BS9999.

- A typical fire safety manual might include:
- Fire safety policy statement
- Fire safety management structure
- Coordination with other parties (e.g. in a shared building)
- Emergency response
- Evacuation of people with special needs
- Contingency and salvage plans
- Emergency responsibilities of designated staff
- Summary of fire safety strategy and plans for the building
- Fire risk assessment
- Procedures for dissemination of information



9 Recommendations

- The corridor arrangement at third floor level should be amended to remove the proposed store from the enclosure of lift 1.
- The lift well for lift 2 should be enclosed throughout its height in fire resisting construction. This may be either as a fire resisting lobby or by the provision of fire resisting doors to separate the lift well from the rest of the accommodation
- Consideration be given to the provision of a refuges for disabled within the lobby approach to stair 1 from the new accommodation in 161 Borough High Street, at each floor level, with accessible accommodation being provided as part of the accommodation within this area.
- Any such refuges provided should be clearly indicated by appropriate signage, and provided with an emergency voice communication system complying with BS 5839-9:2011, consisting of Type B outstations communicating with a master station located adjacent to the main fire alarm indicator panel.

10 Limitations

The advice contained within this report is strictly limited to the scope of the current project: The extension of No. 161; change of use of No. 161 from Office accommodation to Hostel accommodation and the renovation of the 1st to 5th floors of at St. Christophers Village, 161-165 Borough High Street, London SE1 1HR only.

FireSkills Ltd has not reviewed any other issues within the project other than those identified in this report.

FireSkills Ltd offers no comment on any other aspects of the development and any absence of comment on such issues should not be regarded as any form of approval.

The advice should not be used for buildings other than St. Christophers Village, 161-165 Borough High Street, London SE1 1HR.



11 References

Approved Document B, Buildings other than dwelling houses Volume 2, (2006) UK: TSO Fire safety risk assessment: sleeping accommodation [Ref: ISBN 9781851128174]

BS EN 12101-6:2005, Specification for pressure differential systems

BRE 368 (1999) [Design methodologies for smoke and heat exhaust ventilation] BRE:UK

BS 476-10 (2009), Fire test on building material and structures, BSI

BS 5266-1:2016, Emergency lighting. Code of practice for the emergency lighting of premises

BS 5839-1: 2013, Fire detection and fire alarm systems for buildings, BSI

BS 7974: 2001, Application of fire safety engineering principles to the design of buildings. London: Brisish Standard.

BS EN ISO 13943: 2010, (Fire Safety Vocabulary), BSI:UK

CIBSE, Guide E, (2010), Fire Safety Engineering. 3rd ed. London: The Chartered Institution of Building Services Engineers.

Smoke Control Association (2012). Guidance on Smoke Control to Common Escape Routes in Apartments Buildings (Flats and Maisonettes) SCA:UK



12 Appendix A: Occupancy calculation for Ground and basement.

Occupancy calculation for:

The Village 161 - 165 Borough High Street Southwark London, SE1 1HR

Ground floor and basement accommodation



1 Introduction

This technical note has been produced to assess the maximum acceptable occupancy figures in the premises made up of 161 and 163 Borough High Street London, for the proposed ground and basement public assembly areas, taking account of the removal of the accommodation stair currently serving the ground and basement accommodation.

The assessment has been based on the guidance contained within the CLG 'Fire risk assessment in large places of assembly' guide and the Approved Document B Volume 2: Buildings other than dwelling houses.

All measurements used in this assessment were taken from the following plans:

- Allen + Associates Village Belushi Basement plan
- Allen + Associates Village Belushi Ground Floor plan
- Daniel Hurd Associates: 642 03 Rev C Existing basement floor plan
- Daniel Hurd Associates: 642 04 Rev B Existing ground floor plan

The occupancy calculation has been carried out assuming that all other aspects of the fire precautions within the premises are to an adequate standard to support the numbers proposed in the guidance and that there is currently a suitable evacuation strategy in place to ensure safe evacuation of the premises in the event of a fire.

Only the basement and ground floors of the premises have been assessed. The occupation of other parts of the premises for other uses may impact on the total number of occupants who can be safely accommodated by the fire exits from the basement and ground floor accommodation.

2 Means of Escape - Basement

In the new proposed layout, the basement is served by a total of four stairs providing fire exit routes. Access to the stairs is well distributed across the accommodation providing a choice of escape directions from all public access areas, two directions of escape from the kitchen and an acceptable single direction travel distance from the cellar area for staff.

Table 1 lists the available fire escape stairs from the basement and shows the limiting dimension used to calculate the capacity of each stair.

Stair	Width (mm)	Limit point	Capacity: CLG	Capacity: ADB
New Dugout entrance	900	Stair width	130	110
Basement front exit	800	Basement door to stair	100	110
Side exit (central)	900	Basement door to stair	130	110
Side exit (rear)	800	Chillout door to stair	100	110
Total	Largest stair discounted to account for the worst credible fire scenario		330	330

Table 1.

2.1 Basement exit capacity

To calculate the maximum capacity of the basement, the available widths of the storey exits were measured from the plans. The largest storey exit was then discounted to simulate a worst-case fire scenario. In this case, either the New Dugout stair or the central side exit stair can be discounted, both providing a 900mm exit capacity.

This provides a maximum exit capacity figure of 330 persons using either the CLG guide or the Approved Document B.

2.2 Basement floor space capacity

The public areas of the basement provide approximately 145m² of public assembly accommodation. Both the CLG guidance and the ADB allow an occupancy factor of between 0.3m² and 0.5m² per person for bars and assembly areas. The proposed new layout of the basement includes proposed seating areas and booths. Both of these reduce the available space for people and allow a much reduced occupant capacity.



A figure of 0.5m² per person over the whole area of the basement has therefore been used to calculate the maximum reasonable population. This provides a figure of 290 persons.

The area used for this calculation excludes the staff access areas: kitchen, cellar, stores and bar counters. According to the latest fire risk assessment, there can be a maximum of 39 staff on the premises at the busiest time. Although a number of these may be working in the hostel accommodation above, the majority are likely to be employed in the public bar / restaurant areas. If all members of staff were to be temporarily located in the basement, this would bring the maximum occupancy up to 329 persons, which is within the capacity of the stairs to accommodate a safe fire evacuation.

The maximum number of members of the public accessing the basement bar should therefore be limited to 290 persons.

3 Means of escape – Ground Floor

In the new proposed layout, the ground floor is served by a total of four dedicated fire exit routes to open air. Access to the exits is well distributed across the accommodation providing a choice of escape directions from all areas for members of the public and staff.

Table 2 lists the available fire exits from the ground floor bar accommodation and shows the limiting dimension used to calculate the capacity of each exit route.

Exit	Width (mm)	Limit point	Capacity: CLG	Capacity: ADB
New Bar entrance	1750	Final exit width	335	360
New Hostel entrance	950	Final exit width	130	110
Side exit (front)	1050	Final exit width	200	220
Side exit (central)	850	Door width from bar to stair enclosure	100	110
Side exit (rear)	900	Door width form bar to stair enclosure	130	110
Total	Largest exit discounted to account for the worst credible fire scenario		560	550

Table 2.

3.1 Ground floor exit capacity

To calculate the maximum capacity of the ground floor bar areas, the available widths of the exits were measured from the plans. The largest exit was then discounted to simulate a worst-case fire scenario. In this case, the New Bar entrance door was discounted to simulate a fire affecting the front bar seating area preventing the use of the main entrance as an exit route.

This provides a maximum exit capacity figure of 560 persons using either the CLG guide and 550 using the Approved Document B.

3.2 Ground floor - floor space capacity

The public areas of the ground floor provide approximately 214m² of public assembly accommodation. Both the CLG guidance and the ADB allow an occupancy factor of between 0.3m² and 0.5m² per person for bars and assembly areas. The proposed new layout of the ground floor includes proposed seating areas and booths. Both of these reduce the available space for people and allow a much-reduced occupant capacity.

A figure of 0.5m² per person over the whole area of the basement has therefore been used to calculate the maximum reasonable population. This provides a figure of 428 persons.

The area used for this calculation excludes the staff access areas: stores and bar counters; Hostel entrance lobby etc. According to the latest fire risk assessment, there can be a maximum of 39 staff on the premises at the busiest time. Although a number of these may be working in the hostel accommodation above, the majority are likely to be employed in the public bar / restaurant areas. If all members of staff were to be temporarily located on the ground floor, this would bring the maximum occupancy up to 470 persons, which is within the capacity of the exits to accommodate a safe fire evacuation.



The maximum number of members of the public accessing the ground floor bar area should therefore be limited to 428 persons.

4 Conclusion

Implementation of the proposals to remove the accommodation stair serving the basement and ground floor bar / restaurant accommodation will result in a maximum occupant capacity of 290 members of the public in the basement public access accommodation and 428 members of the public in the ground floor public access accommodation.

