

**WOODBERRY DOWN**

**PHASE 4: WDCO PRESENTATION - 2ND ESCAPE STAIRS  
JULY 2023**



# PHASE 4 UPDATE

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In December 2022, the government released a consultation document stating their intent to update the building regulations for fire, adding a requirement for a second fire escape stairs in buildings over 30m height.

The designs for Phase 4, developed with the Design Committee through 2022 met the established design criteria at the time, however need to be reviewed against the new Consultation Document before being submitted for planning approval.

This review has been undertaken over the last few months. The revised scheme has been reviewed with:

- GLA (Greater London Authority)
- London Borough of Hackney - planning team
- HSE - Health & Safety Executive - statutory consultee on fire

This document sets out the proposed amendments to the scheme to incorporate the requirements of the new document.

This document contains 4 sections:

- Background to proposed changes in fire regulations
- Changes to building layouts
- Changes to the ground floor layouts and access
- Building heights & potential change

# FIRE REGULATIONS

The consultation document below was issued by the government in December 2022. Key points are highlighted on the right.

The Government consultation document is not yet formally incorporated into the Building Regulations or British Standards, however it provides a strong guide on the direction of regulation.

 **GOV.UK**

[Home](#) > [Sprinklers in care homes, removal of national classes, and staircases in residential buildings](#)

Department for Levelling Up, Housing & Communities

Open consultation  
**Sprinklers in care homes, removal of national classes, and staircases in residential buildings**

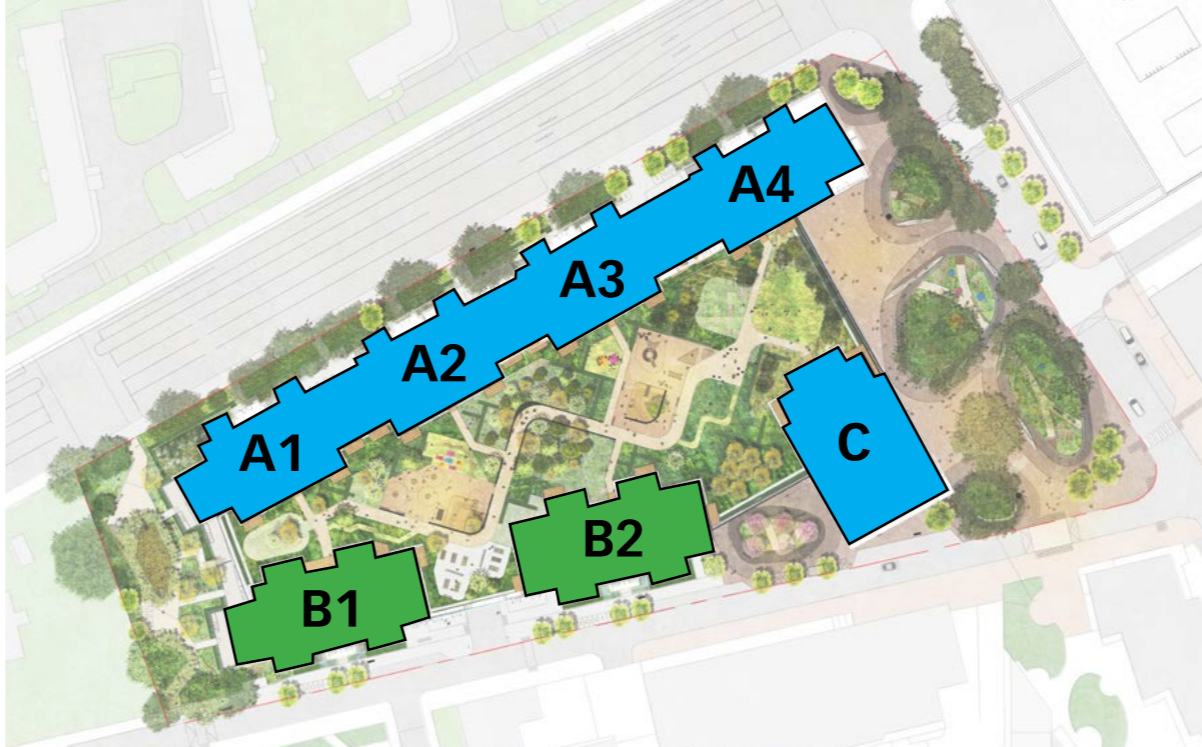
Published 23 December 2022

01. GOV.UK, Department for Levelling Up, Housing & Communities  
 Housing & Communities

Consultation document - Sprinklers in care homes, removal of national classes, and staircases in residential buildings.  
 Published 23 December 2022

**Notes:**

- The government consultation document recommends a second staircase to be provided in residential buildings over 30 metres in height.
- A1-A4 and C block fall within Government consultation heights. The B blocks are close to the threshold for a second stair implementation.



Key

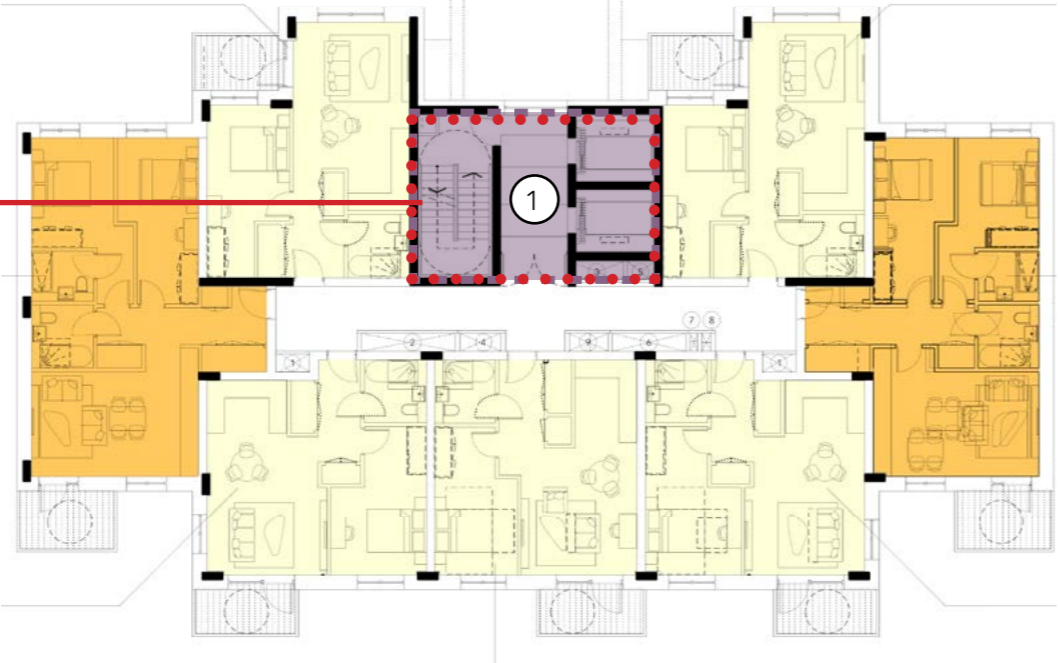
- Buildings under the 30m height threshold
- Buildings over the 30m height threshold

The height of the building is measured from the lowest ground level side to the upper most habitable floor.

<b>A1-A3</b>	<b>H: 32.5 m</b>
<b>A4</b>	<b>H: 32.8 m</b>
<b>B1</b>	<b>H: 26.9 m</b>
<b>B2</b>	<b>H: 27.9 m</b>
<b>C</b>	<b>H: 75.5m</b>

# PROPOSED SCHEME - BLOCK A2 - TYPICAL FLOOR

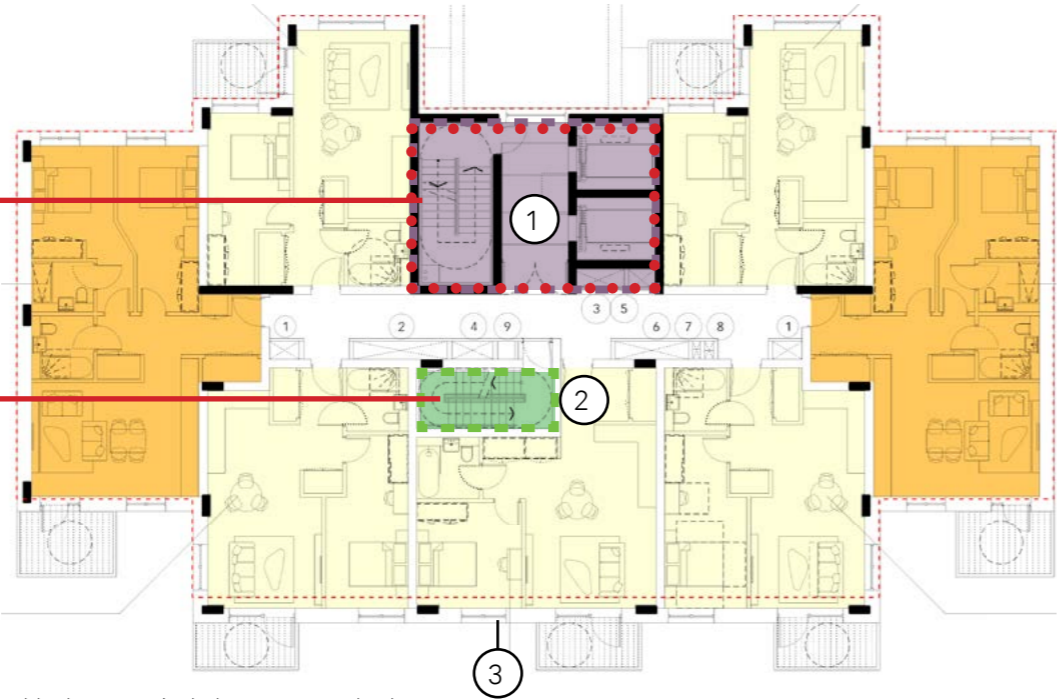
1no. Stair  
2no. Lifts



01 block A2 - typical plan - scheme 2022

1no. Stair  
2no. Lifts

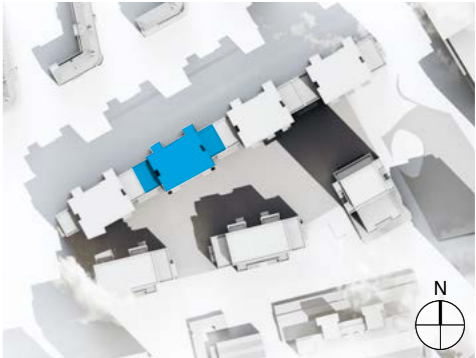
1no. EV stair



02 block A2 - typical plan - proposed scheme

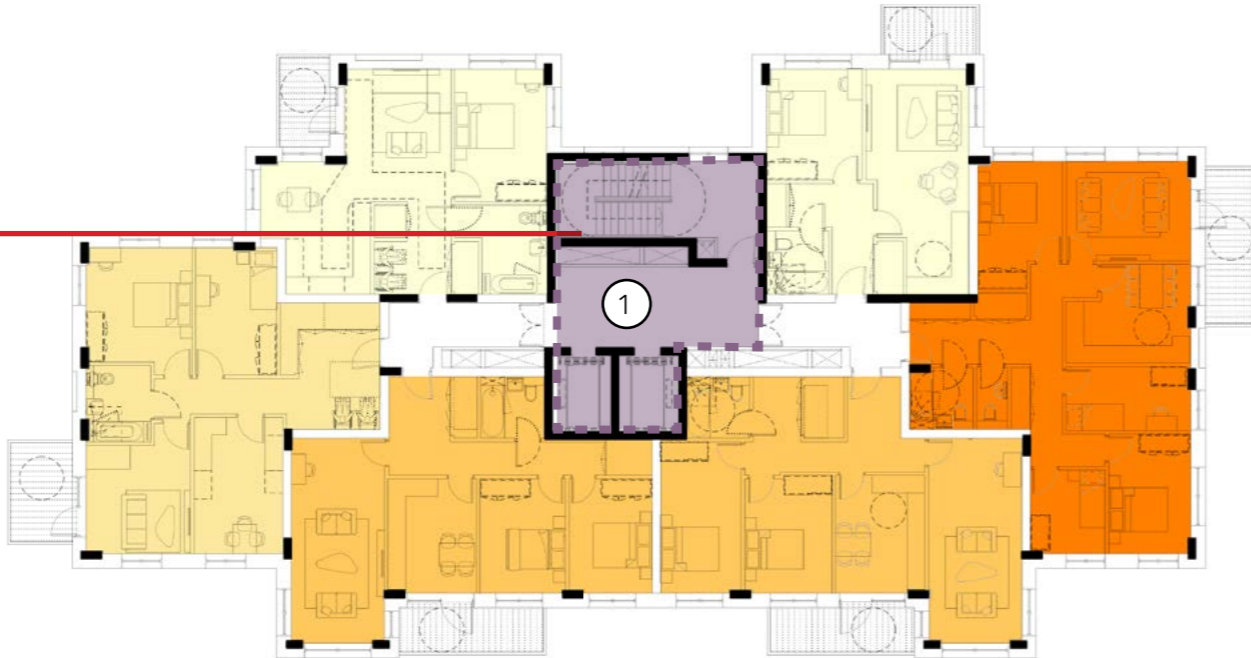
**Notes:**

1. Fire fighting shaft with fire fighting lift, evacuation lift and fighting stair.
  2. Separated evacuation stair.
  3. Building is extended towards the courtyard to accommodate the additional staircase
- Keeping the main lift and stair arrangement the same keeps natural daylight to the corridors and entrance at ground floor
  - The apartment layout has changed only in the middle unit to include the stairs. The rest of the apartment remains with the same layout as the 2022 scheme.



# PROPOSED SCHEME - BLOCK B1 - TYPICAL FLOOR

1no. Stair  
2no. Lifts



01 block B1 - typical plan - proposed scheme - june 2023

1no. Stair  
2no. Lifts



1no. EV stair

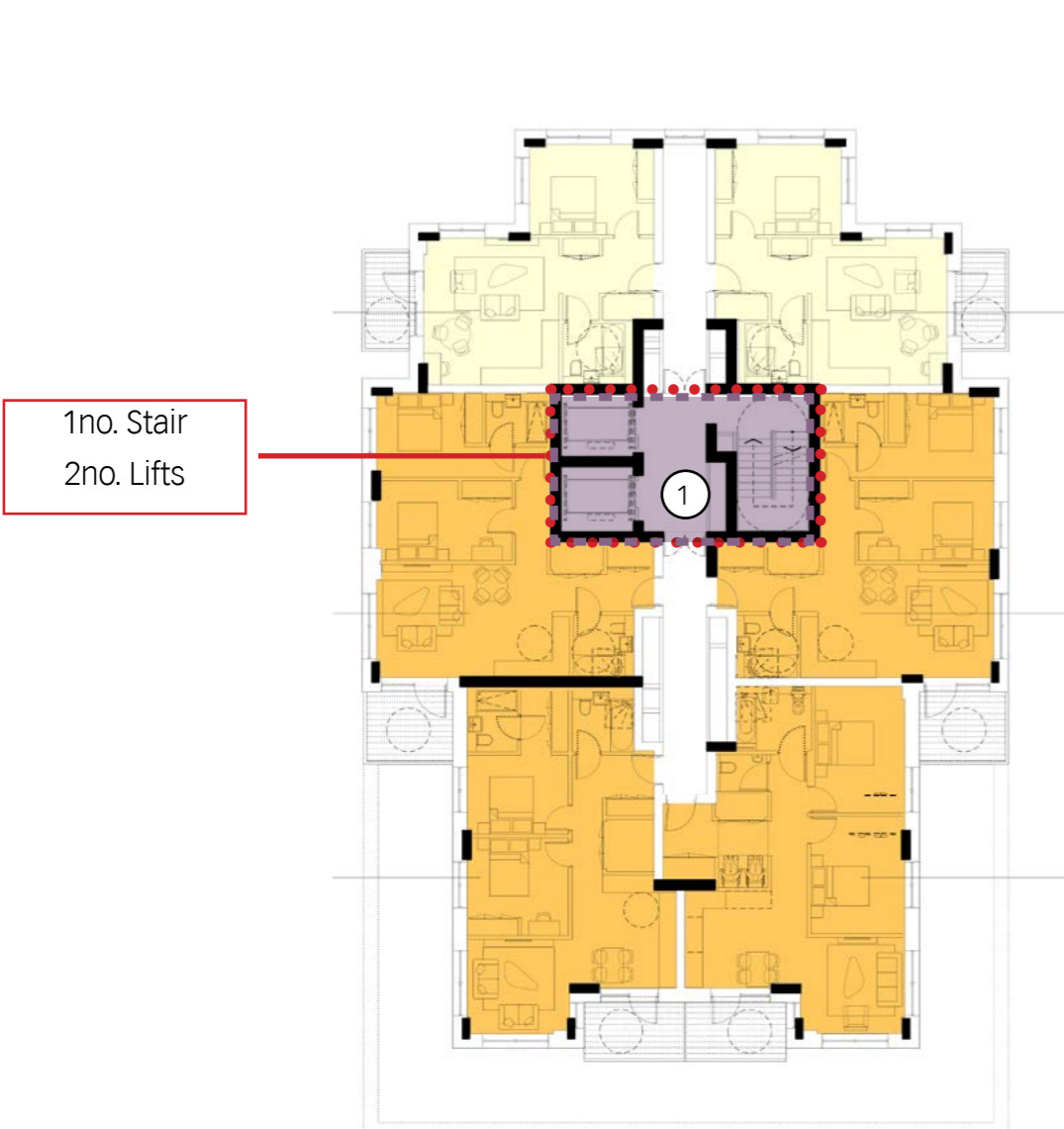
02 block B1 - typical plan - proposed scheme

**Notes:**

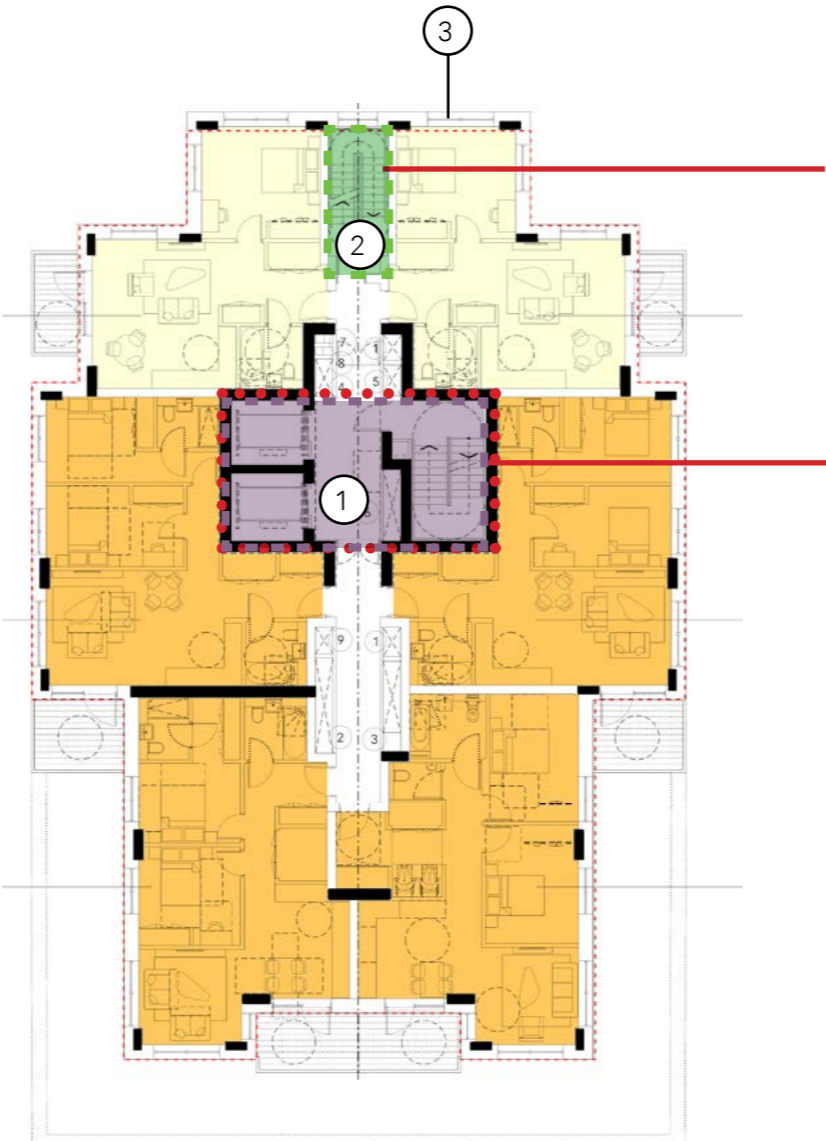
- 1. Fire fighting shaft with fire fighting lift, evacuation lift and fighting stair.
- 2. Separated evacuation stair.
- 3. lift core extended towards to podium garden to make space for the second escape stair.
- The new layout will provide a window straight into the lift lobby - this wasn't possible with the previous design.



# PROPOSED SCHEME - BLOCK C - TYPICAL FLOOR



01 block C - typical plan - scheme 2022



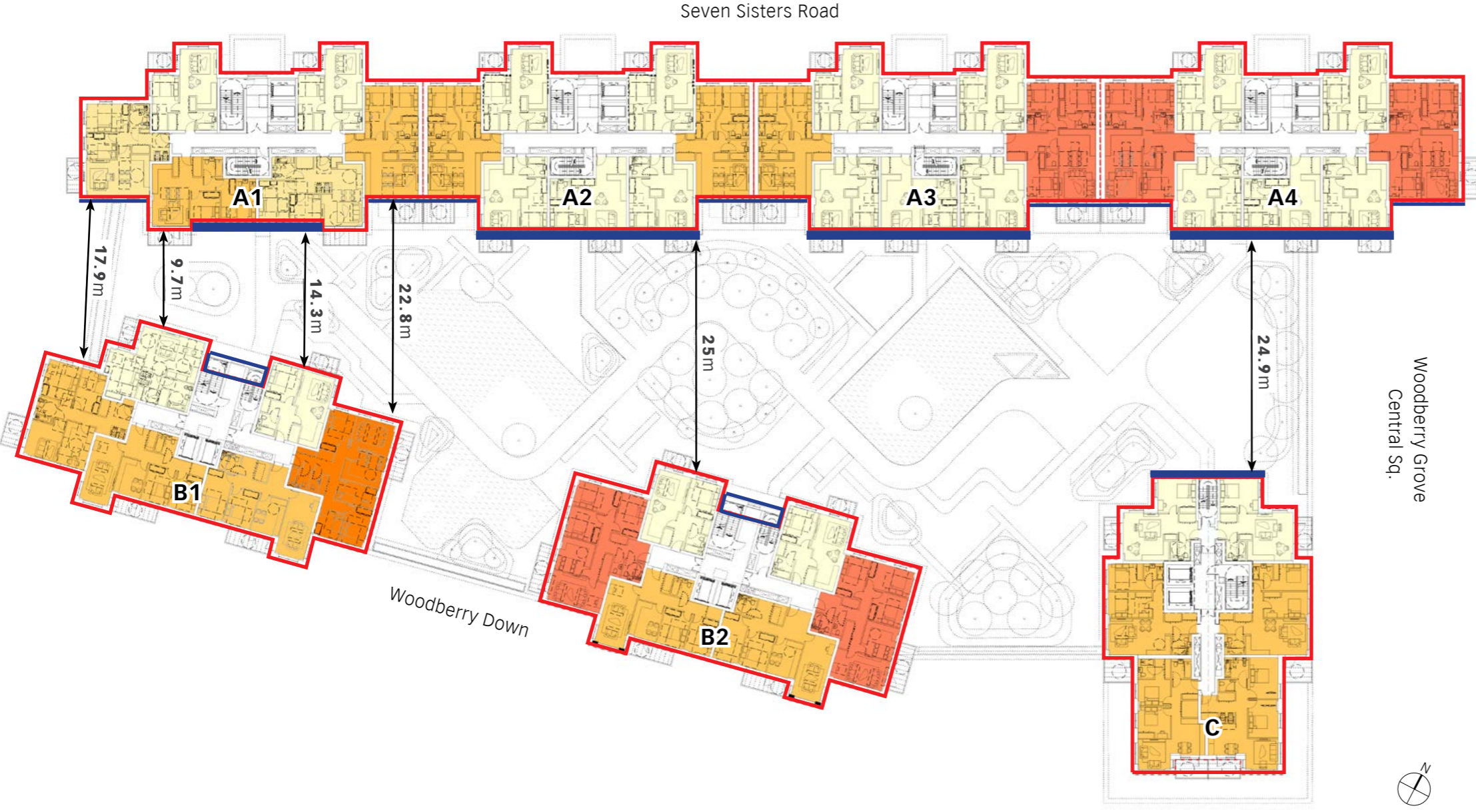
02 block C - typical plan - proposed scheme

**Notes:**

- 1. Fire fighting shaft with combined fire fighting & evacuation lift.
- 2. Separated evacuation stair.
- 3. Extension of the building envelope on the north to accommodated the additional stair.
- glazed doors would be used to allow light and views from the corridor into the building



# PROPOSED SCHEME - TYPICAL FLOOR SUMMARY OF CHANGE



**Summary:**

- Second escape stairs have been added to all buildings.
- The building line around the outside has not been changed, so as to avoid impacting tree retention or public spaces
- Small extensions to the buildings have been made to accommodate the additional stair.
- Where windows have been impacted by the additional stair on the east of building B1, the apartment layout has been adapted so suit the new window layout.

# PROPOSED SCHEME - GROUND FLOOR PLAN

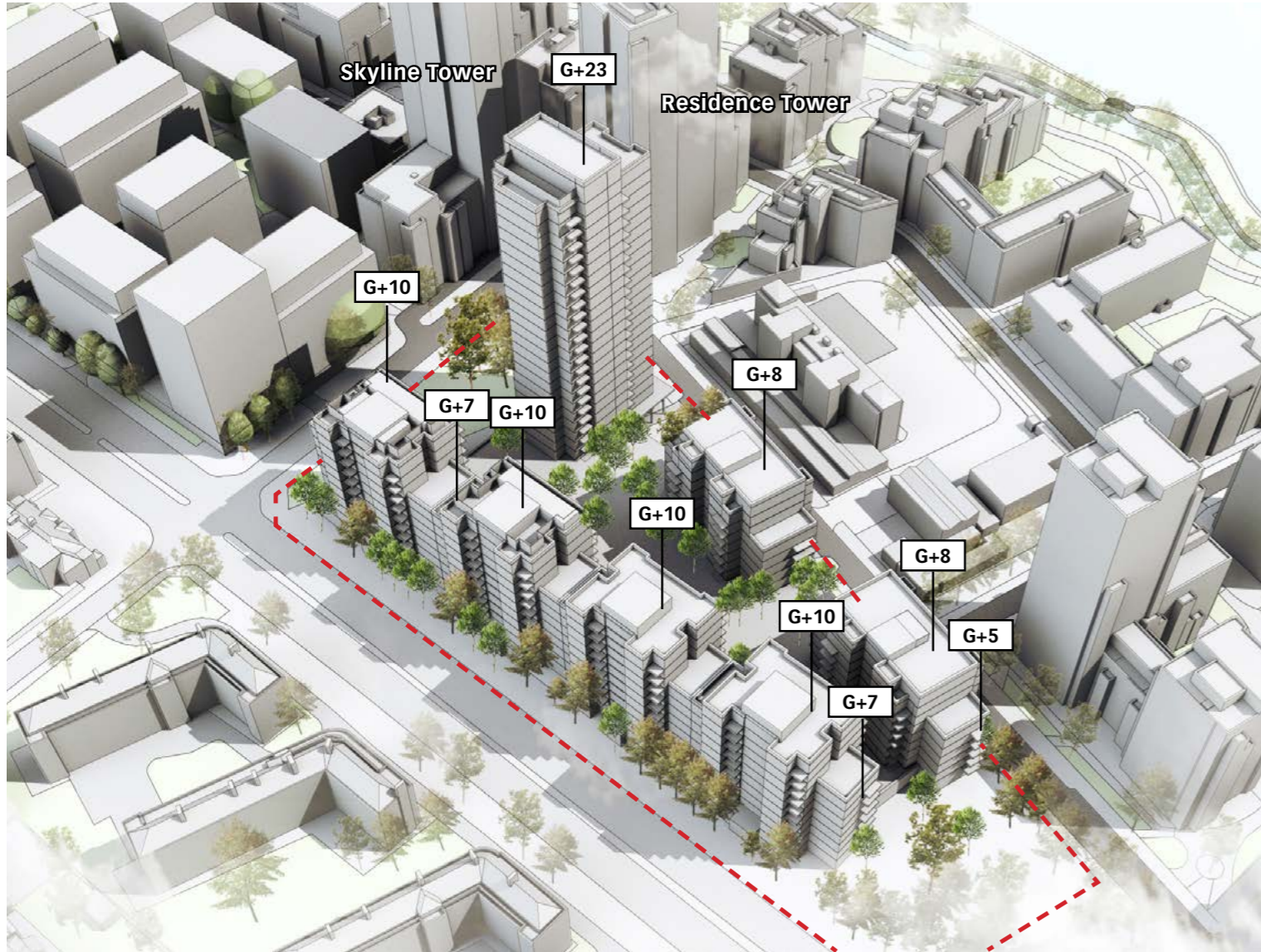


## Proposal:

- The revised ground floor has the following changes:
- Each escape stair must individually lead to a final exit on the edge of the building - this requires additional corridors
- As the ground floor is the same size, the corridor space needs to be provided from one of the existing areas
- Residential, service and retail/ community spaces are all critical - therefore its is proposed to reduce the parking space
- The total number of parking spaces is reduced from 65 to 48. Accessible parking percentages are maintained.
- There are enough spaces for all secure tenants in Phase 6 with cars to move to Phase 4. The lost spaces would have facilitated the early decant for people with cars in Phase 7.
- The layout was reviewed and approved by the HSE



# POTENTIAL MASSING CHANGE

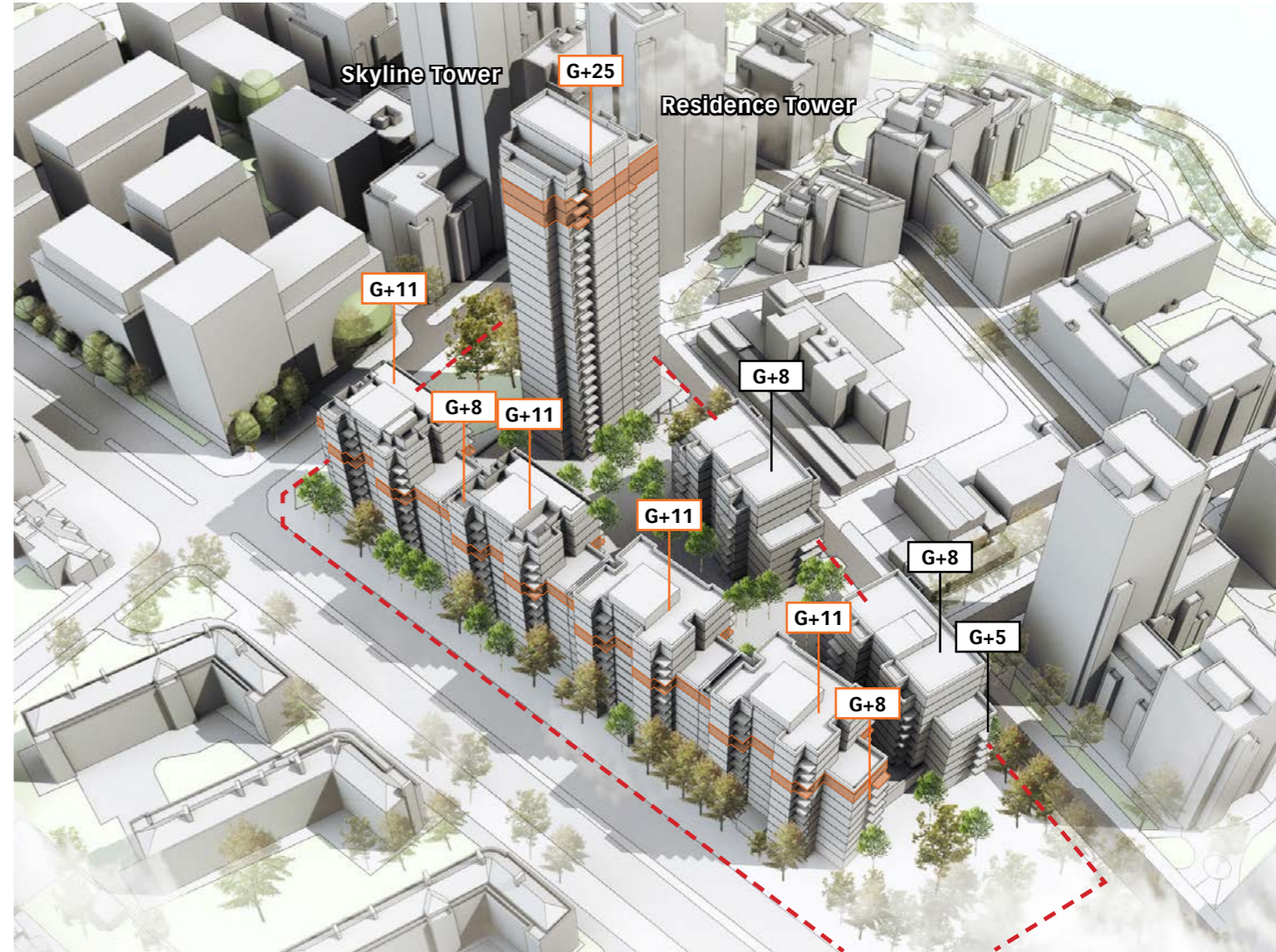


01 aerial view - north-west - 2022 scheme

Due to additional costs resulting from the extra staircases and associated changes, additional height is proposed on the scheme to recoup the viability.

The proposed additional height has been located where it has the least townscape and environmental impacts - this is explained further in the later sections of this document.

The changes to the building heights are led through townscape & environment considerations. This does mean that no additional height is proposed for the 'B' blocks as they sit on the south of the podium.



02 aerial view - north-west - proposed scheme



# 2022 SCHEME - SEVEN SISTERS ROAD



Building heights as presented to the Design Committee in December 2022.

- - - phase 4 site boundary
- 2022 scheme envelope



# PROPOSED SCHEME - SEVEN SISTERS ROAD



Proposed building heights, including the developments to the building plans.

The heights in the image would add 39 dwellings to the scheme, leading to a total of 512 dwelling. The breakdown is shown below:

Total dwelling number  
**512 Dwellings (+39)**

Tenure breakdown:  
Market Dwellings  
**290 Dwellings (+26) / 56.64% (+0.82%)**

Shared Ownership Dwellings  
**132 Dwellings (+13) / 25.78% (+0.62%)**

Social Rent Dwellings  
**90 Dwellings / 17.58% (-1.44%)**

No social rent apartments are lost compared to the 2022 scheme.

--- phase 4 site boundary  
— 2022 scheme envelope

# 2022 SCHEME - WOODBERRY DOWN



Building heights as presented to the Design Committee in December 2022.

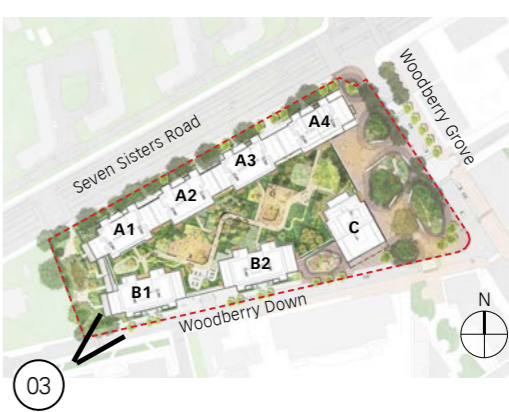
- - - phase 4 site boundary
- 2022 scheme envelope



# PROPOSED SCHEME - WOODBERRY DOWN



- phase 4 site boundary
- 2022 scheme envelope



# LBH DISCUSSIONS & FEEDBACK



Initial feedback from the London Borough of Hackney on the revised proposals has included the following:

- Support for the introduction of second escape stairs
- Support for the revisions to the building plans - some comments have been received and responded to. These include changing the stair arrangement in building B to enhance light levels in the corridors.

The proposed changes to the building heights are still under discussion and further review.

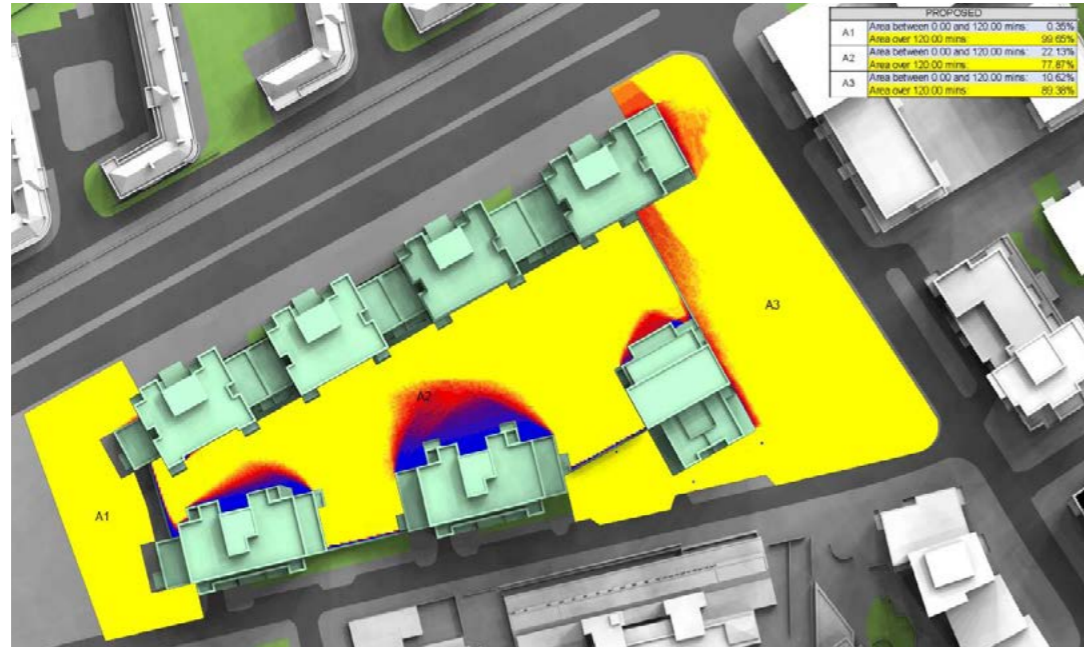
The principle of increasing the building heights due to the scheme viability is understood.

On initial review, the LBH preference is for additional height on Seven Sisters Road, to buildings A2 & A3 (the middle two).

This approach - alongside several variants - will be further reviewed with Hackney in the next couple of weeks.

# MICROCLIMATE - SUNLIGHT

## overshadowing scheme 2022 vs proposed scheme

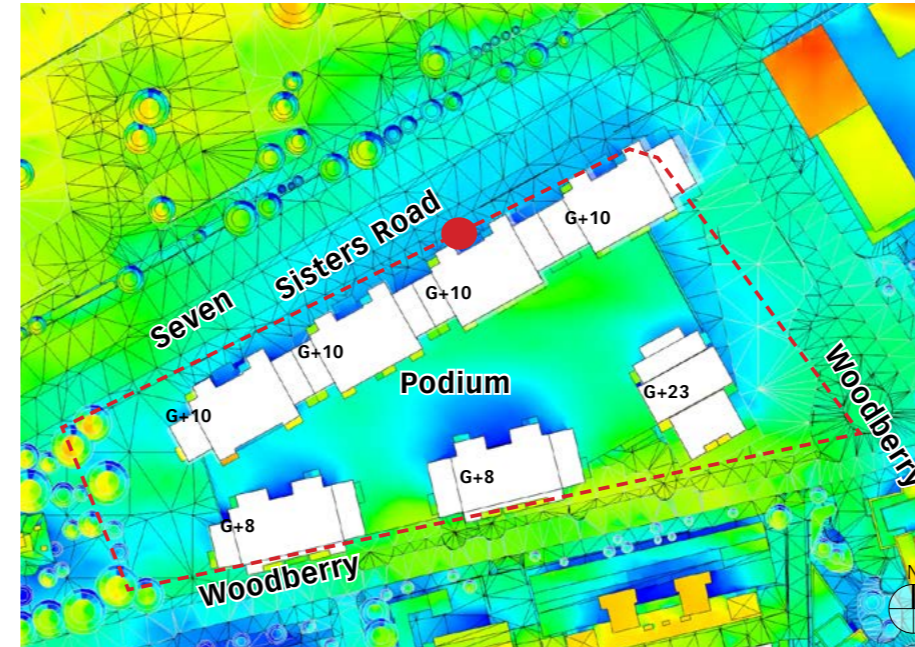


01a overshadowing to outdoor amenity spaces - scheme 2022

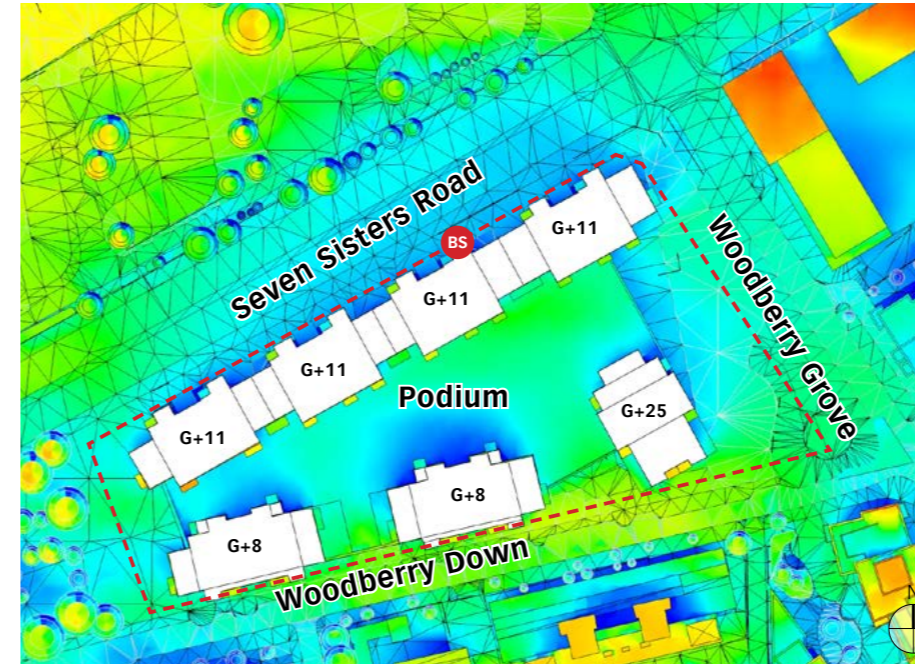


01b overshadowing to outdoor amenity spaces - proposed scheme

## solar exposure - 21st march



02a solar exposure - scheme 2022



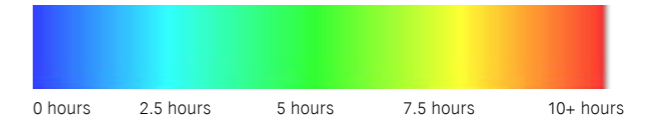
02b solar exposure - proposed scheme conditions

### Notes:

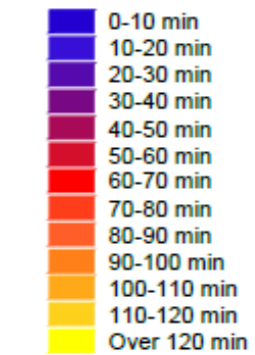
The 2022 Scheme was fully compliant with BRE Guidelines with all outdoor amenity areas receiving at least 2 hrs sunlight on the 21 March to >50% of the area.

The additional height has a negligible impact on sunhours in the public spaces - a change of 0.36% in the new central square.

### Solar exposure key



### key:



# MICROCLIMATE - DAYLIGHT

## daylight effect map - scheme 2022 vs proposed scheme



01a daylight effects maps - 2022 scheme



01b daylight effects maps - proposed scheme

**Notes:**

The differences in retained daylight levels between the 2022 Scheme and the 2 Stair Scheme are negligible.

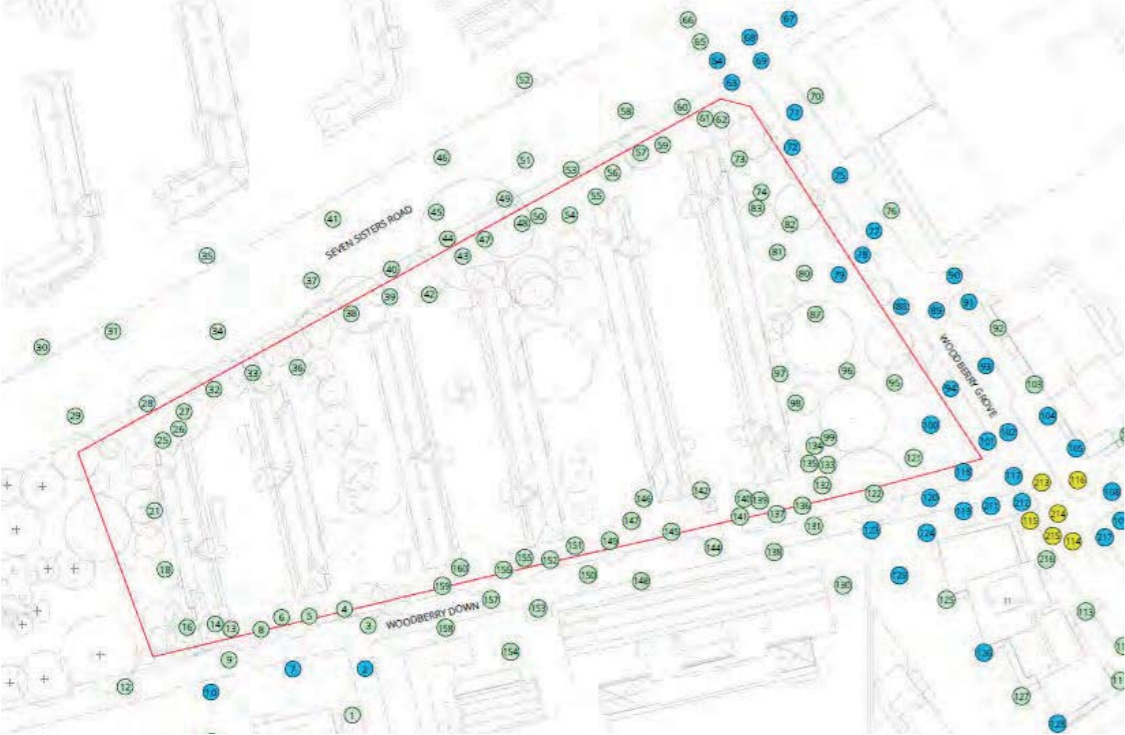
In AY's professional opinion, the 2 Stair Scheme is acceptable in terms of daylight and sunlight effects.

2022 Scheme.  
VSC daylight test  
86% of all windows tested meet the BRE guidelines  
97% of all rooms tested meet the BRE guidelines

2 Stair Scheme.  
VSC daylight test.  
83% of all windows tested meet the BRE guidelines  
97% of all rooms tested meet the BRE guidelines



# ENVIRONMENT - WIND CONDITIONS



01. Existing Site with existing landscaping and existing surrounding buildings (Baseline) – Summer Season



02. proposed Development with existing landscaping, proposed landscaping and existing surrounding buildings – Summer Season – Ground Levels

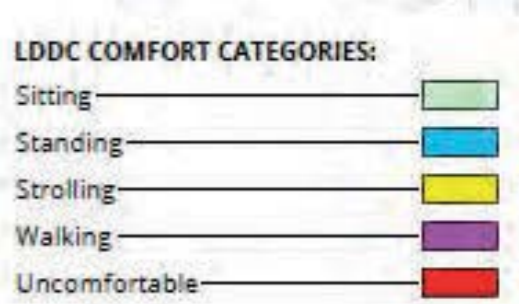
**Notes:**

The 2022 scheme has been tested in a full wind tunnel and is expected to have a slight beneficial impact on the wind conditions at the base of the two existing towers.

Advice from RWDI (Wind and microclimate consultant) is that the additional height has no impact on these results.

This will be confirmed through a second wind tunnel test prior to submittal of the planning application

**key:**



# PHASE 4 - ADJACENCY & SEPARATION



01 western end of the site and distances between B1 and A1 - 2022 scheme



02 western end of the site and distances between B1 and A1 - revised scheme



# 2022 SCHEME - COMMUNAL GARDEN



--- phase 4 site boundary  
— 2022 scheme envelope



# PROPOSED SCHEME - COMMUNAL GARDEN



--- phase 4 site boundary  
— 2022 scheme envelope



# SUMMARY

## Summary of the revised scheme:

- Fire escape for residents is improved for all buildings, in line with the future standard.
- Stairs are incorporated with only very minor changes to the building layouts.
- Daylight to central lift lobby is improved for the 'B' buildings.
- Direct connection from the car park to each building is reintroduced – improving servicing routes.
- Parking is reduced – There are enough spaces for the secure tenants on Phase 6 to move.
- Sunlight levels to public spaces have very limited impacts, and still significantly exceed the BRE guidance.

## Items to be finalised:

- Building heights through pre-application process with London Borough of Hackney.
- Window treatment for the rear elevation of building B1.
- Retest of the wind tunnel to provide evidence of wind conditions.



