### Planning Amendment: North Link Façade Updates\_DRAFT

Document number: BEMP-HBA-P1-ZZ-SK-A-00-1048

Issue date: 11.08.2023

Revision: P01



### **Amendment Description**

This document describes the proposed design amendment to Plot 1's north 'link' facade highlighted opposite - an update to the size and setting out of the windows and brick piers at levels 00 and 01.

Plot 1's north facade has a required fire rating of 90 minutes in both directions - in order for the glazing to achieve this fire rating it must meet the criteria set out in the official fire test report, which is described in the document titled 'BEMP-VGV-SW-XX-RP-X-21-3021' (extract in fig.2).

Following a detailed technical review, the specialist facade subcontractors have advised that the north link windows in the current planning approved scheme (highlighted in fig.1) do not fully satisfy the size criteria set out in the fire test report:

- Level 00 north link windows exceed the specified width criteria
- Level 01 north link windows exceed the width and area criteria

Based on this advice, the design team have explored options to reduce the overall glass size to meet the official fire test criteria, whilst also maintaining equal and symmetrical spacing to the windows and brick piers as per the approved scheme. The proposed amendment is to:

- Increase the width of the 2no. central brick piers at levels 00-01 by 3no. bricks in order to;
- Reduce the width of the windows to ensure the glass width falls within the max. 1800mm limit. This width reduction will also ensure the overall glass area falls within 5.45m<sup>2</sup>.
- The window height remains as per the approved scheme

The design team also explored introducing an additional low-level transom in order to divide and effectively reduce the glazing area, whilst minimising reduction to the window widths. However, our view is that it is preferable to decrease the width of these windows rather than to introduce a transom.

The following pages illustrate this proposed update in more detail.

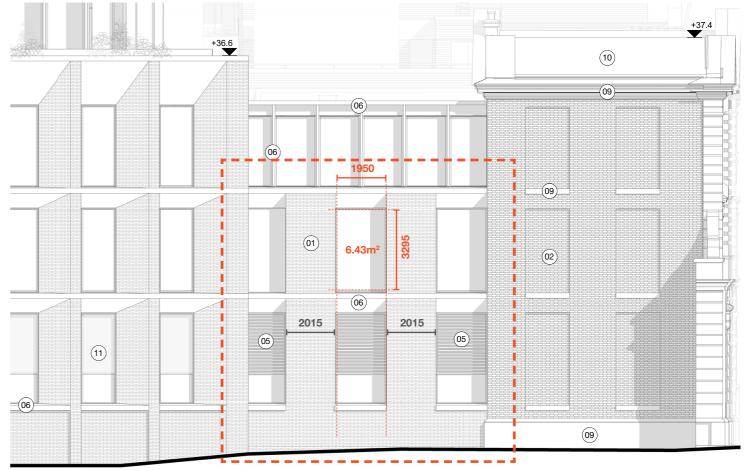


Fig. 1\_Planning approved scheme\_extract of Plot 1 north 'link' elevation

The current windows at levels 00-01 exceed the size criteria set out in the official fire test data (extract in fig. 2 below)

	All the following criteria are to be fulfilled:			
	Glass:	Element*:		
EI 90	area: ≤ 5,45 m²	area: $\leq 6.02 \text{ m}^2$		
	width: ≤ 1800 mm	width: $\leq 1932 \text{ mm}$		
	height: ≤ 3600 mm	height: $\leq 3732 \text{ mm}$		

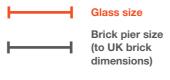
Note: the max width and height

criteria cannot be used together as
this will exceed the maximum area

**Fig.2\_Size** criteria from official fire test data Extract from to BEMP-VGV-SW-XX-RP-X-21-3021

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Max. sizes according to EN 15254-4:2008 for the following classification:					
	All the following criteria are to be fulfilled:				
		Glass:	Element*:		
EI 90	area:	$\leq 5,45 \text{ m}^2$	area:	$\leq 6.02 \text{ m}^2$	
	width:	≤ 1800 mm	width:	≤ 1932 mm	
	height:	≤3600 mm	height:	≤ 3732 mm	

Note: the max width and height -criteria cannot be used together as this will exceed the maximum area

### Planning approved scheme

Drawing ref: BEMP-HBA-P1-ZZ-DR-A-20-1211 Plot 1 North Elevation - Proposed

- Level 00 link building windows exceed the specified width criteria
- Level 01 link building windows exceed the width and area criteria

## +37.4 (10) (06) 1423 (09) 2135 (01) 6.43m<sup>2</sup> (02) (06) 2015 2015 (05) (05) 11 (06) (09)

### **Proposed amendment**

- Increase the width of the 2no. central brick piers at levels 00-01 by 3no. bricks in order to;
- Reduce the width of the windows to ensure the glass width falls within the max. 1800mm limit. This width reduction will also ensure the overall glass area falls within 5.45m<sup>2</sup>
- The proposed amendment maintains equal and symmetrical spacing to the windows and brick piers as per the planning approved scheme



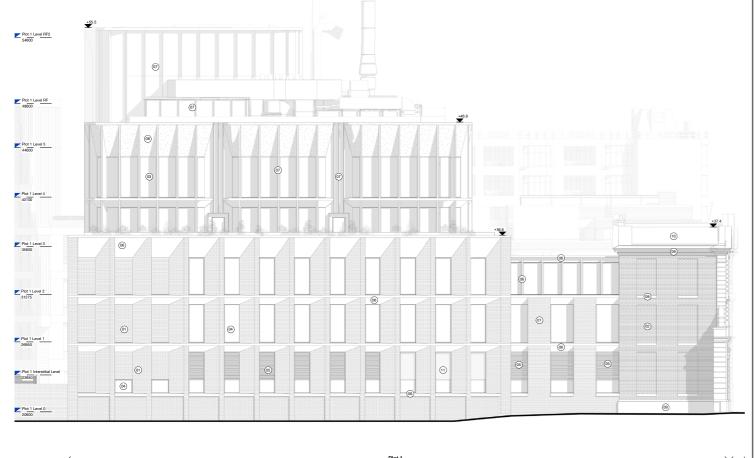
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### Planning approved scheme

Drawing ref: BEMP-HBA-P1-ZZ-DR-A-20-1211 Plot 1 North Elevation - Proposed

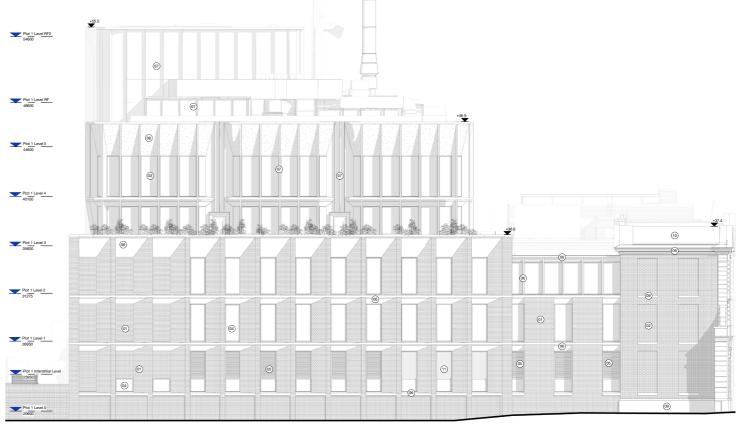
- Level 00 link building windows exceed the specified width criteria
- Level 01 link building windows exceed the width and area criteria



North elevation

#### **Proposed amendment**

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- Reduce the width of the windows to ensure the glass width falls within the max. 1800mm limit. This width reduction will also ensure the overall glass area falls within 5.45m<sup>2</sup>
- The proposed amendment maintains equal and symmetrical spacing to the windows and brick piers as per the planning approved scheme



North elevation