

# FALCONER CHESTER HALL



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## DUCIE STREET, MANCHESTER

—  
P21110-FCH-XX-XX-RP-A-0003  
PLANNING APPLICATION PROPOSED AMENDMENTS - OVERVIEW  
APPLICATION REF: 120149/FO/2018  
—

BIG RED CONSTRUCTION  
—

AUGUST 2024

P07

# Planning Application Proposed Amendments - Overview

Big Red Construction

Ducie Street,  
Manchester,  
M1 2JQ

# INTRODUCTION

## DUCIE STREET, MANCHESTER

120149/FO/2018

This document provides an overview of proposed variations to the planning consented scheme '120149/FO/2018'.

In brief the proposed alterations are as below. A summary of the proposals and the reasons for proposing these amendments are described on page 4, with illustrations on the following pages.

01. Change balcony balustrades from frameless glass to a bespoke metal railing with angled balusters.
02. Add collective edge protection to roof level.
03. Re-set out metal cladding panels to suit manufacturing constraints.
04. Amend location of roller shutter door and plant room louvred panels to suit internal layout amendments.
05. Revise entrance door & lobby glazing to suit internal layout amendments.
06. Simplify appearance of glazed fire escape door.
07. Amend location of louvred bin store doors to align opening with brick vertical movement joint reducing visual impact of the movement joint.
08. Split perforated panels on north-east & south-west elevations and roof privacy screens due to manufacturers limitations.
09. Minor adjustment to soldier course brick detail on West & East Elevations to suit masonry support limitations.
10. Change of window opening type to meet natural purge ventilation requirements on Lomax Street elevation.



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Illustrative CGI image form the Design and Access statement.

# INTRODUCTION

## DUCIE STREET, MANCHESTER

120149/FO/2018

### 01. Change balcony balustrades from frameless glass to bespoke metal railing with angled balusters.

In the Approved Proposal there is frameless glass balustrade with secret fixings to the perimeter of the projecting and inset balconies.

Please refer to the below statement from our Approved Inspector (Ball & Berry), who have advised that they would not accept glazed balustrades under Regulation 7 (2), this includes even fire rated/ framed balustrade products.

*“After reviewing this internally, unfortunately again Ball & Berry would not accept this under Regulation 7(2).*

*We would advise that the government recently undertook a review and chose not to omit or exempt laminated glass to balconies i.e. balcony attached to an external wall where regulation 7(2) is applicable.*

*It is worth noting this also appears to be the stance of several of the leading warranty providers.”*

The proposal is to amend the glazed balustrades to angled metal rod balusters arranged in a bespoke design with flat top, base and side rails. The metal would be in a tone and finish similar to the metal cladding.

Fixings will be as per the frameless glass balustrades, for the recessed and projecting balconies this would be down to the structural slab. For the Juliette balconies this would be to the window frame with colour matched capped screws.

Please refer to page 7 to 10 for comparative GA elevations, page 11-15 for a summary of the design development of the balustrade and the proposed design.

### 02. Add collective edge protection to roof level.

With reference to the 'Hierarchy of Risk Reduction Measures' provided by the HSE, a collective measure such as a balustraded rail would be less susceptible to human error and therefore safer than an individual protection system such as the man-safe or running line system suggested in the Approved Design and Access Statement.

Whilst the balustraded rail is visible on the elevations, it has been set back from the roof edge so that when the building is seen from street level the rails should mostly not be visible or are only minimally visible. This should have no impact on the overall appearance of the building.

It is felt that the requirement to design in accordance with CDM and Working at Height Regulations should, in this case, take precedence over the negligible visual consideration.

Please refer to page 16 for illustrative diagrams.

### 03. Re-set out metal cladding panels to suit manufacturing constraints.

Please refer to pages 7-10 for comparative elevations showing the metal cladding panel arrangements. Vertical format has been retained, panels have been re-set out to best suit manufacturing sizes.

### 04. Amend location of roller shutter door and plant room louvred panels to suit internal layout amendments.

Reconfiguration of the ground floor internal layout was required in order to accommodate:

- a switch room
- a life safety room
- a generator room

### 05. Revise entrance door & lobby glazing to suit internal layout amendments.

As above.

### 06. Simplify appearance of glazed fire escape door.

Design Development.

### 07. Amend location of louvred bin store doors to align opening with brick vertical movement joint reducing visual impact of the movement joint.

Design Development.

### 08. Split perforated panels on north-east & south-west elevations and roof privacy screens due to manufacturers limitations.

Please refer to pages 7-10 for comparative elevations showing the metal cladding panels and page 17 for illustrative diagrams. Panels have been split vertically in the centre to limit visual impact of the new joint.

Please see Appendix B for the metal railing design development document.

### 09. Minor adjustment to Level 01 soldier course brick detail on Ducie St, West & East Elevations to suit masonry support and structural frame installation.

Please refer to pages 7-10 for comparative elevations showing the brick coursing and page 18 for detailed elevations. It is proposed to marginally reduce extent and recess the soldier coursing above the ground floor balconies only due to complications in installing the masonry support and achieving tolerances on the structural frame.

### 10. Change of window opening type to meet natural purge ventilation requirements on Lomax Street elevation.

Vent style openings not able to achieve minimum requirements for AD:Part F and a natural solution was preferred over a mechanical one. Please refer to pages 7-10 for comparative elevations and page 19 for comparative studies.

INTRODUCTION

DUCIE STREET, MANCHESTER

MCC Consultation Timeline

- 09 November 2022 - Document - P21110-FCH-XX-XX-RP-A-0003 rev. P01

Summary of proposed changes to; roof edge protection, metal panel setting out, glazed balustrade to metal railing, amendments to ground floor doors/ glazing to communal/ ancilliary areas. (items 01 to 07)
- 17 February 2023 - Document - P21110-FCH-XX-XX-RP-A-0003 rev. P02

Updated with quote from Approved Inspector regarding use of glass balustrades on a relevant building.
- 28 February 2023 - Document - P21110-FCH-XX-XX-RP-A-0003 rev. P03

Updated with expanded detail collective edge protection to main roof level.
- 03 May 2023 - On-site Review - 1sqm Brick & Mortar Samples
- 11 August 2023 - On-site Review - VMU Brick and Window
- 24 August 2023 - Documents - P21110-FCH-BA-XX-SK-A-0028/ 0029/ 0030

Window Opening Variation Lomax St Elevation (item 10)
- 05 September 2023 - On-site Review - Full VMU - metal cladding/ perforated panel/ sill/ coping
- 20 October 2023 - On-site Review - Full VMU - metal cladding/ perforated panel/ sill/ coping (workmanship issues corrected)
- 08 January 2024 - Document - P21110-FCH-XX-XX-RP-A-0003 rev. P04

Updated with initial design for metal railing.
- 13 May 2024 - Document - P21110-FCH-XX-XX-RP-A-0003 rev. P05

Updated with developed design for metal railing & split in selected perforated panels (item 08)
- 14 May 2024 - On-site review - Brick Lintel, metal railing, exterior lights, roller shutter door
- 23 May 2024 - Document - P21110-FCH-XX-XX-RP-A-0003 rev. P06

Updated to capture all consultation comments and soldier coursing to Ducie St elevation (item 09)
- 01 August 2024 - Document - P21110-FCH-XX-XX-RP-A-0003 rev. P07

Updated to capture all consultation comments, design development and MCC consultation of the developed metal balustrade (item 01)

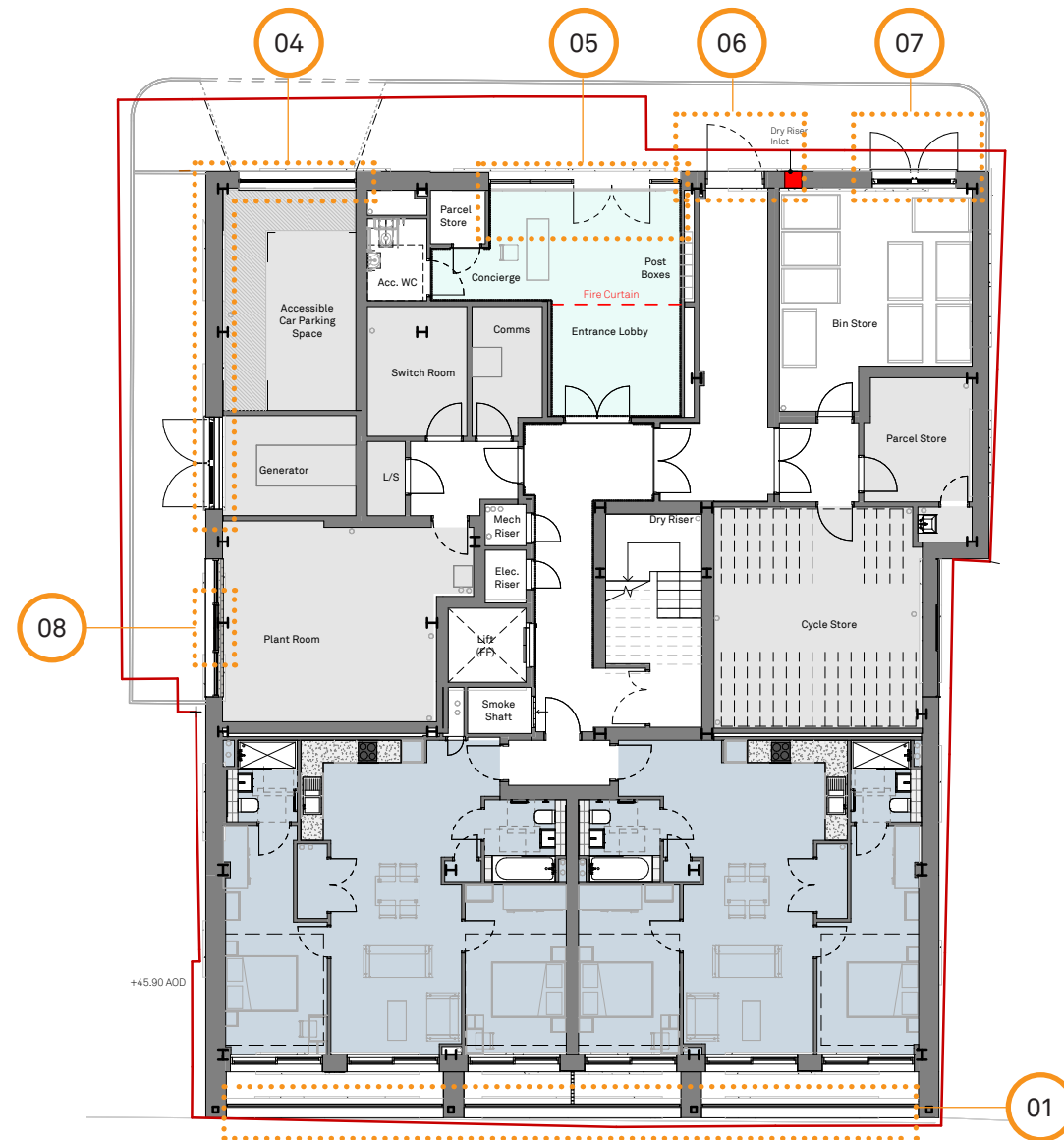


# PROPOSED AMENDMENTS

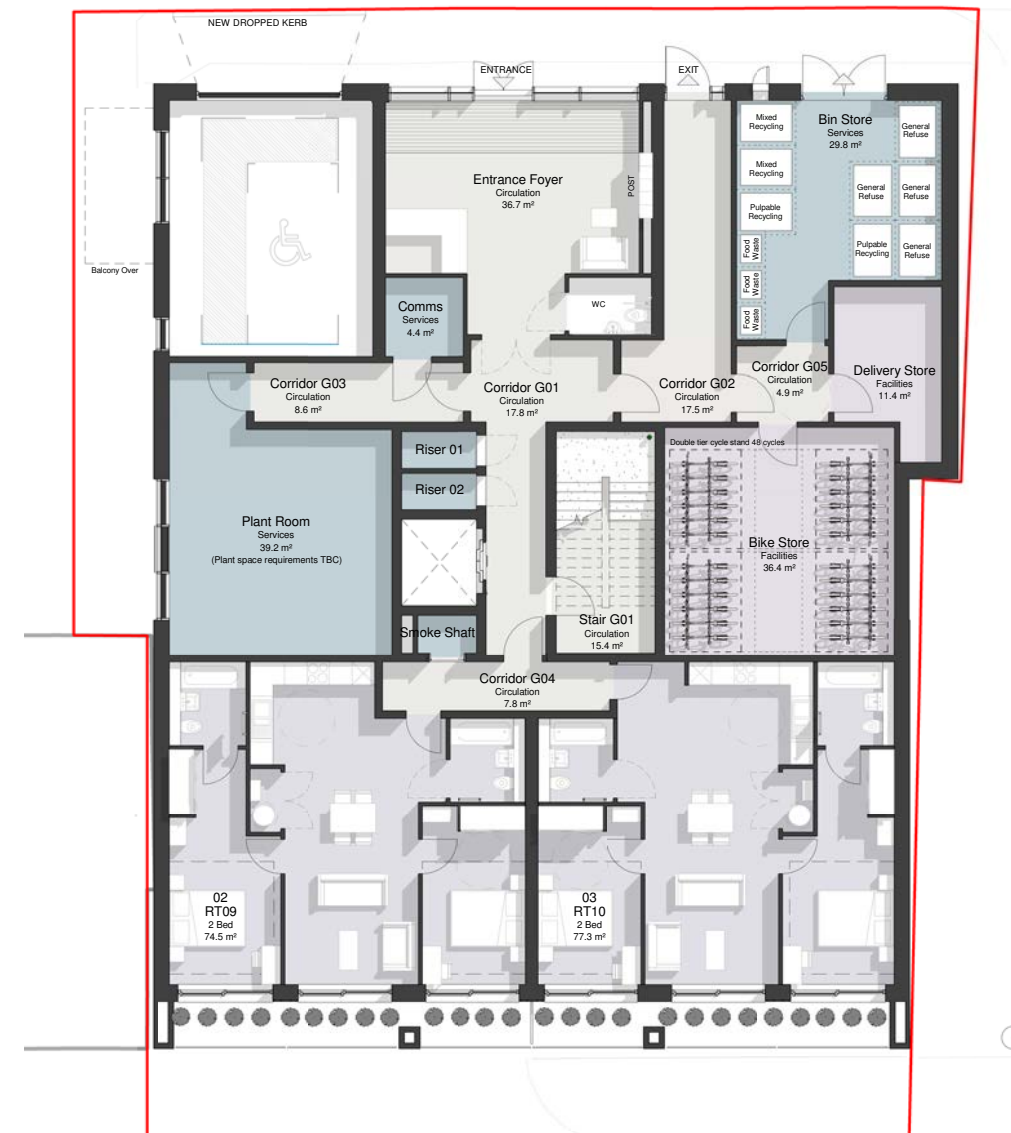
## COMPARATIVE GA PLANS

120149/FO/2018

Ground Floor Plan - Proposed Amendments 1:200



Ground Floor Plan - Consented 1:200



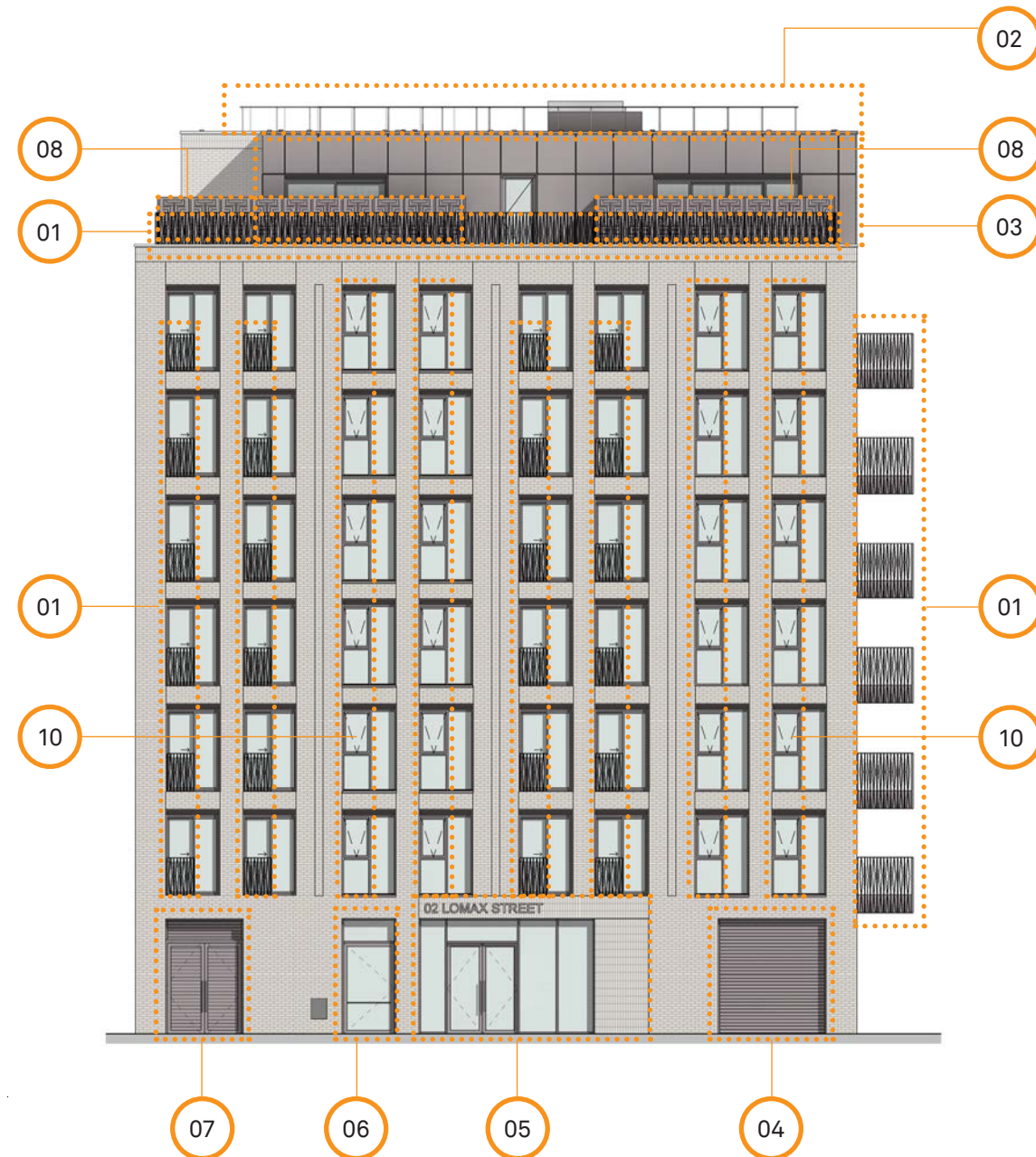
- 01. Change the balcony balustrades from frameless glass to metal railing to suit Building Regulation approval requirements.
- 02. Add collective edge Protection to Roof level.
- 03. Re-set out metal cladding panels to suit manufacturing constraints.
- 04. Amend roller shutter door, louvred panels and add new louvred door to suit internal layout amendments.
- 05. Revise entrance door and glazing on Lomax St elevation to suit to internal layout amendments.
- 06. Simplify the arrangement of the Glazed Fire Escape Door on Lomax St elevation.
- 07. Amend location of louvred doors to align opening with brick vertical movement joint reducing visual impact of the movement joint.
- 08. Split perforated panels on north-east & south-west elevations and roof privacy screens due to manufacturers limitations.
- 09. Minor adjustment to soldier course brick detail on West & East Elevations to suit masonry support limitations.
- 10. Change of window opening type to meet natural purge ventilation requirements on Lomax Street elevation.

# PROPOSED AMENDMENTS

## COMPARATIVE GA ELEVATIONS

120149/FO/2018

North West Elevation - Proposed Amendments 1:200



- 01. Change the balcony balustrades from frameless glass to metal railing to suit Building Regulation approval requirements.
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North West Elevation - Consented 1:200



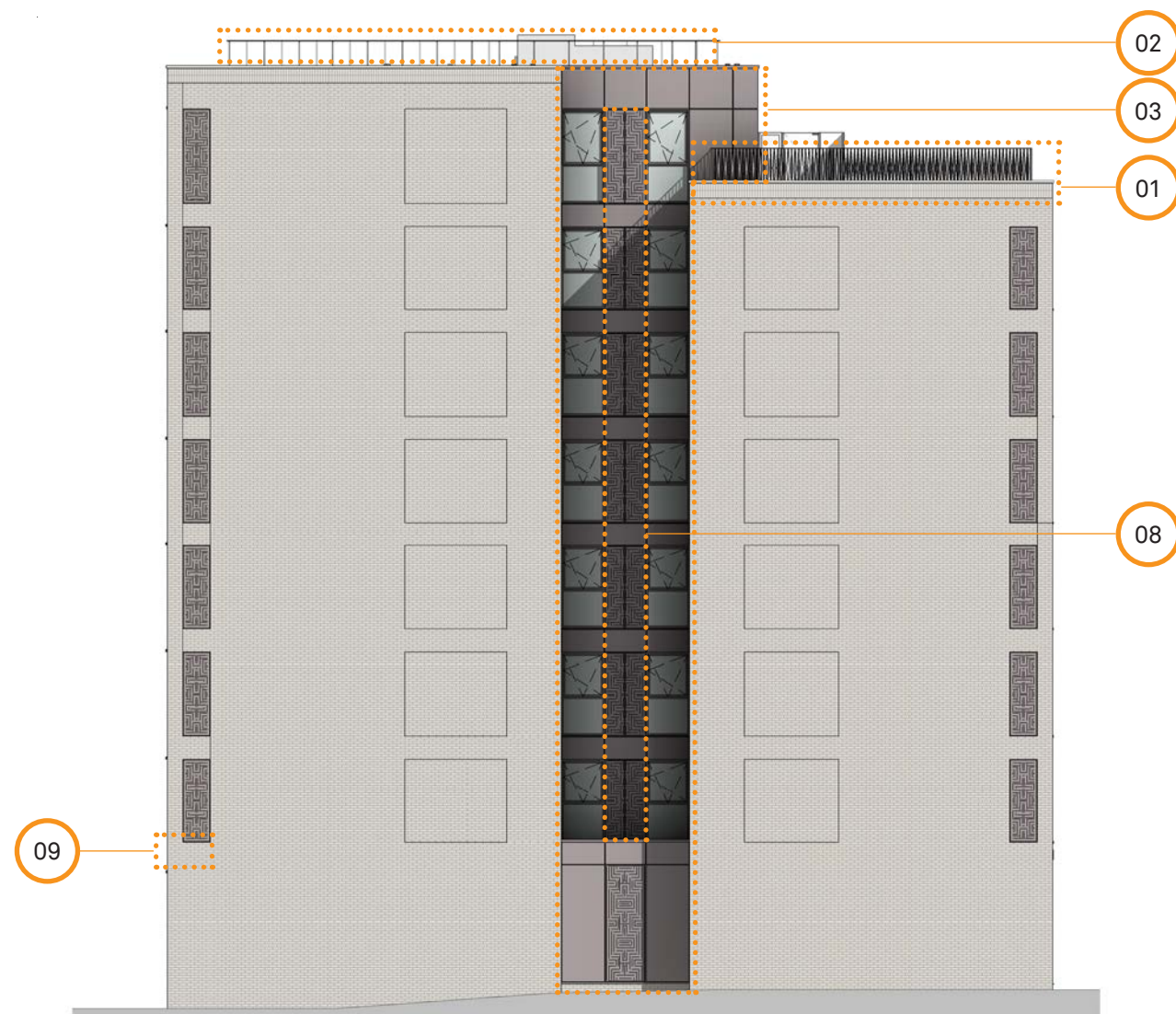
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# PROPOSED AMENDMENTS

## COMPARATIVE GA ELEVATIONS

120149/FO/2018

North East Elevation - Proposed Amendments 1:200



North East Elevation - Consented 1:200



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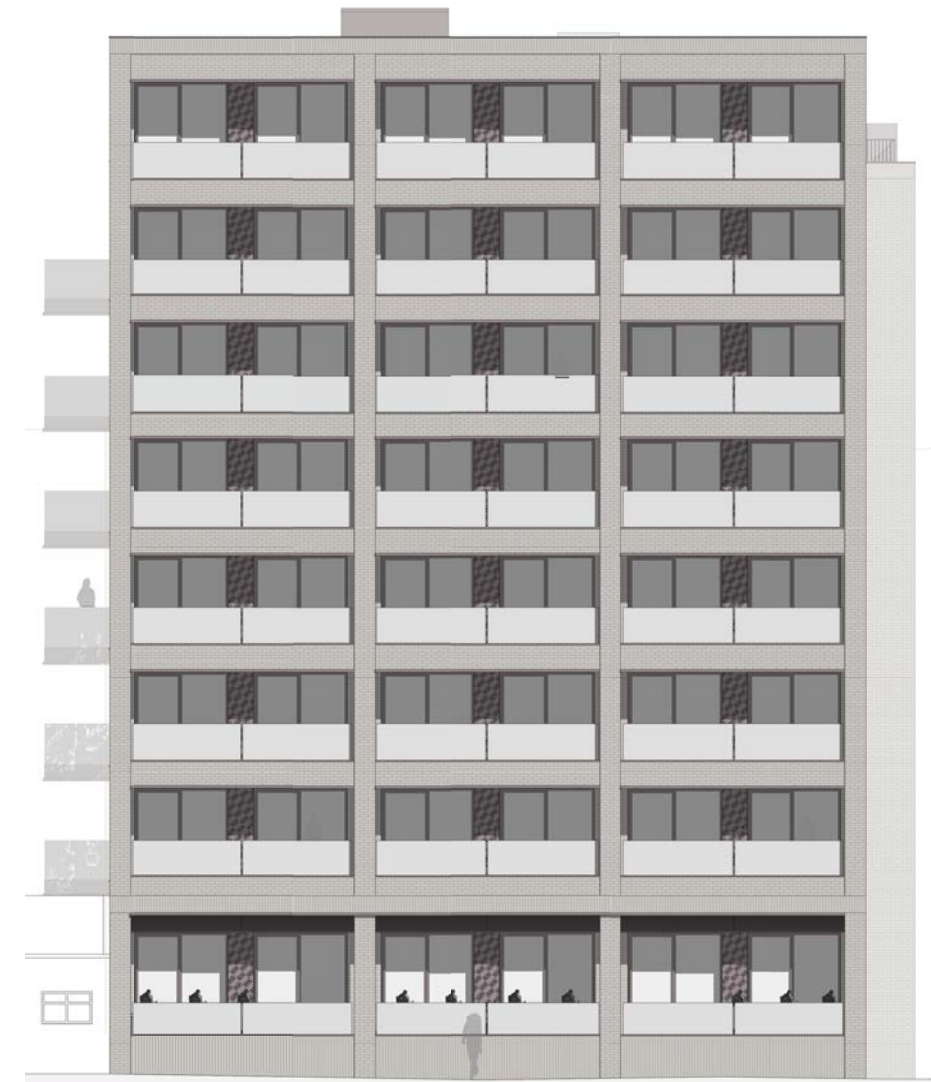
# PROPOSED AMENDMENTS

## COMPARATIVE GA ELEVATIONS

120149/FO/2018

South East Elevation - Proposed Amendments 1:200

South East Elevation - Consented 1:200



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# PROPOSED AMENDMENTS

## COMPARATIVE GA ELEVATIONS

120149/FO/2018

South West Elevation - Proposed Amendments 1:200



South West Elevation - Consented 1:200



- 01. Change the balcony balustrades from frameless glass to metal railing to suit Building Regulation approval requirements.
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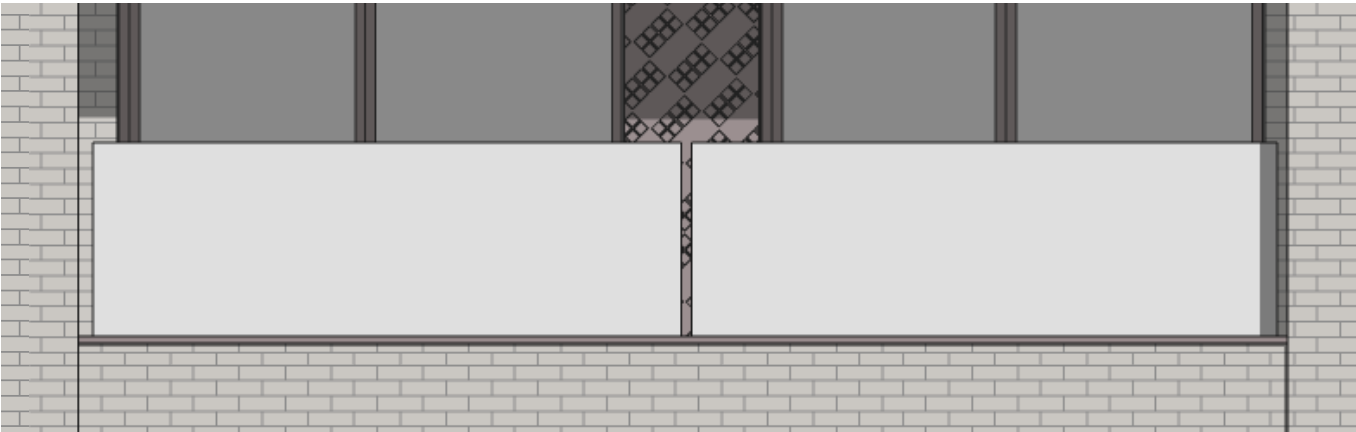
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01 BALCONY BALUSTRADE - DESIGN DEVELOPMENT

Approved Design & Technical (Glazed balustrade)

The Approved Drawings feature a frameless glass balustrade with secret fixings to the perimeter of the projecting and inset balconies.



Glazed balustrade example (nts) extracted from consented Drawing 'DUCIE\_STREET\_ELEVATION-915784'

As the project developed, the BCO (Ball & Berry) were unable to advise that any glazed balustrade product would meet the criteria defined in Regulation 7 (fig. 01). Following these comments, the design team began looking at developing a metal balustrade solution for all balcony types.

Ball & Berry statement extracted below for clarity:

**From:** Alex Portis <Alex.Portis@ballandberry.co.uk>  
**Sent:** 23 August 2022 17:17  
**To:** Iain Macfarlane; Deborah Mclean; Bilal Siddiqui; Alex Eagle  
**Cc:** Stephen Wardle; Paul Soper; Richard Cymler  
**Subject:** RE: P21-110 - Ducie St. Manchester - Glass Balustrades

Deborah/Iain,

After reviewing this internally, unfortunately again Ball & Berry would not accept this under Regulation 7(2).

We would advise that the government recently undertook a review and chose not to omit or exempt laminated glass to balconies i.e. balcony attached to an external wall where regulation 7(2) is applicable.

It is worth noting this also appears to be the stance of several of the leading warranty providers.

Kind Regards,

**Alex Portis**  
Associate Director  
BSc (Hons) MRICS C.Build E MCABE

**ball & berry**  
APPROVED INSPECTORS

**REQUEST A QUOTE**

fig. 01 - BCO (Ball & Berry) statement for all laminated glass balustrade systems

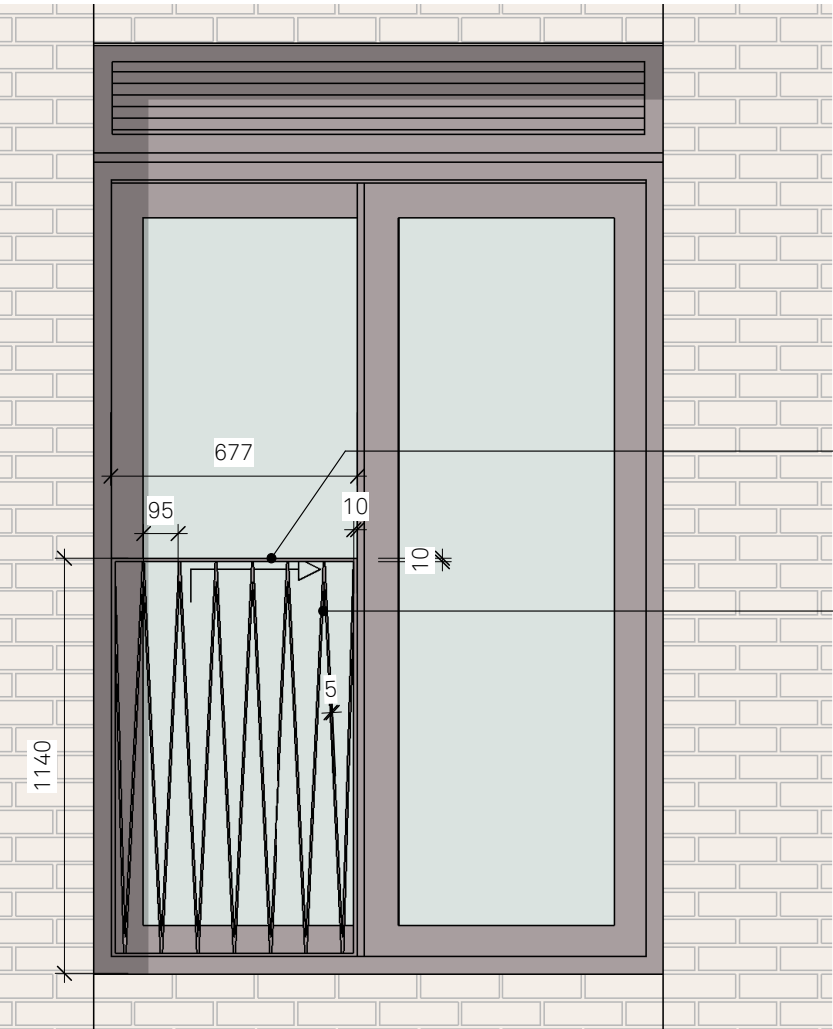
Initial Developed Design (Metal Balustrade)

The initial design of the metal railing was developed as a bespoke element, with thin circular rods to maximise visual transparency and give a lighter appearance, the same intent behind using glazed balustrades and also tie in with the textile theme used in motifs in the brick detailing and perforated metal panels.

However MCC felt this design was not bespoke enough and lacked variation across the building.



The images above show the initial design for the new balustrade, which proposed this angled rods in a 'zig-zag' format as a loose reference to the diamond motif.



## 01 BALCONY BALUSTRADE - DESIGN DEVELOPMENT

### Design Options (Metal Balustrade)

Following the initial design, discussions with MCC and internal reviews, we developed options for the balustrade design, retaining the 'lightness' and incorporating a more obvious reference to the diamond motif, which was felt to be more aligned with the contextual/ historical railing references.

The below options were developed as part of the refinement process:



**Option 01**  
Pros - visual permeability.  
Cons - not bespoke enough, simple, repetitive, similar to previous option, not linked to decorative panels.



**Option 04**  
Pros - closely aligns with 'textile' motif pattern, visual permeability, bespoke and decorative.  
Cons - pattern too similar to perforated panels, would need to be constructed as 'face-fixed' zig-zags rather than integral to the railing design.



**Option 02**  
Pros - closely aligns with 'textile' motif pattern, visual permeability, bespoke and decorative.  
Cons - pattern too distracting/ too complicated, competes with perforated panel pattern.



**Option 05**  
Pros - closely aligns with 'textile' motif pattern, bespoke and decorative.  
Cons - not enough visual permeability, pattern too distracting, introduces a new linear language.



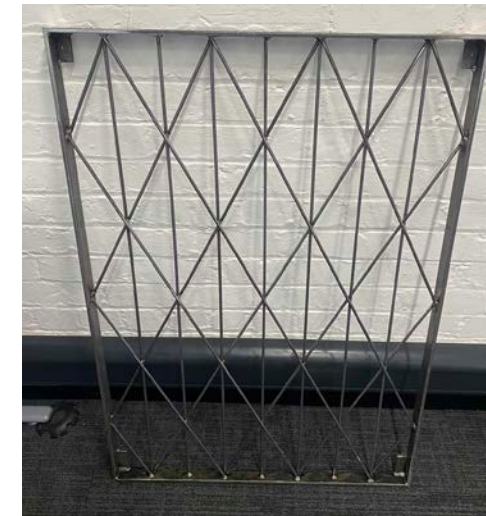
**Option 03**  
Pros - closely aligns with 'textile' motif pattern, visual permeability and bespoke and decorative.  
Cons - vertical and horizontal bars too distracting.



### Developed Design (Metal Balustrade)

Of the options developed, the one below was preferred as it balanced the detail and decoration without overloading the buildings appearance and possessed a more direct reference to the diamond motive.

However, the Principal Designer (CDM) consultant advised that the design was considered climbable and therefore presented a risk. After this, we looked to develop another option which incorporated the PD's comments.



Images above of the fabricated prototype for the Juliette balcony (unpainted).



c. 8mm x 35mm flat plates with welded joints

c. 8mm diameter rods with welded joints

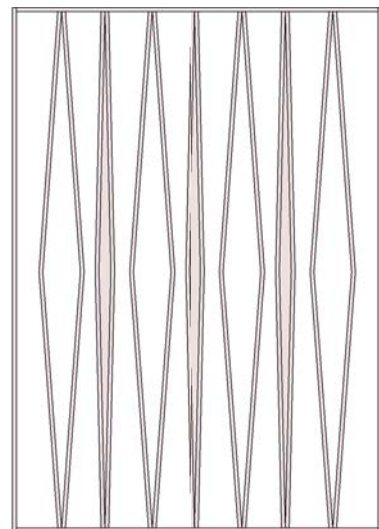
## 01 BALCONY BALUSTRADE - PROPOSED DESIGN

### Proposed Metal Balustrade Design

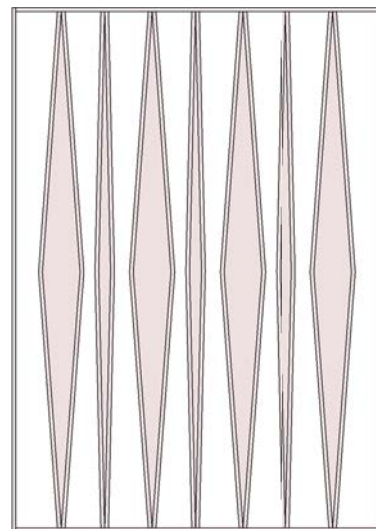
We developed the proposed balustrade design below, which took onboard comments from the PD(CDM) consultant but balanced the previous planning comments regarding variation across the building. As part of the bespoke nature, four railing types were developed, utilising the same baluster designs but varying the use of infill panels across the balcony types and elevations.

On 16.07.24 FCH presented the updated balustrade design to MCC and the design was accepted in principle.

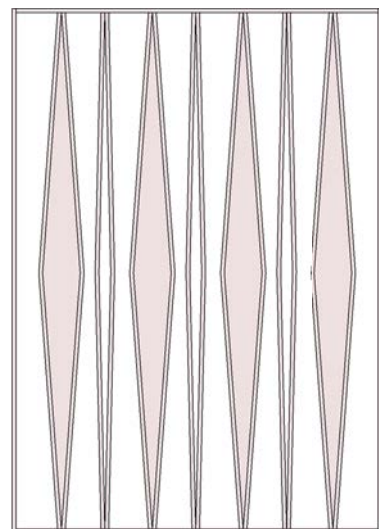
Balustrade Variations (Juliette Balcony)



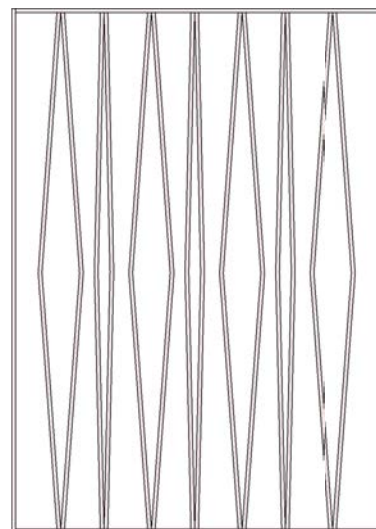
**Balustrade Type A**  
Infill panels behind thin vertical elements



**Balustrade Type B**  
Infill panels behind both thick & thin vertical elements



**Balustrade Type C**  
Infill panels behind thick vertical elements



**Balustrade Type D**  
No infill panels behind vertical elements

Juliet Balcony 3D Render



Projecting Balcony 3D Render



Inset Balcony 3D Render



## 01 BALCONY BALUSTRADE - PROPOSED DESIGN

### Proposed Metal Balustrade Design

The drawings below have colour coded all the balustrade locations on the elevations, clearly illustrating how the four balustrade designs for the balconies will be positioned across the facade.

■ Balustrade Type A - Infill panels behind thin vertical elements

■ Balustrade Type B - Infill panels behind both thick & thin vertical elements

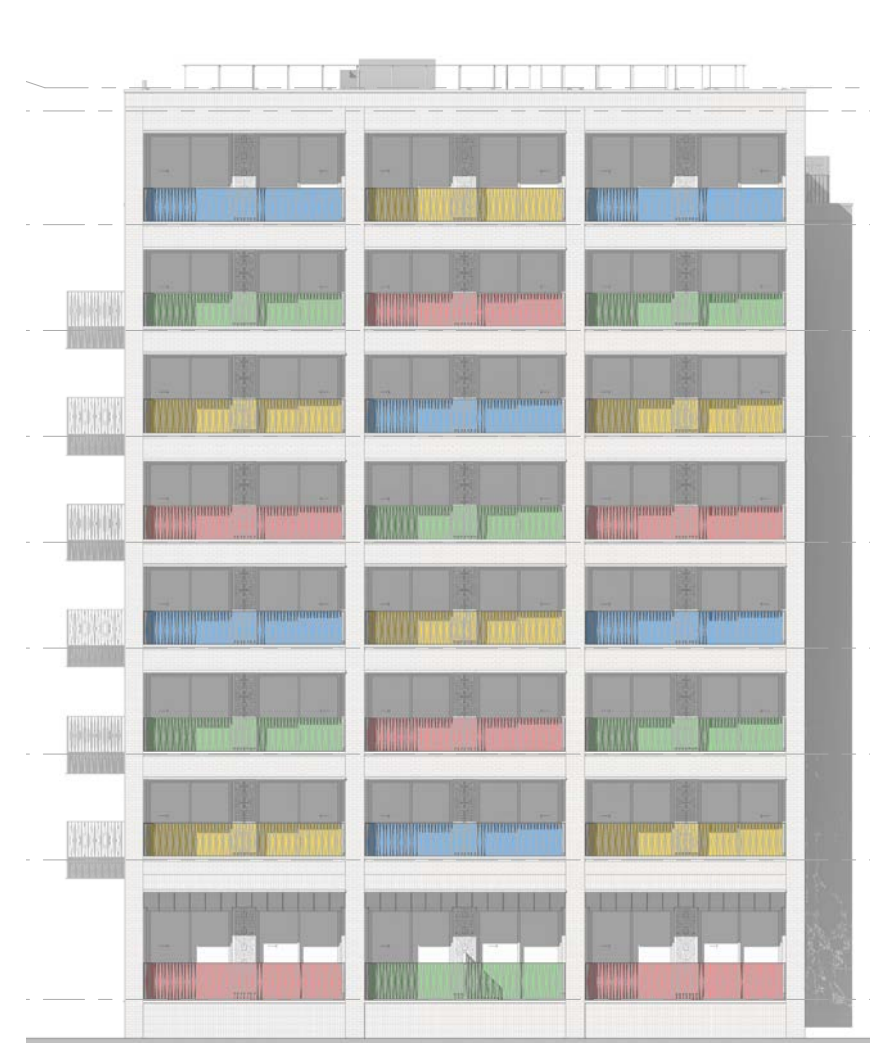
■ Balustrade Type C - Infill panels behind thick vertical elements

■ Balustrade Type D - No infill panels behind vertical elements

North-West Elevation (Lomax St)



South-East Elevation (Ducie St)



South-West Elevation

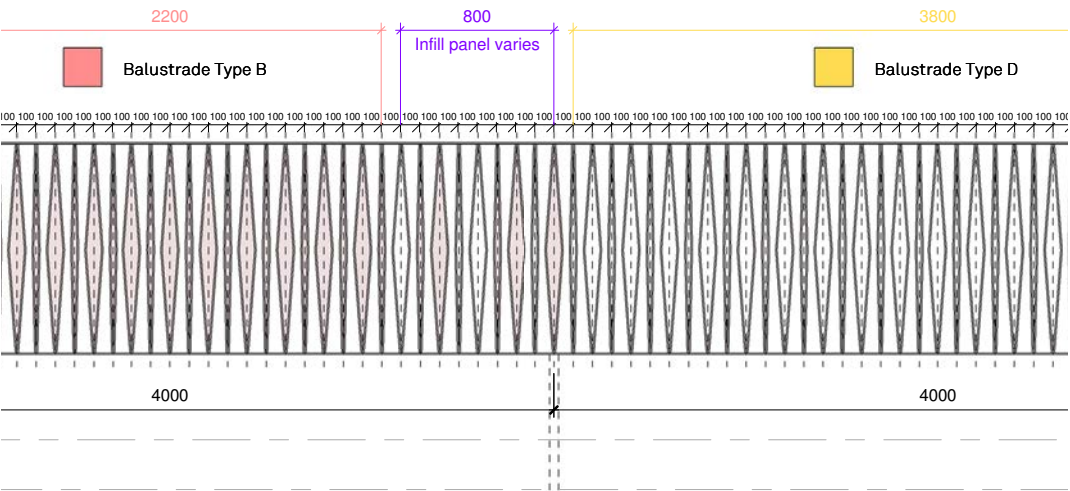
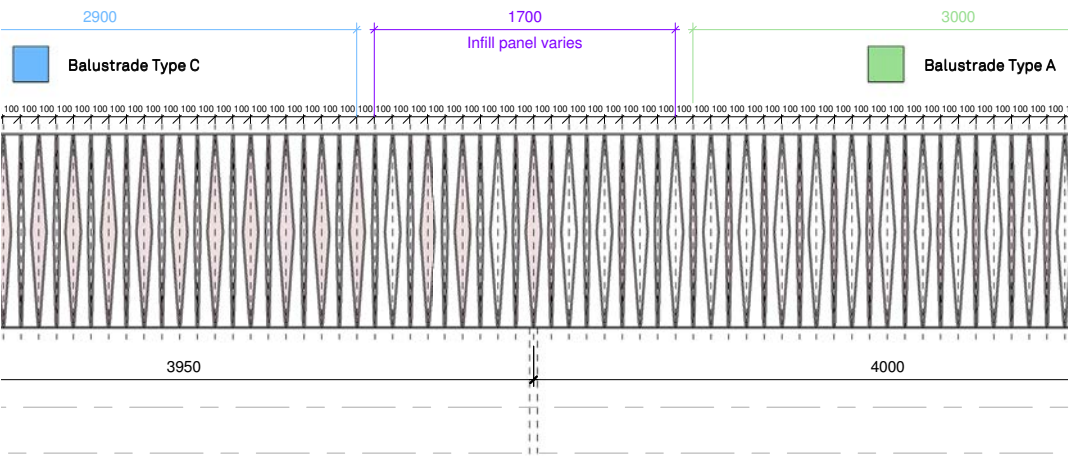


01 BALCONY BALUSTRADE - PROPOSED DESIGN

Proposed Metal Balustrade Design

The drawings below have colour coded the balustrade locations to the roof terrace, clearly illustrating how the balustrade variations have been utilised throughout the railing, with several instances of 'blending' the variations together to create a seamlessly design.

Example of balustrade variation blending below:

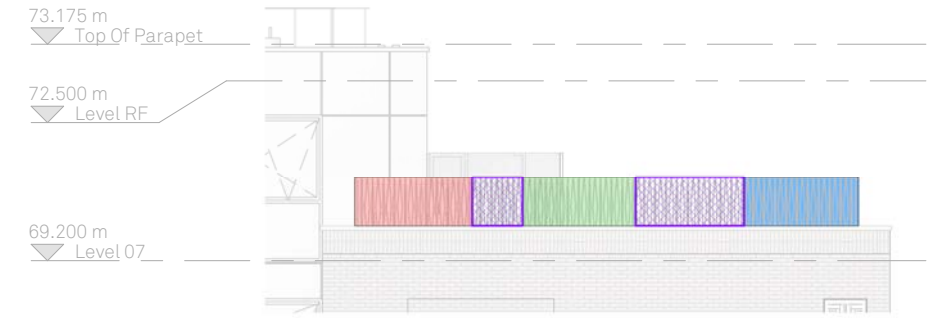


Roof Elevations

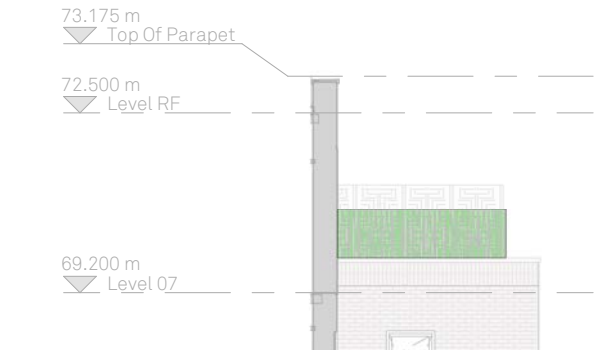
- Balustrade Type A - Infill panels behind thin vertical elements
- Balustrade Type B - Infill panels behind both thick & thin vertical elements
- Balustrade Type C - Infill panels behind thick vertical elements
- Balustrade Type D - No infill panels behind vertical elements



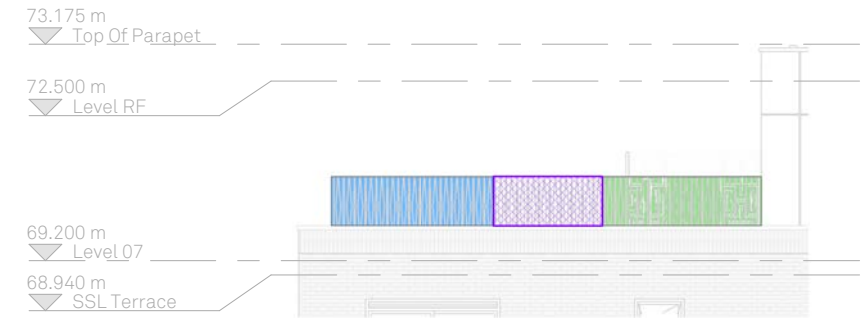
1 Roof Balustrade Types - Lomax Street Elevation  
Scale @ 1 : 100



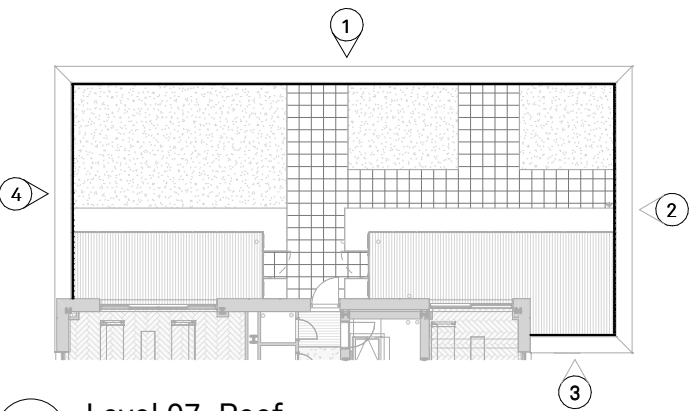
2 Roof Balustrade Types - North-East Elevation  
Scale @ 1 : 100



3 Roof Balustrade Types - West Facet Elevation  
Scale @ 1 : 100



4 Roof Balustrade Types - South-West Elevation  
Scale @ 1 : 100



5 Level 07\_Roof  
Scale @ 1 : 200

## 02 PERMANENT EDGE PROTECTION TO ROOF LEVEL

Illustrative views from street level indicating the visibility of the permanent edge protection on the roof level.

View from Ducie Street looking North East

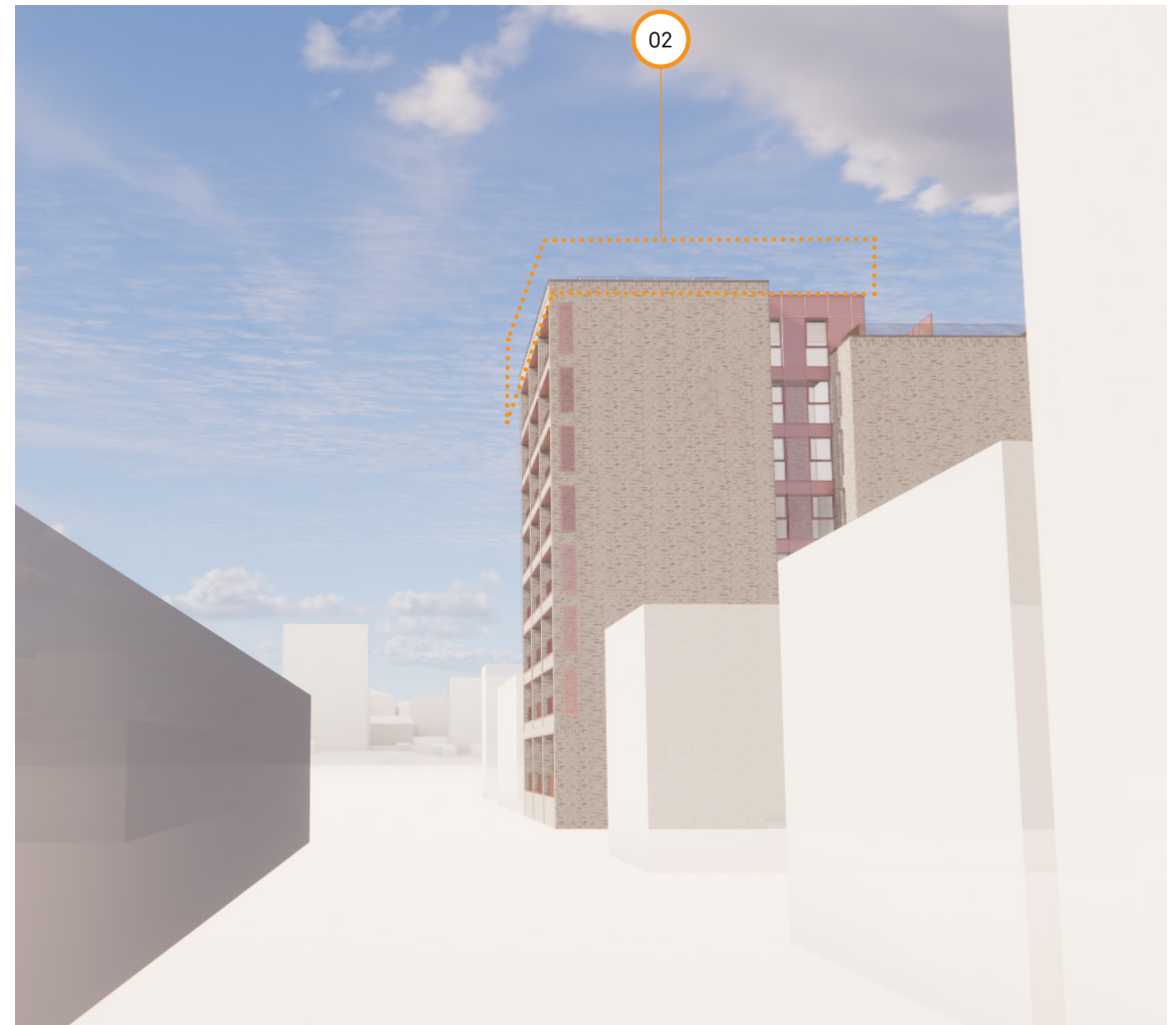


- 01. Change the balcony balustrades from frameless glass to metal railing to suit Building Regulation approval requirements.
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View from Ducie Street looking South West

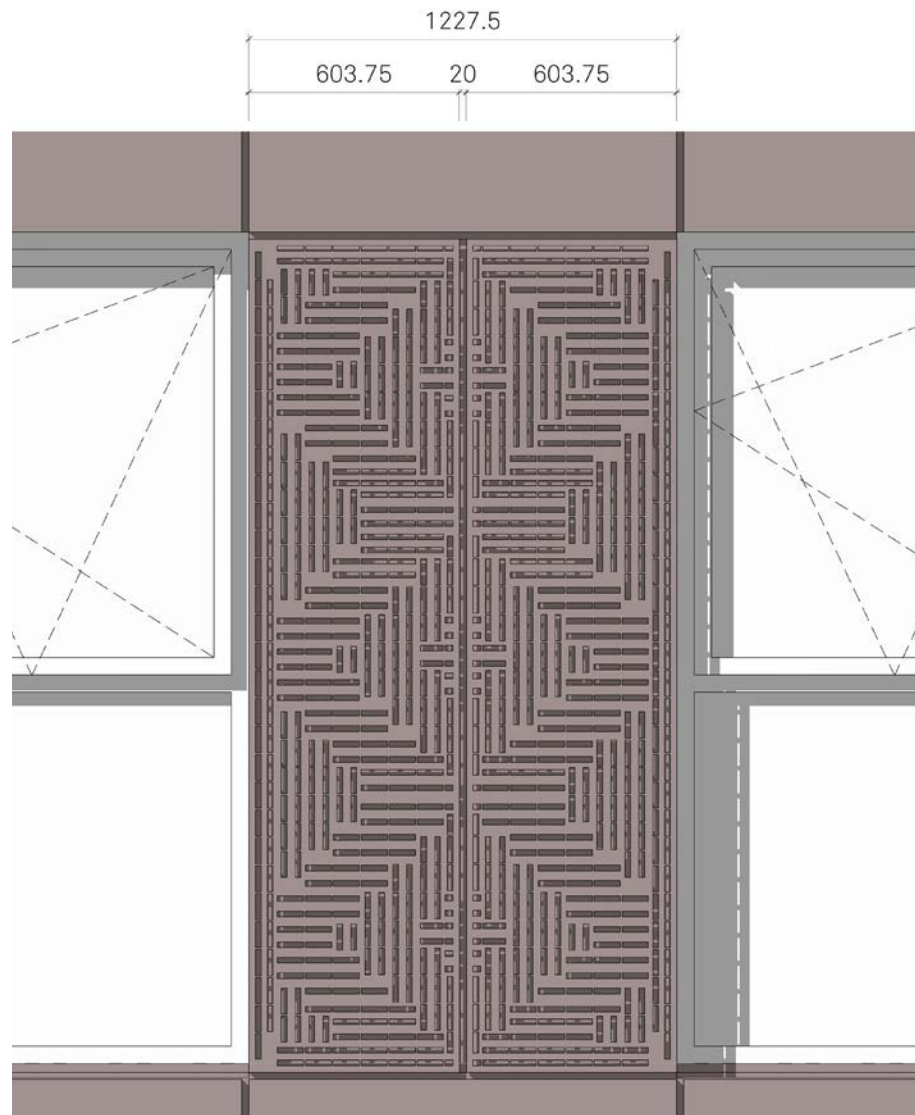


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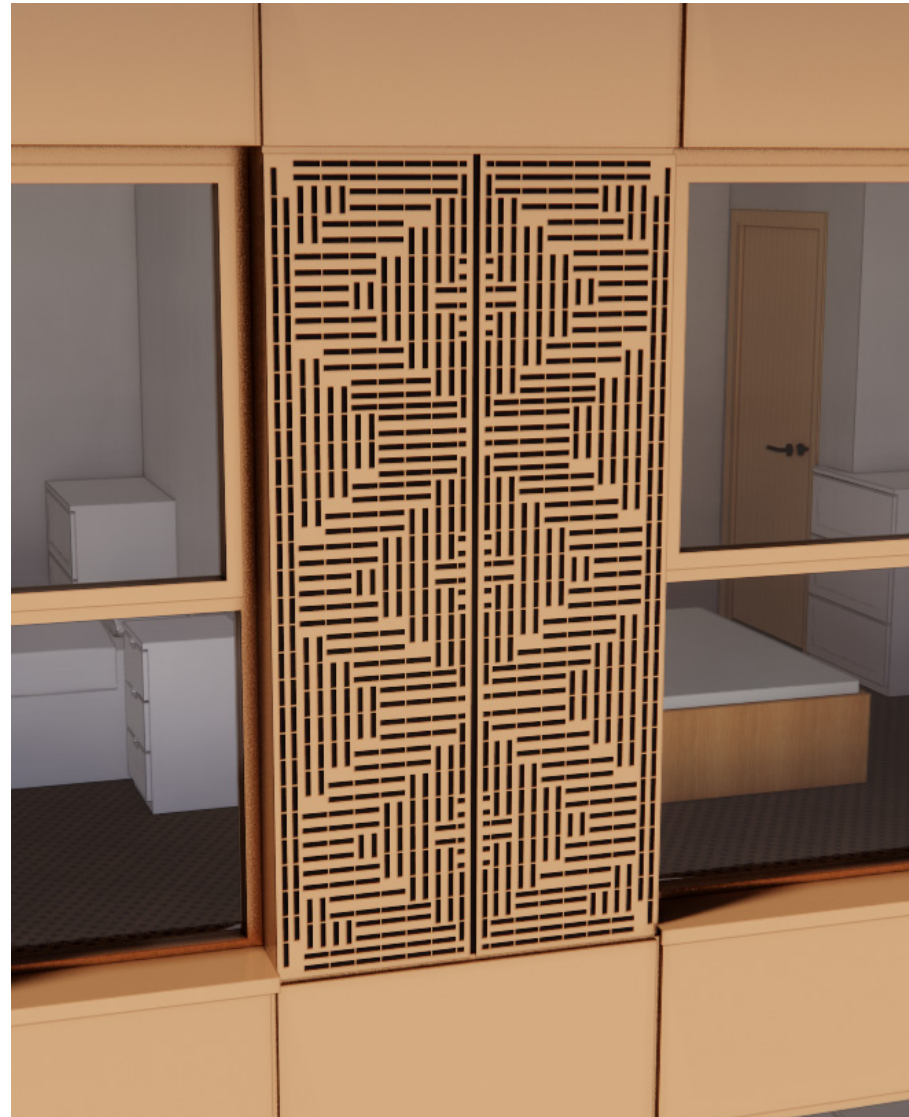
## 08 PROPOSED PERFORATED PANEL

Elevation details showing the proposed perforated panel. Please note colours on these images are indicative and finishes shall be as per agreed samples.

Elevation of vertically split perforated panel on south-west / north-east elevations



3D image of vertically split perforated panel on south-west / north-east facades



3D image of vertical perforated panels on south-west facade



## 09 MINOR AMENDMENT TO SOLDIER BRICK COURSE

The drawings below indicate the minor amendment to soldier coursing on Ducie Street Elevation Ground Floor

It is proposed to marginally reduce extent of the soldier coursing due to complications in installing the masonry support and achieving tolerances on the structural frame.

This means that the soldier coursing in this location would need to be recessed by 30mm in order to maintain suitable bedding onto the masonry support.

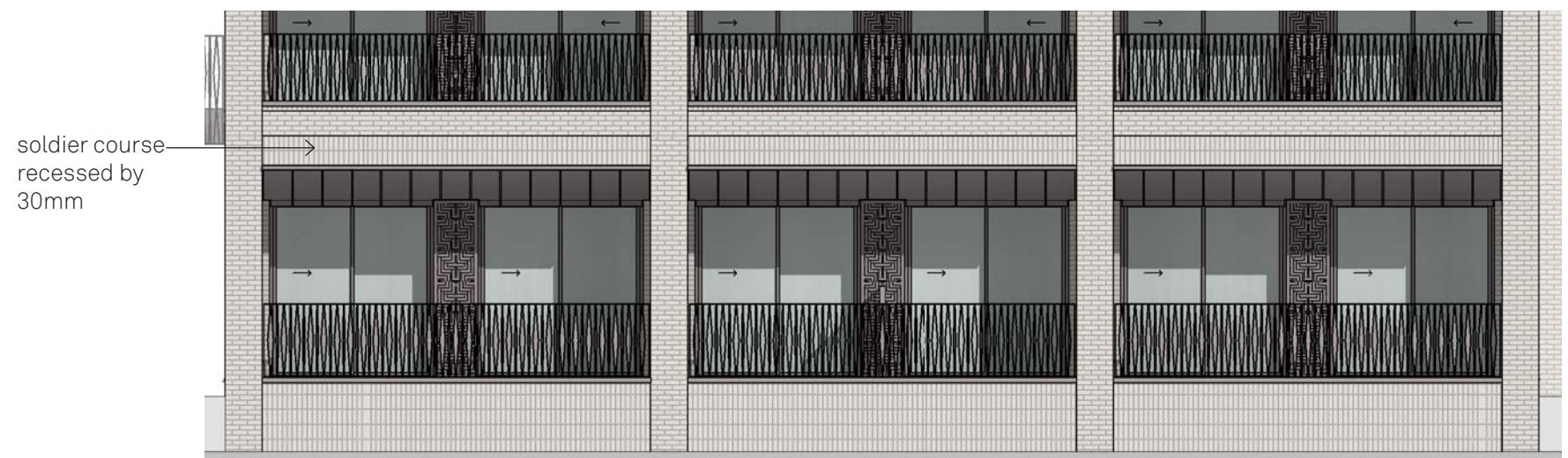
Since we have 30mm recessed brickwork elsewhere on the project it is felt that this ties in with current design language. It would also offer visual relief to the planar elevation, enhancing it's appearance.

The original proposal wrapped the soldier coursing around the corners and across the vertical piers - however our opinion is that limiting the recessed soldier coursing to above the balcony openings enhances the vertical proportion of this facade and the legibility of the balcony openings.

South East Elevation - Consented 1:100



South East Elevation - Proposed Amendments 1:100



## 10 CHANGE OF WINDOW OPENING TYPE

The drawings show a change of window opening type to meet natural purge ventilation requirements.

The consented design failed meet the free area requirements for natural purge ventilation with the tilt-open windows indicated on the Lomax Street elevation. The design team would prefer to stick with a natural solution rather than mechanical in order to reduce the operational energy needs of the building. AD:Part F requires a minimum 15 degree opening which the manufacturer has advised cannot be achieved with a vent opening.

Two options were reviewed; changing to a half-light swing-opening type or change to a full swing opening door with juliette railing.

The half light amendment is preferred for appearance, as will continue the visual language of 4xno. alternating strips of window styles. Half light windows are used elsewhere on the scheme already as part of the planning approved design. See East and West Elevations for this window type used in the metal cladding sections. Transoms will be set at 1140mm above FFL the same as the other half-light windows, which will also line through with the juliette top rail.

North East Elevation - Consented



North East Elevation - Option 01 - Half Transom (proposed)



North East Elevation - Option 02 - Juliette



# CONTACT

---

## Falconer Chester Hall

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