

Rear Infill

Summary

The new fabric infill within the permitted proposals provides an opportunity to create a high quality insert which enables the existing building to accommodate world class laboratory institutions.

The new infill fabric design has been adapted with technical input to provide high quality facade and internal space which is fit for purpose.

Amendments to the facade elements include the following enhancements:

- Raised cill height to reflect lab space planning and limit solar gains
- Rationalised structural grid for vibration reduction with sub grid appropriate for lab planning
- Double height opening to allow vehicle turning in rear yard
- Integrated plant screening to eighth and ninth floor roof
- Simple and robust construction for optimum airtightness and thermal efficiency

A rigorous design process has been followed, with careful consideration of the existing building elements, townscape views and sensitive historical context. High quality and robust materials have been selected to contribute positively to the setting.



Rear Infill

Summary



2021 Planning Permission



Proposed Section 73 Amendment

Summary of Changes

- 1 New openings to existing flank wall removed, existing condition restored
- 2 9th & 8th floor to accommodate rooftop plant with acoustic screening integrated into facade design
- 3 Strobic fans located at eighth floor
- 4 Double height opening in structure to allow for services vehicle turning
- 5 Balconies removed, facade grid regularised to optimise structure
- 6 Escape stair brought internally

Rear Infill

Design Evolution

2021 Planning Permission



Office enabled
Rear infill new facade to office accommodation



Lab enabled
Cill height to lab benching, plant screens to 8th floor, loading bay void



Plant screen articulation
Fluting to screen considers articulates screen against sky



Rational structural grid
Efficient grid appropriate for vibration limitation



Horizontal emphasis
Reference to existing building and industrial aesthetic



Fenestration rhythm
Window divisions complement horizontals with vertical rhythm



Material adjustment
Contrasting colours and textures complement ceramic verticals



Sealed envelope
Windows restored and balconies removed to allow sealed envelope

Proposed Amendment

Rear Infill

Cill Height

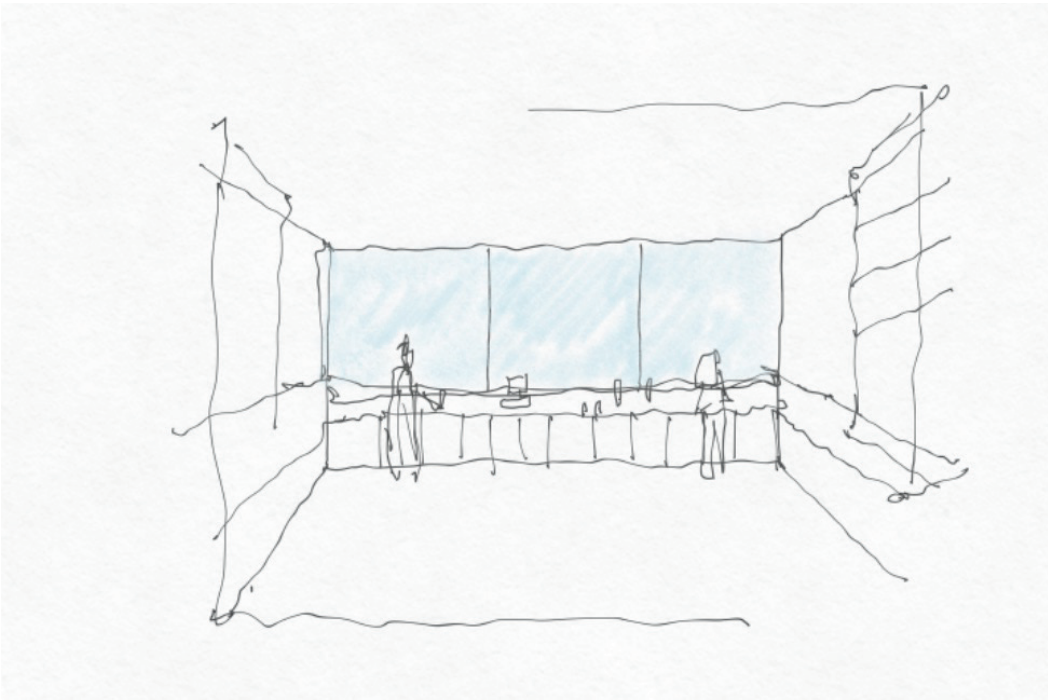
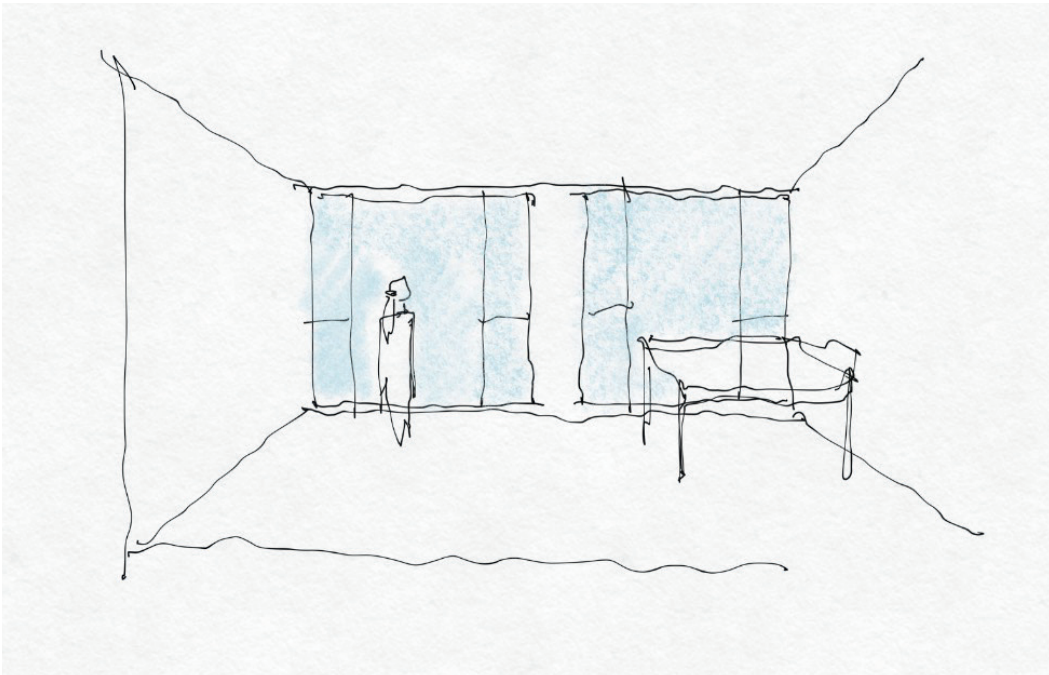
The proposals make adaptations to window openings to suit laboratory space planning and limit solar gain whilst maximising daylight.

Laboratories require specific environmental conditions which require significant servicing for balance and control. Equipment generates heat, therefore external factors such as solar gain should be limited where possible to reduce energy loading on servicing.

Proposals raise the cill height to match benching, significantly reducing glazing area across the facade. This allows flexibility in space planning for a range of laboratory layouts.

Window head height is maximised to preserve views out and provide good daylighting, reducing lighting loading.

Windows are proposed to be openable to allow flexibility for office retrofit in future.



Office Facade
Full height glazing
Glazing Ratio: 59%



Lab Facade
Bench height glazing
Glazing Ratio: 40%

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Facade Order

The proposal seeks to reference the horizontal emphasis of the existing building fenestrations, whilst introducing industrial and functional aesthetic reflective of lab use.

The strong horizontal lines of the windows are accentuated with articulated ribbons at the base of the spandrel. These elements meet vertical tiers as they taper from ground to eighth floor and form deliberate breaks in the horizontality.

These tapered verticals establish a top, middle and bottom order which relates to the existing building and its vertical details.



Vertical alignment and stepped features: Art Deco style



Existing facade ribbon windows with horizontal emphasis



Horizontality in industrial mid century aesthetic

