

# **SARSFIELD ROAD, WILTON**

## DAYLIGHT ASSESSMENT IN RESPONSE TO RFI

11/07/2025

Following feedback from Cork City Council in relation to daylight and sunlight matters, GIA have undertaken further review and assessment of the Proposed Development.

This document seeks to provide further information regarding improvements in terms of daylight as well as the daylight impacts of potential materiality amendments to the northern boundary fence. The specific feedback being addressed herein is:

- “The Planning Authority notes that all the apartment blocks are sited in very close proximity to northern boundary of the site, with ground floor single aspect north facing residential units, and notes that some habitable rooms on the ground floor units do not meet the guidance for daylight.
- The Planning Authority has concerns that the provision of a block/solid wall along the northern boundary would have an increased negative impact on residential amenity of future occupants, and result in more units having reduced daylight, and an unsatisfactory residential environment.”

GIA have provided results comparing a 2.4m high paladin boundary fence and a 2.4m high solid boundary wall (refer to RAU documentation for further details on the fence/walls proposals). The assessed results show a detrimental impact to daylight with significant reductions in daylight to rooms in all three blocks, in some rooms halving in the amount of light received compared to the results with the paladin 2.4m fence.

Where daylight shortfalls occurred in the initial assessment with the paladin fence, opportunities to improve the daylight performance have been explored. The improvements comprise:

- Middle Block - further increases to the width of the fenestration and separation of the kitchen at the rear of the open-plan LKD with x2 LKDs at Ground Floor. See Fig 01.
- East Block - increases to the width of the fenestration to x9 LKDs, 3 each at Ground, First and Second Floor. See Fig 02.

Whilst GIA consider the results of the submitted scheme to be excellent for a flatted development with balconies, incorporation of the above amendments would further improve the performance. Incorporation of the amendments would result in all north facing rooms being BRE compliant for daylight and the overall compliance of the scheme increasing to 96% (886/924 rooms).

Fig 01. Middle Block floor plan showing increased fenestration and enclosed kitchen (applied to Ground Floor only)

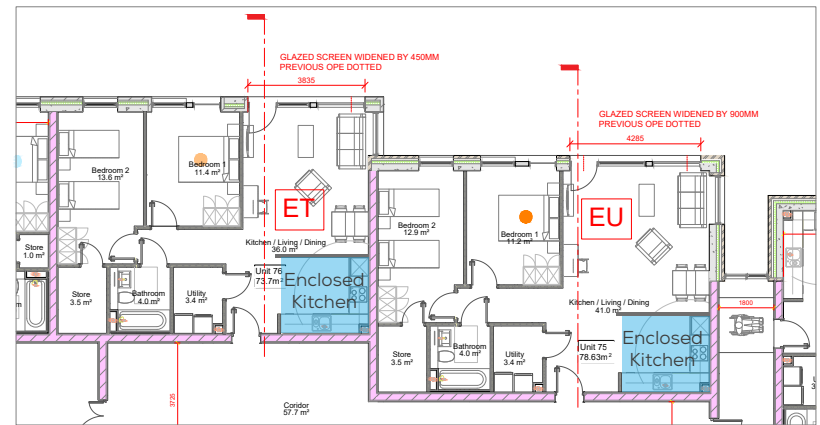
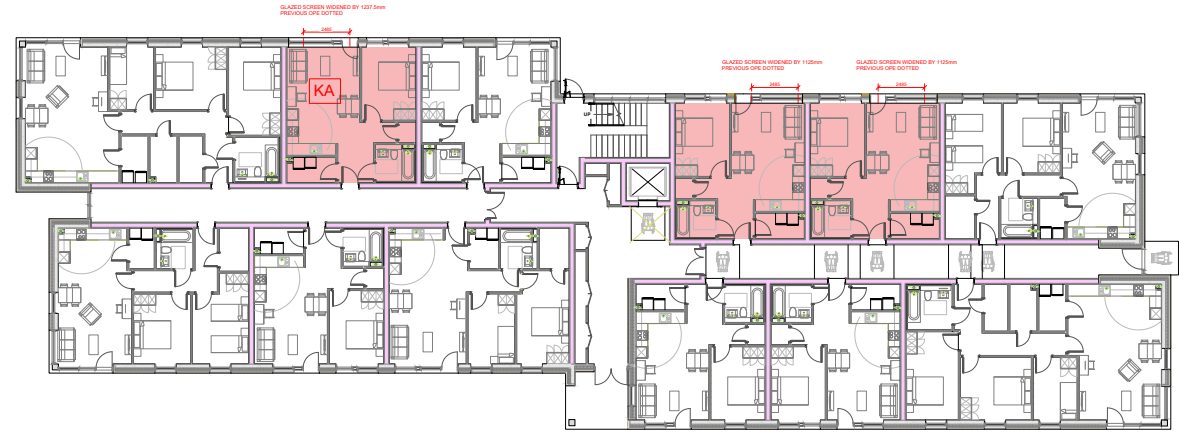
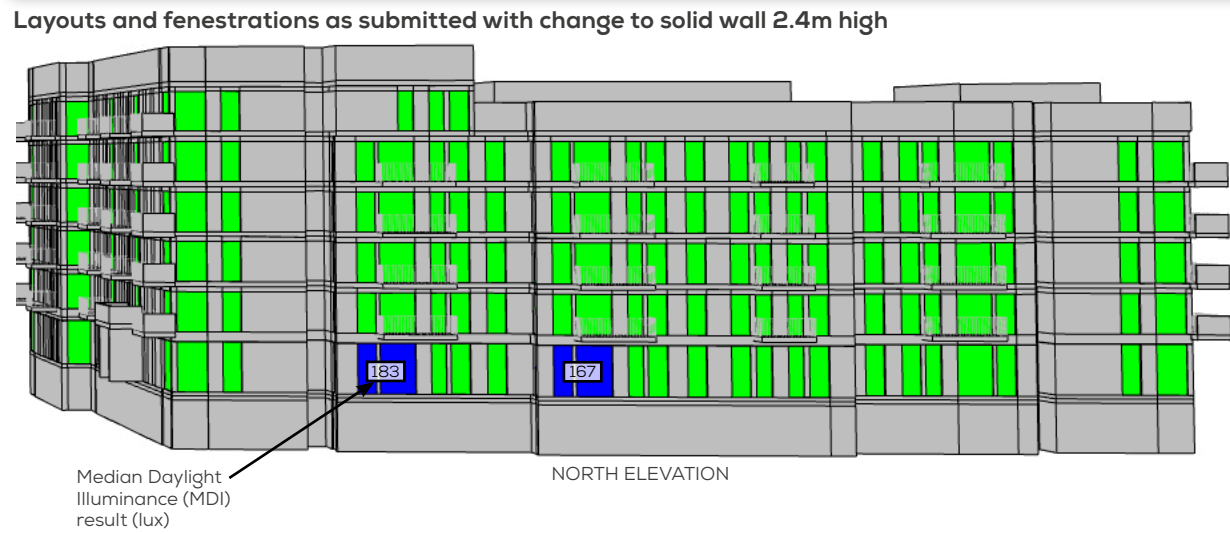


Fig 02. East Block floor plan showing increased fenestration (applied to Ground, First and Second Floors)



# DAYLIGHT ASSESSMENT RESULTS - WEST BLOCK

- Passing (200lux for LKDs and 100lux for bedrooms)
- LKD meeting living room target (150lux)
- Marginal Failure
- Failure



The results show that with a 2.4m high paladin fence, all north facing rooms within the West Block exceed the BRE recommendation for their room use and therefore offer good daylight amenity.

Introduction of a solid 2.4m high wall on the northern boundary in lieu of the more open paladin fence will have a significant impact on daylight to the Ground Floor of the West Block. Whilst most rooms would remain BRE compliant, two open-plan LKDs would reduce from being BRE compliant to meeting the living room target but falling short of the target for rooms with a kitchen.

# DAYLIGHT ASSESSMENT RESULTS - MIDDLE BLOCK

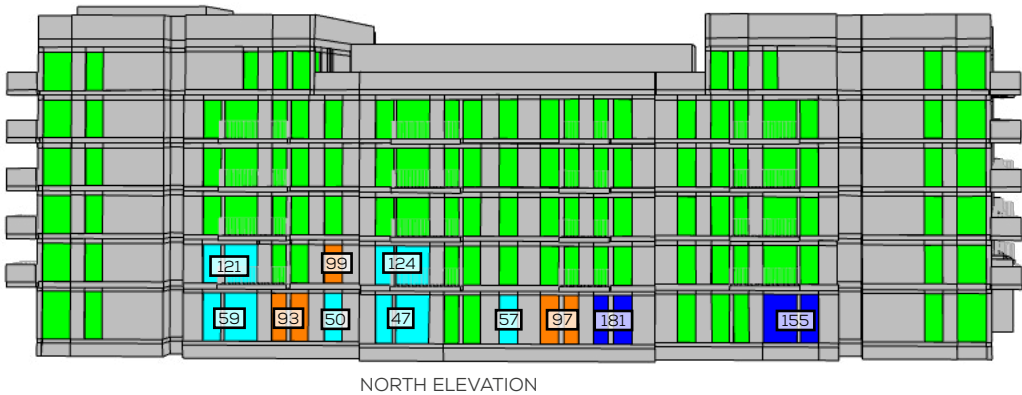


- Passing (200lux for LKDs and 100lux for bedrooms)
- LKD meeting living room target (150lux)
- Marginal Failure
- Failure

Layouts and fenestrations as submitted with paladin fence 2.4m high

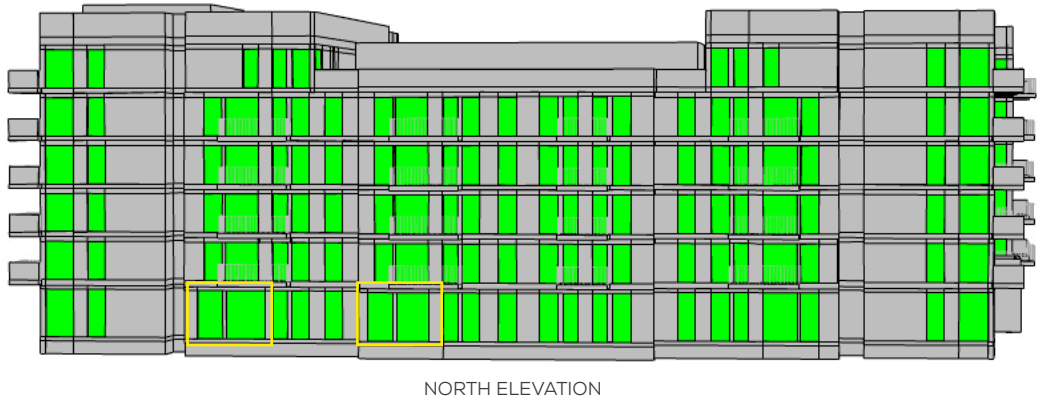


Layouts and fenestrations as submitted with change to solid wall 2.4m high



Increased fenestrations & enclosed kitchens with paladin fence 2.4m high

REVISED.  
ALL NORTH FACING UNITS  
ARE NOW BRE COMPLIANT



The results show that with a 2.4m high paladin fence, all but two north facing rooms within the Middle Block exceed the BRE recommendation for their room use and therefore offer good daylight amenity. The two remaining rooms, both open-plan LKDs and shown in cyan, fall short of the recommendation.

Introduction of a solid 2.4m high wall on the northern boundary in lieu of the more open paladin fence will have a significant impact on daylight to the Ground and First Floors of the Middle Block. Daylight to the two Ground Floor LKDs already below recommendation would halve and an additional nine rooms (four LKDs and five bedrooms) would fall short of the recommended level.

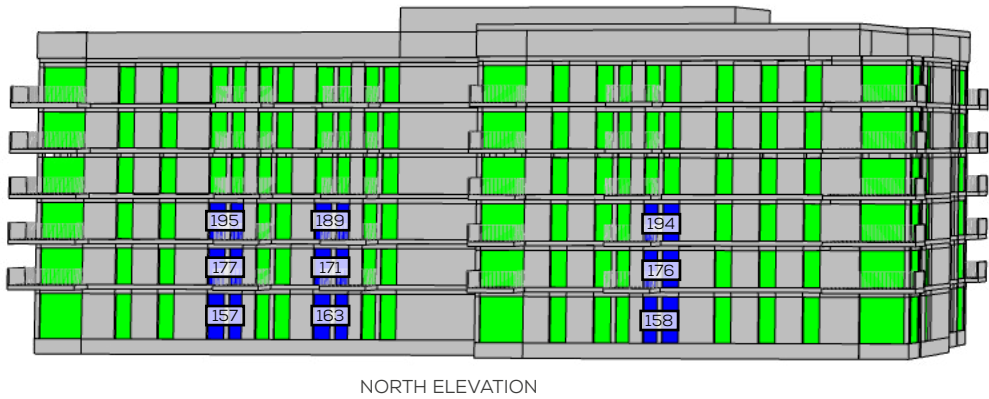
With the 2.4m high paladin fence, the two LKDs falling short of the recommendation can be improved to meet the recommended level by increasing the width of the window and enclosing the kitchen at the rear as shown earlier in Fig 01. With these amendments incorporated, all north facing habitable rooms would be BRE compliant.

# DAYLIGHT ASSESSMENT RESULTS - EAST BLOCK

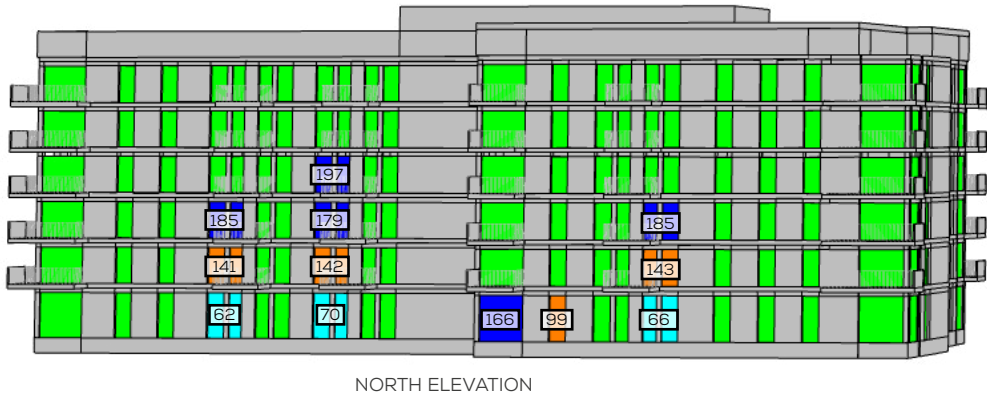


- Passing (200lux for LKDs and 100lux for bedrooms)
- LKD meeting living room target (150lux)
- Marginal Failure
- Failure

Layouts and fenestrations as submitted with paladin fence 2.4m high

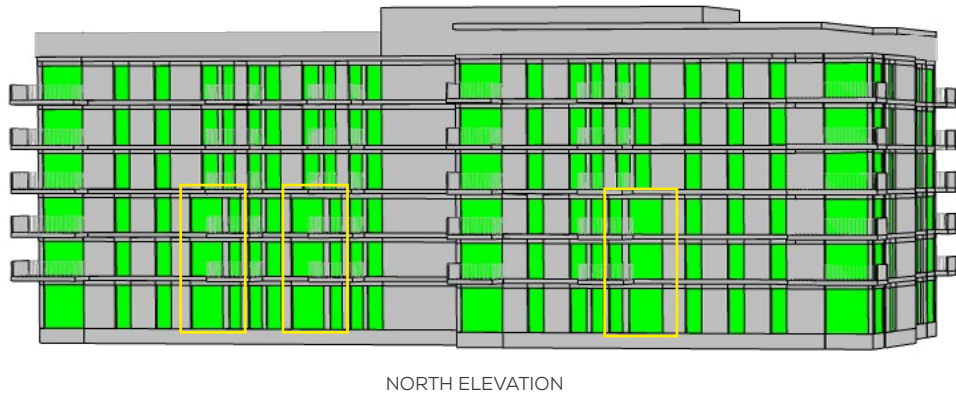


Layouts and fenestrations as submitted with change to solid wall 2.4m high



Increased fenestrations & enclosed kitchens with paladin fence 2.4m high

REVISED.  
ALL NORTH FACING UNITS  
ARE NOW BRE COMPLIANT



The results show that with a 2.4m high paladin fence, all but nine north facing rooms within the East Block exceed the BRE recommendation for their room use and therefore offer good daylight amenity. The nine remaining rooms, all open-plan LKDs and shown in blue, fall short of the recommendation for rooms with a kitchen of 200lux but would meet the living room recommendation of 150lux so may be considered acceptable for their primary use.

Introduction of a solid 2.4m high wall on the northern boundary in lieu of the more open paladin fence will have a significant impact on daylight to the Ground and First Floor of the East Block. Daylight to the six LKDs already below recommendation for rooms with a kitchen would reduce to less than half their value with the paladin fence at Ground Floor and to marginal failures at First Floor. An additional two rooms (one LKD and on bedroom) would fall short of the recommended level.

With the 2.4m high paladin fence, the nine LKDs falling short of the recommendation can be improved to meet the recommended level by increasing the width of the windows as shown earlier in Fig 02. With these amendments incorporated, all north facing habitable rooms would be BRE compliant.