

6 October 2020

Rev 02

## ARCHITECTURAL STATEMENT IN RESPONSE TO COUNCIL'S CONCERNS REGARDING HEIGHT.

Canterbury-Bankstown Council and the Sydney South Planning Panel required SINSW consider the following in relation to the proposed height of Building C:

### Canterbury-Bankstown Council

Consideration should be given to:

- reducing the proposed building height by relocating the roof top plant
- stepping the building/reducing the sub-floor areas at the eastern end of Building C
- providing larger setbacks to Napier St to reduce the bulk and scale of the proposed building
- the impacts of the bulk and scale of Building C on solar access to properties on Napier St and at Pat O'Connor Reserve.

### Sydney Regional Planning Panel

The Panel requested a review of the height, massing, and setbacks of Building C to improve the relationship to the site's topography and transition to the east to reduce its impacts.

#### **Reduce building height by relocating roof top plant**

Since the original submission the design has been modified to relocate the central access core / roof plant away from the centre of the building. The roof plant has now been located over a stair well which is uncovered thus reducing the overall height. Clerestory windows have also been removed to reduce the overall height. They have been replaced with roof mounted skylights.

#### **Stepping the building/reducing the sub-floor areas at the eastern end of Building C**

Building C is a classroom block with associated learning spaces and ancillary services. Ground levels have been established to provide direct equitable access to the adjacent landscaped playground areas. Excavating the building any further or stepping the floor plate would compromise equitable access. Ramps could be added however these would divide the playground areas and compromise student movement from classroom to classroom. As a result of introducing the new kiss and drop roadway the sub-floor area at the eastern end of Block C has been reduced and the building setback a further 7m from the Pat O'Connor Reserve.

#### **Larger setbacks should be provided to Napier St to reduce bulk and scale**

The Educational Facilities and Standards Guidelines (EFSG) sets out the design requirements for new school infrastructure in NSW. The EFSG is based on data gathered from over 50 years of designing, operating and maintaining schools in NSW. It has been developed to ensure new schools and school upgrade projects provide flexible learning environments that align with current and emerging pedagogies, and respond to the needs of the school and local communities. The floor to floor height of 3.6m has been established as the minimum permissible under EFSG. 2.7m high ceilings are required to all learning spaces and an allowance of 900mm for structural concrete slabs and beams and air conditioning systems is the design minimum.

The EFSG sets a minimum roof pitch of 4 degrees to enable service installation and maintenance, accommodate 1:100 ARI events, and avoid future drainage issues. The roof pitch has been reduced to the minimum recommended under the EFSG and the gutter line has been directed to the street to reduce the bulk and scale to Napier Street. The pitching point has been established as the minimum required for structure and services to be installed to the ceiling spaces closest to Napier Street. To set the building back any further will significantly impact on the play space directly accessible to the

learning spaces of Building C. Taking into consideration the limited impacts of bulk and scale on solar access to the Napier Street properties we are of the opinion the current setbacks are appropriate.

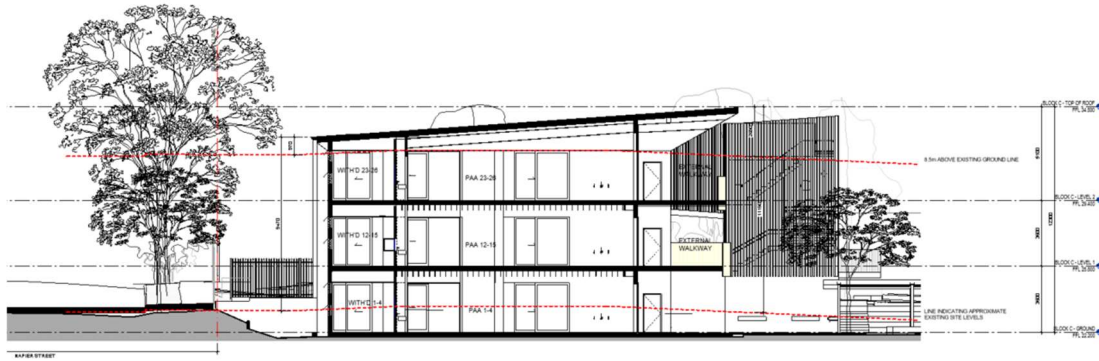


Figure 1 - Section through Building C

**Impacts of bulk and scale on solar access to properties on Napier St and at Pat O'Connor Reserve**  
Shadow diagrams clearly indicate there is minimal impact in terms of solar access to the properties on Napier Street and Pat O'Connor Reserve as a result of the amendments

**The height, massing, and setbacks of the development should be reviewed to better relate to the topography and transition to the east to address its impacts.**

As stated above, several measures have been implemented to lower the overall height and mass of the building. As measured on the north eastern corner the height has been reduced by 585mm. The setback to Napier Street has remained the same, however, Building C has been relocated 7m further away from Pat O'Connor Reserve to accommodate the new roadway. Shadow diagrams clearly indicate there is minimal impact in terms of solar access to the properties on Napier Street and Pat O'Connor Reserve.

Relocating Building C, 7m to the west to accommodate the new kiss and drop roadway, has reduced the visual prominence the building will have from Pat O'Connor Reserve, in terms of scale and bulk.

Further to the building changes, and with regards to Council's concerns about bulk and scale when viewed from Pat O'Connor Reserve, the new roadway will be suspended above the existing ground levels. The civil engineers have manipulated the embankment such that the drop off road is less than 600mm from existing ground level for the majority of its length, with the exception of the north east corner. In this location a reinforced concrete blockwork wall will be required to comply with AS2890.1.



Figure 2 – Section through reinforced blockwork retaining wall

Figure 3 – Section through vehicle barrier balustrade

The extent of the solid wall is highlighted in the image below in red, located on the northern part of the through road.

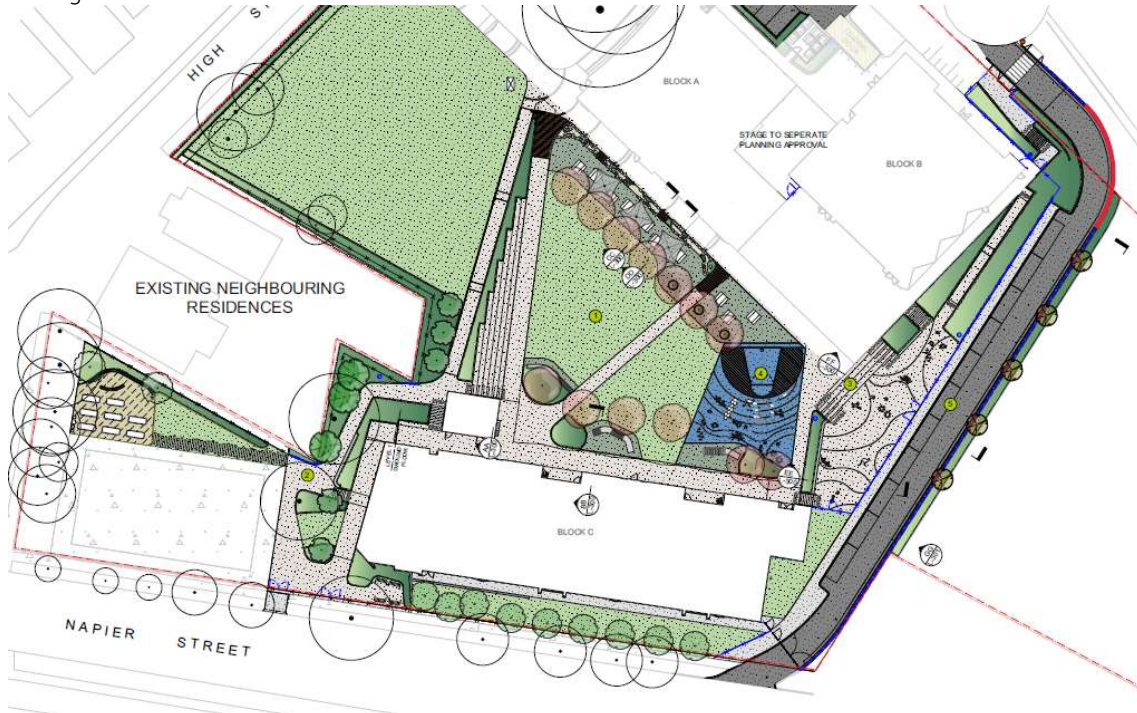


Figure 4 – Landscape plan showing solid reinforced blockwork retaining wall and vehicle barrier balustrading

For child safety a vehicle barrier balustrade shall be installed to the majority of the bounding edge between the roadway and the reserve. Although this balustrading is see through, it is suspended above the existing ground and does provide visual barrier when viewed from the Cup and Saucer Creek. The intention is to landscape in front of this barrier to reduce its mass.

The design has been reviewed in response to feedback provided by Council and the Panel and a number of measures have been implemented to ensure the proposed development does not adversely impact on the surrounding dwellings on Napier Street nor the use of Pat O'Connor Reserve. It is our opinion these measures strike a balance between reducing the bulk and scale whilst not compromising the functionality of the school.

Yours Faithfully  
**NBRSARCHITECTURE**

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