TKDArchitects
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St Joseph's College
Physical Education and Sports Precinct Project

Architectural Design Statement:
Response to Submissions

Prepared for

ST JOSEPH'S
COLLEGE
HUNTERS HILL

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Project No. 16 1002

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Issue	Date	Status	Author	Approved
A	11/04/19	Response to Submissions	IB	RD

1 Introduction

1.1 Introduction

This Architectural Design Statement – Response to Submissions has been prepared for St Joseph's College, Hunters Hill, by Tanner Kibble Denton Architects.

St Joseph's College (**SJC**) submitted a State Significant Development Application (SSD 17_897) to the NSW Department of Planning and Environment (**DPE**) in 2018 proposing the Physical Education and Sports Precinct Project (**PESPP**) building. Following exhibition and notification of SSD 17_897, the DPE issued a Response to Submissions (**RtS**) letter on 23 November 2018.

Submissions were received from Government agencies, the Government Architect, Hunter's Hill Council and the public. In addition, the NSW Department of Planning & Environment also undertook a preliminary assessment of the EIS and requested that matters raised by them be addressed.

In accordance with clause 85A of the Environmental Planning and Assessment Regulation 2000, the Applicant is required to respond to all issues raised and where necessary revise the submission documents.

St Joseph's College have reviewed the submissions and propose to make some significant amendments to the building design in order to address the issues and concerns raised.

St Joseph's College are committed to working with all neighbours and interested parties to finalise a desirable outcome that is appropriate for its urban context and that does not adversely impact neighbours or the Hunters Hill locality.

This Architectural Design Statement outlines the key built form design issues raised and how the building has been amended in response.

2 Design Response

2.1 Site Location

A number of options were considered for locating the building within the St Joseph's College campus. An assessment of these options confirmed that the proposed site location was the preferred location.

This site location was also reconfirmed by the Government Architect at the Pre-Lodgement Meeting (05/06/18):

'GANSW generally supports the locational strategy for a new physical education and sports precinct at the Southern corner of the site, acknowledging the constraints of the site including heritage structures, existing boarding houses and education buildings.'

2.2 Functional Requirements

The design for the Physical Education and Sports Precinct Project (PESPP) has been designed in order to meet the requirements of St Joseph's College and in accordance with the constraints of the site.

The design submitted by St Joseph's College (SJC) for the SSD Physical Education Precinct incorporates 3 x basketball courts, sports storage, limited change facilities and amenities, staff offices, general learning areas, maintenance workshop and basement car parking.

The extent of facilities generally replaces the existing external basketball courts and facilities demolished; and represents the minimum requirements of SJC to meet their learning and sporting curriculum requirements.

The basketball courts are required to comply with the International Basketball Federation (FIBA) standards, to meet the school's requirements for competition basketball. The standards specify the minimum court dimensions and clearances which influence the height and plan dimensions of the building.

2.3 Key Built Form Issues Raised

The exhibition of the EIS for the development of the PESPP for St Joseph's College (SSD 8970) ended on Wednesday 14 November 2018. Submissions were received from Government agencies, the Government Architect, Hunter's Hill Council and the public. In addition, the NSW Department of Planning & Environment also undertook a preliminary assessment of the EIS and requested that matters raised by them be addressed.

The key built form issues raised can be summarised as follows:

- Excessive bulk and scale.
- Excessive height.
- Lack of setbacks to the boundary and street.
- Proximity to the heritage sandstone perimeter boundary wall.

2.4 Proposed Design Changes

In response to the issues raised, SJC has pursued the NSW Government Architect design recommendations to address the key built form issues raised:

- "Increase the building setback to Luke Street to establish a better curtilage for the perimeter wall; [and]
- Reduce the parapet height on the east facing frontage, to minimise the scale impact on Luke St and on the perimeter wall."

In response to these recommendations, SJC propose the following significant design changes to the PESPP:

- **Luke Street Setback**: A 4.3m building setback to Luke Street is proposed (compared with 1.3m in the original SSD), providing for a new landscaped buffer including the planting of significant trees between the PESPP and stone wall. The increased setback also simplifies the required construction solution to protect the stone wall.

- **Building Height Lowered**: A 2.7m reduction in height (-19%) is proposed. This is achieved by increasing the excavation depth to lower the entire building and relocating the roof plant away from Luke Street. The amended *building height* is predominantly 11.4m compared with 14.1m in the original SSD (the amended height is 14m to 15m to the relocated plant room which is located well away from Luke Street).

The details of these design changes are described in the following sections of this Design Statement.

3 Building Setback

3.1 Building Setback

SJC propose to set the building face back **4.3m** from the Luke Street boundary.

The proposed building was previously located as close as practical to the existing SJC Year 10 Dormitory. The additional setback has been achieved by demolishing the existing stairs on the eastern ends of the existing SJC Year 10 Dormitory and the rebuilding of new stairs on the northern and southern elevations of this building. A 1.5m gap has been maintained between the two buildings in order to allow for egress and reticulation of inground services. Additional fire separating construction, acoustic treatment and landscaping will be incorporated to mitigate any impacts to the amenity of the existing Dormitory.

The building has also been setback approximately 4m from the Gladesville Road boundary which allows for the existing mature street trees to be retained and will provide significant screening of the building.

The increased setback allows the existing Luke Street trees to be retained and allows the creation of a landscape buffer to be planted between the building and the Luke Street boundary.

3.2 Heritage Stone Wall

The increased setback provides a greater visual separation and curtilage between the heritage sandstone boundary wall and the building and increases the ability to protect the wall and its foundation.

The integrity of the foundations of the adjacent sandstone wall will be unaffected by the excavation of the building.

Refer to the Structural Engineers Statement.

3.3 Tree Retention

The proposal to set the building back 4.3m from the Luke Street boundary permits the retention of approximately 20 existing street trees located along Luke Street, which will screen large parts of the new building. Only 1 street tree is proposed to be demolished.

The existing trees to be retained include Bottlebrush, Jacaranda, Lilly Pilly, Paperbark and Chinese Tallow trees.

The proposed setback to Gladesville Road allows the retention of 3 significant Brushbox street trees, which will again screen large parts of the building.

3.4 Landscape Buffer

The proposal to set the building back allows the creation of a landscape buffer to be planted between the building and the Luke Street boundary. The landscape buffer will assist with screening of the building and offset the loss of tree canopy within the College Campus.

The Lemon Scented Honey Myrtle (Backhousia citriodora) is proposed as the main tree specimen to be planted within the increased setback as it has the appropriate form and character to form a screening plant. Combined with the existing trees to be retained, the landscape treatment to Luke Street will provide a significant landscape buffer.

The proposed replacement planting comprises of native species ranging in a mature height of between 14 to 30 metres.

Refer to the revised Landscape and Tree Replacement Strategy.

Existing Brushbox Trees (Lophostemon confertus) to be retained on Gladesville Road

Existing street trees on Luke Street to be retained

Proposed landscape buffer tree to Luke Street: Lemon Scented Honey Myrtle *(Backhousia citriodora)*

4 Building Lowered

4.1 Building Lowered

St Joseph's College (SJC) propose to lower the street wall height by a total of **2.7m**.

The street wall parapet level has been lowered by lowering both the basement level (additional excavation) and the roof structure above the sports courts as far as practicable. The roof plant area – previously integrated within the roof area and between roof trusses – has been located above the roof and repositioned to the western side of the building so that its height is not visually perceptible from Luke Street and Gladesville Road. The roof plant will be screened on all sides by a combination of louvres and solid walls, providing visual and acoustic screening of the plant equipment.

The overall bulk and scale of the building is substantially reduced to the street frontages with an overall height reduction of 19%. The overall street wall height averages 11m and approximately aligns with the roof ridge level of the existing residences at 3-7 Luke Street. The shadow cast by the building onto neighbouring properties is substantially reduced.

The lowering of the building results in increased excavation of the site at substantial cost to the College. The building had been previously sunken in to the ground at the northern end by 5.5m and this has been further increased in order to achieve the overall height reduction.

The lowering of the building combined with the setback result in an even greater reduction in bulk and scale to the street frontages.

Refer to Attachment A for a 3D comparison between the submitted and amended design.

4.2 Carpark Driveway

The car park basement level has been lowered as far as practicable based upon the maximum gradients permitted for the entry driveway access ramp. The car park requires an effective traffic control system at the car park entry into the complex and access for service vehicles. The main section of the ramp has been designed to a maximum gradient of 1:6.5 required for Medium Rigid Vehicles (MRV) in accordance with AS2890.2. The boom-gate controlled access and other sections of the ramp have been designed to maximum gradients permitted under AS2890.2.

The lowered basement level also allows the vehicular access from the southern end to be maintained without adversely impacting the existing staff residence.

4.3 Accessible Entry

The lowering of the ground floor results in the requirement for a 1:14 access ramp – previously 1:20 walkway – to the front entry, which will facilitate the movement of students, often in class groups, onto the main floor of the complex. The College require students and staff to be able to easily and directly access the ground floor of the complex, where the main sports courts are located. Any additional lowering of this level would result in convoluted access arrangements that would not be acceptable and facilitate the movement of student groups into the building.

Image showing the amended design compared to the outline of the submitted design

5 Shadowing

5.1 Shadowing

Shadow diagrams have been amended based upon the proposed design changes. The lowering and setting back of the building has improved solar access to all neighbors and reduced any shadowing impacts.

These diagrams largely demonstrate that the shadow impacts of the proposed development to neighbours is not adverse and has minimal impact for most of the year.

Shadows generally only impact the front yards of the adjacent neighbours and solar access is maintained for a minimum of 3 hours to shadowed spaces during the worst period of winter.

Summer Solstice 22 December
The shadow diagrams show that the proposed PESPP has no shadow impacts to neighbours.

Autumn and Spring Equinox 21 March / 23 September
The shadow diagrams show that the proposed PESPP has no shadow impacts to neighbours.

Winter Solstice 21 June
The shadow diagrams show that the proposed PESPP creates shadows to the side yard and northern elevation of **2 Rocher Avenue** for 1.5 hour between 9am and 10.30am in winter. This same area has solar access for 4.5 hours between 10.30am and 3pm in winter.

The shadow diagrams show that the proposed PESPP creates shadows to the front yards and western elevations of **1-7 Luke Street and 30 Gladesville Road** for 1 hour between 2pm and 3pm in winter. This same area has solar access for 3 hours between 11am and 2pm in winter. The shadows cast on the western elevations of **1-7 Luke Street** at 3pm are generally at low levels and below window level.

Refer to the Shadow Diagrams for further information.

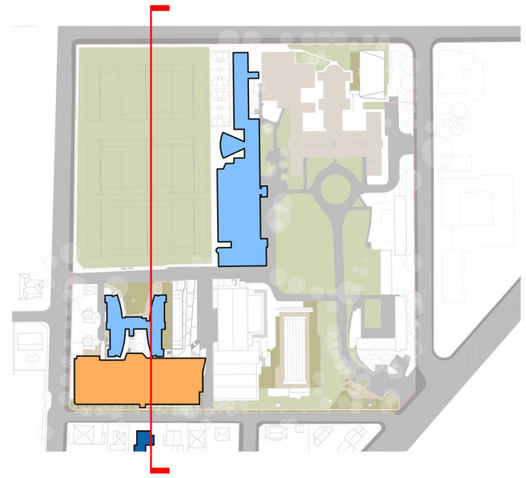
6 Campus and Streetscape Scale

6.1 Campus Scale

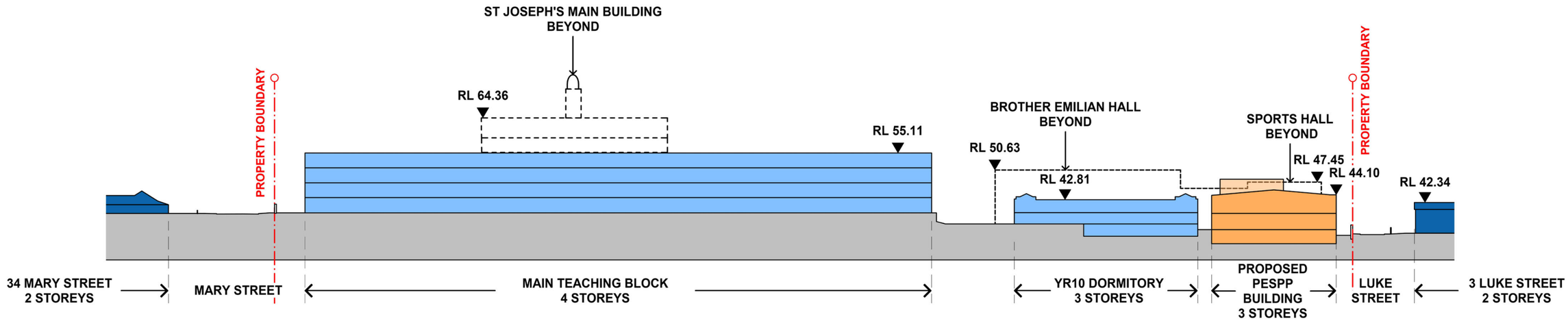
The St Joseph's College campus is characterised by 3-4 storey masonry buildings set within landscaped grounds and lawns. The campus is dominated by the 4 storey sandstone Main Building and Stone Chapel, which sits at the high point of the site.

A sandstone boundary wall is located around the entire perimeter of the campus.

The proposed building is consistent with the scale of buildings located on the St Joseph's College campus and sits lower than most buildings on the campus.



Key Plan



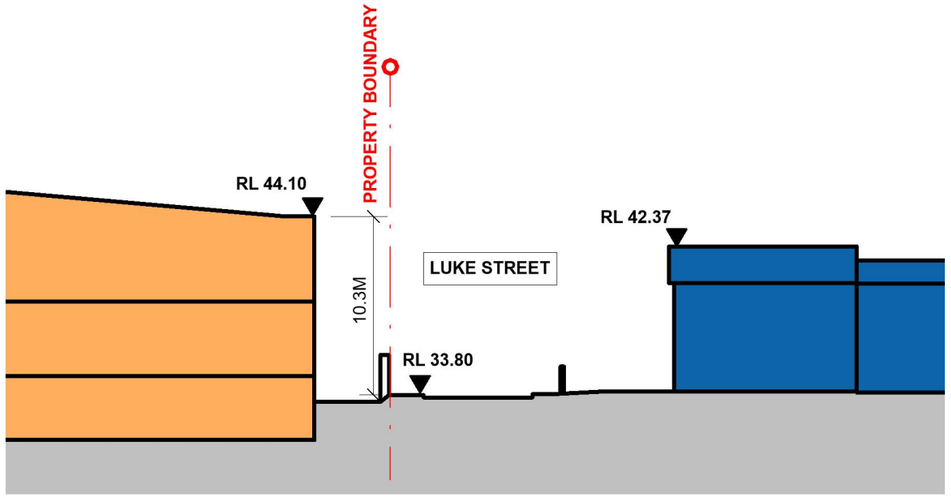
Campus Site Section

6.2 Streetscape Scale and Setback

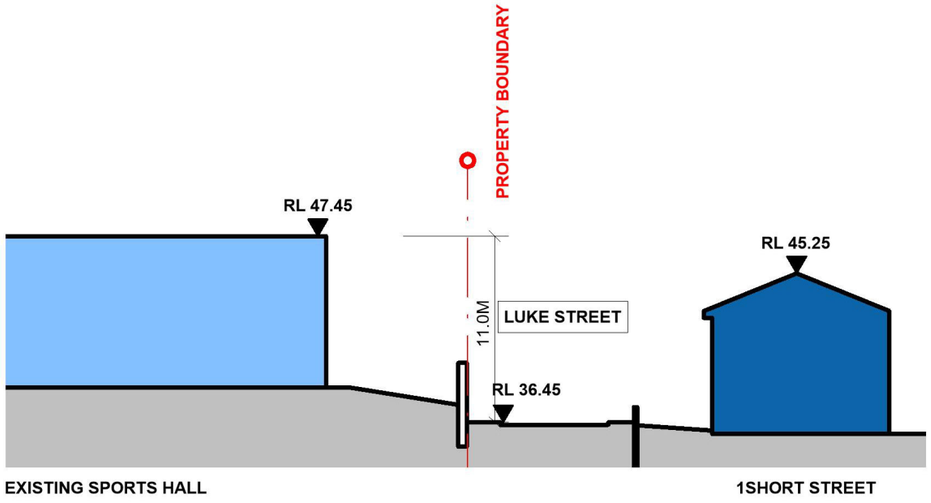
The existing streetscape around the St Joseph's College campus is characterised by the perimeter sandstone wall which is punctuated by the existing College buildings in close proximity to the wall and rising 3-4 storeys above.

The opposite side of the street is largely characterised by 1-2 storey residential properties. The street around the College provides a setback to the residential properties, which look towards the institutional buildings and 3-4 storey development of the College.

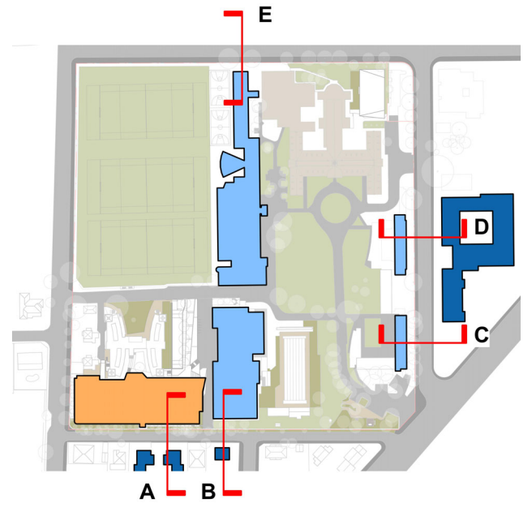
The scale and setback of the proposed building is consistent with the scale of development around the campus. The curtilage between buildings and the perimeter sandstone wall is similar around the campus. Refer to the Streetscape Sections opposite.



Street Section A



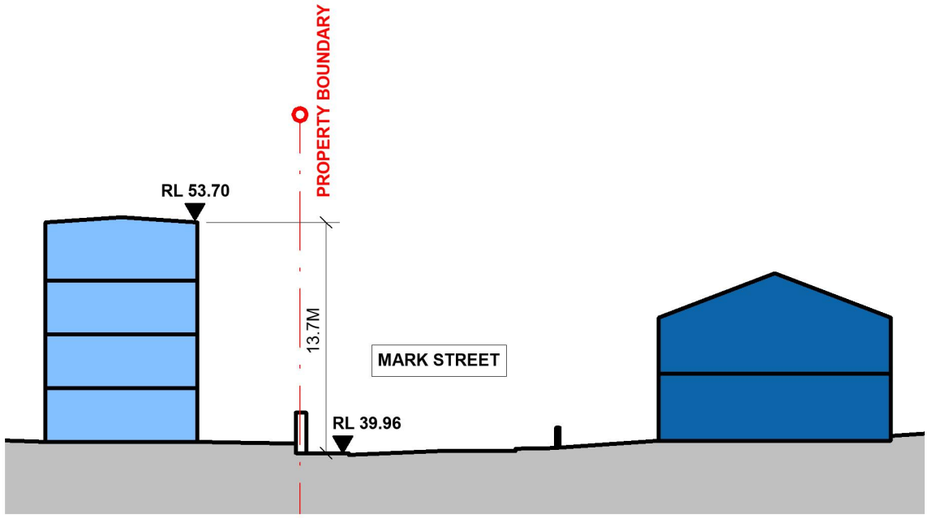
Street Section B



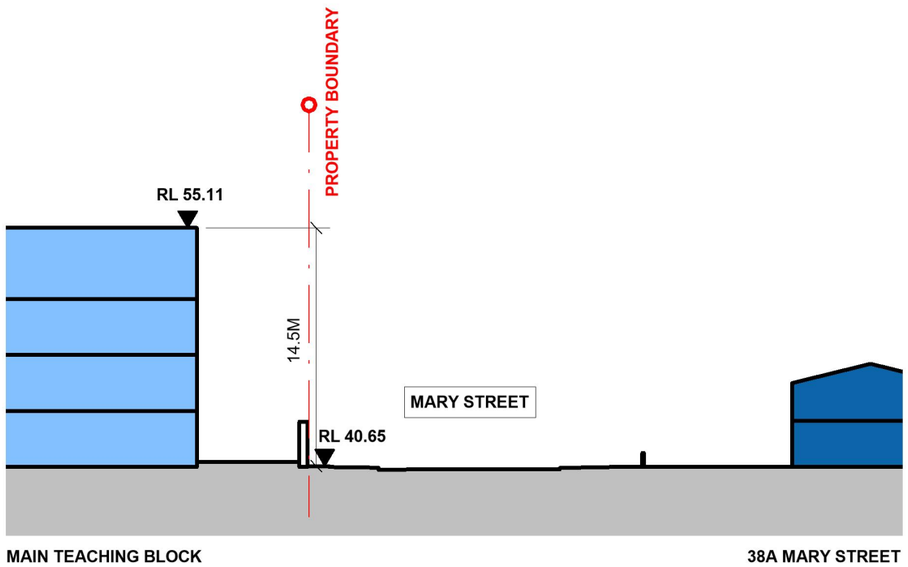
Key Plan

Street Section B: View looking west from Luke Street towards the Sports Hall

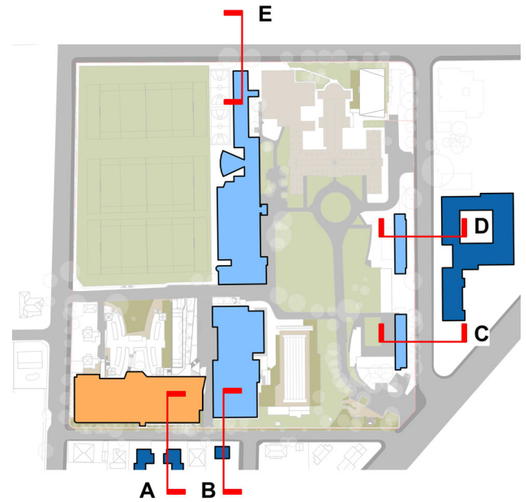
The SJC Campus is characterised by the sandstone perimeter wall which is punctuated by 3-4 storey college buildings in close proximity.



Street Section D (Section C similar)

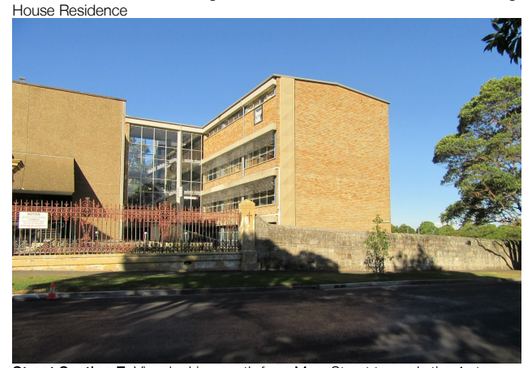


Street Section E



Key Plan

Street Section D: View looking south from Mark Street towards the Boarding House Residence



Street Section E: View looking south from Mary Street towards the 4 storey classroom building
The SJC Campus is characterised by the sandstone perimeter wall which is punctuated by 3-4 storey college buildings in close proximity.

7 Facade and External Materials

7.1 Facade Composition

The Facade and External Materials have been slightly adjusted in response to the lowering and setback of the building.

The articulation of the proposed facade has been purposely considered so as to reduce the expanse of walls and perceived height by articulating the facade horizontally.

The articulation of the facade includes the use of different high-quality materials, window fenestration and grouped vertical blades. The upper band of the facade is a dark neutral colour which is visually recessive and further reduces the perceived height.

The facade along Luke Street has been articulated through the use of a projecting circulation stair and grouped vertical blade elements to provide visual interest and breakup the expanse of facade.

The roof plant area has been located above the roof and repositioned to the western side of the building so that its height is not visually perceptible from Luke Street and Gladesville Road.

The existing sandstone boundary wall curves at the corner of Gladesville Road and Luke Street. The new building form responds to this by similarly curving at the corner.

7.2 External Materials and Finishes

The proposed building has been designed with low maintenance and durable high-quality external materials that will complement the character of the College campus.

External materials consist of face brickwork to the lower levels of the building providing a robust and grounding material. Existing buildings on the campus feature a dominance of golden coloured face brickwork and this has been utilised for the lower levels of the building.

Sandstone has been used on a number of the buildings at the College and it is proposed to use sandstone cladding on the Luke Street and Gladesville Road elevations as a high quality facade material. Sandstone is also proposed at the main entry to the building.

Light weight cladding – consisting of integrally coloured fibre cement – has been selected for other areas of the façade providing a lighter and more expressive language appropriate to a contemporary sporting facility. The light weight cladding colour and joint articulation references the grey tones of the heritage stone wall and arrangement of different sized stone blocks.

Vertical blades and entry awning soffits are proposed to be finished in a timber grained laminated panel, giving a warm contrast to the wall cladding elements.

Refer to the Elevations for the location of the proposed external materials and finishes.

Refer to the External Materials & Finishes Board submitted with this Response to Submissions for further information.

Code	Description / Location	Proprietary Product or Similar / Colour
AW	Aluminium Windows	Colour: Colorbond Monument
BK/F	Face Brickwork	Bowral Dry Pressed Bricks. Colour: Limousine Gold
EWC1	External Wall Cladding 1	Integrally coloured fibre cement cladding: Equitone Materia. Colour: MA200
EWC2	External Wall Cladding 2	Colorbond standing seam metal wall cladding: Lysaght Imperial (325mm). Colour: Colorbond Monument Matt
EWC3	External Wall Cladding 3	Aluminium cladding: Vitracore G2. Colour: Walnut (VB8338)
EWC4	External Wall Cladding 4	Sandstone Cladding
EWC5	External Wall Cladding 5	Integrally coloured fibre cement cladding Equitone Natura. Colour: Charcoal (N252)
EWC6	External Wall Cladding 6	Integrally coloured fibre cement cladding Equitone Natura. Colour: Pale Grey (N154)
VB1	Vertical Blades	Aluminium cladding: Vitracore G2. Colour: Walnut (VB8338)
VB2	Vertical blades and trim	Aluminium cladding: Vitracore G2. Colour: Monument Grey (1270)
GL	Glass Louvres	Colour: Colorbond Monument

8 Conclusion

St Joseph's College have reviewed the submissions and propose to make some significant amendments to the building design in order to address the issues and concerns raised:

- **Luke Street Setback**: A 4.3m building setback to Luke Street is proposed (compared with 1.3m in the original SSD), providing for a new landscaped buffer including the planting of significant trees between the PESPP and stone wall. The increased setback also simplifies the required construction solution to protect the stone wall.

- **Building Height Lowered**: A 2.7m reduction in height (-19%) is proposed. This is achieved by increasing the excavation depth to lower the entire building and relocating the roof plant away from Luke Street. The amended *building height* is predominantly 11.4m compared with 14.1m in the original SSD (the amended height is 14m to 15m to the relocated plant room which is located well away from Luke Street).

St Joseph's College are committed to working with all neighbours and interested parties to finalise a desirable outcome that is appropriate for its urban context and that does not adversely impact neighbours or the Hunters Hill locality.

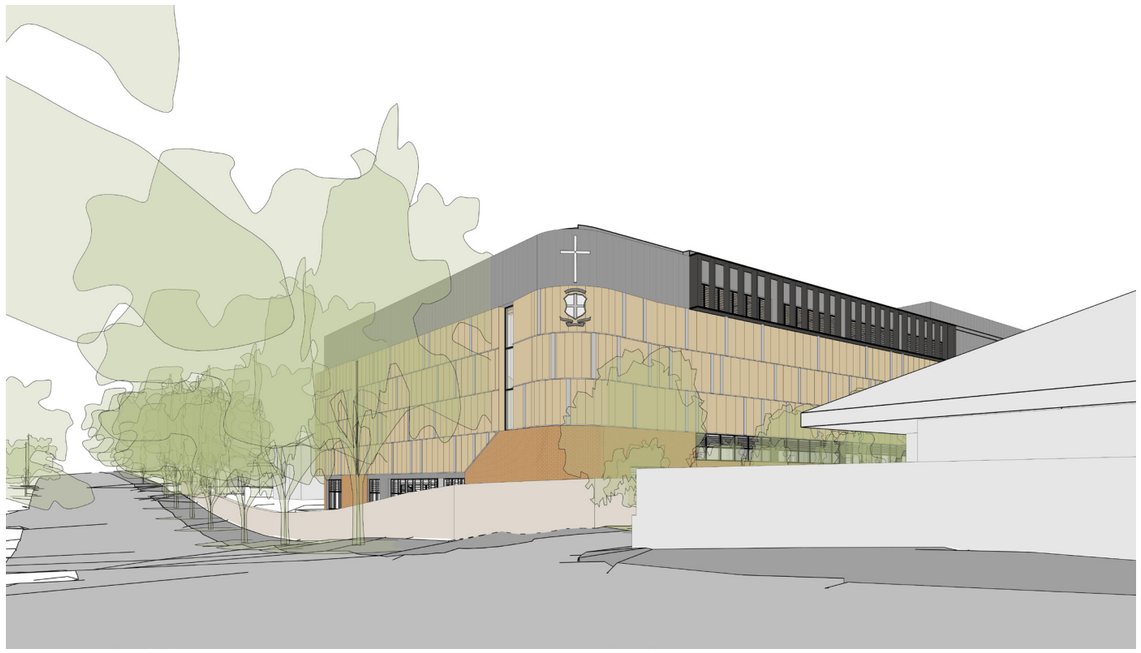
This Architectural Design Statement outlines the key built form design issues raised and how the building has been amended in response.

We believe that the proposed amendments respond to and address all of the concerns and issues raised.

Attachment A

3D View Comparison

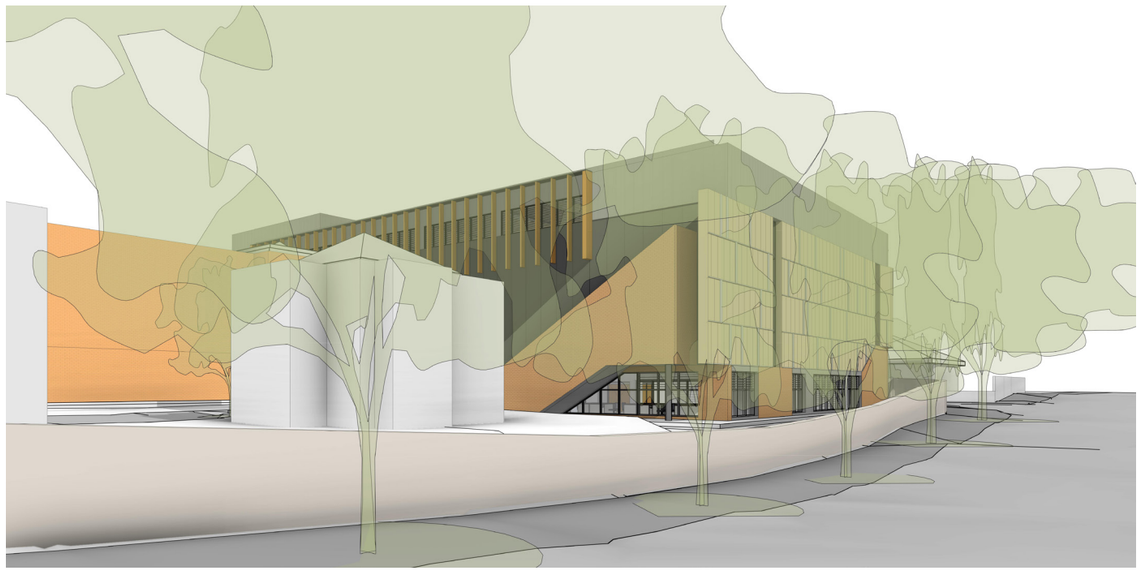
VIEW FROM CORNER OF GLADESVILLE RD AND LUKE ST



SUBMITTED DESIGN PROPOSAL

AMENDED DESIGN PROPOSAL

VIEW FROM GLADESVILLE RD



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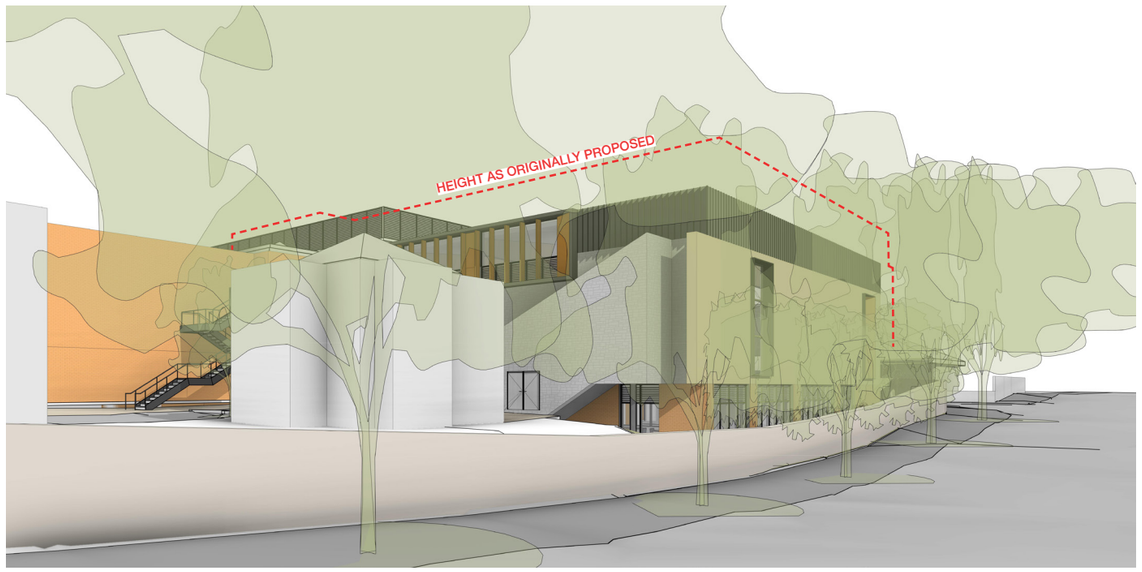

AMENDED DESIGN PROPOSAL

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ST JOSEPH'S COLLEGE PESPP PROPOSED DESIGN AMENDMENT

3D VIEW COMPARISON