Upgrades to Cammeray Public School

Architectural Design Report for Review of Environmental Factors

For NSW Department of Education

Document Quality Control

Project:	Upgrades to Cammeray Public School
Client:	NSW Department of Education
Project No:	7068CY01

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Revision History

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CURRENT ISSUE: F
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Fulton Trotter Architects acknowledge the **Cammeraygal** people as the traditional custodians of the land upon which the **Cammeray Public School** stands. We recognise their continuing connection to land, waters and culture and pay our respects to their Elders past, present and emerging.

Contents

1 Introduction

This Architectural Design Report has been prepared to support a Review of Environmental Factors (REF) for the Department of Education (DoE) for the upgrade of the Cammeray Public School (CPS) (the activity). The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by *State Environmental Planning Policy (Transport and Infrastructure) 2021* (T&I SEPP) as "development permitted without consent" on land carried out by or on behalf of a public authority under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The activity is to be undertaken pursuant to Chapter 3, Part 3.4, Section 3.37 of the T&I SEPP and in consideration of the stakeholder and community participation plan.

The proposed activity is for upgrades to the existing CPS at 68 Palmer Street, Cammeray NSW 2062 (the site).

Project Name:	Upgrades to Cammeray Public School
Proponent:	The Department of Education is the proponent and determining authority pursuant to Section 5.1 of the Environmental Planning and Assessment Act 1979 (the Act).
Landowner:	Minister for Education and Early Learning

The purpose of this report is to

- Outline the design responses to State Environmental Planning Policy (Transport and Infrastructure) 2021, Schedule 8 Design Quality Principles in Schools (Chapter 3)
- Outline the design responses to the Design Guide for Schools published by the Government Architect May 2018
- Consider the visual impact of the proposed works
- Complement the architectural drawings as part of the submission

2 Site Analysis / Description

CPS is located at 68 Palmer Street, Cammeray on the northern side of Palmer Road, bound by Palmer Street to the south, Bellevue Street to the east and Miller Street to the west.

The site has an area of 1.36 ha and comprises 11 allotments, legally described as:

- Lot 11 DP 837836
- Lot 1 DP 316130
- Lot 1 DP 316706
- Lot 1 DP 123406
- Lot 2 DP 174370
- Lot 1 DP 174370
- Lot 4 Sec 35 DP 758790
- Lot 5 Sec 35 DP 758790
- Lot 66 DP 1049613
- Lot 3 DP 571310
- Lot 4 DP 571310

The site currently comprises an existing co-education primary (K-6) public school with 6 permanent buildings, 3 demountable structures, covered walkways linked at multiple levels, play areas, on-grade parking, sports court, covered outdoor learning area (COLA) and vegetation/green spaces with mature trees.

The existing school buildings are clustered towards the southern portion of the site and comprise both single and 2 storey buildings. The northern portion of the site contains the sports court, vegetable garden and play equipment. The north-western portion of the site is heavily vegetated with trees of high landscape significance that are protected with fencing.

The site is identified as a locally listed heritage item (I0019) under Schedule 5 Environmental Heritage pursuant to the *North Sydney Local Environmental Plan 2013* (NSLEP). The school is also identified in the Plateau Heritage Conservation Area (HCA) (Part 2 Schedule 5 of the NSLEP).

The school is listed on the Department of Education (DoE) Section 170 Heritage Conservation Register as 'Cammeray Public School'. The site is approximately 115m from a State heritage item (I0004) being the electricity substation at 143 Bellevue Street and in close proximity to locally heritage listed items.

Development surrounding the site includes low scale residential developments to all sides of the site as well as some medium rise residential and retail developments to the corner of Palmer Street and Miller Streets.

An aerial image of the site is provided in Figure 1.

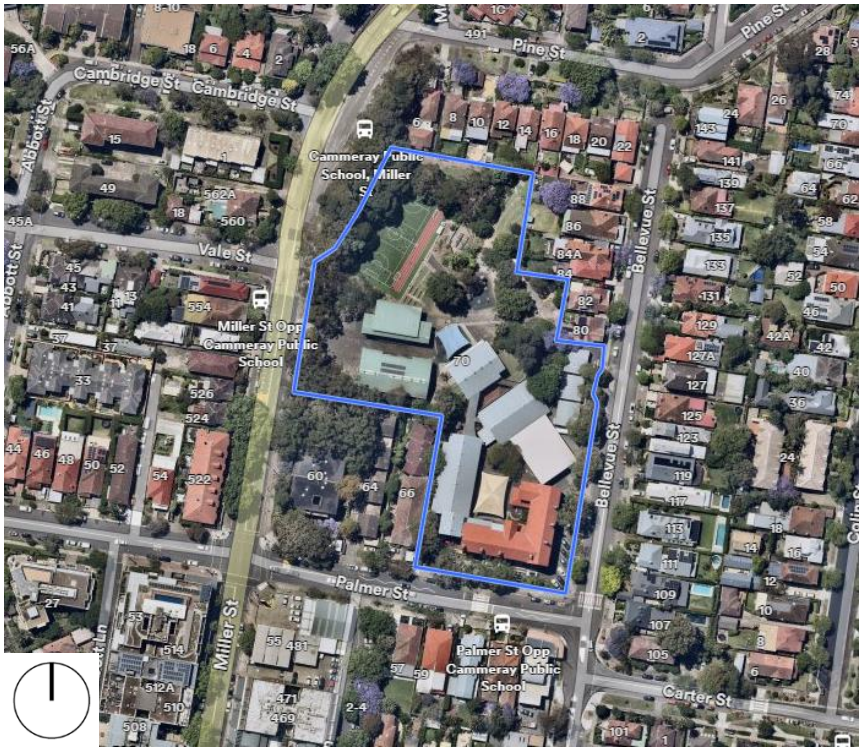

Figure 1: **Aerial image of the site, outlined in blue (Source: NearMap, taken 30 October 2024)**

3 Proposed Activity Description

The proposed activity involves upgrades to the existing CPS, including the following:

- Construction of 4 new permanent teaching spaces in a two-storey building incorporating 2 general learning spaces and 2 practical activity areas
- New egress lift and stairs for access to all building levels
- External covered walkways connecting the new building to the existing school network
- Landscaping and external works including compensatory planting
- Upgrades to site infrastructure and services to support the new buildings
- Removal of 3 temporary (demountable) classrooms from the eastern side of the school
- 50 bicycle parking spaces

The intent of the activity is to provide 4 permanent teaching spaces (PTS) plus 2 practical activity areas (PAA) across a two-storey addition, adjoining Building E. This will result in CPS retaining the capacity of a 'large' school (553-1,000 students) under EFSG (SINSW Education Facilities Standards and Guidelines).

Figure 2 below shows the scope of works for the proposed activity.

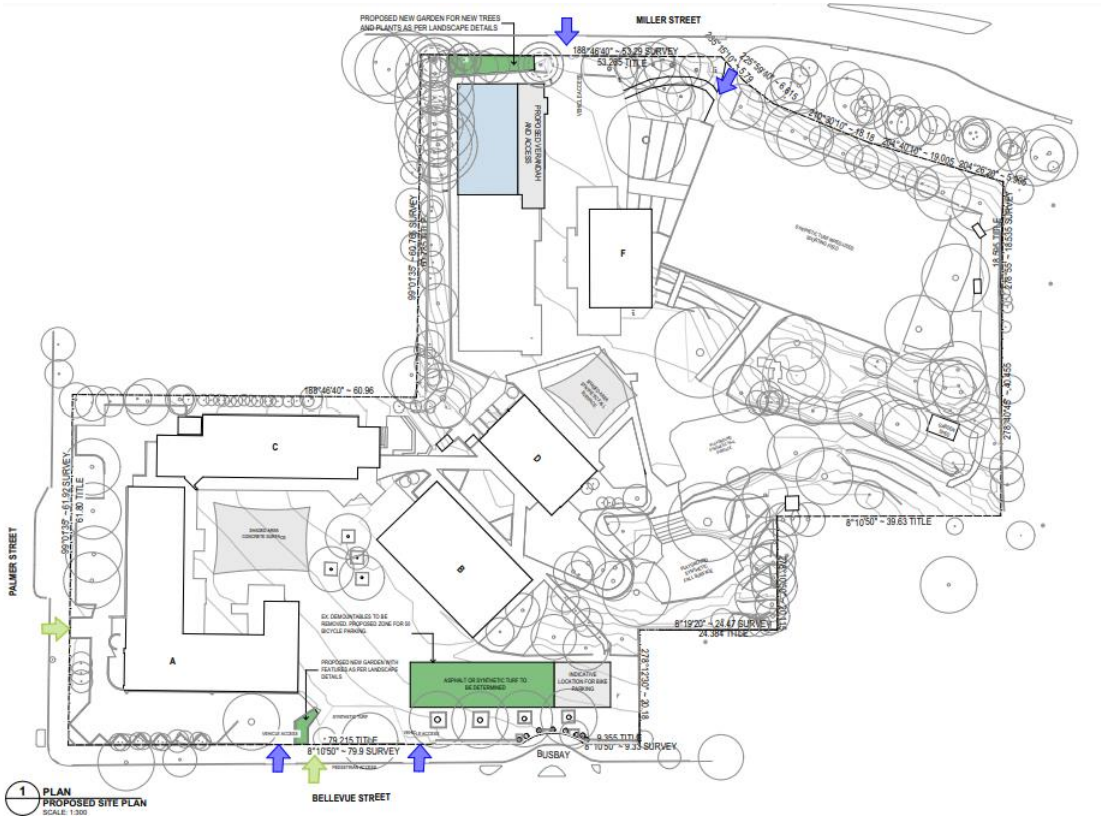

Figure 2: Proposed Scope of Works (Source: Fulton Trotter Architects, Proposed Site Plan (Rev 06))

4 Consultation

Fulton Trotter has been engaged through weekly PMG meetings which includes SI NSW Planning and Delivery teams.

The project team has consulted with the relevant agencies and authority stakeholders to inform the proposed Cammeray Public School upgrade project.

The following is a summary of all stakeholders who have been consulted and informed as part of the Cammeray Public School Upgrade –

- North Sydney Council
  - Heritage Department
  - Flooding / Civil Department
  - Planning Department
  - Sydney Water
  - Sustainable Transport
  - Traffic and Transport Engineer
- TFNSW
  - Transport Working Group
- School Community

Figure 3: Artist's Impression – View from Miller Street (Source: Fulton Trotter Architects)

5 Design Response

Design Process Undertaken

- Master Plan Validation
    - Fulton Trotter Architects were engaged by the NSW Department of Education to design the redevelopment of Cammeray Public School.
    - This process includes identifying key issues identified in the Masterplan Feasibility Report by NBRS and the due diligence reports prepared by various consultants and initial site inspection findings.
    - The preferred architectural masterplan option was presented to the school, NSW Department of Education technical stakeholders and the Project Control Group as well as the Transport Working Group.

- Concept Design
    - Fulton Trotter Architects and the design team continued to develop the endorsed planning option. This phase looked further into the EFSG requirements and functional relationships of the proposed schedule of accommodation.
    - The final Concept Design Report was presented to the school, NSW Department of Education technical stakeholders and the Project Control Group

- Schematic Design
    - The endorsed Concept Design has been further developed in conjunction with the design team to show a high-level strategy on how the project will be built
    - The final Schematic Design was presented to the school and NSW Department of Education for the purpose of exploring a tender package.

Key Design Considerations

- State Environmental Planning Policy (Transport and Infrastructure) 2021 ‘Design Quality Principles’ and ‘Design Guide’.
- Connecting in with the existing building form and building levels of Building E on the site to allow for simple pedestrian access.
- Creating a simple and refined façade fronting to Miller Street in keeping with the heritage character of the surrounding neighbourhood.
- Maintaining as many of the existing mature trees around the building – to the Miller Street frontage of the site.
- Educational Facilities Standards and Guidelines (EFSG) NSW Department of Education
- Asset Management Unit (AMU) NSW Department of Education existing works and upgrades to buildings and landscaping.
- Maintaining a minimum 10m2 of outdoor space per student across the site
- Maintaining as much of the existing building stock as possible.
- Educational Rational (NSW Department of Education engage the school to focus on desirable outcome in the design to compliment the school’s pedagogical approach)

Figure 4: Artist’s Impression – View from North-East (Source: Fulton Trotter Architects)

6 Response to State Environmental Planning Policy (Transport and Infrastructure) 2021

The following is a summary of the responses to the Design Quality Principles in Schools requirements in the State Environmental Planning Policy (Transport and Infrastructure) 2021.

Principle 1— Responsive to context

Schools should be designed to respond to and enhance the positive qualities of their surroundings.

In designing built forms and landscapes, consideration should be given to a Country- centred approach and respond to site conditions such as orientation, topography, natural systems, Aboriginal and European cultural heritage and the impacts of climate change.

Landscapes should be integrated into the overall design to improve amenity and to help mitigate negative impacts on the streetscape and neighbouring sites.

The proposed activity seeks to address this principle as follows:

- The proposed building is a 2-storey structure – in keeping with the scale of the existing buildings on the school site.
- The facade of the building features brickwork – creating a material and colour connection to the existing buildings on the site. Allowing the building to sit comfortably as part of the existing campus.
- The roof form of the proposed activity is set to be a gable roof – matching the roof form of the existing building E adjacent to the proposed new works. This roof form is also in keeping with the remainder of the buildings on the site.
- The building is set back from the Miller Street frontage in order to sit behind the existing trees and street planting to the boundary so that the landscaped street frontage is retained.
- The building levels are set to tie into the existing Building E to maintain pedestrian connectivity through the verandahs of that building. It also provides access down to the playground level to allow for stair and lift access to the play spaces.

Principle 2— Sustainable, efficient and resilient

Good school design combines positive environmental, social and economic outcomes and should align with the principles of caring for Country.

Schools should be designed to be durable and resilient in an evolving climate.

Schools and their grounds should be designed to minimise the consumption of energy, water and other natural resources and reduce waste.

The proposed activity seeks to address this principle as follows:

- Passive cooling using a high window area for natural ventilation, with adjacent proposed trees.
- Sunshading and generous roof overhangs are provided to protect the building from solar heat gain
- Light coloured materials are applied to the façade to reduce the urban heat island effect
- Regular column grid and open floor plates for maximum flexibly of layout in the future
- Robust and low-maintenance materials are used to ensure the longevity of the building.
- PV solar cells are provided to the roof of the new building

Principle 3— Accessible and inclusive

School buildings and grounds should be welcoming, easy to navigate and accessible and inclusive for people with differing needs and abilities.

Schools should be designed to respond to the needs of children of different ages and developmental stages, foster a sense of belonging and seek to reflect the cultural diversity of the student body and community.

Schools should be designed to enable sharing of facilities with the community and to cater for activities outside of school hours.

The proposed activity seeks to address this principle as follows:

- The proposed building levels are set to match the existing building adjacent (Building E). This allows for a simple pedestrian connection to the new works from the verandahs of the existing building.
- A lift is provided as part of the proposed works to provide access to both levels of the building as well as down to the lower level of the building – connecting to the play space areas.
- The activity does not change the ability for the school facilities to be shared with the community.

Principle 4— Healthy and safe

Good school design should support wellbeing by creating healthy internal and external environments.

The design should ensure safety and security within the school boundaries, while maintaining a welcoming address and accessible environment.

In designing schools, consideration should be given to connections, transport networks and safe routes for travel to and from school.

The proposed activity seeks to address this principle as follows:

- The proposed activity maintains the existing boundary reinforcement and lines of security that are in place on the site.
- The building is provided with blinds and doorways that facilitate secure lockdown arrangements in the case of an emergency to protect staff and students at all times.
- The space is designed using ESD principles to ensure a high level of amenity and user comfort within the space. This includes acoustic quality, improved air quality (using low VOC and low formaldehyde materials) as well as the provision of high levels of natural light and natural ventilation.

Principle 5— Functional and comfortable

Schools should have comfortable and engaging spaces that are accessible for a wide range of formal and informal educational and community activities.

In designing schools, consideration should be given to the amenity of adjacent development, access to sunlight, natural ventilation, proximity to vegetation and landscape, outlook and visual and acoustic privacy.

Schools should include appropriate indoor and outdoor learning and play spaces, access to services and adequate storage.

The proposed activity seeks to address this principle as follows:

- Variety of learning and teaching spaces offering different levels of openness or insularity.
- Operable walls to increase flexibility of uses and spaces.
- Designated storage areas to minimise clutter.
- Clear circulation paths to the proposed works.
- Generous windows to allow for natural light and natural ventilation
- A new building in an area of existing mature trees of a scale that is complementary to the surrounding residential area.

Principle 6— Flexible and adaptable

In designing schools, consideration should be given to future needs and take a long-term approach that is informed by site-wide strategic and spatial planning.

Good design for schools should deliver high environmental performance and ease of adaptation and maximise multi-use facilities.

Schools should be adaptable to evolving teaching methods, future growth and changes in climate, and should minimise the environmental impact of the school across its life cycle

The proposed activity seeks to address this principle as follows:

- Regular column grid and open floor plates- maximum flexibly.
- Simple circulation using the external verandah space to the East
- Consolidation of services and wet areas.
- Variety of learning and teaching spaces offering different levels of openness or insularity.
- Operable walls to increase flexibility of uses and spaces.
- Use of robust and low-maintenance materials.
- Use of pre-finished materials or naturally finished materials that don't require ongoing painting

Principle 7— Visual appeal

School buildings and their landscape settings should be aesthetically pleasing by achieving good proportions and a balanced composition of built and natural elements.

Schools should be designed to respond to and have a positive impact on streetscape amenity and the quality and character of the neighbourhood.

The identity and street presence of schools should respond to the existing or desired future character of their locations.

The design of schools should reflect the school's civic role and community significance.

The proposed activity seeks to address this principle as follows:

- Keeping to the scale of neighbouring buildings on the school site.
- The facade of the building features brickwork – creating a material and colour connection to the existing buildings on the site. Allowing the building to sit comfortably as part of the existing campus.
- Colours are used in the window framing and sunshading to provide visual interest and create connections to the colours of the existing buildings on the campus.
- The proposed building will have well-articulated elevations comprising a simple unobtrusive contemporary aesthetic and will sit comfortably in the streetscape and the existing campus.

7 Response to Design Guide for Schools

The following is a summary of the responses to the Design Quality Principles in the Design Guide for Schools published by the NSW Government Architect in 2018.

Principle 1— Context, Built Form and Landscape

Schools should be designed to respond to and enhance the positive qualities of their setting, landscape and heritage, including Aboriginal cultural heritage.

The design and spatial organisation of buildings and the spaces between them should be informed by site conditions such as topography, orientation and climate.

Landscape should be integrated into the design of school developments to enhance on-site amenity, contribute to the streetscape and mitigate negative impacts on neighbouring sites.

School buildings and their grounds on land that is identified in or under a local environmental plan as a scenic protection area should be designed to recognise and protect the special visual qualities and natural environment of the area, and located and designed to minimise the development's visual impact on those qualities and that natural environment.

The proposed activity seeks to address this principle as follows:

- The proposed building is a 2-storey structure – in keeping with the scale of the existing buildings on the school site.
- The building is set back from the Miller Street frontage in order to sit behind the existing trees and street planting to the boundary so that the landscaped street frontage is retained. This is in keeping with the heritage character of the area.
- The facade of the building features brickwork – creating a material and colour connection to the existing buildings on the site. Allowing the building to sit comfortably as part of the existing campus.
- The roof form of the proposed activity is set to be a gable roof – matching the roof form of the existing building E adjacent to the proposed new works. This roof form is also in keeping with the remainder of the buildings on the site.
- The project features a new welcome garden area that includes an acknowledgement of Country and feature native planting.

Principle 2— Sustainable, Efficient and Durable

Good design combines positive environmental, social and economic outcomes. Schools and school buildings should be designed to minimise the consumption of energy, water and natural resources and reduce waste and encourage recycling.

Schools should be designed to be durable, resilient and adaptable, enabling them to evolve over time to meet future requirements.

The proposed activity seeks to address this principle as follows:

- Passive cooling using a high window area for natural ventilation, with adjacent proposed trees.
- Sunshading and generous roof overhangs are provided to protect the building from solar heat gain
- Light coloured materials are applied to the façade to reduce the urban heat island effect
- Regular column grid and open floor plates for maximum flexibly of layout in the future
- Robust and low-maintenance materials are used to ensure the longevity of the building.
- PV solar cells are provided to the roof of the new building

Principle 3— Accessible and inclusive

School buildings and their grounds should provide good wayfinding and be welcoming, accessible and inclusive to people with differing needs and capabilities.

Schools should actively seek opportunities for their facilities to be shared with the community and cater for activities outside of school hours.

The proposed activity seeks to address this principle as follows:

- The proposed building levels are set to match the existing building adjacent (Building E). This allows for a simple pedestrian connection to the new works from the verandahs of the existing building.
- A lift is provided as part of the proposed works to provide access to both levels of the building as well as down to the lower level of the building – connecting to the play space areas.
- The activity does not change the ability for the school facilities to be shared with the community – this is provided elsewhere on the site.

Principle 4— Health and Safety

Good school development optimises health, safety and security within its boundaries and the surrounding public domain, and balances this with the need to create a welcoming and accessible environment.

The proposed activity seeks to address this principle as follows:

- The proposed activity maintains the existing boundary reinforcement and lines of security that are in place on the site.
- The building is provided with blinds and doorways that facilitate secure lockdown arrangements in the case of an emergency to protect staff and students at all times.
- The building is designed as an extension to the existing Building E. This means that the new spaces are accessed easily off the verandahs to Building E – allowing for simple access to all spaces.
- A lift is also provided to provide access to all levels of the building and the playground.

Principle 5— Amenity

Schools should provide pleasant and engaging spaces that are accessible for a wide range of educational, informal and community activities, while also considering the amenity of adjacent development and the local neighbourhood.

Schools located near busy roads or near rail corridors should incorporate appropriate noise mitigation measures to ensure a high level of amenity for occupants.

Schools should include appropriate, efficient, stage and age appropriate indoor and outdoor learning and play spaces, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage and service areas.

The proposed activity seeks to address this principle as follows:

- Generous windows to allow for natural light and natural ventilation.
- The building is designed with appropriate levels of acoustic protection from the vehicular noise generated from Miller Street as well as other external environmental noise – such as rain on the roof.
- The building also incorporates acoustic measures to provide appropriate separation between the teaching spaces to allow for a good level of acoustic amenity and privacy at all times.

Principle 6— Whole of Life, Flexible and Adaptive

School design should consider future needs and take a whole-of-life-cycle approach underpinned by site wide strategic and spatial planning.

Good design for schools should deliver high environmental performance, ease of adaptation and maximise multi-use facilities.

The proposed activity seeks to address this principle as follows:

- Regular column grid and open floor plates - maximum flexibly.
- Consolidation of services and wet areas.
- Variety of learning and teaching spaces offering different levels of openness or insularity.
- Operable walls to increase flexibility of uses and spaces.
- Use of robust and low-maintenance materials.
- Use of pre-finished materials or naturally finished materials that don't require ongoing painting

Principle 7— Visual appeal

School buildings and their landscape setting should be aesthetically pleasing by achieving a built form that has good proportions and a balanced composition of elements.

Schools should respond to positive elements from the site and surrounding neighbourhood and have a positive impact on the quality and character of a neighbourhood.

The built form should respond to the existing or desired future context, particularly, positive elements from the site and surrounding neighbourhood, and have a positive impact on the quality and sense of identity of the neighbourhood.

The proposed activity seeks to address this principle as follows:

- Keeping to the scale of neighbouring buildings on the school site.
- The facade of the building features brickwork – creating a material and colour connection to the existing buildings on the site. Allowing the building to sit comfortably as part of the existing campus.
- Colours are used in the window framing and sunshading to provide visual interest and create connections to the colours of the existing buildings on the campus.
- The proposed building will have well-articulated elevations comprising a simple unobtrusive contemporary aesthetic and will sit comfortably in the streetscape and the existing campus.

8 Indigenous Artwork

The project has followed a simple approach in relation to representing Country and the inclusion of indigenous artwork.

The project will include a new garden bed and Acknowledgement of Country signage at the existing school entry off Bellevue Street. This has been developed in consultation with a representative from the Aboriginal Education Consultative Group for the school.

9 Visual Impact Assessment

In addition to the items discussed above related to the Transport and Infrastructure SEPP 2021, a summary of visual impact is as follows:

- The building form is 2 storeys in height to be in keeping with the existing buildings on the site as well as the bulk and scale of the surrounding neighbourhood.
- The building façade is finished in brickwork in keeping with the existing buildings on the site
- The Miller Street frontage has been maintained as simple and uncomplicated and is designed to sit behind the existing planting along the streetscape. This allows the building to sit comfortably and unobtrusively within the heritage precinct around the school.

Attached to this report are artist impression perspectives that indicate a realistic representation of the propose building in the proposed setting on the site.

Figure 5: Artist's Impression – View from South-West (Source: Fulton Trotter Architects)

10 Evaluation of Environmental Impacts

An evaluation of the environmental impact related to Transport and Infrastructure SEPP 2021 is concluded as follows:

1. The extent and nature of potential impacts are low and will not have significant impact on the locality, community and/or the environment.
2. Potential impacts can be appropriately mitigated or managed to ensure that there is minimal impact on the locality, community and/or the environment.

Figure 6: Artist's Impression – View from North-West (Source: Fulton Trotter Architects)