Upgrades to Kingswood Public School

Architectural Design Report for Review of Environmental Factors

For NSW Department of Education

Document Quality Control

Project:	Upgrades to Kingswood Public School
Client:	NSW Department of Education
Project No:	7068KW01

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NOTES:

Quality Assurance

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Revision History

Issue	Date	Revision Details/Status	Prepared by:	Approved by:
A	13.12.24	Draft Issue – For Review	JW	NK
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Fulton Trotter Architects acknowledge the **Dharug** people as the traditional custodians of the land upon which the **Kingswood 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 accompany a Review of Environmental Factors (REF) for the Department of Education (DoE) for upgrades to Kingswood Public School (the activity) under Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and State Environmental Planning Policy (Transport and Infrastructure) 2021 (SEPP TI).

This document has been prepared in accordance with the Guidelines for Division 5.1 assessments (the Guidelines) by the Department of Planning, Housing and Infrastructure.

This report examines and takes into account the relevant environmental factors in the Guidelines and Environmental Planning and Assessment Regulations 2021 under Section 170, Section 171 and Section 171A of the EP&A Regulation.

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

2 Activity Site

The project site is located at 46-54 Second Avenue, Kingswood and is legally described as Lot 172 in Deposited Plan (DP) 839785. Kingswood Public School is located on the southern side of Second Avenue.

Figure 1 provides an aerial photograph of the site.

Figure 1: Aerial image of the site (Nearmap, 2024)

3 Proposed Activity Description

The proposed activity for upgrades to Kingswood Public School includes:

- One (1) new single storey classroom building comprising eight (8) general learning spaces (GLS), two (2) learning commons areas, two (2) multi-purpose spaces and a verandah along the eastern side of the building.
- The construction of a covered walkway that will provide a connection between the proposed classroom building and an existing covered outdoor learning area (COLA) to the northeast of the proposed building; and
- Removal of existing portable classroom buildings containing ten (10) classrooms.

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

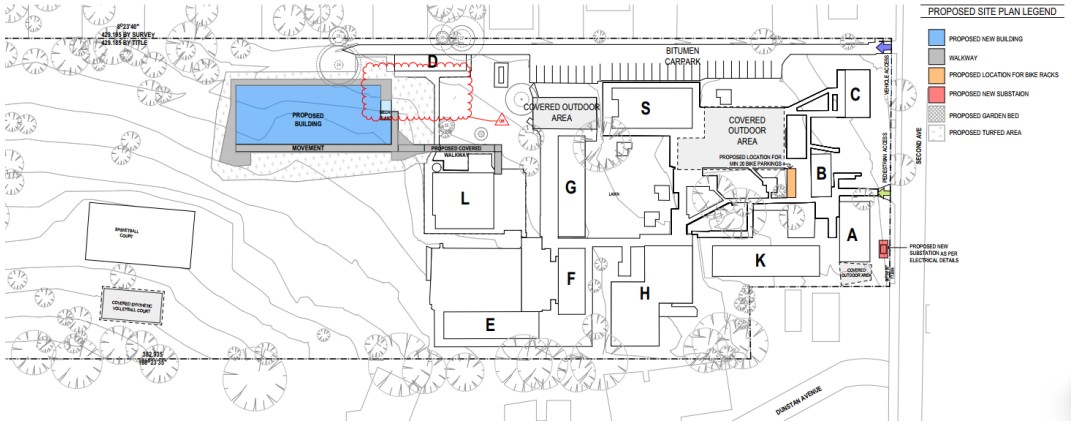

Figure 2: Proposed Scope of Works (Source: Fulton Trotter Architects, Proposed Site Plan (Rev 08))

4 Consultation

Fulton Trotter Architects have been engaged through weekly design consultation meetings, which include the town planner and other specialist consultants. Additionally, Fulton Trotter has been engaged through weekly PMG meetings which includes SI NSW Planning and Delivery team.

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

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

- School Community
- Penrith City Council
    - Heritage Department
    - Flooding / Civil Department
    - Planning Department
    - Sydney Water
- Transport Working Group
    - TFNSW

Figure 1: Artists Impression – View from South-East
(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 proposed development of Kingswood 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 Reference 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’.
- Educational Facilities Standards and Guidelines (EFSG) NSW Department of Education
- Asset Management Unit (AMU) NSW Department of Education existing works and upgrades
- Maintaining a minimum 10m2 of outdoor space per student across the site
- Educational Rational (NSW Department of Education engage the school to focus on desirable outcome in the design to compliment the schools pedagogical approach and broader community engagement objectives)
- Maintaining as much of the existing building stock as possible.
- Maintaining the Tree Protection Zones for the existing mature trees adjacent to the proposed building – to the Western Boundary.
- Maintaining separation from the existing amenities block adjacent (Building D)

Figure 2: Existing Trees to the Western Boundary (Source: Fulton Trotter Architects)

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

Schedule 8 Design Quality Principles in Schools (Chapter 3)

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 development seeks to address this principle as follows:

- The proposed building is a single storey form – in keeping with the scale of the existing buildings on the school site.
- A generous setback has been allowed to the Western boundary in order to maintain the existing mature trees along this boundary line – allowing the building to sit within the existing landscaped context.
- The facade of the building features CFC cladding and sun shading finished in a mixture of colours to create a sense of playfulness as well as a connection to the colours used on the existing buildings on the site. These finishes selections allow for the building to sit comfortably as part of the existing campus.
- The building levels are set to tie into the existing playing field and pathways to the Northern end of the building – allowing for pedestrian connectivity from the new classroom spaces out onto the playing field.

Figure 3: Artists Impression – View of Eastern Elevation (Source: Fulton Trotter Architects)

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 development seeks to address this principle as follows:

- Passive cooling using a high window area for natural ventilation, with adjacent proposed trees.
- Sun shading 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 development seeks to address this principle as follows:

- Accessible access to the site and the new building is maintained from Second Avenue.
- Accessible paths are provided to connect the proposed new building into the existing site path network adjacent to the existing Building L.
- Ramps are integrated into the landscape to not feel like “wheelchair ramps” but part of the natural movement through the site.
- The development 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 development seeks to address this principle as follows:

- The proposed development 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 development 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 development 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 development seeks to address this principle as follows:

- Keeping to the scale of neighbouring buildings on the school site.
- The facade of the building features CFC cladding and sun shading finished in a mixture of colours to create a sense of playfulness as well as a connection to the colours used on the existing buildings on the site. These finishes selections allow for the building to sit comfortably as part of the existing 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.

Indigenous Artwork

The project has followed a simple approach in relation to representing Country and the inclusion of indigenous artwork. The project will include indigenous artwork opportunities to internal and external areas of the building and landscape that continue existing indigenous programs at the school.

Visual Impact Assessment

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

- The proposed building is located to the rear of the site so it has minimal impact on the views to the school from the street frontages – from Calder Street and Kissing Point Road
- The proposed building is a single storey form and is set back from the adjoining boundary behind the existing mature trees. This minimises the visual impact on the adjoining residential properties.

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 4: Artists Impression – View of Eastern Elevation (Source: Fulton Trotter Architects)

7 Evaluation of Environmental Impacts

An evaluation of the environmental impact related to SEPP Transport and Infrastructure 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 5: Artists Impression – View of Eastern Elevation (Source: Fulton Trotter Architects)