



Milton Public School Upgrade

Architectural Design Report for Review of Environmental Factors

For NSW Department of Education

Document Quality Control

Project: Milton Public School Upgrade
Client: NSW Department of Education
Project No: 7068MI01

This document has been prepared by:

Fulton Trotter Architects Pty Ltd trading as

Fulton Trotter Architects

ABN: 57 677 264 550

NOTES:

Quality Assurance

The information below is used as document quality control under Fulton Trotter Architects' Quality Management System. The accuracy of this document cannot be controlled once this document has been printed.

Revision History

Issue	Date	Revision Details/Status	Prepared by:	Approved by:
A	24.01.25	Draft Issue	JH/HC	GI
B	07.04.25	REF Issue	JH/HC	GI

CURRENT ISSUE: B
Document Quality Control

Fulton Trotter Architects acknowledge the Traditional Custodians of the land upon which **Milton 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.....	4
1.1	OUTLINE	4
1.2	PROPOSED ACTIVITY DESCRIPTION.....	5
1.3	DESIGN STATEMENT	6
1.3.1	<i>Design Process Undertaken</i>	<i>6</i>
1.3.2	<i>Key Design Considerations.....</i>	<i>6</i>
2	SITE CONTEXT / DESCRIPTION	7
2.1	SITE DESCRIPTION	7
2.2	ZONING MAP	8
2.3	RELEVANT PLANNING FRAMEWORK.....	8
2.4	OPPORTUNITIES AND CONSTRAINTS	8
3	DESIGN STATEMENT	9
3.1	URBAN BUILT FORM.....	9
3.2	OPTIONS CONSIDERED.....	10
4	ARCHITECTURAL REPONSE.....	11
4.1	DESIGN RESPONSE	11
4.2	MATERIALITY	12
4.3	VISUAL IMPACT ASSESSMENT	13
4.4	OVERSHADOWING ASSESSMENT	14
4.5	LANDSCAPE	16
4.6	INDIGENOUS ARTWORK.....	16
5	RESPONSE TO STATE ENVIRONMENTAL PLANNING POLICY	
	(TRANSPORT AND INFRASTRUCTURE) 2021.....	17

1 Introduction

1.1 OUTLINE

This Architectural Design Report has been prepared to support a Review of Environmental Factors (REF) for the NSW Department of Education (DoE) for Milton Public School upgrade (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.

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 (DPHI) as well as the *Addendum Division 5.1 guidelines for schools*.

The purpose of this report is to:

- Provide an overview of the proposed design strategy.
- Outline a response to State Environmental Planning Policy (Transport and Infrastructure) 2021, Schedule 8 Design Quality Principles in Schools (Chapter 3)
- Consider visual impact
- Note approach to Connecting with Country
- Complement architectural drawings as part of the submission

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

1.2 PROPOSED ACTIVITY DESCRIPTION

The proposed activity relates to upgrades to Milton Public School. Specifically, the proposed activity comprises the following:

- Construction of a new two-storey home base building.
- Installation of additional solar panels.
- Relocation of existing cricket nets to the eastern boundary of site.
- Construction of new stairs and covered walkways linking the new building to the existing school.
- Construction of new fencing.
- Construction of new hardstand area.
- Minor alterations to the existing staff car park.
- Tree removal.
- External landscape works.

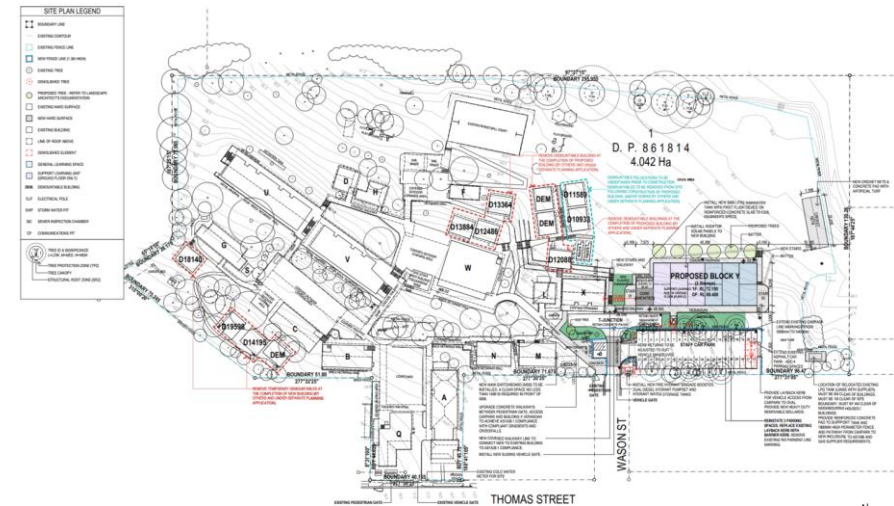
Any works relating to demountables or the water tank will proceed via a separate planning pathway.

Figure 1 Perspective view of Proposed Building from Sports Field



Source: Fulton Trotter Architects, 2025

Figure 2 Site Plan



Source: Fulton Trotter Architects, 2025

1.3 DESIGN STATEMENT

1.3.1 Design Process Undertaken

- Master Plan Validation
 - o Fulton Trotter Architects were engaged by the NSW Department of Education and School Infrastructure (SI) to design the redevelopment of Milton Public School.
 - o 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.
 - o The preferred architectural masterplan option was presented to the school and SI and was endorsed.
- Concept Design
 - o 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.
 - o The final Concept Design Report was presented to the school and SI and was endorsed.
- Schematic Design
 - o 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
 - o The final Schematic Design was presented to SI for the purpose of approving the design to date and preparing documents for a tender package.

1.3.2 Key Design Considerations

- State Environmental Planning Policy (Transport and Infrastructure) 2021 'Design Quality Principles' and 'Design Guide'.
- SI Pattern Book and Educational Facilities Standards and Guidelines (EFSG) SI
- Asset Management Unit (AMU) SI existing works and upgrades
- Maintaining a minimum 10m² of outdoor space per student across the site
- Educational Rational (SI engaged the school to focus on a desirable outcome in the design to compliment the school's pedagogical approach and broader community engagement objectives)
- Consideration of indigenous artwork opportunities in keeping with current school initiatives to further strengthen Connection to Country.
- Connection to the existing school facilities including potential future outdoor play space
- Maintaining existing buildings noting allowance for the removal of demountable classrooms at the end of the construction project.
- Appropriate design taking into account bushfire considerations and authority requirements

2 Site Context / Description

2.1 SITE DESCRIPTION

The site is located at 9 Thomas Street, Milton, NSW, 2538 (the site). The site is legally referred to as Lot 1 in Deposited Plan 861814 and is within the Shoalhaven Local Government Area (LGA) and has an approximate site area of 4 hectares. An aerial photograph of the site is provided at Figure 2.

The site is zoned SP2 Educational Establishment and existing development comprises various buildings, sports facilities and play space associated with Milton Public School. Milton Public School currently comprises 24 permanent teaching spaces (PTS) and 12 demountable teaching spaces (DTS). The site contains two locally heritage listed buildings (Building A and Q).

The site is predominantly cleared; however, there is existing vegetation interspersed throughout the site and significant trees are present along the northern and western boundary of the site. There is a gradual slope downwards from the south-east to the north-east of the site.

The site is an irregularly shaped lot with a narrow frontage along Thomas Street. Pedestrian and vehicular access is provided from Thomas Street and from Wason Street. Milton Public School is adjoined by low density residential properties to the south, west and east and Milton Rainforest Reserve is located to the north.

Figure 3 Aerial Photograph



Source: Urbis, 2025

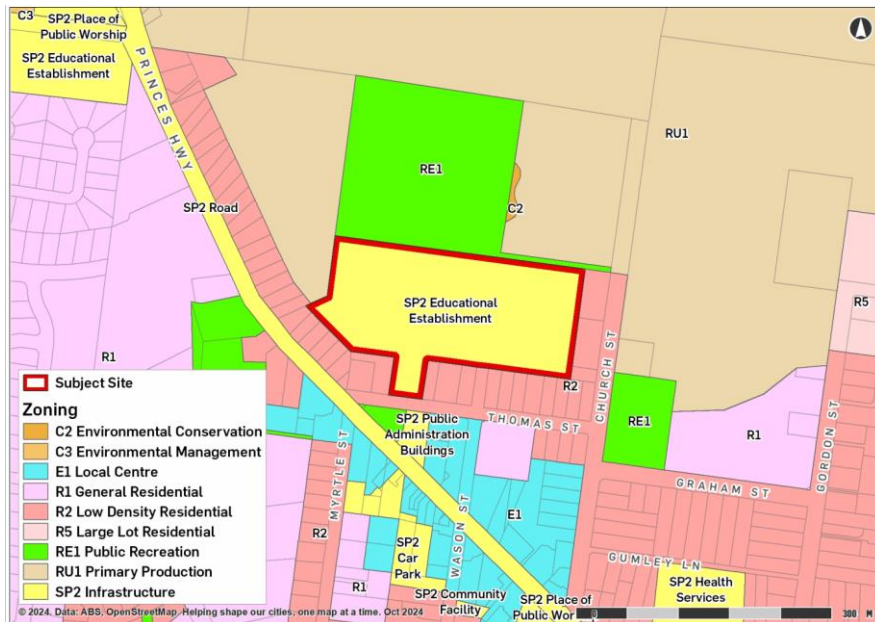
Figure 4 View from proposed site across oval to the north-east



Source: Fulton Trotter Architects, 2024

2.2 ZONING MAP

Figure 5 Zoning Map



Source: Urbis, 2025

2.3 RELEVANT PLANNING FRAMEWORK

Land Zoning	SP2 Educational Establishment in accordance with Shoalhaven Local Environmental Plan 2014 (the SLEP2014)
Easements / Site Servicing	The land survey acknowledges easements for electrical services and drainage. The proposed works do not impact these easements.
Floor Space Ratio	No FSR applicable to the site.
Height	No maximum building height applicable.
Environmental Constraints	The proposed building is within the curtilage of a heritage item. The subject land and proposed development are mapped Bushfire Prone Land (BFPL). There is a bushfire hazard within 140m of the proposed development.

2.4 OPPORTUNITIES AND CONSTRAINTS

Key site issues identified during a site visit undertaken by Fulton Trotter Architects are tabled below.

Opportunities

- Proposed site has a good northern aspect (climatic)
- T-junction driveway area is currently used for playing and assembling, not access by vehicles.
- Compliant access connection is possible from adjacent Block X

Constraints

- Site is Bushfire Prone Land (BPL)
- Existing Trees (arborist report determined some trees of high value)
- Steep fall from existing car park to oval
- Existing LPG Gas Tank and cricket nets (to be relocated)
- Construction access would be shared with school through secondary entry on Wason St and needs management. The main entry on Thomas St is to be retained by the school.

3 Design Statement

3.1 URBAN BUILT FORM

- The new building is positioned on the southeastern corner of the existing school campus
- The new building is adjacent a low-density residential area; the car park and existing vegetation provides a buffer to this residential boundary.
- The school has a pedestrian access point from Wason Street, which will provide DDA access to the new building.
- The new building engages with coastal views to the north but has an active frontage to the south which connect into established circulation routes.
- The building orientation to the north will capture daylight and breezes.
- New landscaping aims to improve amenity, create attractive external spaces and support outdoor learning.
- The materiality has considered the existing context.
- The pattern book design template for the building planning has considered future adaptability of these learning spaces.

Figure 6 Accessibility and wayfinding (principal entry) DDA (indicative plan)

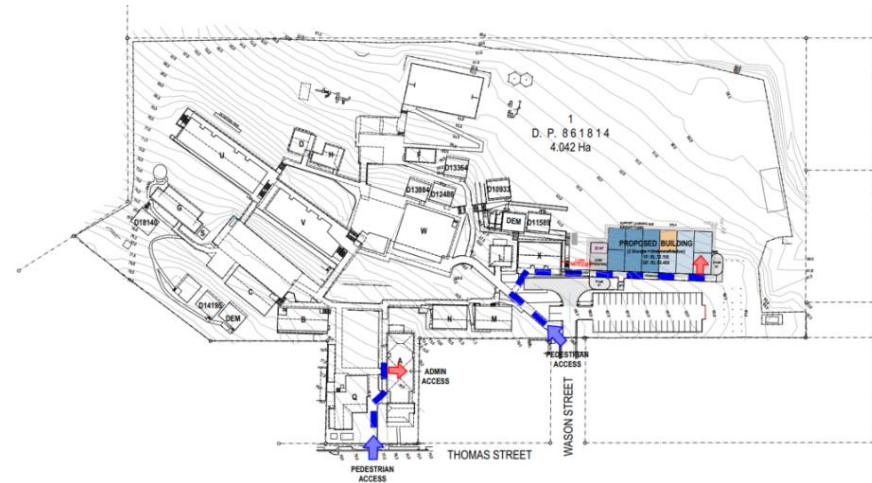
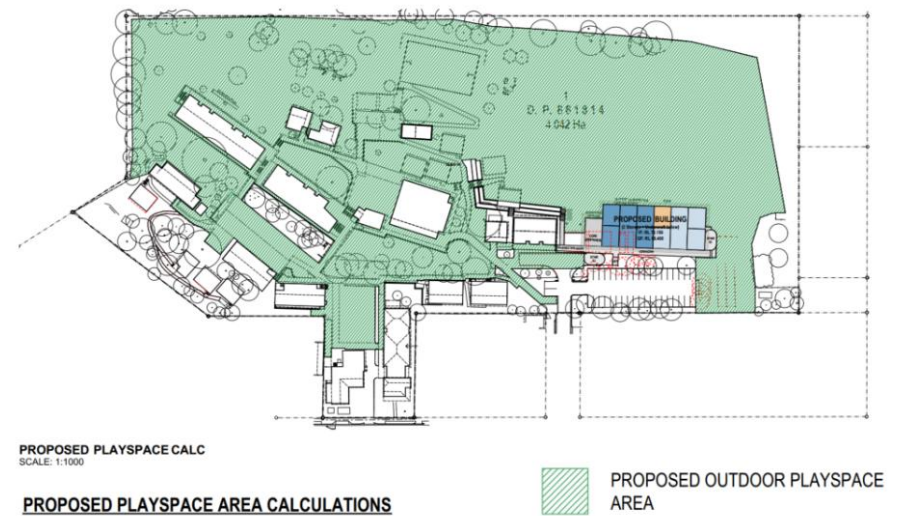


Figure 7 Open Space (Indicative plan)



Source: Fulton Trotter Architects, 2024

3.2 OPTIONS CONSIDERED

Two architectural masterplan options were considered (Option 1 and 2). These options are largely based on the Masterplan Feasibility Report proposal by NBRs.

In both options, the proposed building is located to the north of the existing carpark and east of Building X (similar location to Masterplan Feasibility Report). An access compliant covered walkway connects the new building to Building X.

The differences between options related to the configuration of rooms. Option 1 was endorsed, which has the shorter overall building length.

Option 1 was subsequently modified slightly during Schematic Design to allow the existing T-junction turning bay and waste management area. Stair 01 and lift for the Proposed building were relocated to allow retention of the waste management area.

Figure 8a - Option 1 – Core located at western end of new building (indicative plan)

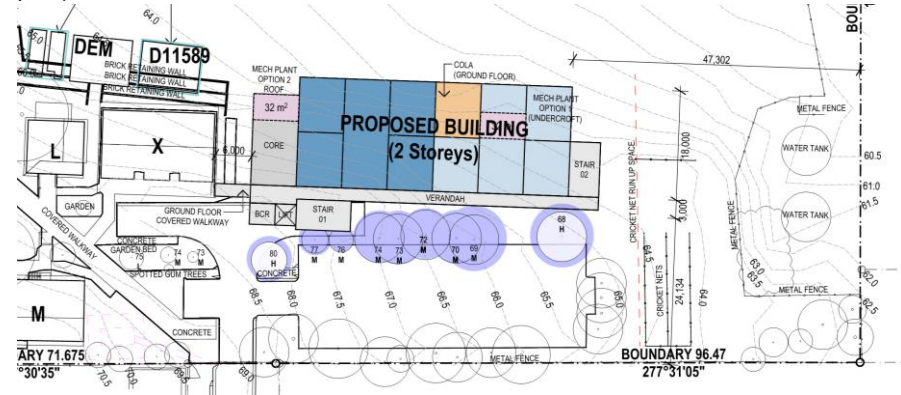
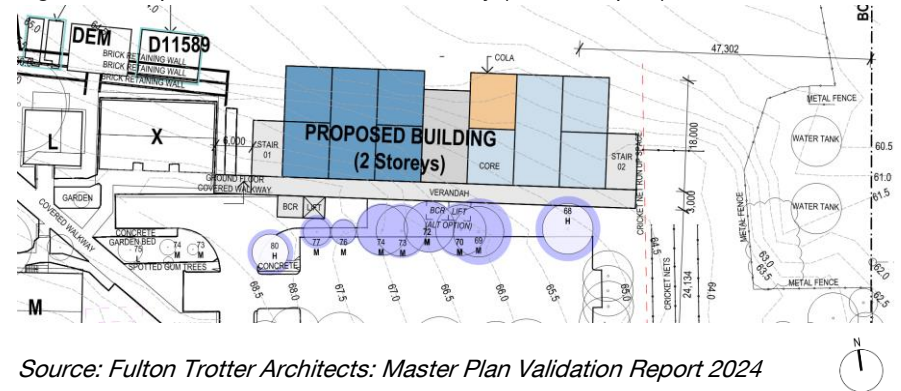


Figure 8b - Option 2 – Core located centrally (indicative plan)



Source: Fulton Trotter Architects: Master Plan Validation Report 2024

4.2 MATERIALITY

Materials and finishes follow the SI Pattern Book Materials & Finishes principles to be contextual, durable, local & economical. The colour combination is inspired by the materiality and colours in and around the existing school context, including building facades elements and artworks

Figure 13a & b Perspective views from Car Park (above) and Oval (below)



Source: Fulton Trotter Architects, 2025

Figure 14 – External materials and finishes. North elevation (above) and south elevation (below).

Roof – metal roof sheeting

Walls – compact fibre cement, metal wall cladding and blockwork

Soffits – external grade fibre cement

Stairs – off-form concrete and perforated metal sheeting

Balustrades – galvanised steel

Windows and doors – aluminium framed glazing, solid core timber doors

Window awnings, louvres – commercial grade powder-coated aluminium



Source: Fulton Trotter Architects, 2025

4.3 VISUAL IMPACT ASSESSMENT

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

- **View – Wason Street – looking North.** The proposed building is embedded so that it has minimal impact on the views to the school from the street frontages. From Wason Street only glimpses of the upper part of the building will be visible through existing mature trees

Figure 14 Location Plan



Image Source: Sixmaps, 2024

Figure 15 View down Watson St to school entrance – extent of building noted.



4.4 OVERSHADOWING ASSESSMENT

Shadow studies were conducted for both Summer and Winter.

The shadows of the new building do not impact the neighbours.

Figure 16a - June 21 9am

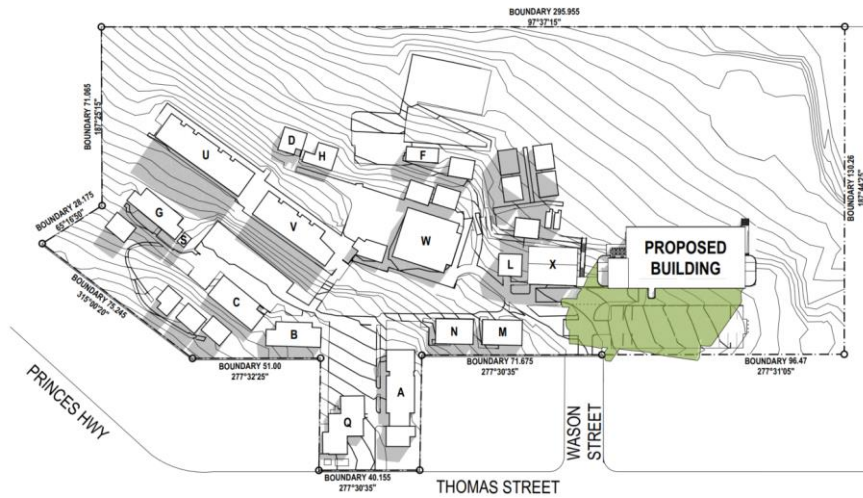


Figure 16b - June 21 11am

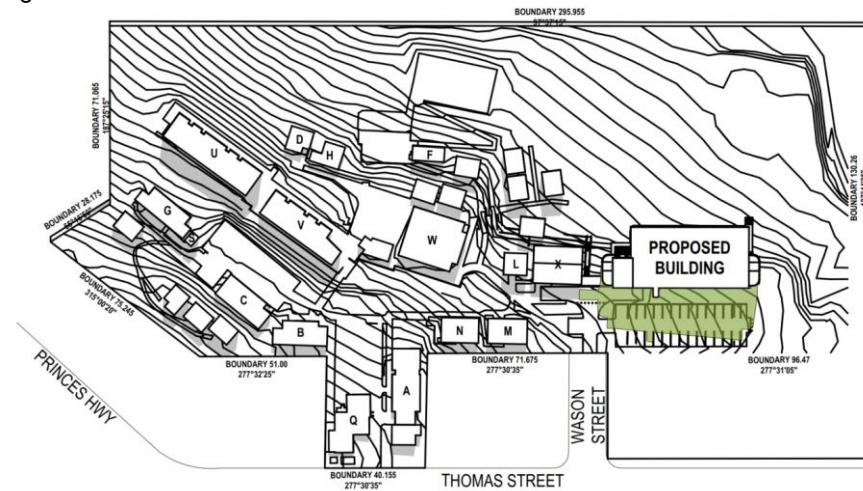


Figure 16c - June 21 1pm

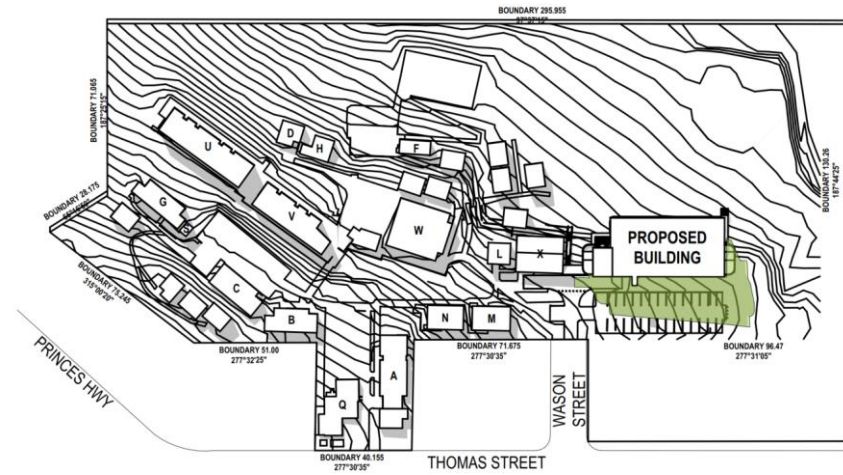
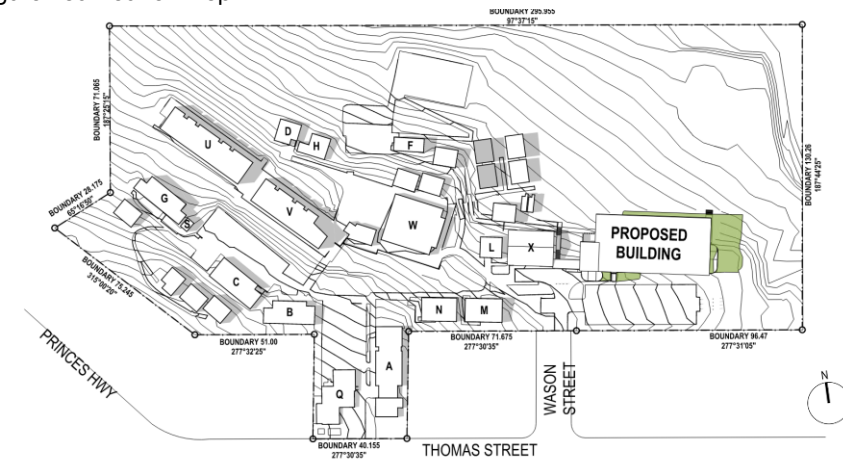


Figure 16d - June 21 3pm



Source: Fulton Trotter Architects: Schematic Design drawings, 2025

Architectural Design Report for Review of Environmental Factors

Milton Public School

Figure 16e - Dec 21 9am

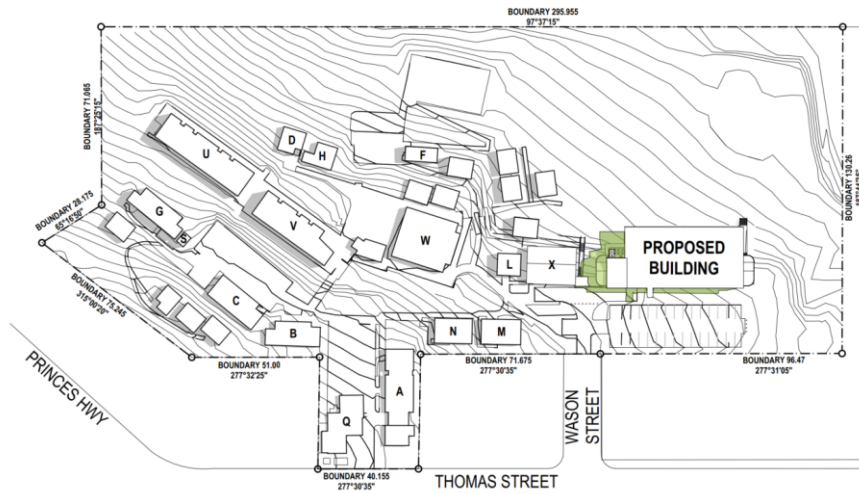


Figure 16g - Dec 21 1pm

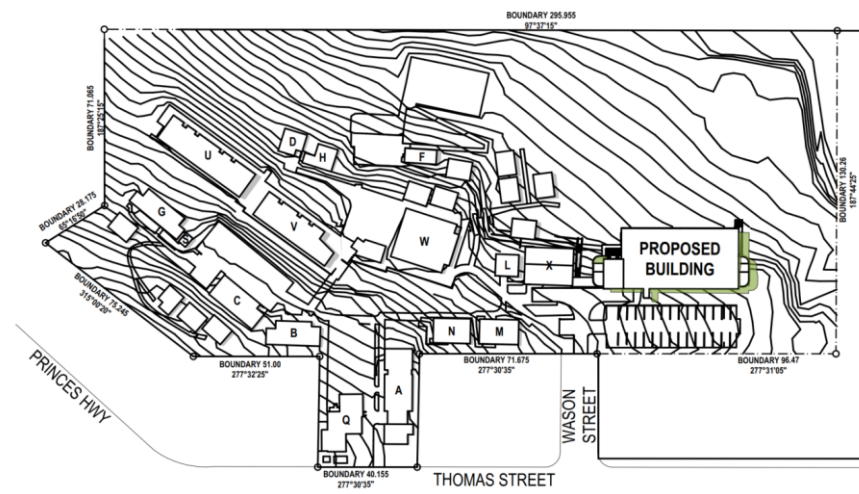


Figure 16f - Dec 21 11am

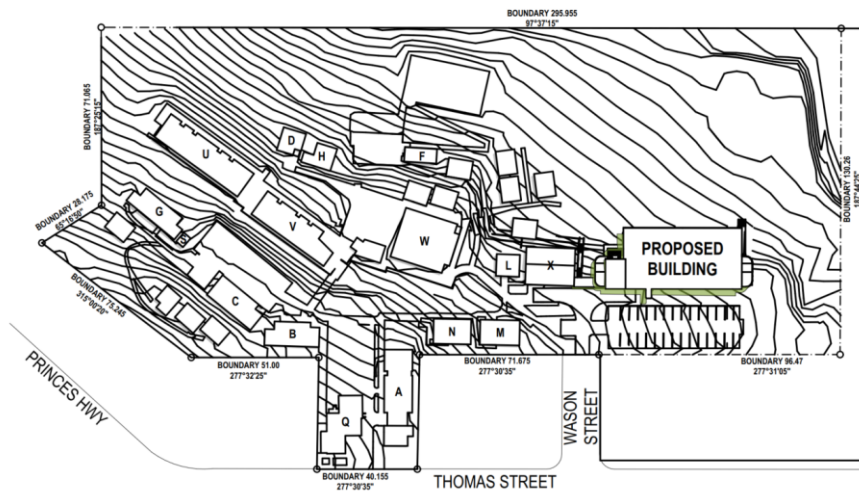
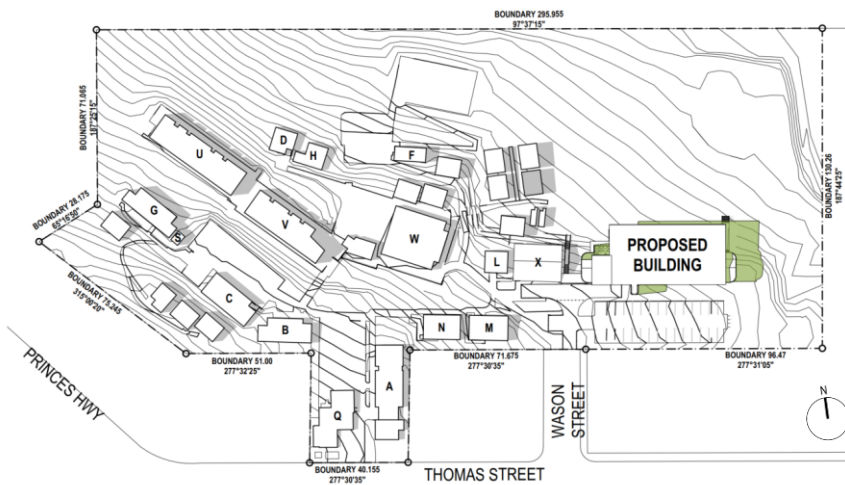


Figure 16g - Dec 21 3pm

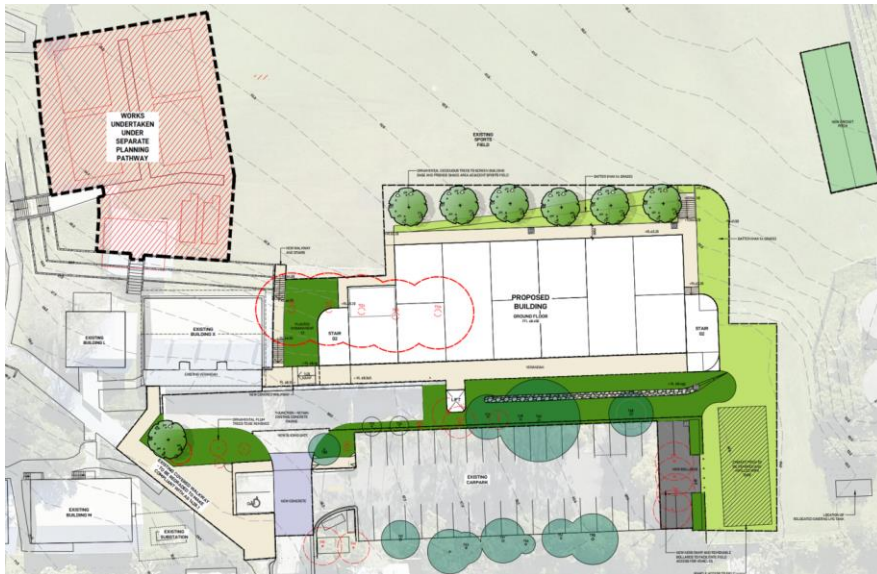


4.5 LANDSCAPE

The landscape design for the scheme is intended to integrate the proposed building works with the existing school grounds. Existing trees are to be protected and retained where possible, and adjacent landscape is to be remediated. Garden beds have been utilised where appropriate to soften the building interface and facilitate drainage.

Species selection has taken into account the existing character of the school grounds, as well as the need for safe and low maintenance planting in the learning environment. Native planting has been prioritised where appropriate to tie into the endemic plant communities and provide an opportunity for learning about the local ecosystems

Figure 17 - Landscape Concept Drawing



Source: Ground Ink Landscape Architects, 2025



4.6 INDIGENOUS ARTWORK

The project has followed a simple approach in relation to Connecting With Country where the design aims to extend existing arrangements that the School currently has. 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.

Figure 18 Internal Artwork Concept (extent in red, artwork to be confirmed)



Source: NSW Department of Education Pattern Book Volume 2, 2024

5 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.

In providing the design response to the 7 Design Quality Principles, consideration has also been given in relation to Better Placed Design Guide for Schools (Government Architect NSW Issue 2 2018) as follows:

- Education SEPP Design Quality Principles
- Design Considerations regarding how to meet the Education SEPP Design Quality Principles
- Integration of the Design Quality Principles with the School Infrastructure Pattern Book

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:

- Keeping to the maximum two-storey scale of existing buildings on the site, at a scale that does not overpower the surrounding single and two storey residential area. Being set back from the site boundary behind the existing car park and mature trees, the building is only slightly visible from Wason Street.

- The building sits comfortably to meet existing ground levels for accessibility, while minimising the extent to which the ground floor level is above existing ground. The building bridges the existing topography to connect the car park level to the oval level.
- Positioning and orienting the building to suit bushfire asset protection zone requirements and building separation, while minimising removal of existing trees
- Maximising the logical connection between the new building and existing adjacent classroom building.
- North facing long elevation for maximum climate control.
- Additional landscape treatment that compliments the existing.

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:

- Building orientation with the main long elevation to the north and a high level of façade sun shading to minimise heat gain.
- Passive cooling using a high window area for natural ventilation, with adjacent proposed trees.
- Landscaping to external areas
- Regular column grid and open floor plates for maximum flexibility of layout in the future. Long life, loose fit.
- Robust, low maintenance materials.

- The external materials themselves are the final finish - no need for painting.

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:

- Part of design to provide safe and equitable access to the new building and to adjacent buildings on the site
- Providing ramp, stair and lift access for full accessibility.
- 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:

- Part of design to provide safe and equitable access to the new building and to adjacent buildings on the site
- A layout that allows for good supervision.
- Internal spaces allowing supervision and visual connection.
- Building has high visibility

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:

- Consistent layout of learning spaces and learning commons offering opportunities in furniture for different levels of openness or insularity.
- Sliding doors between spaces to increase flexibility of uses and spaces.
- Designated storage areas to minimise clutter.
- Clear circulation paths.
- Abundant natural light.
- Opportunity for natural as well as mechanical ventilation.
- A new building in an area of existing mature trees of a scale that is complementary to the surrounding 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.
- Rational circulation.
- Consolidation of services and wet areas.
- Long life, loose fit.
- Sliding doors to increase flexibility of uses and spaces.
- Robust, low maintenance materials.
- The external materials themselves are the final finish- no need for painting.
- Abundant natural light.
- Natural as well as mechanical ventilation.

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:

- In keeping with the scale of neighbouring buildings on the school site.
- The articulation of the structure, glazing and cladding to internal and external areas allows for variety within a consistent grid approach.
- The long elevations are designed with a depth of façade and a variety of materials which breaks down the scale of the building.
- The proposed building will have well-articulated elevations comprising a simple unobtrusive contemporary aesthetic with colours and materials relating to existing buildings and will sit comfortably in the setting.