Ulladulla High School Upgrade Architectural Design Report for Review of Environmental Factors

For NSW Department of Education

Document Quality Control

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| Client: | NSW Department of Education |
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NOTES:

Quality Assurance

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Fulton Trotter Architects acknowledge the people as the traditional custodians of the land upon which **Ulladulla High School** stands. We recognise their continuing connection to land, waters and culture and pay our respects to their Elders past, present and emerging.

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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 Ulladulla High 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: | Ulladulla High 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 is the landowner. |

1.2 PROPOSED ACTIVITY DESCRIPTION

The proposed activity relates to upgrades to Ulladulla High School. Specifically, the proposed activity comprises the following:

- Construction of a new two-storey home base building.
- Construction of new stairs and covered walkways.
- Upgrade works to existing internal pedestrian pathways.
- Installation of solar panels.
- External landscape works.

Any works relating to the existing demountables or associated with substations will be undertaken via a separate planning pathway. Figure 2 provides an extract of the proposed site plan.

Figure 1 Perspective of proposed building from southwest



Source: Fulton Trotter, 2025

Figure 2 Site Plan



Source: Fulton Trotter, 2025

1.3 DESIGN STATEMENT

1.3.1 DESIGN PROCESS UNDERTAKEN

- Master Plan Validation
 - Fulton Trotter Architects were engaged by the NSW Department of Education and School Infrastructure NSW (SINSW) to design the redevelopment of Ulladulla High 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 and SINSW and was endorsed.
- 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 and SINSW and was endorsed.
- 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 SINSW 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'.
- SINSW Pattern Book and Educational Facilities Standards and Guidelines (EFSG) SINSW
- Asset Management Unit (AMU) SINSW existing works and upgrades
- Maintaining a minimum 10m2 of outdoor space per student across the site
- Educational Rational (SINSW 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 internal Indigenous artwork opportunities in keeping with current school initiatives to further strengthen Connection to Country.
- Connection to the existing school facilities
- Maintaining existing buildings noting allowance for the removal of demountable classrooms at the end of the construction project.

Architectural Design Report for Review of Environmental Factors

2. Site Context / Description

2.1 SITE DESCRIPTION

Ulladulla High School is located at 55 South Street, Ulladulla, NSW, 2539 and is legally referred to as Lot 1 in Deposited Plan 595313. The site is located within the Shoalhaven Local Government Area (LGA) and has an approximate area of 6.5ha. An aerial photograph of the site is provided at Figure 3.

The site is zoned SP2 Educational Establishment and existing development comprises various buildings, a car park, landscaping, sports fields and sports courts associated with Ulladulla High School. Ulladulla High School currently comprises 61 Permanent Teaching Spaces (PTS) and 8 Demountable Teaching Spaces (DTS). Playing fields are located in the northwestern portion of the site.

The site is largely rectangular in shape, however, is indented in the north east corner where an early learning centre is situated outside of the site boundary on the corner of Green Street and St Vincent Street. The primary frontage to the school is along St Vincent Street to the east, with two vehicular access points to at-grade carparking areas.

Dense vegetation is in the central and eastern portion of the site, separating the school buildings from the early learning centre. Vegetation is also concentrated along the site boundaries and around the playing fields. The surrounding locality is primarily residential to the west and south. Ulladulla Town Centre is located to the east of the site. Ulladulla Public School is located to the north of site opposite Green Street. Figure 3 Aerial Photograph of the Site





Source: Urbis, January, 2024

2.2 ZONING MAP

Zoning Map

The subject site is zoned SP2 Infrastructure (Educational Establishment). It is surrounded predominately by R2 Low Density Residential zoning to the west and south, SP2 Infrastructure zoning to the north, and E2 Productivity Support and MU1 Mixed Use zoning to the east.



Figure 4 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 adjacent South Street. 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 site is subject to overland flooding during the Probable Maximum Flood (PMF) and in the 1% Annual Exceedance Probability (AEP) event. In the PMF the proposed development area is impacted by flows generally less than 100mm deep, although the flow path just south of the existing demountables to the south of the sports field reaches 370mm. Some flows around the demountable buildings reach a depth of 300mm during the 1% AEP event. |

Figure 5a: 1% AEP flood depths and levels at the Ulladulla High School under existing conditions. Approx extent of proposed building in red, existing demountables within this extent to be relocated by others.



Figure 5b: PMF depths and levels at the Ulladulla High School under existing conditions. Approx extent of proposed building in red.



Source: TTW, 2025

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).
- Compliant access connections are possible from adjacent learning spaces.
- Existing vegetation to western boundary provides visual screening and shading.

Constraints

- The site is vulnerable to overland flooding from the local upstream stormwater catchment.
- Groundwater causes the lower sports field to be waterlogged and unusable for school curriculum in wet years.
- The western boundary is heavily vegetated with a steep embankment.
- There is no formal vehicle access from Camden Street.

Figure 6 View from sports field towards existing demountable buildings and sports field.



Source: Fulton Trotter Architects, 2024

3. Design Statement

3.1 URBAN BUILT FORM

- The new building is positioned on the western boundary of the existing school campus
- The new building is opposite a low-density residential area; but buffered from neighbours by Camden Street and existing boundary vegetation.
- The new building floor level is set down from the street the street level and is effectively a single storey building as viewed from the street
- The new building is orientated to the north to capture daylight and breeze. It overlooks the adjacent sports field, and the short elevation faces Camden Street
- Student circulation will be on the south of the new building to enable connections to existing circulation paths.
- The school has a principal access point from South Street, which will provide DDA access to the new building via an extension to the existing path network. There is an existing pedestrian access point from Camden Street.
- 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 7a Accessibility & wayfinding (principal entry) DDA (Indicative Plan)



Figure 7b Open Space (Indicative Plan)



Source: Fulton Trotter Architects 2024

3.2 OPTIONS CONSIDERED

Two architectural masterplan options were developed (Option 1 and 2) for review. These options are largely based on the Masterplan Feasibility Report proposal by NBRS.

An alternative location in the southwest corner of the site was briefly considered, however the location was not considered suitable as it was located on a steep vegetated area that would be difficult to access. This was not pursued further.

In the preferred location, at the western boundary adjacent the Sports Oval, two options were developed which reviewed alternative finished floor levels and impacts on connections to adjacent buildings. Subsequent flood modelling determined Option 2, with the higher floor level as the most suitable option.

Council have advised that the flood controls outlined in Shoalhaven DCP do not apply, and there is no requirement for the FFL of the development to be set above the PMF level.

Figure 8a - Option 1 – Lower building floor level, less ramping (Indicative Plan)



Figure 8b - Option 2 – Higher building floor level, additional ramping required (Indicative Plan)



Source: Fulton Trotter Architects: Master Plan Validation Report 2024

4. Architectural Response

4.1 DESIGN RESPONSE

The architecture of the proposed building is based on the SINSW Pattern Book. The facade design is based on a standard modular system which presents both internally to the school and to the surrounding context. The modular system contains typical components such as cladding, windows, doors, natural ventilation louvres, mechanical louvres, framing elements and sunshades. The composition of the facade components is designed by the project team based on specific project requirements.

The architecture of the proposed building (Block U) takes cues from the existing building forms on the site. The existing buildings are generally two-storey highly connected buildings, and so the new building positions the access points on the southern side of the building, allowing connection to the adjacent buildings. The northern facade with colourful sun hoods and framing elements is oriented towards the sports oval.

Figure 9 External Works Plan



Figure 10 Site Section from Block Q to boundary / Camden Street



Figure 11 Western Elevation / view from Camden Street



Source: Fulton Trotter Architects: Schematic Design drawings 2025

4.2 MATERIALITY

Materials and finishes follow the SINSW Pattern Book Materials & Finishes principles to be contextual, durable, local & economical. The colour combination will be based on complimenting the existing site character, building forms and context

Perspective views from the Sports Field (above) and view from Camden Street Entry (below)

Figure 12a and 12b



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 – Camden Street– looking East. The proposed building ground floor is substantially lower than street level and is only partially visible from the street, being shielded by existing mature trees. There is minimal impact on the view to the school from the street frontage.

There are no windows on the western side of the proposed building and views to the neighbouring properties are partially shielded by existing trees along the Camden Street boundary.

Figure 13 Ulladulla HS satellite image (Proposed building in red) *Source: Sixmaps*



Figure 14 View from Camden Street to proposed building location – extent of building noted. *Source: Google Streetview*



4.4 OVERSHADOWING ASSESSMENT

Shadow studies were conducted for both Summer and Winter. The shadows of the new building do not impact the neighbours.

KIII) BLOCK P T PROPOSED AMDEN OTDEE Figure 15c - June 21 11am ST VINCENT STREET CAMDEN STREET

ST VINCENT

STREET

Figure 15a - June 21 9am

Figure 15b - June 21 1pm





Figure 15e - Dec 21 9am

Figure 15f - Dec 21 1pm



Source: Fulton Trotter Architects: Schematic Design drawings 2025

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 considered 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 16 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 areas of the building that continue existing Indigenous programs at the school. It is intended for the proposal building to incorporate an existing Indigenous artwork that the school has previously commissioned.

Figure 17 Internal Artwork (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:

- A two-storey building in keeping with the scale of existing buildings on the site
- The ground level of the building is set down substantially from the adjacent Camden Street level so as not to overpower the scale and mass of surrounding single and two storey residential area.
- 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
- Maintaining the general landscaping streetscape between the road and the building.
- Retention of the existing trees to the perimeter of the site
- Maximising the logical connection between the new building and existing adjacent buildings for accessibility.
- 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 flexibly 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.
- Linking upper level of new building to the adjacent building.

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.