Review of Environmental Factors

Vincentia High School Upgrade

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Acknowledgement of Country

The NSW Department of Education acknowledges the Yuin the traditional custodians of the land on which the Vincentia High School is located.

We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of Australia.

The NSW Department of Education is committed to honouring Aboriginal peoples' cultural and spiritual connections to the land, waters and seas and their rich contribution to society.

The NSW Department of Education recognises that by acknowledging our past, we are laying the groundwork for a future that embraces all Australians; a future based on mutual respect and shared responsibility.

Declaration

This Review of Environmental Factors (REF) has been prepared by Urbis Ltd on behalf of the NSW Department of Education (department) and assesses the potential environmental impacts which could arise from the upgrade works at Vincentia High School.

This REF has been prepared in accordance with the *Guidelines for Division 5.1 Assessments* and any relevant addendum (the Guidelines), and the relevant provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP).

This REF provides a true and fair review of the activity in relation to its likely impact on the environment and the information it contains is neither false nor misleading. It addresses to the fullest extent possible all the factors listed in Section 3 of the Guidelines, the EP&A Regulation and the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

In preparing the REF I have declared any possible conflict of interests (real, potential or perceived) and I do not consider I have any personal interests that would affect my professional judgement.

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Abbreviations

| Abbreviation | Description | |
|--------------------|--|--|
| AEP | Annual Exceedance Probability | |
| AHD | Australian Height Datum | |
| AHIP | Aboriginal Heritage Impact Permit | |
| AHIMS | Aboriginal Heritage Information Management System | |
| APZ | Asset Protection Zone | |
| BC Act 2016 | Biodiversity Conservation Act 2016 | |
| BC Regulation | Biodiversity Conservation Regulation 2017 | |
| BAM | Biodiversity Assessment Method | |
| BCA | Building Code of Australia | |
| BDAR | Biodiversity Development Assessment Report | |
| BPL | Bushfire Prone Land | |
| СА | Certifying Authority | |
| CM Act | Coastal Management Act 2016 | |
| CEMP | Construction Environmental Management Plan | |
| CNVMP | Construction Noise and Vibration Management Plan | |
| СТМР | Construction Traffic Management Plan | |
| CWC | Connecting with Country | |
| The department | NSW Department of Education | |
| DCCEEW | Department of Climate Change, Energy, the Environment and Water | |
| DP | Deposited Plan | |
| DPC | Department of Premier and Cabinet | |
| DPHI | Department of Planning, Housing and Infrastructure | |
| Design Guide | Design Guide for Schools published by the Government Architect in May 2018 | |
| EIS | Environmental Impact Statement | |
| ЕМР | Environmental Management Plan | |
| EPA | Environment Protection Authority | |
| EP&A Act | Environmental Planning and Assessment Act 1979 | |
| EP&A Regulation | Environmental Planning and Assessment Regulation 2021 | |
| EPBC Act | Environment Protection and Biodiversity Conservation Act 1999 | |
| EPI | Environmental Planning Instrument | |
| EPL | Environment Protection License | |
| ESD | Ecologically Sustainable Development | |
| FM Act | Fisheries Management Act 1994 | |
| FIRA | Flood Impact Risk Assessment | |
| FERP | Flood Emergency Response Plan | |

| Abbreviation | Description | | |
|--------------------------------|---|--|--|
| GBCA | Green Building Council of Australia | | |
| На | Hectares | | |
| LEP | Local Environmental Plan | | |
| LGA | Local Government Area | | |
| MNES | Matters of National Environmental Significance | | |
| NCC | National Construction Code | | |
| NPW Act | National Parks and Wildlife Act 1974 | | |
| NPW Regulation | National Parks and Wildlife Regulation 2009 | | |
| NPWS | National Parks and Wildlife Service (part of EES) | | |
| NSW RFS | NSW Rural Fire Service | | |
| NT Act (Cth) | Commonwealth Native Title Act 1993 | | |
| OEH | (Former) Office of Environment and Heritage | | |
| Planning Systems SEPP | State Environmental Planning Policy (Planning Systems) 2021 | | |
| PMF | Probable Maximum Flood | | |
| PTS | Permanent teaching spaces | | |
| POEO Act | Protection of the Environment Operations Act 1997 | | |
| PBP | Planning for Bushfire Protection | | |
| Proponent | NSW Department of Education | | |
| REF | Review of Environmental Factors | | |
| RF Act | Rural Fires Act 1997 | | |
| Resilience and Hazards SEPP | State Environmental Planning Policy (Resilience and Hazards) 2021 | | |
| Roads Act | Roads Act 1993 | | |
| SCPP DoE | <i>Stakeholder and community participation plan,</i> published by the NSW Department of Education October 2024 | | |
| SCPP DPHI | Stakeholder and community participation for new health services facilities and schools published by the Department of Planning, Housing and Infrastructure October 2024 | | |
| SDRP | School Design Review Panel | | |
| SEPP | State Environmental Planning Policy | | |
| SIS | Species Impact Statement | | |
| STS | Support teaching space | | |
| TI SEPP | State Environmental Planning Policy (Transport and Infrastructure) 2021 | | |
| WM Act | Water Management Act 2000 | | |

Executive Summary

The Proposal

The proposal relates to the upgrade of Vincentia High School (**Vincentia HS**) to provide new permanent teaching spaces including a new homebase building (Building Q) and associated infrastructure.

The proposed activity is the Vincentia HS Upgrade at 142 The Wool Road, Vincentia (the **site**). Specifically, the proposed activity comprises the following:

- Construction of a new two-storey home base building (Building Q).
- Installation of additional solar panels.
- Construction of new stairs and covered walkways.
- Internal road upgrade which involves providing a new drop off zone, parking spaces and pedestrian pathway.
- Relocation of existing shade structure.
- External landscape works.
- Tree removal.

Vincentia HS is located at 142 The Wool Road, Vincentia NSW 2540. The site has an approximate area of 8.09ha and is legally referred to as Lot 1 in DP 809057 and Lot 1 in DP 550361 within the Shoalhaven Local Government Area (**LGA**).

The site is zoned SP2 Educational Establishment and existing development comprises various buildings, a car park, landscaping, sports fields and sports courts.

The site is irregular in shape. Vehicle access is provided to The Wool Road via a signalised intersection connecting with an internal driveway. The surrounding land consists of extensive natural bushland forming part of Jervis Bay National Park.

The site is mapped as bushfire prone land (BFPL) but is not flood affected.

Planning Pathway

The proposal involves works by the Department of Education (the **department**) (a **public authority**) within the boundaries of the existing Vincentia HS. Accordingly, pursuant to Sections 3.37 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP), the proposed works are classified as development which may be carried out without consent.

Therefore, the proposal is considered an 'activity' for the purposes of Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and is subject to an environmental assessment. For the purposes of this proposal, the department is the proponent and the determining authority and the required environmental assessment is in the form of a Review of Environmental Factors (REF).

The REF has been prepared in the accordance with the *Guidelines for Division 5.1 Assessments* (DPE, June 2022) and the *Guidelines for Division 5.1 assessments - consideration of environmental factors for hospital and school activities Addendum* (DPHI, October 2024).

Consultation

Consultation will be undertaken with in accordance with statutory requirements under the TI SEPP and having regard to the *Stakeholder and community participation plan for new health services facilities and schools* (Department of Planning Housing and Infrastructure (**DPHI**), October 2024) (**SCPP DPHI**) and the *Stakeholder and Community participation plan For new schools and major school upgrade projects undertaken under Division 5.1 of the EP&A Act 1979* (Department of Education, October 2024) (**SCPP DDE**).

Comments received will be carefully considered and responded to.

In addition, as outlined in **Section 5.1** of this REF, non-statutory consultation has been undertaken with a range of community and government stakeholders throughout the design process.

Environmental Impacts

This REF is supported by a series of technical reports that evaluate and propose measures to mitigate any environmental impacts arising from the proposed activity. These reports have identified potential impacts, all of which can be effectively managed through adoption of the required mitigation measures. The key issue assessed is as follows:

• **Bushfire:** The site is mapped as comprising BFPL Category 1 along the eastern portion of the site, with the remainder of the site mapped as Vegetation Buffer land. The entire site is surrounded by Category 1 BFPL. Building Q has been designed with consideration to the impacts of bush fire and will be constructed to BAL-19 under AS 3959-2018. It will also become the designed shelter-in-place location for the school. The upgraded internal vehicle access (Kiss and Drop zone) improves bushfire outcomes by preventing potential obstructions to firefighting vehicles through formalised parking and access arrangements.

Other impacts have been considered as detailed in this REF.

Justification and Conclusion

Based on the environmental assessment undertaken as part of this REF, it has been determined that the proposal will not result in any significant or long-term detrimental impacts. The potential impacts identified can be reasonably mitigated and where necessary managed through the adoption of suitable site practices and adherence to accepted industry standards.

The environmental impacts of the proposal are not likely to be significant. Therefore, it is not necessary for an Environmental Impact Statement (EIS) to be prepared and approval to be sought for the proposal from the Minister for Planning and Public Spaces under Part 5.1 of the EP&A Act. The proposed activity will not have any effect on Matters of National Environmental Significance and approval of the Activity under the Commonwealth EPBC Act is not required.

On this basis, it is recommended that the department determine the proposed activity in accordance with Part 5 of the EP&A Act and subject to the adoption and implementation of mitigation measures identified within this report.

1. Introduction

The NSW Department of Education (the **department**) proposes to undertake upgrade works (the **activity**) at Vincentia High School (**Vincentia HS**) located at 142 The Wool Road, Vincentia NSW 2540 (the **site**).

As part of the NSW Government's plan to rebuild essential services, the 2023-24 Budget sought to deliver \$1.4 billion for new and upgraded schools in regional NSW. This targeted investment seeks to grow communities ensuring public education is accessible to working families. The proposal to upgrade the quality of facilities, teaching spaces and vehicle access arrangements at Vincentia High School is being delivered as a direct result of the NSW Government's plan to expand public education in regional NSW.

This Review of Environmental Factors (**REF**) has been prepared by Urbis Ltd on behalf of the department to determine the environmental impacts of the proposed activity at Vincentia HS. For the purposes of these works, the department is the proponent and the determining authority under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**).

The purpose of this REF is to describe the proposal, examine and take into account all matters affecting or likely to affect the environment and to detail mitigation measures to be implemented to manage impacts.

The potential environmental impacts have been assessed in the accordance with the *Guidelines for Division 5.1 Assessments* (DPE, June 2022), Guidelines for Division 5.1 assessments - consideration of environmental factors for hospital and school activities Addendum (DPHI, October 2024), EP&A Act, the *Environmental Planning and Assessment Regulation 2021*, and the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**).

The assessment contained within the REF has been prepared having regard to:

- Whether the proposed activity is likely to have a significant impact on the environment and therefore the necessity for an Environmental Impact Statement (**EIS**) to be prepared and approval to be sought from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act; and
- The potential for the proposal to significantly impact Matters of National Environmental Significance (**MNES**) on Commonwealth land and the need to make a referral to the Australian Government Department of Environment and Energy for a decision by the Commonwealth Minister for the Environment on whether assessment and approval is required under the EPBC Act.

This REF is supported by a series of technical reports that evaluate and propose measures to mitigate any environmental impacts arising from the proposed activity. These are appended to the REF. **Appendix 1** – Mitigation Measures includes the <u>department's</u> standard Mitigation Measures, as well as any additional mitigation measures identified within the specialist reports.

2. Proposed Activity

2.1 The Site

2.1.1 Site Locality

Vincentia HS is located at 142 The Wool Road, Vincentia, NSW, 2540 and has an approximate site area of 8.09 hectares. The site is comprised of two lots, legally referred to as Lot 1 Deposited Plan P809057 and Lot 1 Deposited Plan 550361 and is located within the Shoalhaven Local Government Area (**LGA**). Further site details are included in **Table 1**.

The site is owned by the Minister for Education and Early Learning. The site is zoned SP2 Educational Establishment and existing development comprises various buildings, a car park, landscaping, a sports field and sports courts. Vincentia HS currently comprises 49 permanent teaching spaces (**PTS**) and 17 demountable teaching spaces (**DTS**). The eastern portion of the site contains natural bushland.

The site is an irregularly shaped lot. Vehicle access is provided to The Wool Road via a driveway that connects to a signalised intersection. The Wool Road is a locally listed heritage item. There is a footpath and cycleway along The Wool Road. The site is located 1.4km from Vincentia Town Centre, 50km from Kiama and 145km from Sydney. The adjoining land to the site is extensive national park bushland reserve (Jervis Bay National Park). The Bay and Basin Leisure Centre is approximately 200m to the north of the site, and the Vincentia Rural Fire Brigade is approximately 300m north.

| Site characteristics | Description |
|---------------------------|---|
| Site address | 142 The Wool Road, Vincentia 2540 |
| Legal description | Lot 1 Deposited Plan P809057 |
| | Lot 1 Deposited Plan 550361 |
| Site area | 80,940m² (8.09ha) |
| Local government area | Shoalhaven City Council |
| Site ownership | Minister for Education and Early Learning |
| Existing use / structures | Vincentia High School, including various structures relating to the existing school on the site. The built form components of the school are concentrated centrally and to the south of the site. The school currently comprises 49 PTS and 17 DTS. |
| Topography | The site has a gentle slope down towards the north within the northern and central parts of the site. The southern part of the site has a moderate slope to the north. |
| Vegetation | The east and north boundaries of the site feature mature, dense vegetation. The vegetation at the north of the site provides acoustic and visual screening from The Wool Road to the school. Mature, tall vegetation is a feature more sparsely throughout the site. Dense vegetation surrounds the site, |

The location and configuration of the site is shown in Figure 1 and Figure 2.

Table 1: Site Details

| Site characteristics | Description |
|------------------------------------|---|
| | forming part of the Jervis Bay National Park. |
| Hydrology | The site is in proximity to an unnamed second order creek, which is a tributary of the Moona Moona Creek. The site is not subject to any overland flood risk and is suitably distanced from any nearby water bodies. |
| Acid Sulfate Soils | The site is mapped as Acid Sulfate Soils Class 5. |
| Coastal Use and Environmental Area | The site is not mapped as being within a coastal use and/or environmental area. |
| Vehicle / site access | The site has frontage to The Wool Road (a classified road). Vehicle access is provided to The Wool Road via a driveway that connects to a signalised four-way intersection. The school site has a single vehicular access point located in the north west corner of the site. Car parking is located at the rear of the site via the single access point. All internal roads and carparking for the school are provided within the site boundary. |



Source: Urbis, 2024

Figure 1: Site Aerial



Figure 2: Locality Plan

2.1.2 Site Constraints and Opportunities

Consideration of site constraints has been undertaken through a review of the Section 10.7 (2 & 5) Planning Certificates dated 17 October 2024, mapping under relevant Environmental Planning Instruments (**EPIs**), and a review of specialist consultant reports and other desktop assessments. Key site constraints include:

- **Bushfire**: The site is identified as Bushfire prone land containing Vegetation Buffer and Category 1 bushfire prone land (**BFPL**). The Category 1 BFPL is located on the eastern edge of the site and the proposed activity area is located within the Vegetation Buffer. A Bushfire Assessment Report (**BAR**) prepared by Eco Logical Australia (**Appendix 25**) assessed the proposed activity against the relevant bushfire protection measures from Planning for Bush Fire Protection 2019. The BAR found that the proposed activity meets the acceptable solutions for Asset Protection Zone (34 56 m), construction (BAL-19 and as modified by Section 7.5 of PBP), utilities, vehicular access and emergency and evacuation planning. The additional bushfire protection measures that form part of the proposed activity achieve an improved bushfire outcome for the school.
- **Existing structures:** Vincentia HS, currently comprises 49 PTS and 17 DTS, generally concentrated centrally and to the south of the site. There is an existing covered outdoor learning area (COLA) close to the proposed Building Q which is to be dismantled as part of the proposed activity. It will be reinstated on the site where the demountables currently are. The existing cricket nets will also be removed and relocated adjacent to this COLA.

• **Biodiversity and Trees**: The site contains areas of high biodiversity value coinciding with the presence of three Plant Community Types (**PCT**). Two of the PCTs are associated with threatened communities. The proposed activity is located within mapped areas PCT 4052 and PCT 3267 as shown in **Figure 3** below. An ecological site assessment conducted as part of the Biodiversity Due Diligence Report (Water Technology 2023) concluded that PCT 4052 and PCT 3267 are present in this area but are in a highly cleared and degraded condition.



Figure 3: Plant Community Types

A summary of key site considerations and constraints as per the Planning Certificate is provided in **Table 2**.

| Table 2: Review of Section | n 10.7 Planning | Certificate |
|----------------------------|-----------------|-------------|
|----------------------------|-----------------|-------------|

| Affectation | Yes | No |
|---|-----|-------------|
| Critical habitat | | \boxtimes |
| Conservation area | | X |
| Item of environmental heritage | | \boxtimes |
| Affected by coastal hazards | | |
| Proclaimed to be in a mine subsidence district | | \boxtimes |
| Affected by a road widening or road realignment | | \boxtimes |
| Affected by a planning agreement | | \boxtimes |

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| Affectation | Yes | No |
|---|-----|-------------|
| Affected by a policy that restricts development of land due to the likelihood of landslip | | \boxtimes |
| Affected by bushfire, tidal inundation, subsidence, acid sulfate or any other risk | X | |
| Affected by any acquisition of land provision | | \boxtimes |
| Biodiversity certified land or subject to any biobanking agreement or property vegetation plan. | | X |
| Significantly contaminated | | \boxtimes |
| Subject to flood related development controls | | \boxtimes |

Consideration has also been given to opportunities identified in project development, including:

- **Strategic location:** The site is located within an existing school and will continue to serve the educational needs of the community of Vincentia.
- **Environment:** There are no significant environmental constraints, with the exception of bushfire. The removal of some existing trees can be compensated for by the proposed new landscaping elements.
- **Sustainability**: The proposed Building Q is oriented with its long elevation to the northwest which maximises natural light and climate control. Energy efficiency provisions for the building include a roof mounted photovoltaic (**PV**) system. The building's western frontage has been articulated with sun shading which also manages heat gain.
- **Futureproofing**: The pattern book template for the building considers the future adaptability of the learning spaces.
- **Topography:** The site's topography is relatively flat.
- **Adjoining uses:** Adjoining land uses are compatible with the site's use as an educational establishment.
- Access: The existing drop off area can be readily upgraded. There is a compliant access connection from the drop off area. All parking and circulation are internal to the school site with no requirement for works approvals to public roads.

2.2 Proposed Activity

The proposed activity relates to upgrades to Vincentia High School. **Figure 4** provides an extract of the proposed site plan.

Table 3 provides a summary of key aspects of the activity. Any works relating to the existing demountables or associated with substations will be undertaken via a separate planning pathway.

| Cable 3: Summary of the activity | |
|-----------------------------------|---|
| Project Element | Description |
| | |
| Site Area | 80,940m ² |
| Project Name | Vincentia High School Upgrade |
| Project Summary | The project is an upgrade works program, and comprises the following: |
| | Construction of a new two-storey home base building (Building Q), featuring a Support Learning Unit (SLU) and a standard General Learning Space (GLS) hub on the ground floor, and two standard GLS hubs on the first floor. The building will also include a lift and student amenities. |
| | Installation of solar panels. |
| | Construction of new stairs and covered walkways. |
| | Internal road upgrade which involves widening it to the site boundary and providing a new drop off zone, parking spaces and pedestrian pathway. |
| | Relocation of existing (COLA) to the area currently occupied by demountables. |
| | Relocation of cricket net to the area currently occupied by demountables. |
| | External landscape works. |
| | Tree removal. |
| Use | Educational establishment |
| Student and Staff Numbers | No change to student capacity or staff numbers. |
| Car Parking and Bicycle Spaces | The proposed activity comprises 17 new car parking spaces. This adds to the existing 98 spaces, making for a total of 115 spaces. |
| | There is a storage cage with space for approximately 40 bicycles. |
| Height | The proposed Building Q will be two storeys. |
| Play Space | 35,521m² outdoor play space area |
| Tree Removal | The proposed activity requires the removal of 33 trees. |
| Off Site Works | The proposed activity does not include any off site works. |

The key features of the proposed activity are shown in Figure 4 to Figure 11.



Source: Fulton Trotter Architects, 2025



Figure 4: Proposed Indicative Site Layout -north

Figure 5: Proposed Indicative Site Layout -south



Source: Fulton Trotter Architects, 2025

Figure 6: Proposed External Works Plan

2.2.1 Design Development

The proposed built form comprises a new two storey homebase building (**Building Q**) situated at towards the north western corner of the site and is designed to be sympathetic to the existing school environment. The proposed design uses the *SINSW Pattern Book and Educational Facilities Standards and Guidelines (EFSG) SI NSW* as a basis for the design. The pattern book design template for the building has considered future adaptability of these learning spaces.

The proposed Building Q has been positioned to accommodate the required bushfire Asset Protection Zones (**APZ**) and is set back from The Wool Road, buffered from view by existing vegetation.

The proposed Building Q aligns with the existing hall and sports courts to integrate with established circulation routes. The building's western frontage has been articulated with sun shading. The choice of materials respects the existing context, and the pattern book template for the building considers the future adaptability of the learning spaces.

The proposed Building Q is oriented to face the main long elevation to the north-west which maximises natural light and climate control. Energy efficiency provisions for the building include a roof mounted photovoltaic (PV) system.

The Kiss and Drop zone adjoining The Wool Road provides the principal access point to the school and is designed in accordance with the accessibility requirements of the *Disability Discrimination Act 1995* (Cth).

New landscaping aims to improve amenity, create attractive external spaces and support outdoor learning.

The project addresses Connecting with Country by including Indigenous artwork opportunities to internal and external areas of the building and landscape that continue existing Indigenous programs at the school.



Source: Fulton Trotter Architects, 2025

Figure 7: Render of New Homebase Building



Source: Fulton Trotter Architects, 2025

Figure 8: Render of New Homebase Building From Sports Court



Source: Fulton Trotter Architects, 2025

Figure 9: New Homebase Building Materials and Finishes



Source: Fulton Trotter Architects, 2025

Figure 10: New Homebase Building Façade Strategy

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2 ELEVATION EAST ELEVATION

Source: Fulton Trotter Architects, 2025

Figure 11: Site Elevations

Landscaping

The approach to the landscape architectural design draws inspiration from the endemic flora and fauna, its context within a bushfire prone site and existing landscape features.

Thirty three (33) trees are required to be removed as part of the proposed activity. Due to bushfire affectation, trees will not be replanted and the new landscaping will consist of native shrubs and low grasses. Garden beds have been utilised where appropriate to soften the building interface and facilitate drainage.

Immediately adjoining the new building turfed areas will be installed and to the eastern side of the building a planted swale with low shrubs including Westringia 'Grey Box' and Rhaphiolepis 'Cosmic Pink will provide separation between the sports courts and the building. These shrubs will grow to be approximately 0.8m tall.

Areas of natural turf will also be used to rehabilitate areas of the site previously occupied by demountables.

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 in to the endemic plant communities and provide an opportunity for learning about the local ecosystems.

The landscape plan is provided at Figure 12 below.



Source: Fulton Trotter and Ground Ink, 2025

Figure 12: Landscape Concept Drawing

Access and Parking

Vehicle Access

The site has a single access point via an internal driveway that adjoins to The Wool Road through a signalised intersection. There will be no alteration to the existing vehicular access point from The Wool Road.

The existing driveway and car park are internal to the school boundary. The existing car park provides 98 spaces. The proposed activity comprises 17 additional car parking spaces. This makes a total of 115 spaces to be provided within the school site.

The proposed activity expands the internal drive to the boundary to provide a dedicated Kiss and Drop zone for pick-up and drop-off, formalised angled parking, a bus zone and pedestrian footpath and crossing facility works. The new Kiss and Drop zone will provide capacity for six to seven vehicles, with further queuing space within the site and ability for vehicle to recirculate if necessary. The proposed activity also includes formalisation of spaces within the existing bus parking area to reduce vehicular congestion.

Pedestrian Access

The school has principal pedestrian access points from the internal roadway drop off area which is connected to The Wool Road. As part of the proposed activity, the entry points and connecting accessways are to undergo DDA upgrade works to achieve compliance to AS1428.1:2009 to the maximum extent possible.

Design Guide and Design Quality Principles

The architecture of the proposed building is based on the SI Pattern Book. The façade 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 façade components is designed by the project team based on specific project requirements.

The architecture of the proposed building 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 eastern side of the building, allowing connection to the rest of the school. The western façade with colourful sun hoods and framing elements is oriented towards the main site entry from The Wool Road.

The built form of the proposed activity responds effectively to the design quality principles in Schedule 8 of the TI SEPP and the Design Guide, as outlined in **Table 4**.

| Design quality principle | Response |
|---|---|
| 1. Responsive to context | The proposed activity has been thoughtfully designed to respond to and enhance the positive qualities of its surroundings, adhering to a Country-centred approach and considering site-specific conditions. Key aspects of the design are as follows: |
| | Scale and Integration: Keeping to the maximum two-storey scale of existing buildings on the site. Accessibility and Ground Levels: 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. |
| | Landscaping and Streetscape: Being set back considerably from the Wool Road frontage and maintaining the general landscaping streetscape between the road and the building. Additional landscape treatment complements the existing landscaping on the site. |
| | Ecology and Orientation: Positioning and orienting the building to suit bushfire asset protection zone requirements and building separation, while minimising removal of existing trees. Retention of the existing natural bushland to the perimeter of the site. Connectivity: Maximising the logical connection between the new building and existing adjacent Hall and Sports Courts. |
| | Overall, the design demonstrates a comprehensive response to the site context, enhancing the positive qualities of the site while improving vehicular and pedestrian access arrangements. |
| 2. Sustainable, efficient and resilient | The proposed activity has been meticulously designed to achieve sustainable, efficient, and resilient outcomes, aligning with the principles of caring for Country. Key elements of the design include: |
| | Orientation: The proposed Building Q is orientated to face the |

Table 4: Response to Design Quality Principles in Schedule 8 of TI SEPP

| Design quality principle | Response |
|-----------------------------|--|
| | main long elevation to the north-west and features a high level of façade sun shading to minimise heat gain. Passive Cooling: Passive cooling using a high window area for natural ventilation, with adjacent proposed vegetation. Flexible and Durable Design: The building comprises a regular column grid and open floor plate design which maximises flexibility for future layout changes. The "long life, loose fit" approach ensure the building can adapt to evolving needs over time, remaining durable and resilient. Landscaping: Landscaping to external areas is designed to enhance the natural environment and contribute to passive cooling, while also minimising water consumption through the planting of native and drought-tolerant plants. Proposed landscaping also responds to the surrounding bushfire hazard by incorporating native shrubs and low grasses. Materials: Robust, low maintenance materials. The external materials are designed to be the final finish, eliminating the need for painting and further reducing maintenance requirements. Solar: A roof mounted PV solar panel system contributes to the energy efficiency and sustainability of the school. |
| | Overall, the design demonstrates a strong commitment to sustainability, efficiency and resilience and ensures that the school is well-equipped to thrive in an evolving climate while minimising its environmental footprint. |
| 3. Accessible and inclusive | The proposed activity has been carefully designed to be accessible and inclusive, ensuring that the buildings and grounds are welcoming and easy to navigate for people with differing needs and abilities. Key aspects of the design include: |
| | Safe and Equitable Access: The design prioritises safe and equitable access to the new building and adjacent buildings and outdoor spaces for people of all abilities to move freely and comfortably throughout the school. Comprehensive Accessibility Features: The proposed activity includes ramp, stair and lift access allowing for people with mobility challenges to move freely and comfortably throughout the building. Community Integration: The design maintains the ability of the school to hold activities outside of school hours and share its facilities with the community. This approach fosters a sense of belonging and strengthens the role of the school as a community hub. |
| | Overall, the design demonstrates a strong commitment to accessibility and inclusivity, caters to the diverse needs of the |

| Design quality principle | Response |
|-------------------------------|--|
| | student body and community and fosters a welcoming and supportive community for all. |
| 4. Healthy and safe | The proposed activity has been thoughtfully designed to prioritise health and safety, ensuring that the environment supports the wellbeing of all users. Key elements of the design include: |
| | Safe and Equitable Access: The design enables safe and equitable access to the new building and adjacent buildings and outdoor spaces on the site and promotes a secure and inclusive environment for all. Supervision and Visibility: The layout of the school is designed to allow for effective supervision with internal spaces that facilitate visual connections. This ensures that staff can easily monitor student activities which promotes safety and security within the school. Building Visibility: The building features high visibility internally and externally providing for a good sense of security and oversight of the school grounds. Welcoming and Accessible Environment: The design maintains a welcoming address and accessible environment and ensures that the school remains inviting and open to the community, while allowing for the emphasis on safety and security. Overall, the design demonstrates a strong commitment to health and safety, creating a secure and supportive environment that promotes the wellbeing of all members of the school community. |
| 5. Functional and comfortable | The proposed activity has been designed to create functional and comfortable spaces that cater to a wide range of educational and community activities. Key aspects of the design include: |
| | Flexible Learning Spaces: The layout features consistent learning spaces and learning commons, and opportunities for different levels of openness or insularity by allowing for flexible furniture arrangements. Sliding doors between spaces further enhance flexibility and allow for various uses and configurations. Designated Storage Areas: Adequate storage areas are provided to minimise clutter and maintain the organisation and functionality of the learning and activity spaces. Clear Circulation Paths: The design includes clear circulation paths enabling the efficient and comfortable navigation of the school. Natural Light and Ventilation: The building is designed to maximise natural light. The design includes natural and mechanical ventilation methods which ensures a comfortable |

| Design quality principle | Response |
|---------------------------|---|
| | indoor environment. |
| | Overall, the design demonstrates a strong commitment to creating functional and comfortable spaces that support a wide range of activities and is considerate of the amenity of the adjacent built and natural environments. |
| 6. Flexible and adaptable | The proposed activity has been thoughtfully designed to be flexible and adaptable, ensuring that the spaces can evolve to meet changing educational and community needs. Key aspects of the design include: |
| | Flexible Learning Spaces: The layout features consistent learning spaces and commons that can be easily reconfigured. The use of sliding doors allows for varying levels of openness or insularity which accommodates for different teaching styles and group sizes. Adaptable Furniture: The design incorporates furniture that can be rearranged to support a wide range of activities, from formal instruction to informal group work, enhancing the adaptability of the learning environment. |
| | Designated Storage Areas: Adequate storage is provided to keep spaces organised and clutter-free, allowing for quick and easy reconfiguration of rooms as needed. Clear Circulation Paths: The design includes clear and rational circulation paths, facilitating smooth transitions between different areas and activities, and supporting the dynamic use of space. Natural Light and Ventilation: Abundant natural light and opportunities for both natural and mechanical ventilation create a comfortable and adaptable indoor environment that can respond to varying conditions and uses. Materials: Robust, low maintenance materials. The external materials are designed to be the final finish, eliminating the need for painting and further reducing maintenance requirements. Flexible and Durable Design: The building comprises a regular column grid and open floor plate design which maximises flexibility for future layout changes. The "long life, loose fit" approach ensure the building can adapt to evolving needs over |
| | time, remaining durable and resilient. Overall, the design demonstrates a strong commitment to flexibility and adaptability, ensuring that the school can effectively support a diverse range of educational and community activities now and in the future. |
| 7. Visual appeal | The proposed activity has been designed with a strong emphasis on visual appeal, ensuring that the buildings and their landscape |

| Design quality principle | Response |
|--------------------------|--|
| | settings are aesthetically pleasing and contribute positively to the streetscape and neighbourhood character. Key aspects of the design include: |
| | |
| | welcoming and visually appealing environment that underscores the importance of the school within the community. |
| | Overall, the design demonstrates a strong commitment to visual appeal, ensuring that the school buildings and their landscape settings are not only functional but also enhance the aesthetic quality and character of the neighbourhood. |

This comprehensive response ensures the built form meets the design principles in the TI SEPP and the Design Guide's requirements, creating a high-quality, functional, and sustainable educational facility.

Sustainability and Climate Change

A Sustainable Development Plan Report was prepared by NDY and is attached at Appendix 11.

The project has been designed in accordance with the Green Building Council of Australia (**GBCA**)'s Green Star Buildings v1 certification at a 4-Star rating.

The building design includes several initiatives aimed at reducing energy consumption. These initiatives feature a greater than 10% improvement in energy efficiency over the minimum National Construction Code (**NCC**) compliance. The design incorporates passive strategies such as optimal

orientation, thermal mass, shading, and high-performance insulation and glazing. Energy-efficient lighting, heating, ventilation, air conditioning, and appliances are utilised, alongside energy monitoring and whole-building demand management. Renewable energy sources, particularly solar photovoltaic panels, are integrated, and the building is designed to be 100% electric to minimise gas use and greenhouse gas emissions. Additionally, commissioning and tuning strategies are implemented to ensure optimal performance.

To address water consumption, the building incorporates water-efficient fixtures, equipment, and appliances, along with water use monitoring systems. Rainwater collection and reuse are facilitated, and bubblers and taps are provided to encourage water drinking and reduce waste. The design also includes water-sensitive urban design, stormwater management, and protection of groundwater and drinking water catchments. Commissioning and tuning strategies are applied to ensure efficient water use.

The building's material consumption strategy focuses on sustainability, aiming for at least a 10% reduction in upfront carbon through the selection of sustainable materials. This includes the use of low embodied carbon materials and those with high recycled content, particularly in major construction materials such as concrete, steel, timber, and aluminium.

The School Transport Plan (**STP**) prepared and attached at **Appendix 17** aligns with ESD principles by promoting sustainable transport options to reduce the carbon footprint of the school community. Measures include:

- Appointment of a School Travel Coordinator (**STC**) to promote sustainable travel behaviour change for all school stakeholders (students, parents/carers and staff).
- The provision of a Travel Access Guide (**TAG**) to staff, parents and students that provides information about how to access the school safely and efficiently, in alignment with this STP.
- Encouraging carpooling to reduce vehicle congestion and emissions during peak school hours.

These measures reflect a commitment to sustainable transport options and align with the broader ESD goals for the activity.

The new homebase building was oriented with the main long elevation to the north-west and a high level of façade sun shading to minimise heat gain. Further it incorporates passive cooling using a high window area for natural ventilation. Proposed adjacent planting and landscaping to external areas will further mitigate the proposal's exposure to extreme climate events.

2.2.2 Construction

The Principal Contractor will be responsible for establishing and managing the site in accordance with planning approvals and relevant legislation and regulations.

The proposed construction hours will be as follows:

- 7:00am to 6:00pm, Monday to Friday.
- 8:00am to 1:00pm, Saturday.
- No work without prior approval on Sundays and Public Holidays.

The site will be secured and made safe from the public throughout the works via the erection of a 1.8m to 2.4m high perimeter fence, including shade cloth hoarding attached where appropriate in locations where a solid hoarding is not provided, along the entire work site boundary to prevent unauthorised entry to the construction site.

The safety of staff and students during construction is of utmost importance, and safety measures are to be adopted by the Principal Contractor at all times. Safety measures include secure hoarding of the construction site, appropriate signage to help staff manage children's movements, limiting heavy vehicle movements to school off-peak times, forward entry and exit of all construction vehicles to and from the site and licensed traffic controllers.

The types of vehicles that will be used for this project are listed below:

- Utes and trucks up to 3T, on a daily basis
- Excavators will be use during foundation and services trenching
- Concrete trucks and concrete pumps will be used for pouring foundations.

Construction waste will be managed in accordance with a Construction Waste Management Plan (**CWMP**) (refer **Section 6.12**). The CWMP ensures compliance with all applicable regulatory requirements during the construction phase of the proposed activity and details measures to promote responsible waste separation, including recycling provisions and procedures.

The current approximate construction program milestones of the proposal are provided in the below table. A detailed construction program for the proposal will be developed by the Main Works Contractor.

| Milestone | Start |
|--------------------------------|-------------|
| Construction contract award | July 2025 |
| Main construction commencement | August 2025 |
| Commissioning and handover | Late 2026 |

Table 5: Construction Program

Demolition

Any works relating to the removal and/or demolition of the demountables will be undertaken through a separate planning pathway. Once the demountables are removed the proposed activity includes the demolition of existing areas of footpath, fencing, retaining walls and garden beds. It also involves the demolition of the existing traffic island and carriageway, as well as the dismantling, temporary storage and relocation of an existing shade structure refer **Figure 13** and **Figure 14** below.



Figure 13: Existing and Demolition site plan -north



Figure 14: Existing and Demolition site plan -south

Earthworks

Bulk excavation will be required for the construction of new pavements and general levelling after the removal of the demountables to accommodate the new building Q and landscaping.

Bulk earthworks will comprise 150mm topsoil removal, creation of a platform for the proposed ramp and footpath, and excavation for stormwater pipes and pits. The total volume of bulk is relatively reasonable with approximately 583.4 cu.m cut required which are based on 785.4 cu.m cut and 202.0 cu.m fill respectively.

Erosion and sediment controls measures will be applied to manage earthworks.

Tree and Vegetation Removal

The Arboricultural Impact Assessment prepared by Allied Trees (**Appendix 22**) identified the removal of 33 trees based on conflict with the proposed new Building Q or the supporting paths and works.

Of the trees required to be removed, the assessment identified the following tree retention values:

- 12 High Retention Value trees.
- 16 Medium Retention Value trees.
- 5 Low Retention Value trees.

Twenty -five (25) trees to be retained are to be managed and protected for the duration of the works. Exclusion zones around trees to be retained will be demarcated by protection fencing, boarding and wraps, as per the Arboricultural Impact Assessment. The Principal Contractor will prepare an approved site-specific Construction Management Plan that demonstrates protection of trees and other identified vegetation in accordance with the Mitigation Measures at **Appendix 1**.

Utilities and Services

The following new utility connection works are proposed, and will be subject to the necessary approvals:

- New in ground sewer and water connections to the new building.
- Proposed new generator to new building as required under NCC Specification 43.

Any works relating to the demolition of the existing substation and construction of a new substation do not form part of this activity and will be undertaken through a separate planning pathway.

Waste Management

The Principal Contractor will adhere to the Construction Waste Management Plan by EcCell Environmental at **Appendix 15**. Waste will be confined to minimise dust and pollution and disposed of in compliance with the *Environmental Planning and Assessment Act 1979*. Designated areas on site will be allocated for the separated storage of building materials and works waste, as well as for sorting and removing waste for recycling, reuse, or landfill. Waste that cannot be reused or recycled will be taken to an EPA-approved facility after proper classification. Hazardous waste will be labelled, kept separate from non-hazardous waste, securely contained, and disposed of by a certified hazardous waste carrier. Before transporting waste offsite, it will be verified that the transporter and facility are licensed to handle the specific materials. For more details, refer to the attached Construction Waste Management Plan (Appendix 15).

2.2.3 Operation

The activity does not propose any changes to the existing operation arrangements of the school, including any alterations to student or staff numbers, community use or operating hours. The existing school hours are outlined in **Table 6**.

Table 6: School Hours of Operation

| Activity | Hours of Operation |
|--------------------|---|
| School Hours | 8:30am – 3:30pm, Monday – Friday |
| Recess and Lunch | Staggered throughout the school day. |
| Administration | 8:00am – 6:00pm |
| After School Hours | 4:00pm – 6:00pm (Hall, Library) Monday – Friday |
| Cleaning | 5:30am to 6:00pm, Monday to Friday |

Waste Management

The proposed operational waste management procedures involve the private collection of waste and recycling bins in accordance with the department's contracts with a private waste collection service. The appointed waste contractors wheel the Mobile Garbage Bins (MGB) for each waste stream from their resting position to the back of the truck for collection and then wheel the MGBs back at nominated times in accordance with the relevant waste contract.

The nominated WCP is within the boundary of the school site and not within a public place. The WCP will not change because of the proposed activity.

2.3 Related activities

There is no other nearby development activity to the site.

Any works relating to the existing demountables will be undertaken via a separate planning pathway, and do not form part of this activity.

3. Proposal Need and Alternatives

3.1 Proposal Need

The proposed activity is part of the NSW Government's plan to rebuild public education with the 2024-25 Budget delivering record education funding, including an historic \$1.4 billion for new and upgraded schools in regional NSW. This targeted investment ensures regional communities receive access to world class public education.

The proposed activity is part of this broader program and will provide much needed upgrades to Vincentia HS through improvements to the quality of facilities and permanent teaching spaces offered at the school. Additionally, the proposed activity will provide a formalised Kiss and Drop zone and additional car parking on the site.

3.2 Alternatives

The proposed activity has been developed following a consideration of options and alternatives to address the need identified above. A summary of the options considered is provided in **Table 5**.

| Option | Discussion | Preferred Option |
|------------------------------------|---|--|
| Option 1: The Proposed Activity | The proposed activity orients the building to be parallel with the existing Block H and Sports Court. This is to suit the required bushfire APZ which does not encroach onto unmanaged bushland to the north of The Wool Road. This option also maintains the min 12m separation from the existing hall. | The proposed activity is the preferred option as it provides an optimal outcome for students and staff whilst ensuring minimal environmental impacts. It best aligns with the strategic goals of the State, as the proposal effectively utilises the \$1.4 billion of funding provided by the NSW Government for new and upgraded schools in regional NSW. The proposed activity will therefore ensure that the Vincentia local area benefits from provided government funding to improve the quality of essential services for residents in the region. |
| Option 2: Alternative Design | The alternative design was generally based on the Masterplan Feasibility Report prepared by NBRS. The proposed building was to be aligned parallel to the Kiss and Drop zone and maintains a minimum 12m separation from the existing hall to meet NCC Spec 43 requirements. The building footprint minimises impact to existing trees. | The alternative design is <u>not</u> <u>preferred</u> as the bushfire APZ encroaches onto unmanaged bushland outside of the subject site to the north of The Wool Road. |
| Option 3: Do Nothing | The do nothing option would retain the existing arrangements on site. | Doing nothing is <u>not preferred</u> as it does not effectively utilise available NSW Government funding and the proposed new teaching spaces and additional upgrades would not be made available to students and staff. |

Table 7: Assessment of Options and Alternatives

4. Statutory and Strategic Framework

4.1 Permissibility and Planning Approval Pathway

State Environmental Planning Policy (Transport and Infrastructure) 2021 (**TI SEPP**) aims to facilitate the effective delivery of infrastructure and educational establishments across the state and provides that various developments for the purposes of a government school are permitted without consent. The proposed activity is development permitted without consent as outlined at **Table 6**.

| Division and Section within TI SEPP | Description of Works | |
|---|---|--|
| 3.37 | The proposed activity comprises construction, operation or maintenance on behalf of a public authority within the boundaries of an existing or approved government school, including: | |
| | Section 3.37(1)(iii) a permanent classroom, | |
| | • Section 3.37(1)(iv) a car park, | |
| | Section 3.37(b) minor alternations or additions such as— | |
| | (i) internal fitouts, or | |
| | (ii) alterations or additions to address work health and safety requirements or to provide access for people with a disability, or | |
| | (iii) alterations or additions to the external façade of a building that do not increase the building envelope (for example, porticos, balcony enclosures or covered walkways), | |
| | • Section 3.37(f) construction, operation or maintenance of a building associated with the operation of the school on land within a prescribed zone. | |
| | Under Section 3.37(2)(a) a building resulting from development carried out under subsection (1)(a) or (f) must not have a height of more than the greater of— | |
| | (a) the maximum height permitted for a building under an environmental planning instrument applying to the land on which the development is proposed to be carried out, or | |
| | (b) 4 storeys. | |
| | The proposed activity involves the construction of building(s) with a maximum height of two storeys which is less than the maximum of four storeys outlined in the policy. It is noted that there is no maximum height of building control for the site under the <i>Shoalhaven Local Environmental Plan 2014</i> . | |
| | In accordance with Section 3.37(4) the proposed activity would not result in the contravention of any existing condition of the development consent currently operating (other than a complying development certificate) that applies to any part of the school, relating to hours of operation, noise, vehicular movement, traffic generation, loading, waste management or landscaping. | |
| | In accordance with Section 3.37(5A) the Design Quality Principles set out in Schedule 8 of the TI SEPP and the Design Principles set out in the Design Guide for Schools have been considered as set out in Section 2.2.1 of this REF. | |

| | Т | able | 8: | Descri | ption | of | Pro | posed | Activities | under | the | ΤI | SEPP |
|--|---|------|----|--------|-------|----|-----|-------|-------------------|-------|-----|----|------|
|--|---|------|----|--------|-------|----|-----|-------|-------------------|-------|-----|----|------|

Activities permissible without consent require environmental impact assessment in accordance with Division 5.1 of the EP&A Act and are assessed and determined by a public authority, referred
to as the determining authority. The department is the proponent and determining authority for the proposed works.

Additionally, section 5.7 of the EP&A Act states that an activity that is likely to significantly affect the environment must be subject of an Environmental Impact Statement rather than an REF. The effects of the activity on the environment are considered in **Section 6** of this REF and have been assessed as a less than significant impact and can therefore proceed under an REF assessment.

Section 171(1) of the EP&A Regulation notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the guidelines that apply to the activity.

The Guidelines for Division 5.1 Assessments (DPE June 2022) and the Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools Addendum (DPHI, October 2024) provide a list of environmental factors that must be taken into account for an environmental assessment of the activity under Division 5.1 of the EP&A Act. These factors are considered in detail in **Section 6** of this REF.

Existing Development Consents

A request for all development consents applying to the site was submitted to Shoalhaven City Council (**Council**) under the *Government Information (Public Access) Act 2009* (**GIPA Act**) and the development consent(s) listed in **Table 7** were identified.

| Development Application # | Description | Date Determined |
|---------------------------|---|----------------------|
| DA07/1040 | Replace existing demountable classrooms with a new Special Education Building. | 22 February 2008 |
| DA07/25/93 | Construction of two lifts for disabled access to school buildings. | 27 September 2007 |
| DA92/2016 | Stage two construction of permanent school buildings including general learning spaces, specialised classrooms and school hall. | 6 November 1992 |
| DA90/2434 | Stage one construction of home high school buildings, 96 car parking spaces, pedestrian footpath, drainage, internal road arrangement, drainage, fence and other associated works. | 5 February 1991 |

Table 9: Development consents applying to the site

The proposed activity would not contravene any existing condition of the consent(s) currently operating (other than a complying development certificate) that applies to any part of the school, relating to hours of operation, noise, vehicular movement, traffic generation, loading, waste management or landscaping.

4.2 Environmental Protection and Biodiversity Conservation Act 1999

The provisions of the EPBC Act do not affect the proposal as it is not development that takes place on or affects Commonwealth land or waters. Further, it is not development carried out by a Commonwealth agency or development on Commonwealth land, nor does the proposed development affect any matters of national significance. An assessment against the EPBC Act checklist is provided at **Table** 8.

Table 10: EPBC Act Checklist

| Consideration | Yes/No |
|--|--------|
| Will the activity have, or likely to have, a significant impact on a declared World Heritage Property? | No |
| Will the activity have, or likely to have, a significant impact on a National Heritage place? | No |
| Will the activity have, or likely to have, a significant impact on a declared Ramsar wetland? | No |
| Will the activity have, or likely to have, a significant impact on Commonwealth listed threatened species or endangered community? | No |
| Will the activity have, or likely to have, a significant impact on listed migratory species? | No |
| Will the activity involve any nuclear actions? | No |
| Will the activity have, or likely to have, a significant impact on Commonwealth marine areas? | No |
| Will the activity have any significant impact on Commonwealth land? | No |
| Would the activity affect a water resource, with respect to a coal seam gas development or large coal mining development? | No |

4.3 Other Approvals and Legislation

Table 9 identifies any additional approvals that may be required for the proposed activity.

| Legislation | Relevant ? | Approval Required ? | Applicability |
|---|---------------|---------------------------|---|
| State Legislati | on | | |
| National Parks and Wildlife Act 1974 | Yes | No | The aim of the NPW Act is to ensure the conservation of the natural environment including any objects, places or features identified as having high cultural value or significance. Section 90 of the NPW Act facilitates the issuance of Aboriginal Heritage Impact Permits (AHIP) in the instance there are any potential aboriginal heritage impacts. There are no Aboriginal sites within 200m, nor is the site assessed as likely to contain Aboriginal cultural heritage values. The NPW Act is not relevant as the proposed activity does not require a Section 90 approval. The site is adjacent to the NSW National Parks and Wildlife Service Estate, Jervis Bay National Park. Areas within this estate are reserved under this Act. The proposed activity will be contained entirely within the existing SP2 Educational Establishment zoned land of the existing school site. No works are anticipated to encroach on Jervis Bay National Park. |
| Rural Fires Act 1997 | Yes | No | The site is mapped as BFPL. School buildings are classified as special fire protection purpose (SFPP) under the Rural Fires Act 1997 and are assessed against the Bushfire Protection Measures (BPM) of the Planning for Bushfire Protection (PBP). Building Q has been designed in accordance with PBP and will be constructed to BAL-19 under AS 3959-2018. |
| Biodiversity Conservation Act 2016 | Yes | No | Part 7 of the Biodiversity Conservation Act 2016 (the BC Act) outlines biodiversity assessment and approval requirements and states that an activity under Part 5 of the EP&A Act is to be regarded as an activity likely to significantly affect the |

Table 11: Consideration of other approvals and legislation

| Legislation | Relevant ? | Approval Required ? | Applicability |
|--|---------------|---------------------------|--|
| | | | environment if it is likely to significantly affect threatened species as defined by the test of significance criteria in Section 7.3 of the BC Act, which may then lead to a Species Impact Statement (SIS) or Biodiversity Assessment Report (BDAR). |
| | | | The Flora and Fauna Assessment report (FFA) prepared by Water Technology the proposed activity (Appendix 21) includes the test of significance and concludes that the proposed activity does not significantly affect any threatened species or ecological communities as per the BC Act. As a result, an EIS (and therefore a SIS or a BDAR) is not required. |
| Contaminated Lands Management Act 1997 | Yes | No | This REF is supported by a PSI prepared by Stantec (Appendix Y) which confirms that the site is suitable for its intended use. Additionally, no approval is required under the CLM Act. Furthermore, the Section 10.7 Planning Certificate does not indicate that the site is significantly contaminated or that any approvals under the CLM Act are required. |
| Roads Act 1993 | Yes | No | The site has frontage to The Wool Road (a classified road). |
| | | | No works are proposed outside the site boundary or within the corridor of The Wool Road. |
| State Legislati | on – State E | nvironmenta | I Planning Policies |
| State Environmenta I Planning Policy (Planning Systems) 2021 | Yes | No | The Planning Systems SEPP allows development for a building for an existing educational establishment to be classified as State Significant Development (SSD) if the EDC exceeds \$50 million. The proposed activity does not reach these thresholds and is not classified as State Significant Development. The proposed |
| | | | activity is being carried out under Section 3.37 of the TI SEPP as development without consent. |
| State Environmenta I Planning Policy (Sustainable Buildings) 2022 | Yes | Yes | The provisions of Chapter 3 of the SB SEPP apply to the proposed activity as it involves the erection of a new building with an estimated development cost (EDC) greater than \$5 million. This REF is accompanied by a Net Zero Statement and ESD Report which outline the strategies to resolve operational and construction emissions as well as committing to Net Zero operational emissions by 2050. An Embodied Emissions Materials Form been prepared by Arcadis (Appendix M) as a mitigation measure. |
| State Environmenta I Planning Policy (Resilience and Hazards) 2021 | Yes | No | State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP) contains planning provisions relating to: Chapter 2- Land use planning within a coastal zone Chapter 3- Management of hazardous and offensive development Chapter 4- Remediation of contaminated land and to minimise risk of harm The site is not identified as a coastal use or within a coastal environment area. Therefore, the provisions of Chapter 2 are not required to be assessed. Chapter 4 of the Resilience and Hazards SEPP provides a |

| Legislation | Relevant ? | Approval Required ? | Applicability | |
|---|---------------|---------------------------|---|--|
| | | | statewide planning approach for the remediation of land to reduce the risk of harm to human health or the environment. Under Chapter 4, a consent authority must consider whether the land is suitable for a proposed activity from a contamination perspective. The preliminary site investigation (PSI, Appendix Y) completed for the proposed activity concludes that the site is not contaminated and is suitable for the proposed activity. | |
| State Environmenta I Planning Policy (Industry and Employment) 2021 | Yes | No | The proposed activity does not include signage works. Therefore, the signage provisions of the IE SEPP are not required to be assessed. | |
| Shoalhaven Local Environmenta I Plan 2014 | Yes | No | The site is zoned SP2 Educational Establishment. While the TI SEPP removes the requirement to seek consent under the provisions of the <i>Shoalhaven LEP 2014</i> , the proposal is consistent with the relevant objective of the SP2 zone which are to: | |
| | | | To provide for infrastructure and related uses. | |
| | | | To prevent development that is not compatible with or that may detract from the provision of infrastructure. | |
| | | | Height of Not subject to a height of building control. Buildings | |
| | | | Floor Space Not subject to a floor space ratio control. Ratio | |
| | | | HeritageThe proposed activity is within proximity to the heritage item 'Colonial road-remnants (former Wool Road)',item number 218 listed under Part 1 of Schedule 5 of the SLEP 2014.Refer Section 6.6 | |
| | | | Shoalhaven LEP mapping is included Figure 11 below. | |



Picture 1 Land Zoning Map

Picture 2 Height of Buildings Map

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Picture 3 Heritage Map

Source: Urbis, 2024

Picture 4 Bushfire Prone Land Map

Figure 15: Shoalhaven LEP Maps

4.4 Strategic Plans

Table 10 considers strategic plans that are relevant to the proposed activity.

Table 12: Consideration of applicable Strategic Plans

| Strategic Plan | Assessment | | |
|--|---|--|--|
| Illawarra Shoalhaven Regional Plan 2041 | The Illawarra Shoalhaven Regional Plan (Regional Plan) provides the overarching strategic plan for growth and change in Wollongong, Shellharbour, Kiama and Shoalhaven. It is a 20-year plan to inform land use planning and inform the work of agencies to plan for growth and change and create an innovated and connected diverse and resilient Shoalhaven. It identifies key challenges facing Sydney including increasing the population to eight million by 2056, 817,000 new jobs and a requirement of 725,000 new homes by 2036. | | |
| | The Illawarra Shoalhaven Region Plan includes the following objectives of relevance to the proposed activity: | | |
| | Objective 11 of the Plan aims to protect important environmental assets. The proposed activity contributes to the improvement of educational facilities within its existing site and does not impact the adjacent environmental assets. | | |
| | Objective 15 of the Plan targets a Net Zero region by 2050. The proposed activity achieves a 4-Star Green Star rating demonstrating its contribution to achieving Net Zero in accordance with this objective. | | |
| Shoalhaven Local Strategic Planning Statement | The Shoalhaven Local Strategic Planning Statement 2020 (LSPS) identifies a long term direction for future land-use planning work and to plan for and deliver homes, jobs, services, and infrastructure. | | |
| | The LSPS sets out two key directions, Direction 1 Managing Economic Growth includes delivering infrastructure (including schools). The proposed activity supports Direction 1 by delivering adequate and appropriate education infrastructure. | | |
| | The proposed activity will upgrade VHS which directly addresses | | |

| Strategic Plan | Assessment |
|--|---|
| | Collaboration Activity CA2.5 of Planning Priority 2: Work with the NSW Department of Education to identify and deliver new and upgraded schools and identify opportunities for community use of facilities. |
| Shoalhaven Delivery Program Operational Plan and Budget 2024- 2025 | Shoalhaven Council has provisioned for capital works as part of Blackspot Program to improve the intersection of The Wool Road and Mernie Street approximately 2 kilometres south of the school. The proposed activity does not preclude the future implementation of any potential improvements to The Wool Road. No other capital works have been allocated funding that are directly relevant to the proposal. |

5. Consultation

5.1 Early Stakeholder Engagement

Table 11 provides a summary of early stakeholder (non-statutory) consultation undertaken to inform project development and preparation of the REF.

| Stakeholder | Engagement | |
|---|--|--|
| Shoalhaven City Council (Council) | A transport working group (TWG) was formed of representatives from Shoalhaven City Council (Council), Transport for New South Wales (TfNSW), School Infrastructure (SI), RP Infrastructure (RPI), Fulton Trotter Architects (FT) and Bitzios Consulting (Bitzios). | |
| | 5 September 2024: | |
| | An introductory meeting was held to discuss the activity's transport context. The project team met with Shoalhaven City Council and TfNSW stakeholders to provide a project overview, rapid transport assessment and list of proposed transport initiatives. The project team was represented by SI, RPI, FT and Bitzios. | |
| | 4 November 2024: | |
| | A follow-up transport meeting was held with stakeholders from Shoalhaven City Council and TfNSW. The project team provided project and design updates. The project team was represented by SI, RPI, FT and Bitzios. | |
| | 9 December 2024: | |
| | An advisory meeting was held with Council to provide site context, planning consideration and architectural plans. The project team was represented by SI, , the department's Statutory Planning team, RPI, FT and Urbis. | |
| Transport for New South Wales (TfNSW) | A TWG was formed of representatives from Council, TfNSW, SI, RPI, FT and Bitzios. | |
| | 5 September 2024: | |
| | An introductory meeting was held to discuss the activity's transport context. The project team met with Shoalhaven City Council and TfNSW stakeholders to provide a project overview, rapid transport assessment and list of proposed transport initiatives. The project team was represented by SI, RP, FT and Bitzios. | |
| | 4 November 2024: | |
| | A follow-up transport meeting was held with stakeholders from Shoalhaven City Council and TfNSW. The project team provided project and design updates. The project team was represented by SI, RPI, FT and Bitzios. | |
| School community | A project review group (PRG) was formed of relevant school community stakeholders and project team representatives. | |
| | 21 February 2023: | |
| | A start up meeting was held with the school principal, Director Education and Leadership (DEL) and SI to present the project governance, proposed upgrades and next steps. The project team was represented by SI. | |
| | 24 July 2024: | |
| | An introductory meeting was held with the school principal and assistant principal, DEL, P&C representative and the project team. An overview of the project and PRG governance arrangements | |

| Stakeholder | Engagement |
|--|--|
| | were discussed. The project team was represented by SI, Schools Infrastructure – Asset Management Unit (AMU), RPI and FT. |
| | 26 August 2024: |
| | Master plan options were presented to the school. In attendance were the school principal and assistant principal, DEL and P&C representative. The project team was represented by SI, RPI and FT. |
| | 31 October 2024: |
| | A project update was provided to the school indicating completion of the masterplan validation stage and the concept design was presented. In attendance were the school principal and assistant principal, DEL and P&C representative. The project team was represented by SI, RPI and FT. |
| | 12 December 2024: |
| | A project update was provided to the school indicating the completion of the concept design stage. The schematic design was presented along with internal layouts based on the pattern book design. School noted students with emotional disturbance require special consideration. In attendance were the school principal and assistant principal, DEL and P&C representative. The project team was represented by SI, RPI and FT. 6 March 2025: |
| | The project team presented the schematic design including internal finishes and layouts. In attendance were the school principal and assistant principal, DEL and P&C representative. The project team was represented by SI, RPI and FT. |
| Endeavour Energy | 26 July 2024 – preliminary enquiry: |
| | A preliminary enquiry was submitted in the Connections Portal to request an electrical engineer and information regarding capacity of existing substation supply. |
| | 11 November 2024 – load application: |
| | A load application was lodged to establish a new substation. Any works relating to the substation will be undertaken through a separate planning pathway, and do <u>not</u> form part of the activity under assessment in this REF. |
| Bus services presentation, | 19 December 2024: |
| including representatives from: Nowra Coaches, Shoal Bus (not in attendance; minutes shared) and Kennedy Tours. | Following the second TWG meeting, the project team met with local bus operators to present the proposed upgrades to the Kiss and Drop zone. |
| Community | 23 November 2023: |
| | A flyer on the project website notified the commencement of planning and geotechnical investigations to occur on 27 and 28 November 2023. |
| | October 2023: |
| | A flyer on the project website announced the proposed upgrades at Vincentia High School. |
| | September 2024: |
| | A flyer on the project website provided an update on project progress and notified the community of an information session to be held on 11 March 2025. |
| | 11 March 2025: |
| | A community information session was held at the school for the |

| Stakeholder | Engagement |
|-------------|---|
| | public community to provide an opportunity to view the master plan and concept design and provide feedback to the project team. Information boards and packs were made available. |

5.2 Statutory Consultation

Consultation will be undertaken with in accordance with statutory requirements under the TI SEPP and having regard to the SCPP DPHI and the SCPP DoE. This includes:

- Sending notices to adjoining neighbours, owners and occupiers inviting comments within 21 days.
- Sending notices to the local council and relevant state and commonwealth government agencies and service providers inviting comments within 21 days (being a major upgrade).
- Making the REF publicly available on the Planning Portal throughout the consultation period.

6. Environmental Impact Assessment

6.1 Traffic, Access and Parking

A Traffic and Transport Impact Assessment (**TTIA**) has been prepared by Bitzios Consulting and is included at **Appendix Q**. The TTIA addresses the traffic and transport impacts during the construction and operational stages of the proposed activity. The report also outlines the proposed mitigation measures for the activity to minimise any adverse impacts, where required.

Methodology

The TTIA provides a comprehensive analysis of both existing and predicted traffic conditions resulting from the proposed activity. The following methodology was undertaken to provide a comprehensive assessment of the existing traffic conditions:

- A review of the existing transport conditions including drop-off / pick-up arrangements, pedestrian and cycling facilities, public transport facilities and connectivity surrounding the subject site.
- A summary of previous consultation with relevant council and agencies through a TWG.
- A review of the existing transport planning documents.
- A transport assessment of the school student enrolment catchment and travel modes.
- A review of historical crash data.
- Assessment of the existing and proposed access arrangements for vehicles, servicing and refuse collection.
- Assessment of the school's car and bicycle parking provision.
- Assessment of the on-site parking layout, access, servicing and refuse collection requirements.

Existing Environment

Vincentia HS has frontage to the Wool Road, a Regional Road with a speed limit of 60km/hour. To the west it joins Naval College Road, a Regional Road with a speed limit of 60km/h to 80km/h

The site is accessed via a signalised intersection between The Wool Road and a driveway that is within the site boundary. The Basin Leisure Centre, located to the north of the Wool Road, is also accessed via this intersection.

Most residential catchments are outside a 1.2 km walkable area, with less than 1 per cent of students living within this range. Existing shared paths connect the school to surrounding areas, with limited paths within these areas, but proposed paths are identified in the Shoalhaven *Pedestrian Access and Mobility Plan* (**PAMP**).

Ten school bus services provided by ShoalBus, Premier Motor Service, and Nowra Coaches service Vincentia HS, with stops within the school site.

A student travel mode share survey conducted in October 2023 (refer **Figure 14**) showed that carbased travel is the highest mode, with 60% of car trips being carpooling. Buses account for 63% of student travel, with 81% of students living within 400m of a bus stop. Active transport participation is limited due to the surrounding environment. A review of reported crashes between 2018 and 2023 identified six crashes within 100m of key intersections along The Wool Road. These incidents do not appear to involve school-related traffic.



Figure 16 Travel Mode Share

Assessment

The proposed activity does not increase the school population, thus it does not generate any additional traffic. However, the proposed activity includes provision of a dedicated Kiss and Drop zone, new parking spaces and proposed internal road upgrades to address safety and operational issues and promote sustainable transport.

The assessment finds:

- The new Kiss and Drop area is within the new vehicle access area located toward the front of the site and ill provide capacity for six to seven vehicles. The new vehicle access area also have capacity for further queuing vehicles within the site and the ability for vehicles to recirculate if necessary. The projected service capacity is approximately 180 vehicles over a 30-minute period. Student pick-up and drop off demands are estimated to be around 127 to 130 vehicles based on existing travel mode shares and car-pooling levels.
- To manage demands and the operational efficiency of the Kiss and Drop, the infrastructure provisions will be supported by the School Travel Plan, Travel Access Guide and supporting operational guidance on the correct and appropriate use of the Kiss and Drop zone.
- The Kiss and Drop zone will offset the need to provide dedicated parking spaces for student pick-up/drop-off purposes on site. Outside of peak pick-up and drop-off times the Kiss and Drop zone could be used for visitor parking.
- The new pedestrian footpath and crossings provide clear designated crossing points through the site's main vehicle areas. Formalised footpath facilities along the western boundary and out to The Wool Road remove previous trip-fall risks with informal pedestrian areas.
- The 17 proposed additional formalised parking spaces within school property will accommodate for visitor and student parking, in addition to the 98 existing spaces, making for a total of 115 car parking spaces on site. The 115 spaces are a practical maximum on-

site parking supply based on available space, while balancing the need for other school facilities and adequate separation of student areas from on-site vehicle traffic.

- The formalised accessible parking for the pick-up and drop off of students in an area clear of bus movements improves pedestrian safety.
- The improved line marking and delineation for buses will provide greater delineation for buses and resolve previous issues with vehicle conflicts and delays for buses being able to depart.
- The on-site car parking facilities are considered to be compliant with the relevant requirements of Council's DCP and Australian Standards AS2890.1, AS2890.2 and AS2890.6.

Construction

The key findings of the TTIA in respect of construction traffic and parking are as follows:

- The construction of the Building Q will generate temporary traffic impacts on the local road network due to the movement of heavy vehicles, material deliveries and workforce commuting. This is not anticipated to impact the road network.
- Construction site access will be provided through a new entry gate near the existing driveway entry.
- During the construction work, the loading and unloading of all materials will only occur within the site.
- It is estimated there will be demand for in the order of 50 construction worker cars. During school holiday periods construction works can use the staff parking area. When the school is in operation during school term, temporary parking areas be allocated within the construction access zone area, clear of the area needed for construction service vehicle manoeuvring.
- Construction vehicle traffic movements shall be scheduled so the majority of movements occur outside school peak periods between 7:45 AM 8:45 AM and 2:00 PM 3:30 PM.
- There are to be no construction vehicle movements in or out of the access gate during school PM peak/finish time to minimise conflicts with parents/students.

Mitigation Measures

Subject to the implementation of the mitigation measures outlined below, the proposed activity will have a negligible impact on the traffic conditions of the area.

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|--------|--|--|------------|-------------------------------|
| OPTMM1 | To support infrastructure provisions and provide supporting operational guidance on the correct and appropriate use of the transport | Prepare and implement a School Travel Plan and Travel Access Guide for use by students, parents and staff. | Operation. | Not significant. |

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|-------|---|---|--------------|-------------------------------|
| | facilities surrounding the site. | | | |
| CTMM4 | To improve site operations and assist with reducing impacts to school bus timetables caused by private vehicles utilising the bus area. | Provide a formalised Kiss and Drop zone. The Kiss and Drop area is to consist of a zone with capacity for 6 to 7 vehicles, plus further queuing space. | Operation. | Not significant. |
| CTMM1 | To ensure safe pedestrian access to the site. | Provide safe crossings through the site's main entry area | Construction | Not significant. |

6.2 Noise and Vibration

A Noise and Vibration Impact Assessment (**NVIA**) has been prepared by NDY in accordance with relevant NSW EPA guidelines and is attached in **Appendix 18**. The report evaluates the potential noise and vibration impacts associated with the proposed activity, covering both the construction and operational phases of the educational establishment.

Methodology

The noise and vibration assessment methodology includes the following key steps:

- Identification of Noise Sensitive Receivers: Key residential, recreational, and educational receivers surrounding the site were identified, with their proximity to construction and operational activities noted.
- Establishing Noise and Vibration Criteria: Criteria were developed based on relevant guidelines, including the *NSW Noise Policy for Industry* (**NPI**), *Interim Construction Noise Guideline* (**ICNG**), and *Assessing Vibration: A Technical Guideline*.
- Noise Prediction and Assessment:
 - Noise level predictions were made using typical construction equipment and activity sound power levels, accounting for distance attenuation, shielding, and reflections.
 - Scenarios for operational noise, including building services and traffic, were modelled to ensure compliance with criteria.
- Vibration Assessment: Potential vibration impacts were evaluated for construction equipment, with recommendations for detailed site-specific assessments during project execution.

Existing Environment

The existing noise environment around the high school site is relatively quiet, reflecting open space conditions.

As shown in **Figure 17**, a leisure centre property along The Wool Road (north of the site) and a residential property at Naval College Road (south of the site) are identified as the most affected receivers. The sensitive receivers are identified in **Table 15** below.

| Receiver | Address | Approximate distance (metres) | Туре |
|----------|---|----------------------------------|-------------|
| A | 1413 Naval College Road, Vincentia | 300 | Residential |
| В | Bay & Basin Leisure Centre, the Wool Road | 210 | Leisure |

Table 14: Sensitive Receivers

The project noise trigger levels (**PNTL**) are the most stringent noise levels of the NSW NPfI project intrusiveness and project amenity noise levels for day, evening and night-time periods and are project-specific, as shown in **Table** 14 below:

| Table 15: Project Noise Trigger Levels | | | | | |
|--|-----------------------------|-----------------------------|------------------|--|--|
| Location | Time | Descriptor | External PNTL | | |
| | 0700 to 1800 | LAeq, Day | 53dBA (Day) | | |
| Α | 1800 to 2200 | LAeq, Evening | 43 dBA (Evening) | | |
| | 2200 to 0700 | LAeq, Night | 38 dBA (Night) | | |
| В | When in use (commercial) | When in use (commercial) | 65 dBA | | |



Source: NDY, 2024

Figure 17 Sensitive Receivers

Assessment

There are no expected changes to noise emissions from waste collection, the school PA system and school bells, outdoor areas, operational traffic or fire pump rooms on site.

The new mechanical plant will be fitted with acoustic louvers for condenser units and internally lined ducts with 50 mm insulation for both ends on fans. It is assumed that the condenser units will operate in a limited way during the evening and not operate during nighttime periods.

Construction noise is predicted to be below 75 dBA. Construction noise for excavation and piling will require a perimeter hoarding as indicated to meet recommended noise levels inside the nearest school building. Time-managed machinery will be required for the tracked excavator and dumper truck. The vibration levels from percussive piling works are expected to meet the construction vibration criteria for sensitive structures to vibration as per DIN 4150 – 3.

The potential noise and vibration impacts resulting from the proposed activity are considered acceptable according to the state and local regulations. The extent and nature of potential impacts are low and will not have a significant impact on the locality, community and/or the environment.

Mitigation Measures

Subject to the mitigation measures outlined below, potential impacts can be appropriately managed to ensure that there is minimal impact on the locality, community and/or the environment.

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|--------|---|---|--------------|-------------------------------|
| OPMM9 | To avoid impacts resulting from the plant room operation. | Acoustic louvres installed surrounding the mechanical plant and fans must have internally lined ducts with acoustic insulation. | Design | Not significant. |
| OPMM10 | To meet the Project Specific Noise Trigger Level (PNTL) levels during nighttime. | Mechanical plant room not to operate during night time periods (after 10 pm). | Operation | Not significant. |
| CMM17 | To protect the existing school buildings from construction noise. | Construction noise for excavation and piling will require a perimeter hoarding to meet recommended noise levels inside the nearest school building to the works. Time managed machinery will be required for the tracked excavator (70 per cent) and dumper truck (50 per cent). | Construction | Not significant. |

6.3 Contamination and Hazardous Materials

A Preliminary Site Investigation (**PSI**) Report has been prepared by Stantec and is included at **Appendix 24**. The results of the PSI did not necessitate the completion of a Detailed Site Investigation (**DSI**). The PSI assesses and quantifies any soil and groundwater contamination at the site and confirms that the site can be made suitable to accommodate the proposed upgrade works.

Methodology

The methodology to undertake the PSI involved:

- A desktop study of information for the site and surrounds. This desktop study included a review of:
 - A collection of historical data.
 - Relevant mapping including geology, hydrogeology, topography and acid sulfate soils risk maps.
 - NSW EPA contaminated land records and Protection of the Environment Operations (PoEO) Licenses.
 - Information and documentation provided to Stantec by the client, including publicly available asbestos registers for the site.
- An onsite inspection primarily focused on the portions of the site that are proposed for upgrade and alteration.

- Interviews with relevant site operators, where possible.
- Development of a Preliminary Conceptual Site Model based on the information gathered during the desktop study and site inspection.

Existing Environment

The PSI report identified the site was undisturbed until 1993, when the construction of the current school commenced. The areas surrounding the site are generally at low risk of contamination, with bushland located to the east, south and west. A Rural Fire Services (**RFS**) facility is located approximately 200m from the site. It is unconfirmed if fire storage and/or the use of per- and poly-fluoroalkyl (**PFAS**) products occurred as part of the operations. Based on surface elevations, the RFS facility is inferred to be downgradient of the site and the risk of contamination is considered to be low.

Assessment

Evidence of filling is noted at various locations within the site. The sports field appears to be constructed upon fill, as well as the areas surrounding the basketball courts and surrounding some buildings. Filling was also observed along the southern site boundary where various wastes and discarded objects appeared to be stored. Outcrops of sandstone rock were observed at multiple locations within the site, indicating that the native soil profile is limited. As such, the likelihood of material being imported to the site during initial construction and ongoing operation and upgrades is high. The fill encountered at the site did not appear to contain properties that would be considered aesthetically unsuitable, as per the guidance of the ASC NEPM 2013, with the exception of plastic, brick and glass at discrete locations.

The soils assessed from within the site, at the points of sample collection, did not contain concentrations of chemical contaminants above the adopted human health criteria that would preclude the ongoing land use as an educational establishment, nor present a potential risk to ecological receptors under the proposed upgrades. Soils could be considered for off-site reuse, particularly natural soils and rock, however that would require detailed assessment in accordance with NSW EPA requirements.

The PSI references the Asbestos in Grounds Management Plan prepared by WSP in 2021 (refer **Appendix 28**). This plan notes that asbestos debris and sheeting are presumed to be present beneath several demountable buildings, which is supported by the observations of waste and anthropogenic materials being present beneath buildings during the inspection, which are in proximity to the area defined for the proposed activity. Asbestos containing materials have not observed on ground surface or in soil excavated during Stantec's investigation.

The PSI concluded that that the site is suitable for the proposed activity. Several mitigation measures have been proposed to manage the risk of unidentified contamination, as well as the classification and disposal of waste.

Mitigation Measures

Subject to the implementation of the following mitigation measures proposed by Stantec, it is considered that the activity will have a negligible environmental risk due to contamination and complies with all relevant NSW EPA requirements.

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|-------|---|---|-------------------|-------------------------------|
| LCMM1 | Due to the potential occurrence of unexpected finds during construction phase. | To manage unidentified contamination risks, develop an unexpected finds protocol for unidentified asbestos or other contamination. | Pre- Construction | Not significant |
| LCMM2 | To ensure that the proposed activity will not have a significant impact on human health and ecological receptors. | Any modifications will need to be assessed by preparing a new REF or an REF document addendum, in consideration of potential contamination and hazardous materials and in accordance with the EP&A Act. | Construction | Not significant. |
| CMM2 | To ensure that the proposed activity will not have a significant impact on human health and ecological receptors. | All future activities should be conducted as per a suitable Construction and Environmental Management Plan (CEMP) to minimise potential risks to human health and the environment. | Construction | Not significant. |
| CMW20 | To avoid the health risks associated with improperly disposed soils and legal liabilities associated with non-compliance of waste disposal. | Any material being removed form site must be classified for off-site disposal in accordance with the EPA (2014) <i>Waste</i> <i>Classification Guidelines</i> and/or an applicable NSW EPA Resource Recovery Order. | Construction | Not significant. |
| SWMM2 | To ensure imported and/or blended material (if required) is suitable for the proposed land use. | Imported fill must be compatible with the existing soil characteristics of the site and limited to the following: Virgin excavated natural material (VENM); and/or Excavated natural material (ENM) certified as such in accordance with Protection of the Environment Operations (Waste) Regulation 2014; and/or Material subject to a Waste Exemption under Clause 91 and Clause 92 of the Protection of the Environment Operations (Waste) Regulation 2014 and recognised by the NSW | Construction. | Not significant. |

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|---|-------------------------------------|---|--------|-------------------------------|
| | | Environment Protection Authority as being "fit for purpose" with respect to the works under the REF. | | |
| | | Certificates from a suitably qualified person/contractor proving that the imported fill material complies with these requirements must be provided to the relevant DoE Project Lead prior to filling works. | | |

6.4 Hydrology, Flooding and Water Quality

A Flood Due Diligence Report has been prepared by TTW and is included at **Appendix 23**. The report assesses the flooding behaviour of the site and surrounding area under existing site conditions, as well as any flood planning controls relevant to the level of flood risk.

A Civil Engineering Report was prepared by Meinhardt (Appendix 14).

Methodology

Existing Environment

The site is in proximity to an unnamed second order creek. The creek is a tributary of the Moona Moona Creek and runs as close as 75m to the east of the site. The site is located just west of a large plateau associated with Jervis Bay National Park, at the start of a ridgeline that continues further west. This ridgeline separates the Moona Moona Creek and St Georges Bay catchments. Two channels separate the site from the plateau – one long, shallow channel adjacent to the site, and one short, steep channel further to the east.

Assessment

Flooding

The site is not at risk of flooding from either the St George Basin or Moona Moona creek catchments, even in a rare probable maximum flood (**PMF**) event. The presence of the creek to the east of the site acts as the main discharge point for the local catchment, redirecting local runoff flows away from the site. As such, overland flows are unlikely to have a notable impact at the school itself.

Overtopping of The Wool Road in both easterly and westerly directions from the site may be possible during the PMF event. This may result in emergency access to or from the site being delayed whilst the routes are inundated, or alternative routes are found. A mitigation measure has been recommended to require the school's Emergency Management Plan to address safety of users of the site in instances of severe widespread flooding.

The proposed activity is compliant with Shoalhaven DCP requirements and no flood planning controls apply to the site.

The potential risks are not considered to have a significant effect on the environment as the site is located outside of inundated areas even in the rare significant events.

Stormwater

The proposed stormwater design is summarised below:

- The proposed activity includes stormwater works. A pit and pipe system within the site area conveys minor flows.
- The roof drainage system has been designed and documented by the hydraulic engineer and is directly discharged to the proposed pit behind the proposed building.
- The proposed activity does not generate a requirement to provide onsite detention under Shoalhaven Development Control Plan 2014.
- Overland flow paths are provided to cater for upstream catchments to bypass the activity site and to convey major storm flows within the activity area along proposed swales near the proposed building.
- As the proposed activity constitutes less than 10% of the existing development footprint at the site, there are no significant environmental impacts and pollutant issues to be anticipated in comparison to existing conditions. Therefore, it is unnecessary to implement additional water quality protection measures.
- Water quality and sediment and erosion control measures, including water quality devices, sediment fences, and sediment basins, will be implemented across the site during the construction phase.

The Civil Engineering Report (Appendix 14) confirms -

- Adequate stormwater management systems will be implemented adjacent to neighbouring properties to ensure the proposed activity does not have significant adverse effects on the locality and community.
- The nature and extent of potential impacts are minor. Potential impacts can be appropriately mitigated or managed to ensure that there is minimal effect on the locality, community.

Mitigation Measures

The following mitigation measures are to be implemented to manage flooding, stormwater, run off and sediment control.

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|-------|---|--|--------------|-------------------------------|
| SWMM7 | To mitigate sediment and erosion during construction and early work stage. | Sediment and erosion control – Sediment control measures, including the provision of sediment basins, straw bales, inlet traps and filters will be implemented. | Construction | Not significant. |
| CMM13 | To minimize the impact of construction activities on the subject site. | All works will be scheduled taking into account approved works hours, any restrictions relevant to specific tolls / activities and respite periods etc. | Construction | Not significant |

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|--------|---|---|-----------|-------------------------------|
| OPFMM1 | To ensure the safety of users to the site via a flood emergency strategy in terms of access to the site during severe widespread flooding. | Upgrade the existing School Emergency Management Plan with respect to flooding. | Operation | Not significant |

6.5 Aboriginal Heritage

An Aboriginal Heritage Due Diligence (**AHDD**) report was prepared by Apex Archaeology in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales 2010* (**DECCW**) and examines the potential Aboriginal archaeological values of the site.

The purpose of the report is to identify, assess, and manage potential impacts on the site, ensuring compliance with cultural heritage protection laws.

Existing Environment

The desktop assessment identified that the site is considered disturbed with no previously registered Aboriginal sites within 200m, nor any previously identified landforms in close proximity that may result in sub-surface Aboriginal archaeological deposits.

The site inspection identified that ground disturbance is prevalent across the majority of the study area, as existing buildings and play areas have been benched into the original ground surface to create level areas. There are some areas of open space, however this area has seen ground surface modification activities over the last 100 years. Evidence of vegetation clearance, landscaping, building, landscape modification and ongoing land use practices are evident within the site.

Assessment

It is considered highly unlikely that archaeological material will be present within the site due to the level of disturbance within the site, as well as topographical features of the area being unlikely to have been a focus of occupation by Aboriginal people in the past.

A site visit identified no surface Aboriginal artefacts, and no areas of potential archaeological deposit were noted.

The site is not considered likely to have Aboriginal cultural heritage values. No further Aboriginal archaeological assessment, Aboriginal Heritage Impact Permit or Aboriginal Cultural Heritage Assessment are required.

Mitigation Measures

The results of the assessment conclude that no further archaeological assessment is required for the site and no application for an Aboriginal Heritage Impact Permit is necessary. Subject to the mitigation measures in the table below, aimed to address the discovery of unanticipated

archaeological material, it is expected that the proposed activity will have a negligible impact on the Aboriginal cultural values of the area.

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|------|--|---|--------------------------------------|-------------------------------|
| HMM2 | To ensure that the proposed activity will not have a significant impact on Aboriginal Heritage. | If any unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, site or places) are discovered during any construction work, all works in the vicinity must cease and the area must be appropriately protected. The DoE Heritage Team is to be notified and an archaeologist engaged to undertake a site inspection to assess the find in consultation with the Registered Aboriginal Parties (RAPs). Following the on- site assessment, the archaeologist and RAPs (if they attended the site) are to advise on whether further management, mitigation or approvals are required in consultation with the DoE Heritage Team. Should Aboriginal objects be identified, these are to be registered in the Aboriginal Heritage Information Management System (AHIMS). An Aboriginal Heritage Impact Permit (AHIP) would also need to be obtained to impact the site. | Pre-construction and construction | Not significant. |
| HMM4 | To ensure that factual information can be presented in the event of a legal dispute. | The Aboriginal Due Diligence Assessment must be kept by the department so that it can be presented, if needed, as a defence from prosecution under Section 86(2) of the <i>Nationals</i> <i>Parks and Wildlife Act 1974</i> . | Construction and operation | Not significant. |

6.6 Environmental Heritage

A European Heritage Impact Assessment was prepared by City Plan and attached in **Appendix T**. The purpose of this report is to confirm whether the updated design impacts the proximate heritage item.

Existing Environment

The site is not listed as a heritage item under Part 1 of Schedule 5 of the *Shoalhaven Local Environmental Plan 2014* (**SLEP 2014**) and is not within a Heritage Conservation Area. No buildings within the site have been assessed as having potential heritage significance. The proposed activity is within proximity to the heritage item 'Colonial road-remnants (former Wool Road)', item number 218 listed under Part 1 of Schedule 5 of the SLEP 2014.

Assessment

The proposed activity has no physical or visual impacts to the proximate heritage item as the works are sufficiently distanced away from the heritage item. There are no significant views of the heritage item and there is no potential for the proposed activity to visually impact the heritage item.

The extent and nature of potential heritage impacts from the proposal are minimal, if any, and will not impact the heritage locality, community and/or environment, thus no heritage mitigation measures are required for the proposed activity.

6.7 Ecology

A Flora and Fauna Assessment (**FFA**) report was prepared by a Water Technology. The report documents the findings of the biodiversity assessment, identifying potential biodiversity constraints relevant to the proposed activity.

Existing Environment

Vegetation communities

The assessment identifies that there are significant areas of biodiversity within the site that could constrain future development. A review of the vegetation mapping databases was undertaken to identify Plant Community Types (**PCTs**) present within the area. Four PCTs were mapped as being present within the school site, being:

- PCT 4019 Coastal Alluvial Bangalay Forest
- PCT 3809: Shoalhaven Rockplate Heath
- PCT 3273: South Coast Lowland Shrub-Grass Forest
- PCT 3545: Coastal Sands Bloodwood Low Forest

PCT 4019 – Coastal Alluvial Bangalay Forest, is a listed threatened ecological community under both the BC Act and the EPBC Act, although it was in a cleared and highly degraded state. Other mapped PCTs were also degraded and occurred only as small, fragmented patches

The proposed activity is located within mapped areas PCT 4019 as shown in Figure 18.



Source: Water Technology, 2024.

Figure 18 Plant Community Types

Threatened species

Species with a high likelihood of occurrence within the site include the South-eastern Glossy Black-Cockatoo, Eastern Bristlebird, Yellow-bellied Glider, Grey-headed Flying-fox and Eastern Pygmy-possum. The site has no Key Fish habitat.

Assessment

Vegetation across the site occurs as scattered trees or small, sporadically placed garden areas. The vegetation largely represented highly cleared Plant Community Type (PCT) 4019, a Threatened Ecological Community (TEC). However, PCT 4019 was cleared and in a highly degraded condition so it would no longer be classified as a TEC (Figure 5-1). The assessment considered the impact of the removal of the 33 trees and the undercutting of vegetation required to provide the APZ.

As the habitat on site was considered low-quality for the listed threatened species, and no threatened species were found, a Test of Significance was not required. No referral to the Australian Minister for the Environment under the EPBC Act is required. The proposal would be unlikely to cause a significant impact on the environment. An approved Environmental Impact Statement under the EPBC Act is not required.

The site assessment did find potential habitat features within the site, which may be impacted by the proposed activity. This included a family of masked lapwings (plovers) in the north west of the site, adjacent to the proposed general learning hub building. Accordingly, mitigation measures have been recommended to deter the masked lapwings from nesting in the area of the proposed activity.

Overall, subject to implementing the mitigation measures contained in **Appendix 1**, the conclusion of the FFA is that the proposed activity will not significantly impact the environment in relation to ecological matters.

Mitigation Measures

The following mitigation measures are to be implemented to manage potential impacts to flora and fauna and biodiversity. Mitigation measures recommended to address tree removal in **Section 6.8** will also protect biodiversity.

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|------|---|--|----------------------|-------------------------------|
| BMM1 | To protect wildlife and comply with ecological regulations. | Inspect all trees to be removed for hollows, nest and other signs of fauna habitat. If fauna is discovered, an ecologist may be required to remove and relocate any fauna if the tree or vegetation is to be removed. Tree removal shall avoid nesting season. | Pre- construction | Not significant. |
| BMM2 | Relocating nests is likely to have an impact on the birds, e.g. nest and chick abandonment. Encouraging the birds to nest elsewhere is the most likely measure to successfully prevent biodiversity impact, particularly in the context of the site's surrounding environs. | Attempt to deter Masked Lapwings from nesting within the activity zone prior to constructing commencing through the following measures: -Letting the grass grow to a length of around 30 cm in height -Installing a fake 'predator' cut outs such as eagles, kites or cats ideally with moving parts These measures need to take place prior to the breeding season, i.e. after March and before August. If nests are located within the works area, they will need to be relocated under appropriate NSW National Parks and Wildlife Service permits. | Construction | Not significant |
| BMM3 | To prevent spread of weeds and optimise landscaping outcomes. | Use AS 4454 leaf mulch with 90% recycled content for tree protection fencing. Chip trees marked for removal and use mulch 100mm deep. Avoid | Construction | Not significant |

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|------|---------------------------------------|--|--------------|-------------------------------|
| | | soil, weeds, sticks, and stones. Comply with AS 4454 (1999) and AS 4419 (1998). | | |
| BMM4 | To avoid invasion by plant pathogens. | Basic hygiene protocols are to be implemented for construction personnel and machinery on site to reduce the potential for invasion by plant pathogens including Phytophthora cinnamomi, the fungus myrtle rust Uredo rangelli and amphibian chytrid fungus. | Construction | Not significant. |

6.8 Tree Removal

An Arboricultural Impact Assessment (**AIA**) has been prepared by Allied Trees and is included at **Appendix 22**. The AIA evaluate the proposed activity's impact on trees, assessing their condition and retention value. It outlines necessary tree protection measures and justifies tree removals, ensuring compliance with relevant environmental standards and minimising ecological disruption during construction.

Methodology

The AIA evaluated 60 trees within the area of the proposed activity, including any tree where the Tree Protection Zone (**TPZ**) or Structural Root Zone (**SRZ**) overlaps with the work area. Trees beyond the proposed activity were not assessed as they will not be impacted by the activity. The AIA provides a detailed tree assessment including tree identification, size, condition and ratings for Safe Useful Life Expectancy (**SULE**) and Significance of a Tree Assessment Rating System (**STARS**).

Assessment

The design of the proposed building protects and retains existing trees where possible. However, the AIA identified thirty-three (33) trees (trees No. 13-22, 40, 138-144, 146-159) for removal based on the design conflict. Tree No. 40 represents two trees.

Of the trees required to be removed, the assessment identified the following tree retention values:

- 12 High Retention Value trees.
- 16 Medium Retention Value trees.
- 5 Low Retention Value trees.

Twenty-five (25) trees (trees No. 25-39 and 160-169) are designated for retention and will be protected throughout the construction process.

The landscape adjacent to the new building will be remediated, and garden beds have been utilised where appropriate to soften the building interface and facilitate drainage.

The AIA considers the extent and nature of potential impacts to be moderate and that they do not have significant impact on the locality, community and/or the environment.

The proposed activity will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values, meaning a Species Impact Statement and/or Biodiversity Development Assessment Report is not required having regard to s7.8 of the BC Act.

Mitigation Measures

The following mitigation measures are to be implemented to ensure tree protection.

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|------|---|---|---|-------------------------------|
| TMM1 | To protect trees | A project arborist (conforms to the AS 4970) is required to be nominated before works start, and they are to be provided with all related site documents. | Pre construction | Not significant |
| TMM2 | To protect trees for retention from unnecessary damage. | A Tree Management Plan (Arboricultural Method Statement) must be issued before works starts, detailing further tree protection measures. | Pre- Construction and Construction | Not significant. |
| ТММЗ | To safeguard trees from construction activities which can impact trees through physical injury, soil compaction, and root damage. | Tree protection must be approved by a Consulting Arborist AQF Level 5. No materials, mixing, parking, disposal, repairs, refuelling, fires, stockpiling, or backfilling is allowed near remaining trees. Removal or lopping of trees needs written permission from the Superintendent. | Pre- construction | Not significant. |
| TMM4 | To avoid the incorrect removal of trees for retention. | Trees for removal are to be identified and marked for removal. | Pre- Construction | Not significant. |
| TMM5 | To ensure accurate recognition and protection of trees throughout the construction process. | All trees to be protected shall be clearly identified and all TPZs surveyed. | Pre- construction | Not significant. |
| TMM6 | To ensure accurate recognition and protection of trees throughout the construction process. | Protective fencing around existing trees and within TPZs must be installed before any site work begins. The fence must be 1800mm high chain wire mesh fixed to galvanised steel posts, enclosing an area to prevent damage as defined in the Tree Protection Plan. No storage inside fenced area. | Pre- construction | Not significant. |
| TMM7 | To ensure accurate recognition and | Tree protection signage must be attached to tree protection zones before works begin. Signs should be | Pre- construction | Not significant. |

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|-------|---|---|----------------------|----------------------------------|
| | protection of trees throughout the construction process. | displayed prominently and repeated at 10m intervals or closer when the fence changes direction. Signs must include information about the tree protection zone, access restrictions, developer's contact details, and Site Arborist information. | | |
| TMM8 | To minimise ecological impact. | All construction workers must be briefed about the conditions outlined in the Tree Management Plan before the initiation of work All contractors and staff must undergo induction outlining the ecological sensitivity of the site, no-go areas, the need to minimise ecological impact and all other mitigation measures outlined in this section. | Pre- construction | Not significant. |
| TMM9 | To safeguard trees from construction activities which can impact trees through physical injury, soil compaction, and root damage. | Tree Protection Zones (TPZs) will be maintained around vegetation to be retained. TPZs will be maintained in accordance with Australian Standard 4970 (2009) Protection of Trees on Development Sites (AS-4970). No activities are to take place within the Structural Root Zones (SRZs) of mature trees. No works, stockpiling of materials, excavation, parking or any other potentially harmful activities will be undertaken within TPZs unless a Level 5 Arborist has provided confirmation that the works will not impact the tree. | Construction | Not significant. |
| TMM10 | To protect trees for retention from unnecessary damage. | No pedestrian or plant access is permissible to TPZs. | Construction | Not significant. |
| TMM11 | To safeguard trees from construction including root damaging activities and contaminant spills. | All site facilities must be located outside of TPZ. Chemicals and contaminants must be stored properly in an enclosed area with a spill bund to prevent runoff in case of accidents. | Construction | Not significant. |
| TMM12 | To safeguard trees from construction activities which can impact trees through physical injury, soil compaction, and root damage. | Avoid storing bulk or harmful materials near trees. Keep spoil from excavations away from TPZs. Ensure wind-blown materials like cement don't harm trees. | Construction | Not significant. |

| # | Reason for mitigation measure | Mitigation Measure | Timing | Significance after mitigation |
|-------|---|---|--------------|----------------------------------|
| | | | | |
| TMM13 | To protect trees for retention from unnecessary damage. | Ropes, cables or similar items should not be tied to trees. | Construction | Not significant. |
| TMM14 | To protect trees for retention from unnecessary damage. | Soil must not be filled or compacted above tree roots enclosed by protection fencing during construction near trees. Guidelines must be followed to prevent soil compaction in these areas. Protection includes using elevated planks attached to scaffolding to prevent ground compression. | Construction | Not significant. |
| TMM15 | Protection of trees | Trenching shall avoid the TPZ's. Proposed routes shall be re-routed outside of the TPZ. Underboring required if unable reroute. Any excavation in the area of a TPZ must be authorised and conditioned by the project arborist. | Construction | Not significant. |
| TMM16 | Construction impacts to site may alter soil hydrology and in turn tree root access to water. | Contractors are to maintain plants are watered. Water should be applied at an appropriate rate suitable for the plant species during periods of little or no rainfall. | Construction | Not significant. |
| TMM17 | To compensate for the loss of protected flora and related fauna habitats. | Advanced specimens of the same species that have been removed must be planted in groups. | Construction | Not significant. |
| TMM18 | To compensate for the loss of amenity value. | Advanced specimens of the same species that have been removed in areas that offer visual and/or noise screening must be planted. | Construction | Not significant. |
| TMM19 | To ensure tree health | Tree protection fencing will use AS 4454 leaf mulch with 90 per cent recycled content. Trees marked for removal with be chipped and mulched to a depth of 100mm, and free from soil, weeds, sticks and stones. The fencing will comply with AS 4454 (1999) and AS 4419 (1998). | Construction | Not significant. |
| LCMM3 | To safeguard trees and avoid ground or water contamination. | Chemicals and contaminants must be stored properly in an enclosed area with a spill bund to prevent runoff in case of accidents. | Construction | Not significant. |

6.9 Social Impact

Social impacts relating to the proposed activity are addressed in Table 21 below.

| Type of Impact | Describe the impacts on the community and how they might be experienced, either positively or negatively | Discussion |
|---|--|--|
| Impacts on access – will there be an improvement to the quality of provision and a response to emerging and changing needs? | There will be a strong positive impact due to the upgraded school environment. | The proposed activity will deliver a new building to eventually replace the existing demountable arrangements which will enhance the delivery of education for future students and their families. |
| Impacts on privacy, overshadowing, peace and quiet, and visual amenity (views / vistas) - will there be significant change for neighbours and the local area during both construction and operation? | There will be short term medium negative impact associated with disruption to the locality during the construction period. There will be no negative visual amenity or overshadowing impacts. | The short term negative impacts may include construction traffic, noise, dust and vibration. These will be managed by an approved Construction Management Plan. |
| Impacts on sense of place - will there be effects on community cohesion or how people feel connected to the place and its character? | There will no impact on community cohesion. There may be positive impacts on community perception of the school and increased connection to the it and its character for students and staff. | The proposed activity does not change the existing use of the site as an educational facility, therefore the impacts will be low. |
| Impacts on the way people get around – will there be changes associated with traffic or parking in the area? | There may short term medium negative impact associated with disruption to the locality during the construction period. There will be a medium positive impact due to formalised pick up and drop off access arrangements and parking. | The short term negative impacts may include heavy vehicle construction traffic and the need for construction workers to park off site. The proposed activity will deliver a new formalised Kiss and Drop zone, associated bus bays and 17 parking spaces. The proposed activity will not generate any additional traffic as it does not increase student or staff numbers. |
| Impacts on wellbeing - will there be benefits for students and the community associated with better school facilities, sporting facilities and grounds, and active transport options? | There may be minor positive impacts on community perception of the school and increased connection to it and its character for students and staff. | The proposed activity will improve the quality of the existing school by providing a new, fit for purpose home base building, landscaping and Kiss and Drop zone. |

Table 16: Social Impact

6.10 Bushfire

A BAR was prepared by Eco Logical Australia Pty Ltd in accordance with *Planning For Bush Fire Protection 2019* (**PBP**). As shown in **Figure 14**, the site is BPL, mapped as Category 1 and Vegetation Buffer. Currently, the Bushfire and Grassfire Response Plan for the school nominates

Building H (the hall) as the shelter-in-place if it is unsafe for offsite evacuation. This building cannot accommodate all students and staff and is not constructed to any specific BAL rating.



Source: Eco Logical, 2024

Figure 19: Bushfire Hazard Assessment

Assessment

The site of the proposed activity is identified as comprising Vegetation Buffer. The proposed activity is a Special Fire Protection Purpose (**SFPP**) facility, which includes schools and similar uses that have vulnerable occupants who may be at greater risk during a bushfire event.

Bushfire prone vegetation within 140m of the site is located to the north, northeast, and west and is a combination of 'tall heath' and 'forested wetland'. The vegetation to the north, north-west and west is mapped as Shoalhaven Rockplate Heath. The effective slope under this hazard falls within the PBP slope hazard interface.

The bushfire prone vegetation within the north-east of the site is mapped Coastal Alluvial Bangalay Forest and is classified as 'forested wetland' by the PBP. The effective slope under this hazard falls within the PBP slope category of 'all upslopes and flat land'. In all other directions there are managed lands within the school grounds.

In summary the BAR concludes:

- APZs are required to the north, south and west of the proposed activity site due to the proposed activity being classified as an SFPP. Proposed Building Q has been positioned and oriented to suit APZ requirements, while seeking to reduce the removal of existing trees. The APZs (shown in Figure 15) are contained wholly within the boundaries of the site and existing public road infrastructure (The Wool Road).
- The BAR identifies performance criteria including BAL 19 construction that when complied with will ensure that the proposed activity meets the relevant specifications and requirements under PBP.
- Specification 43 of the National Construction Code (NCC) 2022 which requires mandatory bushfire protection measures for designated Class 9 buildings including schools will apply to the proposed activity.
- The bushfire mitigation program recommendations provide an overall better bushfire outcome for the school by improving the landscape to minimise potential building ignitions during a bushfire and providing safer defendable areas around existing buildings.
- The proposed Building Q shall be designated as the new shelter-in-place. The existing Emergency Management Plan and associated Bushfire and Grassfire Response Plan will be updated to reflect this.
- The upgraded internal vehicular access will separate bus and car access. This will minimise congestion and potential obstruction to firefighting vehicles accessing the school and will therefore also provide an improved bushfire outcome.



Source: Eco Logical, 2024

Figure 20: Bushfire Prone Land (BPL)

The recommendations within the BAR have been included as mitigation measures in Appendix 1.

Mitigation Measures

The following mitigation measures are to be implemented to address potential bushfire impacts.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|-------|---|---|--|-------------------------------------|
| BFMM1 | To ensure landscaping meets PBP requirements. | Prior to occupation, DoE must ensure new landscaping within the site is designed to meet the requirements of PBP. | Design Construction Operation | Not significant |
| BFMM2 | The proposed building can withstand bushfire attack in the form of wind, embers, radiant heat and flame contact. | DoE are to ensure the proposed building designed and constructed to the relevant NCC requirements including BAL-19 based on the construction specifications detailed in AS 3959-2018 and additional ember provisions detailed in Section 7.5 of PBP as required. At commencement of construction and during operation, DoE to ensure fencing within 6 m of the building to be constructed of non-combustible material only. | Design Construction Operation | Not significant |
| BFMM3 | Afford buildings and their occupants protection from exposure to a bushfire. Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings. | The identified APZs are to be established and maintained in perpetuity or until surrounding land is developed to specifications detailed in Appendix 2 of the BAR. Prior to construction, DoE must ensure the identified APZ (Table 3 and shown in Figure 3 of the Bushfire Assessment Report) is maintained to the specifications detailed in Appendix A of the Bushfire Assessment Report. During operation, DoE must ensure APZ are managed in perpetuity. | Throughout the life of the project | Not significant |
| BFMM4 | To ensure that utility services are adequate to meet the needs of firefighters. | DoE to ensure fire hydrants are provided in accordance with AS2419:2021. | Design Construction Operation | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|-------|--|--|------------------------------------|-------------------------------------|
| BFMM5 | To ensure emergency evacuation procedures and management measures are in place. | Prior to operation, DoE to update Bushfire and Grassfire Response Plan including: 1. Designating the new building as the shelter-in-place; and 2. Clear signage is to be provided to the new building and identifying it is the designated 'shelter-in-place'. 3. Remove Building H as the current shelter-in-place option in the Bushfire and Grassfire Response Plan. 4. Updated Bushfire and Grassfire Response Plan to be provided to local brigade(s) | Prior to operation Operation | Not significant |
| BFMM6 | Better Bushfire Outcome | Prior to operation, DoE to: 1. Install clear signage to the new building and identifying it is the designated 'shelter-in-place'; 2. Ensure external combustible items located away from windows/doors (landscaping, hard landscaping, bins, out buildings etc.); and 3. Additional fire extinguishers to be located internally near all entry/exit points for use against combustible . | Prior to operation Operation | Not significant |
| BFMM7 | To provide access | During design and prior to operation, DoE must ensure the upgrades to the internal loop road meet the specifications detailed in Section 4.4.1 of this Bushfire Assessment Report. | Design Construction | Not significant |

6.11 Soils and Geology

A Geotechnical Assessment has been prepared by Stantec (refer **Appendix 26**) to provide an assessment of the existing subsurface ground conditions and other geological conditions at the site and also assess the potential impacts on surface and groundwater resources as a result of the proposed activity.

Assessment

The key findings and recommendations of the Geotechnical Assessment is summarised below:

• Existing fill as uncontrolled fill was observed to be highly localised and variable across the site with maximum depth of 0.4m.

- The subsurface conditions comprise topsoil overlying fill, residual clay/sand. Based on the geotechnical sub-surface logs and laboratory testing, it is expected the site classification of "Class P" be adopted (if applicable) for footings constructed in accordance with AS2870-2011.
- It is expected that mainly soil will be encountered during all earthworks. Very low to low strength rock can be expected to be present underlying the residual soils, however, it unlikely to be encountered during earthworks.
- Excavation of soil can be readily achieved using conventional earthmoving equipment. Ripping or hammering may not be required for the proposed earthwork.
- Groundwater seepage was encountered in BH03 and BH04 at depths of 1.40mbgl and 1.90mbgl, respectively. Groundwater standing level or seepage was not encountered in any of the other boreholes at the time of investigation. It should be noted however, that variations in groundwater seepage flows may occur due to variations in rainfall duration and intensity. Considering the proposed earthwork will be limited to general levelling only, it is anticipated the proposed development earthwork will not intersect with the groundwater table.

Based on this assessment and the geotechnical conditions encountered during the site investigation, there are not considered to be any significant or unusual geotechnical concerns that would preclude the construction of the proposed activity.

Mitigation measures

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|------|--|---|--------------|-------------------------------------|
| SMM1 | To reduce the risks differential settlement and/or failures. | Prior to bulk earthworks, the site shall be cleared of any foreign matter or unsuitable material. | Construction | Not significant |
| SMM2 | To reduce the risks differential settlement and/or failures. | Proof roll testing to be carried out using a minimum 12 tonne roller and compact the exposed subgrade to at least 98% Standard Maximum Dry Density (SMDD) at +/- 2% Optimum Moisture Content (OMC). | Construction | Not significant |
| SMM3 | To reduce the risks differential settlement and/or failures. | Should isolated soft/loose areas be encountered during this process, this material should be removed and replaced with suitable granular structural fill. | Construction | Not significant |
| | | Structural fill could comprise a select well graded granular material such as processed sandstone and road-base (DGB20) | | |

The following mitigation measures are to be implemented, subject to detailed geotechnical design.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|------|---|--|------------------------|-------------------------------------|
| SMM4 | To reduce the risks differential settlement and/or failures. | Backfill excavation with approved structural fill in 150mm layers to a standard compaction of at least 98%. | Construction | Not significant |
| SMM5 | To reduce the risks of differential settlement and/or failures. | Surface drainage must be maintained at all times by adopting appropriate cross- falls across the site. Surface drainage must be installed as soon as is practicable in order to capture and remove surface flows to prevent erosion and softening of the exposed surface | Construction | Not significant |
| SMM6 | To prevent stability of the batter cuts. | Design and construction of temporary and batter cuts should follow recommendations presented in Table 9 of the Stantec Geotechnical Report. | Design Construction | Not significant |

6.12 Other Issues

Other issues relevant to the proposed activity are considered in Table 22 below.

| Issue | Consideration |
|-------------------------------|---|
| Visual Amenity and Privacy | The proposed building is appropriately set back from The Wool Road and is partly shielded by existing mature trees along the front alignment. Some of these trees will need to be removed for the proposed building. The trees immediately adjacent to the street boundary will be retained. There is minimal impact on the views to the school from the street. There are no surrounding dwellings. |
| | Materials and finishes follow the SINSW Pattern Book Materials and Finishes principles to be contextual, durable, local and economical. The proposed colour combination will complement the existing site character and building forms. |
| Overshadowing | Shadow studies were conducted for both summer and winter as part of the Architectural Plans prepared by Fulton Trotter Architects, included at Appendix 2 While the shadow diagram shown in Figure 21 indicates minor overshadowing of the sports court and existing Block H, the proposed building does not impact neighbouring lots. The proposed activity will not have any significant overshadowing impact and they do not impact any neighbours. No further assessment and no mitigation measures are required. |

| Issue | Consideration |
|----------------|---|
| | <figure></figure> |
| Waste | An Operational Waste Management Plan (OWMP) and a Construction Waste Management Plan (CWMP) were prepared by EcCell Environmental Pty Ltd. The OWMP found that the proposed activity will not introduce additional long-term waste challenges. Waste minimisation and management practices will ensure that potential impacts are mitigated effectively. The proposed activity will not change the location and size of the existing waste storage area or collection vehicle access arrangements. The CWMP notes that the construction phase of the activity will generate additional waste but finds that the extent and nature of potential impacts are low and will not have significant impact on the locality, community and/or the environment. The potential impacts can be appropriately mitigated or managed to ensure that there is minimal impact on the locality, community and/or the environment. |
| Air Quality | The site has frontage to a classified road (The Wool Road) which is a source of potentially polluting emissions, however the proposed building is suitably set back from the road and will not be impacted by ongoing polluting emissions. The construction of the proposed activity is likely to generate dust, however this is a short term impact that can be appropriately mitigated or managed to ensure that there is minimal impact on the locality, community and/or the environment. |
| Land Use | The proposed activity occurs within the existing school grounds and does not alter the site's existing use as an educational establishment. The site is not adjacent to any restricted land uses or near any potentially incompatible land uses. |
| BCA and Access | The proposed activity is supported by a BCA Design Compliance Report (Appendix J) and Access Report (Appendix K). These reports confirm the proposed activity will comply with all applicable regulatory requirements. The design of the proposed new homebase building integrates with existing buildings and structures to provide safe and equitable access and movement |

| Issue | Consideration |
|---------------|---|
| | across the site. |
| Site Services | A Hydraulic Infrastructure Services Report has been prepared by Acor (refer Appendix 7) which finds that the existing wastewater and potable water services can accommodate the proposed activity without augmentation. Hydraulic Services drawings have been prepared by Acor (refer Appendix 8) which identifies the existing utility mains that surround the site and proposed connections within the site to the proposed activity. |
| | An Electrical Services design has been prepared by NDY (refer Appendix 8) to identify the electrical infrastructure upgrades required to service the site, including a generator and new main switchboard. |

6.13 Construction Impacts

A preliminary Construction Management Plan (**CMP**) has been developed by the project managers (RPI Infrastructure) and is provided at **Appendix 14**. The CMP serves as a critical document to guide the construction phase of the project, ensuring that environmental, safety, and community impacts are effectively managed,

Assessment

A summary of the potential impacts during the construction phase of the project is provided below:

- Noise and Vibration: Noise from machinery, vehicles, and construction activities may disturb nearby residents and sensitive areas, particularly during peak activity periods. Vibration caused by excavation and heavy equipment could impact adjacent properties if not carefully managed.
- Air Quality and Dust: Dust generated from excavation, material handling, and vehicular movement on unsealed surfaces could degrade air quality. Diesel emissions from machinery and vehicles may also contribute to temporary air pollution.
- **Traffic and Access**: Construction traffic, including heavy vehicles, could lead to congestion and disruptions on local roads. Construction vehicle movements may also pose safety concerns for pedestrians in the vicinity.
- **Waste Generation**: Construction activities will generate waste, including recyclable materials and potentially hazardous substances, requiring responsible management and disposal.
- Erosion and Sedimentation: Earthworks and excavation activities could result in sediment runoff, potentially contaminating local waterways and stormwater systems if not adequately controlled.

Mitigation Measures

The following mitigation measures are to be implemented to address potential construction impacts.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|-------|--|--|--------------|-------------------------------------|
| CMM3 | To maintain a separation between school occupants and construction activities | Site is to be secured and made safe from the public throughout the Works via the erection of a perimeter fence, including shade cloth hoarding attached to prevent unauthorised entry to the site. | Construction | Not significant |
| CMM18 | To ensure separation of construction vehicles from staff vehicles and reduce truck movements at busy school times. | All construction vehicles will travel along Green Street to enter and exit at the south boundary of the site. | Construction | Not significant |
| CMM19 | To ensure separation of construction vehicles from staff vehicles and reduce truck movements at busy school times. | Heavy vehicle movement is also required to avoid school drop off and pick up times | Construction | Not significant |

6.14 Cumulative Impact

There have been no other developments approved in the last 2 years within 500m of the site.

The TTIA has assessed the traffic impacts of proposed activity and confirmed that the operational traffic impacts would be negligible as the proposed activity does not increase student capacity. Therefore, there are no cumulative operational traffic impacts.

6.15 Consideration of Environmental Factors

Section 171(1) of the EP&A Regulation notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the guidelines that apply to the activity.

The assessment provided in the sections above has been prepared to provide a detailed consideration of the factors that must be taken into account for an assessment under Division 5.1 of the EP&A Act. These factors are summarised at **Table 23** and where mitigation measures have been proposed in response to the factor, these have been identified.

Table 18: Environmental Factors considered

| Environmental Factor | Consideration | Mitigation Measure Reference |
|--|--|---|
| Any environmental impact on a community? | The proposed activity involves an upgrade to an existing educational facility. The new building is situated close to existing buildings and integrates into the existing school infrastructure with minimal external impacts. The building is appropriately set back from The Wool Road behind natural vegetation and will not impact the view to or from the heritage item. The building has been thoughtfully designed with a materials palette that is considerate of the existing environment. The existing school activities will not change therefore there is not anticipated to be any impact or disruption to the surrounding community during the operation of the building. Existing trees have been protected and retained where possible, however the construction of the new building requires the removal of 33 trees identified as conflicting with the position of the building and new vehicle access. The removal of these trees is necessary as the alternative design does not meet bushfire APZ requirements. The landscaped area adjacent to the new building will be remediated. The AIA Report considers that the extent and nature of potential impacts are moderate and could have some impact on the environment, but that potential impacts can be appropriately mitigated and managed as per the Mitigation Measures attached to the REF to ensure that there is minimal impact on the environment. During the construction phase, temporary environmental effects may arise such as increased traffic, noise and dust. However, these impacts are anticipated to be minor and will be effectively managed and mitigated through the implementation of management strategies outlined in this REF. Overall, the proposed activity is designed to achieve positive long-term outcomes for the environment and community. | CTMM3. Prepare a Construction Traffic Management Plan CMM2. Prepare a Construction Environmental Management Plan OPFMM1. Update the School Emergency Plan. All tree protection measures. |
| Any transformation of a locality? | The proposed activity will have a positive impact on the locality. Once operational, the upgrades to the school will provide a positive benefit to the school community through providing the necessary quality educational facilities for students and staff. | N/A |
| Any environmental impact on the ecosystems of the locality? | The proposed activity does not involve environmental impacts on local ecosystems. The site does not contain Aboriginal cultural material. There are no threatened ecological species nor does it contain habitat for threatened species. | TMM5. Trees are identified and marked for retention. TMM6: Tree protective fencing TMM7:Tree protection signage |
| Any reduction of the aesthetic, recreational, scientific or other environmental quality or value | The proposed activity occurs within the existing school site and will not be highly visible from the road. The design incorporates a considerate materials palette further reducing the visibility of the building and maintains compatibility with the surrounding built environment. | N/A |

| Environmental Factor | Consideration | Mitigation Measure Reference |
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| of a locality? | By integrating these design elements, the proposed activity ensures that it does not detract from the aesthetic, recreational, scientific or other environmental qualities of the locality. The activity complements the existing character of the area, resulting in an outcome that is both contextually appropriate and environmentally considerate. | |
| Any effect on locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations? | The site is not identified as having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific, social significance or other special value. Accordingly, the proposed activity will not affect these values for present or future generations. | HMM1, HMM2 |
| Any impact on the habitat of protected animals, within the meaning of the <i>Biodiversity</i> <i>Conservation Act 2016</i> ? | The PSI referenced in this REF found that the habitat of the site exists in a degraded state and that the adjacent Jervis Bay National Park provides better habitat for protected animals. The proposed activity will not have a significant impact on the habitat of protected animals, within the meaning of the BC Act. | TMM5. Trees are identified and marked for retention. All works to comply with tree retention plans |
| Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air? | The proposed activity will not endanger any species of animal, plant or other form of life on land, water or the air. | All ecology mitigation measures. TMM5. Trees are identified and marked for retention. All works to comply with tree retention plans. |
| Any long-term effects on the environment? | The proposed activity is not likely to have long-term effects on the environment. | All mitigation measures. |
| Any degradation of the quality of the environment? | No degradation of the quality of the environment will occur from this proposed activity. Construction activities will be managed in accordance with a Construction Management Plan and mitigation measures contained in this REF to ensure any potential impact on the environment is appropriately managed. | All mitigation measures. |
| Any risk to the safety of the environment? | The proposed activity has been designed with careful consideration of the site's existing risks, particularly bushfire. According to the Bushfire Protection Assessment, the proposed activity is consistent with the specifications and requirements within PBP, with the new building assigned as the | BFMM1-BFMM7 |

| Environmental Factor | Consideration | Mitigation Measure Reference |
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| | designated shelter-in-place for the school. The construction of the new building reduces the risk of bushfire to the school by providing additional safe space from bushfire. This ensures that the project is resilient to potential bushfire events and does not exacerbate the risks of such occurring in the locality. | |
| | As a consequence, the proposed activity is not expected to pose any significant risk to the safety of the environment or the surrounding community, with robust strategies in place to manage and mitigate the identified risks effectively. | |
| Any reduction in the range of beneficial uses of the environment? | The proposed activity relates to upgrades to an existing school and will not limit or reduce the range of beneficial uses of the environment. | N/A |
| Any pollution of the environment? | The risk of noise and vibration and air, water, soil and light pollution arising from construction works will be mitigated by the implementation of the CMP. | CMM2: Prepare a Construction Management Plan |
| Any environmental problems associated with the disposal of waste? | Waste generated by the proposed activity will be managed in compliance with the provisions outlined in the OWMP and CDWMP. These plans ensure that all waste is handled, recycled and disposed of responsibly, preventing any environmental issues associated with waste disposal. | WMM1 – WMM12 OPMM1 |
| Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply? | The activity will not increase the demand for resources that are or are likely to become in short supply. | N/A |
| Any cumulative environmental effects with other existing or likely future activities? | As outlined in Section 6.11 of this REF, there will be negligible cumulative environmental impacts. All construction works associated with the proposal will be undertaken in accordance with the CMP. | CMM2. Prepare a Construction Management Plan |
| Any impact on coastal processes and coastal hazards, including those under projected climate change conditions? | The site is not identified as being within a Coastal Management Area or Flood Prone Land. | N/A |
| Applicable local strategic planning statement, regional strategic plan or district strategic plan made under Division 3.1 of the Act? | The activity is consistent with the strategic policies identified in Section 4.4 of this REF. | N/A |

7. Justification and Conclusion

The proposed upgrade works at Vincentia HS represent a significant investment in the educational infrastructure of the region, aligning with the NSW Government's commitment to enhancing public education facilities in regional areas. The project involves the construction of a new two-storey homebase building, internal road upgrades including a new drop-off zone, additional parking spaces, pedestrian pathways, and landscaping improvements.

The proposed upgrade works at Vincentia HS are subject to assessment under Division 5.1 of the EP&A Act. The REF has examined and taken into account to the fullest extent possible all matters affecting, or likely to affect, the environment by reason of the proposed activity.

As outlined in this REF, the proposed activity can be justified on the following grounds:

- It responds to an existing need within the community;
- It generally complies with, or is consistent with all relevant legislation, plans and policies;
- It has minimal environmental impacts; and
- Adequate mitigation measures have been proposed to address these impacts.

The activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats, and therefore it is not necessary for a Species Impact Statement and/or a BDAR to be prepared. The proposed activity is not likely to significantly affect the environment. Therefore, it is not necessary for an EIS to be prepared and approval to be sought for the proposal from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act. On this basis, it is recommended that the department determine the proposed activity in accordance with Division 5.1 of the EP&A Act subject to the implementation of mitigation measures identified within this report.