

Environmental Impact Statement

New Primary School at Murrumbateman
(SSD-11233241)

Prepared on behalf of NSW Department of Education
June 2021



Project Director

Adam Coburn

Project Planners

Addison Boykin

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			Name	Signature
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* This document is for discussion purposes only unless signed and dated by the persons identified. This document has been reviewed by the Project Director.

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Statement of validity

Applicant details

Name: NSW Department of Education c/- Mecone Pty Ltd NSW

Address: Level 2, 3 Horwood Place, Parramatta NSW 2150

Site and proposal details

Site address: 2 Fairley Street, Murrumbateman

Legal description: Lot 302 DP1228766

Proposed development: Establishment of a new primary school in Murrumbateman, NSW

Prepared by

Name: Adam Coburn

Qualifications: Bachelor of Environmental Planning, Master of Planning

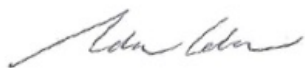
Address: Mecone NSW Pty Ltd, Level 2, 3 Horwood Place, Parramatta NSW 2150

Certification

I certify that I have reviewed the content of this EIS and to the best of my knowledge:

- It is in accordance with Part 4 of the Environmental Planning and Assessment Act 1979 and Schedule 2 of the Environmental Planning and Assessment Regulation 2000;
- All available information that is relevant to the environmental assessment of the development to which the statement relates; and
- The information contained in the statement is neither false nor misleading.

Signature:



Name: Adam Coburn

Date: 09 June 2021

Glossary and abbreviations

Term/acronym	Description
AEP	Annual Exceedance Probability
AS	Australian Standards
BCA	Building Code of Australia
BC Act	<i>Biodiversity Conservation Act 2016</i>
COLA	Covered Outdoor learning Area
Council	Yass Valley Council
CPTED	Crime Prevention through Environmental Design
DA	Development Application
DCP	Development Control Plan
DoE	Department of Education
DPIE	Department of Planning Industry and Environment
EFSG	Educational Facilities Standards & Guidelines
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
ESD	Ecologically Sustainable Development
GFA	Gross Floor Area
Homebase	A primary school classroom
HVAC	Heating, Ventilation and Air Conditioning system
INP	Industrial Noise Policy
LEP	Local Environmental Plan
LGA	Local Government Area
Proposal	Establishment of a new primary school at Murrumbateman

Term/acronym	Description
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policies
Site	Lot 302 DP1228766
SSD	State Significant Development

Executive Summary

Purpose of report

This Environmental Impact Statement (EIS) has been prepared by Mecone NSW Pty Limited on behalf of the NSW Department of Education (DoE) to accompany a development application for a new primary school in Murrumbateman, NSW. This EIS is submitted to the Minister for Planning pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The proposal is for a new school and is therefore classified as State significant development (SSD) in accordance with Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011*.

The EIS addresses the Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning, Industry and Environment (DPIE) on 8 December 2020.

Overview of the proposal

The proposed development is for construction and operation of a new primary school with Core 21 facilities in Murrumbateman that will accommodate up to 368 students. The proposed development includes:

- A collection of one- to two-storey buildings containing 14 home base units, 2 special education learning units, hall, administration facilities and library.
- On-site parking lot with 40 spaces and kiss-and-ride area.
- Outdoor sports court and play area.
- Integrated landscaping, fencing and signage.

Objectives of the proposal

The key objectives of the proposal are to:

- Meet identified demand for a primary school in the area.
- Deliver on the public announcement for a primary school in Murrumbateman.
- Provide a high quality facility that meets the needs of students and teachers and optimises educational outcomes.

The site

The site is located at 2 Fairley Street, Murrumbateman, and is legally described as Lot 302 DP1228766. The site is irregular in shape, with an area of 15,434.92m² and frontages of approximately 217m to Barton Highway and 83m to Fairley Street.

The site is located at the northern end of the Murrumbateman village, which is characterised by a mix of uses including low density residential and some

commercial development. Murrumbateman is the second largest settlement in the Yass Valley Council local government area (LGA) (behind Yass) with a population of approximately 3,200.

Project background and need

The Yass Primary School Community Group (SCG) is located within the Yass Valley Council LGA in regional NSW and borders the Australian Capital Territory (ACT) to the south. Due to the proximity to the ACT and the distant location of Berinba Public School (the NSW primary school in the local catchment) relative to Murrumbateman, students from local townships in the southern part of the Yass Primary SCG catchment often attend government and non-government schools in the ACT.

Projections indicate there is a concentration of unmet demand of 435 students by 2036 in the Murrumbateman region. Demand for schooling in the region is anticipated to experience additional growth from:

- ACT enrolment policy changes, which are expected to reduce cross-border student enrolments.
- 900 additional dwellings in the Murrumbateman region, which will yield an estimated 150 additional primary school students.

Given this strong demand and service need, the NSW Government identified a primary school at Murrumbateman as one of the 40 new and upgraded schools committed to for planning and delivery in 2019-2020.

Alternatives

DoE considered a number of alternatives to the proposal including:

- A. Do nothing.
- B. Upgrade existing facilities across the area.
- C. New primary school at Murrumbateman.

Option A was discarded as it would not address the identified demand and would not deliver on the promise of a new primary school. Option B would meet the identified demand but was ultimately discarded because it would be costly to implement and would not deliver on the promise of a new primary school. This option would also require many students to travel large distances to existing schools. Option C (the subject of this application) was chosen because it addresses identified demand, delivers on the promise of a new primary school in Murrumbateman and provides a geographically convenient school option for students in the area.

Consultation

Pre-lodgement consultation was conducted with various stakeholders including Yass Valley Council officers; State agencies including Government Architect NSW and Transport for NSW; the local community; and local Aboriginal stakeholders.

Comments provided by these stakeholders have been instrumental in the preparation of the EIS. Section 6 describes the consultation activities undertaken.

Planning context

The EIS has been prepared in accordance with the relevant legislative requirements of the EP&A Act and *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). Section 5 of the EIS considers all applicable legislation in detail.

Yass Valley Local Environmental Plan 2014 (the LEP) applies to the site. The proposal is permitted with consent in the RU5 Village zone and is consistent with relevant planning provisions in the LEP.

Environmental impacts and mitigation measures

Sections 7 and 8 of the EIS provide an assessment of the environmental impacts of the proposal in accordance with the SEARs. The key environmental matters considered include:

- Built form and urban design.
- Environmental amenity.
- Transport and accessibility.
- Sustainability.
- Heritage.
- Aboriginal heritage.
- Noise and vibration.
- Soil and water.
- Contamination.
- Drainage.
- Bush fire risk.

An environmental risk assessment is provided at section 9 of the EIS. The assessment has concluded that the proposal will result in no major impacts, subject to the implementation of mitigation measures.

A range of mitigation measures have been recommended based upon the input of specialists. Section 10 of the EIS sets out a summary of the proposed mitigation measures.

Conclusion

The EIS fulfils the requirements of the EP&A Act and EP&A Regulation, addresses all relevant matters for consideration prescribed by the SEARs and demonstrates that

the potential impacts of the proposal can be satisfactorily managed or mitigated. Given the evident benefits of the proposal and lack of significant environmental impacts, it is recommended that consent be granted to the application.

1 Introduction

This Environmental Impact Statement (EIS) has been prepared by Mecone NSW Pty Ltd on behalf of the NSW Department of Education (DoE) to support an application for State Significant Development (SSD).

DoE is seeking approval for a new primary school in Murrumbateman.

The proposal is for a new school and is therefore classified as SSD in accordance with Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP).

The EIS has been prepared in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) and the Secretary's *Environmental Assessment Requirements* (SEARs) issued on 8 December 2020.

1.1 Project overview

The proposed development is for construction and operation of a new primary school with Core 21 facilities in Murrumbateman that will accommodate up to 368 students. The proposed development includes:

- A collection of one- to two-storey buildings containing 14 home base units, 2 special education learning units, hall, administration facilities and library.
- On-site parking lot with 40 spaces and kiss-and-ride area.
- Outdoor sports court and play area.
- Integrated landscaping, fencing and signage.

1.2 Proposal objectives

The key objectives of the proposal are to:

- Meet identified demand for a primary school in the area.
- Deliver on the public announcement for a primary school in Murrumbateman.
- Provide a high quality facility that meets the needs of students and teachers and optimises educational outcomes.

1.3 Project background and need

The Yass Primary School Community Group (SCG) is located within the Yass Valley Council local government area (LGA) in regional NSW and borders the Australian Capital Territory (ACT) to the south, around the growing region of Gungahlin. Due to the proximity to the ACT and the distant location of Berinba Public School (the NSW primary school in the local catchment) relative to Murrumbateman, students from

local townships in the southern part of the Yass Primary SCG catchment often attend government and non-government schools in the ACT.

Projections indicate there is concentration of unmet demand of 435 students by 2036 in the Murrumbateman region. Demand for schooling in the region is anticipated to experience additional growth from:

- ACT enrolment policy changes, which are expected to reduce cross-border student enrolments.
- 900 additional dwellings in the Murrumbateman region, which will yield an estimated 150 additional public school students.

Given this strong demand and the strategic location of Murrumbateman, the NSW Government identified a primary school at Murrumbateman as one of the 40 new and upgraded schools committed to for planning and delivery in 2019-2020.

1.4 Alternatives considered

DoE undertook a structured approach in assessing the various options to meet the identified service need. The options considered are outlined in Table 1-1.

Table 1-1 Options considered

Option	Description	Analysis
A	Do nothing. This option would involve allocating excess demand across existing schools.	This option is undesirable for the following reasons. • The identified service need would not be met. • It does not fulfill the 2018 public announcement and expectations of a new primary school in Murrumbateman. • There would be a capacity shortfall in the SCG, resulting in overcrowding and significant travel time for students.
B	Upgrade existing schools within the Yass Primary SCG. This option would involve expanding existing school core facilities, upgrading temporary learning spaces and adding additional classrooms.	This option would address the service need but is undesirable for the following reasons: • The required upgrades may be costly and not represent whole of government value for money. • Core upgrades may be required, which are intrusive and expensive to implement. • It would not fulfill the public announcement and expectations of a new public school in Murrumbateman. • Some students would remain in outdated and undersized classrooms, and others

Option	Description	Analysis
		would need to travel large distances to attend school.
C	Construct a new primary school at Murrumbateman. This is the option proposed under the subject application.	This option is preferred option for the following reasons: • The service need will be met. • It fulfills the public announcement and expectations of a new public school in Murrumbateman. • It promotes sustainable travel and spatial alignment of capacity and demand.

1.5 SEARs

The project SEARs were issued on 8 December 2020. The table below identifies where the SEARs are addressed within the EIS.

Table 1-2 Project SEARs

SEAR	Location in EIS
The Environmental Impact Statement (EIS) must be prepared in accordance with and meet the minimum requirements of clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000 (the Regulation).	Throughout EIS
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Section 9
In addition, the EIS must include: • an executive summary.	Executive summary (front of report) Section 3 Appendix 1 Appendix 2
• a complete description of the development, including: ○ the need for the development. ○ justification for the development. ○ suitability of the site. ○ alternatives considered.	Section 1.3 Section 1.4 Section 3 Appendix 1 Appendix 4

SEAR	Location in EIS
○ likely interactions between the development and existing, approved and proposed operations in the vicinity of the site. ○ a description of any proposed building works. ○ a description of existing and proposed operations, including staff and student numbers, hours of operation, and details of any proposed before/after school care services and/or community use of school facilities. ○ site survey plan, showing existing levels, location and height of existing and adjacent structures/buildings and site boundaries. ○ a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development. ○ plans, elevations and sections of the proposed development. ○ cladding, window and floor details, including materials. ○ a site plan showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process). ○ plans and details of any advertising/business identification signs to be installed, including size, location and finishes. ○ any staging of the development. ○ details of construction and decommissioning including timing. ○ an estimate of the jobs that would be created during the construction and operational phases of the development along with details of the methodology to determine the figures provided.	
• a detailed assessment of the key issues identified below, and any other significant issues identified in the risk assessment, including: ○ a description of the existing environment, using sufficient baseline data and methodology to establish baseline conditions. ○ an assessment of the potential impacts of all stages of the development on all potentially impacted environments, sensitive receivers, stakeholders and future developments. The assessment must consider any relevant legislation, policies and guidelines. ○ consideration of the cumulative impacts due to all other developments in the vicinity (completed, underway or proposed).	Section 7

SEAR	Location in EIS
- o identification of all proposed monitoring or required changes to existing monitoring programs. - o measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment and triggers for each action. - o details of alternative measures considered.	
• a consolidated summary of all the proposed environmental management and monitoring measures, identifying all commitments included in the EIS.	Section 10
• the reasons why the development should be approved and a detailed evaluation of the merits of the development, including consequences of not carrying out the development.	Section 11
The EIS must be accompanied by a report from a qualified quantity surveyor providing a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived.	Submitted separately
Key issues	
The EIS must address the following specific matters: 1. Statutory Context, Strategic Context and Policies Address the statutory provisions contained in all relevant environmental planning instruments, including but not limited to: • State Environmental Planning Policy (State and Regional Development) 2011. • State Environmental Planning Policy (Infrastructure) 2007. • State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017. • State Environmental Planning Policy No 64 – Advertising and Signage. • State Environmental Planning Policy No 55 – Remediation of Land. • Draft State Environmental Planning Policy (Remediation of Land). • Draft State Environmental Planning Policy (Environment). • Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities). • State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 (Vegetation SEPP). • Yass Valley Local Environmental Plan 2013.	Section 5

SEAR	Location in EIS
Having regard to the relevant environmental planning instruments: • address the permissibility of the development, including the nature and extent of any prohibitions • identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards • adequately demonstrate and document how each of the provisions in the listed instruments are addressed, including reference to necessary technical documents.	
Address the relevant planning provisions, goals and strategic planning objectives in all relevant planning policies including but not limited to the following: • NSW State Priorities. • State Infrastructure Strategy 2018 – 2038 Building the Momentum. • Future Transport Strategy 2056. • Crime Prevention through Environmental Design (CPTED) Principles. • Better Placed: An integrated design policy for the built environment of New South Wales (Government Architect NSW (GANSW), 2017). • Healthy Urban Development Checklist (NSW Health, 2009). • Draft Greener Places Design Guide (GANSW). • Koala Habitat Protection Guideline (DPIE, 2020). • NSW South East and Tablelands Regional Plan 2036. • Fairley Commercial Centre Development Control Plan 2015. • Yass Valley Local Strategic Planning Statement. • Yass Valley Settlement Strategy. • Yass Valley Development Servicing Plans for Water and Sewerage.	Section 4
2. Built Form and Urban Design • Address: ○ the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces ○ design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colours ○ how Crime Prevention through Environmental Design (CPTED) principles are to be integrated into development	Section 3.3 Section 7.1 Appendix 2

SEAR	Location in EIS
○ how good environmental amenity would be provided, including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility ○ how design quality will be achieved in accordance with Schedule 4 Schools – design quality principles of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 and the GANSW Design Guide for Schools (GANSW, 2018) ○ how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.	
• Provide: ○ a detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development ○ a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape including views to and from the site and any adjoining heritage items.	Section 2 Section 7.2.3 Appendix 2
3. Tree Removal and Landscaping • Provide: ○ where relevant, an arboricultural impact assessment prepared by a Level 5 (Australian Qualifications Framework) Arborist, which details the number, location and condition of trees to be removed and retained, includes detailed justification for each tree to be removed and details the existing canopy coverage on-site. ○ a detailed site-wide landscape strategy, that: - details the proposed site planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage. - provides evidence that opportunities to retain significant trees have been explored and/or informs the plan. - considers equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation - demonstrates how the proposed development would: • contribute to long term landscape setting in respect of the site and the streetscape.	Section 3.5 Section 8.4 Appendix 3 Appendix 9

SEAR	Location in EIS
- mitigate the urban heat island effect and ensure appropriate comfort levels on-site. - contribute to objectives to increase urban tree canopy cover. - Provide visual screening and acoustic attention from the Barton Highway. - a detailed landscape plan prepared by a suitably qualified person. Relevant Policies and Guidelines: - Australian Standard 4970 Protection of trees on development sites. - Draft Greener Places Design Guide (GANSW).	
4. Environmental Amenity - Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing, wind impacts and acoustic impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated. - Provide: - shadow diagrams. - a view analysis of the site from key vantage points and streetscape locations and public domain including photomontages or perspectives showing the proposed and likely future development. - an analysis of proposed lighting that identifies lighting on-site that will impact surrounding sensitive receivers and includes mitigation management measures to manage any impacts. - details of the nature and extent of the intensification of use associated with the proposed development. Relevant Policies and Guidelines: - Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning, 2008).	Section 7.2 Appendix 1 Appendix 2
5. Transport and Accessibility Provide a transport and accessibility impact assessment, which includes, but is not limited to the following: - analysis of the existing transport network, including: - road hierarchy. - pedestrian, cycle and public transport infrastructure.	Section 7.3 Appendix 5a Appendix 5b

SEAR	Location in EIS
○ details of current daily and peak hour vehicle movements based on traffic surveys and / or existing traffic studies relevant to the locality. ○ existing transport operation for 1 hr before and after (existing or proposed) bell times such as span of service, frequency for public transport and school buses, pedestrian phasing for signals. ○ existing performance levels of nearby intersections utilising appropriate traffic modelling methods (such as SIDRA network modelling). • details of the proposed development, including: ○ a map of the proposed access which identifies public roads, bus routes, footpaths and cycleways. ○ pedestrian site access and vehicular access arrangements, including for service and emergency vehicles and loading/unloading, including swept path analysis demonstrating the largest design vehicle entering and leaving the site and moving in each direction through intersections along the proposed transport routes. ○ car parking, bicycle parking and end-of-trip facilities. ○ drop-off / pick-zone(s) and bus bay(s). ○ pedestrian or road infrastructure improvements or safety measures. • analysis of the impacts due to the operation of the proposed development, including: ○ proposed modal split for all users of the development including vehicle, pedestrian, cyclist, public transport and other sustainable travel modes. ○ estimated total daily and peak hour vehicular trip generation. ○ a clear explanation and justification of the: - assumed growth rate applied. - volume and distribution of proposed trips to be generated. - type and frequency of design vehicles accessing the site. ○ details of performance of nearby intersections with the additional traffic generated by the development both at the commencement of operation and in a 10-year time period (using SIDRA network modelling). ○ cumulative traffic impacts from any surrounding approved development(s).	

SEAR	Location in EIS
○ adequacy of pedestrian, bicycle and public transport infrastructure to accommodate the development. ○ adequacy of car parking and bicycle parking provisions when assessed against the relevant car / bicycle parking codes and standards. ○ adequacy of the drop-off / pick-up zone(s) and bus bay(s), including assessment of any related queuing during peak-hour access. ○ adequacy of the existing / proposed pedestrian infrastructure to enable convenient and safe access to and from the site for all users, particularly across Barton Highway from Jones Park. • measures to ameliorate any adverse traffic and transport impacts due to the development based on the above analysis, including: ○ travel demand management measures to increase sustainable transport (such as a School Transport Plan). ○ arrangements for the Travel Coordinator roles. ○ governance arrangements or relationships with state and local government transport providers to update roads safety. ○ infrastructure improvements, including details of timing and method of delivery. • a preliminary operational traffic and access management plan for the site, the drop-off / pick-up zone(s) and bus bay(s). • analysis of the impacts of the traffic generated during construction of the proposed development, including: ○ construction vehicle routes, types and volumes. ○ construction program (duration and milestones). ○ on-site car parking and access arrangements for construction, emergency and construction worker vehicles. ○ cumulative impacts associated with other construction activities in the locality (if any). ○ road safety at identified intersections near the site due to conflicts between construction vehicles and existing traffic in the locality. ○ measures to mitigate impacts, including to ensure the safety of pedestrian and cyclists during construction. • a preliminary Construction Traffic and Pedestrian Management Plan. Note: Further guidance is provided in the TfNSW advice attached to the SEARs. Relevant Policies and Guidelines:	

SEAR	Location in EIS
• Guide to Traffic Generating Developments (Roads and Maritime Services, 2002). • EIS Guidelines - Road and Related Facilities (Department of Urban Affairs and Planning (DUAP), 1996). • Cycling Aspects of Austroads Guides. • NSW Planning Guidelines for Walking and Cycling (Department of Infrastructure, Planning and Natural Resources (DIPNR), 2004). • Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments (Austroads, 2020). • Australian Standard 2890.3 Parking facilities, Part 3: Bicycle parking (AS 2890.3). in the TfNSW advice attached to the SEARs.	
6. Ecologically Sustainable Development (ESD) • Identify: ○ how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) would be incorporated in the design and ongoing operation phases of the development. ○ proposed measures to minimise consumption of resources, water (including water sensitive urban design) and energy. ○ how the future development would be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design (including water sensitive urban design) and technology and use of renewable energy. ○ how environmental design will be achieved in accordance with the GANSW Environmental Design in Schools Manual (GANSW, 2018). • Provide: ○ an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level. ○ a statement regarding how the design of the future development is responsive to the NARCLiM projected impacts of climate change. ○ an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design. Relevant Policies and Guidelines:	Section 7.4 Appendix 20

SEAR	Location in EIS
• NSW and ACT Government Regional Climate Modelling (NARClIM) climate change projections.	
7. Heritage • Identify any archaeological potential or archaeological significance on and adjacent to the site and the impacts the development may have on this significance. • Provide a statement of significance and an assessment of the impact on the heritage significance of the heritage items on and adjacent to the site, including the Old Murrumbateman Schoolhouse, in accordance with the guidelines in the NSW Heritage Manual (Heritage Office and DUAP, 1996) and Assessing Heritage Significance (OEH, 2015).	Section 7.6 Appendix 6
8. Aboriginal Cultural Heritage • Provide a Aboriginal Cultural Heritage Assessment Report (ACHAR) that: ◦ identifies and describes the Aboriginal cultural heritage values that exist across the site. ◦ includes surface surveys and test excavations where necessary. ◦ has been prepared in accordance with the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) and Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010). ◦ incorporates consultation with Aboriginal people in accordance with Aboriginal Cultural Heritage Consultation Requirements for Proponents (Department of Environment, Climate Change and Water, 2010). ◦ documents the significance of cultural heritage values of Aboriginal people who have a cultural association with the land. ◦ identifies, assesses and documents all impacts on the Aboriginal cultural heritage values. ◦ demonstrates attempts to avoid any impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR and EIS must outline measures proposed to mitigate impacts. ◦ demonstrates attempts to interpret the Aboriginal cultural heritage significance identified into the development. Any Aboriginal objects recorded as part of the assessment must be documented and notified to the Environment, Energy and Science Group of the Department of Planning, Industry and Environment.	Section 7.5 Appendix 7

SEAR	Location in EIS
9. Social Impacts • Provide a Social Impact Assessment prepared in accordance with the draft Social Impact Assessment Guideline 2020. Relevant Policies and Guidelines: • Draft Social Impact Assessment Guideline 2020 (Department of Planning, Industry and Environment).	Section 7.7 Appendix 21
10. Noise and Vibration • Provide a noise and vibration impact assessment that: ○ includes a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation and construction. ○ details the proposed construction hours and provide details of, and justification for, instances where it is expected that works would be carried out outside standard construction hours. ○ includes a quantitative assessment of the main sources of operational noise, including consideration of any public-address system, school bell, mechanical services (e.g. air conditioning plant), use of any school hall for concerts etc. (both during and outside school hours) and any out of hours community use of school facilities. ○ outlines measures to minimise and mitigate the potential noise impacts on nearby sensitive receivers. ○ considers sources of external noise intrusion in proximity to the site (including, road rail and aviation operations) and identifies building performance requirements for the proposed development to achieve appropriate internal amenity standards. ○ demonstrates that the assessment has been prepared in accordance with policies and guidelines relevant to the context of the site and the nature of the proposed development. Relevant Policies and Guidelines: • NSW Noise Policy for Industry 2017 (NSW Environment Protection Authority (EPA)). • Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009). • Assessing Vibration: A Technical Guideline 2006 (Department of Environment and Conservation, 2006). • Development Near Rail Corridors and Busy Roads - Interim Guideline (Department of Planning, 2008).	Section 7.8 Appendix 11

SEAR	Location in EIS
Australian Standard 2363 Acoustics - Measurement of noise from helicopter operations (AS 2363).	
11. Biodiversity - Provide a Biodiversity Development Assessment Report (BDAR) that assesses the biodiversity impacts of the proposed development in accordance with the requirements of the Biodiversity Conservation Act 2016, Biodiversity Conservation Regulation 2017 and Biodiversity Assessment Method, except where a BDAR waiver has been issued in relation to the development or the development is located on biodiversity certified land. - Where a BDAR is not required because a BDAR waiver has been issued in relation to the development, provide: - a copy of the BDAR waiver and demonstrate that the proposed development is consistent with that covered in BDAR waiver - an assessment of flora and fauna impacts where significant vegetation or flora and fauna values would be affected by the proposed development. Note: Further guidance is provided in the Biodiversity and Conservation Division Standard Environmental Assessment Requirements attached to the SEARs.	Section 0 Appendix 8a Appendix 8b
12. Contributions - Identify: - any Section 7.11/7.12 Contribution Plans, Voluntary Planning Agreements or Special Infrastructure Contribution Plans that affect land to which the application relates or the proposed development type. - any contributions applicable to the proposed development under the identified plans and/or agreements. Justification is to be provided where it is considered that the proposed development is exempt from making a contribution. - any actions required by a Voluntary Planning Agreement or draft Voluntary Planning Agreement affecting the site or amendments required to a Voluntary Planning Agreement affected by the proposed development.	Section 5.9
13. Staging Assess impacts of staging where it is proposed and detail how construction works and operations would be managed to ensure public safety and amenity on and surrounding the site.	Section 3.7.1
14. Utilities In consultation with relevant service providers:	Section 7.16 Appendix 12

SEAR	Location in EIS
○ assess of the impacts of the development on existing utility infrastructure and service provider assets surrounding the site. ○ identify any infrastructure upgrades required off-site to facilitate the development and any arrangements to ensure that the upgrades will be implemented on time and be maintained. ○ provide an infrastructure delivery and staging plan, including a description of how infrastructure requirements would be co-ordinated, funded and delivered to facilitate the development.	
15. Stormwater Drainage • Provide: ○ a preliminary stormwater management plan for the development that: - is prepared by a suitably qualified person in consultation with Council and any other relevant drainage authority. - details the proposed drainage design for the site including onsite detention facilities, water quality measures and the nominated discharge point. - demonstrates compliance with Council or other drainage authority requirements. ○ stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties. • Where drainage infrastructure works are required that would be handed over to Council, provide full hydraulic details and detailed plans and specifications of proposed works that have been prepared in consultation with Council and comply with Council's relevant standards. Relevant Policies and Guidelines: • Guidelines for developments adjoining land managed by the Office of Environment and Heritage (OEH, 2013).	Section 7.11 Appendix 13
16. Flooding • Identify any flood risk on-site in consultation with Council and having regard to the most recent flood studies for the project area and the potential effects of climate change, sea level rise and an increase in rainfall intensity • Assess the impacts of the development, including any changes to flood risk onsite or off-site, and detail design solutions to mitigate flood risk where required. Relevant Policies and Guidelines:	Section 7.12 Appendix 13

SEAR	Location in EIS
• NSW Floodplain Development Manual (DIPNR, 2005).	
17. Soil and Water • Provide: ○ an assessment of potential impacts on surface and groundwater (quality and quantity), soil, related infrastructure and watercourse(s) where relevant. ○ details of measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. ○ an assessment of salinity and acid sulphate soil impacts, including a Salinity Management Plan and/or Acid Sulphate Soils Management Plan, where relevant. Relevant Policies and Guidelines: • Acid Sulfate Soil Manual, (NSW Acid Sulfate Soil Management Advisory Committee, 1998). • Acid Sulfate Soils Assessment Guidelines (DoP, 2008). • Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. • Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008).	Section 7.13 Appendix 13
18. Waste • Identify, quantify and classify the likely waste streams to be generated during construction and operation. • Provide the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. • Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site. • Provide a hazardous materials survey of existing aboveground buildings that are proposed to be demolished or altered. Relevant Policies and Guidelines: • Waste Classification Guidelines (EPA, 2014).	Section 0 Appendix 17 Appendix 18
19. Contamination • Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. This must include the following prepared by certified consultants recognised by the NSW Environment Protection Authority:	Section 7.15 Appendix 14

SEAR	Location in EIS
○ Preliminary Site Investigation (PSI). ○ Detailed Site Investigation (DSI) where recommended in the PSI. ○ Remediation Action Plan (RAP) where remediation is required. This must specify the proposed remediation strategy. ○ Preliminary Long-term Environmental Management Plan (LEMP) where containment is proposed on-site. Relevant Policies and Guidelines: • Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP, 1998). • Sampling Design Guidelines (EPA, 1995). • Consultants Reporting on Contaminated land – Contaminated Land Guidelines(EPA, 2020). • National Environment Protection (Assessment of Site Contamination) Measure (National Environment Protection Council, as amended 2013)	
20. Bush fire • Provide a bush fire assessment that details proposed bush fire protection measures and demonstrates compliance with Planning for Bush Fire Protection (NSW RFS, 2019).	Section 7.10 Appendix 10
Plans and documents	
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents. Any plans and diagrams included in the EIS must include key dimensions, RLs, scale bar and north point.	Appendix 1
In addition to the plans and documents required in the General Requirements and Key Issues sections above, the EIS must include the following: Section 10.7(2) and (5) Planning Certificates (previously Section 149(2) and (5) Planning Certificate)	Appendix 23
• Design report to demonstrate how design quality would be achieved in accordance with the above Key Issues including: ○ architectural design statement. ○ diagrams, structure plan, illustrations and drawings to clarify the design. ○ intent of the proposal.	Appendix 2

SEAR	Location in EIS
- o detailed site and context analysis. - o analysis of options considered to justify the proposed site planning and design approach. - o summary of feedback provided by GANSW and NSW State Design Review Panel (SDRP) and responses to this advice. - o summary report of consultation with the community and response to any feedback provided.	
• Geotechnical and Structural Report.	Section 8.1 Appendix 15 Appendix 16
• Accessibility Report.	Section 8.3 Appendix 19
Consultation	
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, relevant special interest groups, including local Aboriginal land councils and registered Aboriginal stakeholders and affected landowners. In particular, you must consult with: • the relevant Council. • Government Architect NSW (through the NSW SDRP process). • Transport for NSW. Consultation should commence as soon as practicable to inform the scope of investigation and progression of the proposed development. The EIS must describe and evidence the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.	Section 6 Appendix 22
Further consultation after two years	
If you do not lodge a development application and EIS for the development within two years of the issue date of these SEARs, you must consult further with the Planning Secretary in relation to the preparation of the EIS.	Noted.
References	
The assessment of the key issues listed above must consider, but not be limited to, relevant guidelines, policies, and plans as identified.	Relevant guidelines, policies and

SEAR	Location in EIS
	plans considered in assessment of key issues.

2 Site analysis

2.1 Regional context

The site is located in the Southern Tablelands region of NSW, approximately 30km northwest of Canberra. A regional context map is provided at Figure 2-1.

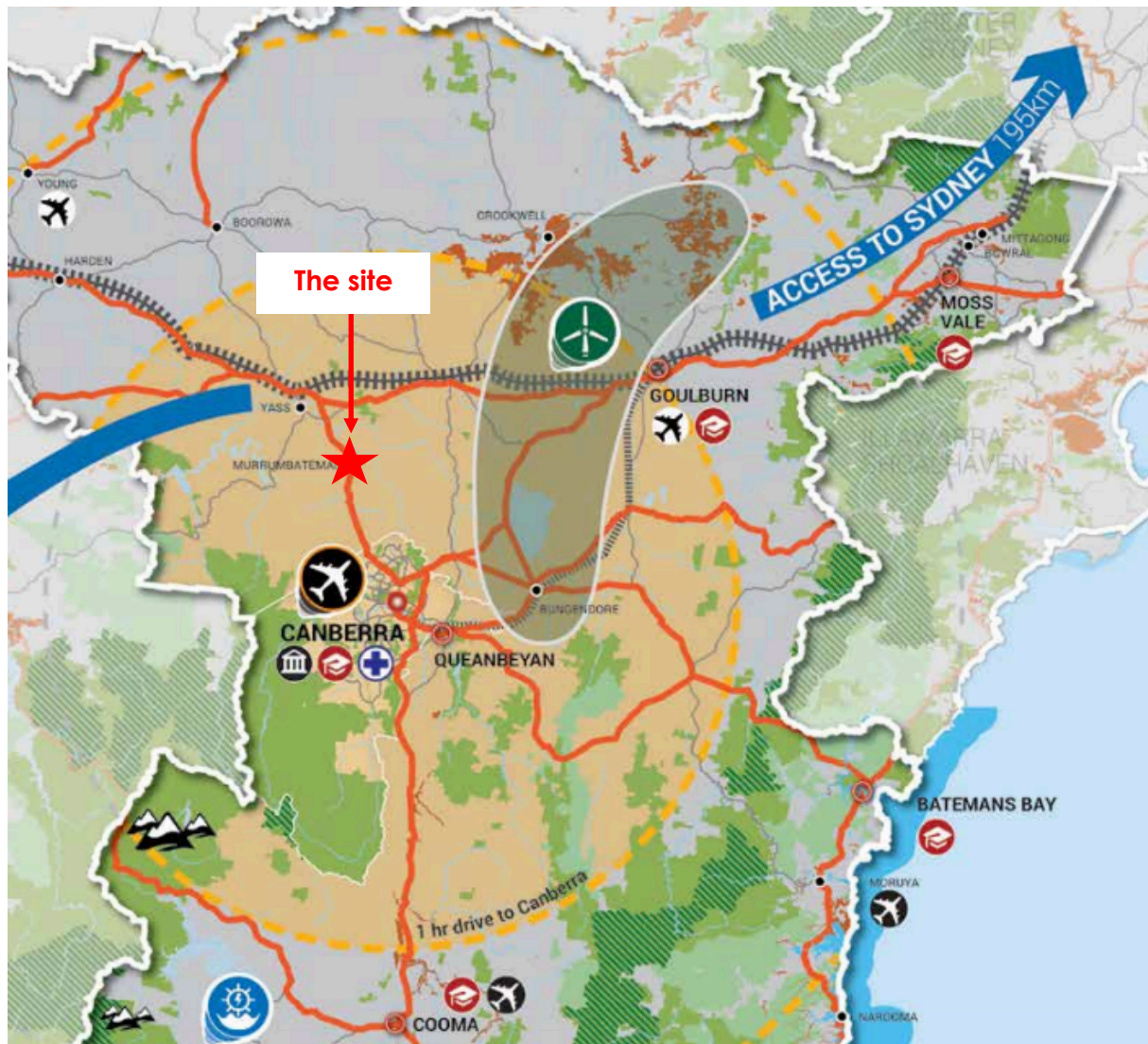


Figure 2-1 Regional context plan
Source: South East and Tablelands Regional Plan 2036

2.2 Local context

The site is located at the northern end of the Murrumbateman village, which is characterised by a mix of uses including low density residential and some commercial development.

Murrumbateman is the second largest settlement in the Yass Valley Council LGA (behind Yass) with a population of approximately 3,200 persons. A local context map is provided at Figure 2-2.



Figure 2-2 Local context map
Source: Pedavoli Architects

2.3 Site description

The site is located at 2 Fairley Street, Murrumbateman, and is legally described as Lot 302 DP1228766.

The site is irregular in shape, with an area of 15,434.92m² and frontages of approximately 217m to Barton Highway and 83m to Fairley Street.



Figure 2-3 Site aerial image
Source: Nearmap

2.4 Existing development

The site contains an existing parking lot in its northern end and a private access road along its western boundary. There is also a mound of soil at the southern end of the site. The site is otherwise cleared and vacant.



Figure 2-4 Site frontage looking west along Fairley St
Source: Pedavoli Architects



Figure 2-5 Existing onsite carpark seen from existing access road entrance
Source: Pedavoli Architects



Figure 2-6 Southern portion of site seen from onsite car park
Source: Pedavoli Architects

2.5 Previous consents

DA 5.2016.43.1 – Carpark

Development application 5.2016.43.1 was approved on 29 April 2016 for construction of a carpark and driveway and installation of infrastructure. The carpark was built and remains on the site. It was originally intended to service a commercial development (see below).

DA 5.2016.112.1 – Commercial development

Development application 5.2016.112.1 was approved on 30 November 2016 for a commercial complex on the site including restaurant, brewery and four commercial buildings. This development did not progress.

2.6 Surrounding development

Development immediately surrounding the site includes a tourist hotel to the north across Fairley Street, the former Murrumbateman school and schoolhouse (heritage item) to the south, a medical centre (Murrumbateman Health Hub) and child care centre to the west, and equestrian facilities to the east across Barton Highway. There is also a pedestrian/cycling and equestrian pathway to the south between the site and library.

Also, a commercial development known as Fairley Square has been approved (DA155289) on the currently vacant land to the west of the site between the medical centre and child care centre. The approved development includes eight separate tenancies that are expected to accommodate cafes/restaurants, retail shops and other local businesses.

The photos below show the key surrounding development.



Figure 2-7 Adjoining medical centre seen from the site's carpark
Source: Pedavoli Architects



Figure 2-8 Tourist hotel across Fairley St
Source: Google



Figure 2-9 Former Murrumbateman School and schoolhouse looking SW
Source: Pedavoli Architects



Figure 2-10 Pathway to the south of site
Source: Pedavoli Architects

2.7 Transport infrastructure

The site is bordered to the north by Fairley Street, which is a local road, and to the east by Barton Highway, which is a State Highway.

The Murrumbateman locality has a high dependency on private vehicles. The Murrumbateman locality has a high dependency on private vehicles. Currently there are two bus routes (842 and 843) operating in the area, connecting Yass to Canberra, with a stop at Murrumbateman Village accessed from Barton Highway (approximately 400m south of the site). Route 842 operates six times per day, while Route 843 operates twice per day.

The footpath infrastructure in the area is limited and is predominantly concentrated around the town centre at the corner of Barton Highway and Hercules Street. There is no provision for cycling connectivity or infrastructure throughout the township; however, there is a pedestrian/cycling/equestrian pathway immediately to the south of the site that links the old Murrumbateman School and schoolhouse site to North Street.

For further discussion on existing transport infrastructure, refer to section 7.3 of this EIS.

2.8 Vegetation, topography and natural features

The site is cleared and contains no significant vegetation or other natural features.

In the past there was first order stream that traversed the northern portion of the site. There is no evidence of this stream currently on the site, and it is assumed that the associated flows were addressed during previous DAs over the site.

There is a mound of soil in the southern portion of the site. Based on historical aerial imagery, it is apparent that this mound is not a remnant land form but rather a stockpile created during previous earthwork activities.

The site falls slightly (approximately 4m) from the northeast to the southwest.

2.9 Easements

As discussed in the Infrastructure Management Plan at **Appendix 12**, there are a few existing easements identified on the site survey, mainly within the existing driveway off Fairley Street. These are mainly to service the adjacent medical centre. As part of the proposed development, these existing easements and services are to be retained during and after construction.

In addition to the above, an existing water main easement currently runs through the site, affecting the proposed school layout. It is proposed to extinguish the existing water main easement but still utilise the existing water main to service the school. This is subject to investigations from the project hydraulic engineer.

Below is the site survey with the existing easements highlighted.

3 Description of proposed development

3.1 Overview

The table below provides a summary of the key elements of the proposed development. The elements are described in further detail in the subsections below the table.

Architectural drawings by Pedavoli Architects are attached at **Appendix 1**.

Table 3-1 Summary description of the development

Proposal element	Brief description
Gross floor area (GFA)	3,345.39m ²
Maximum height	Two storeys RL 577.868
Land use	Educational establishment (primary school)
Student capacity	368 students
Access	Access to the site will be via the existing crossover off Fairley Street.
Car parking	Onsite car park with 40 spaces
Jobs	Construction: 250 full time equivalent (FTE) jobs Operation: 25 school staff plus 3 maintenance and cleaning staff
Construction hours	Monday to Friday: 7.00am to 6.00pm Saturdays: 8.00am to 5.00pm No work on Sunday or public holidays
Hours of operation	School accessible from 6.30am to 6.30pm weekdays Morning bell at 9.00am and afternoon bell at 3.00pm Out of school hours care to run from 7.00am to 9.00am and from 3.00pm to 6.00pm

3.2 Demolition

It is proposed to demolish the existing driveway and a portion of the onsite car park as shown in the demolition plan below.

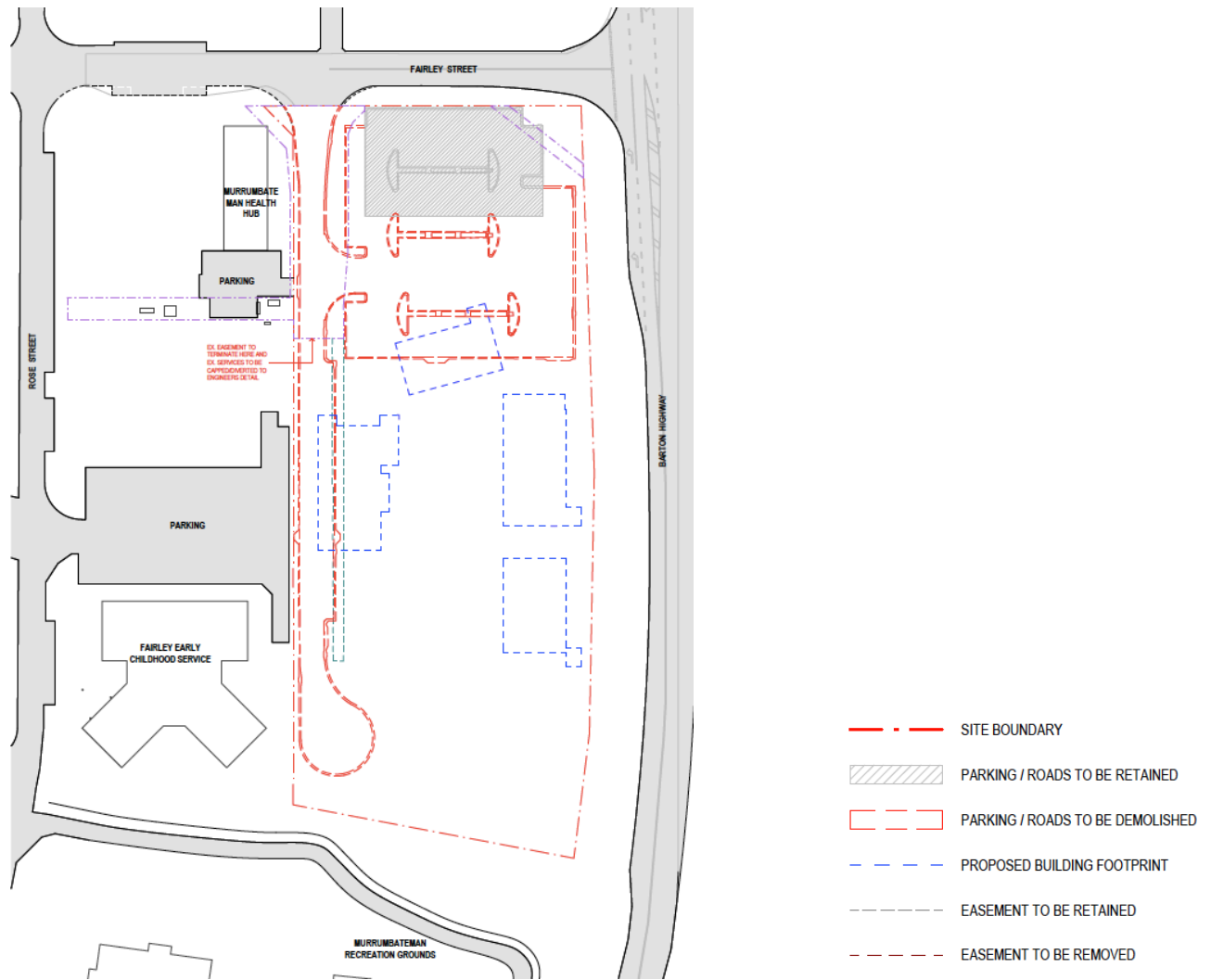


Figure 3-1 Demolition plan
Source: Pedavoli Architects

3.3 Earthworks

The proposal requires some cut and fill to form the building platform areas. The greatest cut (approximately 2m) will occur in the area of the existing soil mound, and the greatest fill (approximately 1m) will occur along the eastern edge of the site to the north of Block B. Surplus material generated from the earthworks will be spread over existing open areas. For further detail, refer to the bulk earthworks drawing in the Civil Engineering Report at **Appendix 13**.

A bulk earthworks plan is provided at Figure 3-3.

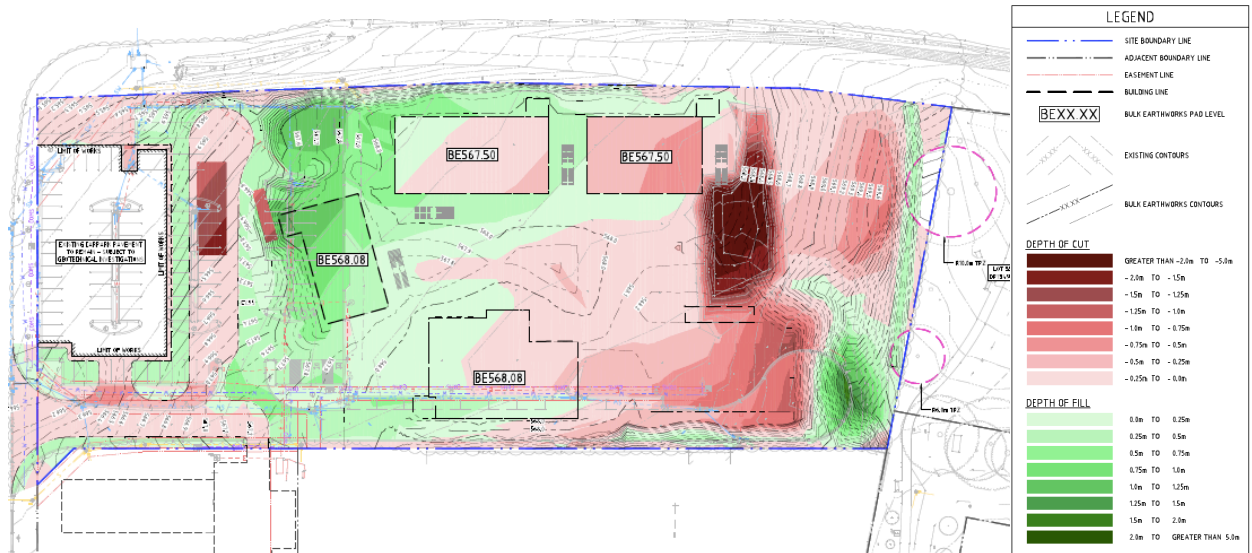


Figure 3-2 Bulk earthworks plan
Source: Northrop Engineers

3.4 Built form and design

3.4.1 Layout

The proposed layout consists of four separate buildings (namely Blocks A, B, C and D) positioned generally in an inverted U shape around a central outdoor space. Block A contains administrative facilities and library; Blocks B and C contain homebase rooms; and Block D contains the canteen and library. This layout responds appropriately to the site's varying boundary conditions and provides a sheltered internal central play area. Further discussion on the proposal's interface with the surrounding development is provided at section 3.4.7 below.

A site plan is provided at Figure 3-3.



Figure 3-3 Site plan
Source: Pedavoli Architects

3.4.2 Height, bulk and scale

At one and two storeys, the proposed school buildings are compatible with the height of surrounding development, including the two-storey tourist hotel to the north and two-storey medical centre to the west.

The proposal's bulk and scale are typical of a school use and appropriate to the mixed use village context, which features several larger non-residential buildings including tourist hotel, medical centre and child care centre.

3.4.3 Density

There is no FSR or other density control applicable to the site. The proposal's density is a direct result of the required student capacity and site/context analysis. The proposed buildings are sized for purpose and feature appropriate intra-building separation and separation from neighbouring development.

The proposed gross floor area is 3,345.39m². Based on the site area of 15,434.92m², the proposed FSR is approximately 0.22:1. This FSR is considered appropriate to the rural village context.

3.4.4 Setbacks

The proposal features the following setbacks from the boundaries:

- **Northern boundary (Fairley Street):** The northernmost school building, Block A, is set back from Fairley Street by more than 50m. The onsite car park is located within the setback zone.
- **Southern side boundary:** The southernmost school building, Block C, is set back from the southern boundary by more than 50m. The proposed southern play space is situated in this large setback zone.
- **Eastern boundary (Barton Highway reserve):** The easternmost school buildings, Blocks B and C, are set back from the Barton Highway reserve by 6.9m and 6.6m, respectively. This setback allows for buffer planting and is consistent with Council's building line policy, which requires a minimum setback of 6m. (Note: Council's building line policy applies to dwelling houses and non-habitable structures only but nonetheless provides a useful guide).
- **Western side boundary:** The westernmost school building, Block D, is set back from the western boundary by 6.7m. This setback allows for buffer planting and provides for suitable separation from the adjoining site. Notably, the area of the adjoining site directly across from Block D is occupied by a car park, which means there are no notable privacy or building separation issues.

3.4.5 Façade and articulation

The proposal utilises varying setbacks, breaks in building form, materiality and fenestration to create articulated buildings that are visually attractive and compatible with the rural village character. Opened covered connections between buildings will create visual relief in the façade while allowing daylight, breezes and visual connection between the school and surrounding context.

3.4.6 External materials and finishes

The selected external colours and textures are desaturated in tone, drawing on the inspiring surrounding rolling hills and valleys as discussed with relevant Aboriginal stakeholders during pre-lodgement consultation. The palette also aims to integrate with the wayfinding, signage and landscape designs.

The roof will be light-coloured to achieve low solar absorbance, and materials will be selected that are durable and low-maintenance. Brick has been selected for the hall to respond to the surrounding built context and the earthy tones found in the landscape. Sample materials and inspiration are shown in the image below.

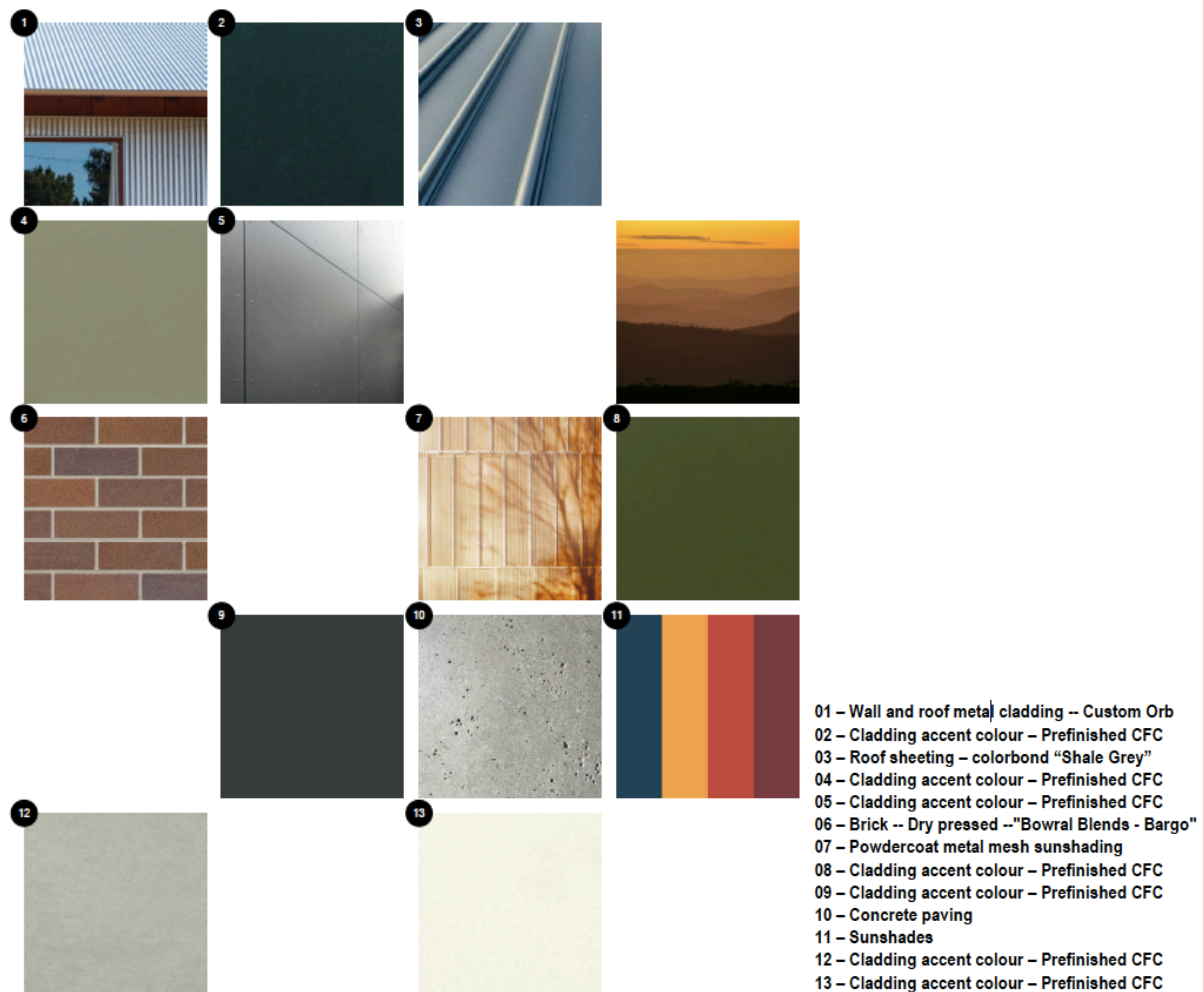


Figure 3-4 External materials and finishes board
 Source: Pedavoli Architects

3.4.7 Relationship to surrounding development, topography and streetscape

Relationship to surrounding development

The position of the buildings responds to surrounding development as follows:

- The eastern boundary adjoins the Barton Highway road reserve. The homebases are proposed parallel to the road and set back from the boundary to allow a landscape buffer. This positioning for Blocks B and C provide an acoustic and safety buffer to the outdoor play areas, which are located centrally and to the south of the site.

- The southern boundary addresses a pedestrian/landscape corridor. The built form has been well set back from this zone so as to contribute further to the landscape and pathways in the design of the southern play area.
- To the western edge are commercial developments. An appropriate setback is proposed with some hard and soft landscape proposed in the setback zone. The hall has its back to this edge addressing the central playspace, creating a privacy and acoustic buffer for the commercial developments and the school.
- To the north is Fairley Street. The proposed carpark utilises the existing carpark, with some changes to create a kiss and drop that the main entry to the school addresses.

Relationship to topography

The site was previously cleared and is generally flat, with the exception of a mound of soil, which is not a remnant land form but rather is a stockpile from previous earthworks. The proposal responds to this existing topography by proposing minimal cut and fill to achieve the required floor levels. The existing mound of soil on the site will be removed.

Relationship to streetscape

The proposal's front address is Fairley Street. There is no established building line along this street. The proposal will generally preserve the existing streetscape by retaining a large portion existing car park and setting the proposed buildings well back from the street, behind the car park. New plantings within the car park and along the boundary will contribute to visual amenity along the street.

The site's eastern boundary adjoins the Barton Highway, a classified road. Given safety, access and amenity considerations, the proposed school buildings do not directly front the highway. Nonetheless, the buildings have been designed to address the highway through window placement, materiality and articulation. Buffer plantings between the road reserve and school buildings will both improve amenity within the school site and contribute to the visual amenity of the Barton Highway streetscape.

Elevations showing the proposal's relationship to the streetscape context are provided in the figures below, while full-size versions can be found in the Design Analysis report at **Appendix 2**.



Figure 3-5 North elevation (Fairley Street)
Source: Pedavoli Architects



Figure 3-6 East elevation (Barton Highway)

Source: Pedavoli Architects

3.4.8 Services

Waste and other services have been considered in the design of the proposal, with specialist consultants engaged from an early stage of the project. A waste storage pad is provided at the easternmost side of the car park, and waste collection will occur from this point.

In regards to mechanical plant, the architectural plans at **Appendix 1** include the locations of communication rooms, utility rooms and other necessary rooms for services, and the section drawings clearly indicate sufficient space for service bulkheads.

3.4.9 Access to daylight, ventilation and acoustic separation

The design utilises a combination of passive and mechanical measures to ensure the amenity and comfort of students and staff.

Learning spaces and common spaces are oriented to achieve high levels of natural daylight and feature extensive glazing to allow visual connection to the outdoors.

In regards to ventilation, a mixed mode strategy will be utilised. When external conditions are favourable, windows to each homebase cluster can open to facilitate natural ventilation.

In regards to acoustic separation, the buildings have been arranged to provide amenity both for students and neighbouring uses. Along the eastern boundary, Blocks B and C serve to shield the central outdoor area from Barton Highway traffic. Along the western boundary, Block D helps to block noise emissions from the central outdoor play to the adjoining uses to the west. Also, noise from ventilation systems will be minimised.

Access to landscape and outdoor spaces

The proposal features a landscape design with ample outdoor spaces including central play area with dry creek bed and growing gardens, a large grassed area and separate sports courts. The landscaping is integrated with the building design, ensuring students have easy and frequent access to outdoor spaces. The landscape design is described further in section 3.5 below.

3.5 Landscaping

A landscape plan has been prepared by Taylor Brammer and is attached at **Appendix 3**. The landscape strategy generally includes:

- Deciduous tree planting in the car park, main entrance and central outdoor area.
- Buffer planting along the eastern boundary to Fairley Street including native trees and understorey of groundcovers and grasses.
- Buffer planting along the western boundary including smaller native trees.
- Open grass play area at the southern end of the site, surrounding by buffer planting.

A total of approximately 105 native trees and 37 exotic tree plantings are proposed.

The proposed landscape masterplan is shown in the figure below.



Figure 3-7 Landscape plan
Source: Taylor Brammer

The proposed plant species have been carefully selected from the ACT Government's "Municipal Infrastructure Standards Part 25 Plant Species for Urban

Landscape Projects" and Council's "Native Plant List for Water Wise Gardens in the Yass Valley".

The Yellow Box – Red Gum Grassy Woodland, a critically endangered community in the ACT Region, provides direction for the native tree and grassland selection in the design.

Additionally, the Ngunnawal people have inspired the selection of many of the plant species. Plants were utilised for a variety of uses such as food, medicine, tools, artworks and shelter.

3.6 Security fencing

The proposal includes boundary security fencing around the school buildings and play areas, as well as separate security fencing around the car park.

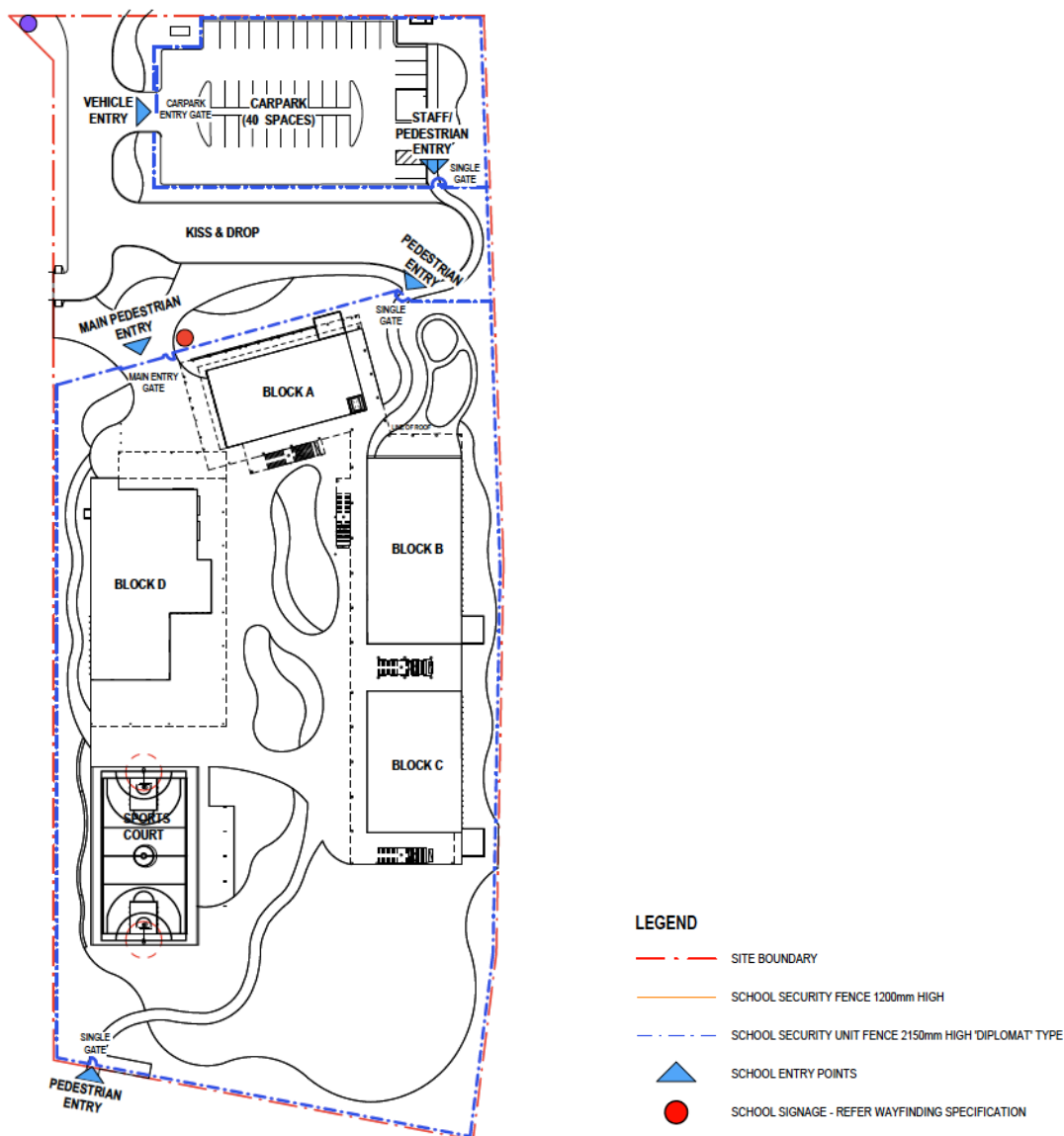


Figure 3-8 Fencing strategy
Source: Pedavoli Architects

3.7 Access, parking and circulation

3.7.1 Parking

The proposal includes an onsite car park with 40 spaces. Being a primary school, the car carpark will cater for staff only, as well as students with accessible set down requirements. This quantity of spaces is adequate for staff in accordance with Schools Infrastructure NSW (SINSW) Educational Standards and Facilities Guidelines (EFSG).

3.7.2 Vehicular access into site

All vehicles, including service vehicles, will access the car park via a new driveway to Aprasia Avenue as shown in the figure below. The car park has been specifically designed to accommodate up to medium rigid vehicles. Swept paths are provided at Appendix B of the Transport Assessment at **Appendix 5a**.

A kiss-and-ride area with turning circle is provided at the front of the school as shown in the figure below.

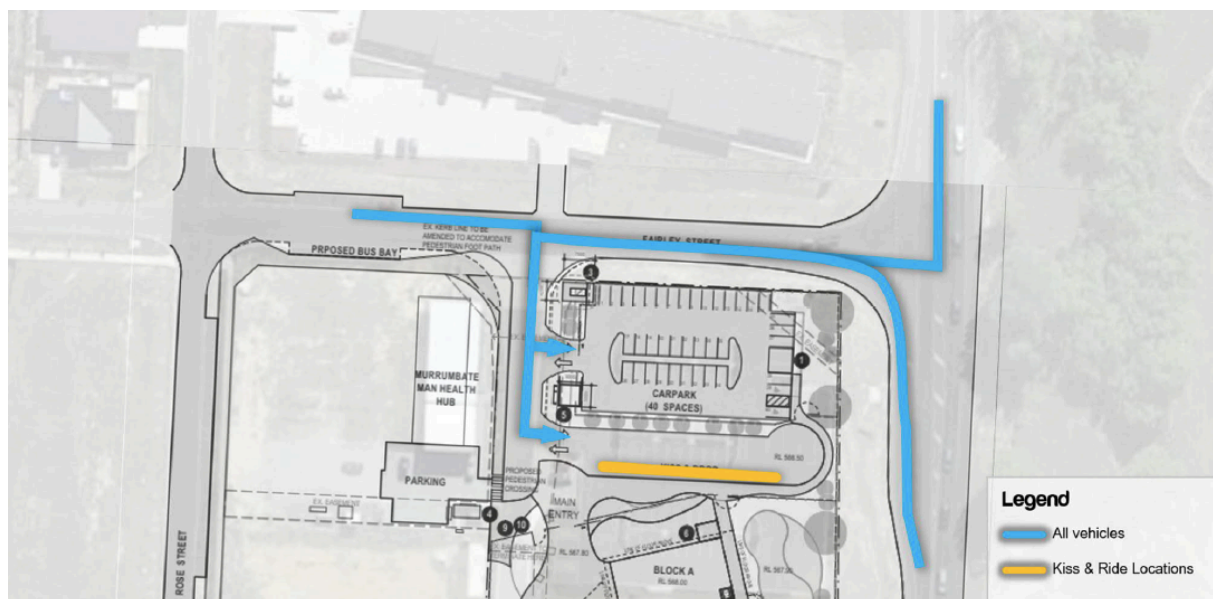


Figure 3-9 Vehicular access

Source: Ason Group

3.7.3 Bus bay

A bus bay is proposed along the along Fairley Street to the northwest of the site, in front of the adjacent medical centre. The bus stop will be operational during the school peak periods to allow students to travel to and from the school. The stop will also be used for special events such as excursions. Students will be escorted to and from the bus stop.

3.7.4 Pedestrian circulation

The proposal includes two pedestrian access points, namely a main entry point at the northern end of the site and a secondary entry at the southern end of the site. the main entry point links to Fairley Street via the driveway, while the southern secondary entry links to the existing pedestrian/cycling equestrian path to the south of the site. A circulation diagram is shown in the figure below. As shown in the diagram, it is anticipated that cyclists accessing the site will utilise the southern entry point, as this point connects to the existing pathway to the south of the site.

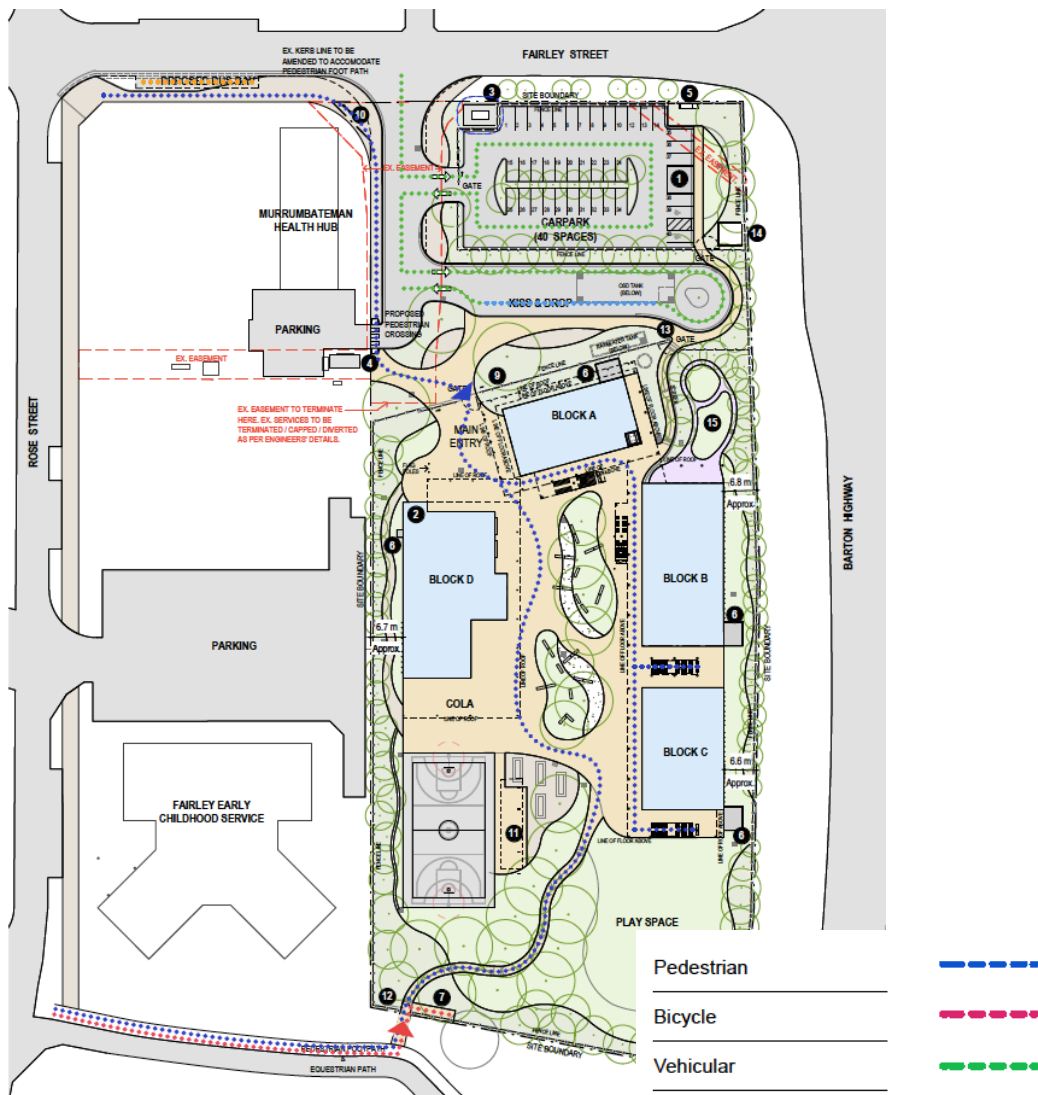


Figure 3-10 Circulation diagram
Source: Pedavoli Architects

3.8 Staging

The proposal does not include any staged construction or occupation.

3.9 Construction

Construction of the proposal will be undertaken during the following hours:

- Monday to Friday: 7:00am to 6:00pm.
- Saturdays: 8:00am to 5:00pm.
- No work on Sunday and public holidays.

Approximately 250 FTE construction jobs will be created during construction.

Construction is anticipated to commence in December 2021 and be completed in May 2022.

3.10 Operational details

The school will accommodate up to 368 students and employ approximately 25 school staff plus 3 maintenance staff.

The school will be accessible from 6:30am to 6:30pm on weekdays, with restricted access outside these hours. The morning bell is expected to be at 9:00am and the afternoon bell at 3:00pm.

The out of school hours care will operate before school from 7:00am to 9:00am and after school from 3:00pm to 6:00pm, and a maximum of 110 students will attend out of school hours care.

3.11 Signage

Two signs are proposed as part of this application:

- A digital pylon sign located at the main driveway entry with a digital content area of 1,080mm x 1,720mm and with a maximum height of 4,390mm.
- A plinth sign located at the main pedestrian entry along the security gate, measuring 630mm in width and 2,800mm in height.

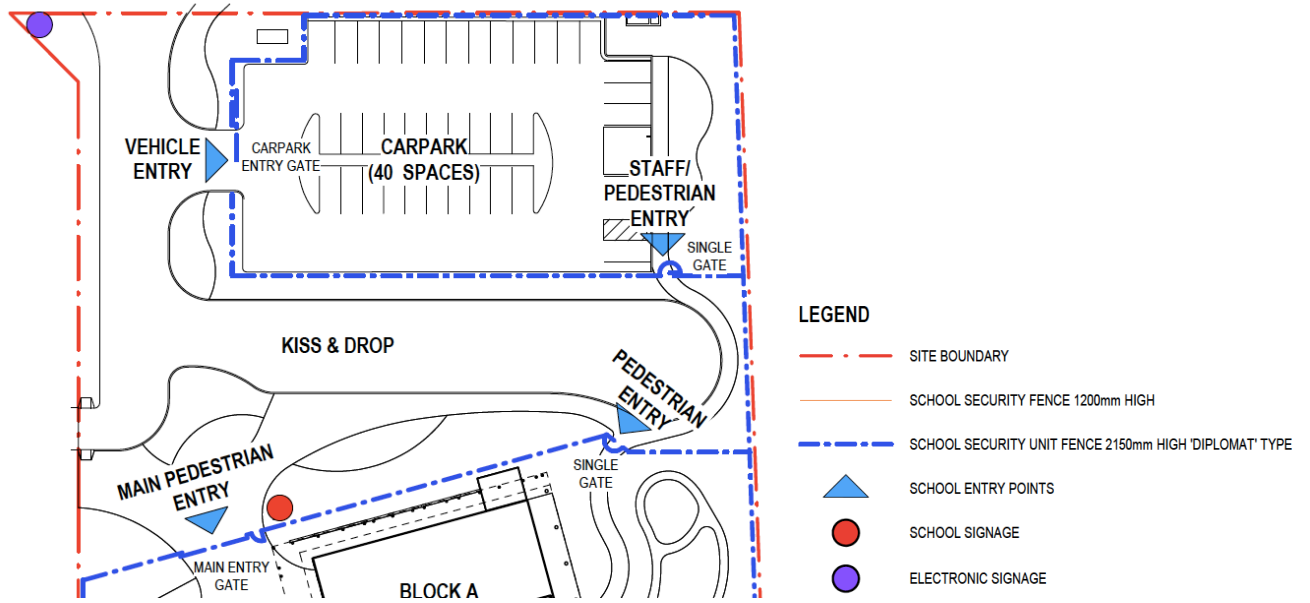


Figure 3-11 Signage location plan
Source: Pedavoli Architects

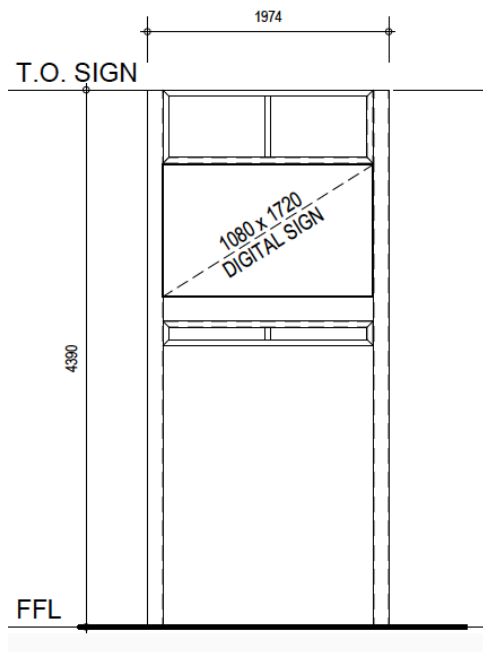


Figure 3-12 Proposed digital pylon sign
Source: Pedavoli Architects

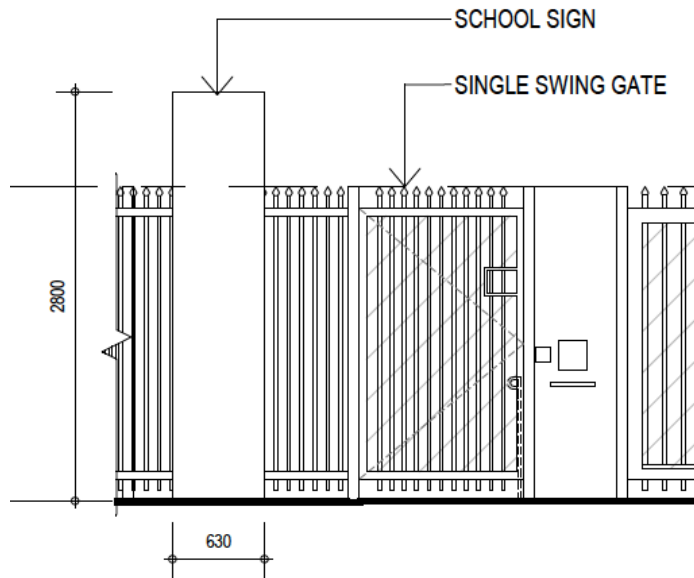


Figure 3-13 Proposed plinth sign
Source: Pedavoli Architects

3.12 Substation

The school site has no existing low voltage (LV) supply, and the proposed load required for the school is likely to be larger than any spare capacity on the existing padmount substation. A new padmount substation is required to service the school, requiring an easement of 4.2m x 7.0m.

The substation is proposed to be located at the northwestern corner of the carpark outside of the school fencing as illustrated in site plan extract below (refer to **Appendix 1** for the full site plan). This location is appropriate as it allows for easy access from Fairley Street. From the substation, high voltage (HV) and LV cables will be laid underground to Rose Street and joined to the cables in that location.

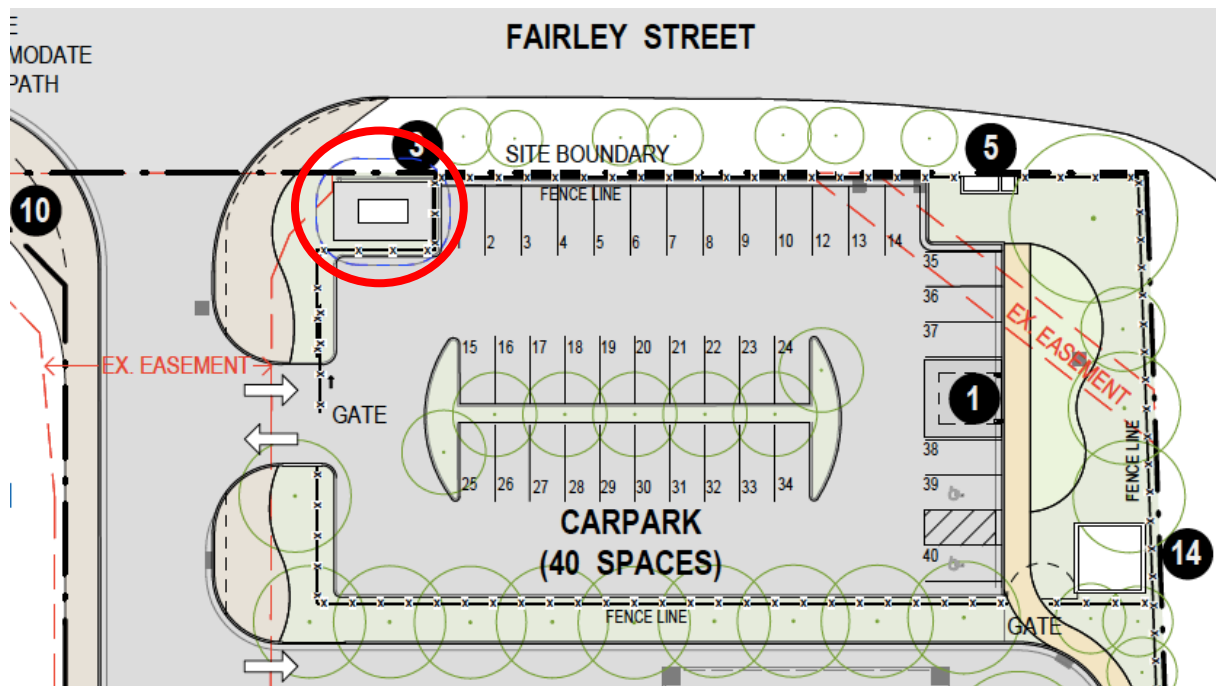


Figure 3-14 Site plan extract showing substation location
Source: Pedavoli Architects

4 Strategic context

The proposal is consistent with the relevant planning provisions, goals and strategic planning objectives in relevant planning policies, as outlined in the table below.

Table 4-1 Assessment against strategic plans

Strategic plan	Purpose
NSW State Priorities	The 14 NSW State Priorities were unveiled in 2019 to provide a framework for economic growth, infrastructure delivery, service provision, and community wellbeing and safety across NSW. The proposal seeks to construct a new school to expand enrolment capacity in the area. Through its provision of important educational services, the proposal supports the priority of “improving education results”. The other priorities are generally not relevant given the proposal's nature and location.
State Infrastructure Strategy 2018 – 2038 Building the Momentum	The State Infrastructure Strategy is a 20-year infrastructure investment plan for the NSW Government that places strategic fit and economic merit at the centre of investment decisions. The Strategy's strategic objective for education infrastructure is to “Deliver infrastructure to keep pace with student numbers and provide modern, digitally-enabled learning environments for all students”. The Strategy primarily relates to addressing enrolments in schools, which are expected to increase by 25% over the next 20 years. The proposal is consistent with the Strategy's relevant objective in that it provides for a new educational establishment incorporating best-practice approaches to education. The proposal also meets growing demand for primary school enrolment in the region.
Future Transport Strategy 2056	The Future Transport Strategy 2056 is an update of the NSW Long Term Transport Masterplan. It sets the 40-year vision, directions and outcomes framework for transport customer mobility in NSW. The Strategy will be delivered through a suite of accompanying plans, including Services and Infrastructure Plans and issue-based or placed-based Supporting Plans. The Strategy identifies Barton Highway as a new/improved regional road corridor. As discussed in the Barton Highway Improvement Strategy section below, future improvements to the highway include a bypass at Murrumbateman village. This future bypass will likely reduce traffic along Barton Highway adjacent to the site, which will improve the commute for students and staff, and improve safety for pedestrians. There are no other specific objectives or actions in the strategy directly relevant to the proposal.

Strategic plan	Purpose
Crime Prevention Through Environmental Design (CPTED) Principles	The proposal has been assessed against the four key principles of CPTED including surveillance, access control, territorial reinforcement and space management. Refer to the CPTED Report at Appendix 25 for further discussion.
Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)	This policy sets out the NSW Government's position on design in the urban environment. It provides clarity on what the NSW Government means by good design and functions to assist in the design and assessment of projects. The policy includes seven applicable objectives: • Better fit – contextual, local and of its place; • Better performance – sustainable, adaptable and durable; • Better for community – inclusive, connected and diverse; • Better for people – safe, comfortable and liveable; • Better working – functional, efficient and fit for purpose; • Better value – creating and adding value; and • Better look and feel – engaging, inviting and attractive. In accordance with these objectives, the proposal is sustainable, functional, sensitive to its context and visually distinctive. Notably, the design has been reviewed by the State Design Review Panel as discussed at section 6.2.1 and Appendix 2 of the EIS.
Healthy Urban Development Checklist	The purpose of the Healthy Urban Development Checklist is to assist health professionals in providing advice on urban development proposals. The proposal is consistent with the Checklist as it will provide for a new development characterised by well-designed open spaces, quality environment, opportunity for social cohesion, healthy food and high quality learning facilities.
Draft Greener Places Design Guide	The Draft Greener Places Policy aims to guide the planning, design and delivery of Green Infrastructure in urban areas across NSW. The Policy is centred around the following four guiding principles: • Principle 1 – Integration; • Principle 2 – Connectivity; • Principle 3 – Multifunctionality; and • Principle 4 – Participation. In accordance with these principles, the proposal successfully integrates building form and green open space; provides for a series of accessible connected open space; features multifunctional green space that simultaneously provides

Strategic plan	Purpose
	environmental performance and enhances facility amenity; and incorporates the needs of various stakeholders including students, staff, community and local Aboriginal stakeholders.
Koala Habitat Protection Guideline	This guideline is not relevant given that the site contains no trees and no tree removal is proposed.
NSW South East and Tablelands Regional Plan 2036	The South East and Tablelands Regional Plan 2036 is a 20-year strategic plan. The plan sets four goals for the region: • <i>A connected and prosperous economy.</i> • <i>A diverse environment interconnected by biodiversity corridors.</i> • <i>Healthy and connected communities.</i> • <i>Environmentally sustainable housing choices.</i> Consistent with these goals, the proposal will provide for new social infrastructure that is essential for achieving a connected and prosperous economy. In regard to schools, the plan identifies, "New schools, if required, will be established where there are no other sustainable options available within existing assets". The proposal provides for the establishment of a new school in a location where other sustainable options are available. For further discussion on project need, refer to section 1.3 of the EIS.
Fairley Commercial Centre Development Control Plan 2015	The Fairley Commercial Centre Development Control Plan (DCP) 2015 applies to the site but was originally prepared to guide an envisioned commercial development. The DCP does not identify commercial as the preferred development type for the site but merely provides a guideline for commercial development should it occur. The objectives of the DCP are to: • <i>To provide an indication as to how the land may be developed for commercial purposes.</i> • <i>To indicate the type of commercial activities proposed for the area.</i> • <i>To provide an indicative layout of buildings, car parking, access and other site facilities and features.</i> • <i>To allow for future commercial uses and activities.</i> The commercial development is no longer progressing, and therefore this DCP is not relevant.
Yass Valley Local Strategic Planning Statement	The Yass Valley Local Strategic Planning Statement (LSPS) sets outs the 20-year vision for land use within the Local Government Area, outlining how growth and change will be managed into the future. It defines the special characteristics which contribute

Strategic plan	Purpose
	to Yass Valley's identity and recognises the shared community values to be maintained and enhanced. A key relevant action in the statement is to "Support NSW Education in planning and delivering Primary School in Murrumbateman". The proposal aligns with this action by providing for a new primary school in Murrumbateman.
Yass Valley Settlement Strategy	The Yass Valley Settlement Strategy provides a clear direction for long term growth and development, which accounts for the proposed Parkwood development and increasing pressure for NSW-ACT border development (which was not covered in the previous studies and strategies) within the Yass Valley LGA. The strategy identifies the following key relevant opportunity: <i>Increasing the population at Murrumbateman to approximately 10,000 people will foster the growth of local and district services and facilities, comprising the general range of weekly and some higher order goods and business services. It will also support the establishment of a school(s).</i> The strategy also recommends the following action for Murrumbateman: <i>Continue to lobby for a new school with the NSW Government.</i> The proposal aligns with the above action and opportunity by providing for a new primary school that will cater to the existing population and expected population increase in Murrumbateman.
Barton Highway Improvement Strategy	The Barton Highway Improvement Strategy sets out the NSW Government's 20-year plan to guide the development and management of the corridor to improve road user safety and traffic efficiency and to ensure the long term development of the highway is supported. Barton Highway adjacent to the site forms part of Section 3 of the strategy. Section 3 has the highest casualty rate (per kilometre per annum 2009–2013) and greatest severity of crashes along the Barton Highway. Safety concerns for active transport users crossing the highway in Murrumbateman were identified in the stakeholder and community consultation during preparation of the Strategy. To address these concerns, a number of strategies are being pursued, including a duplication of Barton Highway including a bypass at Murrumbateman Village. The village bypass would pass around the proposed school site, meaning that the site's current Barton Highway frontage would accommodate primarily local traffic in the future once the bypass has been completed. The bypass has been reflected in Council's LEP mapping. Construction of the first stage of the duplication, an

Strategic plan	Purpose
	8km stretch from the ACT border towards Murrumbateman, has commenced. It is understood that the bypass works, which form the fourth stage, have not yet received funding. Additionally, a number of upgrades to pedestrian infrastructure have been completed in Murrumbateman Village, including: • Widening the existing footpath from Hercules Street to the bus stop outside the Murrumbateman Community Centre for a wider and safer path. • Upgrading the Barton Highway/Recreational Ground Access intersection by widening a portion of Barton Highway. • Installation of pedestrian fencing along highway shoulder between Jones Park and Barton Highway to provide protective barrier for pedestrians and cyclists. • Change the flow of traffic to one-way at the Jones Park rest area. These upgrades are illustrated at Figure 4-1 below the table.
Yass Valley Development Servicing Plans for Water and Sewerage	Under Section 306(4) and (5) of the <i>Water Management Act 2000</i>, the Minister for Planning may decide in regard to developer charges levied on Crown Developments. Given the proposal is a Crown Development for essential community services, it is requested that the proposal be exempt from developer charges under the Yass Valley Development Servicing Plans for Water and Sewerage.

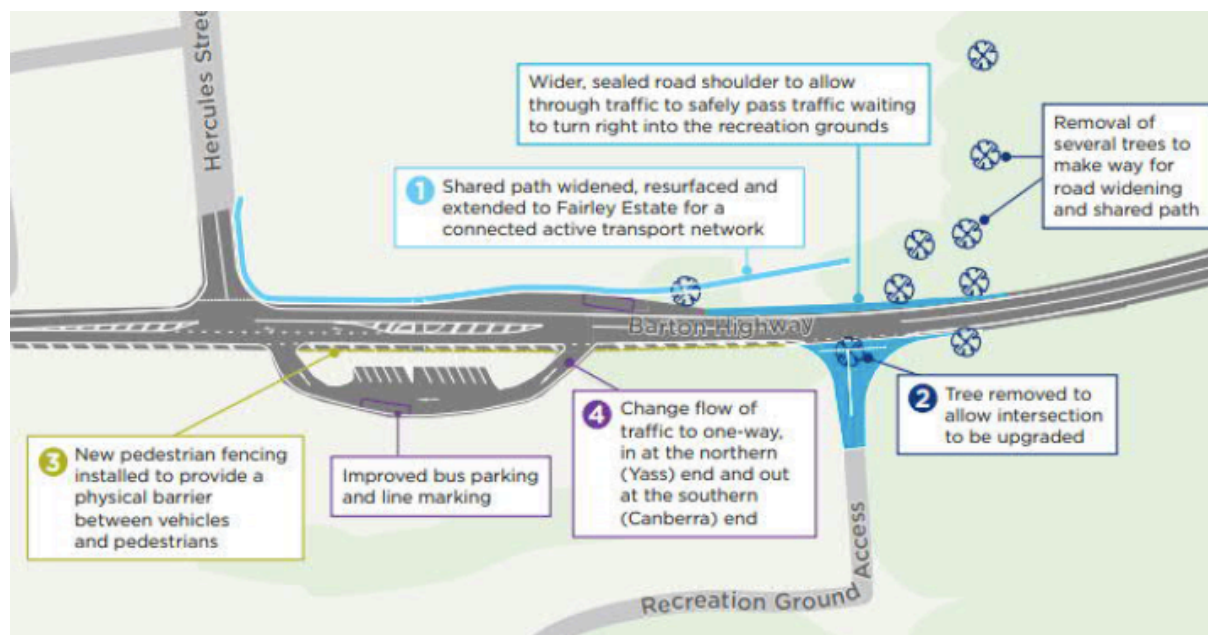


Figure 4-1 Murrumbateman Village safety improvements

Source: Barton Highway Improvement Strategy

5 Statutory context

5.1 Planning approval pathway

The SRD SEPP nominates certain types of development as either State significant development (SSD), State significant infrastructure or regionally significant development.

Under clause 15(1) of Schedule 1 of the SRD SEPP, development for the purpose of a new school, regardless of the capital investment value, is categorised as SSD.

The proposal is for the purposes of a new school and is therefore classified as SSD. The consent authority under section 4.5 of the EP&A Act is the Minister for Planning and Public Spaces or their delegate.

The EP&A Act establishes the assessment framework for the proposal. Section 4.12(8) requires that a development application for an SSD be accompanied by an EIS prepared by or on behalf of the applicant in the form prescribed by Schedule 2 of the Environmental Planning and Assessment Regulation 2000.

5.2 Permissibility

The site is zoned RU5 Village under the *Yass Valley Local Environmental Plan 2013* (the LEP). Schools are permitted with consent in the zone.

5.3 Additional approvals required

The proposal includes a bus stop along Fairley Street and future pedestrian crossings. However, consent from the roads authority under Section 138 of the *Roads Act 1993* (Roads Act) is not required because, pursuant to Clause 5 of Schedule 2 of the Roads Act, the applicant is a public authority and the affected roads are not classified or Crown roads.

No requirements for other approvals have been identified at this stage. It is noted that section 4.41 of the EP&A Act identifies a number of approvals that do not apply to SSD applications.

5.4 EPBC Act

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is federal legislation which provides a legal framework to protect and manage nationally important flora, fauna, ecological communities and heritage places defined as “matters of national environmental significance” (MNES). A referral must be made to the Australian Government Minister for the Environment for actions that are likely to have a significant impact on MNES.

The proposal is not likely to have a significant impact on MNES as confirmed in the Biodiversity Constraints Letter at **Appendix 8b**, and therefore no referral is required. It is noted that a biodiversity development assessment report (BDAR) waiver has been

issued for the proposal (refer to **Appendix 8a**) in recognition of the site's low biodiversity value.

5.5 EP&A Act

The table below provides consideration of the proposal in the context of the objects of the EP&A Act.

Table 5-1 Objects of the EP&A Act

Objects of the EP&A Act	Comments
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources	The proposal conserves and manages resources by locating the development on an already cleared area of land within an urban area.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal incorporates a number of ESD measures outlined in section 7.4 of the EIS. The proposal is targeting a 4 Star Green Star rating.
(c) to promote the orderly and economic use and development of land	The proposal promotes the orderly and economic use of land by placing a new school on relatively unconstrained land in an existing urban area.
(d) to promote the delivery and maintenance of affordable housing	This objective is not applicable to the proposal.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats	The proposal is located on cleared land and requires no vegetation removal. No notable flora or fauna or their habitat will be affected. DPIE has issued a BDAR waiver (refer to Appendix 8a) in recognition of the low likelihood of impacts on biodiversity values.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)	The built and cultural heritage (including Aboriginal cultural heritage) of the site and adjoining properties has been considered as part of this EIS. As discussed in sections 7.5 and 7.6, the proposal would have no unacceptable heritage impacts.
(g) to promote good design and amenity of the built environment	As discussed in section 7.1 and Appendix 2 , the proposal features a high quality, purpose-built design that provides high amenity for users.

Objects of the EP&A Act	Comments
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants	The proposal has been designed in compliance with relevant Building Code of Australia (BCA) and <i>Disability Discrimination Act 1992</i> (DDA) standards for building construction.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State	Prior to lodgement, consultation was carried out with a range of State government agencies and Yass Valley Council as detailed in section 6 of this EIS. Also refer to the consultation report at Appendix 22 .
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The local community and other stakeholders were consulted prior to lodgement as discussed in section 6 of this EIS, and the community will be able to provide further input during the formal exhibition process.

5.6 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* (BC Act) is the key piece of legislation that identifies and protects threatened species, populations and ecological communities within NSW.

Clause 7.9 of the BC Act requires any application for SSD to include a BDAR “unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values”.

A request to waive the requirement for a BDAR was submitted to DPIE on 09 December 2020. In recognition of the site's lack of impact on biodiversity values, a waiver was granted on 19 February 2021 (refer to **Appendix 8a**). Also refer to **Appendix 8b** for a Biodiversity Constraints Letter prepared to inform the SEARs request.

5.7 State Environmental Planning Policies

5.7.1 Education SEPP

The *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (Education SEPP) aims to provide a state-wide framework for delivery of education facilities.

Clause 57 of the Education SEPP requires that new school development resulting in an additional 50 or more students be referred to TfNSW for comment. This clause also requires consideration of accessibility of the site and potential traffic safety, road congestion and parking implications. These matters are addressed at section 7.3 and **Appendix 5a** of the EIS.

Clause 35 requires consideration of the design quality principles in Schedule 4. These principles are addressed in the Design Analysis Report by Pedavoli Architects at **Appendix 2**, and a summary is provided below.

Principle 1: Context, built form and landscape

The proposed design is based on information drawn from the site analysis and urban design principles to ensure the project responds to the context and is site- and community-specific.

The proposed site planning is in keeping with the context by extending the landscape corridor to the south into the site as a secondary school entry. The setback to the western boundary and the proposed carpark and kiss-and-drop establishes a forecourt at the school's entry that addresses the neighbouring commercial facilities/carpark and vehicular/pedestrian entry points.

The scale of the school at two storeys is in keeping with the surrounding built form, at this scale the school nests within the surrounding landscape.

Principle 2: Sustainable, efficient and durable

The proposal has been designed with regard to the principles of environmentally sustainable development. The buildings' location, orientation, sun shading and passive thermal design elements are the first step to creating a sustainable building solution. This is further enhanced by the inclusion of a rainwater tank for irrigation, solar power and the selection of long lasting, low maintenance materials.

The structural system for the buildings is a mixture of concrete frame and steel framing. The benefit of these systems is that the internal walls are non-loading bearing, allowing for reconfiguration in the future if necessary. With input from project engineers, the buildings have been optimised to facilitate good daylighting and natural ventilation.

Principle 3: Accessible and inclusive

The site has been designed to provide an accessible and inclusive ground plane such that buildings are all served by ramps and/or lifts. The design of the open space aims to provide walkway transitions between the various areas. This creates equitable access for all users. The site layout is clear and simple, promoting easy and direct circulation. This will be enhanced by clear wayfinding signage.

Principle 4: Health and safety

The design ensures that natural light, ventilation and acoustics create healthy and safe learning/teaching environments. The school site is to be fenced at the boundary as the perimeter security. The landscaping of the site and arrangement of the fence assist in integrating the school into the site and public domain. The primary and secondary entries are clearly visible.

Principle 5: Amenity

The objective of the design is to provide a variety of teaching and learning spaces with access to natural light and ventilation and good internal acoustics to facilitate comfortable learning environments.

The typical learning clusters contain four homebases, a combined practical activity area with a shared learning common area. In addition, a range of outdoor learning and play spaces are provided with the aim to encourage learning from the natural environments.

The proposed massing locates the built forms adjacent to the streetscape to maximise the useable play spaces towards the centre and south of the site. This places the buildings as a buffer between the public domain and the outdoor play space.

Principle 6: Whole of life flexible and adaptive

The key factors that ensure a building can be used well into the future are;

- Long lasting, low maintenance materials to ensure its use stands up to the impacts associated with school buildings.
- Framed construction that allows the internal walls to be reconfigured in the future to adapt to future learning requirements.
- A variety of learning spaces demonstrating good amenity for the students and teachers.

Principle 7: Aesthetics

The school is designed to provide an articulated and dynamic built form which contextually responds to site, scale and massing. The main pedestrian entry and urban marker for the site is bounded by Block A and the hall (Block D), which form a funnel into the school's interior.

The proposed school is two-storey with the exception of the hall. It wraps around a central playspace in a horseshoe form. The connections between each of the four buildings unify the schools order and form. These open covered connections create visual relief in the façade between buildings, whilst allowing daylight, breezes and visual connection between the school and its surrounding context.

A site narrative has been developed through the applied material palette, landscape design, signage and wayfinding strategy to include the local indigenous narrative, history and culture of the traditional Indigenous groups. These themes will be refined further at our next meeting with the relevant Indigenous community members. The combination of the building forms and the landscape setting will provide a sense of identity for the neighbourhood and wider community.

5.7.2 Other relevant SEPPs

The proposal's consistency with other relevant current and draft SEPPs is outlined in the table below.

Table 5-2 SEPP assessment

SEPP	Comment
State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)	Clause 15 of Schedule 1 of the SRD SEPP identifies that development for the purpose of a new school (regardless of capital investment value) is SSD. The proposal is for the purposes of a new school and is therefore classified as SSD.
State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)	Clause 101 of the ISEPP applies to the site given Barton Highway is a classified road. Consistent with the requirements of this clause, the proposal provides for vehicular access off Fairley Street (rather than Barton Highway) and does not adversely affect the safety, efficiency or ongoing operation of Barton Highway. The proposal also includes measures to ameliorate noise and vehicle emissions including building layout and orientation, buffer plantings and acoustic fencing. Clause 102 does not need to be considered because Barton Highway does not meet the annual average daily traffic volume threshold of more than 20,000 vehicles.
State Environmental Planning Policy No 64—Advertising and Signage (SEPP 64)	Two signs are proposed as part of the application. These signs are consistent with the aims of SEPP 64 in that they are compatible with the desired amenity and character of the area, provide effective communication in a suitable location and are of high quality design and finish. SEPP 64 contains no detailed controls directly applicable to the proposed signage, and consultation with TfNSW is not required given the size and location of the signage. An assessment against the general criteria in Schedule 1 of the SEPP is provided at Appendix 24 of the EIS. In summary, the signage will have no adverse impacts in relation to character of the area; special areas; views and vistas; streetscape, setting or landscaping; site and building; associated devices and logos; illumination; or safety.
State Environmental Planning Policy No. 55 Remediation of Land (SEPP 55)	Clause 7 of SEPP 55 requires that the consent authority consider whether the land is contaminated and whether it is or can be made suitable for the proposed use. Contamination is discussed in section 7.15 and Appendix 14 of the EIS. The contamination assessment has concluded that the site is suitable for the proposed use subject to standard mitigation measures. No additional investigation is required.

SEPP	Comment
Draft State Environmental Planning Policy (Remediation of Land)	The Explanation of Intended Effect (EIE) for the draft SEPP was on exhibition from 31 January 2018 until 13 April 2018. The draft SEPP will retain the key operational framework of SEPP 55 and add new provisions relating to remediation works. The proposed new conditions are not relevant to the proposal given that no remediation works are proposed.
Draft State Environmental Planning Policy (Environment)	The draft Environment SEPP consolidates and simplifies seven existing SEPPs. The Explanation of Intended Effect (EIE) for the draft Environment SEPP was on exhibition from 31 October 2017 until 31 January 2018. None of the SEPPs to be consolidated are applicable to the proposal.
Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities)	An Explanation of Intended Effect has been exhibited for proposed changes to the Education SEPP. The proposed changes focus on resolving operational issues, clarifying provisions and other housekeeping issues. The changes are not directly relevant to this SSD application.

5.8 Yass Valley Local Environmental Plan 2013

The table below addresses key sections of the LEP.

Table 5-3 Yass Valley LEP 2013 assessment

Clause	Comment
Land use table	The site is zoned RU5 Village. A zoning map is provided below the table. Schools are permitted with consent in the RU5 zone.
Zone objectives	The objectives of the RU5 Village zone are as follows: • To provide for a range of land uses, services and facilities that are associated with a rural village • To ensure that development is compatible with village character and amenity. • To ensure that development is provided with an adequate water supply and the disposal of sewage. The proposal is consistent with the zone objectives in that it provides for a development that is compatible with the locality in terms of use and character, and includes adequate water supply and sewage systems.

Clause	Comment
4.1 Minimum subdivision lot size	LEP mapping identifies the site as subject to a 1,500m ² minimum lot size control. The proposal includes no subdivision and therefore this clause is not relevant.
4.3 Height of buildings	No height of buildings control applies to the site.
4.4 Floor space ratio	No FSR control applies to the site.
5.1 Relevant acquisition authority	LEP mapping does not identify any part of the site as land reserved for public purposes.
5.10 Heritage conservation	The site adjoins local heritage item no. 111 "Murrumbateman School and schoolhouse (former)" to the south. Heritage impacts are addressed at 7.6 and Appendix 6 of the EIS. In summary, the heritage assessment has found the proposal will not diminish the heritage values of the adjoining heritage item. Aboriginal cultural heritage is addressed at 7.5 and Appendix 7 of the EIS. In summary, the assessment has found that the proposal will result in no unacceptable impacts on Aboriginal cultural heritage.
6.4 Groundwater vulnerability	The site is identified as "Groundwater vulnerability". The proposal is not expected to have any adverse impacts on groundwater as it does not involve any on-site storage of solid or liquid waste and chemicals, or any other potentially polluting activity, that would contaminate groundwater. The site's groundwater conditions are discussed in the Report on Geotechnical Investigation at Appendix 16 .
7.1 Acid sulfate soils	The site is not identified as having acid sulfate soils.
7.11 Essential services	The site is serviced by all essential infrastructure including water, electricity and sewage. Certain upgrades will be required to service the development. Refer to section 7.16 and Appendix 12 of this EIS for further detail.

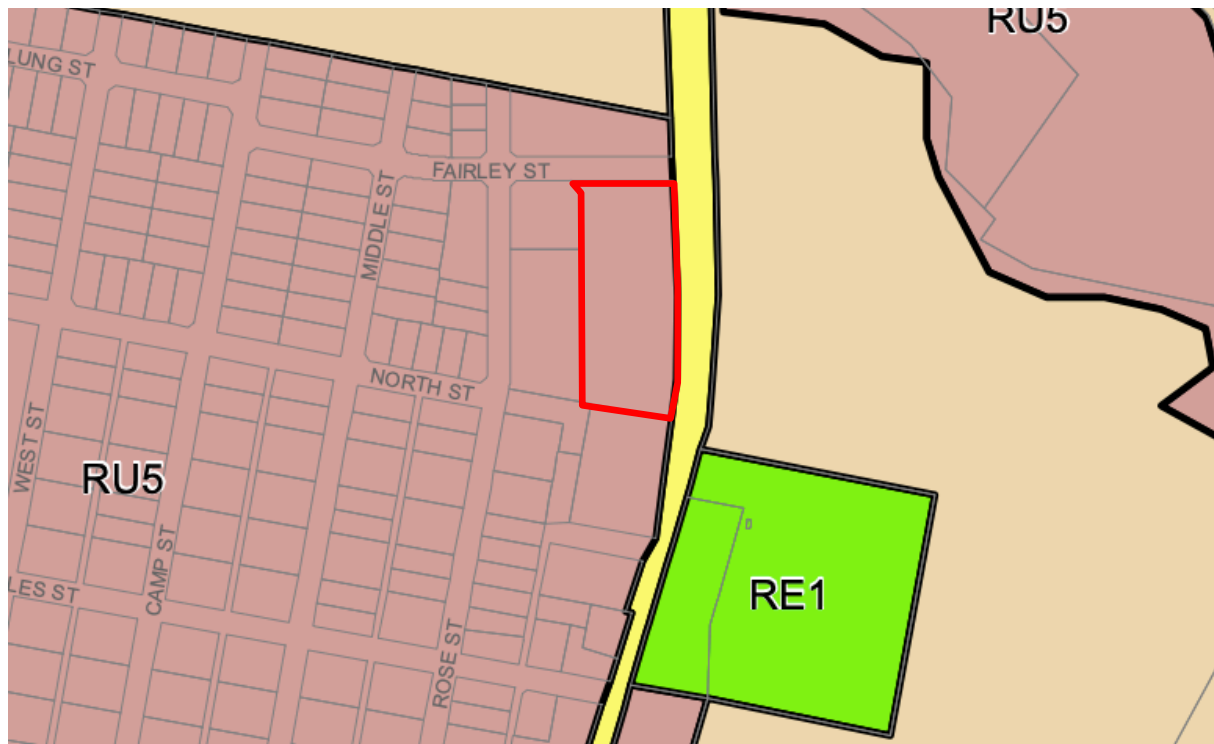


Figure 5-1 Zoning map
Source: Yass Valley LEP 2013

5.9 Development contribution plans

The proposal provides for social infrastructure on behalf of the Crown and therefore is not subject to development contributions. This is consistent with the advice from DPIE in Circular D6 "Crown Development Applications and Conditions of Consent".

The circular notes that Crown activities provide facilities which lead to significant benefits for the public in terms of essential community services and employment opportunities, and the activities are not likely to require the provision of public services and amenities in the same way as development undertaken with a commercial objective. The circular recommends that, where the applicant is a Crown authority and the development is for educational services, no contributions should be collected for open space, community facilities, parking, and general local and main road upgrades.

Furthermore, the Yass Valley Contributions Plan 2018 explicitly notes that the plan does not apply to "development of facilities on behalf of a public authority". The proposed school is on behalf of the State government, and therefore Council's contribution plan does not apply.

6 Consultation

Consultation have been undertaken in accordance with DoE's consultation policy (Planning and Delivery School Infrastructure NSW Public Consultation Policy), which provides a framework to actively engage the community and other stakeholders in relation to the planning of major projects.

A comprehensive Consultation Report is attached at **Appendix 22** of the EIS. Key consultation activities and outcomes are outlined in the subsections below.

6.1 Community engagement

DoE conducted the following community engagement activities prior to lodgement:

- A media release was issued in April 2020.
- In April 2020 an online survey was activated to obtain feedback from the local community what is important to them when designing the school. The online received 40 responses. An information hub was also established at the new school site in October 2020 to better understand community aspirations and capture community feedback. A total of 219 respondents provided feedback through an online survey. Key findings from the surveys included:
 - Responders felt extremely positive about the proposal to build a new primary school in Murrumbateman, noting it would provide a positive contribution to the local community.
 - Sustainable design is of high priority to fit the needs of the community, closely followed by accessibility of location and community access to playing fields and surrounding amenity.
 - Effective use of space, timeline for construction and sustainability were the most important aspects of construction to respondents.
 - Activity spaces, technology, and flexibility were the three most important things for a new school design.
 - Covered outdoor learning areas are the most important element of outside school space, followed closely by activity spaces and sports courts.
 - Innovative learning spaces were the preferred style of classroom design.
- Planning updates were uploaded to the SINSW Murrumbateman website in October 2020 and March 2021.
- In March 2021 a two-page project update was distributed to the letterboxes of 3,000 local residents and shared through social media and website channels.

6.2 Public authority engagement

6.2.1 Government Architect NSW

The proposed design was presented to the SDRP on 28 April 2021 and comments were received from the panel on 6 May 2021. The comments are directly addressed in the table below.

Table 6-1 GANSW engagement outcomes

SDRP comment	Response
Connecting with Country	
Formulate a strategy to gather, retain and embed cultural knowledge as an ongoing process throughout the development of the project.	Pages 16-17 of the Design Analysis Report at Appendix 2 summarises the strategy and implementation for Connecting with Country.
Consult with other cultural groups that have relationships with the site and incorporate multiple cultures, languages, and stories into the project.	This consultation is ongoing.
Illustrate how local materials can be incorporated as part of the Modern Methods of Construction system to provide local character and further emphasise the connection to Country.	The material palette on page 34 of the Design Analysis Report at Appendix 2 outlines the rationale behind the colour palette and its integration of inspiration from the Connecting to Country work that has been undertaken.
Understand and demonstrate the intention of the yarning circle to this location. Consultation with the local community, cultural groups and school community can inform a suitable purpose for this site.	Consultation is ongoing. In this consultation the design team will discuss this item with the relevant Aboriginal elders.
Illustrate how the broader cultural and physical landscape, including distant views, can be incorporated into the project.	See Visualisation and Streetscapes on pages 36-37 of the Design Analysis Report at Appendix 2 , which exhibits the views to and from the site. Refer also to the landscape plans at Appendix 3 .
Public Domain and Context	
The new school will serve as a community hub. Illustrate how the main entry will accommodate and encourage gathering and social interaction.	The school entry has been designed with a generous forecourt that acts as a welcoming entry space for the school and has the potential to be a valuable community gathering space. The hall creates the southern boundary to this forecourt, thereby providing easy access for the community, should it be required. The canteen location within the hall has the opportunity to

SDRP comment	Response
	address this forecourt via a servery window. This arrangement provides the flexibility to utilise the hall, canteen and forecourt as a community space.
The location and approach to the canteen is supported, however its operation and security lines need further resolution. Consider a secondary security line during the day allowing this area to remain open to the public during school hours	The proposed canteen provides opportunity for serving towards the forecourt entry. Maintaining access to the public during the day would require a gate within the forecourt, which is viewed as a negative outcome for the primary entry to the school. The exterior school fence location allows for a generous forecourt and does not require a secondary fence.
A standard 2.4m palisade fence is not an appropriate site-specific response. Fencing should relate to the context and surroundings. Explore zones that are appropriate to be opened during the day, context specific materials, varying perimeter lines relating to the school and avoid long expanses of hard edges.	The details of the fence are being developed with an aim to achieve the functional requirements and a good urban design outcome. Fencing options are being explored. Due to the site area and the surrounding context, it was decided (in collaboration with the landscape architect and the project team) to locate the perimeter fence on the boundary.
Develop a stronger civic address at the main entry that promotes a sense of arrival. Include traffic calming devices such as textured paving, trees, shared ways, etc. to reduce the dominance of vehicles and ensure the circulation from the street to the school entry is pedestrian friendly.	The fence line has been considered in the design so that it is woven in between landscape, removing a hard visual boundary to the site. The main entry will have a large sliding gate that will open on arrival during school session. The fence location allows for a generous forecourt at the school entry. Clear signage, wayfinding and seating are proposed in the school forecourt (between Blocks A and D) and outside the school fence line to allow for visitors and students to gather at the main entry.
Illustrate potential future expansion options for the school and demonstrate the current proposal will not adversely impact future opportunities.	The core facilities of the school, including hall, administration and staff have been sized to cater for future expansion. The U-shaped site layout allows for additional homebases to be added along the eastern boundary, while maintaining the centralised playspace. Any expansion of the school will require a separate design and approval process.
Architectural Expression	
The proposal is yet to show the architectural expression of the buildings. Develop the architecture for	The library (Block A) is intentionally positioned as the urban marker and rotated on the site as a response to the civic address. The rotation of

SDRP comment	Response
this proposal to have its own individual character, specific to the site and context.	Block A also assists in pedestrian flow towards the main forecourt/entry. Block D is positioned so that the hall provides the future potential for shared uses. The architectural language and materials will be woven into the Connection to Country. The U shape of the built form nests the primary outdoor play space, creating a safe educational outdoor learning environment. See part 5 "Architecture" and part 6 "Visualisation and Streetscapes" of the Design Analysis Report at Appendix 2, which show how the design has developed with individual character and site-specific responses in the architecture
Illustrate the internal amenity of spaces, including daylighting, access to the outdoors, views, and appropriate solar shading.	The depth of building and window design facilitate a good level of daylight and ventilation. Working closely with the ESD consultant, the thermal performance and solar shading have been optimised to provide an efficient envelope as well as a functional school environment. In consultation with the landscape architect, the connection with the external play space has been considered and maximised by physical and visual connections. This connection reinforces the principles of Connecting to County.
Next SDRP Meeting	
It is recommended the project returns to the State Design Review Panel. In addition to the Design Package Requirements the following material should also be provided at the next SDRP: • Details of the extent of fencing along the perimeter including size, materials, openings, and further resolution along the north boundary at the main entry including security lines. • Spatial details to demonstrate how the main entry will form part of the public domain, including the canteen's role in encouraging gathering, pedestrian connectivity from	It is considered that the proposed design provides a satisfactory response to the SDRP's concerns, and therefore an additional meeting is not required.

SDRP comment	Response
the street and how the vehicle dominance will be addressed. • Details of the character of the buildings, including further developed building masses, façade articulation and materials. • Massing diagrams exploring where development could occur in future, should the school need to expand. • Summary response to the points raised in this advice letter.	

6.2.2 Yass Valley Council

Meetings with Council officers/TfNSW were held on 17 December 2020, 17 March 2021, 24 March 2021 and 31 March 2021. Key issues discussed included traffic and transport opportunities and constraints; location of the bus stop and kiss-and-ride zones; staff car parking; local school benchmarks; and open space and landscaping.

Council also provided comment during the SEARs request process. Response to these comments is provided in the table below.

Table 6-2 Response to Council comments

Comment	Response
In terms of Strategic Documents, the following are required to be addressed: • Yass Valley Settlement Strategy • Barton Highway Improvement Strategy • Yass Valley Development Servicing Plans for Water and Sewerage	These documents are addressed at section 4.
The SEARs need to consider the adjacent Local heritage Item 111, particularly as it is the original school site for Murrumbateman. How the new school will relate to the former site requires consideration within the EIS.	Heritage impacts are addressed at section 7.6 and in the Statement of Heritage Impact and Archaeological Assessment at Appendix 6.
The draft Murrumbateman Flood Study identifies part of this site as being affected by the 1% AEP Flood event. The school is also considered to be a sensitive use, and	Flooding is addressed at section 7.12. In short, it has been found that the 1% AEP-affected land is in the northeast portion of

Comment	Response
in a PMF flood event both vehicle access roads – Fairley Street and Barton Hwy are affected.	the car park and will not affect school operations.
The landscape plan needs to incorporate screening for visual and acoustic attenuation to/from the Barton Hwy.	Appropriate landscape screening has been included in the landscape plans at Appendix 3 .
<u>Traffic/pedestrian safety associated with the adjacent Barton Highway:</u> • Vehicle movements, particularly school buses turning entering/existing the Barton Highway from Fairley Street. • Whether the private access way/ cul-de-sac on the site is now necessary. • Pedestrian safety across Barton Highway, particularly parents walking children to school (marked yellow on the map below) who then commute to Canberra for work from Jones Park. • Pedestrian safety for students if Joint Use is agreed to for facilities on the Murrumbateman Recreation Ground.	Traffic and pedestrian movements are addressed in the Traffic Assessment at Appendix 5a. Regarding crossing from Jones Park, it is noted that, as part of the Barton Highway Improvement Strategy works, a new pedestrian fence has been installed between the car park and highway, with a single open point leading to a pedestrian refuge island. It is considered that children with their parents will be able to utilise the refuge island safely. Regarding children walking to the recreation ground, joint use has not been agreed to at this stage. Pedestrian movement to the ground will be assessed in detail if/when joint use is agreed to.
<u>The minimal area of the site:</u> The area of the site is 1.544ha. All previous discussions with the Department specified that a minimum size of 2ha would be required in Murrumbateman (the minimum of 1.5ha applied to urban areas). The minimum of 2ha would only be reduced if there was the ability to share or co-locate playing fields/facilities. As discussed above, any joint use of the Recreation Ground has significant traffic safety issues to be addressed.	The selected site, while below 2ha, nonetheless allows for a school facility with a suitable layout with appropriate amenity and no significant environmental impacts as demonstrated throughout this EIS.
Council is the Crown Land Manager for the Old Murrumbateman Schoolhouse Buildings adjacent to the south. Given this was the site of the original Murrumbateman primary school, integrating this into the proposed site has a very strong historical element for the community. As Council has transitioned to a Mobile Library Service for	DoE is not considering taking on ownership/management of the heritage item at this stage. An assessment of the feasibility of the acquisition of this item is considered unnecessary.

Comment	Response
Murrumbateman, this building and site are no longer required for this purpose. The transfer of ownership/management to the Department of Education would increase available development area (site area 5,430m²), activate a key site within Murrumbateman and could still present opportunities for Joint Use if appropriate. The SEARs should include a feasibility assessment into the use/acquisition of this Crown Reserve (97127).	

6.2.3 Other public authorities

As noted above, TfNSW participated in the multiple meetings with Council. Traffic matters were discussed in detail over the course of the meetings.

7 Assessment of key issues

This section contains an assessment of the key issues identified in the project SEARs. It is informed by, and should be read in conjunction with, the specialist reports and drawings appended to the EIS.

7.1 Built form and urban design

7.1.1 Methodology

A Design Analysis report by Pedavoli Architects is attached at **Appendix 2**. The report explains the proposal's design rationale based on analysis of the site and context, and provides comment on the proposal's consistency with relevant guidelines and principles. Key points from the report are outlined below.

It is noted that section 3.4 of this EIS contains a description of the proposal's' layout, height; bulk and scale; density; setbacks; facade and articulation; external finishes and materials; relationship to surrounding development, topography and streetscape; and access to daylight, ventilation and acoustic separation.

7.1.2 Existing environment

The site is located in a rural village setting and is surrounded by a mix of uses and development types including a two-storey tourist hotel to the north, two-storey medical centre and one-storey child care centre to the east and a one-storey heritage item (former Murrumbateman School and schoolhouse) to the south.

7.1.3 Impacts

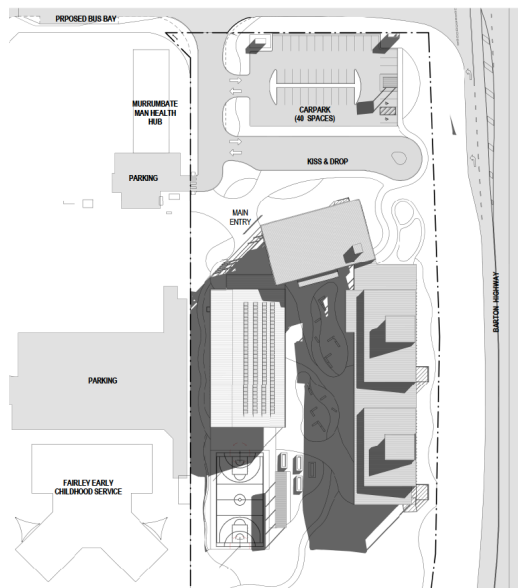
The proposal will contribute positively to the built form of the area as follows:

- The proposal features a high quality contemporary design fit for purpose and complementary to the local character.
- The proposal's layout includes breaks between volumes to provide visual articulation.
- The proposal utilises extensive landscaping to enhance the streetscapes along Barton Highway and Fairley Street.
- The material and finishes complement the landscape and are based on a desaturated palette, reflecting the tones of the surrounding landscape.
- The landscape design acknowledges the history and the local site context as an integral part of the site planning. It provides spaces that encourage interaction between learning areas and equal access to all areas of the site.

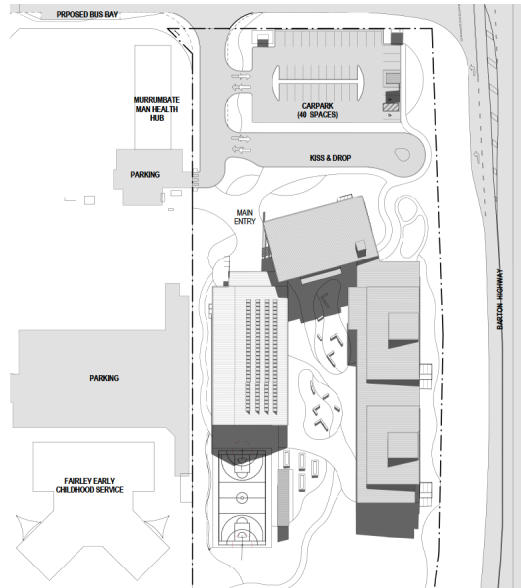
7.2 Environmental amenity

7.2.1 Overshadowing

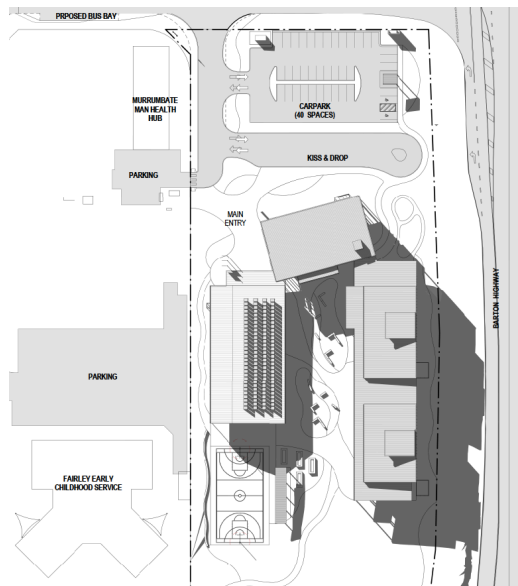
The proposal will not cause any unreasonable overshadowing of neighbouring land. As shown in the mid-winter (worst case scenario) shadow diagrams below, the proposal's shadow will remain within the site from 9am until after 12pm. By 3pm, the proposal will cause minor overshadowing to the Barton Highway road reserve. This minor overshadowing is considered acceptable given the road reserve is not a protected area and does not form a notable pedestrian thoroughfare.



9am, 21 June



12pm, 21 June



3pm, 21 June

Figure 7-1 Shadow diagrams
Source: Pedavoli Architects

7.2.2 Visual privacy

The proposal will result in no unreasonable privacy impacts for the following reasons:

- The proposed buildings provide adequate setbacks from all boundaries including a 50m+ setbacks from the northern boundary (Fairley Street), a 50m+ setback from the southern boundary (old Murrumbateman Schoolhouse), a 6.6m setback from the eastern boundary (Barton Highway) and a 6.7m setback from the western boundary.
- Block D, the building closest to the western boundary, is only one storey in height and is located directly across from a parking area on the adjoining lot, meaning there will be no overlooking issues.
- Plantings will be provided to all boundaries, enhancing privacy between the school and surrounding development.

7.2.3 View impacts

Methodology

Assessment of view impacts has taken the form of analysis by Mecone supported by 3D renders of the proposal prepared by the architect. The proposal is low in scale (maximum two storeys), and there are no significant views that cross the site. Specialist analysis is therefore considered unnecessary.

Existing environment

The site is situated within Murrumbateman village along Barton Highway. The surrounding area is generally characterised by a mix of low density uses and rural land.

The surrounding area is largely flat with no significant terrain features. The nearby heritage items do not benefit from any significant views over the site.

The site has a broad frontage (approximately 217m) to Barton Highway and is easily visible from the highway. The site is not located on a ridge, knoll or other local high point, and there are no significant views identified in Council's DCP or other planning document that cross the site.

Looking north and south over the site from Barton Highway, the primary visible features are village development interspersed with vegetation.



Figure 7-2 View 1: Looking NW from Barton Hwy frontage
Source: Google



Figure 7-3 View 2: Looking SW from Barton Hwy frontage
Source: Google



Figure 7-4 View 3: Looking W from Barton Hwy frontage
Source: Google



Figure 7-5 View 3: Looking S from Fairley St frontage
Source: Pedavoli Architects

Impacts

Pedavoli Architects have prepared a number of 3D renders to assist in understanding the visual impacts of the proposal. These are shown in the figures below.



Figure 7-6 3D render key
Source: Pedavoli Architects



Figure 7-7 View A – Looking SW from corner of Barton Hwy and Fairley St
Source: Pedavoli Architects



Figure 7-8 View B – Looking S from Fairley St
Source: Pedavoli Architects



Figure 7-9 View C – Looking SW from corner of Barton Hwy and Fairley St
 Source: Pedavoli Architects



Figure 7-10 View D – Looking NE from southern pedestrian pathway
 Source: Pedavoli Architects



Figure 7-11 View E – Looking SW from Barton Hwy
Source: Pedavoli Architects

Commentary on the above views is provided in the table below. In summary it has been found that the proposal will result in no significant or unreasonable impacts on views. The proposal's scale is appropriate to the context, and there are no significant views crossing the site that the proposal would obscure.

(Note: View F from the 3D render key have not been assessed given this relates to internal views within the site.)

Table 7-1 View analysis

View	Analysis
A – Aerial view looking southwest over the site from intersection of Fairley Street and Barton Highway	This view demonstrates that the proposal will sit comfortably in the village context. The proposed built form appears similar in scale to the adjoining medical centre and child care centre and is appropriate to the general commercial setting.
B – Looking south into the site from Fairley Street	From this view, the proposed car park is visible in the foreground, while the school buildings are set back behind the car park and partially obscured by tree plantings. The two-storey scale of Block A is seen to be similar to that of the adjoining medical centre. The proposed landscape and built form introduced to the currently empty site create a positive address to Fairly Street and Barton Highway.
C – Looking southwest at the site from the corner of Barton Highway and Fairley Street	From this view the proposed Blocks A and B are the most prominent built form. The height and scale of the buildings appear compatible with the medical centre to the west of the site. The indicative boundary plantings shown in the render contribute positively to

View	Analysis
	the view and help soften the appearance of the built form, and the buildings' neutral, subdued tones are appropriate to the commercial setting.
D – Looking northeast at the site from the southwest corner of the site	From this view is apparent that the play courts and grassed areas provide an appropriate transition between the pedestrian pathway to the south of the site and the school buildings. The extension of the landscape from the pedestrian corridor into the school site is a positive visual outcome. The buildings are in the background to a foreground of landscaping and playing courts. The proposed Blocks C and D are visible, sitting comfortably in the context.
E – Looking southwest at the site from Barton Highway	Similar to View C, the proposed Blocks A and B are most prominent built form components. Block C is also visible, effectively forming a continuation of Block B. The buildings positively address the street with their orientation, materials and fenestration. Breaks in the building help to provide visual relief, and indicative boundary plantings help to soften the built form.

7.2.4 Lighting

An external lighting strategy has been developed for the proposal. The implementation of a new exterior lighting design will be in accordance with the following Australian Standards:

- AS/NZS 1158:2005 Lighting for the roads and public places.
- AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting.

The design will consider surrounding properties and residents and work to mitigate the negative effects of this through careful and considered selections of luminaires and control strategies, appropriate lighting levels and lighting locations.

The new exterior lighting system will also consider crime prevention and work to eliminate cause through the implementation of correct lighting categorisations, and a cohesive lighting system with robust luminaires that is compatible with security system requirements.

For further detail, refer to the external lighting strategy within the design report at **Appendix 2**.

7.2.5 Wind

The site is located in a rural village context and is not known to suffer from any acute or unusual wind impacts.

Given the low height of the proposal and lack of known current wind issues, it is considered that the proposal will not result in any unacceptable adverse wind impacts. Specialist assessment is considered unnecessary.

7.3 Transport and accessibility

7.3.1 Methodology

A Transport Assessment prepared by Ason Group is attached at **Appendix 5a**. The report analyses the existing transport network; assesses the potential traffic impacts associated with the proposed development during the construction and operation phases; assesses the suitability of the development's access, internal circulation and servicing arrangements; and recommends measures to ameliorate any adverse impacts.

The report utilises SIDRA analysis to determine potential traffic impacts. Traffic count surveys were undertaken on Tuesday 27 April 2021 from 6am to 9am and from 2pm to 6pm.

7.3.2 Existing environment

Existing access and surrounding road network

The site is bordered by two roads, namely Fairley Street (local street) to the north and Barton Highway (State Highway) to the east. The surrounding road network is illustrated in Figure 7-12 below.

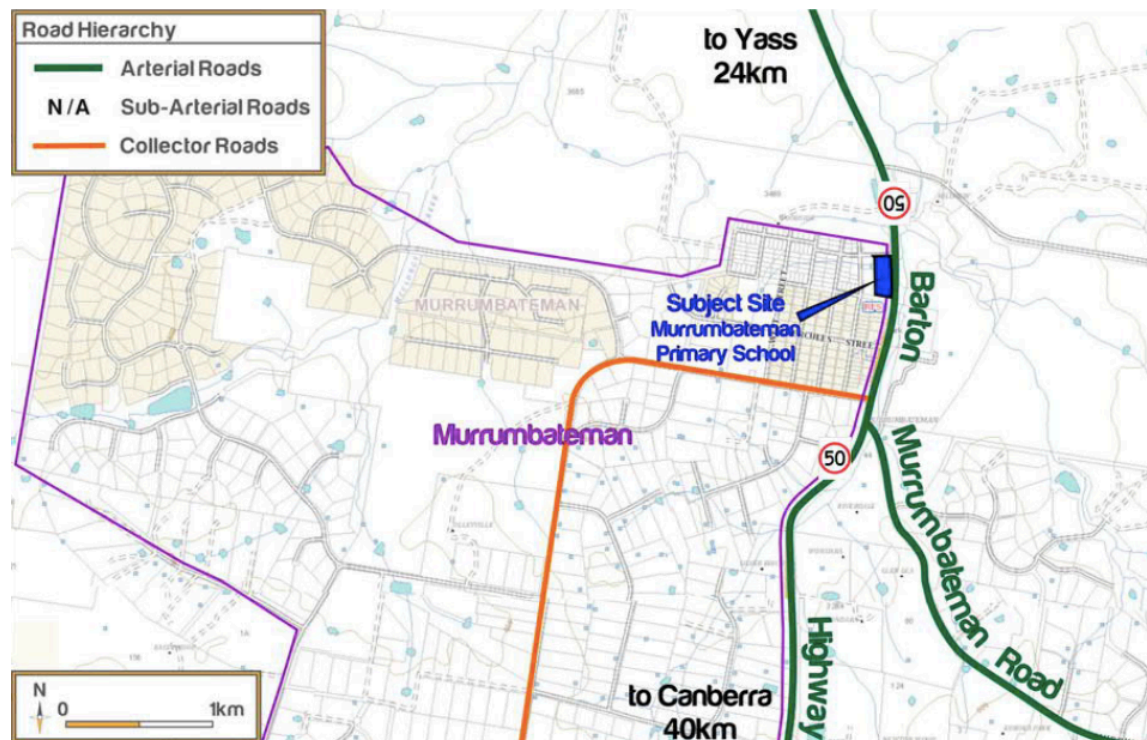


Figure 7-12 Road hierarchy
Source: Ason Group

Existing traffic conditions

Traffic count surveys were undertaken on 27 April 2021 from 6am to 10am and from 2pm to 6pm at the following four key intersections in the vicinity of the site:

- Barton Highway/Fairley Street.
- Fairley Street/Rose Street.
- Barton Highway/Hercules Street.
- Hercules Street/Rose Street.

SIDRA analysis has shown that the existing level of service (LoS) at these intersections is Level B (satisfactory operation) or better.

Existing public transport

The Murrumbateman locality has a high dependency on private vehicles. Currently there two bus routes (842 and 843) operating in the area, connecting Yass to Canberra, with a stop at Murrumbateman Village accessed from Barton Highway (approximately 400m south of the site). Route 842 operates six times per day, while Route 843 operates twice per day.

Existing pedestrian and bicycle infrastructure

Currently the provision for footpaths and pedestrian connectivity throughout the Murrumbateman township is predominantly concentrated around the town centre at the corner of Barton Highway and Hercules Street. Future developments to the north and northeast are anticipated to provide new footpaths in certain locations to the north of the school site.

At this time there is no provision for cycling connectivity or infrastructure throughout the township. It can be expected that, as additional developments and infrastructure are constructed within Murrumbateman, cycling infrastructure will follow.

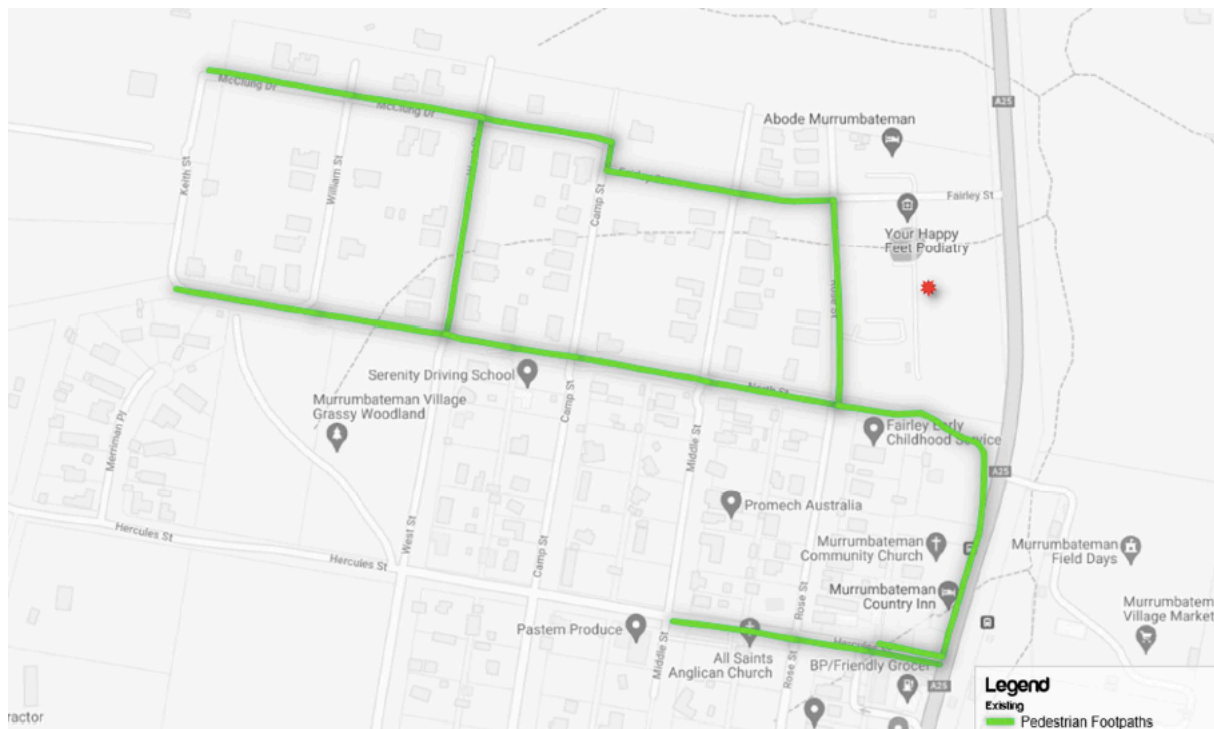


Figure 7-13 Existing footpath network

Source: Ason Group

Existing road safety

A review of the TfNSW Centre for Road Safety database has been undertaken to establish the vehicle crash history within the immediate vicinity of the site. The results are based on crashes over a five-year period between 2014 and 2019. The results show that only a single incident (non-casualty) occurred over the period. The incident occurred at the Fairley Street/Rose Street intersection. It can be concluded that the local road network in the immediate vicinity of the site is operating in a relatively safe manner.

7.3.3 Traffic impacts

Traffic generation

Based on the averages of surveyed rates of similar schools in Sydney by TfNSW, it is estimated that the school will generate 176 trips during the AM peak hour and 146 trips during the PM peak hour. The majority of the trips will occur at the kiss-and-ride area.

Intersection performance

Traffic impacts have been modelled using SIDRA to determine the proposal's potential impacts on the surrounding intersections. The modelling considers the scenario of a completed school in 2023 as well as a future 2033 scenario. The modelling results are provided in section 8.3.2 of the Traffic Assessment. Key findings are outlined below:

- The key intersections analysed are anticipated to perform at good levels of operation during the school morning and afternoon peak periods if there was no school development.
- For the 2023 year and 2033 year with 2% compounded growth, the key intersections will continue operate with ample spare capacity and a 95th percentile queue of 1m (during the morning school peak of the 2033 horizon year at the Barton Highway/Fairley Street intersection).
- The degree of saturation levels at all intersections are well below 1 in the 2023 and 2033 scenarios, which indicates the network is operating under capacity.

Impacts of kiss-and-ride

The potential impacts of the kiss-and-ride areas have also been assessed. Assuming these areas are managed and time-restricted to a maximum of two minutes per vehicle, it is estimated that, over a 45-minute period during the pick-up and drop-off times, the areas can accommodate a total of 315 vehicle movements. Given the proposal's estimated traffic generation is 176 trips and 146 trips during the AM and PM peak hours, respectively, it is evident that the kiss-and-ride area has sufficient capacity for ensuring the kiss-and-ride areas do not adversely impact the adjoining road network.

7.3.4 Parking

Car parking

A total of 40 onsite car parking spaces are proposed, which fully meets staff requirements.

The car park will be accessed from Fairley Street via a two-way driveway. Parking within the car park will be restricted to staff and students with accessible set down requirements only.

The travel path and swept path of service vehicles to, through and from the staff car park and service area is provided in Appendix B of the Transport Assessment.

The parking spaces have been assessed and found to be generally compliant or capable of complying with the minimum requirements of AS2890.1.

Bicycle parking

Council's DCP does not specify bicycle parking rates for schools, and therefore 36 spaces have been provided in accordance with EFSG. The spaces are positioned adjacent to the southern pedestrian entry, providing convenient access to the cycling pathway to the south.

7.3.5 School Travel Plan

A Preliminary School Transport Plan (PSTP) is attached at **Appendix 5b**. The purpose of the PSTP is to propose a series of operational arrangements with the intention to

drive modal share towards active and public modal measures and achieve mode share targets. A summary of the operational improvements are suggested below:

- Education initiatives such as road awareness/safety, independent travel.
- Advocate TfNSW to improve public transport services in response to increased development.
- Promote use of public transport for students with a rewards scheme.
- Liaise and discuss with TfNSW the feasibility of providing bus services for students outside of the 2.3km driving distance from the school.
- Potentially introduce and enforce of parking restrictions around the school. This is to be discussed and implemented in collaboration with Council's road safety officer.

In addition to the above, the PSTP makes reference to a variety of key infrastructure changes in the locale relating to the provision of bus services, as well as the inclusion of key pedestrian crossings to improve site connectivity and amenity.

7.3.6 Construction traffic management

A Preliminary Construction Traffic Management Plan (PCTMP) has been prepared by Ason Group and is provided within the Transport Assessment. The report outlines principles that shall be adopted by the appointed contractors for the project and is subject to a detailed CTMP that forms part of a Construction Management Plan (CMP) to be prepared and commissioned by the incumbent contractor. Key items from the PCTMP are outlined below.

Construction vehicle routes and access

It is proposed that construction vehicles enter and exit the site via the routes shown in Figure 7-14 below.

The access and egress routes will be utilised by all construction vehicles associated with the site and represents the shortest route between the local and regional road network, thereby minimising the impacts of the construction process. No trucks will be queued on local roads. mobile phones and two-way radios will be used to coordinate truck arrivals.



Figure 7-14 Construction vehicle haulage routes

Source: Ason Group

Traffic control measures

It is required that authorised traffic controllers to be present throughout the demolition, and construction stages of the project.

Pedestrian management

During construction, pedestrian movements will be maintained along the western boundary of the site. This includes maintaining access needs and requirements for pedestrians to/from the adjoining medical centre and childcare centre.

7.3.7 Mitigation measures

Construction of the above development would generate a moderate increase in traffic on the surrounding road network. In this regard, the following measures should be undertaken to minimise the impacts of the construction activities of the development:

- A construction fence will be provided along the Fairley Street site boundaries, to the south of the Site and to the north of the east-west Shared Path to provide safe pedestrian, cyclist and equestrian access.
- Traffic control may be required to manage and regulate traffic movements into and out of the site during construction, with pedestrian priority provided during peak hour periods to maintain accessibility to public transport facilities.

- Disruption to road users should be kept to a minimum by scheduling intensive delivery activities outside of peak network hours.
- Supervised traffic control will be required where two-way flow is restricted over any length of the roadway, depending on the number of truck movements required and would be managed outside of peak hour vehicle and pedestrian activity.

7.4 Ecologically sustainable design (ESD)

An ESD Report by Steensen Varming is attached at **Appendix 20**. The report summarises the ESD initiatives adopted for the project, explains how the project has addressed the SEARs requirements and provides an overview of how the proposal responds to sustainable planning.

7.4.1 Principles of ESD

There are four ESD principles defined by clause 7(4) of Schedule 2 of the EP&A Regulation that must be considered in the assessment of the proposal. These are addressed in the table below. The Green Star report card at Appendix A of the ESD report also identifies where specific project initiatives align with the four principles.

Table 7-2 ESD principles assessment

Principle	Description	Comment
Precautionary principle	The precautionary principle says that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.	There are no threats of serious or irreversible environmental damage associated with the proposal. The proposal provides for a development that avoids environmental impacts where possible and locates new buildings on previously disturbed land.
Intergenerational equity	The principle of intergenerational equity says that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.	The proposal seeks to maintain the environmental assets of the site by ensuring the protection of trees on the adjoining site and providing for appropriate management of stormwater. The proposal also seeks to improve the environmental character of the site through new and improved landscaping, and to minimise the consumption of resources where possible.
Conservation of biological diversity	This principle says that conservation of biological diversity and ecological	The proposal is located on cleared/developed land, thereby conserving other areas of biological and ecological

Principle	Description	Comment
and ecological integrity	integrity should be a fundamental concern.	integrity. The proposal will implement appropriate stormwater management systems and have no detrimental impact on surrounding waterways.
Improved valuation, pricing and incentive mechanisms	This principle says that environmental factors should be included in the valuation of assets and services.	The project will integrate several initiatives which aim to minimise pollution and other undesirable environmental outcomes. Contractors will be required to provide and abide by an environmental management plan which is in accordance with NSW Environmental Management Systems Guidelines or a similar standard.

7.4.2 ESD measures

In order to support the functional demands of the school as a learning and teaching environment, the proposal's ESD strategy focuses on the following key priorities:

- Optimised natural daylight.
- Excellent indoor air quality.
- Excellent thermal, visual and acoustic comfort.
- Resource conservation.
- Creation of an integrated community resource.
- Development of the building and surrounds as a teaching tool.

The key measures for promoting the key priority of resource conservation are detailed in the table below.

Table 7-3 Resource conservation measures

Theme	ESD measure
Energy consumptions	• Building form has been designed with consideration of façade access for greater access to natural daylight and opportunity for natural ventilation, within the constraints of the site. • Passive design principles will be employed to respond to environmental conditions of the building including orientation, solar access, prevailing winds, seasonal and diurnal temperatures changes.

Theme	ESD measure
	• Building envelope performance (airtightness and thermal) will be enhanced by prefabrication. • A mixed mode ventilation strategy will be assessed for improved indoor air quality, whilst also reducing energy consumption associated with air conditioning. When external and internal conditions are favourable, external windows to each cluster can open to facilitate natural ventilation. • Building energy performance improvement - Energy modelling will be undertaken using the NCC Section J, JV3 energy modelling guidelines. The energy modelling will aim to demonstrate the project achieves a minimum 10% energy reduction against the benchmark standard. • Energy efficient LED lighting, zoning, controls, and site co-ordination for both internal and external lighting systems are to be considered among the lighting strategies. • Occupancy controls considered for spaces so that AV, lighting, and mechanical systems can be shut down both manually and automatically when unoccupied. • A solar photovoltaic (PV) array has been considered and will potentially be located on the roof terrace. Energy generated onsite can be reused onsite. • High efficiency HVAC (Heating, Ventilation & Air-conditioning) systems to be incorporated. • CO2 monitoring in the appropriate control of outdoor air provisions.
Water conservation	• Water efficient fixtures/fittings will be specified. These include fittings such as taps, showerheads, toilets, zip taps, dishwashers, etc. certified under the WELS rating scheme • Rainwater reuse – Rainwater collection and reuse systems will be assessed. Reuse options include landscape irrigation and toilet Hushing. • Fire systems – Water capture and storage for reuse using the rainwater tank will be assessed.
Materials and construction waste	• Use sustainable timber – timber products used for concrete formwork, structure, wall linings, flooring and joinery will be sourced where possible from reused, post-consumer recycled or FSC-certified/PEFC-certified timber. • Steel – will be specified where possible to meet specific strength grades, energy-reducing manufacturing technologies, and on-site fabrication. Steel will also be sourced with a proportion of the fabricated structural steelwork via a steel contractor accredited by the Environmental Sustainability Charter of the Australian Steel Institute.

Theme	ESD measure
	- Recycled concrete – The project aims to reduce the use of Portland cement through substitutions. Fine and coarse aggregate inputs from manufactured sand or other alternative materials, and the amount of Portland cement will be reduced within the concrete mix where possible. - High recycled content or recyclability – Furniture items with high recycled or recyclability content to be considered.
Emissions	- The design aims to reduce of all forms of emissions, including watercourse pollution, light pollution, and ozone depletion. - Water Sensitive Urban Design (WSUD) integrates water cycle management with urban planning and design. The aim of WSUD is to manage the impacts of storm water run-off from the development to protect and improve waterway health by replicating the natural water cycle.
Other key measures	- Environmental Management Plan (EMP) – An EMP has been considered for the school. The EMP will be developed and implemented for the construction stage, including demolition and excavation, to address environmental, worker health and safety and community risks. The EMP is a project-specific plan developed using State and Federal Guidelines and standards. The main contractor will implement an Environmental Management System certified to the ISO 14001 standard to ensure the objectives of the EMP are met. - Site waste management plan – During the demolition and construction phase, the development of a project-specific site waste management plan (WMP) will be assessed to reduce recycling of demolition and construction waste. - Comprehensive commissioning – Pre-commissioning, commissioning and quality monitoring for all building services to be considered. - Waste storage will be provided dedicated to the separation and collection of recyclable waste. - Cycle parking and end of trip facilities – Inclusion of 60 bicycle parking racks, and end of trip facilities for staff are being considered.

7.4.3 Assessment against accredited rating scheme

The proposal seeks to achieve a 4 Star Green Star certification in line with Green Star Design and As Built v1.3 principles. A Green Star scorecard is included at Appendix A of the ESD report.

7.4.4 NARClIM projected impacts

To assess the climate projections for the region, the NSW and ACT Regional Climate Modelling (NARClIM) project has been considered. Murrumbateman is included

within the Australian Capital Territory area. The main trends regarding climate change projections for the area are as follows:

- Maximum temperature are projected to increase in the near future by 0.6° – 0.9°C in the near future (2030) and by 1.4° – 2.3°C in the far future (2070).
- Minimum temperatures are projected to increase in the near future by 0.4° – 0.7°C in the near future (2030) and by 1.4° – 2.3°C in the far future (2070).
- The number of hot days will increase, and the number of cold nights will decrease.
- Rainfall is expected to decrease in spring and increase in summer and autumn.
- Average fire weather is projected to increase in spring, summer and winter, and the number of severe fire weather days is projected to increase in summer and spring.

The table below shows a high-level review of climate change risks and a review of how the design can address these risks. A more detailed review and workshop will be conducted during this stage of the project to review all likely risks and discuss how their relative impacts can be identified, assessed, and mitigated.

Table 7-4 Response to climate change risks

Climate impact	Design response
Increase in extreme hot days and average temperatures	• Back-up power (generators/PV). • Redundancy built into cooling capacity. • Thermal Storage – manages peak loads. • Durable materials selection. • Mechanical system to be able to respond to extreme temperatures.
Increased drought duration	• No water-based heat rejection to be used. • On-site efficiency measures to reduce potable water demand. • Drought-resistant planting selection.
Increased fire weather	• Back-up power systems and onsite generation • Filtration for air intakes into buildings.
Increased rainfall variability	• Sustainable urban drainage features will capture, treat, store stormwater, and reduce outflow. • Predictive/forecast management of water storage.

Climate impact	Design response
Increased storm intensity	• Durability of materials selection. • Predictive management planning in event of large storm events.

7.5 Aboriginal cultural heritage

7.5.1 Methodology

An Aboriginal Cultural Heritage Assessment (ACHA) by Ecological is attached at **Appendix 6**. The ACHA has been prepared in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010b) (the Code), The Burra Charter (ICOMOS 2013), Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011) (the Guide) and Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010).

7.5.2 Existing environment

A search of the Aboriginal Heritage Information Management System (AHIMS) identified no previously recorded Aboriginal sites or places within or adjacent to the site.

Based on historical aerial imagery and the known history of the site, it is understood that the site was used for predominantly for agricultural/pastoral purposes in the past. More recently, significant subdivision and development has occurred, and the entirety of the site has been affected by earthworks and construction of a car park and internal road.

7.5.3 Consultation

In accordance with consultation requirements, consultation was carried in four stages:

Stage 1: Notification of project proposal and registration of interest

Relevant bodies and known Aboriginal stakeholders were notified of the development, requesting registration of interest in the project. Additionally, advertisement was placed in the *Bungendore Regional Independent* on 11 January 2021. A total of nine Aboriginal stakeholders registered their interest.

Stages 2 & 3: Presentation of information about the project and gathering information about cultural significance

A project information pack was sent to the nine registered Aboriginal parties (RAPs) on 18 February 2021. No responses were received from the RAPs.

A field survey was carried out on 29 January 2021. The results of the survey are outlined below. In short, no artefacts were found, and it was deemed that archeological investigations were not required.

Stage 4: Review of draft ACHA report

The draft ACHA was sent to the RAPs on 15 April 2021 for a 28-day review and comment period, and the review period ended on the 13th of January 2021. No comments from the RAPs were received.

7.5.4 Field survey

A survey of the site was completed by archaeologists on 29 January 2021 in accordance the Code. The entire site was walked on foot, and areas of disturbance were noted. The entire area was found to be significantly disturbed. No artefacts were observed, and the soil A horizon appeared to be extremely shallow, making it unlikely that an archaeological deposit would be present.

Based on the results of the survey, it was determined that no archaeological excavations would be required as part of the ACHA.

7.5.5 Statement of significance

The site contains no Aboriginal archaeological sites. Site inspection revealed a high degree of disturbance across the entirety of the site associated with the soil removal/scraping, clearance and an existing car park. Further investigations of the site would not contribute to our understanding of Aboriginal landscape use in the area. Based on the intactness, representativeness, and research potential, the site is determined to have nil to low archaeological significance.

7.5.6 Mitigation measures

The ACHA recommends the following mitigation measures:

- No further assessment is warranted, and works may proceed with caution.
- If suspected Aboriginal objects, such as stone artefacts are located during works, works must cease in the affected area and an archaeologist called in to assess the finds. If the finds are found to be Aboriginal objects, DPIE must be notified under Section 89A of the NPW Act. Appropriate management and avoidance should then be sought if Aboriginal objects are to be moved or harmed.
- In the extremely unlikely event that human remains are found, works should immediately cease, and the NSW Police should be contacted. If the remains are suspected to be Aboriginal, the DPIE may also be contacted at this time to assist in determining appropriate management
- The ACHA should be submitted for registration on the AHIMS register within three months of completion.

7.6 Heritage

7.6.1 Methodology

A Statement of Heritage Impact and Archaeological Assessment by Ecological is attached at **Appendix 6**. The report identifies and assesses any potential impacts to the significance of any heritage in the vicinity and includes the results of archaeological assessment. Key points from the report are outlined below.

7.6.2 Existing environment

The site is not identified as a heritage item, but there are a number of local heritage items in the near vicinity, including:

- **Murrumbateman School and schoolhouse (former) (I111)** – This item adjoins the site to the south and includes contains two brick buildings – a residence closer to the road and the former schoolhouse. The items was previously used as a local library by Council, but it is understood that this use has ceased as Council has moved to a mobile library system. The buildings and grounds have significance for the present community, many of whom attended during their childhood. The buildings are attractive examples of their type, and the remaining trees contribute to the village setting as seen from Barton Highway.
- **Woodside – slab cottage (I101)** – This item is located to the north on the opposite side of Fairley Street and behind the tourist hotel. The cottage is one of the oldest buildings in the area, predating the village of Murrumbateman. It is a good example of a slab cottage and illustrates sound, rustic workmanship typical of rural building methods in the mid-nineteenth century. The building has aesthetic values and is a landmark on the Barton Highway.
- **Hillview – homestead and garden (I100)** – This item is located to the east across Barton Highway. It is a prominent pastoral property that is associated with the mid nineteenth century development of Murrumbateman.
- **Memorial trees (I109)** – This item consists of approximately 75 London Plane trees planted in a row on the eastern side of Barton Highway. The trees are located from north of Hillview to the Gundaroo Road. Some of the trees were originally planted on Arbor Day during World War II to commmentarte members of the local community who served their country during the two World Wars. Additional trees have been added over time.

An LEP map extract identifying these items is provided below.



Figure 7-15 Heritage map extract
Source: Yass Valley LEP 2013

7.6.3 Impacts on surrounding heritage items

The assessment has concluded the following regarding impacts on the surrounding heritage items:

- The proposed school will not encroach upon the curtilage of any of the heritage items.
- No heritage items will be directly or indirectly impacted by the proposal.
- There are no significant views to or from any of the heritage items in the vicinity of the site.
- There are no significant views to or from any of the heritage items in the vicinity to the study area.
- In keeping with the character of the town, the proposed new buildings are one and two storeys.

- Form, siting, proportion and design have been considered to facilitate the requirements of the school while complementing the low scale and character of the surrounding town.
- Continued appreciation of heritage items in the vicinity has not been comprised.
- The heritage impact of the proposal is therefore considered negligible.

7.6.4 Archaeological impacts

A site inspection carried out by the heritage consultant found the site to be highly disturbed with no evidence of previous structures or archaeological features or deposits.

Historically, the site was north of the main township and was farmland with a dam until 2017. The land was subject to clearing grazing and possibly some cropping, but no buildings were constructed apart from fencing. No occupation occurred that would have left an archaeological resource.

Given the above, the site has no archaeological potential or significance.

7.6.5 Mitigation measures

The report recommends the following mitigation measures to avoid impacts on the surrounding heritage items:

- The location of site storage, parking, compounds, stockpiles, etc. should not be located within the curtilage of any heritage item.
- Vehicular traffic or storage should not occur within the Old Murrumbateman School heritage curtilage. Fencing to avoid impacts should be considered.
- The remaining trees within the Old Murrumbateman School heritage curtilage have both historic and aesthetic values and contribute to the village setting as seen from Barton Highway. The trees can be trimmed on the advice of an arborist but should be protected from damage during the construction phase. (Planner's note: The trees are not proposed to be removed and will be protected as per the recommendations of the Arboricultural Impact Assessment (**Appendix 9**).
- A standard unexpected finds process should be adopted during works associated with the proposal.

7.7 Social impact

7.7.1 Methodology

A Social Impact Statement prepared by Elton Consulting is attached at **Appendix 21**. The report has been prepared in accordance with DPIE's Draft Social Impact Assessment Guideline.

7.7.2 Existing environment

Murrumbateman is a town located on the Barton Highway, approximately 40 minutes northwest of Canberra's city centre by car. It sits in the central section of the Yass Primary SCG, around 20km southeast of Yass.

The 2020 estimated resident population of Murrumbateman is 3,219 people, representing roughly 20% of the Yass Valley population. Population has increased by approximately 4% since 2016.

Murrumbateman and the Yass Valley LGA both have a relatively high median age, reflecting an older population. Murrumbateman, however, has a relatively younger age profile compared to the broader LGA, with a higher proportion of primary school aged residents and parents and homebuilders, and fewer residents aged 60 years or older.

Much of the SCG is in a rural and semi-rural setting, meaning most of the schools are geographically separated with limited public transport options. There are four existing public schools and one private primary school within the SCG.

Projections indicate there is a concentration of unmet demand of 435 students (19 learning spaces) by 2036 in the Murrumbateman region, which is geographically disparate from the wider SCG.

7.7.3 Stakeholder engagement

Eight stakeholders and community members were interviewed in May 2021 to provide input into the SIA. Key findings from the interviews include:

- There is high expectation across stakeholders and community members that the new school will contribute towards the growth, wellbeing, sense belonging and cohesion of the community.
- The inclusion of special education facilities and classes are seen as a great opportunity for families with special needs who currently have limited support services in the local area. The Berimba Public School also acknowledged the opportunity to share the delivery of special needs education in the area.
- Pedestrian safety, increased traffic and safety on the Barton Highway were a major concern raised by all stakeholders. Their concern varied from immediate risks due to construction and long-term impacts during school operation
- Dust, noise and vibration during construction was an undesirable effect identified by the neighbouring medical centre and child care centre. They both identified communication and coordination as key activities to address any potential issue
- The use of the proposed site for the construction of the school was perceived as a loss of commercial development opportunity and loss of playground (given that a commercial development was previously approved for the site)

as discussed at section **Error! Reference source not found.** of the EIS). Concerns were raised regarding the size and location of the site, particularly that it may not allow room for expansion.

- Communication and engagement were perceived as key activities to enhance the positive effects of the school and manage any potential issues during construction and operation.
- There were different perspectives regarding the potential impact on schools in catchment area. Some interviewed identified an opportunity to have this school to share the load and others identified as a negative effect that might affect school resources and staff availability.

7.7.4 Impact assessment

The table below provides a brief summary of the identified social impacts and mitigation measures.

Table 7-5 Social impacts

Category	Impacts and mitigation
Access to education and wellbeing	<u>Positive impacts:</u> The proposal will respond to future education needs, improve quality of learning and teaching experience, increase access to education for students with special needs, reduce travel times for many parents and students, and include consultation/complaint mechanisms to address issues during construction and operation. <u>Potential negative impacts:</u> During interviews some residents expressed concerned that the new school would remove students from other schools and thereby affect other schools' funding. Others raised concern that teaching positions at other schools could be reduced. In response to these concerns, it is emphasised that there is significant unmet demand for a primary school in Murrumbateman, and the proposal is a direct response to this demand. Distributing this unmet demand across existing schools is not a feasible option. Refer to section 1.3 of this EIS for further discussion.
Community, way of life and livelihood	<u>Positive impacts:</u> The proposal will increase community cohesion and sense of belonging, providing a local hub that will foster lasting relationships between families. Additionally, the proposal will celebrate Aboriginal cultural heritage, bring new residents to the area and provide local business and job opportunities. <u>Potential negative impacts:</u> A perceived loss of commercial development was identified through interviews (as a commercial development was previously approved on the site). This perceived loss will be alleviated given that a

Category	Impacts and mitigation
	separate commercial development (Fairley Square) has been approved on the adjoining site.
Amenity impacts	<u>Positive impacts:</u> The proposal will contribute to visual amenity in the area. The proposal also has some potential to promote active transport use through provision of bicycle storage (though it is expected that most students and staff will arrive by car). <u>Potential negative impacts:</u> Construction traffic, noise and dust may adversely affect neighbours during the construction phase. The impacts have been identified as low-to-high in significance. These impacts will be relatively short-lived and can be effectively mitigated through construction management measures, including preparation and implementation of a construction management plan (CMP) and implementation of the recommendations in the noise report. Pedestrian safety was identified as having high significance. This concern will be adequately mitigated through finalisation and implementation of the School Travel Plan and finalisation of pedestrian crossing locations.
Effective and inclusive design	<u>Positive impacts:</u> The proposal will provide for adaptive and flexible learning spaces, support good thermal conditions, support special needs students, be accessible for all and support health and well-being.

7.8 Noise and vibration

7.8.1 Methodology

An Acoustic Assessment prepared by Pulse White Noise Acoustics is attached at **Appendix 11**. The report assesses the impacts associated with noise emissions from the site during the operational and construction phases as well as noise intrusion to the site from surrounding noise sources.

An unattended noise survey was conducted between 9 April and 18 April to establish the existing background noise level at the site. The location of the logger is shown at Figure 7-16 below. Due to the site being a vacant lot and other surrounding noise sources (i.e., dwelling construction works, child care, pre-school, etc.), the logger location was limited and selected to be located away from the surrounding noise sources.

7.8.2 Existing conditions

Surrounding noise receivers include a mix of residential, educational and commercial uses. The location of these uses are illustrated in Figure 7-16 below. The

nearest residential receivers are located on the western side of Rose Street, approximately 80m west of the site.

Surrounding noise sources include Barton Highway, which adjoins the site to the west, Fairley Street to the north and operational activities of the surrounding medical centre, child care centre and tourist hotel.

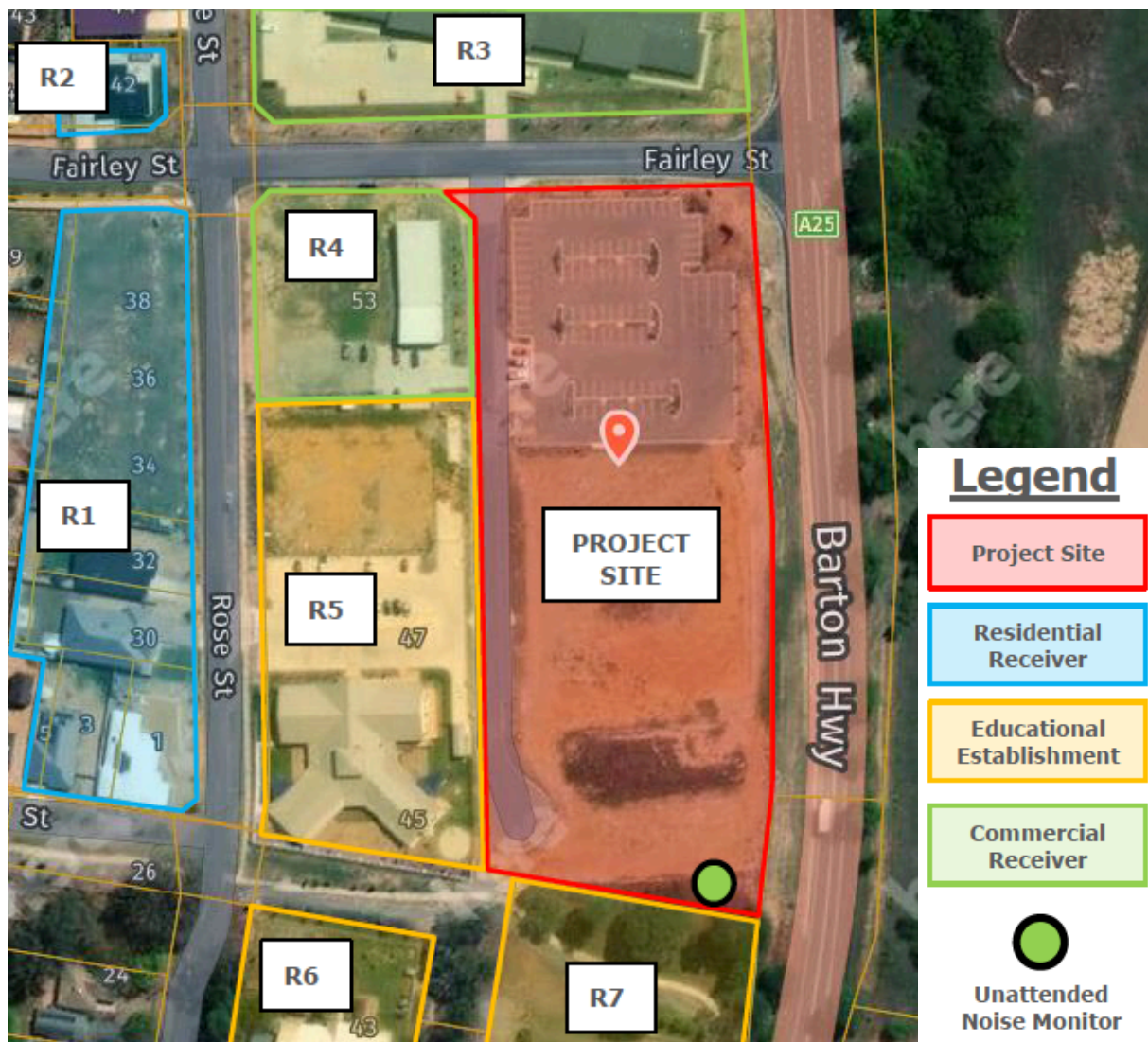


Figure 7-16 Surrounding noise receivers
Source: White Pulse

7.8.3 Noise emission from school

Operational noise

Key sources of noise emissions from operation of the future school include the public address (PA) system, school bell, mechanical services, outdoor activities and additional traffic noise.

Regarding the PA system, bell and mechanical services, detailed information is not available at this early stage of the project design. A detailed acoustic review of the

PA system and building services will be carried out once the design is finalised to ensure relevant noise criteria are achieved.

The acoustic report provides a proof-of-concept assessment of noise from building services based on similar projects. The assessment has shown that the proposal is capable of complying.

Predicted noise from outdoor play activities has been calculated, and the results are provided at table 6-7 of the acoustic report. The results show that noise from the outdoor areas will comply with the relevant criteria at the nearest residential receivers and will marginally exceed the criteria at the adjacent medical centre and child care centre. The exceedances are considered acceptable given that they are marginal, are not necessarily offensive (being the noise of playing children rather than industrial or mechanical noise) and affect medical and other education uses (rather than residential).

Construction noise

Predicted noise levels from construction activities have been calculated, and the results are provided at table 7-1 of the acoustic report. The results show that some of the works are predicted to exceed noise management levels at surrounding receivers, with some works expected to exceed the Highly Noise Affected Level when occurring near the receiver. Construction management measures will need to be applied accordingly. These are outlined at sections 7.5 to 7.11 of the acoustic report.

Construction vibration

Human comfort vibration criteria are outlined in section 4.4 of the acoustic report. Section 7.4 of the report outlines indicative safe distances required in order to achieve compliance with the criteria.

7.8.4 Noise intrusion into school

The primary source of noise intrusion into the school is the adjacent Barton Highway. Section 4.2 of the acoustic report specifies the noise criteria that must be met for the school's school internal and external areas.

For internal areas, it is expected that the specified criteria can be met subject to implementation of appropriate façade and glazing systems. The acoustic report recommends facade and glazing treatments that may be used to satisfy the specified noise criteria (refer to section 5 of the report). It is noted that the recommendations are only an example of one solution and that the specified levels may be met through other façade and glazing solutions.

For the outdoor play area, measured on site noise levels indicate that the specified criteria will be achieved, subject to management of passive activities in accordance with the figure below. Passive outdoor uses, such as outdoor learning, are subject to slightly stricter noise criteria, and therefore these passive uses will need to occur in the western portions of the play areas.



Figure 7-17 Passive and active play areas diagram
Source: Pulse White Noise

7.8.5 Mitigation measures

Façade and glazing systems must be designed to achieve the specified internal noise levels.

Section 6.5 of the acoustic report outlines a number of treatments and management controls that must be implemented for ensuring the proposal meets operational noise emission criteria, including:

- A detailed acoustic review of all building services is required prior to installation once final selections are made to ensure compliance.

- A review of the proposed Public Address/bell system is recommended once locations of speakers are known to ensure compliance.
- Use of the community hall for activities which include the use of amplified music and or speech will require all doors and windows to remain closed.
- Use of the community hall is permitted between 7:00am and 10:00pm only.

Sections 7.5 to 7.11 of the report outline a number of standard mitigation measures to ensure construction activities adequately mitigate construction noise and vibration. Additionally, a Construction and Vibration Management Plan will need to be prepared and implemented.

In order to meet noise criteria for the northern and southern outdoor play spaces passive play must be managed so that it occurs in the western portions of the play spaces as specified at figure 7 of the acoustic report.

7.9 Biodiversity

A request for a biodiversity development assessment report (BDAR) waiver was submitted to DPIE on 09 December 2020. DPIE subsequently granted a waiver on 19 February 2021 on the basis that the development is not likely to have any significant impacts on biodiversity values (refer to **Appendix 8a**).

No significant vegetation or flora and fauna values will be affected by the proposal. The site is highly disturbed and contains very low biodiversity values. No threatened ecological communities and no threatened flora or fauna species listed under the BC Act or the EPBC Act have been recorded on the site or are likely to occur. Refer to the Biodiversity Constraints Letter at **Appendix 8b** for further detail.

Given the above, no mitigation measures regarding biodiversity impacts are required.

7.10 Bushfire

7.10.1 Methodology

A Bushfire Assessment Report by Peterson Bushfire is attached at **Appendix 10**. The author of the report is a Fire Protection Association Australia Bushfire Planning and Design Level 3 Certified Practitioner.

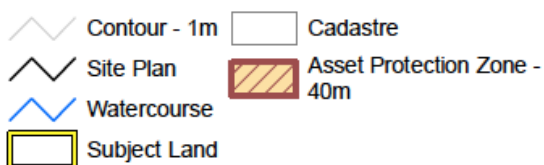
The report details fire protection measures and demonstrates compliance with Planning for Bush Fire Protection (NSW RFS, 2019) (PBP), specifically Chapter 6, which relates to schools.

7.10.2 Existing environment

The bushfire hazard within the required 140m assessment area consists of unmanaged grassland to the east of Barton Highway as mapped at Figure 7-18. This grassland hazard is situated on a gradient in the PBP slope class of "downslope 0-5 degrees".



Legend



Vegetation Formation

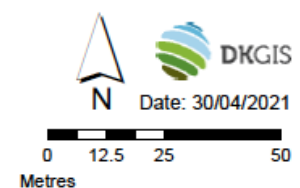
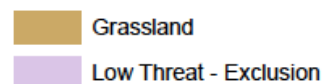


Figure 7-18 Bushfire hazard analysis and APZ
Source: Peterson Bushfire

Beyond the grassland is a narrow corridor of exotic trees along a drainage line that is classified as “low threat – exclusion” in accordance with PBP Section A1.10. This classification is due to the width of the corridor being less than 20m wide and separation from the site and other areas of vegetation by at least 20m. The vegetation is also regarded as low threat due to its composition being entirely exotic

deciduous trees that do not present the flammability and fuel availability as with native trees. The corridor is therefore not considered a bushfire hazard and consideration of APZ and BAL is not required. The hazard classification was agreed to by RFS during consultation over the phone on 29 April 2021.

The lands in the remaining directions are adequately managed and do not present a hazard.

7.10.3 Asset protection zone

Using the hazard parameters of vegetation and slope identified above, the required asset protection zone (APZ) between the proposed development and the bushfire hazard is 40m. This required APZ is shown hatched in Figure 7-18.

7.10.4 Bushfire attack level

Buildings are required to be designed and constructed in accordance with the relevant bushfire attack level (BAL). In accordance with Table A1.12.5 of PBP, it has been determined that the proposed Blocks B and C and the connecting roof are impacted by BAL-12.5. Accordingly, these structures must be designed and constructed to comply with BAL-12.5.

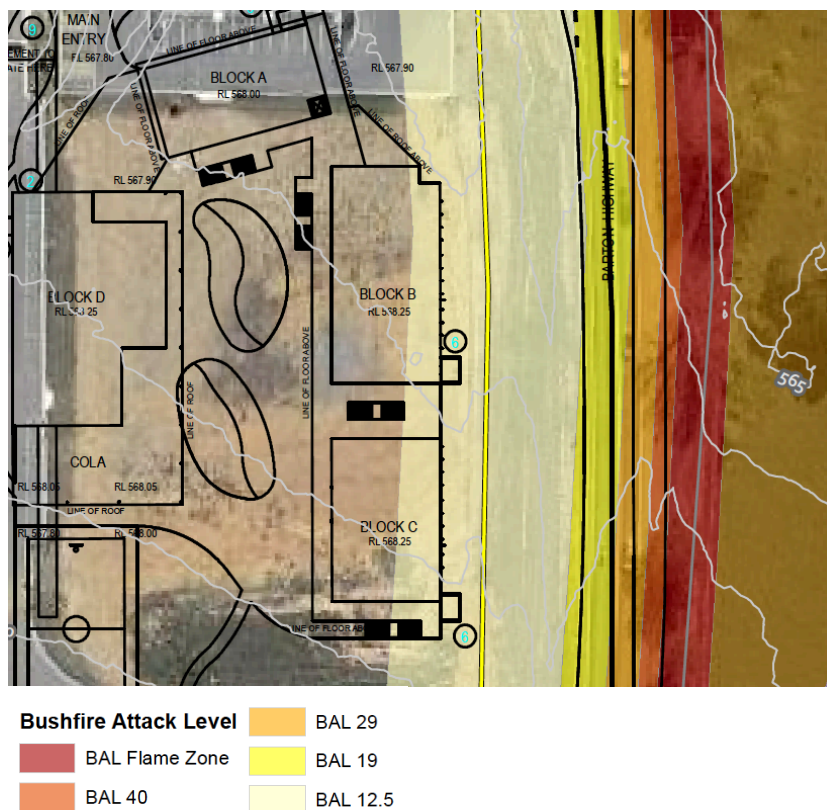


Figure 7-19 Bushfire hazard analysis and APZ

Source: Peterson Bushfire

7.10.5 Other considerations

PBP requires that landscaping is managed to minimise flame contact and radiant heat to buildings and the potential for wind-driven embers. The proposed landscaping is capable of being managed in accordance with PBP.

The proposal complies with or is capable of complying with the requirements for access, water supply and electricity services set out in PBP.

7.10.6 Mitigation measures

The bushfire report recommends the following mitigation measures:

- Any proposed landscaping is to satisfy the standard of an inner protection area as listed within Appendix A4.1.1 of Planning for Bush Fire Protection 2019.
- Buildings B and C and the connecting roof are to be designed and constructed to comply with BAL-12.5. The NSW variation to AS 3959 is also to be applied to the BAL requirements. The variation is found at Section 7.5.2 of PBP.
- The access drive is to be designed to comply with the Acceptable Solutions of PBP (Table 6.4b).
- Fire hydrants are to be installed to ensure compliance with PBP and AS 2419.1 – 2005 Fire Hydrant Installations – System Design, Installation and Commissioning (AS 2419).
- Any gas services are to be installed and maintained in accordance with AS/NZS 1596-2014 The storage and handling of LP gas.
- A Bushfire Emergency Management and Evacuation Plan is to be prepared in accordance with RFS guidelines prior to occupation of the new school.

7.11 Stormwater management

A concept stormwater strategy is included in the Civil Engineering SSDA Report by Northrop at **Appendix 13**.

Stormwater will be captured by a series of pits and pipes draining to an on-site detention (OSD) tank located under the kiss-and-drop area before discharging to Council's stormwater infrastructure in Fairley Street. Given the location of the OSD tank, the car park area will bypass the OSD.

Based on discussions with Council, it is understood that water quality treatment is not a requirement in the LGA and has therefore not been incorporated into the stormwater management design.

Council has, however, noted that rainwater storage is required and this has been implemented as part of the SSDA. Collected rainwater will be used for irrigation purposes.

7.12 Flooding

A Civil Engineering SSDA Report prepared by Northrop is attached at **Appendix 13**. Section 1.5 of the report contains discussion on flooding.

The Flooding Assessment prepared for Yass Valley Council (Murrumbateman, Bowning, Bookham and Binalong Flood Study – Lyall & Associates, August 2020) indicates that the site is not flood affected for the 1% AEP event. The northeast corner of the site is affected in the PMF event, with 0.1m to 0.3m depth of flooding, as illustrated in the figure below.

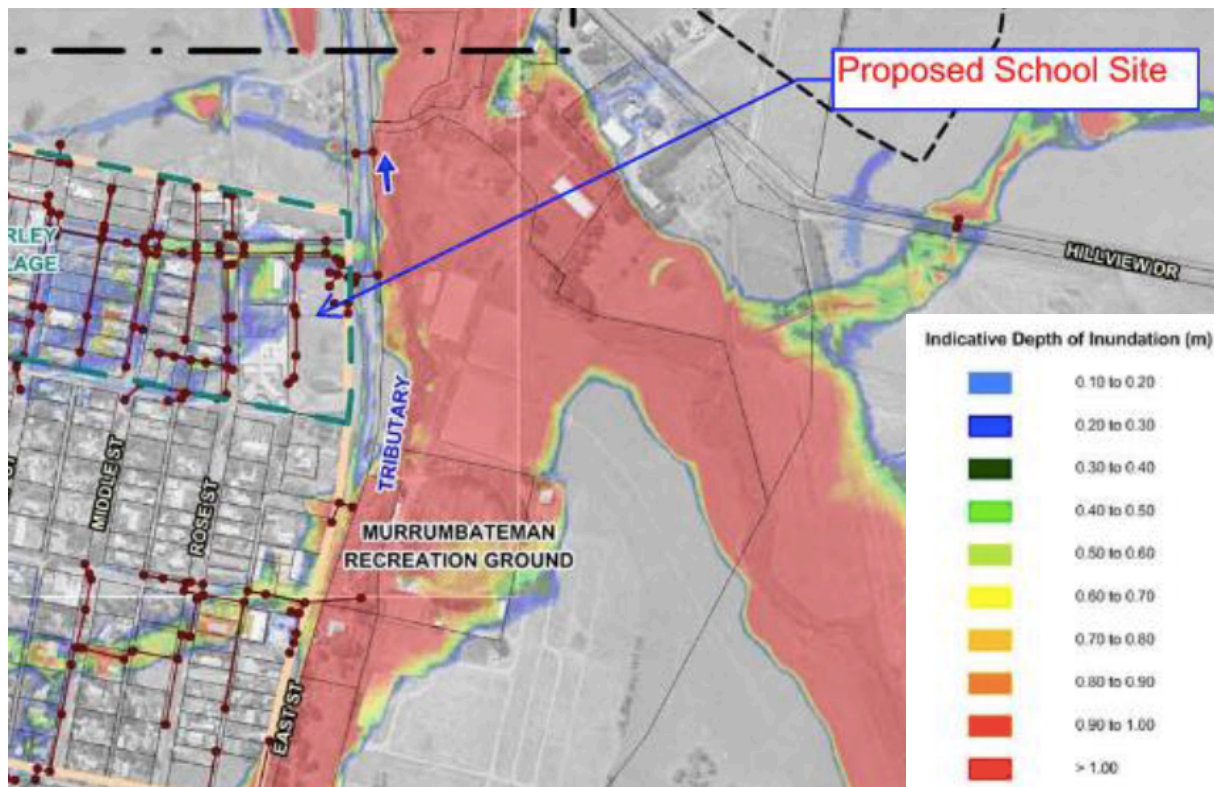


Figure 7-20 Flood Map PMF
Source: Lyall & Associates

The floor levels of the proposed school buildings will be above the PMF level, and the site levels in the existing car park (i.e., the PMF-affected area of the site) are not proposed to be altered. As such, the proposal is not expected to be adversely affected by flooding.

7.13 Soils and water

7.13.1 Groundwater

The Report on Geotechnical Investigation by Douglas Partners (refer to **Appendix 16**) considers groundwater conditions across the site. The report notes that no free groundwater was observed during the drilling/excavation of the boreholes/test pits; however, groundwater was found in some boreholes after one to four hours. The groundwater was observed at depths ranging from 5m to 6.7m.

It is likely that excavations will come into contact with groundwater through seepages from the silty/sandy soil layers or through fractures in the bedrock after periods of rain and possibly in areas of springs (which cannot be detected until bulk earthworks). However, the proposal is not expected to have any adverse impacts on groundwater. The proposal does not involve any on-site storage of solid or liquid waste and chemicals, or any other similar polluting activity, that would contaminate groundwater.

7.13.2 Sediment and erosion control

Sediment and erosion control measures will be applied prior to the commencement of construction and maintained throughout construction. The measures will be in accordance with Council's requirements and the NSW Department of Housing Manual, "Managing Urban Stormwater Soil & Construction" 2004 (Blue Book). Refer to the sediment and erosion control plan in the civil engineering package at **Appendix 13** for further detail. Provided that these measures are in place prior to construction, no adverse sediment and erosion impacts are anticipated.

7.13.3 Salinity

The Preliminary Site Investigation at **Appendix 14** addresses soil salinity. The DPIE eSPADE website indicates that the site is unlikely to be affected by soil salinity issues, and therefore no further investigations have been undertaken.

7.14 Waste

7.14.1 Construction waste

A Construction Waste Management Plan prepared by EcCell is attached at **Appendix 17**. The report outlines the estimated quantity and type of waste that will be generated during the construction stage and provides details on servicing arrangements, and roles and responsibilities.

The expected waste volumes during construction stage is identified in the table below. As seen in the table, the majority of construction waste will be recycled, with less a quarter to be transferred to a landfill.

Material type	Estimated volume (m ³)		
	Reuse	Recycling	Disposal
Concrete brick blockwork and tile	-	105	-
Metals	-	45	-
Timber off-cuts	-	125	-
Cardboard	-	90	-

Material type	Estimated volume (m ³)		
	Reuse	Recycling	Disposal
Plasterboard	-	105	-
Plastics, plastic packaging, paint drums, containers	-	45	25
Pallets and reels	40 units	-	-
Liquid waste	-	-	15
General waste	-	-	115
Subtotal	40 units	515	155
Total	670m ³		

7.14.2 Operational waste

An Operational Waste Management Plan (WMP) by EcCell is attached at **Appendix 18**. The plan considers the proposal's waste generation, bin requirements, waste rooms and collection arrangements.

Waste generation

The proposal's predicted waste generation and bin requirements are outlined in the table below.

Table 7-6 Operational waste generation

Waste type	Weekly volume (L)	Required bins	Collection frequency
Paper cardboard	546	1 x 660L	Once per week
Comingled	612	1 x 660L	Once per week
Soft plastic	590	1 x 660L	Once per week
Organics	109	1 x 120L	Once per week
Return and earn	66	1 x 240L	Once per week
General	808	1 x 3,000L	Once per week

The waste storage pad is located at the easternmost side of the car park along the site boundary, as shown in Figure 7-21. The pad is sized to accommodate the required quantity of bins outlined in the table above.

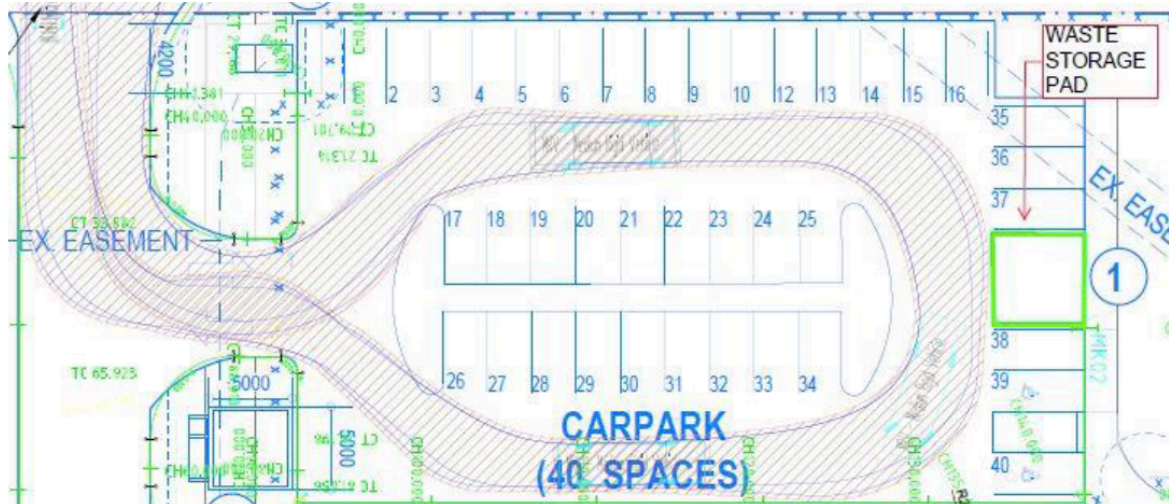


Figure 7-21 Waste storage area location
Source: EcCell

Waste movement

Staff, students and visitors will place general waste and recycling into small waste and recycling bins (paper and comingled) located in the offices, canteen, classrooms and open space playground. Waste will be then transported by cleaning contractors via the nominated egress corridors/pathways to the waste storage pad and placed in the correct waste stream bins.

Medium rigid vehicles will collect the bins from the waste storage pad on collage days. Swept paths and access pathways are provided at Appendix A of the Operational WMP.

7.15 Contamination

7.15.1 Methodology

A Preliminary Site Investigation by Douglas Partners is attached at **Appendix 14**. The objective of the report is to assess whether contamination has the potential to exist on the site and to determine whether further investigation is needed.

The report identifies potential sources of contamination and comments on the need for further investigation. The investigation included a review of review of site history information, a site walkover, excavation of seven test pits, collection of soil samples and laboratory testing. Key items from the report are outlined below.

7.15.2 Existing environment

The site contains an existing parking lot at its northern end and a driveway along its western boundary. There is also a mound of soil at the southern end of the site. The site is otherwise cleared and vacant.

It is understood that the earliest title for the site was granted in 1900, and the site was likely used for grazing until it was subdivided in 2006. Sometime in 2015, the site was cleared, and topsoil stripped, with the stockpile appearing within the southern portion of the site.

The site is included within land subject to previous geotechnical assessments (Douglas Partners, 2016 & 2017). The assessments confirmed that the former dam and central portion of the site was covered in fill ranging between 1.5m to 4.5m, with soil sourced from earthworks resulting from surrounding residential subdivision.

Douglas Partners note that there are no records of any previous site contamination assessments undertaken at the site and the site does not appear on the list of contaminated sites notified to the NSW EPA.

7.15.3 Impacts

The results of the laboratory analysis indicated that reported concentrations of contaminants of concern associated with the fill and potential use of pesticides were below the adopted assessment criteria or not detected. Accordingly, the site is considered suitable for the proposed use, subject to a number of standard mitigation measures.

7.15.4 Mitigation measures

The contamination report recommends the following mitigation measures:

- A Construction Environmental Management Plan should be prepared including an unexpected finds protocol and implemented during future site works.
- Should suspected asbestos containing materials be encountered at the site, the affected area should be fenced off and assessed by a licenced asbestos assessor.
- The fill material encountered beneath the site would be suitable for on-site reuse.
- Should any fill or stockpiled material be required to be disposed off-site, they must first be assessed in accordance with NSW EPA Waste Classification Guidelines Part 1 Classifying Waste (2014) and assigned a waste classification prior to off-site disposal.

7.16 Utilities

An Infrastructure Management Plan prepared by Norman Disney & Young is provided at **Appendix 12**. The existing site infrastructure and need for upgrades are summarised in the table below.

Table 7-7 Utility infrastructure details

Utility	Existing infrastructure	Proposed supply
Potable water	Yass Valley Council own and operate the potable water, sewer and storm water infrastructure on Fairley Street and the Barton Highway that is available for connection. The site has frontage to the following YVC potable water mains: • 100mm potable water main reticulating within the existing internal road. • 150mm potable water main reticulating within Fairley Street to the north of the site.	A pressure and flow enquiry on the existing water mains has been lodged with Council to determine the requirement of booster pumps and/or fire water storage tanks, and the results are pending. A new potable water connection shall be made to the existing Council potable water main located within existing internal road. A new fire services connection shall be made to the existing Council potable water main traversing Fairley Street. The 100mm potable water main within the existing internal road appears to have adequate capacity to meet the potable cold water demand for the proposed development; however, this may not have the sufficient flow required for firefighting purpose. The fire main is proposed to connect to the 150mm Council potable water main traversing the Fairley Street. This is to be confirmed upon receipt of pressure and flow statement from the council. Potable cold water supply will be reticulated to all fixtures and tapware via an authority water meter. Backflow prevention devices and water meter assembly shall be provided for proposed development works in accordance with the requirements of Council.
Sewer	The site has frontage to the following Council sewer mains: • A 150mm sewer main within the existing internal road.	It is proposed to connect sewer drainage at two locations to the existing Council sewer main reticulating within the existing internal road and also at the eastern boundary. The 150mm sewer main appears to have adequate capacity

Utility	Existing infrastructure	Proposed supply
	A 150mm sewer main along Barton Highway;	to service the proposed development. Final invert level of the existing sewer main will need to be determined to finalise the connection point. Gravity flow sewer drainage systems will collect waste and effluent from all fixtures, fittings and appliances from the proposed buildings and connected to the Council sewer main. Pumped sewer systems will be considered in areas where gravity falls cannot be achieved. Sewer pump station volume to be as per the requirements of Council and Water Services Association Australia.
Natural gas	No natural gas assets are available for connection. Jemena has confirmed that there are no plans in the near future to extend gas to this area.	The project proposes to utilise electric heating sources only. No gas will be required onsite.
Electrical high voltage (HV) services	There is an existing substation 25-79206 that supplies the adjoining child care centre. The cables supplying this substation go through that site to Rose Street. The land title shows that Essential Energy has a right of way on the school site for it to access and operate this substation. This will need to be maintained.	The school site has no existing LV supply, and the proposed load required for the school is likely to be larger than any spare capacity on the existing padmount substation. A new padmount substation is required to service the school. The substation is proposed to be located at the northwestern portion of the carpark as shown on the architectural drawings at Appendix 1 . This location is appropriate as it allows for easy access from Fairley Street. From the substation, HV and LV cables will be laid underground to Rose Street and joined to the cables in that location.
Communication services	There is no existing communications infrastructure supplying or traversing the site.	Existing NBN pit and associated underground conduits located in Fairley Street are proposed to be the connection point to the NBN network, as it is strategically located on the northwest corner of the campus. New NBN pits and associated underground NBN conduits are

Utility	Existing infrastructure	Proposed supply
		proposed to be installed for NBN lead-in optic fibre reticulation.

8 Assessment of other issues

8.1 Geotechnical

A Report on Geotechnical Investigation has been prepared by Douglas Partners and is attached at **Appendix 16**. The report provides the results of subsurface investigations to inform the structural design of the proposal. The report indicates that the site is geotechnically suitable for the proposed development and provides comments regarding site preparation, likely reactivity site classifications, retaining wall design parameters, foot design parameters and drainage.

8.2 Structural

A Structural Schematic Design Report by Northrop is attached at **Appendix 15**. The report outlines the required structural design criteria and the proposed structural systems. Based on the report, it is expected that standard structural techniques and methodologies will be utilised.

8.3 Accessibility

An Accessibility Report by JAZ Building Consultants is attached at **Appendix 19**. The report considers the proposal's accessibility with reference to the BCA, Disability (Access to Premises – Buildings) Standards 2010, relevant Australian Standards and *Disability Discrimination Act 1992*.

Based on the report, it is expected that the proposal can comply with relevant accessibility provisions, either by meeting the deemed-to-satisfy requirements or via a performance-based approach.

8.4 Tree protection

8.4.1 Methodology

An Arboricultural Impact Assessment by Wade Ryan Contracting is attached at **Appendix 9**. The assessment provides comment on the site's vegetation and two trees on the adjoining site to the south.

8.4.2 Existing environment

Regarding onsite vegetation, the assessment confirms there is no vegetation on the site that qualifies as a tree.

Regarding adjoining land, the assessment identifies two nearby trees on the adjoining lot to the south (Old Murrumbateman School House site):

- Tree 1: Large Stone Pine (9m height), which is possibly a significant tree based on heritage values.
- Tree 2: Large Stone Pine (15m height), a significant tree that dominates the local landscape and has heritage values.

8.4.3 Impacts

The assessment has found that the proposal may have the following potential impacts on Trees 1 and 2:

- General potential impacts to the canopy or stem from movement and storage of plant and materials.
- Landscaping impacts on root zone, including bulk earthworks and cut into embankment.
- Boundary fence construction.

8.4.4 Mitigation measures

The following measures are proposed to minimise impacts on the neighbouring trees:

- The tree canopy of Trees 1 and 2 will require pruning and lifting to allow for erection of tree protection zone (TPZ) fencing and boundary fence construction, which will be carried out by a Level 3 arborist.
- A 6m tree protection zone (TPZ) is required for Tree 1. Following pruning, this can be reduced to 3m to the north (on the subject site) for the purpose of bulk fill and post hole boring. No cut is allowed in the TPZ.
- A 12m TPZ is required for Tree 2. This can be reduced to 10m for the purposes of post hole boring, bulk fill and construction of a swale/mountain/bunding. No cut is allowed in the TPZ.
- Landscape design should consider amelioration of TPZ impacts where feasible.

The assessment also provides a number of other general recommendations at section 6 of the assessment.

9 Environmental risk assessment

The table below provides a summary risk assessment of the proposal's potential environmental impacts as well as a consolidated list of recommended mitigation measures.

Table 9-1 Environmental risk assessment

Impact	Impact detail	Level of impact	Mitigation measures	Residual risk
Traffic				
Construction	Construction activity is anticipated to result in minor disruption to daily activities in the vicinity of the site.	Low	<u>Management plan</u> : Finalise and implement the Construction Traffic Management Plan, which recommends installation of construction fencing, supervised traffic control and scheduling truck movements outside of peak hours, as well as other general measures.	Low
Operation	The proposed development will generate 176 and 146 vehicle trips during the AM and PM peak hours, respectively. The local intersections have ample spare capacity to accommodate these trips.	Low	<u>School Travel Plan</u> : The School Travel Plan should be finalised and implemented. <u>Pedestrian crossing infrastructure</u> : In consultation with Council, the applicant is actively investigating the following pedestrian crossings: • An east-west crossing spanning the access road from Fairley Street. • An east-west crossing spanning Rose Street via the equestrian path and north street.	Low
Noise and vibration				

Impact	Impact detail	Level of impact	Mitigation measures	Residual risk
Construction	Noise associated with the normal construction works are predicted to exceed noise management levels at surrounding receivers, with some works expected to exceed the Highly Noise Affected Level when occurring near the receiver.	Medium	<u>Management plan</u> : A Construction Noise and Vibration Management Plan must be prepared and implemented.	Medium
Operation	Noise emissions associated with operation of the school include mechanical plant, PA system, hall, outdoor play areas and additional traffic noise.	Low	<u>Detailed design</u> : Detailed acoustic impact of the PA system and mechanical plant must continue during the detailed design phase to confirm compliance with relevant noise criteria specified in the Acoustic Assessment at Appendix 11 . <u>Management measures</u> : Use of community hall is permitted between 7am and 10pm only, and hall doors must remain closed for activities that include the use of amplified music or speech.	Low
	The Barton Highway is the primary source of noise intrusion into the site.	Low	<u>Construction standards</u> : The façade and windows should be designed in accordance with the relevant internal noise levels specified Acoustic Assessment at Appendix 11 . <u>Management of passive learning areas</u> : To ensure amenity for students utilising the outdoor play areas, the portions of the areas closest to the Barton Highway will not be used for passive recreation, as specified in the Acoustic Assessment at Appendix 11 .	Low
Aboriginal heritage				
Construction	The site has been identified as having no	Low	<u>Unexpected finds protocol</u> : A standard unexpected finds	Low

Impact	Impact detail	Level of impact	Mitigation measures	Residual risk
	notable Aboriginal heritage significance.		protocol should be implemented.	
Heritage				
Construction	The site is located adjacent to a heritage item. The site has been identified as having no archaeological significance.	Low	<u>Construction management</u>: Site storage, parking, compound, stockpiles, etc. should not be located within the curtilage of any heritage item. <u>Unexpected finds protocol</u>: A standard unexpected finds protocol should be implemented.	Low
Bushfire				
Construction	The site is located within 40m of low threat grassland (across Barton Highway).	Low	<u>Building standards</u>: Buildings B and C (including connecting roofs) must be designed and constructed to comply with BAL-12.5. <u>Asset protection zones</u>: All landscaping is to be designed to satisfy the standard of an inner protection area. <u>Access</u>: Internal roads must be designed to comply with the Acceptable Solutions of PBP. <u>Water supply</u>: Fire hydrants are to be installed to ensure compliance with PBP and AS 2419.1 – 2005.	Low
Operation	The site is located within 40m of low threat grassland (across Barton Highway).	Low	<u>Asset protection zones</u>: All landscaping is to be maintained to satisfy the standard of an inner protection area. <u>Emergency and evacuation management</u>: A Bushfire Emergency Management and Evacuation Plan must be prepared prior to occupation.	Low

Impact	Impact detail	Level of impact	Mitigation measures	Residual risk
Tree protection				
Construction	There are two trees on the adjoining site to the south near the site boundary.	Low	<u>IPZs</u> : Tree protection zones will need to be established for both trees as recommended in the Arboricultural Impact Assessment at Appendix 9 .	Low
Contamination				
Construction	The site has been identified as suitable for the proposed use subject to standard mitigation measures.	Low	<u>Management plan</u> : A Construction Environment Management Plan should be prepared including an unexpected finds protocol.	Low

10 Mitigation measures

A consolidated summary of the proposed mitigation measures is provided in the table below.

Table 10-1 Consolidated mitigation measures

Impact	Impact detail	Mitigation measures
Traffic		
Construction	Construction activity is anticipated to result in minor disruption to daily activities in the vicinity of the site.	<u>Management plan</u> : Finalise and implement the Construction Traffic Management Plan, which recommends installation of construction fencing, supervised traffic control and scheduling truck movements outside of peak hours, as well as other general measures.
Operation	The proposed development will generate 176 and 146 vehicle trips during the AM and PM peak hours, respectively. The local intersections have ample spare capacity to accommodate these trips.	<u>School Travel Plan</u>: The School Travel Plan should be finalised and implemented. <u>Pedestrian crossing infrastructure</u>: In consultation with Council, the applicant is actively investigating the following pedestrian crossings: • An east-west crossing spanning the access road from Fairley Street. • An east-west crossing spanning Rose Street via the equestrian path and north street.
Noise and vibration		
Construction	Noise associated with the normal construction works is expected to exceed the noise limits for highly noise affected receivers within standard hours.	<u>Management plan</u>: A Construction Noise and Vibration Management Plan must be prepared and implemented. <u>Miscellaneous</u>: The proposal must align with the various noise and vibration mitigation measures outlined in the Acoustic Assessment at Appendix 11 relating to plant and equipment; onsite noise management; work scheduling; and consultation, notification and complaints handling.

Impact	Impact detail	Mitigation measures
Operation	Noise emissions associated with operation of the school include mechanical plant, PA system, hall, outdoor play areas and additional traffic noise.	<u>Detailed design</u>: Detailed acoustic impact of the PA system and mechanical plant must continue during the detailed design phase to confirm compliance with relevant noise criteria. <u>Management measures</u>: Use of community hall is permitted between 7am and 10pm only, and hall doors must remain closed for activities that include the use of amplified music or speech.
	The Barton Highway is the major source of noise intrusion into the site.	<u>Construction standards</u>: The façade and windows should be designed in accordance with the recommendations in the Acoustic Assessment at Appendix 11 to ensure appropriate internal noise levels. <u>Management of passive learning areas</u>: To ensure amenity for students utilising the outdoor play areas, the portions of the areas closest to the Barton Highway will not be used for passive recreation, as specified in the Acoustic Assessment at Appendix 11.
Aboriginal heritage		
Construction	The site has been identified as having no notable Aboriginal heritage significance.	<u>Unexpected finds protocol</u> : A standard unexpected finds protocol should be implemented.
Heritage		
Construction	The site is located adjacent to a heritage item. The site has been identified as having no archaeological significance.	<u>Construction management</u>: Site storage, parking, compound, stockpiles, etc. should not be located within the curtilage of any heritage item. <u>Unexpected finds protocol</u>: A standard unexpected finds protocol should be implemented.
Bushfire		
Construction	The site is located within 40m of low threat grassland (across Barton Highway).	<u>Building standards</u>: Buildings B and C (including connecting roofs) must be designed and constructed to comply with BAL 12.5. <u>Asset protection zones</u>: All landscaping is to be designed to satisfy the standard of an inner protection area. <u>Access</u>: Internal roads must be designed to comply with the Acceptable Solutions of PBP.

Impact	Impact detail	Mitigation measures
		<u>Water supply</u> : Fire hydrants are to be installed to ensure compliance with PBP and AS 2419.1 – 2005.
Operation	The site is located within 40m of low threat grassland (across Barton Highway).	<u>Asset protection zones</u> : All landscaping is to be maintained to satisfy the standard of an inner protection area. <u>Emergency and evacuation management</u> : A Bushfire Emergency Management and Evacuation Plan must be prepared prior to occupation.
Tree protection		
Construction	There are two trees on the adjoining site to the south near the site boundary.	<u>TPZs</u> : Tree protection zones will need to be established for both trees as recommended in the Arboricultural Impact Assessment at Appendix 9 .
Contamination		
Construction	The site has been identified as suitable for the proposed use subject to standard mitigation measures.	<u>Management plan</u> : A Construction Environment Management Plan should be prepared including an unexpected finds protocol.

11 Conclusion and justification

This EIS is submitted to the Minister for Planning to accompany an SSD application for establishment of a new primary school at Murrumbateman.

This EIS has considered the relevant statutory instruments and strategic documents and provided an assessment of the potential impacts of the proposal on the built and natural environments as well as an assessment of social impacts.

This EIS fulfils the requirements of the EP&A Act and Regulation, addresses all relevant matters prescribed by the SEARs and demonstrates that the potential impacts of the proposal can be satisfactorily managed or mitigated.

In summary, the development should be approved for the following reasons:

- The proposal will meet identified demand and deliver on the announcement of a public school in Murrumbateman.
- The proposal will provide for a contemporary, purpose-built facility that will optimise educational outcomes.
- The proposal will generate jobs, both short-term and ongoing.
- The proposal's design is the result of detailed analysis of the site and consultation with the community, DoE and GANSW.
- The potential environmental impacts of the proposal can be satisfactorily mitigated subject to the recommendations of the technical supporting documentation accompanying this EIS.
- The site is suitable for the proposal.
- The proposal is in the public interest.



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