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Project Code SA6365

Report Number SA6365_Schofields EIS

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SIGNED DECLARATION

This Environmental Impact Statement (EIS) has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000.*

Environmental Assessment Prepared by:		
Names:	Alaine Roff (Associate Director) Bachelor of Arts, University of Newcastle, NSW Master of Town Planning, University of New South Wales Naomi Weber (Consultant) Bachelor of Urban and Regional Plan, University of New England, NSW	
Address:	Urbis Pty Ltd Level 23, Darling Park Tower 2, 201 Sussex Street Sydney NSW, 2000	
In respect of:	NSW Department of Education	

Applicant and Land Details:			
Applicant:	NSW Department of Education C/- Urbis Pty Ltd		
Applicant Address:	Urbis Pty Ltd Level 23, Darling Park Tower 2, 201 Sussex Street Sydney NSW, 2000		
Land to be developed:	Lots 20 & 21 DP 2912		
Project:	Redevelopment of Schofields Public School for approximately 620 students, including new classrooms, open spaces and associated facilities.		

I certify that the contents of the Environmental Impact Statement, to the best of my knowledge, has been prepared as follows:

- In accordance with Schedule 2 of the Environmental Planning and Assessment Regulations 2000;
- In accordance with the requirements of the Environmental Planning and Assessment Regulations 2000; and State Environmental Planning Policy (State and Regional Development) 2011;
- The statement contains all available information that is relevant to the environmental assessment of the proposed development; and
- The information contained in this report is neither false nor misleading.

Name:	Alaine Roff, Associate Director
Signature / Date:	Mainelott 26 March 2018

EXECUTIVE SUMMARY

PURPOSE OF THIS REPORT

This Environmental Impact Assessment (EIS) has been prepared by Urbis Pty Ltd on behalf of the NSW Department of Education (DoE) in support of State Significant Development Application SSD 17_8740 for the redevelopment of 'Schofields Public School' at 60 St Albans Road, Schofields (the 'site').

This EIS should be read in conjunction with the Secretary's Environmental Assessment Requirements (SEARs) attached at **Appendix B**, and the supporting technical documents provided at **Appendix A** - **Z**.

THE PROPOSAL

'Schofields Public School' (the 'School') currently accommodates a maximum of 298 students and 16 staff. As a result of the proposal, the School will accommodate up to 621 students from Kindergarten to Year 6, and a total of 50 staff.

The proposal will facilitate an additional 323 students and 34 staff to take enrolment pressure off the existing School which currently exceeds student capacity, and accommodate future population growth within the Blacktown City Local Government Area (LGA). The redeveloped primary school will contain high quality classrooms, collaborative learning spaces, open play spaces, sports courts and associated facilities. Specifically, this DA seeks development consent for the following works at the site:

- Demolition of numerous existing school buildings;
- Removal of 44 trees:
- Construction of a new two-storey building to house new classrooms, learning space and office;
- Construction of a new covered outdoor learning area (COLA);
- Modification of existing school building for use as a canteen;
- Internal refit of heritage school building and hall;
- Removal of four car parking spaces to accommodate the new two-storey teaching facility;
- Landscaping works; and
- School signage.

THE SITE

The site is located at St Albans Road, Schofields within the Blacktown City LGA. It comprises two lots legally described as Lot 20 and Lot 21 in Deposited Plan (DP) 2912. The site is rectangular in shape and is bounded by St Albans Road to the north, Junction Road to the east and Station Street to the south.

The site currently contains the existing Schofields Public School, which comprises demountable classrooms and outdated brick and wooden classroom buildings. The existing School needs to be upgraded to greatly improve learning, teaching and recreation spaces.

COST OF WORK AND PLANNING FRAMEWORK

Pursuant to Schedule 1 Clause 15 of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP), development for the purposes of educational establishments (including schools) with a CIV more than \$20 million is state significant development for the purposes of the SRD SEPP.

This development has a capital investment value (CIV) of more than \$20 million. This is detailed in the Quantity Surveyors Cost Assessment at Appendix C. As the cost of works exceeds \$20 million, the EIS will be submitted to the New South Wales Department of Planning and Environment (DPE) for assessment and determination.

ASSESSMENT

The proposal has been assessed against all items contained to the SEARs issued for the project on 28 September 2017. In summary:

- The proposal satisfies the applicable local and state planning policies: The proposal satisfies the objectives of all relevant planning controls and achieves a high level of planning policy compliance.
- The design positively responds to the site conditions and future urban morphology: The design of
 the School was carefully considered to ensure it has good connections to adjacent external space, is
 generally located away from residential neighbours and is located on a primary street address with a
 good street presence.
- The proposal is highly suitable for the site: The proposal continues the education use and is suitable for the site. The increase in students and staff is not significant and will not generate unreasonable traffic impacts.
- The proposal is in the public's best interest: The proposal will take substantial pressure off existing primary schools within the surrounding locality and ensure more children have access to new state of the art school facilities, learning spaces and equipment. The proposal will also create temporary job opportunities in manufacturing, construction and construction management during the project's construction phase of works, and significant job opportunities in teaching and administration at the project's completion.
- The proposal appropriately satisfies each item within the SEARs: The proposal satisfies the SEARs as demonstrated within this EIS.

Considering the above and the content contained to this EIS, it is recommended that the DPE approve this SSD DA, subject to appropriate conditions.

SECRETARY'S ENVIRONMENTAL ASSESSMENT **REQUIREMENTS**

A request was made to the Minister for the Secretary's Environmental Assessment Requirements (SEARs), pursuant to Clause 3, Schedule 2 of the Environmental Planning and Assessment Regulation 2000. The SEARs issued on 28 September 2017 are addressed within this report and included in full at Appendix B.

Table 1 below provides a summary of the SEARs and identifies the section of the report where the relevant requirement is addressed and/or the appendix reference for the specialist consultant's report associated with that requirement.

Table 1 – SEARs

Item / Description	Document Reference	
A. General Requirements		
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 <i>Environmental Planning and Assessment Regulation 2000</i> (the Regulation).	The EIS has been prepared in accordance with the Secretary's Requirements and meets the minimum form and content	
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	requirements specified in Schedule 2 of the Environmental Planning and	
Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include:	Assessment Regulation 2000.	
adequate baseline data;	The EIS includes a	
consideration of potential cumulative impacts due to other development in the vicinity (completed, underway or proposed); and	comprehensive assessment of the environmental risks and impacts associated with the development.	
measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.		
The EIS must be accompanied by a report from a qualified quantity surveyor providing:	Appendix C	
 a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; 		
an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and		
certification that the information provided is accurate at the date of preparation.		
B. Key Issues – This EIS must address the following specific matters:		
Statutory and Strategic Context	Section 4	

Item / Description	Document Reference
Address the statutory provisions contained in all relevant environmental planning instrument.	
Permissibility:	
Detail the nature and extent of any prohibitions that apply to the development.	
Development Standards:	
Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.	
2. Policies	Section 5
Address the relevant planning provisions, goals and strategic planning objectives.	
3. Operation	Section 3
 Provide details of the proposed school operations, including staff and student numbers, school hours of operation, and operational details of any proposed before/after school care services and/or community use of school facilities. 	
Provide a detailed justification of suitability of the site to accommodate the proposal and increase in student and staff capacity.	
 Where relevant, detail how Schofields Public School will continue to operate during construction activities, including proposed mitigation measures. 	
4. Built Form and Urban Design	Section 3.4, Section 3.10,
Address the height, density, bulk and scale, setbacks of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces.	Section 4.3.1, Section 5.7, Appendix K and Appendix L
Address design quality, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, colours and Crime Prevention Through Environmental Design Principles.	
Provide details of any digital signage boards, including size, location and finishes.	
Demonstrate in consultation with and to the satisfaction of the Government Architect NSW that design excellence will be achieved in accordance with Schedule 4 Schools – design quality principles of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017.	
Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.	

Item / Description

Document Reference

5. Environmental Amenity

Section 3, Section 6.1 and Section 6.7

- Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated.
- Detail any proposed use of the school grounds out of school hours (including weekends) and any resultant amenity impacts on the immediate locality and proposed mitigation measures.

Section 6.2 and Appendix K, Appendix L.

6. Transport and Accessibility

Include a transport and accessibility impact assessment, which details, but not limited to the following:

- Current daily and peak hour vehicle, public transport, pedestrian and cycle movement and existing traffic and transport facilities.
- an assessment of the operation of existing and future transport networks.
- details of estimated total daily and peak hour trips generated by the proposal.
- the adequacy of public transport, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development;
- the impact of the proposed development on existing and future public transport infrastructure within the vicinity of the site in consultation with Blacktown City Council, Roads and Maritime Services and Transport for NSW and identify measures to integrate the development with the transport network;
- the identification of infrastructure required to ameliorate any impacts.
- details of travel demand management measures to minimise the impact on general traffic and bus operations.
- the impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement work.
- the proposed walking and cycling access arrangements and connections to public transport services;
- details of any proposed school bus routes along bus capable roads (i.e. travel lanes of 3.5 m minimum) and infrastructure (bus stops, bus layovers etc.);
- the proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and

Item / Description Document Reference impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones; · measures to maintain road and personal safety in line with CPTED principles; • proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance; • proposed number of on-site car parking spaces for teaching staff and visitors and corresponding compliance with existing parking codes and justification for the level of car parking provided on-site; · an assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development; · details of emergency vehicle access arrangements. an assessment of road and pedestrian safety. · service vehicle access, delivery and loading arrangements and estimated service vehicle movements. Construction traffic 7. Ecologically Sustainable Development (ESD) Section 3.10 and Appendix Q, Appendix L. • Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the design and ongoing operation phases of the development. Demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice. Include a description of the measures that would be implemented to minimise consumption of resources, water (including water sensitive urban design) and energy. 8. Social Impacts Section 6.4 Include an assessment of the social consequences of the schools' relative location and decanting activities if proposed. 9. Heritage Section 4.4.6, Section 6.5, Appendix F and Appendix Where relevant, include a Heritage Impact Statement that addresses the Н significance of, and provides an assessment of the impact on the heritage significance of any heritage items on the site and in the vicinity, and/or conservation areas and/or potentially archaeologically significant areas, in accordance with the guidelines in the NSW Heritage Manual.

Item / Description

Document Reference

10. Aboriginal Heritage

Section 6.6 and Appendix G. Consultation Outcome Report.

- Identify, describe and document the Aboriginal Cultural Heritage values that exist across the whole area that will be affected by the development, which may include the need for surface survey and test excavation. The identified of Aboriginal Cultural Heritage values should be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECC, 2011).
- Where Aboriginal Cultural Heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.
- The EIS must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented in the EIS.

11. Noise and Vibration

Section 6.7 and Appendix

Identify and provide a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation, construction and operation, 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, and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.

Relevant Policies and Guidelines:

- NSW Industrial Noise Policy (EPA)
- Interim Construction Noise Guideline (DECC)
- Assessing Vibration: A Technical Guideline 2006
- Development Near Rail Corridors and Busy Roads Interim Guideline (Department of Planning 2008)

12. Sediment, Erosion and Dust Control

Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles.

13. 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.

Section 6.8 and Appendix Ρ.

Section 4.5, Appendix S and Appendix U

Item / Description	Document Reference
Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works.	
→ Relevant Policies and Guidelines:	
Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP)	
14. Utilities	Appendix I
Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure.	
Prepare 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.	
15. Contributions	Section 4.9
Address Council's Section 94 Contribution Plan and/or details of any Voluntary Planning Agreement, which may be required to be amended because of the proposed development.	
16. Drainage	Appendix P
Detail drainage associated with the proposal, including stormwater and drainage infrastructure.	
Detail measures to minimise operational water quality impacts on surface waters and groundwater.	
→ Relevant Policies and Guidelines:	
Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)	
17. Flooding	Section 6.10 and Appendix
Assess any flood risk on site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity.	P
18. Waste	Section 3.8, Appendix M
Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe 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.	and Appendix O
19. Construction Hours	Section 3.11.1 and Appendix M

Item / Description Document Reference Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours. C. Plans and Documents The EIS must include all relevant plans, architectural drawings, diagrams Appendix A to Z and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: Architectural drawings (dimensioned and including RLs); · Site Survey Plan, showing existing levels, location and height of existing and adjacent structures / buildings and boundaries; • Site Analysis Plan; Stormwater Concept Plan; Sediment and Erosion Control Plan; · Shadow Diagrams; View Analysis / Photomontages, including from public vantage points; • Landscape Plan (identifying any trees to be removed and trees to be retained or transplanted); • Preliminary Construction Management Plan, inclusive of a Preliminary Construction Traffic Management Plan detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures; · Geotechnical and Structural Report; · Accessibility Report; · Arborist Report; • Salinity Investigation Report (if required); · Acid Sulphate Soils Management Plan (if required); and · Schedule of materials and finishes. D. Consultation During the preparation of the EIS, you must consult with the relevant local, Section 7 and Appendix Y. State or Commonwealth Government authorities, service providers, community groups, special interest groups including local Aboriginal land councils and registered Aboriginal stakeholders, and affected landowners. In particular, you must consult with:

Blacktown City Council;

Item / Description Document Reference • Government Architect NSW; • Transport for NSW; and • Roads and Maritime Services. Consultation with TfNSW and RMS should commence as soon as practicable to agree the scope of investigation. The EIS must describe 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.

1. INTRODUCTION

1.1. OVERVIEW

This Environmental Impact Assessment (EIS) has been prepared by Urbis Pty Ltd on behalf of the New South Wales Department of Education (the 'Applicant') in support of State Significant Development Application SSD 17_8740 for the development of 'Schofields Public School'. Specifically, this DA seeks development consent for the following works at the site:

- Demolition of numerous existing school buildings;
- · Removal of 44 trees;
- Construction of a new two-storey building to house new classrooms, learning space and office;
- Construction of a new covered outdoor learning area (COLA);
- Modification of existing school building for use as a canteen;
- Internal refit of heritage school building and hall;
- Removal of four car parking spaces to accommodate the new two-storey teaching facility;
- Landscaping works; and
- · School signage.

1.2. PROJECT CONTEXT AND BACKGROUND

Across NSW, DoE is funding new schools, upgrades to existing schools and improved facilities as public school enrolments are anticipated to be 40,000 students higher in 2019-2020 than in 2015-16. Accordingly, substantial pressure is being placed on existing public schools throughout NSW, causing them to become overcrowded beyond capacity.

Sydney's North West is a location where population growth has placed substantial pressure on existing public schools within the area, including Schofields Public School. In response, DoE is proposing to redevelop the existing Schofields Public School site to provide additional capacity and new state of the art facilities.

On 28 September 2017, SEARs were issued by the DPE for SSD 17_8740 'Schofields Public School'. The SEARs are addressed within this EIS and attached at Appendix B.

1.3. PROJECT TEAM

Specialist consultants were engaged to assist in the preparation of this SSDA, including:

Deliverable	Prepared by	Appendices
Architectural Plans	TKD Architects	Appendix A
Secretary's Environmental Assessment Requirements	NSW Department of Planning & Environment	Appendix B
Capital Investment Value Report	Altus Group	Appendix C
Arboricultural Assessment and Development Impact Report	Raintree Consulting	Appendix D
Flora and Fauna Assessment	UBM Ecological Consultants	Appendix E

Deliverable	Prepared by	Appendices
Heritage Impact Assessment	TKD Architects	Appendix F
Aboriginal Archaeological Assessment	Comber Consultants	Appendix G
Historical Archaeological Assessment	Comber Consultants	Appendix H
Infrastructure Overview Plan	Shelmerdines Consulting Engineers & AJ Whipps Consulting	Appendix I
Site Survey	Hill & Blume	Appendix J
Traffic Impact Assessment	Traffix	Appendix K
Urban Design Report	TKD Architects	Appendix L
Preliminary Construction Management Plan	Cadence Australia	Appendix M
Landscape Concept Plans	Context	Appendix N
Operational Waste Management Plan and Construction Waste Management Plan	Foresight Environmental Cadence	Appendix O
Stormwater Management Report and Plans	Woolcotts	Appendix P
Ecological Sustainable Development Report	Wood & Grieve Engineer	Appendix Q
Accessibility Report	Design Confidence	Appendix R
Stage 1 Environmental Site Assessment	Environmental Investigation Services	Appendix S
Salinity Assessment	Environmental Investigation Services	Appendix T
Remediation Action Plan	Environmental Investigation Services	Appendix U
Geotechnical Report	JK Geotechnics	Appendix V
Noise Impact Assessment	Wilkinson Murray	Appendix W
Wind Impact Assessment Report	Vipac Engineers & Scientists	Appendix X
Consultation Outcomes Report	Cadence Australia	Appendix Y
BCA Report	Design Confidence	Appendix Z

1.4. REPORT STRUCTURE

This EIS provides the following:

- **Section 2**: A description of the site and surrounding context; including identification of the site, existing development on the site, and surrounding development.
- **Section 3**: A detailed description of the proposed development;
- Section 4: An assessment of the proposed development against the relevant statutory planning controls;
- Section 5: An assessment of the proposed development against the relevant strategic planning controls;
- Section 6: An assessment of the key issues and impacts generated by the proposed development; and
- Section 7: A detailed description of the consultation undertaken with respect to the proposal.
- Section 8: An outline of key recommendations and mitigation measures.
- Section 9: Conclusion.

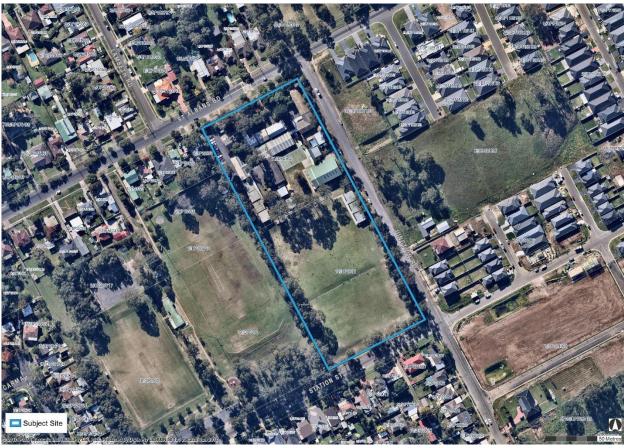
This EIS should be read in conjunction with the *Secretary's Environmental Assessment Requirements* attached at **Appendix B**, and the supporting technical documents provided at **Appendix A– Z**.

2. SITE AND SURROUNDING CONTEXT

2.1. SUBJECT SITE

The subject site is known as Schofields Public School, located at 60 St Albans Road, Schofields. The site is legally described as Lot 20 and Lot 21 DP 2912 and has an area of approximately 28,346m². The site is bound by St Albans Road to the north, Junction Road to the east and Station Street to the south (**Figure 1**).

Figure 1 - Site Location



Source: Nearmap

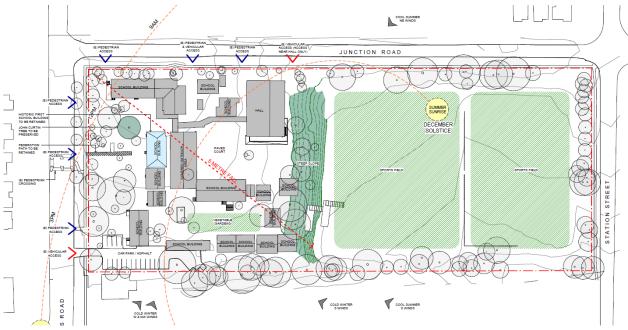
2.2. EXISTING DEVELOPMENT

The contains an established public school with the following elements:

- Established single storey school buildings fronting Junction Road;
- Smaller classrooms setback from St Albans Road;
- Demountable classrooms at the rear of the site;
- Paved play areas and a basketball court;
- Pedestrian access via St Albans Road and Junction Road;
- Vehicular access via St Albans Road with minimal on-site car parking; and
- A large portion of open space at the rear of the school (entirety Lot 20 DP 2912).

Figure 2 and Figure 3 illustrate the existing facilities of the school.

Figure 2 – Existing School Facilities



Source: TKD Architects

Figure 3 – Photographs of the Site and Surrounds



Picture 1 - St Albans Road entrance



Picture 3 - Eastern boundary along Junction Road



Picture 2 - School oval



Picture 4 - Northern boundary along St Albans Road

2.3. SITE ACCESS

2.3.1. Vehicular Access

The site currently contains three vehicular access points. The primary vehicular access point is provided off St Albans Road and connects to the on-site staff car park. Secondary vehicular entries for use by service and emergency vehicles are provided off Junction Road near the existing school hall.

2.3.2. Pedestrian Access

The site currently contains six pedestrian access points into the site:

- Off St Albans Road, adjacent to the car park driveway;
- Off St Albans Road, adjacent to the existing 'zebra' crossing;
- Off St Albans Road, near Junction Road;
- Off Junction Road, near St Albans Road;
- Off Junction Road with combined vehicular access; and
- Off Junction Road, adjacent to the school hall.

2.4. FLORA AND FAUNA

An Arboricultural Assessment and Development Impact Report has been prepared by RainTree Consulting and is attached at **Appendix D.** This report identified the following flora and fauna at the site:

2.4.1. Flora

- There are 120 trees assessed at the site, of which eight are located on the Council verges, seven are situated within the adjacent Schofields Park, two are neighbouring property trees and seven trees within the site have been assessed as containing short retention values
- 49 trees were assessed as having High Retention Value, 61 trees as Medium Retention Value and 10 trees as Low Retention Value.
- Most vegetation present at the site consists of grassed open space, and landscaped areas containing exotic and commonly planted urban native vegetation.
- None of the trees within the school form part of an endangered ecological community, or are protected under the Commonwealth Environmental and Biodiversity Conservation Act 1999 or NSW Threatened Species Conservation Act 1995.

2.4.2. Fauna

A review was undertaken of the NSW Office of Environmental and Heritage's Atlas of NSW Wildlife. No threatened or endangered species are identified on the Atlas mapping system as being recorded within the school grounds.

A Ecology Report: Flora & Fauna Survey has been undertaken by UBM Ecological Consultants and is provide at **Appendix E.** Further commentary on the fauna on site is provided in **Section 6.3.**

2.5. SERVICES

The site is connected to all necessary services including water, gas, electricity, communications and sewage.

2.6. TOPOGRAPHY

The northern portion of site falls by approximately five metres from north to south, with a narrow steep slope separating the existing school buildings with the sports fields. A Site Survey has been attached at **Appendix J.**

2.7. HERITAGE

2.7.1. European Heritage

The original school building at the subject site was opened on 10 November 1923. At this time, Schofields Public School consisted of only Lot 21. The school site was expanded to include Lot 20 in 1951. The school was progressively expanded, beginning in 1959 to cater for student growth. The most recent building to be built at the site is the school hall, completed in 2010.

Due to the school's significance to the Schofields area, the 1923 school building has been listed as an item of heritage significance. All other school buildings are not considered to have any heritage significance.

A full assessment of the heritage significance of the subject site is provided in the Statement of Heritage Impact prepared by TKD Architects at **Appendix F.**

2.7.2. Aboriginal Heritage

A review of the NSW Aboriginal Heritage Information Management System (AHIMS) was undertaken to identify recorded Aboriginal sites or places on and around the site. The AHIMS search found no Aboriginal sites or places within 200m of the site.

Combers Consultants have undertaken a thorough Aboriginal archaeology assessment of the school site, further discussion is provided in **Appendix G**.

2.8. SITE CONTEXT AND SURROUNDING DEVELOPMENT

The site is located in the east portion of the "Alex Avenue Precinct" of the North-West Growth Centre. It is immediately adjacent to 'Primrose Gardens', a residential estate, and approximately 4.8km from the local centre at Rouse Hill.

The site is predominantly surrounded by low density residential and outdoor recreation uses. Development in the surrounding area is summarised as:

- To the north are existing low-density residences;
- To the east is a new low-density subdivision, comprising of mostly vacant allotments;
- To the south are existing low-density residences. Further south is Schofields Station and Woolworths;
- To the of west is council-owned Schofields Park, comprising of Netball Courts and grass playing fields. Further west are low density residences.

Figure 4 highlights the broader context of the subject site.

Figure 4 – Surrounding context



Source: Urbis

2.9. TRANSPORT CONTEXT

Bus:

The site is located close to multiple bus stops operating the following Busways services:

- Route T74 Blacktown to Riverstone via The Ponds
- Route T75 Blacktown to Rouse Hill & Riverstone

The School is also serviced by the following four dedicated Busways school bus services:

- Route 6016 (AM only) Riverstone and Schofields
- Route 6533 (PM only) Schofields, Marsden Park and Riverstone
- Route 6525 (PM only) Schofields
- Route 6501 (PM only) Marsden Park

Bicycle:

A footpath is provided on the northern side of Station Street between Junction Street and Railway Terrace. This footpath can be used by cycling students under the age of 12.

There is a dedicated cycleway along Railway Terrace between Station Street and Schofields Station.

3. THE PROPOSED DEVELOPMENT

3.1. **OVERVIEW**

The proposal includes demolition of several existing buildings and the construction of a new 2-storey building to accommodate new classrooms for the school. This DA seeks consent for the following works:

- Demolition of numerous existing school buildings;
- Removal of 44 trees:
- Construction of a new two-storey building to house new classrooms, learning space and office;
- Construction of a new covered outdoor learning area (COLA);
- Modification of existing school building for use as a canteen;
- Internal refit of heritage school building and hall;
- Removal of 4 car parking spaces to accommodate the new two-storey teaching facility;
- Landscaping works; and
- School signage.

No change of use is proposed, as the use will remain as an education establishment (primary school).

Figure 5 illustrates the footprints of the proposed school buildings.

Figure 5 - Proposal Overview



Source: TKD Architects

3.2. BUILDING DESIGN PHILOSOPHY

An Urban Design Report has been prepared by TKD Architects and is attached at **Appendix L**. The proposed school incorporates the following Urban Design considerations:

- The main school entry and after school care are accessed from the Junction Road corner via a formal entry;
- The school buildings are located to the perimeter of the site as a visual and acoustic buffer to the schools play areas and to provide a visual presence for this important community facility;
- The building is located on the southern side of the site and it allows to give the school a new face with a good connection to the outdoor play area;
- The proposed buildings connect into existing heritage and admin building;
- · Existing site access points are retained; and
- Construction is kept well clear of the significant John Curtain and Anzac trees.

3.3. DEMOLITION AND SITE CLEARING

3.3.1. Building Demolition

The proposal involves the demolition of all existing school buildings at the site, excluding the heritage listed school building and the existing hall. A partial demolition of the northern-most building is proposed. All existing demountable classrooms will also be removed. The buildings to be removed are outdated and were not built for long-term use.

The school buildings to be removed are not classified as items containing heritage significance. The proposal represents a positive outcome, as the construction of modern school buildings will provide new state of the art facilities at the site for improved learning, teaching and play.

3.3.2. Tree Removal

The proposal seeks consent to remove 44 trees within the school site. Remaining trees are considered trees viable for retention in the existing environment. The loss of vegetation is considered acceptable given the substantial benefits associated with the project and the extent of new planting proposed.

Construction works will be undertaken in accordance with the recommendations of the Arboricultural Assessment and Development Impact Report to ensure that the trees to be retained within the site are suitably protected.

3.4. BUILT FORM AND USE

A new two-storey building will be constructed adjacent to the western boundary of the site. The building will replace the existing school buildings and demountable classrooms that are proposed to be demolished. The new building will provide integrated, future-focused learning spaces for primary school students and appropriate core facilities for staff and students in line with the Education Facilities Standards & Guidelines (EFSG).

By level, the new building will contain:

- Ground Level: administration and office facilities, staff facilities, two 'home-bases' with associated
 presentation spaces, withdrawal rooms and storage space, special education facilities with outdoor
 space, library, outdoor learning area and amenities.
- First Level: five 'home-bases' with associated presentation spaces, withdrawal rooms and storage space, upper level library and amenities.

3.5. SITE ACCESS

3.5.1. Vehicular Access

The proposed development will contain a singular vehicle access point off St Albans Road using the existing car park driveway. Four car parking spaces will be lost as a result of the development.

3.5.2. Pedestrian Access

The proposed development will include two pedestrian access points.

- Primary access off St Albans Road, adjacent to the existing 'zebra' crossing; and
- Secondary access off Junction Road, between the new canteen and spill out lawn.

3.6. EXTERNAL MATERIALS AND FINISHES

The proposed school has been appropriately designed with external materials and finishes that complement the surrounding natural and built environment of Schofields. The building materials are durable, hardwearing, low maintenance and evoke smart building design (**Figure 6**). Materials include:

- Prefinished fibre-cement sheet;
- Coloured cladding;
- Aluminium windows and louvres;
- · Bricks and glazed coloured bricks; and
- Metal roof sheet.

Figure 6 - Proposed Materials and Finishes



Source: TKD Architects

3.7. LANDSCAPING

New landscaped areas and open space are proposed as part of the development. The spaces will be provided to enhance the learning experience provided by the development. The proposed landscaping contains the following key aspects:

- · Retention of existing significant 'John Curtin Tree' and 'Gallipoli Tree'
- 'Commemorative lawn' at school entrance adjacent to the significant trees

- Relocation of productive garden
- A 'green spine' pathway connecting the school entrance to the sports field
- Synthetic turfed and soft-fall play area
- Multi-purpose sports court under COLA structure
- Nature play areas
- · Landscaped garden spaces
- Elevated timber decking around canteen building

Figure 7 below illustrates the proposed landscape design. The full details of the Landscape Plan can be viewed at **Appendix N.**

Figure 7 - Landscape Plan



Source: Context Landscape Design

3.8. WASTE

3.8.1. Construction Waste

The contractor will comply with DPE's Conditions of Consent and the Construction Management Plan at **Appendix M** to ensure all waste is carefully removed, packaged and transported from the site to an appropriate waste facility. This will minimise potential contact with the waste and reduce environmental risk from an accidental release. Where appropriate, waste will be reused or recycled.

3.8.2. Ongoing Waste

An Operational Waste Management Plan has been prepared by Foresight Environmental and is attached at **Appendix O**. Based on the information provided and benchmark data from similar developments, the primary waste streams expected to be generated in the ongoing operation of the School would be:

- Paper/cardboard;
- Food organics;
- Comingling recycling; and
- General waste.

Additional smaller waste streams may include toner cartridge recycling, fluoro tube/globe recycling and battery recycling. A waste storage area of 24m² is recommended. The current waste storage area located off St Albans Road provides sufficient capacity for the bins proposed, which comprise:

- 3 x 1100L Paper/Cardboard Recycling bins cleared once per week;
- 10 x 240L Paper/Cardboard Recycling bins cleared once per week;
- 2 x 660L Comingled Recycling bins cleared twice per week; and
- 2 x 1100L General Waste bins cleared three times per week.

These bins will be stored throughout the school for use at the point of generation. They will be brought to the waste storage/collection area as required for collection.

3.9. SITE SERVICES

An Infrastructure Management Plan has been prepared by Shelmerdines Consulting Engineers and is attached at **Appendix I.** A Hydraulic Site Services Availability Statement has also been prepared as part of this SSDA by AJ Whipps Consulting Group and is attached at **Appendix I.** Both reports outline existing and proposed new services to be developed at the site.

3.10. ECOLOGICALLY SUSTAINABLE DEVELOPMENT

An Ecological Sustainable Development (ESD) Report has been prepared by Wood & Grieve Engineers and is included in **Appendix Q**. This proposal will include the following ESD initiatives (amongst others):

- Establishment of ongoing environmental performance targets relating to the consumption of energy and water, production and recycling of waste, and the ongoing maintenance and improvement of good indoor environmental quality;
- Building services will include metering on all major energy and water-consuming equipment, providing
 the facility manager with live information on system performance and allowing them to closely manage
 efficient use of resources on site;
- · Facilities for the separation and recycling of waste streams;
- A rainwater harvest and re-use system;
- All habitable rooms including teaching and learning spaces will be naturally ventilated;
- High performance glazing to meet or exceed the requirements of the Building Code of Australia;
- Bespoke mechanical design systems sized appropriately for the development. These systems will have adequate efficiency, possible measures include economy cycles, CO2 monitoring or temperature band fluctuation control to promote energy efficiency in the design.
- Teaching and learning spaces will be naturally day-lit. Roof lights or translucent glazing. This increases
 the natural light in the space, reducing the need for artificial lighting and potentially reducing the heating
 demand in winter;
- Building services, lighting and equipment to be used will be highly energy efficient;

- Solar photovoltaic (PV) arrays to offset daytime energy demand and reduce ongoing operating costs;
- All bathroom fixtures (toilet pans, urinals, hand basin taps and showers) will meet minimum ratings;
- · Potential ceiling fans;
- Chosen landscaping will have a low demand for water consumption, and any irrigation will be via sub-soil drip irrigation to further minimise water consumption and costs.

By incorporating the ESD indicatives listed above, plus those specified within the attached ESD Report, the proposed development will achieve a minimum Green Star rating of 4 (no formal rating will be pursued).

3.11. STAGING AND CONSTRUCTION MANAGEMENT

3.11.1. Construction Staging

It is envisaged that the main works will be delivered in one stage. The construction works are predicted to commence in October 2018 and run for a period of 65 weeks.

3.11.2. Work Hours

The proposed construction works will be undertaken during the following hours:

- Monday to Friday 7.00am to 5.00pm
- Saturdays 8.00am to 3.00pm
- Sundays / Public Holidays No work

If required, after hours permits will be sought from the relevant authorities.

3.12. OPERATION

Schofields PS caters for student from K-6. Once completed, the redeveloped school will cater for up to 621 students and have a total of 50 staff. During the construction, the existing 323 students and 34 staff will be accommodated in a temporary demountable school which will be constructed on a proportion of the sports field. The demountable's REF is under review by the Department of Education.

The current operation hours between 8:45-3:10 will remain unchanged.

The existing Schofields OOSH will continue to operate out of the existing hall, providing before and after school care for students. No additional community uses are proposed at this stage.

4. STATUTORY PLANNING CONTEXT

In accordance with SEARs, the following statutory planning policies have been considered in the assessment of the proposal:

- Biodiversity Conservation Act 2016
- State Environmental Planning Policy (State & Regional Development) 2011;
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017;
- State Environmental Planning Policy (Sydney Region Growth Centres) 2006;
- State Environmental Planning Policy No.55 Remediation of Land;
- State Environmental Planning Policy No. 64 Advertising and Signage;
- Sydney Regional Environmental Plan No. 20 Hawkesbury-Nepean River (No 2—1997); and
- Blacktown City Council Growth Centre Precincts Development Control Plan 2016.

Compliance with the relevant controls contained within the above statutory planning policies is discussed below.

4.1. BIODIVERSITY CONSERVATION ACT 2016

An Ecology Report, including a Flora & Fauna Survey has been prepared by UBM Ecological Consultants and included at **Appendix E.**

The vegetation on site is a mixture of native trees and introduced/exotic species; some being natives that are not indigenous to this part of Western Sydney. Despite the occurrence of some trees (presumably planted or self-recruited) characteristic of the Critically Endangered Ecological Community (CEEC) *Cumberland Shale Plains Woodland (CSPW)* being recorded, no truly 'remnant' vegetation was recorded on site. There are no trees over 50 years old, and the shrub and understorey strata are highly modified.

An Assessment of Significance for (CSPW) would ordinarily be required under the new *Biodiversity Conservation Act* 2016. However, as the site has been Biodiversity Certified, an Assessment of Significance is not required. Further, discussion on the findings on the Ecology Report are outlined in **Section 6.3** of this FIS

4.2. STATE ENVIRONMENTAL PLANNING POLICY (STATE & REGIONAL DEVELOPMENT) 2011

State Environmental Planning Policy (State and Regional Development) 2011 identifies development types that are of state significance, or infrastructure types that are of state or critical significance. Under the State Environmental Planning Policy (State and Regional Development) 2011:

- (1) Development for the purpose of a new school (regardless of the capital investment value).
- (2) Development that has a capital investment value of more than \$20 million for the purpose of alterations or additions to an existing school.
- (3) Development for the purpose of a tertiary institution (within the meaning of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017), including associated research facilities, that has a capital investment value of more than \$30 million.

The proposal is defined as an 'educational establishment', is for the purpose of 'alterations or additions to an existing school' and has a project value in excess of \$20 million. This meets the minimum threshold of \$20 million. Accordingly, an SSD application has been lodged with the Department of Planning and Environment (DPE).

4.3. STATE ENVIRONMENTAL PLANNING POLICY (EDUCATIONAL ESTABLISHMENTS AND CHILD CARE FACILITIES) 2017

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP) has provisions that will make it easier for child-care providers, schools, TAFEs and universities to build new facilities and improve existing ones by streamlining approval processes to save time and money and deliver greater consistency across NSW. The Education SEPP balances the need to deliver additional educational infrastructure with a focus on good design.

In accordance with Clause 35(6) of the Education SEPP, the following must be considered for the assessment of a school development permitted with consent:

- (a) the design quality of the development when evaluated in accordance with the design quality principles set out in Schedule 4, and
- (b) whether the development enables the use of school facilities (including recreational facilities) to be shared with the community.

4.3.1. Design Quality Principles

Schedule 4 of the Education SEPP outlines the design quality principles that are proposed for consideration of applications for school developments. The proposal responds to these design quality principles as follows:

- Principle 1 context, built form and landscape: The proposal involves a new built form elements and
 reuse of existing school buildings. The proposal will not exceed the maximum building height outlined in
 the LEP and is considered an appropriate scale for the surrounding residential context. Landscaping will
 be provided in accordance with the Landscape Plan provided in Appendix N.
- Principle 2 sustainable, efficient and durable: The proposal adopts a range of ESD initiatives, including the runoff from the new roof areas will be connected to the existing rain water tank, this will allow for water from the tank to be used to flush toilets associated with the new works. Further, a new raingarden will be provided to replace the swale and provide treatment to the new paved area. Envirpod will be provided in all new grated inlet pits. The proposal will also provide positive social and economic benefits for the local community particularly in terms of job creation and reducing pressure of surrounding public schools.
- **Principle 3 accessible and inclusive:** The proposal is capable of complying with relevant provisions for accessibility as outlined in the Accessibility Report included at **Appendix R.**
- Principle 4 health and safely: CPTED measures have been incorporated into the design and management of the site to ensure a high level of safety and security for students and staff. The redesign of the school entry along St Albans Road will improve surveillance and encourage students to move into the internals area of the school. Passive surveillance to St Albans Road and Junction Road will also be improved through the redevelopment. A range of open spaces and sports facilities will be available for students to encourage passive recreation.
- **Principle 5 amenity:** The proposal will contain state of the art facilities, spaces and equipment for use by students and staff. These areas will provide students with an enhanced learning environment.
- **Principle 6 whole of life, flexible and adaptive:** The proposal involves refurbishment of some school buildings. The proposed new classroom building is designed to ensure flexibility and longevity.
- **Principle 7 aesthetics:** The proposal will have high quality external finishes, which will be aesthetically pleasing by achieving a built form that has good proportion and a balanced composition. The proposal is an appropriate scale and form for the residential context.

4.3.2. Traffic Generating Development

This EIS addresses Clause 57, Part 7 of the Education SEPP which stipulates that development for the purposes of an 'educational establishment' with 50 of more students and with access to any road will be referred to the RMS. A referral to the RMS will be undertaken during the assessment of the EIS in accordance with Clause 57 of the Education SEPP.

4.4. STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (Growth Centres SEPP) identifies the site of Schofields Public School within the Alex Avenue and Riverstone Precinct Plan 2010 (Appendix 4 of the Growth Centres SEPP). As such, development controls relating to the site are outlined in this Precinct Plan.

4.4.1. Zoning and Permissibility

Under the Alex Avenue and Riverstone Precinct Plan 2010 of the Growth Centres SEPP, the site is zoned R2 Low Density Residential.

Educational establishments are permitted with consent in this zone. As per the Growth Centres SEPP, an educational establishment is defined as:

"a building or place used for education (including teaching), being:

- (a) a school, or
- (b) a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act."

The proposed redevelopment of the School is therefore permitted with consent.

4.4.2. Zone Objectives

The relevant objectives of the R2 Low Density Residential zone are:

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To allow residents to carry out a reasonable range of activities from their homes, where such activities are not likely to adversely affect the living environment of neighbours; and
- To support the well-being of the community, by enabling educational, recreational, community, religious and other activities where compatible with the amenity of a low density residential environment.

The proposal is consistent with these objectives as:

- It will satisfy the education and recreational needs of current and future students in the area, and provided significant employment
- The proposal will provide important infrastructure to accommodate the growing population of the northwest regional growth centre. The existing education use will not change and the redevelopment will enhance the social infrastructure through building and services upgrades.
- It is primarily two storeys in scale, which is in keeping with the predominate scale of surrounding residential development. The proposal will have no significant impacts on surrounding low-density residential and recreational land uses as it provides adequate landscaping and design principles to protect residential privacy and amenity.

4.4.3. Height

The maximum height limit applicable to the site is 9m. The existing school buildings are not more than two-storeys in height. The proposed new school buildings are keeping with this built form, with an overall building height of 9m.

4.4.4. Floor Space Ratio (FSR)

The Growth Centres SEPP does not prescribe a maximum FSR for the site.

4.4.5. Preservation of trees or vegetation

Clause 5.9 Preservation of Trees or Vegetation seeks to preserve existing trees and vegetation. An Arboricultural Assessment and Development Impact Report has been undertaken by RainTree Consulting

and is provided in **Appendix D**. The school campus has numerous mature trees within its existing landscaped areas and adjacent to the site boundaries. In developing the concept proposal opportunities to retain site vegetation have been explored. Space is at a premium within the site and the removal of 44 trees is unavoidable.

However:

- A comprehensive landscape strategy has been developed for the site and will be progressively implemented. New trees and landscaped spaces will be planted to compensate for the loss of vegetation.
- Reducing the footprint of new development is not considered an option as this would not cater for the growing population of Schofields.
- Development in the cleared play field is not considered an option as this would dramatically reduce the about of play space for the children.

On balance, the loss of vegetation is considered acceptable given the substantial benefits associated with the project and the extent of new planting proposed.

Construction works will be undertaken in accordance with the recommendations of the Arborist Report to ensure that the trees to be retained within the site are suitably protected.

4.4.6. Heritage Conservation

Clause 5.10 of the Growth Centre SEPP identifies the objectives for heritage conservation and identifies where the consent is required for heritage items. A proportion of the site is identified as local heritage item, being Schofields Public School, refer to **Figure 8.**

Subject Site
Herilge Rom

Subject Site
Heril

Figure 8 - Heritage Map

Source: Growth Centres SEPP 2006

The consent authority, before granting consent under this clause, must consider the effect of the proposed development on the heritage significance of the item or area concerned. A Statement of Heritage Impact (SHI) has been prepared by TKD Architects and is included at **Appendix F.**

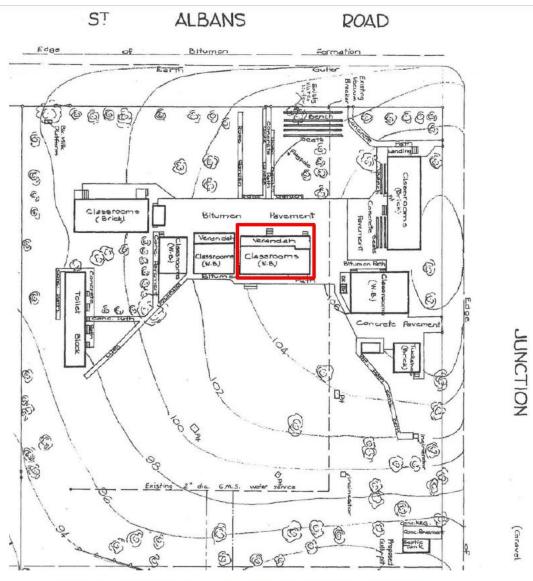
The SHI concludes that the school has local heritage significance. In 1923 the Schofield Public School was officially opened, the school consisted of two class-rooms divided by a folding partition. The significant school building is identified in **Figure 9**, which illustrated the existing significant building in respect to a 1965 school plan.

The 1923 building is the tangible evidence of the decision to establish a public school in the district. The school has been in continuous operation since it was opened on 10 November 1923. The original building was the only classroom block cited until the late 1950s and is therefore has the highest level of historical significance.

Further, the John Curtin memorial tree, planted in the 1940s, is evidence of a relatively common twentieth century practice of plating tree in honour of individual, groups or events.

The proposal will retain the 1923 classroom block, Federation Pathway and the commemorative John Curtin Tree and the Gallipoli Tree.

Figure 9 – Plan of Schofield Public School and Significant Heritage Item



4 Plan of Schofields Public School, circa 1965. The 1923 building is highlighted. Source: Department of Finance & Services Information Services, SB2325-3

Source: TKD Architects

The SHI concludes that the proposed development is supportable on heritage grounds for several reasons, including:

- The original classroom block is to be retained and adapted for new uses:
- Buildings that are to be demolished are of little heritage significance;
- Site landscaping elements including the Federation Path and trees that are significant are to be retained (the John Curtin and Gallipoli Tree);
- The location and design of the proposed new building allows sufficient curtilage for the significant building to be understood and appreciated.

4.4.7. Public Utility Infrastructure

Clause 6.1 of the Growth Centres SEPP states that prior to development consent being granted the consent authority must be satisfied that essential public utility infrastructure is provided on site. The site has adequate arrangements in place for supply of water, electricity and disposal and management of sewage. The proposal will not require upgrades to these services.

4.4.8. Information and Educational Facilities in R2 Low Density Residential

Clause 6.3 of the Growth Centres SEPP outlines additional provisions for education facilities in the R2 Low Density Residential Zone, to ensure that the educational facilities do not detract from the character and amenity of the low density residential area. The clause states:

- (2) Development for information and educational facilities is permissible with development consent on land within Zone R2 Low Density Residential located:
 - (a) on land adjoining land within Zone RE1 Public Recreation or Zone E2 Environmental Conservation, or separated from land within Zone RE1 Public Recreation or Zone E2 Environmental Conservation only by a public road, or
 - (b) within 90 metres of a public transport stop, or
 - (c) adjoining an educational establishment or a community facility or separated from an educational establishment or a community facility only by a public road.

The site contains an existing educational facility, which is located within 90m of a public transport stop and is not located within 800m of another public education facility. The proposed two-storey main school building and alteration and addition works are permitted with consent and will be in keeping with the character and amenity of the Alex Avenue and Riverstone Precinct.

4.5. STATE ENVIRONMENTAL PLANNING POLICY NO 55 – REMEDIATION OF LAND

State Environmental Planning Policy No 55—Remediation of Land (SEPP 55) provides a state-wide planning approach to the remediation of contaminated land. SEPP 55 requires the consent authority to consider whether the subject land is contaminated. If the land requires remediation to ensure that it is made suitable for a proposed use or zoning, Council must be satisfied that the land can and will be remediated before the land is used for that purpose.

Contamination

In September 2016, WSP/Parsons Brinckerhoff were engaged by the NSW Public Works Department to provide a clearance certificate following an investigation and removal of suspected asbestos contaminated material (ACM) on the site. Approximately ten (10) suspected fragments were removed from the site. The fragments were assessed to be to be 'non-friable'. Asbestos fibre air monitoring was undertaken during the investigation. Respirable fibres were not detected by the air fibre monitoring. However, there is still a potential that additional ACM is located either on the surface of the site or buried within the fill material.

A Preliminary Stage 1 Environmental Site Assessment has been undertaken by Environmental Investigation Services and is attached at **Appendix S.** The assessment objectives are to:

• Assess the potential for site contamination;

- Assess the potential risk the contamination may pose to the site receptors; and
- Provide a preliminary waste classification for the off-site disposal of soil and comment on the suitability of the site for the proposed development.

Eleven (11) sampling points were used for the investigation of the site. An elevated concentration of benzo(a)pyrene was encountered at one sampling point on the site. However, the benzo(a)pyrene results pose a low risk and soil remediation is not required.

Additionally, six visible fibre cement fragments were collected from the surface of the site during the site inspection. Asbestos fibres were detected in the fibre cement fragments (FCF) obtained from the surface of the site. During sampling the FCF were assessed to be in good condition and could not be broken by hand pressure. Hence the material was assessed to be 'non-friable' based on field information.

Remediation Action Plan

As such, a Conceptual Remediation Action Plan (RAP) has been prepared by EIS and included at **Appendix U**. The RAP applies to the proposed development area only which is located in the norther portion of the site. The goal of remediation is to render the site suitable for the proposed primary school development. This will be achieved by reducing the potential for exposure to the contaminants of concern. Remediation works fall under Category 1 outlined in SEPP 55.

EIS confirm the following method for remediation:

The preferred option for remediation is to cap and contain. A cap and contain strategy is considered to be the most appropriate option as it reduces the potential for disturbing asbestos impacted fill, and can be relatively easily integrated into the proposed development works and the existing asbestos management framework applicable to the site. In unpaved areas this will involve placement of a visual marker layer (geogrid and geofabric) over the contaminated material, overlain by at least 0.2m of clean soil, while in paved areas it will involve placement of a visual marker layer over the contaminated material, overlain by pavement materials.

4.6. STATE ENVIRONMENTAL PLANNING POLICY NO 64 – ADVERTISING AND SIGNAGE

State Environmental Planning Policy No. 64 Advertising and Signage (SEPP 64) applies to all signage and advertisement. SEPP 64 applies to the proposed signage. Table 2 outlines the proposed signage for the school.

Table 2 - Proposed Signage

Proposed Signage	Description	Illumination	Approximate Dimensions
School Identification Sign	"Schofields Public School" – Street Signage fronting St Albans Road	Non-illuminated	W: 6.26m H: 0.3m Total Area: 1.88m ²
School Identification Sign	"Schofields Public School" – Façade signage on proposed school building	Non-illuminated	W: 6.35m H: 0.3m Total Area: 1.9m ²

As set out under clause 13 of SEPP 64, the consent authority is required to consider and assess any proposed signage and/or advertisements against the Assessment Criteria set out under Schedule 1 of the SEPP.

An assessment of the proposed signage against the objectives of the SEPP and relevant criteria for assessment has been undertaken and is summarised in **Table 3**.

Table 3 – SEPP 64 Schedule 1 Compliance

Control	Proposed	Complies		
1 Character of the Area				
 Is the proposal compatible with the character of the area or locality in which it is proposed to be located? Is the proposal consistent with a particular theme for outdoor advertising in the area or locality? 	The proposed signage is compatible with the current land use. The proposed signage will not detract from the streetscape as they are modern, small in scale and setback from St Albans Road. The signage will not disrupt vehicular or pedestrian flow.	YES		
	The scale and location of the proposed signage is considered appropriate, as they balance the needs of the school within a residential streetscape. The proposed façade design of the new school building further integrates the signage within St Albans Road streetscape, softening the appearance.			
2 Special Area				
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposal does not detract from the amenity or visual quality of any environmental sensitive area, natural or other conservation area, open space area, waterway or rural landscape.	YES		
	The signage will be integrated into and complement the architectural design of the school entrance area. As such, the proposed signage will not adversely impede the visibility of other signage within the surrounding area.			
3 Views and Vistas				
Does the proposal obscure or compromise important views?	The signage is affixed at a low level above the ground and will not obscure or	YES		
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	compromise views, dominate the skyline or impede on the viewing rights of other advertisers.			
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	The signage has been designed in respect of the surrounding residential uses and will not create visual clutter or impact nearby properties			
Does the proposal screen unsightliness?				

С	ontrol	Proposed	Complies
	Does the proposal protrude above buildings, structures or tree canopies in the area or locality? Does the proposal require ongoing vegetation management?		
4	Streetscape, setting or landscaping		
•	Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed signage is compatible with the scale of the surrounding streetscape and setting.	YES
•	Does the proposal respect important features of the site or building, or both?	The proposed signage will incorporate quality materials and finishes and provide a coherent and integrated colour scheme.	
•	Does the proposal show innovation and imagination in its relationship to the site or building, or both?	· ·	
6	Associated devices and logos with adve	rtisements and advertising structures	
•	Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	No safety devices, platforms, lighting devices or logos are proposed.	N/A
7	Illumination		
•	Would illumination result in unacceptable glare?	No illumination is proposed.	N/A
•	Would illumination affect safety for pedestrians, vehicles or aircraft, or detract from the amenity of any residence or other form of accommodation?		
•	Can the intensity of the illumination be adjusted, if necessary?		
•	Is the illumination subject to a curfew?		
8	Safety		
•	Would the proposal reduce the safety for any public road?	The proposed signage will not distract motorists. No safety implications for	YES
•	Would the proposal reduce the safety for pedestrians or bicyclists?	pedestrians or vehicular users are envisaged. The signage will be set back	
•	Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	from the front boundary.	

4.7. SYDNEY REGIONAL ENVIRONMENTAL PLAN NO 20 – HAWKESBURY-NEPEAN RIVER (NO 2 – 1997)

The Sydney Regional Environmental Plan No 20 – Hawkesbury-Nepean River (No. 2 – 1997) (SREP) aims to protect the environmental of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in the regional context; the SREP applies to the Blacktown Local Government Area.

The proposal will not have any adverse environmental impacts on environmentally sensitive area, areas of high scenic quality, wetland areas, areas of high cultural heritage or impact on the water quality of the Hawkesbury Nepean River. The development controls outlined in Part 3 of the SREP have been reviewed and deemed irrelevant to this development application as no controls relate to the development of educational establishments.

4.8. BLACKTOWN CITY COUNCIL GROWTH CENTRE PRECINCTS DEVELOPMENT CONTROL PLAN 2016

The Blacktown City Council Growth Centre Precincts Development Control Plan 2016 (BCC Growth Centre DCP) provides the development and design guidelines for future development within the Blacktown City Council's growth centre precincts. The plan was adopted on 14 May 2010 and amended on 7 September 2016.

Schofields Public School is located within the Alex Avenue and Riverstone Precinct. The following excerpt from the BCC Growth Centre DCP outlines the vision for the Riverstone Precinct:

Riverstone will be home to a diverse community living in a variety of housing forms within a landscape dominated by trees. Open spaces, local services, infrastructure and employment will be locally provided to enhance lifestyle and maximise environmental sustainability. Riverstone will be a place where families can start out, grow and age while enjoying the cultural security of a community and environment that has been designed to meet their changing needs.

The proposal is consistent with the vision of the precinct as it will expand the existing educational infrastructure and services to cater for the population growth of the surrounding locality.

A full table of compliance to the development and design guidelines is provided below in Table 4.

Table 4 – Blacktown Growth Centres DCP 2010 Compliance Table

Provision	Compliance	Comment				
4.4 Other Development in Residential Area	4.4 Other Development in Residential Areas					
 4.4.1 General Requirements Front setback: 4.5m from the lot boundary to building façade line. 	NO Non- compliance justified	 The proposed main school building will be setback 1.4m from St Albans Road, the reduced setback is considered acceptable as the proposed façade varies in colour and form, reducing the perceived bulk and scale of the building. St Albans Road acts as a buffer between the school and the residents on the northern side of the road. Approximately 40m will separate the proposed building from the front façade of adjacent residential dwellings. 				

Provision	Compliance	Comment
		 The proposed landscaping softens the appearance of the building from adjacent residential properties. The reduced setback will not result in any overshadowing or amenity issues to adjacent residential properties, and will provide greater passive surveillance opportunities.
 Side setback: 0.9m Rear setback: 4m (ground level), 6m (upper level) 	YES	 The setback to Junction Road will remain unchanged. The setback to Station Street will remain unchanged.
 Maximum site coverage is 60% of the total size area. Minimum landscaped area for non-residential development is 20% of the total site area. 	YES	 The proposal will increase the GFA by 7,022m², The site will have a site coverage of 19%. The site will have a landscaped area of 81% of total site area.
Provision of car parking for non-residential uses will be assessed by Council on an individual basis but must be sufficient to meet demand generated by staff and visitors.	NO Non- compliance justified	This DA is accompanied by a Traffic Impact Assessment. The school building will result in the loss of 3 parking spaces. This is considered acceptable as it is assumed many students will be within the new residential estate and walking distance to the school and the proposal does not encroach on students play space.
Non-residential development in residential zones should be similar in bulk, scale, height and siting to the surrounding buildings.	YES	The proposal will not exceed the 9m maximum height limited as defined in the Growth Centres SEPP. The bulk, scale and height is deemed appropriate in the residential context.
Finishes, materials, paving and landscaping are to be consistent with those of surrounding residential development	YES	 The proposed finishes, materials, paving and landscaping are detailed in the Architectural Plans located at Appendix A, the finishes and materials will be sympathetic to the surrounding built form.
4.4.3 Educational Establishments & Places of Worship Council will consider the following:	PARTIAL	The proposal will increase the capacity of the existing school and enhance the functioning and amenities to provide a better learning and teaching

Provision	Compliance	Comment
 The privacy and amenity of adjoining developments The need and adequacy for provision of buffer zones to surrounding residential development Urban design Location The size of the land where the development is proposed Traffic generation and impacts of traffic on the road network and the amenity of nearby residents The availability of parking The scale of buildings and their capacity Hours of operation and noise impacts Car parking spaces shall be provided at the rate of 1 space per staff member plus 1 space per 100 students. 		environmental. The proposed redevelopment will retain the local heritage listed school building as well as the hall and school canteen. New buildings will not exceed the prescribed 9m building maximum to ensure adequate bulk and scale in the residential zone. No overshadowing will occur to adjacent residences. • The façade fronting St Albans Road will be articulated with a variety of colours to create visual interest and reduce the perceived bulk and scale for the public domain. • Landscaping is also proposed along St Albans Road and Junction Road. • The proximity to residential properties has been carefully considered, the proposal will not create any overshadowing to residential properties along St Albans Road and Junction Road. • The proposal will result in a reduction of four parking spaces. No additional parking spaces will be provided, which is aligned with the Department of Education's Education Facilitites Standard & Guidelines (EFGS). Ample on-street car parking is available surrounding the school, however, public and passive transport options are the preferred travel methods. This DA is accompanied by a Traffic Impact Assessment in Appendix K, the TIA outlines recommended measures to assist with parking demand.
 A traffic and transport report/statement is to accompany the DA addressing the impact of the proposed development on the local road system and defining car parking requirements. 	YES	 This DA is accompanied by a Traffic Parking Assessment in Appendix K; the proposal will result in the loss of four parking spaces. This minor reduction is considered acceptable as the proposal does not encroach on students play space. Ample on-street car parking is available surrounding the school,

Provision	Compliance	Comment
		however, public and passive transport options are the preferred travel methods.
A landscape plan and associated documentation is to be submitted with the DA.	YES	 A Landscape Plan has been provided in Appendix N. The proposal provided additional landscaping throughout the school to compensate for the loss of trees.
An acoustic report is to be submitted with the DA.	YES	 An Acoustic Report is submitted at Appendix W. The proposal will not create any adverse acoustic impacts to the nearby residences.

4.9. CONTRIBUTIONS

Section 4.33 of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) sets out specific provisions relating to the determination of Crown DAs. It states:

- (1) A consent authority (other than the Minister) must not:
- (a) refuse its consent to a Crown development application, except with the approval of the Minister, or
- (b) impose a condition on its consent to a Crown development application, except with the approval of the applicant or the Minister.

On this basis, the consent authority has no power to issue a refusal or issue an approval subject to conditions of consent to which the DoE does not agree. The limitation on the power to impose a condition of consent extends to the consent authority's ability to require contributions to be paid, including contributions pursuant to Section 7.11 and 7.12. Contributions occur by way of conditions of consent. Therefore, neither Council or DPE can impose conditions relating to contributions without the DoE's consent.

The following planning policies support the best practice of exempting community infrastructure from paying contributions:

<u>Circular D6 – Crown Development Applications and Conditions or Consent</u>

Exemption from contributions is supported by Planning Circular (Circular D6) relating to Crown Development Applications, issued by the then Department of Urban Affairs and Planning. Circular D6 sets out the circumstances in which it is appropriate for a consent authority to seek the approval of the applicant or the Minister to impose conditions of consent. Circular D6 notes that where a consent authority intends to levy contributions on Crown Development, they must be justified and consideration should be given to the Crown's role in providing a community service, the cost of which is accountable to all taxpayers in the State.

The currency of Circular D6 is confirmed in the Draft Development Contributions Practice Note – July 2005, which states "the current limitation on imposition of levies on Crown Developments as outlined in Circulate D6…remain in force."

Draft Local Development Contributions Guidelines

The Guidelines outline the best practice approach to developer contributions on the public sector:

8.3 Public sector development

The current limitations on the imposition of development contributions on public sector developments as outlined in Circular D6 – Crown Development Applications and Conditions of Consent remain in force.

Public sector development generally falls into the following 2 categories:

- Development that is carried out with an underlying philosophy of community service such as a courthouse, school, hospital or social housing; or
- Development that is carried out on a profit-making basis

Council can, in its contribution plan, identify those types of developments that are exempt from contributions.

Council can, in its contribution plan, identify those types of developments that are exempt from contributions. In this regard it is considered best practice to exempt those developments provided by the Crown with an underlying philosophy of community service, such as a courthouse, school or community centre, should not be levied a contribution as the material public benefit that is derived from the development exceeds any demand that it creates on existing infrastructure.

Where development is carried out by the public sector on a profit-making capacity they should pay a level of contribution equal to that applicable to the private sector.

Comment: DPE must acknowledge that to impose a contribution on this project, it would need to have the agreement of the Minister. Planning Circular D6 notes that consideration should be given to the Crown's role in providing a community service (not provided for by Council).

5. STRATEGIC PLANNING CONTEXT

In accordance with SEARs, the following strategic planning policies have been considered in the assessment of the proposal:

- NSW State Priorities;
- A Plan for Growing Sydney;
- NSW Long Term Transport Master Plan 2012;
- Sydney's Cycling Future 2013;
- Sydney's Walking Future 2013;
- Sydney's Bus Future 2013;
- Crime Prevention Through Environmental Design (CPTED) Principles;
- Healthy Urban Development Checklist, NSW Health;
- Greater Sydney Commission's Draft West Central District Plan; and
- Blacktown City Council Growth Centre Precincts Development Control Plan 2016.

Consistency with the relevant goals contained to the above strategic policies is discussed below.

5.1. NSW STATE PRIORITIES

NSW State Priorities is the State Government's plan to guide policy and decision making across the State. The proposed redevelopment at the site is consistent with key objectives contained within the plan, including:

• Creating Jobs: Create 150,000 new jobs by 2019

The proposal will create temporary job opportunities in manufacturing, construction and construction management during the project's construction phase of works, and job opportunities in teaching and administration at the project's completion.

• Building Infrastructure: Infrastructure projects to be delivered on time and on budget across the state

The proposal provides a significant development opportunity for the State that will create jobs, stimulate the economy and deliver a vital service for the community. Significant population growth within Sydney's North West has placed substantial pressure on surrounding public schools within the area. The proposal will provide a high-quality facility to the community and take enrolment pressure off existing primary schools.

• Improving Education Results: Increase the proportion of NSW students in the top two NAPLAN bands by eight per cent

The proposal will contain state of the art facilities, spaces and equipment for use by students and staff. This will provide students with greater opportunities to learn and improve their numeracy and literacy skills

Overall, it is considered that the proposal is consistent with the goals and objectives set out within the *NSW* State Priorities.

5.2. A PLAN FOR GROWING SYDNEY

Released in December 2014, *A Plan for Growing Sydney* (the Strategy) includes a range of goals, directions and actions that aim to support the strategic growth of Sydney over the long term. One of the key planning directions (Direction 1.10) contained to the Strategy is:

"Plan for education and health services to meet Sydney's growing needs".

In accordance with the Strategy, this SSDA will ensure an upgraded primary school can be delivered to meet Sydney's growing educational needs. The proposal will take enrolment pressure off the existing School currently exceeding student capacity and ensure a high quality educational facility is provided for the future population of Schofields.

The proposal is also consistent with the other wider goals and directions contained within the Strategy, including:

Direction 1.7: Grow strategic centres – Providing more jobs closer to home;

The proposal will create temporary job opportunities in manufacturing, construction and construction management, and on-going jobs in teaching and administration for the residents of Schofields and the wider Blacktown City LGA.

Direction 1.11: Deliver infrastructure;

The proposal will deliver a vital piece of educational infrastructure for Schofields that will take enrolment pressure of the existing School currently exceeding student capacity and other local schools.

Direction 3.1: Revitalise existing suburbs; and

The proposal will revitalise an aged school to provide contemporary facilities to meet future educational standards, and provide increased jobs and growth for Schofields.

Direction 3.3: Create healthy built environments.

The site is close to bike paths, establishment residential neighbourhoods and multiple bus routes. Future students, parents and employees will be encouraged to access the site via public transport, cycling or walking. This will reduce reliance on cars, decrease road congestion and generally create a healthy built environment. The proposal also includes a range of open spaces, playgrounds and sports facilities to encourage passive recreation.

The proposed development will deliver a sustainable, well-designed building that promotes the use of public and active transport. The redevelopment of the site will make a valued contribution to economic growth in Sydney and provide increased learning and employment opportunities.

5.3. NSW LONG TERM TRANSPORT MASTER PLAN 2012

NSW Long Term Transport Masterplan (2013) seeks to promote the use of public transport as an effective travel option. The site benefits from being located:

- Near dedicated cycleways and bicycle friendly roads;
- Within an area well serviced by buses; and
- Within an existing residential neighbourhood containing appropriate footpaths.

Accordingly, future parents, students and employees can easily cycle, walk or catch the bus to the school. Schofields Railway Station is within a reasonable cycling distance from the school. This will reduce reliance on cars, decrease congestion and promote in sustainable outcomes.

5.4. SYDNEY'S CYCLING FUTURE 2013

Sydney's Cycling Future (2013) seeks to make bicycle riding a feasible transport option within Sydney by encouraging in the use of Sydney's existing bicycle network.

The DoE website acknowledges that the decision to install and maintain bicycle racks is made by an individual school to reflect individual circumstances surrounding safety. Existing bicycle racks are available through the site at key buildings and will be made available for future students and employees.

The site is well serviced by existing dedicated cycle routes and can also be accessed from a network of smaller, more accessible local streets. Future parents, students and employees of the school will be able to use these roads to access the site via bike. This will reduce reliance on cars, decrease congestion and promote sustainable outcomes

5.5. SYDNEY'S WALKING FUTURE 2013

Sydney's Walking Future (2013) aims to promote walking as a means of effective transport within Sydney by encouraging investment in safe, permeable walking networks. The School is located within an established residential neighbourhood. Students, teachers and parents are able to access the site by walking. This will promote healthy practise and decrease vehicular use.

5.6. SYDNEY'S BUS FUTURE 2013

Sydney's Bus Future (2013) outlines the NSW Government's long term plan to deliver fast and reliable bus services within Sydney to meet current and future customer needs.

The School is located close to multiple bus stops and is serviced by four dedicated school bus services and two regular bus services operated by Busways (see Section 2.9 of this EIS). Students, teachers and parents will therefore be able to easily access the site via bus, deterring the need to drive.

5.7. CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN PRINCIPLES

The Crime Prevention Through Environmental Design (CPTED) guidelines were prepared by the NSW Police in conjunction with the DPE. CPTED provides a clear approach to crime prevention and focuses on the 'planning, design and structure of cities and neighbourhoods'.

The main aims of the policy are to:

- Limit opportunities for crime;
- Manage space to create a safe environment through common ownership and encouraging the public to become active guardians; and
- Increase the perceived risk involved in committing crime.

The guidelines provide four key principles to limit crime. These are outlined in Table 5 below.

Table 5 - CPTED Principles

	Principle	Definition
1	Natural Surveillance	Natural surveillance is a by-product of well-planned, well-designed and well-used space. It involves maximising opportunities for passers-by and users to observe what happens in an area (the 'safety in numbers' concept). Higher risk locations can also benefit from organised surveillance, which involves the introduction of formal measures such as on-site security guards or CCTV.
2	Access Control	Control of who enters an area so that unauthorised people are excluded, for instance, via physical barriers such as fences, grills etc.
3	Territorial Reinforcement	People are more likely to protect territory they feel they own and have a certain respect for the territory of others. This can be expressed through installation of fences, paving, signs, good maintenance and landscaping. Territoriality relates to the way in which a community has ownership over a space.
4	Space Management	Ensures that space is appropriately utilised and cared for. Space management strategies include: activity coordination (i.e. having a specific plan for the way different types of activities are carried out in space), site cleanliness, rapid repair of vandalism and graffiti, the

Principle	Definition
	replacement of burned out lighting and the removal or refurbishment of decayed physical elements.

A CPTED Assessment has been undertaken by Urbis below. The CPTED Assessment concludes that the proposed design of the newly constructed School will incorporate natural surveillance, access control, territorial reinforcement and space management design principles to deter crime. The proposed development on the site will employ many existing CPTED measures that have been successful at deterring crime at the existing school.

Notwithstanding this, the CPTED Assessment has also made further recommendations to enhance these outcomes. A summary of these recommendations that have been informed by best-practice CPTED principles for schools is provided within the subsections below:

5.7.1. Natural Surveillance

- Incorporate an open palisade fence around the perimeter of the into to allow for passive surveillance both into the site and onto surrounding streets.
- Provide adequate lighting throughout the site, including at footpaths, entrances and at the proposed staff carpark.
- Orientate the proposed buildings to ensure they do not conceal passive surveillance to the school's vehicular entrance and exit points off St Albans Road.
- The upper level of the proposed school building is designed with a balcony and windows to ensure passive and informal surveillance is available onto the surrounding open space and streets.

5.7.2. Access Control

- High quality fencing should be contained to the entire perimeter of the site to restrict access.
- During school hours, visitor access to the school should only be able to occur once visitors sign-in at the main reception. Accordingly, internal signs should be installed to direct visitors to report at reception before accessing school buildings.
- Landscaping should be designed to respond to pedestrian movement paths help guide people to entries and public spaces.
- All doors to be used at the site should be built from resistant materials to prevent break-ins and vandalism.
- Proposed school rooms with valuable equipment should be made physically secure and locked when not in use
- Wayfinding signage should be provided throughout the site to mark school buildings. Signs should also be provided at the staff carpark to appropriately manage vehicles entering and exiting.

5.7.3. Territorial Reinforcement

- Signs depicting the name of the school should be displayed at the vehicular site entrance (Williamson Crescent).
- Proposed school entry and exit points should be monitored by staff and/or CCTV, and be locked afterhours as appropriate.
- An open palisade fence should be provided around the perimeter of the site to allow views into the site
 from the surrounding streets.
- A strong teacher presence should be felt throughout the school to encourage safety and security among students.

5.7.4. Space Management

- All outdoor lighting fixtures, equipment and furniture should be sturdy and designed to be 'vandal-proof'.
- Break-resistant materials should be used for windows and access points where appropriate to limit the
 potential for building damage.
- The proposed school buildings should be regularly maintained and monitored for potential graffiti or damage.
- A rapid removal of graffiti strategy should be developed by the school to ensure the prompt removal of graffiti and/or tags.
- A School Plan of Management should be developed by the school that includes maintenance and repairing strategies, complaint management measures, emergency procedures, waste removal procedures, evacuation procedures, safety procedures for large events and monitoring measures.

The above recommendations have been or can be incorporated into the final school design. Accordingly, the proposal will provide a high level of security and be designed to deter criminal behaviour.

5.8. HEALTHY URBAN DEVELOPMENT CHECKLIST

Prepared by NSW Health, the *Healthy Urban Development Checklist* seeks to ensure built environments are created within New South Wales that are sustainable and promote healthy habits. The proposal satisfies a range of items contained to the checklist, including:

- Encourage incidental physical activity;
- Promote opportunities for walking, cycling and other forms of active transport;
- Promote access to usable and quality public open spaces and recreational facilities;
- Reduce car dependency and encourage active transport;
- Improve location of jobs to housing;
- Provide access to a range of facilities to attract and support a diverse population; and
- Respond to existing (as well as projected) community needs and current gaps in facilities and/or services.

The proposal therefore aids in promoting a healthy and sustainable built environment.

5.9. GREATER SYDNEY COMMISSION'S DRAFT CENTRAL CITY DISTRICT PLAN

Released in November 2017, the Draft Central City District Plan (previously the Draft West Central District Plan) (Draft District Plan) includes a range of priorities and actions to appropriately support the strategic growth of the Central City (former West Central) District. The Draft District Plan identifies the following:

- There will be a 59% growth in school-aged children to 2036 within the District; and
- The largest increases are expected in the Blacktown and Parramatta LGA, which collectively will account for 63% of total increase in school-aged children over today's numbers.

These figures demonstrate that there is a significant demand for school facilities within the local area. Accordingly, a major priority within the Draft District Plan is <u>'4.8.2 – Plan to meet the demand for school</u> facilities', which states:

"If no additional classrooms were to be provided in the West Central District by 2036 there would be significant shortfalls based on projected changes in the primary and secondary school aged population. Of particular note, there is significant forecast growth in demand in Parramatta, Epping, Auburn, Schofields and Castle Hill."

In response, the Draft District Plan notes that DoE is funding upgrades to existing government schools to provide additional classrooms to the Central City District to address issues of supply. Accordingly, this SSDA

is consistent with the Draft District Plan, as it supports the DoE's substantial investment in the redevelopment of Schofields Public School.

6. KEY ASSESSMENT MATTERS

The following matters as per the SEARs have been assessed, with the impacts noted and mitigation measures proposed where necessary in this report:

- Environmental Amenity;
- Transport and Accessibility;
- Biodiversity;
- Social and Economic Impacts;
- Historical Archaeological;
- Aboriginal Archaeological;
- Noise and Vibration;
- Sediment, Erosion and Dust Controls;
- · Geotechnical and Salinity; and
- Flooding.

6.1. ENVIRONMENTAL AMENITY

6.1.1. Solar Access and Overshadowing

The proposal has been appropriately designed to provide maximum solar access to all school buildings and open spaces. Importantly, the classrooms and open space areas receive sunlight during winter and are appropriately screened for sun in summer.

Shadow Diagrams have been provided as part of the Architectural Plans attached at **Appendix A.** These illustrate the shadows which will be cast by the proposed development at the winter solstice (21st June), along with the shows from the existing development at the same point in time.

The overshadowing is summarised below:

- At 9:00am the shadows are long, but will fall mostly within site. A very small portion will overshadow the adjacent oval. There will be no impact to adjacent residential properties.
- At midday, the shadows will be relatively small and fall within the site. There will be no impact to adjacent residential properties.
- At 3:00pm the shadows will be long, but are fully contained within the site. There will be no impact to adjacent residential properties.

Given the above, the proposed development will not give rise to adverse impacts in terms of overshadowing. The proposal will not impact adjacent residential properties ability to receive at least three hours of sunlight between 9:00am and 3:00pm at the winter solstice, as per the Growth Centres SEPP.

6.1.2. Privacy

The existing school building is located within a heavily vegetated environment, in particular on the northern and western boundaries with mature. This already provides a high level of screening, which ensures that privacy levels are maintained at interfaces between the school buildings and surrounding residential properties. The majority of all perimeter trees will be retained, except those at the bus bay location and the new learning building location.

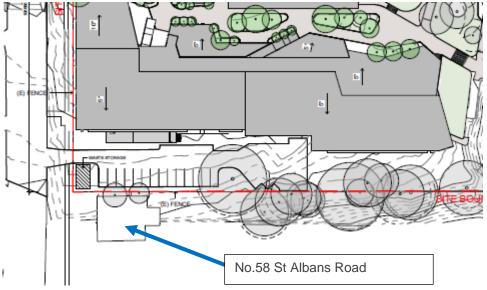
The closest residential property to the site is located at No.58 St Albans Road, and is a single storey detached dwelling house situated adjacent to the north-west corner of the site. At present the property is positioned on the boundary adjacent to the existing parking area and access from St Albans Road. It is proposed that this parking area adjacent to the site boundary will be retained as part of the proposed development, with the addition of a new bin storage area that will be readily accessible for waste collection.

In terms of new built form on site, a new school building is proposed to be constructed within the site on the other side of this parking area. This is illustrated on **Figure 10** below which shows the location of the new building.

In order to protect privacy levels, the window openings on the proposed building are covered with sunshades to avoid significant overlooking of the neighbouring property, as illustrated in **Figure 11** below. This design feature, as well as the existing tree cover, will therefore serve to protect this neighbour's residential privacy.

It is not expected that any other properties will be adversely impacted in terms visual privacy given the distance to properties on the opposite side of St Albans Road, as well as the inward-looking design which will prevent any privacy issues arising from properties on the opposite side of Junction Road. Further to the south, the properties on Station Road are separated from the development by the significant expanse of playing fields on the site which extend to approximately 150m in length.

Figure 10 - Plan illustrating location of nearest neighbour



Source: TKD Architects

Figure 11 – Proposed elevation plan on boundary with neighbour



Source: TKD Architects

6.1.3. View loss

There are no views from or to the site. Therefore, there is no view loss resulting from the proposal.

6.1.4. Wind

A Wind Impact Assessment (WIA) has been prepared by Vipac Engineers & Scientists and is attached at **Appendix X.** Vipac have investigated winds effects for the ground level areas adjacent to the school, at this no wind tunnel testing has been undertaken. Vipac have considered five main points:

- The exposure of the proposed development to wind;
- · The regional wind climate;
- The geometry and orientation of the proposed development;
- · The interaction of flows with adjacent developments;
- The assessment criteria, determined by the intended use of the public areas affected by wind flows generated or augmented by the proposed development.

The WIA made the following observations:

- The development would be expected to generate wind conditions in the ground level footpath areas satisfying the walking criterion;
- The development would be expected to generate wind conditions at the building entrances and covered outside spaces on or within the standing criterion; and
- The development would be expected to generate wind conditions at the first-floor walkway area within the walking criterion.

Overall, the assessment found that the conditions within the ground of the proposed school are generally suitable, due to the low-rise nature of the development and will have no impact on winds at surrounding public access locations including pedestrian footpaths. The WIA concludes that the proposal is suitable for the site.

6.2. TRANSPORT AND ACCESSIBILITY

6.2.1. Parking

A Traffic Impact Assessment has been provided by Traffix and is included in Appendix K.

Car Parking

In accordance with the Blacktown Growth Centres DCP 2010 educational establishments are required to have a minimum of one space per staff member and one space per 100 students. From these rates the proposed development is required to provide 28 parking spaces. This proposal requires the removal of four parking spaces does not include the provision of replacement or additional off-street parking. A total of 14 off-street parking spaces will be retained. An accessible pick up and drop off zone is located in the car park.

The DoE has its own set of guidelines in relation to the provision of parking for staff within education facilities. The Department's *Educational Facilities Standards and Guidelines* (EFSG) activity encourages the use of sustainable means of transport. Furthermore, the Motor Vehicle Policy for NSW Government Agencies does not entitle parking spaces for private use vehicles on Government leased or owned premises.

To reduce the reliance on use of private vehicles, a comprehensive package of measures is proposed to meet the needs of staff, students and parents while achieving a mode shift towards public transport. The following measures are proposed:

- Bicycle User Group and promotion of Bicycle Initiatives;
- Walking school bus program and school travel plans;
- Car sharing scheme; and
- Staggered schemes for pick-up and drop-off times.

There are currently eight dedicated on-street pick-up and drop-off spaces on the western side of Junction Street. These are provided in the existing 50m 'No Parking 8:00am-9:30am, 2:30pm-4:00pm, School Days' restricted parking zone along the school's Wentworth Street frontage. An additional 45m of the above-mentioned restricted parking on the western side of Junction Street between the proposed bus bay and the existing No Parking restriction is recommended. This will provide an additional seven pick-up/drop-off spaces.

6.2.2. Access

The development proposes no changes to the existing access to the site. Vehicle access is available from St Albans Road to the onsite car park via a driveway and gates. Pedestrian access is provided from a main entry on St Albans Road. A secondary pedestrian entrance is located on Junction Road. Two vehicle accesses are located on Junction Road to allow vehicle access to the school grounds and sports fields.

In terms of site accessibility, there are a number of bus stops within a 400m radius of the site, which is readily walkable. The nearest train station (Schofields Railway Station) is approximately 1.2km distance from the site, which may not be walkable for all, however there is a bus service which links the site to both Schofields and Riverstone Stations.

6.2.3. Traffic

The proposal is expected to generate additional vehicle trips in the AM peak associated with student drop-off and staff arrivals, and vice versa during the PM peak. The proposed volumes occur over the school peaks from 7:30am to 9:30am and 2:30pm to 4:30pm.

Traffix has reviewed the data collected from the staff and student surveys, and has applied a 84% and 71% private vehicle occupancy for student in the AM and PM peak periods, respectively, and an 93% vehicle occupancy for staff.

It is assumed that 65% of parent drop-off and 66% of staff vehicles will arrive at the school during the AM peak hour between 8:00am to 9:00am and 90% of parent pick-up and 13% of staff vehicles will depart during the PM peak hour at 3:00pm to 4:00pm.

Based on an increase of 299 students and 25 staff, the traffic generation is estimated at:

- 206 vehicle trips (111 in, 95 out) during the AM peak period.
- 256 vehicle trips (126 in, 130 out) during the PM peak period.

Table 6 illustrates that the AM & PM peak hour intersection performance comparing the existing and proposed Level of Service of surrounding intersections. All key intersections are expected to operate satisfactorily after the completion of the proposed development with a Level of Service of 'A' being maintained at all critical intersections during both peak periods.

Table 6 - AM & PM Peak Hour Intersection Performances

Intersection Description	Control Type	Model	Period	Level of Service	Degree of Saturation	Intersection Delay (sec)
Junction Road &	Give way	Existing	AM	А	0.051	6.0
St Albans Road			PM	А	0.066	6.0
		Existing &	AM	А	0.166	6.5
		Development	PM	А	0.204	6.6
St Albans Road &	Give way	Existing	AM	А	0.037	5.9
Lambeth Road			PM	А	0.022	5.9
		Existing &	AM	А	0.073	5.9
		Development	PM	A	0.025	6.7

6.2.4. Sustainable Travel

Appendix H of the Transport Impact Assessment provide a draft Transport Access Guide (TAG), which will provide information to school staff, students, parents and visitors on how to travel to and from the School by active modes of transport and public transport. The TAG includes the following information:

- Local bus facilities and network maps;
- Local cycle route maps;
- Information regarding a walking school bus;
- Information regarding staggered pick up and drop off times; and
- · Cycle initiatives and events.

The TAG will be developed further by the school.

6.2.5. Construction Traffic

Traffix has prepared a preliminary Construction Traffic Management Plan (CTMP) will be prepared and submitted to Council separate to this Development Application. In summary,

- The truck routes utilised for the construction of the development would utilise the arterial road network where possible.
- Trucks will have an anticipated maximum vehicle size of 12.5 HRV, to accommodate movement to and from the site in a forward direction.
- Contractors will be encouraged to either use public transport or ride share to/from the site.
- If necessary, a Traffic Control Plans will be development in accordance with the RMS Traffic Control at Worksites Manual and AS1742.3.
- Swept Path Analysis should be undertaken for each construction stage demonstrating forward entry and exit during all construction stages. All entry and exit movements will be monitored by certified traffic controllers.

6.2.6. Conclusion

Traffix conclude that the proposed development is supportable on traffic planning grounds and will operate satisfactorily. The future provision of walking and cycling routes and the development of a WTP and TAG will influence future travel modes and encourage a shift toward sustainable transport modes.

6.3. BIODIVERSITY

An Ecology Report: Flora & Fauna Survey has been prepared by UBM Ecological Consultant Pty Ltd and is provided at **Appendix E**.

Schofields Public School is located within the North-West Growth Centre, and is Biodiversity Certified under the *Biodiversity Conservation Act* 2016, meaning that an assessment of impacts of the proposed development on biodiversity is not required. However, given the generally 'broad-brush' nature of the Biodiversity Certification Methodology, most Councils have considered it prudent to undertaken further site investigations. Hence, the purpose of the Ecology Report is to identify the occurrence of any threatened entities (listed under the *Biodiversity Conservation Act* 2016 and/or *Environmental Protection and Biodiversity Conservation Act* 1999) on the site.

Given that the site has been Biodiversity Certified, it is understood that Assessments of Significant and Commonwealth Impact Assessment are not required.

The Biodiversity Certified land has been addressed in relation to the *Environmental Protection and Biodiversity Conservation Act* 1999 through the Sydney Growth Centres Strategic Assessment Program (the 'Program'), which was undertaken by the NSW Government. The Program considered the potential impacts of development on matters of national environmental significance for the whole of Sydney's Growth Areas.

The Program was then endorsed by the Commonwealth Environment Minister, and as a result, any proposal on land that is certified under the Growth Centres Biodiversity Certification is taken to be in accordance with the endorsed Program. Therefore, a Significant Impact Assessment for matters of national environmental significance that may occur on the Subject Property is not required.

Even though an assessment technical is not required, EBM have undertaken a high-level assessment, which has highlighted the proposal has the following impacts:

Ecological Communities:

The vegetation of the school is a mixture of native trees and introduced/exotic species; some being natives that are not indigenous to this part of Western Sydney. Despite the occurrence of some trees (presumably planter or self-recruited) characteristics of the Critically Endangered Ecological Community (CEEC) being recorded for the site, no truly 'remnant' vegetation was recorded on-site.

An Assessment of Significance for CSPW would ordinarily be required under the new *Biodiversity Conservation Act 2016*. However, as the site has been Biodiversity Certified under the *Environmental Protection and Biodiversity Conservation Act* 1999, an Assessment of Significance is not required.

Flora:

A total of 111 plant species were recorded at Schofields Public School, with 43 species (39%) being native species and the remaining 68 exotic or non-indigenous introductions.

No threatened flora species or population were observed at the site or in the immediate locality. Six Target Weed species were identified within the site, including Asparagus aethiopicus, which is a Weed of National Significant (WoNS) and listed as a Priority Weed for Greater Sydney. *Olea europaea subsp. cuspidata* (African Olive) was also recorded and is subject to Regional Recommended measures.

Fauna:

The site is situated within a highly fragmented urban landscape, and is therefore subject to a high level of anthropogenic disturbance and edge effects. Seven vulnerable species listed under the EPBC and/or BC Acts were recorded during the current fauna survey, with varying reliability of identification. An additional three vulnerable species also have the potential to occur within the Study Area.

The Flora and Fauna Report provides a number of recommendations; these are outlined in Section 8 of this EIS.

6.4. SOCIAL AND ECONOMIC IMPACTS

The proposal will generate numerous beneficial social and economic impacts for Schofields and the wider Blacktown LGA. The anticipated social and economic impacts include:

- The proposed redevelopment of the school will provide significant job opportunities. These include temporary job opportunities during demolition and construction, and ongoing teaching and administration jobs at the project's completion. It is anticipated that 25 additional staff members will be required after the redevelopment of the school;
- Redevelopment of the school will alleviate pressure on existing aged school facilitates and cater for population growth;
- The proposal will result in sufficient area for indoor and outdoor recreation to improve the health and welling of future students;
- The design will create a series of teaching spaces which are flexible and promote increased social interaction among students and teachers;
- The proposal will provide future students with learning difficulties new facilities and spaces. This will
 enable high-quality teaching beyond what can currently be provided within the existing aged
 demountable's and wooden classrooms;
- The proposed built form has been designed to ensure residential amenity will be maintained to residential dwellings fronting St Albans Road and Junction Road;

- Deliver a school that is sustainable and efficient; incorporating positive environmental measures including PV panels, rainwater tanks and WSUD initiatives;
- The external materials and finishes to be used complement the surrounding built and natural
 environment of Schofields. Accordingly, no negative impacts environmental amenity impacts will result
 from the proposal; and
- The proposal has been designed in accordance with CPTED design principles to deter crime. Accordingly, the proposal will positively activate the site, provide opportunities for passive surveillance and be design of materials that are 'vandal-proof.'

6.5. HISTORICAL ARCHAEOLOGICAL

An Historical Archaeological Assessment (HAA) has been prepared by Comber Consultants and is included in **Appendix H.** This HAA satisfies the requirements of the SEARs to identify and provide an assessment of the significance of any potentially archaeologically significant area, in accordance with the NSW Heritage Manual. A site inspection was undertaken to determine if the site contains any archaeological potential. A thorough inspection of all visible ground surfaces was undertaken and no evidences of any historical archaeological deposits or features were observed.

The historical research indicated that all building during the progressive development of the school are on the site, with the exception of a boys and girls toilets block. Based on the plan dates, it is considered likely that the boys and girls toilets we constructed after the original classroom building shown in **Figure 9**. However, it is likely that these toilets were constructed prior to 1935 when the mains water was connected to the school. Given that it is likely that these toilets were constructed prior to connection to mains water, it is probable that cesspits associated with these toilets could be located within the study area. Generally, when cesspits ceased being used, they are filled with rubbish and other waste materials; and can sometime contain artefacts which provide information about the people occupying the site and their activities.

Figure 12 illustrates the proposed ground floor development plan in respect to the location of the boys and girls toilet shown in purple outline. The location of the girl's toilet on the eastern side of the study area, is presently situated under a shed and a portion of a brick building. These buildings will be demolished as part of the proposed development. No further buildings will be constructed in the location of the early girl's toilet, however the area will be subjected to landscaping. This area will be subjected to minor levelling (approximately ± 200mm) and landscaping with artificial turf.

The location of the boys toilet on the western side of the study area, is presently partially located under the demountable buildings and the area between the demountable's and asphalted car park. The demountable's are to be demolished as part of the proposed development and no further buildings are proposed for construction in the location of the boys toilet. However, it is likely that some minor levelling (approximately ± 200mm) will occur and the area will be asphalted to match the retained existing car park.

The research reveals that there is a potential for archaeological deposits within the cesspits. However, until the cesspits are uncovered, it is unknown if they meet the significance assessment. Any ground disturbance in the area of the former toilet blocks should be monitored and if cesspits are uncovered the following should be undertaken:

- They should be recorded in detail including surveying their location onto a plan of the site. The recording should include scale drawings and photographs.
- If they are to be impacted upon, they should be excavated first by a qualified archaeologist, as they have the potential to contain relics.
- Any relics retrieved should be photographed and catalogued.

Given that the proposed development is a SSDA, no approvals will be required from the Heritage Council of NSW. The HAA provides a number of recommendations, these are outlined in Section 8 of this EIS.

Figure 12 – The location of the boys and girls toilets in purple.

Source: Comber

6.6. ABORIGINAL ARCHAEOLOGICAL

An Aboriginal Archaeological Assessment (AAA) have been prepared by Comber Consultants and are included in **Appendix G.** This report satisfies the SEARs requirement to address Aboriginal cultural heritage issues in accordance with the *Guide to investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* and considers the projects impact upon cultural heritage values.

Twenty-two recorded Aboriginal sites are located within 1km radius of the site. The undertaking of excavation in the region has revealed medium to large densities of artefacts. Although there are no sites recorded on site or directly adjacent, the AAA believes this is due to a lack of investigation rather than an absence of cultural activity.

During the site inspection numerous pieces of ochre were located in the central portion of the site, north of the existing field. Further, in the north-western section of the site, adjacent to the car park, a nodule of fine grained highly siliceous material, approximately 5cm in length was located partially embedded in an open area. The AAA assumes it may be silcrete, however, it was difficult to determine as the legislation does not permit its removal without a permit. **Figure 13** illustrates the location of ochre fragments and siliceous rock on site.

Figure 13 – Location of ochre fragments and siliceous rock



Source: Comber Consultants

In addition, the study area is located within an area of archaeological sensitivity determined by OEH's *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* details the archaeological importance of certain landscape features includes a water source that is located "within 200m".

Further investigation is required to confirm the extent, however, the AAA states that the materials found are likely artefactual, as it would be usual for such material to occur naturally in this location.

Comber provides the following statement of significance:

This site contains a large concentration of ochre and a possible artefact. These items are important to Aboriginal people as they demonstrate the lifestyle and subsistence activities of their ancestors and provide a continuing link to the past. The ochre and possible artefact and their locations demonstrates the historic values associated with the occupation and use of the area demonstrating Aboriginal lifeways. The site has the potential to yield further information, through archaeological investigation that will yield information that will contribute to an understanding of the cultural history of Schofields and New South Wales. Archaeological excavation has the potential to reveal information about the precontact Aboriginal occupation of the area. The ochre located on the site is an important natural resource, used as a painting material and traded extensive across Australia. It indicates spiritual, traditional, historical, contemporary associations and attachments to the area and offers research potential for the use of the area. Ochre is an important resource and is rare in the archaeological record

The AAA concludes that the upgrades to the school, in particular the eastern landscaping, will impact upon the ground surface and has the potential to harm subsurface Aboriginal objects. Thereby, to mitigate the impact, archaeological testing and salvage should be undertaken prior to the development. This mitigation measure will ensure that the maximum amount of information about Aboriginal occupation and activities is gained. Comber have made the following recommendations:

- (a) In accordance with the SEARS and prior to any redevelopment of the site Aboriginal community consultation should be undertaken in accordance with OEH's Aboriginal Cultural Heritage consultation requirements for proponents 2010 and an Aboriginal Cultural Heritage Assessment report (ACHAR) prepared, detailing the results of the consultation. This archaeological report should be appended to the ACHAR.
- (b) Once the above consultation has been undertaken, archaeological testing to determine the nature and extent of any archaeological deposit should be undertaken in consultation with the Registered Aboriginal Parties, prior to any bulk excavation, piling, redevelopment or any activity that disturbs the ground surface.
- (c) If archaeological objects are uncovered a program of archaeological salvage should be undertaken, in association with the Registered Aboriginal Parties, prior to any redevelopment of the site. This should be undertaken immediately after the testing.

In conclusion, it is proposed that further archaeology investigation will occur in targeted locations. Community consultation with the Aboriginal community has commenced and is expected to be completed by early April 2018. An Aboriginal Cultural Heritage Assessment report will be prepared which details such consultation.

The Aboriginal community will be welcomed to provide feedback on the methodology proposed for further investigation. This feedback will inform future site investigations.

6.7. NOISE AND VIBRATION

An Acoustic Report has been prepared by Wilkinson Murray and is included in Appendix W.

6.7.1. Construction Noise and Vibration

The greatest potential impact form construction occurs when mobile construction plant operates in close proximity to residential receivers adjacent to the western boundary. Throughout the demolition and excavation period, careful management will be required to minimise impacts at residences. A review of the predicted noise level ranges indicates exceedances of up to 30dBA may occur during bulk excavation works. This exceedance is not unusual for construction works in a relatively quiet residential area and can be mitigated by the construction noise management procedures detailed in the following sections. The following project-specific mitigation measures should be adopted:

- Installation of localised noise barriers between piling rigs and residences;
- Selection of quietest feasible construction equipment;
- Localised treatment, such as barriers, shrouds and the like around fixed plant, such as pumps, generators and concrete pumps;
- Provision of respite periods, particularly on Saturdays; and
- Trial testing of vibration levels where equipment is identified as having the potential to exceed the human comfort criteria.

In addition, the following measures should be included in a Noise and Vibration Management Plan:

- Plant Noise Audit Noise emission levels of all mobile plant and equipment should be checked for compliance with noise limits appropriate to those items prior to the equipment going into regular service. Testing should be established with the contractor.
- Operator Instruction Operators should be trained in order to raise their awareness of potential noise problems and to increase their use of techniques to minimise noise emission.
- Equipment Selection All fixed plant at the work sites should be appropriately selected, and where necessary, fitted with silencers, acoustical enclosures and other noise attenuation measures in order to ensure that the total noise emission from each work site complies with EPA guidelines.
- Site Noise Planning Where practical, the layout and positioning of noise-producing plant and activities on each work site should be optimised to minimise noise emission levels.

Community consultation will also occur with the adjoining properties to advise of the proposed works and likely impacts. The Acoustic Report recommends that a Community and Stakeholder Engagement Strategy be development and Noise and Vibration Management Plan be prepared prior to the issue of a Construction Certificate.

6.7.2. Operational Noise

Operational noise is expected from the mechanical service plant, school announcements, teaching and practical activities, outdoor play and events in the hall. Noise emission from the school will not change significantly from the existing case.

The noise level emissions from assumed worst-case operational scenarios of the future potentially noisegenerating activity / teaching spaces have been predicted to the nearest surrounding residential receivers.

- At this stage, no design of the PA system has been determined. However, the following measures should be adopted to ensure that their impact at all surrounding residences is minimised:
 - Speakers should be located and orientated to provide good coverage of the school areas whilst being directed away from residences. System coverage should be reviewed during the detail design stage.
 - The volume of the system should be adjusted on site so that announcements and bells are clearly audible on the school site without being excessive. The system should initially be set so that noise at surrounding residences does not exceed the ambient noise levels by more than 5dBA.
 - Once the appropriate level has been determined on site, the system should be limited to the acceptable level so that staff cannot increase noise levels.
 - The system bell should be set so that it only occurs on school days.

6.7.3. Road Traffic Noise

It is predicted that increasing enrolments at the school will increase the overall traffic noise by 1.0 dBA. As noted in the Road Noise Policy (RNP), an increase of less than 2dBA represents a minor impact that is considered barely perceptible to the average person.

While the traffic noise during peak school times is predicted to exceed the RNP criteria for daytime, as is the current case, the predicted increase in traffic noise due to the proposal is unlikely to be detectable at surrounding receivers.

6.8. SEDIMENT, EROSION AND DUST CONTROLS

A Stormwater Management Report and associated plans have been prepared by Woolcotts and included at Appendix P. An erosion and sediment control plan has been prepared for the development to reduce the amount of sediment laden runoff leaving the site. It details measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. During construction, erosion and sediment control measures will be provided in accordance with the "Blue Book" and Guidelines for development adjoin land managed by the Office of Environment and Heritage.

The Preliminary Construction Management Plan at Appendix M outlines measures to mitigate dust production from evacuation and construction. If wind-blown dust is observed, water trucks will be employed to spray exposed areas or stockpiles will be covered with geofabric or similar material. Dust will not be produced as part of the ongoing operation.

GEOTECHNICAL AND SALINITY <u>6.9</u>

6.9.1. Geotechnical

A Geotechnical Report has been prepared by JK Geotechnics is attached at Appendix V. The investigation reveals a generalised subsurface profile comprised of silty sand, silty sandy clay, silty clay topsoil. Residual silty clay and shale bedrock. No ground water was encountered within the investigation depth. The report provides a number of construction recommendations outlined in Section 8 of this EIS.

6.9.2. Salinity

A Salinity Assessment has been prepared by Environmental Investigation Services is attached at **Appendix T.** The site is located within the area of Western Sydney included in the Salinity Potential Map. Based upon interpretation from geological formations and soil groups presented on the map, the site is located in a region of high salinity potential.

Based on the results of the preliminary assessment, the site has 'slightly saline' and 'non-to-mildly aggressive' soil. The pH results indicate that the majority of the soils are classified as non-aggressive towards buried concrete, however, soils in the vicinity of BH101 are classed as mildly aggressive towards buried concrete. The appropriate concrete strength and corrosion allowance outlined in AS2159- 2009 should be adopted in this area.

Further, the site is not located in an acid sulfate soil (ASS) risk area according to the risk maps prepared by the Department of Land and Water Conservation. Thereby, an ASS Management Plan is not required to be prepared.

6.10. FLOODING

The site is not identified as being in a flood prone area under the Growth Centres SEPP or DCP. Woolcotts have confirmed that the site is not flood prone in the Stormwater Management Plan at **Appendix P.**

6.11. SITE SUITABILITY

The site is suitable for this development for the following reasons:

- The site is already in use by Schofields Public School, and pursuant to the Growth Centres SEPP 2006 educational establishments are permitted with consent in the R2 Low Density Residential zone.
- The site is capable of accommodating upgraded educational buildings with no undue impacts on surrounding residential properties.
- Residential amenity and privacy to adjacent properties will be respected the through the use of landscaping and fencing.
- The site is located in an area of high population growth and development. The redevelopment contribute to servicing the growth of Schofields.

Accordingly, the site is considered suitable for the development for education purpose and can accommodate the increase in students and staff.

6.12. PUBLIC INTEREST

The proposal is in the public interest because:

- The development is permissible with consent and have been prepared having regard to the objectives of the Education SEPP and Growth Centres SEPP;
- The design of the proposed development has had regard to the relevant statutory and strategic planning policies and generally complies with the objectives of the development controls for the site;
- The proposal is suitable for the site as evidenced by the site analysis and various site investigations, including geotechnical, site contamination and flora and fauna;
- Subject to the various mitigation measures recommended by the specialist consultants, the proposal will
 not have any unacceptable impacts on adjoining or surrounding properties or the public domain in terms
 of traffic, social and environmental impacts;
- The site is well serviced by public transport and walking and cycling routes. The proposal encourages
 non-private vehicles options to access the site. It provides bicycle parking spaces to encourage cycling
 to and from the site;
- The proposal will result in a high quality educational environment for staff and students that;
 - Maintain a large area of open space for students;

- Enables an excellent academic programme;
- Supports a fulfilling and diverse extra-curricular experience;
- Provides an inclusive, supportive and secure pastoral environment; and
- Provides efficient and environmentally sustainable facilities.
- The proposal will make a positive contribution to the built form of Schofields and create attractive streetscape along both St Albans Road and Junction Road; and
- The proposal will contribute positively to energy efficiency and environmental sustainability. The design
 has incorporated many ESD features to reduce energy consumption during the life of the proposed
 development.

7. CONSULTATION

A Consultation Outcomes Report prepared by Cadence Australia and provided at **Appendix Y** and has been prepared to document engagement activities and feedback from residents and the school community throughout the design process. Key stakeholders include identified in the Consultation Outcomes Report are:

- Local community;
- · Blacktown City Council.
- Government Architects Office NSW;
- Transport for NSW;
- · Roads and Maritime Services; and
- Local Aboriginal Land Councils.

The following sections are a summary of the consultation undertaken to date.

7.1. SCHOOL AND COMMUNITY ENGAGEMENT ACTIVITIES

As part of the communications strategy for the project, the project team engaged with the local school community and broader community. This consultation includes newsletter, surveys, project specific website updates and regular community information booths held at the school and local shopping centre. Other engagement activities include:

- Project Reference Group (PRG): Monthly meetings with the PRG have been held throughout the mater
 planning and design development process. The PRG is a working group consisting of the Director of
 Public Schools (PS), the Principal of the school, a parent representative from the school, Head Design
 Consultant, Project Manager and Department of Education's Asset Management Unit.
- Project Survey: In August and September 2016, Cadence as Project Managers on behalf of the Department of Education conducted consultation with the local school community to seek input and feedback on the redevelopment.
- Project Website: DoE have developed a Project Website which is accessible to the Public. The website
 provides the project overview / update, progress summary and next step. The website provides up to
 date information on the project status.
- **School Newsletters:** The school newsletter is regularly distributed to parents of students attend the school. The project team has used letters attached to the school newsletter as a form of communication to parents and community groups.
- Community Information Booths: A total of 20 community information booths have been held to date and they are planned to be held quarterly during construction. The locations of the information booths included Schofields Public School and Woolworths Schofields. These sessions provided the community with an opportunity to obtain information and provide their feedback on the proposed development.

7.2. BLACKTOWN CITY COUNCIL

TKD and Urbis engaged Blacktown City Council to discuss the proposed school upgrade 22 June 2017. A key matter that has remained consistent across many engagement activities between the school and Blacktown City Council is the provision of parking and potential traffic impacts associated with school operations. The project team discussed options to mitigate the impacts of this issues, as outlined in **Section 8** of this EIS.

7.3. GOVERNMENT ARCHITECT NSW

The Project Team and DoE stakeholders met with the Government Architects Office on 30 January 2018. Preliminary feedback was provided by the Government Architects Office regarding how the development has considered the context of the broader public domain and how design development has responded to this context. TDK have considered three options for the school, 'Option C' was selected as the most appropriate

response to the surrounding context, as it retains the old admin block and the heritage building. The mass is located on the southern side of the site which give the school a new face and a better connection to the outdoor play area and St Albans Road.

The Government Architect will provide formal feedback from the meeting within 10 days of the meeting for the project team to incorporate into the design.

7.4. TRANSPORT FOR NSW

The project team has contacted TfNSW to consult regarding the project. Any feedback received by TfNSW will be considered during the assessment of the application and the formal referral process. Any amendments to the scheme resulting from this feedback will be considered with the feedback from the broader community during the exhibition period.

7.5. ROADS AND MARITIME SERVICES

The project team has contacted RMS to consult regarding the project. Feedback was provided by RMS in March 2018 stating that there is no comment for Council's consideration in the determination of the application.

7.6. LOCAL ABORIGINAL LAND COUNCIL

Community consultation with the Aboriginal community has commenced and is expected to be completed by early April 2018. An Aboriginal Cultural Heritage Assessment report will be prepared which details such consultation. The Aboriginal community will be welcomed to provide feedback on the methodology proposed for further investigation. This feedback will inform future site investigations.

RECOMMENDATIONS AND MITIGATION MEASURES 8.

A range of mitigation measures are proposed to reduce potential environmental and social impacts of the proposal. Table 7 below provides a summary of the mitigation measures proposed to be undertaken as part of the development.

Table 7 - Mitigation Measures

Item	Potential Impact	Mitigation Measures
Overshadowing	Overshadowing of adjoining residential properties.	 The orientation, bulk and scale of the proposed school buildings minimise overshadowing impacts to adjoining residential properties, as outlined in Section 6.1.
Privacy	Adverse visual and acoustic privacy impacts on surrounding residential properties and recreational areas.	 Retention of existing trees along the western boundaries to screen the proposal and prevent onlooking from the adjacent residential property. The proposed school building will be setback between 11.25m and 16.57m to the western boundary, away from the closest residential receiver. The proposed school building will be setback 2.17m from St Albans Road. St Albans Road will provide an additional buffer between the school and residential properties on the north of the road. Implementation of recommendations outlines within the Construction Noise and Vibration Management Report.
Biodiversity	Vegetation clearing, loss of fauna habitat, threatened species.	 Implementation of recommendations outlined in the Ecology Report including the following: Appropriate tree protection measures should be in place prior to construction works commencing for all trees identified for retention (e.g. wooden tree guards, exclusion fencing). Where trees are unavoidably impacted, supplementary trees and shrubs should be planted post construction (e.g. site landscaping). Refer to Landscape Plans at Appendix N. Preferably use species characteristic of the local ecological community, Cumberland Shale Plains Woodland, for landscaping. However, there is no objection to using exotics and other introductions provided that they are known not to naturalise in local bushland. Fauna habitat variety should be maintained and enhanced where possible. Increasing floristic

Item	Potential Impact	Mitigation Measures
		diversity through plantings of shrub and tree species around the School would be highly beneficial, especially locally occurring native plants that produce nectar, pollen and fruits, including winter-flowering canopy trees, and patches of dense vegetation cover. Landscape diversity has been included in the Landscape Plans at Appendix N.
		• Immediately prior to the removal of vegetation and debris, a pre-clearance survey should be undertaken by a qualified Fauna Spotter/Catcher to identify and relocate fauna that may be disturbed, injured or killed during clearing (e.g. nesting birds).
		Use a slow-drop method for the removal of identified habitat trees (i.e. those containing nests, dreys and hollows) and have a qualified Ecologist or member of WIRES present during clearing to ensure that any fauna encountered are removed to a carer or relocated to a nearby safe site
Transport and Accessibility	Traffic impacts, demand for on-site staff car parking.	Implementation of measures outlined within the Traffic Impact Assessment including:
		That the school prepare a detailed Green Travel Plan for staff outlining all public and active transport opportunities and strategies by which to reduce private vehicle travel.
		 That a staggered scheme for pick-up/drop-off be implemented to reduce congestion during peak periods.
		That a more detailed Construction Traffic Management Plan be developed further to the finalisation of the construction program.
		 The existing access and parking arrangements comply with the relevant sections of AS 2890.1 (2004), AS 2890.2 (2002), AS 2890.3 (2015) and AS 2890.6 (2009).
		Consult with Blacktown City Council in respect to Council's proposed bus bay on Junction Street.
Construction Vehicles	Adverse construction vehicle impacts on	Implementation of measures outlined within the Preliminary Construction Management Report.
	surrounding residents.	All truck drivers will be provided with a copy of the proposed dedicated site access route.

Item	Potential Impact	Mitigation Measures
		Dedicated traffic controller will be employed at the construction vehicle access point off St Albans Road to direct traffic and uphold pedestrian safety.
		The following strategies will be employed by DoE to manage demand for on-site staff carparking:
		 Provision of 17 spaces on-site car parking spaces, including an accessible pick-up and drop-off zone within the carpark.
		 Green Travel Program.
		 Car-pooling initiatives.
Wind	Wind conditions at ground level students walkway areas.	As outlined at Appendix X , Vipac does not predict any exceedance of the various recommended criteria for the pedestrian level winds at the ground level and walkway at the first floor as a result of the proposed development. Therefore, Vipac makes no recommendations for the alterations of the design as proposed.
Crime and Safety	Crime risk to safety of students, staff and visitors.	The proposed development incorporates CPTED principles to deter crime. Incorporated principles include:
		 Incorporating an open palisade fence around the perimeter of the site;
		 Providing adequate lighting throughout the site. This includes at footpaths and entrances;
		 Installing identification signs depicting the name of the School at the St Albans Road site entrance to reinforce the School presence;
		 Ensuring that a strong teacher presence will be felt throughout the School;
		 Incorporating sturdy and well-designed outdoor lighting fixtures, equipment and furniture; and
		 Providing balconies and windows at the upper levels of the proposed School buildings to ensure passive and informal surveillance is available onto surrounding streets.
Acoustic and Vibration	Noise generation during construction and operation of the School.	Construction Noise & Vibration
		Selection of quietest feasible construction equipment;
		 Localised treatment, such as barriers, shrouds and the like around fixed plant, such as pumps, generators and concrete pumps;

Item	Potential Impact	Mitigation Measures
		Provision of respite periods, particularly on Saturdays;
		Trial testing of vibration levels where equipment is identified as having the potential to exceed the human comfort criteria;
		Plant Noise Audit – Noise emission levels of all mobile plant and equipment should be checked for compliance with noise limits appropriate to those items prior to the equipment going into regular service. Testing should be established with the contractor;
		Operator Instruction – Operators should be trained in order to raise their awareness of potential noise problems and to increase their use of techniques to minimise noise emission;
		Equipment Selection – All fixed plant at the work sites should be appropriately selected, and where necessary, fitted with silencers, acoustical enclosures and other noise attenuation measures in order to ensure that the total noise emission from each work site complies with EPA guidelines; and
		Site Noise Planning – Where practical, the layout and positioning of noise-producing plant and activities on each work site should be optimised to minimise noise emission levels.
		Operation
		At this stage, no design of the PA system has been determined. However, the following measures should be adopted to ensure that their impact at all surrounding residences is minimised:
		 Speakers should be located and orientated to provide good coverage of the school areas whilst being directed away from residences. System coverage should be reviewed during the detail design stage.
		 The volume of the system should be adjusted on site so that announcements and bells are clearly audible on the school site without being excessive. The system should initially be set so that noise at surrounding residences does not exceed the ambient noise levels by more than 5dBA.
		 Once the appropriate level has been determined on site, the system should be

Item	Potential Impact	Mitigation Measures
		limited to the acceptable level so that staff cannot increase noise levels.
		 The system bell should be set so that it only occurs on school days.
Contamination	Disturbance of asbestos materials.	Implementation of recommendations outlined within the Stage 1 Environmental Site Assessment.
		Implementation of Remedial Action Plan (RAP) if required.
Tree Protection	Construction impacts on retained trees.	Implementation of recommendations outlined within the Arboricultural Assessment & Development Impact Report to ensure significant trees retained are protected during construction.
European Heritage	Impacts on the local heritage listing.	 Tree removal should be based on the recommendations included in the Arboricultural Assessment & Development Impact Report. Thereby, maintaining the Prime Minister John Curtin tree and a tree grown from a seed. Undertake construction and demolition works in accordance with the Architectural Plans provided at Appendix A, to ensure no impact to the 1923 school buildings.
Aboriginal Archaeology	Impacts on potential Aboriginal archaeology sites.	 Regard and implementation of the recommendations outlined in the Aboriginal Archaeology Assessment: Once consultation has been undertaken, archaeological testing is required to determine the nature and extent of any archaeological deposit should be undertaken in consultation with the Registered Aboriginal Parties, prior to any bulk excavation, piling, redevelopment or any activity that disturbs the ground surface. If archaeological objects are uncovered a program of archaeological salvage should be undertaken, in association with the Registered Aboriginal Parties, prior to any redevelopment of the site. This should be undertaken immediately after the testing.
Historical Archaeology	Impacts on potential historical archaeology sites.	 Implement the recommendations outlined in the Historical Archaeology Assessment including: Any ground disturbance in the vicinity of the two historic toilet blocks and possible cesspits should be monitored by an experienced and qualified archaeologist. If evidence of the cesspits is uncovered the following should be undertaken.

Item	Potential Impact	Mitigation Measures
		 They should be recorded in detail including surveying their location onto a plan of the site. The recording should include scale drawings and photographs.
		 If they are to be impacted upon, they should be excavated first by a qualified archaeologist, as they have the potential to contain relics.
		 Any relics retrieved should be photographed and catalogued.
		If any previously unexpected archaeological deposits are uncovered during the course of the proposed works, all work must cease in the vicinity of that archaeological deposit while advice is sought from an experienced and qualified archaeologist.
Stormwater Management	Impacts from stormwater	Implementation of proposed stormwater concept plan and erosion and sediment control plan.
Waste	Excessive waste generation	Implementation of Construction Waste Management Plan and Operational Waste Management Plan.
		Waste generated during construction is to be removed by a licensed waste contractor and disposed of in a licensed landfill facility if/as required.
		Segregate and recycle solid waste generated by construction activities.
		Reduce waste by selecting, in order of preference, avoidance, reduction, reuse and recycling.
		Consider measures and performance based targets for reduction, reuse and recycling.
Erosion and Sediment Control	Erosion and sediment runoff into adjacent watercourse.	Ensure during construction, erosion and sediment control measures will be provided in accordance with the "Blue Book" and "Guidelines for Developments adjoin land managed by the Office of Environment and Heritage."
		Measures will include silt fences on the low side of the works and construction exits for vehicles.
		Ensure water quality measures comply with the Blacktown Control Development Plan 2015 Part J.
		Ensure on-site detention system will cater for all storm events up to and including 1% AEP storm events.

Item	Potential Impact	Mitigation Measures
Geotechnical	Structural impacts to soil.	Implementation of recommendations outlined in the Geotechnical Report including the following:
		All earthworks recommendations should be completed by reference to AS3798-2007.
		 Following tree and vegetation removal, any contaminated fill should be removed. The topsoil should be separately stockpiled for possible use for landscaping.
		If considered to be an important contractual issue, it is recommended that a number of test pits be excavated across the proposed school building footprint to more accurately assess the topsoil/root affected soil stripping depth.
		Excavation down to design subgrade level, where required, may be completed using buckets fitted to a hydraulic excavator.
		The earthworks should be carefully planned and scheduled to maintain good cross-falls during construction.
		 Following site stripping and excavation down to design subgrade level, where required, we recommend that the subgrade over the proposed school building and pavement footprints be proof rolled with at least six passes of a static smooth drum roller of at least 12 tonnes deadweight.
		Subgrade heaving during proof-rolling may occur in areas where the clays have become 'saturated' or in areas where poorly compacted fil is present.
		If soil softening occurs after rainfall periods, then the clay subgrade should be over-excavated to below the depth of moisture softening and replaced with engineered fill. If the clay subgrade exhibits shrinkage cracking, then the surface should be watered and rolled until the shrinkage cracks are no longer evident.
		Engineered fill must be used where site levels need to be raised.
		 A combination of pad/strip footings and bored piles are likely to be required. Bored piles will be required where the bedrock is at least 1.5m below the proposed ground floor level.

Item	Potential Impact	Mitigation Measures
		Footings founded in shale bedrock may be designed for a maximum allowable bearing pressure of 700kPa. Footings founded into low strength or stronger shale bedrock may be designed for a maximum allowable end bearing pressure of 1,000kPa.
		 All piles/footings should be drilled/excavated, cleaned out, inspected and poured with minimal delay.
		Ground beam between footings be poured over a void former at least 50mm thick so as to isolate the beams from the underlying clay soils.
		The on-grade floor slab should be isolated from the walls, columns and footings of the proposed building so as to permit relative movements.
		 Joints in the concrete on-grade floor slab should be designed to accommodate shear forces but not bending moments by using dowelled or keyed joints.
		Based on the investigation results, we recommend that the proposed pavements be designed on the basis of a CBR value of 3% or a Short-Term Young's Modulus of 20MPa.
		 All base course materials comprise DGB20 in accordance with RMA Specification D&C 3051 unbound base.
		Density tests should be regularly carried out on the granular pavement materials to confirm the above specifications are achieved.
		Subsoil drains should be provided below the edges of the proposed pavements with invert levels at least 200mm below design subgrade level.
Salinity	Impacts from high levels of salinity.	Implementation of recommendations outlined in Salinity Assessment including:
		 In the absence of endorsed recommendations for buildings in saline environments, reference is made to the CCAA 2005. The guide provides recommendations on the minimum concrete grade/strength required for slabs and footings in saline soils.
		 In designing for durability, reference should be made to the requirements listed in the AS2159- 2009.

Item	Potential Impact	Mitigation Measures
		 All fill/topsoil imported onto site should also be free from contamination. In the event that any fill/topsoil is imported onto the site it should meet the importation criteria.

9. SUMMARY AND CONCLUSIONS

The proposal has been assessed against all items contained in the SEARs and we conclude that:

- The proposal satisfies the applicable local and state planning policies;
- The design positively responds to the site conditions and future urban morphology;
- The proposal is highly suitable for the site;
- The proposal is in the public interest; and
- The proposal appropriately satisfies each item within the SEARs.

The site is considered highly suitable for the proposal for the following reasons:

- The land is zoned R2 Low Density Residential under the Growth Centre SEPP. The proposed development is permissible with consent and consistent with the land use objectives of R2 Low Density Residential zoning;
- The land is already used for educational purposes. The site is at capacity and the proposal continues this educational use;
- The proposal is consistent with the objectives of all relevant planning controls and achieves a high level of planning policy compliance;
- There are no significant environmental constraints limiting development on the site; and
- The development and increase in students and staff will not generate unreasonable impacts on the surrounding locality.

The proposal is in the public interest because:

- The proposed works are permissible with consent and have been prepared having regard to Education SEPP and Growth Centre SEPP;
- The proposal has been prepared having regard to Council's planning policies and generally complies with the aims and objectives of the controls for the site;
- The proposal is suitable for the site as evidenced by the site analysis and various site investigations, including geotechnical, archaeology, site contamination and flora and fauna;
- Subject to the various mitigation measures recommended by the specialist consultants, the proposal and
 increase in staff and students does not have any unacceptable impacts on adjoining or surrounding
 properties or the public domain in terms of traffic, social and environmental impacts;
- The site is well serviced by public transport, school buses and walking and cycling routes. The proposal encourages non-private vehicles options for staff to access the site.
- The proposal will result in a high quality educational environment for staff and students with learning difficulties that;
 - Provides expanses of open space for students;
 - Enables an excellent academic programme;
 - Supports a fulfilling and diverse extra-curricular experience;
 - Provides an inclusive, supportive and secure pastoral environment; and
 - Provides efficient and environmentally sustainable facilities.
- The proposal will make a positive contribution to the built form of Schofields and create an attractive streetscape along St Albans Road; and

The proposal will contribute positively to energy efficiency and environmental sustainability. The design
has incorporated many ESD features to reduce energy consumption during the life of the proposed
development.

Considering the above and the content contained to this EIS, it is recommended that the DPE approve this SSDA, subject to appropriate conditions.

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A ARCHITECTURAL PLANS

APPENDIX B SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

APPENDIX C QUALITY SURVEYORS COST ASSESSMENT

APPENDIX D ARBORICULTURAL ASSESSMENT & DEVELOPMENT IMPACT REPORT

APPENDIX E FLORA AND FAUNA ASSESSMENT

APPENDIX F HERTIAGE IMAPCT ASSESSMENT

APPENDIX G ABORIGINAL ARCHAEOLOGICAL ASSESSMENT

APPENDIX H HISTORICAL ARCHAEOLOGICAL ASSESSMENT

APPENDIX I INFRASTRUCTURE OVERVIEW PLAN

APPENDIX J SITE SURVEY

APPENDIX K TRAFFIC IMPACT ASSESSMENT

APPENDIX L URBAN DESIGN REPORT

APPENDIX M CONSTRUCTION MANAGEMENT PLAN

APPENDIX N LANDSCAPE PLAN

APPENDIX 0

OPERATIONAL WASTE MANAGEMENT PLAN AND CONSTRUCTION WASTE MANAGEMENT PLAN

APPENDIX P STORMWATER MANAGEMENT REPORT AND PLANS

APPENDIX Q ECOLOGICALLY SUSTAINABLE DEVELOPMENT REPORT

APPENDIX R ACCESSIBILITY REPORT

APPENDIX S STAGE 1 ENVIRONMENTAL SITE ASSESSMENT

APPENDIX T SALINITY ASSESSMENT

APPENDIX U REMEDIATION ACTION PLAN

APPENDIX V GEOTECHNICAL REPORT

APPENDIX W NOISE IMPACT ASSESSMENT

APPENDIX X WIND IMPACT ASSESSMENT REPORT

APPENDIX Y CONSULTATION OUTCOMES REPORT

APPENDIX Z BCA REPORT



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