



ENVIRONMENTAL IMPACT STATEMENT

CURL CURL NORTH PUBLIC SCHOOL

14 AUGUST 2017
PREPARED FOR NSW DEPARTMENT OF EDUCATION



URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Associate Director	Alaine Roff
Assistant Planner	Jarred Statham
Project Code	SA6451

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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) <i>Bachelor of Arts, University of Newcastle, NSW</i> <i>Master of Town Planning, University of New South Wales</i>
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:	Lot 1 DP 731454 and Lot 286 DP 752038
Project:	Redevelopment of Curl Curl North Public School for approximately 1,000 students, including new classrooms, open spaces, sports fields 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:	 14 August 2017

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_8310 for the redevelopment of 'Curl Curl North Public School' at Playfair Road, North Curl Curl (the 'site').

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

THE PROPOSAL

'Curl Curl North Public School' (the 'School') currently accommodates a maximum of 920 students and 70 staff. The redeveloped School is proposed to accommodate up to 1,000 students from Kindergarten to Year 6, and a total of 76 staff (65 teachers and 11 administration persons). This rate constitutes an increase of 80 students and 6 staff. The proposal works will also generate 120 to 125 temporary construction jobs.

The proposal will facilitate an additional 80 students to take enrolment pressure off the existing School which currently exceeds student capacity, and accommodate future population growth within the Northern Beaches 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 EIS seeks development consent for the following works at the site:

- Demolition of existing buildings (excluding Block M and library);
- Construction of multiple school buildings arranged in a U-shape comprising:
 - Collaborative learning spaces;
 - Classrooms;
 - Offices for teachers and administrative staff;
 - Library; and
 - Student canteen.
- Retention and reconfiguration of Block M and existing library block;
- Construction of sports court, futsal fields and multiple handball courts;
- Construction of new on-site staff carpark and associated vehicular access point off Abbott Road;
- Associated site landscaping including new COLA, bush play, central playground and lawns; and
- Augmentation and construction of ancillary infrastructure and utilities as required.

THE SITE

The site is located at Playfair Road, North Curl Curl within the Northern Beaches LGA. It comprises two lots legally described as Lot 1 DP 731454 and Lot 286 DP 752038. The site is irregular in shape and is bound by Abbott Road to the south and Playfair Road to the west.

The site currently contains the existing Curl Curl North Public School, which comprises demountable classrooms and outdated 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 15 of *State Environmental Planning Policy (State and Regional Development) 2011*, development for an 'educational establishment' (including associated research facilities) with a capital investment value (CIV) of more than \$30 million is identified as 'State Significant Development'.

The CIV for the proposal is calculated at over \$30 million. This is detailed in the Quantity Surveyors Cost Assessment at **Appendix B**. As the cost of works exceeds \$30 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 Secretary's Environmental Assessment Requirements issued for the project on 5 April 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 Secretary's Environmental Assessment Requirements:** 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 SSDA, 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 5 April 2017 are addressed within this report and included in full at Appendix A.

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	
<p>The Environmental Impact Statement (EIS) must be prepared in accordance with, and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> (the Regulation).</p> <p>Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.</p> <p>Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include:</p> <ul style="list-style-type: none"> • Adequate baseline data; • Consideration of potential cumulative impacts due to other development in the vicinity (complete, underway or proposed); and • Measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment. 	<p>The EIS has been prepared in accordance with the Secretary's Requirements and meets the minimum form and content requirements specified in Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>The EIS includes a comprehensive assessment of the environmental risks and impacts associated with the development.</p>
<p>The EIS must be accompanied by a report from a qualified quantity surveyor providing:</p> <ul style="list-style-type: none"> • 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. 	Appendix B

Item/ Description	Document Reference
<p>B. Key Issues – The EIS must address the following specific matters:</p>	
<p>1. Statutory and Strategic Context</p> <p>Address the statutory provisions contained in all relevant environmental planning instruments, including:</p> <ul style="list-style-type: none"> • <i>State Environmental Planning Policy (State and Regional Development) 2011;</i> • <i>State Environmental Planning Policy (Infrastructure) 2007;</i> • <i>State Environmental Planning Policy 55 - Remediation of Land;</i> • <i>Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017;</i> and • <i>Warringah Local Environmental Plan 2011.</i> <p><i>Permissibility:</i> Detail the nature and extent of any prohibitions that apply to the development.</p> <p><i>Development Standards:</i> Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.</p>	<p>Section 4</p>
<p>2. Policies</p> <p>Address the relevant planning provisions, goals and strategic planning objectives in the following:</p> <ul style="list-style-type: none"> • <i>NSW State Priorities;</i> • <i>A Plan for Growing Sydney;</i> • <i>NSW Long Term Transport Master Plan 2012;</i> • <i>Sydney's Cycling Future 2013;</i> • <i>Sydney's Walking Future 2013;</i> • <i>Sydney's Bus Future 2013;</i> • <i>Healthy Urban Development Checklist, NSW Health;</i> • <i>Greater Sydney Commission's Draft North District Plan;</i> and • <i>Warringah Development Control Plan 2011.</i> 	<p>Section 5</p>
<p>3. Built Form and Urban Design</p> <ul style="list-style-type: none"> • Address the height, density, bulk and scale, setbacks of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces. • Address design quality, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building 	<p>Section 5.7, Section 6.1, and Appendix E</p>

Item/ Description	Document Reference
<p>articulation, materials, colours and Crime Prevention Through Environmental Design Principles.</p> <ul style="list-style-type: none"> Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development. 	
<p>4. Environmental Amenity</p> <ul style="list-style-type: none"> 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
<p>5. Transport and Accessibility</p> <p>Include a transport and accessibility impact assessment, which details, but not limited to the following:</p> <ul style="list-style-type: none"> Accurate details of the current daily and peak hour vehicle, public transport, pedestrian and cycle movement and existing traffic and transport facilities provided on the road network located adjacent to the proposed development; An assessment of the operation of existing and future transport networks including the bus network and their ability to accommodate the forecast number of trips to and from the development; Details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips; The adequacy of public transport, pedestrian and bicycle networks and 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 Roads and Maritime Services and Transport for NSW and identify measures to integrate the development with the transport network; Details of any upgrading or road improvement works required to accommodate the proposed development; The preparation of a Green Travel Plan that outlines proposals to encourage sustainable travel choices and details programs for implementation; 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 upgrading or road improvement works, if required (note: traffic modelling is to be undertaken with scope to be agreed by TfNSW and RMS in advance); 	Section 6.4 and Appendix Z.

Item/ Description	Document Reference
<ul style="list-style-type: none"> • The proposed active transport access arrangements and connections to public transport services; • The proposed access arrangements, including car and bus pickup/drop-off facilities, and measures to mitigate any associated traffic impacts and 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; • The proposed car and bicycle parking provision, including end of trip facilities, which must be taken into consideration of the availability of public transport and the requirements of Council's relevant parking codes and Australian Standards; • Proposed bicycle parking facilities in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance; • Details of the proposed number of car parking spaces and compliance with appropriate parking codes and justify the level of car parking provided on-site; • Details of emergency vehicle access arrangements; • An assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures; • Service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times); • In relation to construction traffic: <ul style="list-style-type: none"> – Assessment of cumulative impacts associated with other construction activities (if any); – An assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity; – Details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process; – Details of anticipated peak hour and daily construction vehicle movements to and from the site; – Details of access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle; – Details of temporary cycling and pedestrian access during construction; – Details of proposed construction vehicle access arrangements at all stages of construction; and – Traffic and transport impacts during construction, including cumulative impacts associated with other construction activities, and how these impacts will be mitigated for any associated traffic, pedestrian, cyclists, parking and public transport, including the preparation of a draft 	

Item/ Description	Document Reference
<p>Construction Traffic Management Plan to demonstrate the proposed management of the impact.</p> <p>→ <u>Relevant Policies and Guidelines:</u></p> <ul style="list-style-type: none"> • <i>Guide to Traffic Generation Developments (Road and Maritime Services)</i> • <i>EIS Guidelines – Road and Related Facilities (DoPI)</i> • <i>Cycling Aspects of Austroads Guides</i> • <i>NSW Planning Guidelines for Walking and Cycling</i> • <i>Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development</i> • <i>Standards Australia AS2890.3 (Bicycle Parking Facilities)</i> 	
<p>6. Ecologically Sustainable Development (ESD)</p> <ul style="list-style-type: none"> • Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>) 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. 	<p>Section 3.10 and Appendix S</p>
<p>7. Social Impacts</p> <p>Include an assessment of the social consequences of the schools' relative location.</p>	<p>Section 6.9, Appendix BB and Appendix CC</p>
<p>8. Biodiversity</p> <p>Flora and fauna impacts related to the proposal are to be assessed.</p>	<p>Section 6.5, Appendix F and Appendix G</p>
<p>9. Noise and Vibration</p> <p>Identify and provide a quantitative assessment of the main noise and vibration generating sources during construction and operation, including consideration of any public address system, school bell and use of any school hall for concerts etc. (both during and outside school hours), and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.</p> <p>→ <u>Relevant Policies and Guidelines:</u></p> <ul style="list-style-type: none"> • <i>NSW Industrial Noise Policy (EPA)</i> • <i>Interim Construction Noise Guideline (DECC)</i> • <i>Assessing Vibration: A Technical Guideline 2006</i> 	<p>Section 6.6 and Appendix V</p>

Item/ Description	Document Reference
<ul style="list-style-type: none"> • <i>Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning 2008)</i> 	
<p>10. Sediment, Erosion and Dust Controls</p> <p>Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles.</p> <p>→ <u>Relevant Policies and Guidelines:</u></p> <ul style="list-style-type: none"> • <i>Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom)</i> • <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)</i> • <i>Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)</i> 	<p>Section 6.7 and Appendix K</p>
<p>11. Contamination</p> <p>Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55.</p> <p>→ <u>Relevant Policies and Guidelines:</u></p> <ul style="list-style-type: none"> • <i>Managing Land Contamination: Planning Guidelines – SEPP 55 Remediation of Land (DUAP)</i> 	<p>Section 4.3, Appendix H, Appendix I and Appendix FF</p>
<p>12. Utilities</p> <ul style="list-style-type: none"> • Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation 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 use of potable and non-potable water, and water sensitive urban design. 	<p>Section 3.8, Appendix X, Appendix Y and Appendix J</p>
<p>13. Contributions</p> <p>Address Council's Section 94A Contribution Plan and/or details of any Voluntary Planning Agreement.</p>	<p>Section 4.7</p>
<p>14. Drainage</p> <p>Detail drainage associated with the proposal, including stormwater and drainage infrastructure.</p> <p>→ <u>Relevant Policies and Guidelines:</u></p> <ul style="list-style-type: none"> • <i>Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)</i> 	<p>Section 6.8 and Appendix M</p>

Item/ Description	Document Reference
<p>15. Flooding</p> <p>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>	<p>Section 6.8 and Appendix N</p>
<p>16. Waste</p> <p>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.</p>	<p>Section 3.7, Appendix P and Appendix Q</p>
<p>C. Plans and Documents – The EIS must include the following:</p>	
<p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>. Provide these as part of the EIS rather than as separate documents.</p> <p>In addition, the EIS must include the following:</p> <ul style="list-style-type: none"> • 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; • Landscape Plan (identifying any trees to be removed and trees to be retained or transplanted); • Preliminary Construction Management Plan, inclusive of a Preliminary Control 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 	<p>Appendix A - FF</p>

Item/ Description	Document Reference
<ul style="list-style-type: none"> Schedule of materials and finishes. 	
D. Consultation	
<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>In particular you must consult with:</p> <ul style="list-style-type: none"> Northern Beaches Council; Transport for NSW; and Roads and Maritime Services. <p>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.</p>	<p>Section 7 and Appendix EE</p>

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_8310 for the development of 'Curl Curl North Public School'. Specifically, this EIS seeks development consent for the following works at the site:

- Demolition of existing buildings (excluding Block M and library);
- Construction of multiple school buildings arranged in a U-shape comprising:
 - Collaborative learning spaces;
 - Classrooms;
 - Offices for teachers and administrative staff;
 - Library; and
 - Student canteen.
- Retention and reconfiguration of Block M and existing library block;
- Construction of sports court, futsal fields and multiple handball courts;
- Construction of new on-site staff carpark and associated vehicular access point off Abbott Road;
- Associated site landscaping including new COLA, bush play, central playground and lawns; and
- Augmentation and construction of ancillary infrastructure and utilities as required.

This is shown in the Architectural Drawings prepared by TKD at Appendix D.

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

On 5 April 2017, SEARs were issued by the DPE for SSD 17_8310 'Curl Curl North Public School Redevelopment'. The SEARs are contained within this EIS and provided at Appendix A.

1.3. REPORT STRUCTURE

This EIS provides the following:

- A description of the site and surrounding context; including identification of the site, existing development on the site, and surrounding development.
- A detailed description of the proposed development;
- An assessment of the proposed development against the relevant strategic and statutory planning controls;
- An assessment of the key issues and impacts generated by the proposed development; and

- A detailed description of the consultation undertaken with respect to the proposal.

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

1.4. PROJECT TEAM

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

Table 2 – Project Team

Deliverable	Consultant	Appendix
Secretary's Environmental Assessment Requirements	NSW Department of Planning	Appendix A
Capital Investment Value Report	Slattery	Appendix B
Site Survey	CMS Surveyor	Appendix C
Architectural Plans	TKD Architects	Appendix D
Urban Design Report	TKD Architects	Appendix E
Arborist Report	BLUEGUM	Appendix F
Flora and Fauna Impact Assessment Report	Eco Logical Australia Pty Ltd	Appendix G
Stage 1 Environmental Site Assessment	Environmental Investigation Services	Appendix H
Hazardous Materials Assessment	Hibbs & Associates Pty Ltd	Appendix I
Integrated Water Management Plan	Woolacotts.	Appendix J
Sediment and Erosion Control Plan	Woolacotts.	Appendix K
Geotechnical and Structural Report	JK Geotechnics	Appendix L
Stormwater Management Report	Woolacotts.	Appendix M
Flood Risk Assessment Report	Woolacotts.	Appendix N
Landscape Plans	Context	Appendix O
Preliminary Construction Management Plan	TKD	Appendix P
Construction and Demolition Waste Management Plan	Foresight Environmental	Appendix Q
Operational Waste Management Plan	Foresight Environmental	Appendix R
Ecological Sustainable Development Report	Umow Lai	Appendix S
Building Code of Australia Report	Design Confidence	Appendix T
Access Design Assessment Report	Design Confidence	Appendix U
Construction and Operational Noise Report	Wilkinson Murray	Appendix V

Deliverable	Consultant	Appendix
Wind Impact Assessment Report	Vipac	Appendix W
Infrastructure Management Plan	Shelmerdines Consulting Engineers	Appendix X
Hydraulic Site Services Availability Statement	AJ Whipps	Appendix Y
Transport and Accessibility Impact Report	Traffix	Appendix Z
Preliminary Construction Traffic Management Plan	Traffix	Appendix AA
Social Impact Assessment Report	Urbis	Appendix BB
CPTED Assessment Report	Urbis	Appendix CC
Heritage Statement	TKD	Appendix DD
Consultation Outcomes Report	Coffey	Appendix EE
Remediation Action Plan	Environmental Investigation Services	Appendix FF

2. THE SITE AND SURROUNDING CONTEXT

2.1. SUBJECT SITE

The site is located at Playfair Road, North Curl Curl within the Northern Beaches Local Government Area (**Figure 1**). It comprises two lots legally described as Lot 1 DP 731454 and Lot 286 DP 752038.

The site is irregular in shape, has a total site area of approximately 27,982sqm and has two street frontages: a 134m frontage to Abbott Road to the south and a 219m frontage to Playfair Road to the west.

Figure 1 – The Site



Source: Nearmap

2.2. EXISTING DEVELOPMENT

The site currently contains Curl Curl North Public School, which accommodates a maximum of 920 students and 70 staff. These staff comprise 61 teachers and 9 administration persons. The existing School contains:

- Demountable classrooms and single-storey wooden classroom buildings;
- Covered outdoor learning area (COLA);
- At-grade staff carpark containing 21 car spaces (including 1 disabled space);
- Outdoor sports court and playground;
- Open sports field; and
- School library.

The proposed School also contains 8 drop off/pick up spaces (a 44.4m 'No Parking 8:30am-9:30am School Days' zone) located off-site along Playfair Road.

Images of the existing School are identified in **Figure 2 - Pictures 1 to 6.**

Figure 2 – Existing Development at the Site



Picture 1 – Looking North-East: Existing Fig Tree
Source: Urbis



Picture 2 – Looking West: Existing Sports Court
Source: Urbis



Picture 3 – Looking South-East: Existing Block M
Source: Urbis



Picture 4 – Looking North-East: Existing Classrooms
Source: Urbis



Picture 5 – Looking East: Existing COLA
Source: Urbis



Picture 6 – Looking East: Existing Playfair Entrance
Source: Urbis

2.3. SITE ACCESS

2.3.1. Vehicular Access

The site currently contains 3 vehicular access points. The primary vehicular access point is provided off Playfair Road near the existing library block, and connects to the on-site staff car park. Secondary vehicular entries for use by service and emergency vehicles are provided off Playfair Road near the existing 'children's crossing', and off Abbott Road near the existing playground.

2.3.2. Pedestrian Access

The site currently contains 6 pedestrian access points into the site:

- Off Playfair Road, at the north-western site boundary;
- Off Playfair Road, near existing demountables and Block H;
- Off Playfair Road, adjacent to the existing 'children's crossing';
- Off Abbott Road, adjacent to the existing 'zebra' crossing;
- Off Abbott Road at the south-eastern site boundary; and
- Off Ross Street, through a pedestrian pathway that connects to the School.

2.4. FLORA AND FAUNA

An Arborist Report has been prepared by BLUEGUM and is attached at Appendix F. A Flora and Fauna Assessment was also prepared by Eco Logical Australia and is attached at Appendix G. These reports identified the following flora and fauna at the site:

2.4.1. Flora

- There are 276 trees at the site, of which 60 were assessed as having High Retention Value, 187 as Medium Retention Value and 29 as Low Retention Value.
- No hollow-bearing trees were recorded at the site.
- Most vegetation present at the site consists of grassed open space, and landscaped areas containing exotic and commonly planted urban native vegetation.
- No threatened ecological communities were recorded at the site.

2.4.2. Fauna

The site is not considered to provide suitable habitat to support threatened fauna species listed under the *Threatened Species Conservation Act 1995* (TSC Act) or the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). No threatened fauna species were recorded at the site.

2.5. ACID SULFATE SOILS

As per the *Warringah Local Environmental Plan 2011* and Environmental Site Assessment attached at Appendix H, the entire site contains Class 5 Acid Sulfate Soils.

2.6. SERVICES

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

2.7. TOPOGRAPHY

The site falls by approximately 7m from north to south, with an even gradient to the low point at the south-east corner. A Site Survey has been attached at Appendix C.

2.8. HERITAGE

2.8.1. European Heritage:

The site does not contain any items of heritage significance, is not located near surrounding heritage items and is not located within a heritage conservation area. This is reaffirmed within the Heritage Impact Statement prepared by TKD at Appendix DD.

2.8.2. Aboriginal Heritage:

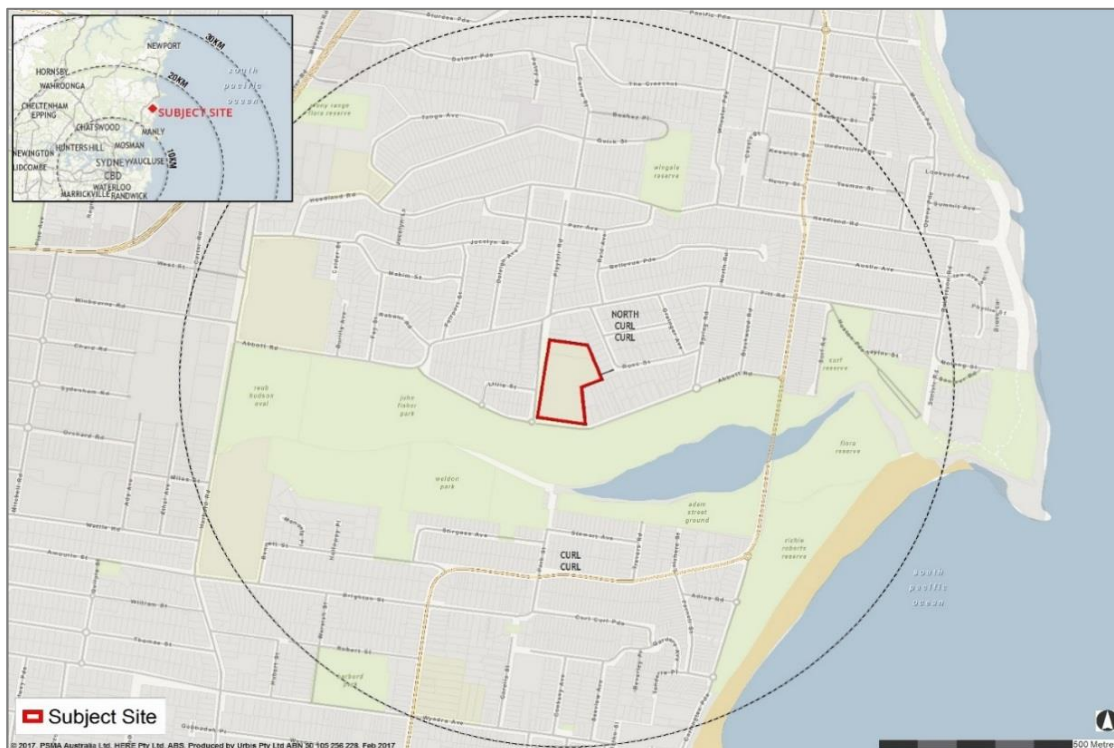
A review of the NSW Aboriginal Heritage Information Management System (AHIMS) was undertaken to identify recorded Aboriginal sites or places on and around the site. The AHIMS search found no Aboriginal sites or places within 200m of the site.

2.9. SITE CONTEXT AND SURROUNDING DEVELOPMENT

North Curl Curl is located on Sydney's Northern Beaches, 1.2km from Dee Why Town Centre, 3.6km from Manly CBD and 13.5km from Sydney CBD. At a local level, the site is within an established residential neighbourhood, surrounded by low-density dwellings, neighbourhood shops and public open spaces. The site is surrounded by the following:

- To the north are multiple low-density residential dwellings. Further north is the North Curl Curl neighbourhood centre, containing a variety of neighbourhood shops.
- To the east are multiple low-density residential dwellings fronting Ross Street. Further east is North Curl Curl Beach.
- To the south-east is the Abbott Road sports grounds, containing netball courts, basketball courts and football fields. Further south-east is Curl Curl Lagoon.
- To the south opposite Abbott Road is the Curl Curl Sports Centre, Curl Curl Youth and Community Centre and the John Fisher Netball Courts.
- To the west opposite Playfair Road is Manly Selective Campus, servicing selective high school students from Year 7 to 12.

Figure 3 – Location Map



Source: Urbis / Nearmap

2.10. TRANSPORT CONTEXT

Bus:

The School is located close to multiple bus stops operating State Transit bus services:

- Route 159 – Manly Wharf to Dee Why via North Curl Curl.
- Route E36 – North Curl Curl to Manly Wharf.
- Route E76 – Dee Why to City via North Curl Curl.
- Route E77 – Dee Why to City via North Curl Curl.
- Route 136 – Manly to Chatswood via North Curl Curl.

The School is also serviced by four dedicated State Transit school bus services. These are:

- Route 682 – St John’s School, Freshwater to Pitt Road, North Curl Curl via Curl Curl North Public School (Note: operates 1 afternoon service).
- Route 757 – Curl Curl North Public School to Manly Wharf (Note: operates 1 afternoon service).
- Route 759 – Pitt Road, North Curl Curl to Curl Curl North Public School (Note: operates 1 morning service).
- Route 759 – Curl Curl North Public School to Headland Road, North Curl Curl (Note: operates 1 afternoon service).

Cycleways:

The site benefits from proximity to dedicated cycleways on Griffin Road, Harbord Road and on the foreshore of Greendale Creek. Adjoining Abbott Road is also marked as ‘bicycle friendly’.

3. THE PROPOSED DEVELOPMENT

3.1. OVERVIEW

This SSDA seeks development consent for the following works:

- Demolition of existing buildings (excluding Block M and library);
- Construction of multiple school buildings arranged in a U-shape comprising:
 - Collaborative learning spaces;
 - Classrooms;
 - Offices for teachers and administrative staff;
 - Library; and
 - Student canteen.
- Retention and reconfiguration of Block M and existing library block;
- Construction of sports court, futsal fields and multiple handball courts;
- Construction of new on-site staff carpark and associated vehicular access point off Abbott Road;
- Associated site landscaping including new COLA, bush play, central playground and lawns; and
- Augmentation and construction of ancillary infrastructure and utilities as required.

The proposed school will facilitate up to 1,000 students and 76 staff (65 teachers and 11 administration persons). This rate constitutes an increase of 80 students and 6 staff. The proposal works will also generate 120 to 125 temporary construction jobs. Further details of the proposal are provided in the subsections below and within Appendix A - FF. A Site Plan of the proposal can be seen in **Figure 4**.

Figure 4 – Site Plan of the Proposal



Source: TKD

3.2. BUILDING DESIGN PHILOSOPHY

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

- *“The main school entry and shared community facilities (hall, library, etc) are accessed from the Abbott/Playfair 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 buildings are arranged in a U-shape to create a central civic courtyard and connect outdoor areas with teaching spaces;*
- *The proposed buildings connect into existing buildings that have been deemed suitable for the current educational planning principles;*
- *Existing site access points are retained;*
- *Construction is kept well clear of the significant fig tree;*
- *The building is primarily two storeys in scale, which is in keeping with the predominate scale of the surrounding development;*
- *Verandah spaces provide a transition zone between indoor and outdoor spaces;*
- *The built form is broken into smaller components to allow permeability between buildings for pedestrians, natural light and ventilation;*
- *The built form provides a well-defined public face to the school along Abbott Road;*
- *The proposed buildings are kept distant from residential neighbours, reducing the chance of overshadowing and privacy issues;*
- *Play space is maximised in area; and*
- *Solar access is maximised to play areas and teaching spaces.”*

The proposed design appropriately responds to the urban design opportunities and constraints of the site, and will provide the best educational outcomes for future students, teachers and staff.

3.3. DEMOLITION AND SITE CLEARING

To facilitate the redevelopment of Curl Curl North Public School, the proposal seeks development consent to demolish all existing buildings from the site, excluding Block M and the existing library building. The existing COLA is also proposed to be retained. Demolition will be undertaken in accordance with the Demolition Plan attached at Appendix D, and the Preliminary Construction Management Plan at Appendix P.

Development consent is also sought to clear some existing vegetation and to remove up to 70 trees from the site. Flora and Fauna Impacts are discussed at Section 6.5 of this EIS.

3.4. BUILT FORM AND USE

The proposal is for new school buildings, staff carparking, sporting facilities and signage. The School will also reconfigure Block M and the existing library building.

Re-Use of Existing Library:

The existing library building is proposed to be reconfigured to contain new special program classrooms and a proposed new Out of School Hours (OOSH) service. The proposed new OOSH service will operate as per the existing OOSH service on-site: from 6.30am to 9am, and from 3.10pm to 7pm, Monday to Friday.

New School Buildings:

Multiple double-storey, multi-purpose school buildings are proposed to be constructed at the southern portion of the site to provide new state of the art school facilities, spaces and equipment for future students

and teachers. Existing Block M is also proposed to be reconfigured. The proposed new school buildings and reconfigured Block M are to be arranged in a U-shape and connected by awnings and a continuous roof.

The interconnected school buildings will provide:

- Collaborative learning spaces and classrooms;
- Communal hall;
- Specified toilets for males, females and staff;
- Private office space for teachers and administrative staff;
- School canteen; and
- Utilities/ services rooms.

Figure 5 – Proposed Development



Source: TKD

Parking:

A new on-site carpark containing 16 spaces (including 1 accessible space) is proposed to be constructed near the south-eastern boundary of the site off Abbott Road. Use of this carpark will be restricted to School teachers and staff. A total of 68 bicycle spaces are to be provided at the site. 20 spaces are to be located next to Block L, and 48 spaces are to be located next to Block E.

Sports Facilities:

The proposal includes multiple sporting facilities, comprising:

- Sports court;
- Multiple handball courts throughout the site; and
- New synthetic turf court to facilitate futsal fields.

Signage:

Two unilluminated 'Curl Curl North Public School' signs are proposed to be installed at the site. These comprise:

- Sign at Abbott Road site entrance – 9990mm (W) x 450mm (H).
- Sign at Playfair Road site entrance – 4130mm (W) x 1080mm (H).

Figure 6 – Proposed Signage Layout



Source: TKD

3.5. SITE ACCESS

3.5.1. Vehicular Access

The proposed School will contain three vehicular access points:

- An access driveway provided off Abbott Road near the south-eastern boundary of the site to serve the proposed on-site car park;
- An access driveway provided off Playfair Road near the proposed external toilet block to service waste pickup vehicles and service vehicles; and
- Existing secondary access driveway provided off Playfair Road to be retained to service emergency vehicles.

Each vehicular access point has been designed in accordance with the relevant Australian Standards.

3.5.2. Pedestrian Access

The proposed School will contain four pedestrian access points:

- Off Abbott Road, adjacent to the existing 'zebra' crossing;
- Off Playfair Road, near the proposed futsal courts;
- Off Playfair Road, near the proposed OOSH service building; and
- Off Ross Street, through a pedestrian pathway that connects to the School.

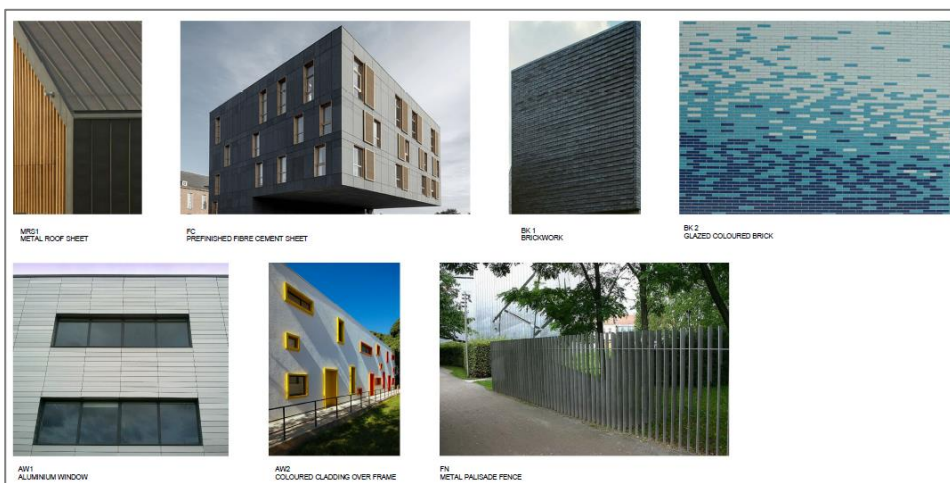
These pedestrian access points have been designed to provide safe and inclusive access for all.

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 North Curl Curl. The building materials are durable, hardwearing, low maintenance and evoke smart building design (**Figure 7**). Materials include:

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

Figure 7 – Proposed Materials and Finishes



Source: TKD

3.8. WASTE

3.8.1. Construction Waste

The contractor will comply with DPE's Conditions of Consent and the Construction and Demolition Waste Management Plan at Appendix Q 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 environment 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 R. 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:

- Cardboard/paper recycling;
- Comingled recycling;
- Food organics 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 17.6m² is recommended. The current waste storage area located off Playfair Road provides sufficient capacity for the bins proposed, which comprise:

- 2 x 1100L Paper/Cardboard Recycling bins;
- 10 x 240L Paper/Cardboard Recycling bins;
- 1 x 660L Comingled Recycling bins; and
- 3 x 1100L General Waste bins.

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 X. 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 Y. Both reports outline existing and proposed new services to be developed at the site.

3.10. ECOLOGICALLY SUSTAINABLE DEVELOPMENT

An Ecologically Sustainable Development (ESD) Report has been prepared by Umow Lai and is attached at Appendix S. The 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;
- Development of 68 onsite bicycle spaces to encourage future students, parents and teaches to access the site by bike;
- A rainwater harvest and re-use system;
- All habitable rooms including teaching and learning spaces will be naturally ventilated;

- Teaching and learning spaces will be naturally daylight;
- Building services, lighting and equipment to be used will be highly energy efficient;
- Adaptive reuse of existing library block and Block M to minimise the consumption of resources;
- 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 WELS ratings;
- A high percentage of timber, pipes, flooring, blinds and cables used in the proposal will be responsibly sourced or have a sustainable supply chain; and
- 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.

3.11. STAGING AND CONSTRUCTION MANAGEMENT

The proposal is to be constructed over four stages in accordance with the Preliminary Construction Management Plan prepared by TKD at Appendix P. The four development stages are as follows:

Stage 1 – Pre-Construction:

- Project preparation works including surveys, due diligence and approvals; and
- Site preparation.

Stage 2 – Early Works:

- Demolition;
- Remediation of on-site contamination; and
- Site clearance and bulk excavation.

Stage 3 – Stage 1 Works:

- Construction of retaining walls;
- Construction of main building blocks; and
- Installation of associated site services.

Stage 4 – Stage 2 Works:

- Removal of final demountable classrooms;
- Construction of new sports fields; and
- Construction of hard and soft landscaping.

During each construction stage, the construction area will be closed off using perimeter fencing. This will assist in mitigating issues associated with site safety, security, theft and vandalism.

3.11.1. Work Hours

The proposed works will be undertaken during the following hours:

- Monday to Friday – 7.00am to 5.00pm
- Saturdays – 8.00am to 1.00pm
- Sundays / Public Holidays – No work

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

4. STATUTORY POLICY CONTEXT

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

- *State Environmental Planning Policy (State & Regional Development) 2011;*
- *State Environmental Planning Policy (Infrastructure) 2007;*
- *State Environmental Planning Policy 55 – Remediation of Land;*
- *State Environmental Planning Policy No.64 – Advertising and Signage;*
- *Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017; and*
- *Warringah Local Environmental Plan 2011.*

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

4.1. STATE ENVIRONMENTAL PLANNING POLICY (STATE AND 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*:

“Development for the purpose of educational establishments (including associated research facilities) that has a capital investment value of more than \$30 million” is considered a SSD.”

The proposal is defined as an ‘educational establishment’ and has a project value in excess of \$30 million. This meets the minimum threshold of \$30 million. Accordingly, an SSD application has been lodged.

4.2. STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) provides the legislative planning framework for infrastructure and the provision of services across NSW. The relevant provisions of the ISEPP are discussed below:

School Facilities Standards

Clause 32 of the ISEPP provides the relevant matters for consideration in the determination of a DA for ‘educational establishments’. Clause 32(2) states that:

“Before determining a development application for development for the purposes of a school, the consent authority must take into consideration all relevant standards in the following State government publications (as in force on the commencement of this Policy):

- (a) School Facilities Standards—Landscape Standard—Version 22 (March 2002),*
- (b) Schools Facilities Standards—Design Standard (Version 1/09/2006),*
- (c) Schools Facilities Standards—Specification Standard (Version 01/11/2008).”*

The above School Facilities Standards (SFS) are no longer relied on as the guidelines for school design. During 2011 and 2012, DoE undertook a comprehensive review of the ISEPP SFS. This review resulted in the ISEPP SFS standards being revised and redeveloped into the Educational Facility Standards and Guidelines (EFSG). Accordingly, the standards and objectives contained to the SFS are outdated, superseded by the EFSG and no longer relied upon.

The EFSG is the relevant version of the SFS referred to in Clause 32(2) of the ISEPP. Accordingly, the proposed School has been designed to be consistent with the requirements of the EFSG, and several other industry and government benchmarks.

Further, Clause 32(3) of ISEPP states that if there is an inconsistency between a standard referred to in Clause 32(2) and a provision of a development control plan, the standard prevails to the extent of the inconsistency.

Traffic Generating Development

Schedule 3 'Traffic generating development to be referred to the RTA' stipulates that development for the purposes of an 'educational establishment' with 50 or more students and with access to any road will be referred to the RTA.

The RMS were consulted during the SEARs stage. The Transport and Accessibility Impact Report at Appendix Z addresses the matters by RMS in the SEARs. A Referral to the RMS will be made during the assessment of the EIS in accordance with Schedule 3.

4.3. 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 for the remediation of land and aims to promote in the remediation of contaminated land to reduce the risk of harm to human health or the environment. Clause 7(1) requires the consent authority to consider whether land is contaminated prior to consent of a DA.

A Preliminary Stage 1 Environmental Site Assessment was undertaken by Environmental Investigation Services as part of this EIS and is attached at Appendix H. Environmental Investigation Services determined that the site can be made suitable for the proposed development, provided the following recommendations are implemented to mitigate the risks:

- *“The NSW Department of Education (DoE) – Asbestos Management Unit (AMU) should be contacted and advised of the continual discovery of ACM at Curl Curl North Public School. WSP | Parsons Brinckerhoff (PB) who prepared the Asbestos in Grounds, Asbestos Management Plan (AMP) report for Curl Curl North Public School should also be contacted and advised of the continual discovery as their report may need to be revised. Management procedures from the WSP | Parsons Brinckerhoff (PB) Asbestos in Grounds, Asbestos Management Plan (AMP) report should be implemented as a priority to reduce the risk to potential receptors;*
- *Depending on the clients preferred remediation/management strategy, undertake a Detailed Site Investigation (DSI) to characterise the extent of asbestos contamination at the site;*
- *Prepare a Remediation Action Plan (RAP) to outline remedial measures for the site;*
- *Prepare a Validation Assessment (VA) report on completion of remediation;*
- *Undertake a Hazardous Materials Assessment (Hazmat) for the existing buildings prior to the commencement of demolition work.”*

A Hazardous Building Materials Survey has been prepared by Hibbs & Associates Pty Ltd and is attached at Appendix I. The survey found that:

- Significant quantities of flat asbestos cement sheeting and compressed asbestos cement sheeting were identified at the site. Small quantities of vinyl small tiles were also identified;
- No synthetic mineral fibre materials (SMF) or polychlorinated biphenyl's (PCBs) were identified at the site;
- Lead based paint systems identified at the site were in good condition and no remedial works are recommended; and
- It is recommended that Asbestos materials should be removed from the site prior to the commencement of any renovation/demolition works that may cause their disturbance;

In accordance with the recommendation outlined within the Hazardous Building Materials Survey, a Remediation Action Plan (RAP) has been prepared by Environmental Investigation Services and is attached at Appendix FF. The RAP outlines proposed remediation works to remove hazardous material from the site. The RAP concludes that:

- “The site can be made suitable for the proposed school development provided this RAP is implemented accordingly; and
- A site validation report and EMP should be prepared on completion of remediation activities and should be submitted to the consent authority”.

It is expected that the recommendations provided within the Preliminary Stage 1 Environmental Site Assessment, the Hazardous Building Materials Survey and the Remediation Action Plan will be included as conditions of development consent.

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

State Environmental Planning Policy No.64 – Advertising and Signage (SEPP64) aims to ensure signage is compatible with the desired amenity and visual character of an area, provides effective communication in suitable locations and is of a high-quality design and finish.

Consent is sought to install two unilluminated ‘Curl Curl North Public School’ signs at the site. Clause 8 and 13 of SEPP64 specify that consent cannot be granted to signage unless the consent authority is satisfied that the proposed has been designed to satisfy the provisions of Schedule 1. Accordingly, an assessment of the proposed signage against the relevant provisions of Schedule 1 within SEPP64 has been undertaken below in **Table 3**.

Table 3 – SEPP64 Compliance Table

Control	Proposal	Compliance
1 - Character of the Area		
<ul style="list-style-type: none"> • 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? 	<ul style="list-style-type: none"> • The proposed signs are minor in scale, inoffensive and comparable with the current and future character of the site. The signs will identify the School to the surrounding community and passers-by. • The proposed signs are classified as ‘building identification signs’ and are not advertising. The proposal is not located near surrounding advertisements. 	YES
2 - Special Areas		
<ul style="list-style-type: none"> • 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? 	<ul style="list-style-type: none"> • The proposal is not located near heritage areas, conservation areas or rural landscapes. • The proposed signs have been specifically designed with inoffensive colours and text to ensure they do not detract from the amenity or visual quality of environmentally sensitive areas, open space areas, waterways and residential areas. 	YES

Control	Proposal	Compliance
	<ul style="list-style-type: none"> The proposal will significantly activate the Abbott Road and Playfair Road site frontages, while being informative to the local community. 	
3 - Views and Vistas		
<ul style="list-style-type: none"> Does the proposal obscure or compromise important views? Does the proposal dominate the skyline and reduce the quality of vistas? Does the proposal respect the viewing rights of other advertisers? 	<ul style="list-style-type: none"> The proposal does not obscure or comprise important views. The proposed signs will not protrude beyond the walls on which they are to be installed. The proposal is located at ground level and will in no way dominate the skyline. The proposal is not located in the vicinity of surrounding advertisements. 	YES
4 - Streetscape, Setting or Landscape		
<ul style="list-style-type: none"> Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape? Does the proposal contribute to the visual interest of the streetscape, setting or landscape? Does the proposal reduce clutter by rationalising and simplifying existing advertising? Does the proposal screen unsightliness? Does the proposal protrude above buildings, structures or tree canopies in the area or locality? Does the proposal require ongoing vegetation management? 	<ul style="list-style-type: none"> The proposed signs have been specifically designed to be of a comparable scale, form and proportion to the walls on which they are to be installed. The proposal will contribute to the visual amenity of the site and surrounding streetscape. The proposal will invigorate bare walls, activate site frontages, and be informative to the local community. The site does not contain existing advertising. No. The proposed signs are visually interesting in their design and will enhance the visual appearance of the site. No. The proposed signs have been appropriately designed to ensure they do not protrude beyond the walls on which they are to be installed. No. No vegetation is proposed as part of the signs. 	YES
5 - Site and Building		
<ul style="list-style-type: none"> Is the proposal compatible with the scale, proportion and other characteristics of the site or building, 	<ul style="list-style-type: none"> The proposed signs have been appropriately designed to ensure they do not protrude beyond the walls on which they are to be installed. 	YES

Control	Proposal	Compliance
<p>or both, on which the proposed signage is to be located?</p> <ul style="list-style-type: none"> Does the proposal respect important features of the site or building, or both? Does the proposal show innovation and imagination in its relationship to the site or building, or both? 	<ul style="list-style-type: none"> The proposed signs are minor in scale and do not detract from the proposed School design. The proposal shows innovation and imagination, as the design of the signs conveys a clear message to the viewer whilst being visually interesting. 	
6 - Associated Devices and Logos with Advertisements and Advertising Structures		
<ul style="list-style-type: none"> 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? 	<ul style="list-style-type: none"> The signs do not contain any safety devices, platforms or lighting devices. The proposed signs are made up of letters which spell 'Curl Curl North Public School'. The signs will act as a way-finding tool and increasingly allow passers-by to identify the site as Curl Curl North Public School. 	YES
7 – Illumination		
Both signs will be unilluminated. Accordingly, the following controls do not apply.		
8 - Safety		
<ul style="list-style-type: none"> Would the proposal reduce the safety for any public road? Would the proposal reduce the safety for pedestrians or bicyclists? Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas? 	<ul style="list-style-type: none"> The proposed signs are unilluminated, unobtrusive and significantly setback from the road. Accordingly, the signs will in no way risk drivers, pedestrians or cyclists. The proposed signs are to be setback from the street and will not obscure sightlines from public areas. 	YES

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

The DPE released the *Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (Draft SEPP) in February 2017. The Draft SEPP aims to (amongst other things) streamline the planning system for education and child care facilities including changes to exempt and complying development. Of relevance to this proposal are Clause 36 and Schedule 4.

4.5.1. Clause 36 – Development Standards

Clause 36 of the Draft SEPP states that:

“Development consent may be granted to development for the purpose of a school that is state significant development even though the development would contravene a development standard imposed by the local environmental plan under which the consent is granted.”

The proposal exceeds the Floor Space Ratio development standard which applies to the site. Accordingly, Clause 36 of the Draft SEPP is to be taken into consideration by the consent authority.

4.5.2. Schedule 4 – Design Quality Principles

Schedule 4 of the Draft 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 design of the proposed School has been inspired by the surrounding built and natural environments of North Curl Curl. The proposed buildings are primarily two storeys in scale, which is in keeping with the built form of surrounding development. Further, the proposed School incorporates landscaping comprising bush play areas which is in keeping with the sites coastal bushland setting.
- **Principle 2 – Sustainable, Efficient and Durable:**
The proposal adopts a range of ESD initiatives as outlined in Section 3.10 and Appendix S. The proposal will also provide a range of 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 proposed School has been inclusively designed to provide safe and equal access for all, as outlined within the Access Design Statement Report at Appendix U. An OOSH service will also be provided for use by students attending Curl Curl North Public School.
- **Principle 4 – Health and Safety:**
A range of open spaces, playgrounds and sports facilities including handball courts and futsal fields will be available for students to encourage passive recreation. Crime Prevention Through Environmental Design measures will also be incorporated into the design and management of the School to ensure a high level of safety and security is upheld for students and staff.
- **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 a pleasant learning environment and encourage students to learn. Subject to the careful management and implementation of each recommended mitigation measures in Section 8 of this EIS, the proposal will not result in any unacceptable impacts on neighbouring properties.
- **Principle 6 – Whole of Life, Flexible and Adaptive:**
The proposed School has been designed to provide additional student capacity to cater for future demand within North Curl Curl and the wider Northern Beaches LGA. The proposal school also provides a range of multi-use facilities, including an adaptable sports court and flexible classroom spaces.
- **Principle 7 – Aesthetics:**
The scale, materials, finishes and landscaping chosen for the proposed School are aesthetically pleasing and complement the surrounding natural and built environment of North Curl Curl. Accordingly, the proposal evokes smart building design and sets a desirable design precedent.

4.6. WARRINGAH LOCAL ENVIRONMENTAL PLAN 2011

The *Warringah Local Environmental Plan 2011* (WLEP) is the principal environmental planning instrument governing development at the site. An assessment against the relevant controls of the WLEP has been undertaken in the subsections below.

4.6.1. Zoning and Permissibility

The entire site is zoned as R2 Low Density Residential.

Educational Establishment:

Within this zone, 'educational establishments' are permitted with consent. As per the WLEP, 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 School is therefore permitted with consent.

Out of School Hours Service:

The proposed School also includes an ancillary OOSH service for its students, to be located within the existing library block. Since the proposed OOSH service is ancillary to the proposed educational establishment, the OOSH service is deemed permissible with consent at the site. The proposed OOSH service is also consistent with the R2 land use objective, *"to enable other land uses that provide facilities or services to meet the day to day needs of residents"*.

Further, the proposed OOSH service is not defined as a 'child care centre' (which is prohibited at the site). As per the HSLEP, a child care centre is defined as:

"a building or place used for the supervision and care of children that:

(a) provides long day care, pre-school care, occasional child care or out-of-school-hours care, and

(b) does not provide overnight accommodation for children other than those related to the owner or operator of the centre,

but does not include:

*(i) **a school***

The proposed OOSH service is in the grounds of the School and provided for Curl Curl North Public School students only. Accordingly, the proposal is ancillary and cannot be classified as a 'child care centre' under the WLEP, and is therefore permitted with consent.

Building Identification Sign:

Development consent is also sought to install 'Curl Curl North Public School' signage. Within the R2 zone, 'building identification signs' are permitted with consent. As per the WLEP, a building identification sign is identified as:

"a sign that identifies or names a building and that may include the name of a building, the street name and number of a building, and a logo or other symbol but does not include general advertising of products, goods or services."

The proposed signs have been designed to identify the name of the School on-site, and in no way contains general advertising. The proposed building identification signs are therefore permitted with consent.

4.6.2. Zone Objectives

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

- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To ensure that low density residential environments are characterised by landscaped settings that are in harmony with the natural environment of Warringah.*

The proposal is consistent with these objectives as:

- The School will satisfy the educational and recreational needs of current and future students in the area, and provide significant employment; and

- The School is primarily two storeys in scale, which is in keeping with the predominate scale of surrounding residential development. The proposal also provides significant landscaped gardens and bush play spaces to complement the character of Curl Curl lagoon.

4.6.3. Other LEP Provisions

Other relevant provisions contained to the WLEP are addressed in **Table 4** below.

Table 4 – Key WLEP Controls

Consideration	Control	Comment	Compliance
Clause 4.3 - Height of Buildings	8.5m	The proposal has a maximum height of 11.25m. This non-compliance has been addressed as a Clause 4.6 Variation at Section 4.6.4 of this EIS.	NO
Clause 4.4 - Floor Space Ratio (FSR)	N/A	FSR controls do not apply to the site.	N/A
Clause 5.9 - Preservation of Trees or Vegetation	A person must not ringbark, cut down, top, lop, remove, injure or wilfully destroy any tree or other vegetation without consent.	The proposal seeks development consent to remove 70 trees from the site. Most trees located around the perimeter of the site are to be retained, including the existing Fig Tree in the centre of the site. Refer to Section 6.5 of this EIS and Arborist Report at Appendix F.	YES
Clause 6.2 - Earthworks	Earthworks must not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.	Bulk earthworks will be undertaken in accordance with: <ul style="list-style-type: none"> • Geotechnical and Structural Report attached at Appendix L; • Preliminary Construction Management Plan attached at Appendix P; and • DPE Conditions of Consent. Accordingly, it is not anticipated that the proposed earthworks will create any adverse impacts, as all proposed earthworks will be undertaken in a highly vigilant manner.	YES
Clause 6.3 - Flood Planning	Southern end of the site classified as a Medium Flood Risk Planning Precinct.	The proposal has been designed in accordance with the recommendations outlined within the Flood Risk Assessment Report attached at Appendix N.	YES

Consideration	Control	Comment	Compliance
		See Section 6.8 of this EIS for further discussion.	

4.6.4. Clause 4.6 - Exceptions to Development Standards

Clause 4.6 provides flexibility to vary the development standards specified within the LEP where it can be demonstrated that the development standard is unreasonable or unnecessary in the circumstances of the case and where there are sufficient environmental grounds to justify the departure.

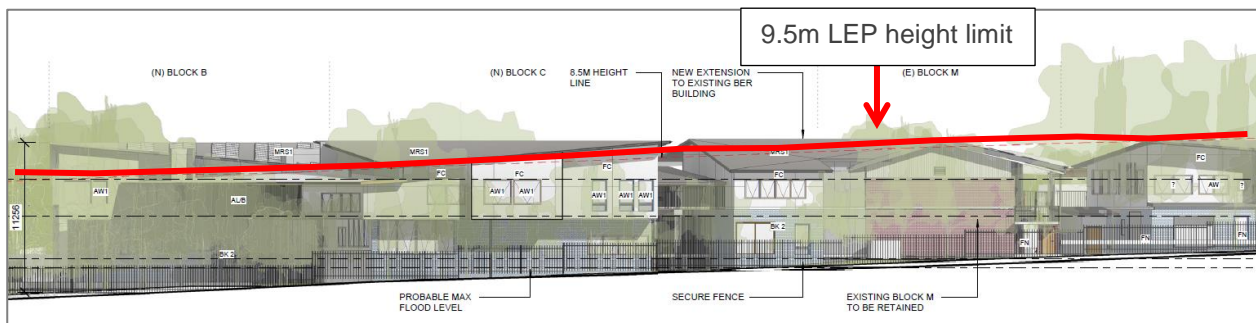
We set out below the justification for the departure to the building height control applicable under WLEP. This section demonstrates that strict compliance with the standard is unreasonable and unnecessary in the circumstances of this particular case. It also provides justification for the departure from the control.

Proposed Variation

Pursuant to Clause 4.3 of the WLEP, and the accompanying height map, a maximum height limit of 8.5m applies to the site. The proposal involves the construction of a new school. The maximum height of the school is 11.25m (**Figure 9**). The height limit has been breached for the following reasons:

- The site falls 7m from the north to the south. The proposal complies towards the north, and exceeds the height limit at the southern end where the land falls. Due to the sloping topography, the proposal does not comply.
- Space within the site is extremely limited. To achieve the floor space requirements necessary to accommodate the additional students it has been necessary to exceed the height limit.
- The design aims to maximise much needed outdoor playing space to the north where it will not be shadowed by its own buildings. By concentrating play area to the north, there is better integration and connectivity with the school buildings compared to the existing development.
- The area of non-compliance generally relates to the roof space, which has no windows and will not impact on privacy.
- The proposed buildings reflect the current school facilities requirements including minimum ceiling heights of 2.7m. Floor to floor heights are 3.2m to achieve minimum ceiling heights and sufficient space for services.

Figure 9 – Height Non-Compliance



Clause 4.3 Objectives

Clause 4.3 sets out the objectives of the maximum building height development standard. The consistency of the proposed development with these objectives is set out below.

Table 5 – Clause 4.3 Objectives

Objectives	Proposed Development
<i>(a) to ensure that buildings are compatible with the height and scale of surrounding and nearby development</i>	The proposal is two storeys, which is compatible with the height of the surrounding development. The height maintains the low-density character of the area. The additional height is a result of the sloping topography.
<i>(b) to minimise visual impact, disruption of views, loss of privacy and loss of solar access</i>	The area of non-compliance is roof area, with no windows that will cause privacy impacts. There are no views over the site that will be impacted. Solar access impacts are minimal with shadow being cast on properties to the east in the afternoon only. These properties are unaffected in the morning and midday hours, compliant with the DCP.
<i>(c) to minimise any adverse impact of development on the scenic quality of Warringah's coastal and bush environments</i>	The site is within an urban environment, away from the coast and bush. The proposal will not impact the coastal scenic quality or bush environment.
<i>(d) to manage the visual impact of development when viewed from public places such as parks and reserves, roads and community facilities</i>	To the south is reserve and recreation land. The proposal addresses Abbott Street and relates to the community centre on the opposite side of the street. The proposal is a contemporary school that will have a positive visual impact. It is two storeys in keeping with the character of the area, and is articulated and moderated to provide visual interest and minimise perceived bulk.

The proposal is therefore consistent with the objectives of Clause 4.3 of the WLEP.

Justification for the Variation

In the circumstances, strict compliance with Clause 4.3 of the WLEP is considered to be both unnecessary and unreasonable. The proposal is justified on the following environmental planning grounds:

- It represents a logical and co-ordinated development of the site for school use.
- It will replace demountable classroom with well-designed buildings that improve the physical appearance of the site. The design is responsive to site context and its intended function.
- The architectural design of the new development provides a good quality built form outcome for the site.
- New development will not result in overlooking, overshadowing or privacy issues.
- It will be consistent in height with existing buildings in the surrounding area that are two storeys.
- If the roof was altered to a flat roof, the proposal could comply. However, this would be out of context in the area, which is characterised by predominantly pitched and hipped rooves.
- Alternatively, if the proposed building was reduced in height, a greater footprint would be required to facilitate the student accommodation. The existing play area is compromised by the existing demountables. Reducing the height would have the effect of reducing the active play areas. The proposal consolidates the footprint of the demountables providing for a larger and better connected outdoor play area.

- Compliance could be achieved by reducing the scale of the development but this would undermine the visual quality of the design and the School's accommodation requirements would not be met.

Community Benefits

The principle aim of the proposal is to provide improved infrastructure to service the education needs of the community within a low-density environment. The proposed variation to the height control of the WLEP does not result in the loss of amenity to the adjoining properties from overshadowing or loss of privacy. The proposed height is therefore considered to be acceptable, particularly when balanced against the benefits of the project which are:

- Improved educational facilities for an existing education establishment.
- Increased accommodation needed to cater for the increased number of students in the area.
- Visual improvements to the site by removing demountables.
- Increased outdoor play area and connectivity within the site.
- Increased provision of planting and green spaces will enhance the ecological and landscape qualities of the site.
- The proposed façade is articulated using materials, fenestrations, screening and colours that create visual interest and assist with minimising the perceived bulk.
- There are no heritage items on site. The siting, scale and design of the new building has been designed having regard to the character of the area.

In summary, the proposal is considered appropriate and consistent with the objectives and intent of Clause 4.3 of the WLEP. Strict compliance with the WLEP in this case is unreasonable and unnecessary because:

- The objectives of the WLEP Building Height standard are achieved, notwithstanding the technical non-compliance.
- The proposal is consistent with the strategic planning direction for the site and locality. The North District Plan focuses on delivering schools to accommodate the growth in school age children in the district.
- There are sufficient environmental planning grounds to support the proposed variation.
- The proposal does not raise significant matters of state or regional significance.
- The proposal provides critical community infrastructure to meet the needs of the community.

There is no public benefit by maintaining the development standards. The public benefit comes from the additional teaching and learning, recreation and open space play. The public benefit is the delivery of much needed education infrastructure for the growing inner Sydney area.

4.7. SECTION 94 CONTRIBUTIONS

The site is covered by the '*Northern Beaches Council Section94a Plan 2016*' (S94 Plan). The purpose of this S94 Plan is to raise funds from private, commercially driven developments to be put towards the cost of public facilities and infrastructure which are burdened by those developments

Whilst Council's Plan does not expressly exclude Crown Developments or 'educational establishments' from the payment of Section 94A contributions, an exemption is considered appropriate in this instance, as:

- The DoE is a government agency which relies on government funding to provide new facilities for both the school community and the public. Levying DoE would divert a significant portion of public funds and impact the vital redevelopment of Curl Curl North Public School; and

- The future School will largely provide the type of infrastructure which Council typically seeks to levy for - an accessible, multi-purpose space for use by the broader community. The proposed development will provide new infrastructure which will relieve pressure on existing public facilities.

The DoE's position is also supported by provisions outlined within the Department of Planning Circular D6 and Part 4, Division 4 of the *Environmental Planning and Assessment Act 1979*.

4.7.1. Crown Applications – Department of Planning Circular D6

The Department of Education's position is supported by the provisions of Circular D6, which states:

“Crown Activities providing a public service or facility lead to significant benefits for the public, in terms of essential community services and employment opportunities. Therefore, it is important that these essential community services are not delayed by unnecessary disputes over conditions of consent. These activities are not likely to require the provision of public services and amenities in the same way as developments undertaken with a commercial objective.”

Circular D6 notes that where the applicant is a Crown authority and the development is for educational services, no contributions should be collected for open space, community facilities, parking, and general local and main road upgrades. Further, the exemption from payment of contributions relating to community facilities, public domain and new open space is considered appropriate, as the future school will provide significant areas of accessible open space, as well as a range of community facilities. These future facilities include:

- Construction of a new multi-purpose communal hall;
- Construction of multiple sporting facilities including a sports court, futsal fields and handball courts;
- Provision of a new school library for students, which will relieve pressure on existing local libraries; and
- Provision of a new OOSH service, which will relieve pressure on existing local before/after school care centres.

The availability of these amenities and services on-site will greatly reduce the demand on public amenities outside the school campus. Considering the significant public benefits, it is clear that no development contributions should be levied against the proposed development.

4.7.2. Crown Applications – EP&A Act

Any DoE application is to be assessed as a Crown Development Application, and is therefore subject to the provision of Part 4, Division 4 of the EP&A Act. This legislation has been developed over time in recognition of the role Crown Development plays in providing essential community services. Crown Developments such as a school provide facilities that are a significant benefit for the public in terms of essential community services and employment opportunities. These activities are not likely to require public services and amenities in the same way as development undertaken with a commercial objective.

5. STRATEGIC PLANNING CONTEXT

In accordance with SEAR's, 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 North District Plan; and*
- *Warringah Development Control Plan 2011.*

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 Northern Beaches 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 North Curl Curl.

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 North Curl Curl and the wider Northern Beaches LGA.

- **Direction 1.11: Deliver infrastructure;**

The proposal will deliver a vital piece of educational infrastructure for North Curl Curl that will take enrolment pressure of the existing School currently exceeding student capacity.

- **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 North Curl Curl.

- **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 busses; 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. 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 site is located near dedicated cycleways on Griffin Road, Harbord Road and on the foreshore of Greendale Creek. Adjoining Abbott Road is also marked as bicycle friendly. Future parents, students and employees of the School will be able to use these dedicated cycleways and roads to access the site via bike. Further, a total of 68 bicycle spaces are to be provided at the site to encourage cycling.

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 serviced by four dedicated school bus services and is located close to multiple bus stops operating State Transit bus services (see Section 2.10 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 6** below.

Table 6 – 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 replacement of burned out lighting and the removal or refurbishment of decayed physical elements.

A CPTED Assessment has been prepared by Urbis and is attached at Appendix CC. The CPTED Assessment concludes that the proposed design of the redeveloped School incorporates natural surveillance, access control, territorial reinforcement and space management design principles to deter

crime. Further, the redevelopment School proposes to employ many existing CPTED measures that have been successful at deterring crime at the existing School.

Notwithstanding this, the 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 site 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 existing laneway entrance off Ross Street.
- The upper levels of the proposed School buildings should be designed with balconies and windows to ensure passive and informal surveillance is available onto the surrounding 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

- Two signs depicting the name of the School should be displayed at the primary (Abbott Road) and secondary (Playfair Road) site entrances.
- Proposed School entry and exit points should be monitored by staff and/or CCTV, and be locked after-hours 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, NSW HEALTH

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 NORTH DISTRICT PLAN

Released in November 2016, the *Draft North District Plan* (Draft District Plan) includes a range of priorities and actions to appropriately support the strategic growth of Sydney's North District. The Draft District Plan identifies the following:

- There will be a 20% growth in school-aged children to 2036 within the District; and
- The largest projected growth in school-aged children within the District is expected in the Ryde, Ku-ring-gai and Northern Beaches LGAs.

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 '4.8.2 – Plan to meet the demand for school 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."

In response, the Draft District Plan notes that DoE is funding upgrades to existing government schools (including Curl Curl North Public School) to provide additional classrooms to the North 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 Curl Curl North Public School.

5.10. WARRINGAH DEVELOPMENT CONTROL PLAN 2011

The *Warringah Development Control Plan 2011* (WDCP) provides detailed controls for specific developments types and locations. Most controls in the WDCP relate to character, streetscape and public domain works. Under Clause 11 of *State Environmental Planning Policy (State and Regional Development) 2011*, the application of Development Control Plans is excluded when assessing SSD projects. Notwithstanding this, the proposal has been assessed against the relevant controls of the WDCP in **Table 7**.

Table 7 – WDCP Compliance Table

Consideration	Control	Proposal	Compliance
Part B: Built Form Controls			
B5 – Side Boundary Setbacks	<ul style="list-style-type: none"> • 0.9m 	3.5m setback from Playfair Road.	YES
B7 – Front Boundary Setbacks	<ul style="list-style-type: none"> • 6.5m 	6.5m setback from Abbott Road.	YES
Part C: Siting Factors			
C3 – Parking Facilities	<ul style="list-style-type: none"> • Provide the following: <ul style="list-style-type: none"> – 1 car space per staff member in attendance; – Adequate pickup/setdown area on site; – Adequate provision of bicycle racks; – Adequate provision for student parking; and – Provision of bus standing and turning area. 	<ul style="list-style-type: none"> • The proposal provides: <ul style="list-style-type: none"> – 16 on-site car spaces (including 1 accessible space); – 20 on-street pick up/drop off parking spaces; – 68 on-site bicycle spaces; – No student parking, as the proposal relates to a primary school (K-6); and – Existing bus set-down zone on Playfair Road to be retained. • See Section 6.4 and Traffic Impact Assessment at Appendix Z. 	NO
Part D: Design			
D1 – Landscaped Open Space and Bushland Setting	<ul style="list-style-type: none"> • 40% of total site area should provide landscaped open space. 	<ul style="list-style-type: none"> • In accordance with the DCP, over 40% of total site area is landscaped open space. 	YES
D6 – Access to Sunlight	<ul style="list-style-type: none"> • Development should avoid unreasonable overshadowing any public open space. • At least 50% of the required area of private open space of adjoining dwellings are to receive a minimum of 3 hours of sunlight between 9am and 3pm on June 21. 	<ul style="list-style-type: none"> • Shadow diagrams for 9am, 12pm and 3pm during the winter solstice have been prepared by TKD Architects and are attached at Appendix D. • The shadow diagrams show that there are no significant overshadowing impacts caused by the redevelopment on neighbouring residential sites. 	YES

Consideration	Control	Proposal	Compliance
D10 – Building Colours and Materials	<ul style="list-style-type: none"> In highly visible areas, the visual impact of new development is to be minimized through the use of appropriate colours and materials and landscaping. 	<ul style="list-style-type: none"> Residential properties to the north-east will have increased access to sunlight during 9am, 12pm and 3pm. The proposed School has been designed with external materials and finishes that complement the surrounding natural and built environment of North Curl Curl. See Section 3.5 and Schedule of Materials and Finishes at Appendix D. 	YES
D11 – Roofs	<ul style="list-style-type: none"> Roofs should complement the roof pitch and forms of the existing buildings in the streetscape. 	<ul style="list-style-type: none"> The architectural design of the proposed School roofs are sympathetic to the surrounding residential character of North Curl Curl. The roofs are pitched similarly to surrounding dwellings. 	YES
D12 – Glare and Reflection	<ul style="list-style-type: none"> Development should not result in overspill or glare from artificial illumination or sun reflection. 	<ul style="list-style-type: none"> The materials and finishes cause minimal reflectivity. See Section 3.5 and Schedule of Materials and Finishes at Appendix D. 	YES
D13 – Front Fences and Front Walls	<ul style="list-style-type: none"> Fences are to be constructed to allow casual surveillance, except where there is excessive noise. Fences should complement the architectural period of the building. 	<ul style="list-style-type: none"> A 2.1m high palisade fence is proposed around the perimeter of the site. The design of this fence: <ul style="list-style-type: none"> Is not solid to allow for casual surveillance; and Will complement the Architectural style of the proposed School and surrounding locality. 	YES
D18 – Accessibility	<ul style="list-style-type: none"> The proposed development should comply with: <ul style="list-style-type: none"> All Australian Standards relevant to accessibility; 	<ul style="list-style-type: none"> The proposal provides safe and equal access for all. See Building Code of Australia Statement at Appendix T and Access Design Assessment Report at Appendix U. 	YES

Consideration	Control	Proposal	Compliance
	<ul style="list-style-type: none"> – The Building Code of Australia access requirements; and – Disability Discrimination Act 1992. 		
D20 – Safety and Security	<ul style="list-style-type: none"> • The proposed development should be designed in accordance with the NSW Department of Planning and Environment’s CPTED principles. 	<ul style="list-style-type: none"> • The proposed development has been appropriately designed in accordance with CPTED principles. • See Section 5.7 and Social Impact Assessment Report at Appendix BB. 	YES
D21 – Provision and Location of Utility Services	<ul style="list-style-type: none"> • Utility services must be provided, including provision of the supply of water, gas, telecommunications and electricity and the satisfactory management of sewage and drainage. 	<ul style="list-style-type: none"> • On-site infrastructure comprising water, gas, telecommunications, electricity and drainage are being adequately provided as part of the proposal. • See Section 3.9, Infrastructure Management Plan at Appendix X and Hydraulic Site Services Availability at Appendix Y. 	YES
Part E: The Natural Environment:			
E6 – Retaining Unique Environmental Features	<ul style="list-style-type: none"> • Development is to be designed to address any distinctive environmental features of the site and on adjoining nearby land. 	<ul style="list-style-type: none"> • A Moreton Bay Fig Tree in the centre of the site: <ul style="list-style-type: none"> – Has a High Retention Value as per the Arborist Report attached at Appendix F; and – Has high community significance as per the Consultation Outcomes Report at Appendix DD. • This fig tree is proposed to be retained and is a central feature of the proposed Landscape Plan attached at Appendix O. 	YES
E7 – Development on Land Adjoining Public Open Space	<ul style="list-style-type: none"> • Development on land adjoining public open space is to complement the landscape character and public use and enjoyment of the adjoining 	<ul style="list-style-type: none"> • The site is close to the Abbott Road playing fields and Curl Curl Lagoon Reserve. The landscaping complements these spaces by: 	YES

Consideration	Control	Proposal	Compliance
	parks, bushland reserves and other public open spaces.	<ul style="list-style-type: none"> <li>– Incorporating the use of native Australian flora; <li>– Incorporating bush play areas; and <li>– Incorporating a wide variety of sporting facilities. 	

6. KEY ASSESSMENT ISSUES

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

- Built Form and Urban Design;
- Environmental Amenity;
- Existing School Buildings;
- Transport and Accessibility;
- Construction Vehicles;
- Biodiversity;
- Noise and Vibration;
- Sediment, Erosion and Dust Controls;
- Water Management and Flooding;
- Social and Economic Impacts;
- Site Suitability; and
- Public Interest.

6.1. BUILT FORM AND URBAN DESIGN

The built form and urban design of the proposed School has been appropriately developed to:

- Complement the surrounding built and natural character of North Curl Curl;
- Minimise amenity impacts on surrounding residents; and
- Provide a superior educational environment that encourages collaborative learning, knowledge and play.

A detailed analysis of each of the above considerations is provided below.

Complements Surrounding Built and Natural Character:

The site is located within the coastal suburb of North Curl Curl, which contains a variety of open parklands, nature reserves and beaches. The suburb also comprises detached residential dwellings with raised roofs, supporting neighbourhood shops and sports fields.

In accordance with the above, the proposed School has been specifically designed to complement North Curl Curl's distinct built and natural character. This has been achieved by:

- Incorporating a pitched roof onto each school building; characteristic of surrounding dwellings that also incorporate pitched roofs;
- Providing a range of native Australian flora, turfed areas, swales, bush play areas and gardens into the proposed landscaped design; characteristic of the surrounding parks and reserves;
- Designing the School to include a range of colourful external materials and finishes, including blue glazed tiles that are representative of the nearby ocean and lagoon;
- Proposing to construct a range of sporting facilities at the site, including a large sports court, multiple handball courts throughout the site and futsal fields; complementing the adjacent Abbott Road sports grounds; and
- Designing the School to have a maximum building height that is consistent with the surrounding two storey buildings to the north, east and west.

Minimises Amenity Impacts on Surrounding Residents:

The new School buildings and reconfigured Block M are proposed to be constructed at the southern end of the site along the perimeter, and arranged in a U-shape. This building form and arrangement has been specifically chosen, as it:

- Maximises visual privacy, as the proposed new buildings are kept distant from surrounding dwellings to the north, east and west;
- Provides an acoustic buffer, as outdoor play and announcement noises will be increasingly concealed within the proposed internal courtyard space;
- Maximises solar access to the School and surrounding neighbours, as the buildings are low scale and arranged to ensure sun access planes are not obstructed; and
- Does not result in any view loss impacts.

The proposed built form, design and placement of the new School buildings will aid in minimising various amenity impacts. Further discussion is provided in Section 6.2 below.

Provides a Superior Educational Environment for Students and Staff:

The existing School primarily comprises of aged demountables and single-storey wooden classroom buildings that are not representative of a world class educational establishment. Further, the arrangement of these existing buildings is highly impermeable and creates a barrier between the northern and southern ends of the site.

In response, the redeveloped School has been designed to provide a superior educational environment for all. The arrangement of the site in a U-shape ensures the proposal provides interconnected learning spaces and classrooms that encourage active learning and play. This arrangement also ensures the future School provides a pedestrian circulation system that is highly permeable and representative of an inclusive built environment. The centre of the site is now proposed to contain a central civic courtyard that provides direct access to the outdoor areas at the northern edge of the site, and the teaching spaces at the southern edge of the site. This arrangement will increasingly encourage collaborative learning, knowledge and play amongst students and staff.

6.2. ENVIRONMENTAL AMENITY

6.2.1. Solar Access and Overshadowing

The Site:

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.

Adjoining Sites:

Shadow diagrams for 9am, 12pm and 3pm during the winter solstice have been prepared by TKD Architects and are attached at Appendix D. The shadow diagrams demonstrate that there are no significant overshadowing impacts caused by the redevelopment on neighbouring residential sites. Specifically:

- Residential properties to the north will be unaffected by the proposed redevelopment and will continue to have access to sunlight. The layout of the northern edge of the site is to be retained and will not contain new School buildings that have the potential to cause overshadowing;
- Residential properties to the north-east will have increased access to sunlight during 9am, 12pm and 3pm. The existing School buildings at the north-eastern edge of the site currently causing some overshadowing are to be removed from the site;
- Residential properties to the east will have no overshadowing impacts during 9am and 12pm. During 3pm, some shadowing that will result on adjoining properties to the east is minor and does not directly cover any houses; and

- Adjoining properties to the west will be unaffected by the proposed redevelopment and will continue to have access to sunlight.

Due to the chosen arrangement and scale of the proposal, there are no significant overshadowing impacts caused on neighbouring residential sites.

6.2.2. Privacy

The proposal has been appropriately designed to prevent adverse privacy impacts on surrounding residents and future students as:

- The layout of the northern edge of the site is to be retained and will not contain new School buildings that have the potential to cause onlooking into neighbouring properties;
- Block I and multiple demountable structures located at the north-eastern corner of the site currently allow for onlooking into neighbouring properties. These structures are proposed to be removed from the site and replaced with a sports court;
- Significant tall trees contained to the north, north-east, east, and western site boundaries are proposed to be retained. These trees screen the proposal from adjoining residents, and prevent onlooking into and from the site (**Figure 10: Picture 7 and Picture 8**).
- The provision of Playfair Road to the west ensures that there is sufficient separation distance between the School and neighbouring residential properties;
- The proposed structures achieve the minimum setback controls; and
- The school will continue to generally operate during standard school hours, when most residents are at work. This will ensure privacy is maintained during the early morning, evenings and at night.

Accordingly, the proposal is appropriate in terms of visual privacy. Acoustic privacy impacts will be managed via the recommendations of Wilkinson Murray and the conditions of consent.

Figure 10 – Existing Tall Trees



Picture 7 – Tall Trees at Playfair Road Site Boundary

Source: Urbis



Picture 8 – Tall Trees at Eastern Site Boundary

Source: Urbis

6.2.3. View Impacts

There are no views across the site. Therefore, there is no view loss from the proposal.

6.2.4. Wind Impacts

A Wind Impact Assessment Report has been prepared by Vipac and is attached at Appendix W. The Report provides an assessment of the likely wind conditions that would be experienced at ground level and at the level 1 walkway areas within the grounds of the proposed School.

Vipac's assessment found that wind conditions within the grounds of the proposed School would be suitable:

- At ground level footpath areas (for walking);

- At building entrance areas (for standing);
- At outdoor seating areas (for sitting);
- At ground level outdoor amenity areas (for standing); and
- At level 1 student walkway areas (for standing).

The assessment also found that with the inclusion of additional design treatments, wind conditions at ground level student walkway areas, including between Block A and Block B, would be suitable for standing. Recommended design treatments include incorporating additional landscaping, such as a tree, to help mitigate wind. These recommendations have been or can be incorporated into the final School design.

6.3. EXISTING SCHOOL BUILDINGS

The proposal involves the demolition of all existing School buildings at the site, excluding Block M and the existing library block. The School buildings to be removed are outdated and were not built for long-term use. This is reaffirmed within an attached Heritage Statement prepared by TKD at Appendix DD, which states:

“The buildings were not seen as a permanent solution to providing classroom accommodation. The standard timber portable classrooms were generally intended to provide interim accommodation pending the construction of permanent buildings.”

Further, the School buildings to be removed are not classified as items containing heritage significance. As per TKD, this is because:

“The buildings at North Curl Curl Public School do not have architectural characteristics that would warrant listing as heritage items.”

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.

6.4. TRANSPORT AND ACCESSIBILITY

6.4.1. Parking

A Traffic Impact Assessment has been prepared by Traffix and is attached at Appendix Z. As per the WDCP, the proposal generates a demand for 76 staff car parking spaces. The proposal seeks to provide a total of 16 car parking spaces onsite, including 1 accessible space.

In summary, the Traffic Impact Assessment supports this proposed car parking rate on the following basis:

- Section PS610.17 of *The Department’s Educational Facilities Standards and Guidelines* (EFSG) states that onsite school parking should be kept to a minimum to maximise open play space and to encourage the use of sustainable transport when travelling to and from the school;
- Section 4.8 within *The Motor Vehicle Policy for NSW Government Agencies v13.0.14 April 2014* specifies that no private vehicles are entitled to a parking space on Government leased or owned premises;
- Surveys conducted of the surrounding streets confirm that Abbott Road, Playfair Road, Ross Street and Lillie Street have sufficient on street capacity to support the proposed parking provision. An image taken on 23/05/2017 at 9:30am identifies excessive on-street capacity along Abbott Road (**Figure 11: Picture 9** and **Picture 10**);
- Council’s car parking rate of 1 space per staff member is considered highly unsustainable, as:
 - This rate will discourage staff members from accessing the site using sustainable active transport modes (walking and cycling) and public transport.
 - This rate greatly incentivises the use of private cars to access the site, which will increase congestion, pollution and noise on surrounding residential streets; and
 - This rate is counterproductive to the measures outlined within the Green Travel Plan.

- The proposal will provide 68 bicycle spaces to promote cycling to the School; and
- The proposed redevelopment of the School will only result in an increase of 6 staff.

To encourage travel by alternative means other than a private car, Traffix has developed a Workplace Travel Plan (WTP) and Active Travel Guide (ATG). Traffix also recommends that a car pool scheme be considered by the future School. Car-pooling can be an effective method for reducing the impact of private vehicle usage and reduces the amount of car parking required.

Figure 11 – Abbott Road Parking Capacity



Picture 9 – Empty car spaces off Abbott Road, approximately 100m from the School

Source: Urbis



Picture 10 – Vacant car spaces off Abbott Road, directly opposite the School

Source: Urbis

6.4.2. Parking During Construction

A Preliminary Construction Traffic Management Plan (CTMP) has been prepared by Traffix and is attached at Appendix AA. The CTMP outlines the proposed parking arrangement for School staff and construction workers during the School's construction.

During construction of the proposed School, trucks will access the site via the existing primary driveway off Playfair Road. Use of this access point removes the need to construct a temporary driveway into the site, reducing unnecessary delays and costs. However, use of this existing driveway will restrict vehicles from accessing the existing on-site staff carpark, resulting in a temporary loss of 21 on-site staff parking spaces.

Although it is acknowledged that this arrangement may cause some inconveniences, the proposed is considered acceptable from a parking perspective, as:

- As identified within the Traffic Impact Assessment at Appendix Z and **Figure 11: Picture 9 and Picture 10**, there is ample on-street parking surrounding the site to facilitate School staff and construction workers. Surrounding streets with excessive parking capacity during school and after-hours include Abbott Road, Playfair Road, Ross Street and Lillie Street.
- Staff and construction workers will be encouraged to access the site via car-pooling, public transport and/or active transport. To incentivise car-pooling, Traffix notes that some informal parking spaces can be temporarily provided on-site for use by car-poolers only.

6.4.3. Drop Off and Pick Up

The WDCP does not nominate specific rates for the number of drop off and pick up spaces required for educational establishments. Notwithstanding this, it is proposed that 20 drop off/pick up spaces (a 109.3m 'No Parking 8:30am-9:30am School Days' zone) will be provided to service the School off Playfair Road.

To provide these spaces, the existing Children's Crossing off Playfair Road is proposed to be removed. This is deemed acceptable, as Traffix have determined that the existing crossing in its current form is unsafe, non-compliant and underutilised. The existing 8 drop off/pick up spaces (a 44.4m 'No Parking 8:30am-9:30am School Days' zone) that currently service the School off Playfair Road are also proposed to be retained.

This proposed drop off/pick up rate is deemed majorly acceptable as:

- The existing School currently services 920 students using 8 drop off/pick up spaces; and
- The proposal will more than double the amount of drop off/pick up spaces that currently exist at the site (from 8 to 20), to facilitate a marginal increase in students (80 additional students).

The proposed increase in drop off/pick up spaces will drastically reduce waiting times for parents and students, and ease the build-up of cars waiting for a drop off/pick up space off Playfair Road.

Further to the above, the WDCP specifies that each drop off/pick up space should be provided on-site within the school grounds. However, the proposal seeks to continue providing each space off Playfair Road. This configuration is supported because:

- Providing drop off/pick up spaces on-site will increase the number of vehicular access points into the site, which will:
 - Slow traffic, due to a build-up of cars waiting to enter/exit the site;
 - Increase the risk of pedestrians encountering a vehicle entering/exiting the site; and
 - Increase conflict between pedestrians and cars.
- Providing drop off/pick up spaces on-site will greatly reduce the total space available on-site to facilitate open play space and landscaping for the benefit of students; and
- There is adequate room off Playfair Road to provide each drop off/pick up space.

6.4.4. Traffic Generation

The Traffic Impact Assessment prepared by Traffix assesses the traffic impact of the proposal on the surrounding road network. The RMS *Guide to Traffic Generating Developments* does not nominate a specific generation rate for schools, with traffic generation to be assessed using surveys of comparable developments. Accordingly, surveys were undertaken at the site to establish traffic generation rates.

Existing Rate:

Survey's conducted at the School established the following existing trip rates:

- 446 vehicle trips (237 in; 209 out) during the AM peak period.
- 339 vehicle trips (165 in; 174 out) during the PM peak period.

Proposed Rate:

Using the existing traffic rates, Traffix have established the following trip rates for the proposal:

- 520 vehicle trips (275 in; 245 out) during the AM peak period.
- 398 vehicle trips (194 in; 204 out) during the PM peak period.

This proposed trip rate only constitutes an increase of 74 vehicles during the AM peak and 59 vehicles during the PM peak when compared to the existing School.

This traffic generation rate is based on conservative modes of travel. Given that a WTP and ATG will be employed at the proposed School, there will be a shift in travel modes, with higher utilisation of active transport and public transport services. Notwithstanding this, for the purposes of a conservative approach to the traffic assessment, no reduction has been taken into consideration. In summary:

- The above traffic generations are 'worst case' scenario. The PM peak also occurs outside the normal peak period time;
- All key intersections are expected to operate satisfactorily and maintain an A Level of Service during the critical AM and PM peak periods; and
- Additional traffic volumes generated by the proposed development will be accommodated by the existing road network. Accordingly, no additional upgrades are required.

In light of the above, Traffix conclude that the proposal is supportable on traffic planning grounds and will operate satisfactorily.

6.4.5. Public Transport Capacity

The four dedicated State Transit school busses that currently service the School, as well as the multiple State Transit bus services within the immediate vicinity of the site, operate with capacity and are considered sufficient to accommodate the additional demand which will result from the proposal.

6.4.6. Construction Vehicles

A Preliminary Construction Traffic Management Plan has been prepared by Traffix and is attached at Appendix AA. The CTMP outlines proposed strategies to minimise potential construction vehicle impacts on the surrounding locality. In summary:

- All construction vehicles will travel to and from the site via a proposed dedicated route. This route avoids local roads where possible and makes best use of the surrounding arterial road network. All truck drivers will be provided with a copy of the dedicated route. This will ensure that issues associated with truck noise, emissions and safety are minimised for residents located on the surrounding local streets.
- All construction vehicles will access the site via the existing driveway off Playfair Road near the existing library block. Use of this suitable access point mitigates the need to construct a temporary construction access point into the site.
- A dedicated traffic controller will be present at the Playfair Road vehicular access point to ensure pedestrian safety is upheld when construction vehicles enter and exit the site.
- The Traffic Control Plan (TCP) prepared by Traffix in accordance with the RMS *Traffic Control at Work Sites Manual* is proposed to be implemented and will be kept on-site at all times. Accordingly, temporary road signage will be placed along Playfair Road to notify drivers of potential construction trucks entering and existing the site.

It is noted that this CTMP is preliminary in nature and will be finalised at a later stage; subject to the appointment of a suitable builder and the conditions of consent imposed by the DPE for this SSDA.

6.5. BIODIVERSITY

Flora:

An Arborist Report has been prepared by BLUEGUM and is attached at Appendix F. The report acknowledges that 70 trees are proposed to be removed to facilitate the proposal. Of these, five trees are identified as having a high retention value.

- Tree 51 is a Swamp Mahogany. The roots and canopy of this tree are located within the proposed development footprint, and the tree cannot be retained.
- Tree 58 is a Swamp Mahogany. This tree is located within the proposed footprint of the new carpark for staff and cannot be retained.
- Tree 61 is a Forest Red Gum. This tree is located within the proposed footprint of the new carpark for staff and cannot be retained.
- Tree 64 is a Forest Red Gum. This tree is located within the proposed footprint of the new carpark for staff and cannot be retained.
- Tree 132 is a Scribbly Gum. This tree is located within the proposed development footprint and cannot be retained.

Whilst these trees require removal, considering the significant schedule of new planting proposed as part of the development, the impact associated with this tree loss is considered appropriate. Further, 206 trees at the site are to be retained. This includes the existing Moreton Bay Fig tree (Tree 172) contained to the centre of the site, which is a central feature into the proposed Landscape Plan at Appendix O.

In addition, a Flora and Fauna Assessment prepared by Eco Logical Australia at Appendix G confirmed that no trees within the school form part of an endangered ecological community, or are protected under the *Commonwealth Environmental and Biodiversity Conservation Act 1999*, or the *NSW Threatened Species*

Conservation Act 1995.

To protect each retained tree during demolition and construction, the Arborist Report recommends various tree protection measures. These include providing protection fencing around trees, and providing trunk protection on trees. These recommendations can be incorporated into the conditions of consent

Fauna:

The Flora and Fauna Assessment attached at Appendix G confirmed that no threatened fauna species were recorded at the site, and that the site is not considered to provide suitable habitat to support threatened fauna species. Considering this, no biodiversity offset scheme is required.

6.6. NOISE AND VIBRATION

A Construction and Operational Noise Report has been prepared by Wilkinson Murray and is attached at Appendix V. The Report addresses the following key considerations:

- Construction Noise and Vibration; and
- Operational Noise.

These key assessment considerations and proposed mitigation measures have been summarised below.

6.6.1. Construction Noise and Vibration

There is potential for noise and vibration impacts during construction of the proposed School, due to the proximity of surrounding residences. Accordingly, careful management will be required to minimise acoustic and vibration impacts on residences. These measures should be determined in detail when a contractor has been engaged. Notwithstanding this, the following project-specific mitigation measures are recommended:

- *“Selection of quietest feasible construction equipment;*
- *Use of rock saws and ripping in preference to rock breakers if rock removal is required;*
- *Localised treatment, such as barriers, shrouds and the like around fixed plant, such as pumps, generators and concrete pumps;*
- *Provision of respite periods, particularly if out of standard hours work is required; and*
- *Trial testing of vibration levels is conducted where equipment is identified as having the potential to exceed the human comfort criteria.*

In addition, Wilkinson Murray also recommend that:

- A community relations program should be established to keep the community updated of any anticipated changes in noise and vibration emissions prior to critical stages of the works; and
- A Noise and Vibration Management Plan should be prepared by the chosen contractor.

These mitigation measures can be incorporated into the conditions of consent and are aimed at working towards achieving the noise management levels established at surrounding receivers.

6.6.2. Operational Noise

Operational noise emissions associated with the proposal will be from the following sources:

- Services noise from mechanical plant;
- School announcements and bells;
- Outdoor play;
- Concerts in the hall; and
- Potential weekend sporting events on the oval.

Wilkinson Murray have made recommendations to mitigate against these potential noise sources. These include (amongst others):

- Silencers should be incorporated on the outlets of exhaust fans. Any roof top plant should be housed in a louvered acoustic barrier;
- The volume of the announcement and bell system should be adjusted so that the announcements and bells are clearly audible on the school site without being excessive to surrounding neighbours;
- The sound system within the proposed communal hall should have a noise limiter included in the system control so that internal noise levels can be controlled; and
- Use of the proposed sporting fields on weekends should be limited, and only occur during the day.

These mitigation measures can be incorporated into the conditions of consent to ensure operational noise resulting from the proposed School is deemed acceptable.

6.7. SEDIMENT, EROSION AND DUST CONTROLS

In accordance with the Sediment and Erosion Control Plan attached at Appendix K and the Stormwater Management Report at Appendix M, sediment, erosion and dust control measures will be provided during construction in accordance with the requirements of *“Managing Urban Stormwater Soils and Construction, 4th Edition (Blue Book)”*.

The following structures are proposed to be installed at the site to mitigate dust, erosion and sediment runoff:

- A silt fence along the entire south facing boundary and part of the east facing boundary to mitigate soil runoff;
- Various silt traps throughout the site; and
- A temporary construction entry/exit at the sites southern boundary to remove silt from all vehicles vacating the site.

6.8. WATER MANAGEMENT AND FLOODING

Woolacotts Consulting Engineers have prepared a Flood Risk Assessment Report which is attached at Appendix N. The report identifies that the site is affected by 1 in 100 year ARI flooding (to RL 3.7m AHD). The southern end of the site is also located within a medium flood risk precinct.

Accordingly, to mitigate against potential flooding impacts, various project-specific mitigation measures are recommended by Woolacotts Consulting Engineers, including:

- *“The minimum habitable floor level of the site must be set at or above the PMF level of 5.70m AHD;*
- *Flood proofing of all structural components to the PMF level 5.70m AHD;*
- *The development must not reduce flood storage under the FPL of 4.20m AHD;*
- *All new building works and services shall be designed to withstand the hydraulic forces of a flood up to PMF of 5.70m AHD;*
- *Hazardous chemicals must not be stored below the Flood Planning Level of 4.20m AHD;*
- *Proposed storage areas must be above the FPL of 4.20m AHD;*
- *The types of materials to be used to ensure the structural integrity of the building and potential risk of damage in the event of a flood due to floodwaters and debris must be considered in the structural design; and*
- *Appropriate stormwater quality and erosion control measures inclusive of grassed swales and silt fences to ensure environmental protection.”*

The proposed development has been designed to comply with the above mitigation measures and is deemed acceptable. Woolacotts Consulting Engineers have also prepared a Stormwater Management Report at Appendix M. The report identifies proposed stormwater and flooding mitigation measures incorporated into the design of the redeveloped School. These include (amongst others):

- *“A piped stormwater drainage system will be designed to carry runoff from storms up to and including the 20 year ARI event, with pipes graded at a minimum fall of 1 in 100;*
- *For runoff from storms up to and including the 100 year ARI event, overland flow paths will be provided to ensure a minimum freeboard to habitable levels;*
- *External surfaces will be graded at a minimum fall of 1 in 100 to the stormwater collection and drainage system;*
- *Water sensitive urban design principles have been incorporated into the stormwater drainage design; and*
- *Grassed swales, and Stormwater360 enviropod inserts to all new pits are proposed within the system design to achieve an overall increase of stormwater quality.”*

Stormwater and overland flow will be appropriately managed in accordance with the Flood Risk Assessment Report, Stormwater Management Report and the ancillary civil plans.

6.9. SOCIAL AND ECONOMIC IMPACTS

The proposal will generate numerous beneficial social and economic impacts for North Curl Curl and the wider Northern Beaches LGA. A Social Impact Assessment Report has been prepared by Urbis to detail these impacts and is attached at Appendix BB. In summary, the social and economic impacts comprise:

- The proposed redevelopment will provide future students and staff with new state of the art facilities and spaces. This will enable high-quality teaching beyond what can currently be provided within the existing aged demountables and wooden classrooms;
- The inclusion of a new OOSH service at the redeveloped School will continue to assist parents in the area;
- The proposed School will facilitate an additional 80 students. This will ease pressure on the existing School which has reached capacity and take enrolment pressure off other schools within the surrounding locality;
- The proposal includes sufficient areas for indoor and outdoor recreation to improve the health and wellbeing of future students and staff;
- 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 6 additional staff members will be required after the redevelopment of the School;
- The external materials and finishes to be used complement the surrounding built and natural environment of North Curl Curl. Accordingly, no negative impacts on the existing character of the area will be generated; 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 designed of materials that are ‘vandal-proof’.

6.10. SITE SUITABILITY

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

- The land is zoned R2 Low Density Residential under the WLEP. The proposed development is permissible with consent and consistent with the land use objectives of R2 zoning;
- 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;
- The site currently contains the existing Curl Curl North Public School. Accordingly, the proposal continues this educational use and in no way creates an undesirable precedent; and

- The minor increase in students and staff that will result from the proposed redevelopment is not significant and will not generate unreasonable impacts on the surrounding locality.

6.11. PUBLIC INTEREST

The proposal is in the public interest because:

- The proposed works are permissible with consent and have been prepared having regard to ISEPP and WLEP;
- 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, site contamination and flora and fauna;
- Subject to the various mitigation measures recommended by the specialist consultants, the proposal 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 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;
 - 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 North Curl Curl and create attractive streetscape along both Playfair Road and Abbott 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

Consultation has commenced for the development and will continue to occur while the SSDA is under assessment and under construction (if approved).

The purpose of the consultation process to date has been to inform and seek feedback from key stakeholders. The DoE and Coffey have worked to ensure relevant issues have been considered during the development of the proposal. Early consultation has also been designed to gauge the level of community support and acceptance of the proposal. The objectives of the preliminary consultation were as follows:

- Identify key community stakeholders with an interest in the project.
- Provide relevant information about the proposal to residents and community stakeholders to create awareness about the proposal and forthcoming SSDA.
- Provide a means by which stakeholders could provide comment on the development of the proposal.
- Provide the project team with the opportunity to incorporate stakeholder feedback into the planning and development process.

The consultation undertaken for the proposal to date is documented within the Community Consultation Report attached at Appendix EE. The key stakeholders identified in the Community Consultation Report are:

- Project Reference Group (PRG);
- Local community;
- Northern Beaches Council;
- Transport for NSW; and
- Roads and Maritime Services.

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

7.1. PROJECT REFERENCE GROUP

Fortnightly meetings were held with the PRG, which is a working group that discussed the ongoing design of the proposed School. The PRG consisted of the Director of Public Schools for the Northern Beaches, the Principal of Curl Curl North Public School, a parent representative from Curl Curl North Public School, a teacher representative from Curl Curl North Public School, Head Design Consultant, Quantity Surveyor, Project Manager and representatives from the Department of Education's Asset Management Unit.

7.2. LOCAL COMMUNITY

Coffey have undertaken detailed community consultation for the proposed School. Engagement activities which have supported this stage of consultation include:

- Three (3) community information booth sessions have been held at:
 - Curl Curl North Public School (28 March 2017);
 - Curl Curl North Public School Community Centre (29 March 2017); and
 - Manly Library (4 April 2017).
- An online survey questionnaire and feedback forms distributed at the community information booth sessions provided an opportunity for the community to comment on the proposal;
- A Curl Curl North Public School newsletter distributed to parents on 30 March 2017 informed the proposal and the community information booth sessions;
- A newspaper article published within the Manly Daily on 25 April 2017 titled 'New design all class' informed the proposal and the community information booth sessions;

- Multiple newspaper advertisements placed within the Manly Daily informed the proposal and the community information booth sessions; and
- The Curl Curl North Public School website has been updated by the DoE to inform the proposal and process.

Coffey has provided answers to key issues and questions raised during community consultation, which are summarised within the Community Consultation Report at Appendix EE. Matters raised by the community related to the School's design, proposed learning environments and ongoing consultation opportunities.

The DoE is committed to working closely with the community throughout the construction and operation process. Further information booth sessions will be undertaken during the construction phase to provide the opportunity for new residents to the area to be kept informed on the project and its progress.

7.3. NORTHERN BEACHES COUNCIL

Consultation with Northern Beaches Council was undertaken through a pre-DA meeting held on 7 February 2017. The pre-DA meeting aimed to ensure the design of the redeveloped School had been developed with input from local government to deliver a positive outcome for both the School and local community. Persons in attendance at the meeting represented Northern Beaches Council, Coffey, TKD Architects and Urbis.

The key issues discussed at the pre-DA meeting included:

- Traffic and Parking;
- Contamination;
- Stormwater;
- Flooding; and
- Built Form.

These key issues raised during the pre-DA meeting have been appropriately addressed within this EIS and various supporting appendices.

7.4. TRANSPORT FOR NSW

Consultation was undertaken with Transport for NSW on 10 March 2017 with Principal Land Use Planner Mark Ozinga. As part of this consultation, Mark Ozinga requested that the Traffic Impact Assessment Report to be prepared address traffic and transport impacts (including during construction), parking provisions, active transport initiatives and servicing requirements. Additional requests from Mark Ozinga to be provided within the Traffic Impact Assessment Report were received on 4 April 2017.

The key issues requested from Mark Ozinga on 10 March 2017 and 4 April 2017 have been appropriately addressed in the Traffic Impact Assessment prepared by Traffix at Appendix Z.

7.5. ROADS AND MARITIME SERVICES

Consultation was undertaken with the Roads and Maritime Services (RMS) on 10 March 2017. The consulted Land Use Planner raised the following traffic discussion points for the site:

- Daily and peak traffic movements;
- Details of proposed site accesses;
- Proposed parking provision; and
- Service vehicle movements.

These traffic discussion points have been appropriately addressed within the Traffic Impact Assessment prepared by Traffix at Appendix Z.

8. RECOMMENDATIONS AND MITIGATION MEASURES

A range of mitigation measures are proposed to reduce any potential environmental and social impact of the proposal. **Table 8** below provides a summary of the environmental management measures proposed.

Table 8 – Mitigation Measures

Item	Potential Impact	Mitigation Measure
Overshadowing	Overshadowing of adjoining residential properties.	<ul style="list-style-type: none"> The chosen orientation, bulk and scale of the proposed School buildings minimise overshadowing impacts.
Privacy	Adverse visual and acoustic privacy impacts on surrounding residents.	<ul style="list-style-type: none"> Retention of existing trees contained to the north, north-east, east, and western boundaries to screen the proposal and prevent onlooking. Proposed buildings achieve minimum setback distances. Implementation of recommendations outlined within the Construction and Operational Noise Report.
Parking	Demand for on-site staff car parking.	<ul style="list-style-type: none"> The following strategies will be employed by DoE to manage demand for on-site staff carparking: <ul style="list-style-type: none"> Provision of 16 on-site staff car parking spaces, including 1 accessible space. Provision of 68 on-site bicycle spaces. Development of a Workplace Travel Plan and an Active Travel Guide. Car-pooling initiatives. Initiatives to encourage the utilisation of empty car parking spaces located on Abbott Road, Playfair Road, Ross Street and Lillie Street.
Construction Vehicles	Adverse construction vehicle impacts on surrounding residents.	<ul style="list-style-type: none"> Implementation of measures outlined within the Traffic Control Plan. All truck drivers will be provided with a copy of the proposed dedicated site access route. Dedicated traffic controller will be employed at the construction vehicle access point off Playfair Road to direct traffic and uphold pedestrian safety.
Wind	Wind conditions at ground level student walkway areas.	<ul style="list-style-type: none"> The recommendations contained within Section 3.2 of the Wind Impact Assessment Report have been, or can be incorporated into the final School design.
Crime and Safety	Crime risk to safety of students, staff and visitors.	<ul style="list-style-type: none"> The proposed redevelopment incorporates CPTED principles to deter crime. Incorporated principles include: <ul style="list-style-type: none"> Incorporating an open palisade fence around the perimeter of the site.

Item	Potential Impact	Mitigation Measure
		<ul style="list-style-type: none"> – Providing adequate lighting throughout the site. This includes at footpaths and entrances. – Installing identification signs depicting the name of the School at the Abbott Road and Playfair Road site entrances 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.	<ul style="list-style-type: none"> • Implementation of recommendations contained within the Construction and Operational Noise Report. • Preparation of a Construction Noise and Vibration Management Plan.
Contamination	Disturbance of Asbestos materials.	<ul style="list-style-type: none"> • Asbestos materials to be removed from the site prior to the commencement of any renovation/demolition works that may cause their disturbance. • Implementation of recommendations outlined within Section 12 of the Stage 1 Environmental Site Assessment, Section 6 of Hazardous Building Materials Survey and the Remediation Action Plan.
Tree Protection	Construction impacts on retained trees.	<ul style="list-style-type: none"> • Implementation of recommendations outlined within Section 6 of the Arboricultural Impact Assessment to ensure retained trees are protected during construction.
Water Management	Impacts from stormwater.	<ul style="list-style-type: none"> • Implement proposed stormwater concept, which includes: <ul style="list-style-type: none"> – Piped stormwater drainage system, to carry runoff from storms up to and including the 20 year ARI event. – Overland flow paths for runoff from storms up to and including the 100 year ARI event. – External surfaces with a minimum graded fall of 1 in 100 to proposed stormwater collection and drainage system. – WSUD, including grassed swales, open turf areas and Stormwater 360 enviropod inserts to all new pits.
Waste	Excessive waste generation.	<ul style="list-style-type: none"> • Waste generated during construction for disposal to be removed by a licensed waste contractor and disposed of in a licensed landfill facility if/as required.

Item	Potential Impact	Mitigation Measure
		<ul style="list-style-type: none"> • Segregate and recycle solid wastes generated by construction activities. • Reduce wastes by selecting, in order of preference, avoidance, reduction, reuse and recycling. • Make purchasing decisions that consider recycled products. • Consider measures and performance based targets for reduction, reuse and recycling.

9. SUMMARY AND CONCLUSIONS

This EIS has been prepared by Urbis Pty Ltd on behalf of the NSW Department of Education in support of State Significant Development Application SSD 17_8310 for the redevelopment of 'Curl Curl North Public School' at Playfair Road, North Curl Curl. The redeveloped primary school will contain high quality classrooms, collaborative learning spaces, open play spaces, sports courts and associated facilities.

The School currently accommodates a maximum of 920 students. The redeveloped School is proposed to accommodate upto 1,000 students from Kindergarten to Year 6. Accordingly, the proposal will facilitate an additional 80 students to take enrolment pressure off the existing School which currently exceeds student capacity, and accommodate future population growth within the Northern Beaches LGA.

The proposal has been assessed against all items contained to 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's best interest; and
- The proposal appropriately satisfies each item within the Secretary's Environmental Assessment Requirements.

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

DISCLAIMER

This report is dated 14 August 2017 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of NSW Department of Education (**Instructing Party**) for the purpose of Environmental Impact Statement (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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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

SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

APPENDIX B CAPITAL INVESTMENT VALUE REPORT

APPENDIX C SITE SURVEY

APPENDIX D ARCHITECTURAL PLANS

APPENDIX E

URBAN DESIGN REPORT

APPENDIX F

ARBORIST REPORT

APPENDIX G

FLORA AND FAUNA IMPACT ASSESSMENT REPORT

APPENDIX H

STAGE 1 ENVIRONMENTAL SITE ASSESSMENT

APPENDIX I

HAZARDOUS MATERIALS ASSESSMENT

APPENDIX J INTEGRATED WATER MANAGEMENT PLAN

APPENDIX K SEDIMENT AND EROSION CONTROL PLAN

APPENDIX L GEOTECHNICAL AND STRUCTURAL REPORT

APPENDIX M

STORMWATER MANAGEMENT REPORT

APPENDIX N

FLOOD RISK ASSESSMENT REPORT

APPENDIX O

LANDSCAPE PLANS

APPENDIX P

PRELIMINARY CONSTRUCTION MANAGEMENT PLAN

APPENDIX Q

CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN

APPENDIX R

**OPERATIONAL WASTE MANAGEMENT
PLAN**

APPENDIX S

ECOLOGICAL SUSTAINABLE DEVELOPMENT REPORT

APPENDIX T BUILDING CODE OF AUSTRALIA REPORT

APPENDIX U ACCESS DESIGN ASSESSMENT REPORT

APPENDIX V

**CONSTRUCTION AND OPERATIONAL
NOISE REPORT**

APPENDIX W WIND IMPACT ASSESSMENT REPORT

APPENDIX X

INFRASTRUCTURE MANAGEMENT PLAN

APPENDIX Y

HYDRAULIC SITE SERVICES AVAILABILITY STATEMENT

APPENDIX Z

TRANSPORT AND ACCESSIBILITY IMPACT REPORT

APPENDIX AA PRELIMINARY CONSTRUCTION TRAFFIC MANAGEMENT PLAN

APPENDIX BB SOCIAL IMPACT ASSESSMENT REPORT

APPENDIX CC CPTED ASSESSMENT REPORT

APPENDIX DD HERITAGE STATEMENT

APPENDIX EE CONSULTATION OUTCOMES REPORT

APPENDIX FF REMEDIATION ACTION PLAN



BRISBANE

Level 7, 123 Albert Street
Brisbane QLD 4000
Australia
T +61 7 3007 3800

GOLD COAST

45 Nerang Street,
Southport QLD 4215
Australia
T +61 7 5600 4900

MELBOURNE

Level 12, 120 Collins Street
Melbourne VIC 3000
Australia
T +61 3 8663 4888

PERTH

Level 14, The Quadrant
1 William Street
Perth WA 6000
Australia
T +61 8 9346 0500

SYDNEY

Tower 2, Level 23, Darling Park
201 Sussex Street
Sydney NSW 2000
Australia
T +61 2 8233 9900

CISTRI – SINGAPORE

An Urbis Australia company
#12 Marina View
21 Asia Square, Tower 2
Singapore 018961
T +65 6653 3424
W cistri.com