

ENVIRONMENTAL IMPACT STATEMENT

LINDFIELD LEARNING VILLAGE



8 JUNE 2017
SA6386
FINAL
PREPARED FOR NSW DEPARTMENT OF EDUCATION



URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Associate Director	Alaine Roff
Senior Consultant	Erin Dethridge
Project Code	SA6386
Report Number	SA6386_EIS_FINAL

TABLE OF CONTENTS

Signed Declaration	i
Executive Summary.....	1
Secretary's Environmental Assessment Requirements	1
1. Introduction	10
1.1. Overview	10
1.2. Report Structure.....	10
1.3. Project Team.....	11
2. The Site and Surrounding Context	12
2.1. Site Description	12
2.2. Existing Development	12
2.3. Flora and Fauna.....	15
2.4. Acid Sulfate Soils	15
2.5. Services	15
2.6. Topography.....	15
2.7. Built Heritage	15
2.8. Aboriginal Heritage	16
2.9. Site Context and Surrounding Development	16
2.10. Road Network	17
2.11. Public Transport.....	18
3. The Proposed Development	19
3.1. Overview	19
3.2. Education Principles	19
3.3. Proposed Works	20
3.4. Access and Car Parking	22
3.5. Waste	23
3.6. Staging and Construction Management	24
4. Concept Plan Approval MP 06_130.....	25
5. Statutory Policy Context.....	26
5.1. Overview	26
5.2. State Environmental Planning Policy (State and Regional Development) 2011	26
5.3. State Environmental Planning Policy (Infrastructure) 2007	26
5.4. State Environmental Planning Policy No. 55 – Remediation of Land.....	27
5.5. Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017	27
5.6. Ku-ring-Gai Local Environmental Plan 2015	28
5.7. Ku-ring-gai Development Control Plan 2015	31
5.8. Section 94 Contributions.....	35
6. Strategic Planning Context	37
6.1. Overview	37
6.2. NSW State Priorities	37
6.3. A Plan For Growing Sydney	38
6.4. NSW Long Term Transport Master Plan 2012	38
6.5. Sydney's Cycling Future 2013	38
6.6. Sydney's Walking Future 2013	39
6.7. Sydney's Bus Future 2013.....	39
6.8. Healthy Urban Development Checklist, NSW Health	39

7.	Key Assessment Issues.....	40
7.1.	Built Form and Urban Design	40
7.2.	Environmental Amenity	41
7.3.	Crime Prevention Through Environmental Design	42
7.4.	Transport and Accessibility	44
7.5.	Ecologically Sustainable Development.....	46
7.6.	Social Impacts.....	47
7.7.	Biodiversity.....	47
7.8.	Built Heritage	48
7.9.	Aboriginal Heritage	49
7.10.	Noise and Vibration.....	49
7.11.	Bushfire	50
7.12.	Site Suitability	51
7.13.	Public Interest	51
8.	Consultation	52
8.1.	Local Community	52
8.2.	Roads and Maritime Services.....	53
8.3.	Rural Fire Service	53
9.	Recommendations and Mitigation Measures	54
10.	Summary and COncclusions	58
	Disclaimer	59

Appendix A	Secretary's Environmental Assessment Requirements
Appendix B	Quantity Surveyors Cost Assessment
Appendix C	Site Survey
Appendix D	Architectural Drawings
Appendix E	Built Form & Urban Design Report
Appendix F	Compliance with MP 06_130
Appendix G	Biodiversity
Appendix H	Heritage Impact Statement
Appendix I	Aboriginal Due Diligence Assessment
Appendix J	Traffic and Transport Assessment
Appendix K	ESD Assessment Report
Appendix L	CPTED Assessment
Appendix M	Social Impact Assessment
Appendix N	Noise Impact Assessment
Appendix O	Sediment, Erosion and Dust Control Statement
Appendix P	Preliminary Environmental Site Assessment
Appendix Q	Infrastructure and Services Report
Appendix R	Report on Existing Drainage Infrastructure
Appendix S	Flood Study
Appendix T	Construction and Operational Waste Management Plans
Appendix U	Bushfire Assessment Report
Appendix V	Preliminary Construction Management Plan
Appendix W	Report on Structural Adequacy
Appendix X	High-Level Access Assessment
Appendix Y	Community Consultation Report

FIGURES:

Figure 1 – Location Plan.....	12
Figure 2 – Aerial Photograph.....	13
Figure 3 – Photographs of Existing Development	14
Figure 4 – Existing Vegetation within the Site	15
Figure 5 – Extract from KLEP Heritage Map	16
Figure 6 – Surrounding Development.....	17
Figure 7 – Concept Masterplan for Level 4	21
Figure 8 – Perspectives Detailing Proposed External Works.....	22
Figure 9 – Drop-Off and Pick-Up Locations.....	23
Figure 10 – Extract from KLEP Zoning Map.....	29
Figure 11 – Site Plan and Setbacks	41

TABLES:

Table 1 – SEARs	1
Table 2 – Project Team	11
Table 3 – Existing Bus Services	18
Table 4 – KLEP Compliance Table	30
Table 5 – KDCP Compliance Table.....	31
Table 6 – CPTED Principles.....	42
Table 7 – Proposed Allocation of Parking Spaces	45
Table 8 – Mitigation Measures	54

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> Erin Dethridge (Senior Consultant) <i>Bachelor of Urban Planning and Development, University of Melbourne</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:	100 Eton Road, Lindfield (Lot 2 DP1151638)
Project:	Redevelopment of the former UTS Ku-ring-gai Campus for use as the Lindfield Learning Village, including learning spaces, offices, child care centre, open space 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
- To the best of my knowledge the information contained in this report is neither false nor misleading.

Name:	Alaine Roff, Associate Director	Erin Dethridge
Signature:		
Date:	8 June 2017	8 June 2017

EXECUTIVE SUMMARY

PURPOSE OF THIS REPORT

This Environmental Impact Assessment (EIS) was prepared by Urbis Pty Ltd on behalf of the NSW Department of Education (DoE) in support of State Significant Development Application (SSD 16_8114) for the development of 'Lindfield Learning Village' at 100 Eton Road, Lindfield (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 – X**.

THE PROPOSAL

'Lindfield Learning Village' (the 'School') is proposed to accommodate approximately 2,100 students from kindergarten to Year 12. The School is a new model of learning with six 'home bases' of around 350 students, based on their learning progression rather than age.

The school will take enrolment pressure off surrounding primary schools exceeding student capacity, and accommodate future population growth within Ku-ring-gai Local Government Area (LGA). The 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:

- Internal reconfiguration and refurbishment of the former UTS Ku-ring-gai Campus to create:
 - New learning spaces for the Lindfield Learning Village, accommodating approximately 2,100 students across Kindergarten to Year 12;
 - A 94-space child care centre; and
 - Administration facilities for Aurora College (distance education).
- Construction of lightweight pavilions at Level 7 to accommodate new internal spaces for the child care centre;
- Minor external alterations to revitalise the existing building facades and accommodate new access and fire stairs;
- Upgrades to the existing facilities and car parking to address the Building Code of Australia (BCA) and access requirements;
- Minor earthworks are proposed for the construction of footpaths, shade structures and fencing; and
- Landscaping and open space throughout the site.

As the extent of works largely involve internal refurbishment of the existing building, there is no change to the overall height, bulk, scale and setbacks of the building.

THE SITE

The subject site is located at 100 Eton Road, Lindfield and is legally described as Lot 2 DP1151638. The site is within the Ku-ring-gai Local Government Area (LGA) and comprises an irregular parcel of land with a total area of approximately 3.6ha.

The former UTS Ku-ring-gai Campus currently occupies the site and it is proposed to be refurbished to accommodate the new Lindfield Learning Village. The building consists of a single concrete structure and has six storeys with basement and rooftop plant rooms and an astronomy observation tower.

Vehicular and pedestrian access to the campus is available via Eton Road, with rows of car parking located to the east of the existing building reflecting the topography of the site and dense pockets of native vegetation. A total of 184 marked parking spaces are currently available within the site, including 35 spaces within the basement and 149 at-grade spaces. A pedestrian footbridge over Dunstan Grove links the main campus building to the gymnasium.

The existing building is surrounded by grassed areas, which extend from the building to the Lane Cove National Park and form the southern and eastern boundaries of the site.

PROJECT CONTEXT

The development of the new Lindfield Learning Village by the DoE reflects the significant need for additional public education infrastructure in the area. Across NSW, the 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 2019-20 than 2015-16. The Lindfield area is a location where population growth has placed substantial pressure on existing public schools within the area, causing them to become overcrowded beyond capacity. To meet the future demand, the DoE is required to provide a school at this location with the modern facilities required for a contemporary teaching and learning environment.

The new school at Lindfield will be a comprehensive primary and high school strongly focused on new and innovative ways of teaching and learning. Students will learn collaboratively as a member of one of six home bases, each housing up to 350 students aged from Kindergarten through to Year 12.

The learning environment will be technology-rich and allow students to interact with global experts. Students will have direct access to practical and specialist learning spaces, including laboratories and maker spaces.

There will also be an early learning centre (child care centre) located within the grounds accommodating 0-5-year-olds. This will allow the school to embrace “all through learning” providing a sense of belonging for students and families as well as continuity for each child throughout their learning journey.

Other services such as Aurora College, a virtual school for selective students will be housed on site, and local community events will be accommodated, thereby creating a community hub in this location.

PROJECT BACKGROUND

On 11 June 2008, the Minister for Planning approved Concept Plan number MP 06_130, and gazetted an amendment to Schedule 3 of the then State Environmental Planning Policy (Major Projects) 2005 for the redevelopment of the UTS Ku-ring-gai Campus at Lindfield.

The approved Concept Plan retained and adaptively reused the main campus building for education. Despite the broad range of courses offered at the Ku-ring-gai UTS campus, student numbers declined as students preferred to attend UTS's CBD campus. The Concept Plan facilitated a broader range of land uses on the site, including residential in addition to educational uses. The Concept Approval was subsequently modified by MP 06_130 Mods 1, 2, 3 and 4.

The campus was later handed over to the NSW Department of Education, which intends to retain the site for public education. The campus will be adaptively reused for a school through SSD 16_8114.

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 NSW Department of Planning and Environment (DPE) for assessment and determination.

ASSESSMENT

The proposal has been assessed against all items contained to the SEARs issued for the project on 16 December 2016. 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 proposal provides for the adaptive re-use of a former educational facility.**

It provides for the adaptive and sustainable use of the existing educational facilities, with proposed works generally limited to the internal spaces of the building. This will ensure that the proposal does not adversely impact on the identified ecological and heritage qualities of the site.

- **The proposal is in the public's best interest.**

The proposal will take substantial pressure off existing public 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 will not have any unacceptable impacts on neighbouring residential properties or the public domain.**

Subject to the various mitigation measures recommended by the specialist consultants, the proposal will not have any unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, heritage, social and environmental impacts.

- **The proposal satisfies the SEARs as demonstrated in this EIS and accompanying specialist reports.**

The proposal satisfies the SEARs as demonstrated in this EIS.

Considering the above and the content contained in this EIS, it is recommended that the DPE approve this SSD, 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 are addressed within this report and included in full at **Appendix A**.

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 technical consultant's report associated with that requirement.

Table 1 – SEARs

Item / Description	Document Reference
A. General Requirements	
The Environmental Impact Statement (EIS) must be prepared in accordance with, and the minimum requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> (the Regulation). Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development. Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: • Adequate baseline data; • Consideration of potential cumulative impacts due to other development in the vicinity (completed, 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. The EIS must be accompanied by a report from a qualified quantity surveyor providing: • A detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the <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.	The EIS has been prepared in accordance with the SEARs and meets the minimum form and content requirements specified in Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>. The EIS includes a comprehensive assessment of the environmental risks and impacts associated with the development. Appendix B

Item / Description	Document Reference
B. Key Issues – The EIS must address the following specific matters:	
1. Statutory and Strategic Context Address the statutory provisions contained in all relevant environmental planning instruments, including: • <i>State Environmental Planning Policy (State and Regional Development) 2011;</i> • <i>State Environmental Planning Policy (Sydney Region Growth Centres) 2006;*</i> • <i>State Environmental Planning Policy (Infrastructure) 2007;</i> • <i>State Environmental Planning Policy 55 - Remediation of Land; and</i> • <i>Ku-ring-gai Local Environmental Plan 2015.</i> <i>Permissibility:</i> Detail the nature and extent of any prohibitions that apply to the development. <i>Development Standards:</i> Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.	Section 5 and 6 <i>* Please note that the subject site is not within a designated growth centre and therefore SEPP (Sydney Region Growth Centres) 2006 does not apply.</i>
2. Policies Address the relevant planning provisions, goals and strategic planning objectives in the following: • <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>Crime Prevention Through Environmental Design (CPTED) Principles;</i> • <i>Healthy Urban Development Checklist, NSW Health; and</i> • <i>Ku-ring-gai Development Control Plan 2015.</i>	Sections 5.7 and 6
3. Built Form and Urban Design • Address the height, density, bulk and scale, setbacks of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces.	Sections 7.1, 7.2, 7.3, Appendix E and Appendix L

Item / Description	Document Reference
- Address design quality, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, colours and Crime Prevention Through Environmental Design Principles. - Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.	
4. Environmental Amenity Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environment amenity for any surrounding residential land uses must be demonstrated, including description of mitigation and management options to prevent, control, abate or minimise identified environmental impacts associated with the construction and operation of the development.	Section 7.2
5. Transport and Accessibility (Construction and Operation) - Include a transport and accessibility impact assessment, which details, but not limited to: - 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; - An estimate of the total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and cycle 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:	Section 7.4 and Appendix J

Item / Description	Document Reference
traffic modelling is to be undertaken with scope to be agreed by TfNSW and RMS in advance); • The proposed active transport access arrangements and connections to public transport services; • details of proposed school bus routes along bus capable roads (i.e. travel lanes of 3.5 m minimum) and infrastructure (bus stops, bus layovers etc.); • The proposed access arrangements, including car and bus 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; • 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); • 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; • Traffic and transport impacts during construction, including cumulative impacts associated with other construction activities, and how these	

Item / Description	Document Reference
impacts will be mitigated for any associated traffic, pedestrian, cyclists, parking and public transport, including the preparation of a draft Construction Traffic Management Plan to demonstrate the proposed management of the impact. → Relevant Policies and Guidelines: • <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>	
6. Ecologically Sustainable Development (ESD) • Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the design and ongoing operation phases of the development. • Demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice. • Include a description of the measures that would be implemented to minimise consumption of resources, water (including water sensitive urban design) and energy.	Section 7.5 and Appendix K
7. Social Impacts Include an assessment of the social consequences of the schools' relative location.	Section 7.6 and Appendix M
8. Biodiversity Biodiversity impacts related to the proposed development are to be assessed and documented in accordance with the Framework for Biodiversity Assessment, unless where otherwise agreed by the OEH, by a person accredited in accordance with s142B(1)(c) of the <i>Threatened Species Conservation Act 1995</i>.	Section 7.7 and Appendix F
9. Heritage Include a Heritage Impact Statement that addresses the significance of, and provides an assessment of the impact on the heritage significance of any heritage items on the site and in the vicinity, and/or conservation areas and/or potentially archaeologically significant areas, in accordance with the guidelines in the NSW Heritage Manual.	Section 7.8 and Appendix H

Item / Description	Document Reference
10. Aboriginal Heritage - Address Aboriginal cultural heritage in accordance with the <i>Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011)</i> and <i>Aboriginal cultural heritage consultation requirements for proponents 2010</i>. - The EIS must demonstrate attempts to avoid any impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts.	Section 7.9 and Appendix I
11. Noise and Vibration - 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 the school hall for concerts etc.) and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. - Assessment of noise impacts in accordance with <i>Development Near Rail Corridors and Busy Roads – Interim Guidelines</i>, including details of noise mitigation measures. → <u>Relevant Policies and Guidelines:</u> <i>NSW Industrial Noise Policy (EPA)</i> <i>Interim Construction Noise Guideline (DECC)</i> <i>Assessing Vibration: A Technical Guideline 2006</i> <i>Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning 2008)</i>	Section 7.10 and Appendix N
12. Sediment, Erosion and Dust Controls Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. → <u>Relevant Policies and Guidelines:</u> <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>	Appendix O
13. Contamination	Section 5.4 and Appendix P

Item / Description	Document Reference
Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. → <u>Relevant Policies and Guidelines:</u> <i>Managing Land Contamination: Planning Guidelines – SEPP 55 Remediation of Land (DUAP)</i>	
14. Utilities - 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.	Section 2.5 and Appendix Q
15. Contributions Address Council's Section 94A Contribution Plan and/or details of any Voluntary Planning Agreement.	Section 5.8
16. Drainage Detail drainage associated with the proposal, including stormwater and drainage infrastructure. → <u>Relevant Policies and Guidelines:</u> <i>Guidelines for development adjoining land and water managed by DECCW (OEH, 2013)</i>	Section 2.5 and Appendix R
17. Flooding 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.	Section 5.6 and Appendix S
18. Waste 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.	Section 3.5 and Appendix T

Item / Description	Document Reference
19. Bushfire Address bushfire hazard and if required, prepare a report that addresses the requirements for Special Fire Protection Purpose Development as detailed in <i>Planning for Bush Fire Protection 2006</i> guidelines.	Section 7.11 and Appendix U
C. Plans and Documents – The EIS must include the following:	
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. In addition, the EIS must include the following: • Architectural drawings (dimensioned and including RLS); • Site Survey Plan, showing existing levels, location and height of existing and adjacent structures/buildings and boundaries; • Site Analysis Plan; • Stormwater Concept Plan; • Sediment and Erosion Control Plan; • Shadow Diagrams; • View Analysis / Photomontages; • 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 • Schedule of materials and finishes.	Appendix B - Y
D. Consultation	
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. In particular, you must consult with:	Section 8 and Appendix Y

Item / Description	Document Reference
• Ku-ring-gai Council; • Transport for NSW; • Roads and Maritime Services; and • NSW Rural Fire Service. Consultation with TfNSW and RMS should commence as soon as practicable to agree the scope of investigation. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.	

1. INTRODUCTION

1.1. OVERVIEW

This Environmental Impact Assessment (EIS) has been prepared by Urbis Pty Ltd on behalf of the NSW Department of Education (DoE) (the 'Applicant') in support of State Significant Development Application (SSD 16_ 8114) for the development of the 'Lindfield Learning Village' within the former UTS Ku-ring-gai Campus at 100 Eton Road, Lindfield (the 'site').

Specifically, this EIS seeks development consent for the following works at the site:

- Internal reconfiguration and refurbishment of the former UTS Ku-ring-gai Campus to create:
 - New learning spaces for the Lindfield Learning Village, accommodating approximately 2,100 students across Kindergarten to Year 12;
 - A 94-space child care centre; and
 - Administration facilities for Aurora College (distance education).
- Construction of lightweight pavilions at Level 7 to accommodate new internal spaces for the child care centre;
- Minor external alterations to revitalise the existing building facades and accommodate new access and fire stairs;
- Upgrades to the existing facilities and car parking to address the Building Code of Australia (BCA) and access requirements;
- Minor earthworks are proposed for the construction of footpaths, shade structures and fencing; and
- Landscaping and open space throughout the site.

This is illustrated in the architectural drawings prepared by DesignInc Sydney Pty Ltd in **Appendix D**.

As the extent of works largely involve internal refurbishment of the existing building, there is no change to the overall height, bulk, scale and setbacks of the building.

1.2. 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 SEARs attached at **Appendix A**, and the supporting technical documents provided at **Appendix B – Y**.

1.3. PROJECT TEAM

Specialist consultants were engaged to assist in the preparation of this SSD, as outlined in **Table 2**.

Table 2 – Project Team

Discipline / Input	Consultant	Appendix
Secretary's Environmental Assessment Requirements	DPE	Appendix A
Quantity Surveyors Cost Assessment	Wilde and Woollard	Appendix B
Site Survey	William L Backhouse Surveyors	Appendix C
Architectural Drawings	DesignInc	Appendix D
Urban Design	DesignInc	Appendix E
Planning	Urbis	Appendix F
Biodiversity	Ecoplaning	Appendix G
Built Heritage	Urbis	Appendix H
Aboriginal Heritage	Urbis	Appendix I
Traffic and Transport	Arup	Appendix J
Ecologically Sustainable Development (ESD)	Umow Lai	Appendix K
Crime Prevention Through Environmental Design	Urbis	Appendix L
Social Impact	Urbis	Appendix M
Noise and Vibration	Acoustic Logic	Appendix N
Sediment, Erosion and Dust Control	Bizulis	Appendix O
Contamination, Salinity and Acid Sulphate Soils	Environmental Investigation Services	Appendix P
Utilities	Erbas	Appendix Q
Drainage	Bizulis Associates Pty Ltd	Appendix R
Flooding	Bizulis Associates Pty Ltd	Appendix S
Waste Management	Foresight Environmental	Appendix T
Bushfire	Advanced Bushfire Performance Solutions	Appendix U
Construction Management	Savills and DesignInc	Appendix V
Structural Engineering	Bizulis Associates Pty Ltd	Appendix W
Accessibility	BCA Logic	Appendix X
Consultation	Savills	Appendix Y

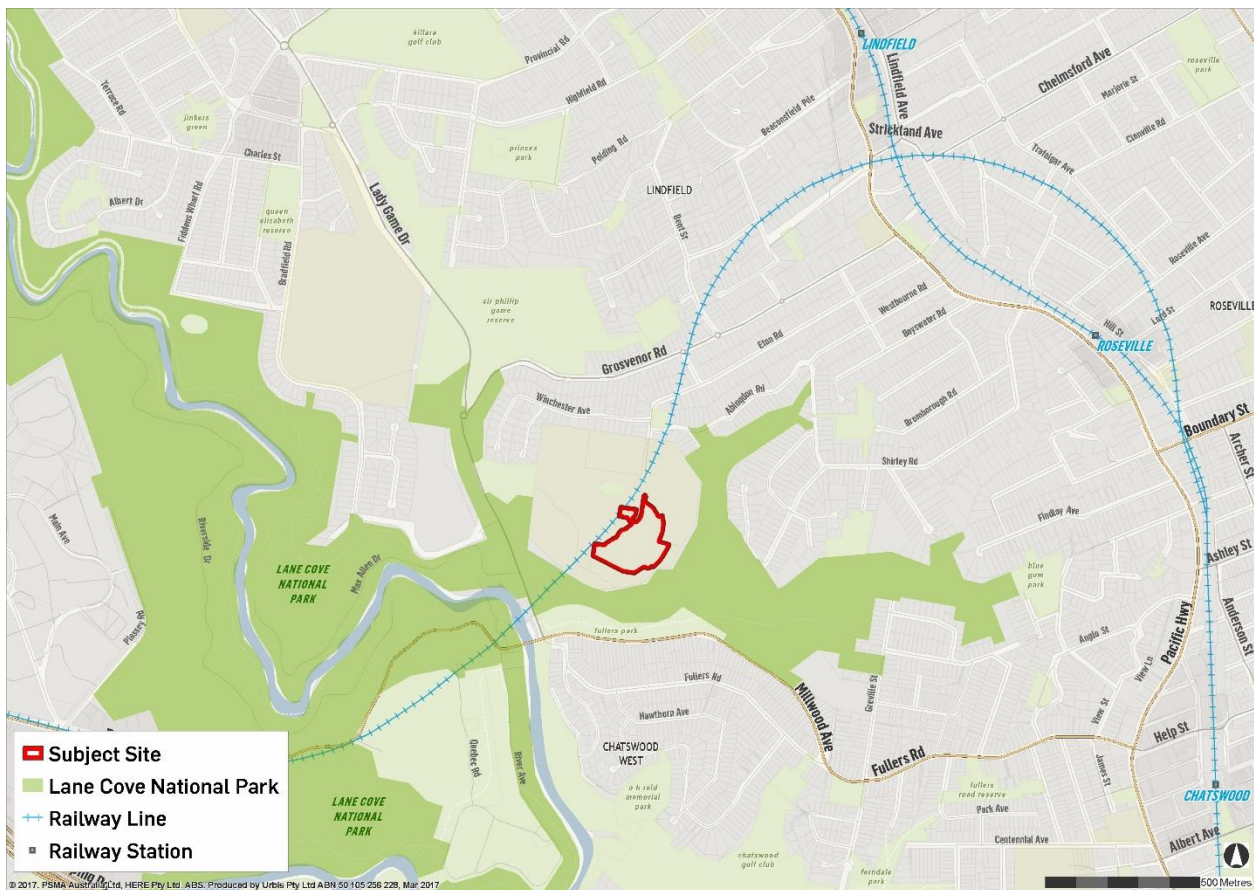
2. THE SITE AND SURROUNDING CONTEXT

2.1. SITE DESCRIPTION

The subject site is located at 100 Eton Road, Lindfield and is legally described as Lot 2 DP1151638. A location plan is provided at **Figure 1**.

The site is located within the Ku-ring-gai Local Government Area (LGA). The site is an irregular parcel of land and has a total area of approximately 3.6ha.

Figure 1 – Location Plan



Source: Urbis

2.2. EXISTING DEVELOPMENT

The former UTS Ku-ring-gai Campus currently occupies the site and it is proposed to be refurbished to accommodate the new Lindfield Learning Village. The existing campus was constructed in the early 1970s and originally opened as the William Balmain Teachers College. The facilities later became the Ku-ring-gai College of Advanced Education and in 1989 it was amalgamated into the UTS.

The site is an example of Brutalist style of architecture, characterised by the use of robust materials including concrete and brickwork. The building consists of a single concrete structure and has six storeys with basement and rooftop plant rooms and an astronomy observation tower. The massing of the building consists of various heights, which step down in response to the topography of the site. Lower levels of the building have rooms that open onto roof decks and the massing of the building is broken by small courtyards and concrete linking bridges.

The overall height of the existing building is 24m, however due to its fragmented composition, the various forms of the building range in height from 2 storeys (6.3m) to five storeys (17m). The building footprint covers an area of approximately 12,200sqm, which represents a site coverage of 33.9 per cent. The total internal floor area of the building is approximately 28,900sqm.

The building comprises the following existing specialised spaces:

- Greenhalgh auditorium (750 seat capacity);
- Large lecture theatre (180 seat capacity);
- Small lecture theatre (100 seat capacity);
- Library resource centre;
- Gymnasium building comprising dance studio and weights room;
- Drama and music facilities;
- Science labs; and
- Wood and metal technology facilities.

Vehicular and pedestrian access to the campus is available via Eton Road, with rows of car parking located to the east of the existing building reflecting the topography of the site and dense pockets of native vegetation. A total of 184 marked parking spaces are currently available within the site, including 35 spaces within the basement and 149 at-grade spaces. A pedestrian footbridge over Dunstan Grove links the main campus building to the gymnasium.

The existing building is surrounded by grassed areas, which extend from the building to the Lane Cove National Park and form the southern and eastern boundaries of the site.

An aerial photograph of the site is provided at **Figure 2**. Photographs of the internal and external exterior of the existing building are provided at **Figure 3**.

Figure 2 – Aerial Photograph



Source: Google Earth

Figure 3 – Photographs of Existing Development



Picture 1 – Main building entrance



Picture 2 – External building facade



Picture 3 – Internal space, main foyer



Picture 4 – Internal space



Picture 5 – View towards the internal footbridges



Picture 6 – Footbridge over Dunstan Grove

2.3. FLORA AND FAUNA

A Biodiversity Assessment and Biodiversity Offset Policy have been prepared by Ecoplaning in accordance with the SEARs, as outlined in the statement provided at **Appendix F**. Recent vegetation mapping has included all large areas of vegetation in close proximity to the existing building as remnant vegetation, although in many places this vegetation is highly modified with horticultural plantings and/or clearing of understorey vegetation. There are also some large stands of Flooded Gum (*Eucalyptus grandis*) in close proximity to the building, although these are not Indigenous to the area.

A number of threatened flora are known to occur close the site, including *Darwina Darwinia biflora*, *Epacris purpurascens subsp. purpurascens* and *Acacia bynoeana*. Surveys undertaken by Ecoplaning has not identified any individuals of these species within the site.

The proposed development does not involve the removal of any existing trees from within the site.

Figure 4 – Existing Vegetation within the Site



Picture 7 – External view of existing building



Picture 8 – Grassed area to the south of the campus

2.4. ACID SULFATE SOILS

The site is not located in an acid sulfate soil (ASS) risk area according to the risk maps prepared by the Department of Land and Water Conservation.

2.5. SERVICES

The site currently contains and is connected to all necessary services including water, gas, electricity, communications and sewage. The Utilities Study prepared by Erbas and attached at **Appendix R** confirms that the existing services have sufficient capacity to accommodate the proposal.

A review of the existing drainage infrastructure was also undertaken by Birzulis Associated and is attached at **Appendix R**. Given the proposed works are primarily internal to the building, the review by Birzulis indicates that new drainage infrastructure is not required to accommodate the proposed school.

2.6. TOPOGRAPHY

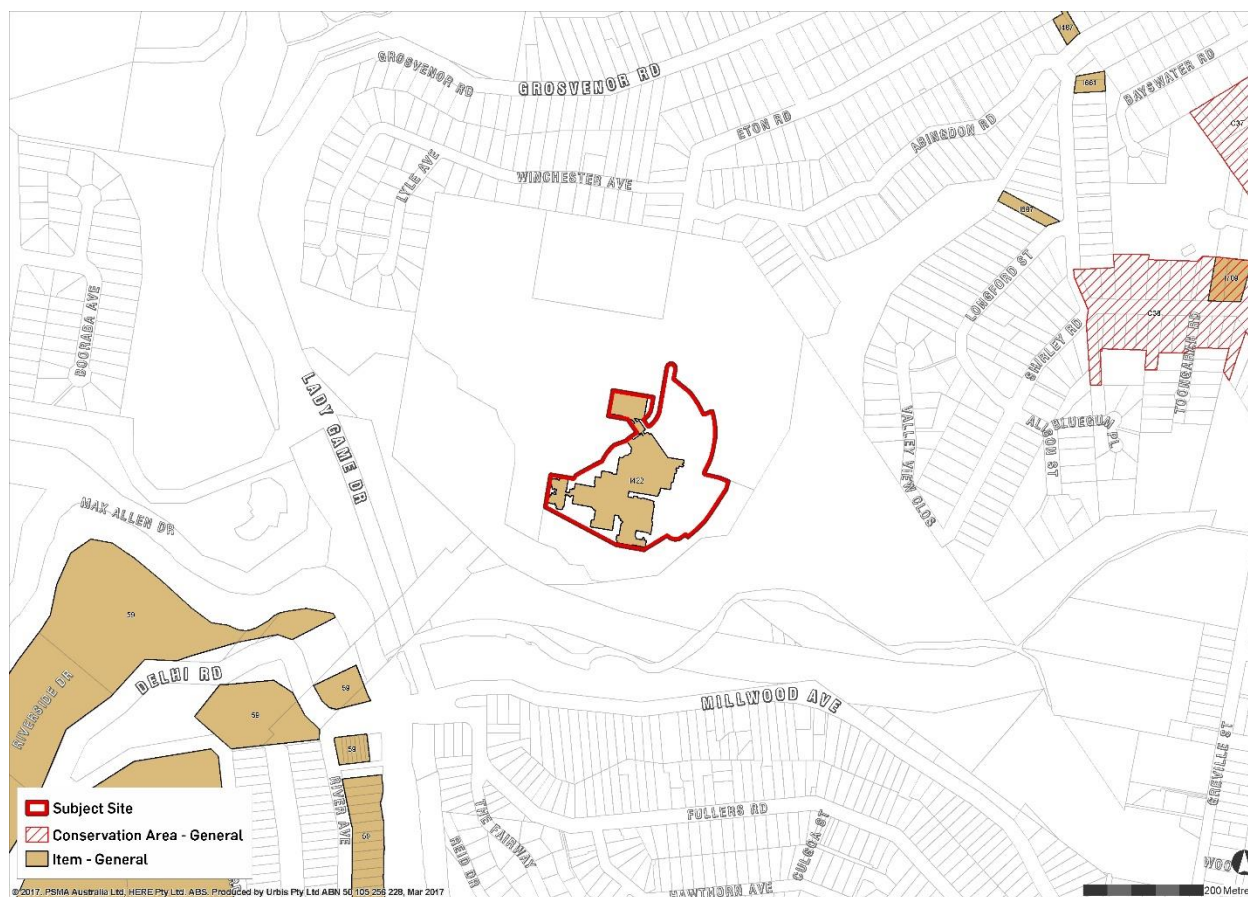
The site has a fall of approximately 6m from north to east and a further 9m to the south. The ground is characterised by sandstone outcrops with various level changes and flat and sloping grass areas.

2.7. BUILT HERITAGE

The UTS Ku-ring-gai Campus is a local heritage item (I422) under the KLEP, see **Figure 5**. The heritage listing includes the main building, the gymnasium and footbridge. The setting of the site is the Lane Cove National Park, which surrounds the campus with native vegetation.

A Heritage Impact Statement was prepared by Urbis and is attached at **Appendix H**.

Figure 5 – Extract from KLEP Heritage Map



Source: KLEP

2.8. ABORIGINAL HERITAGE

An Aboriginal Due Diligence Assessment was prepared by Urbis and is attached at **Appendix I**. The assessment highlights the following:

- The Study Area would have had the potential to contain Aboriginal sites/objects prior to disturbance. However, the Study Area has been subject to severe and extensive disturbance.
- No Aboriginal archaeological sites or places are recorded within the Study Area.
- Rock shelter and artefact sites were the most commonly encountered site types in the area, though the results of previous investigations as well as the extent to which the Study Area has been disturbed (and the absence of suitable rock shelters, rock outcrops and rock platforms within the Study Area and proposed impact areas specifically) indicates that the potential for such sites to be encountered within the Study Area is very low to nil;
- No Aboriginal objects were identified during the site walk-over. The visual inspection confirmed that the Study Area had been severely disturbed, and that the archaeological potential of the Study Area is very low.

Aboriginal heritage matters are discussed further at **Section 7.9** of this report.

2.9. SITE CONTEXT AND SURROUNDING DEVELOPMENT

The context of the site is characterised by the following:

- Surrounding the site to the **east, west** and **south** is native vegetation associated with the Lane Cove National Park. The Blue Gum Creek is also located to the **south** of the subject site.

- The site is surrounded to the **north-west** and **north-east** by Edgelea, a medium density residential development recently constructed on the balance of the former UTS Ku-ring-gai campus by Defence Housing.
- The north-eastern residential building is four storeys in height and is nestled into the slope of the hillside. The north-western residential building is five storeys in height, with vehicle access provided from Eton Road and Dunstan Grove. Photographs of the interface with the residential development across Dunstan Grove to the north are provided at **Figure 6**.
- Land further **north** includes the Charles Bean sports field, recently demolished Screen Australia complex and an established low-density residential environment.

Figure 6 – Surrounding Development



Picture 9 – Residential development across Dunstan Grove



Picture 10 – Interface with neighbouring residential development

2.10. ROAD NETWORK

Key roads which provide access to the site are:

- Pacific Highway (State Road);
- Lady Game Drive (Regional Road); and
- Grosvenor Road and Eton Road (Local Roads).

Pacific Highway

Within the vicinity of the site, the Pacific Highway currently operates efficiently during school peak periods and the evening peak periods. During the AM peak, there is a high demand of southbound traffic heading to the city.

Lady Game Drive

Lady Game Drive provides access to North Ryde via Dehli Road and to Chatswood via Millwood Avenue. During the AM peak, the high southbound traffic demand creates a queue which extends past the roundabout with Grosvenor Road, starting from the Millwood Avenue intersection.

Grosvenor Road and Eton Road

These local roads mainly consist of one lane carriageways, forming unsignalised intersections and roundabouts. They provide access to low density residential areas, with Eton Road providing access to medium density residential areas near the learning village. All the local roads currently operate efficiently with no delays observed.

A Traffic and Transport Assessment was prepared by Arup and is attached at **Appendix J**. Traffic related matters are discussed further at **Section 7.4** of this report.

2.11. PUBLIC TRANSPORT

Bus Services

The site is directly serviced by the No. 565 bus route, with a bus stop currently located just north of the site on Eton Road. Route No. 565 operates hourly, with services between Chatswood and Macquarie University. Typical bus travel times during the morning 8am peak is shown in **Table 3**.

Table 3 – Existing Bus Services

Departing From	Travel Time to Site	Service Period
Macquarie University	29 mins	AM – First service 6.56am PM – Last service 5.42pm
Chatswood	19 mins	AM – First service 7.37am PM – Last service 6.08pm
Roseville Station, Pacific Highway	9 mins	AM – First service 7.48am PM – Last service 6.13pm
Lindfield Station, Pacific Highway	9 mins	AM – First service 6.32am PM – Last service 6.15pm

Train Services

The site is located approximately 2km (20-minute walk) from both the Lindfield and Roseville Train Stations. Trains to these stations run frequently during peak hours along the T1 North Shore Line.

Once completed in 2019, Sydney Metro Northwest will provide direct access to locations throughout Greater Sydney including Macquarie Park and Chatswood, and direct access to the Sydney Trains and Sydney Buses network. The new metro is expected to provide more frequent and efficient train services from Epping to Chatswood and will provide additional public transport capacity to the site.

3. THE PROPOSED DEVELOPMENT

3.1. OVERVIEW

The proposal involves the redevelopment of the former UTS Ku-ring-gai Campus for the purposes of a new school to be known as the Lindfield Learning Village.

The proposed development provides an opportunity to deliver a new educational model within a unique campus setting and will cater for up to 2,100 students from Kindergarten through to Year 12. An overview of the proposed school and ancillary facilities is provided below.

Kindergarten to Year 12 Home Bases

- It is planned to group students into six home bases, each catering for approximately 350 students of all ages from Kindergarten to Year 12. The home base model represents the educational concept of 'schools within a school'. The educational philosophy is based on the principles of 'Future Focussed Learning' and academic progression through the school is by stage of scholastic achievement, not by the age of the student.
- To manage the impact on the surrounding road network by reducing the peak traffic generated, the commencement times of the home bases will be staggered as follows:
 - two home bases commencing at 7:30am and concluding at 2.00pm;
 - two home bases commencing at 8:30am and concluding at 3.00pm; and
 - two home bases commencing at 9:00am and concluding at 3.30pm.
- Approximately 160 teachers will be employed.

Other Facilities

The proposed school will also be supported by the following facilities:

- Child care centre accommodating approximately 94 children and 12 staff. The child care centre will operate from 6.30am to 6.30pm;
- Aurora College (Distance Education) comprising 12 staff.

After Hour Facilities

It is anticipated that the following facilities will also be made available after hours for community use:

- Existing Greenhalgh Auditorium, 750 seat capacity;
- Existing Lecture Theatre 1, 180 seat capacity; and
- Existing Lecture Theatre 2, 100 seat capacity.

3.2. EDUCATION PRINCIPLES

Highly innovative ideas have been used to create the Lindfield Learning Village education model. The focus is on placing the needs of the learner and learning at the centre. The proposal has been designed with the following principles in mind:

- Stage not age, allowing learners to move to progressively more advanced study according to their rate of progress rather than age.
- Vertical school structures facilitating schools within schools to foster engagement, a sense of belonging and which support wellbeing.
- Project based learning where students explore real life questions which link outcomes across the NSW Board of Studies curriculum.

- Pre-school to year 12 and beyond which will minimise the impact of stage breaks between schools and which allows links with universities and further learning.
- Higher School Certificate over 3 years to allow students flexibility to achieve their full potential.
- Global digital citizenship which connects students with their own learning, other learners, the local community and the broader global community.
- Use of data to inform learning empowering students to understand their own learning progress through making thinking and learning visible.

The design will facilitate the delivery of an educational model based on communication, collaboration, creativity and critical thinking in a family based caring structure.

3.3. PROPOSED WORKS

3.3.1. Internal Works

The proposal essentially involves the internal reconfiguration and refurbishment of the existing building to provide new learning spaces for the Lindfield Learning Village.

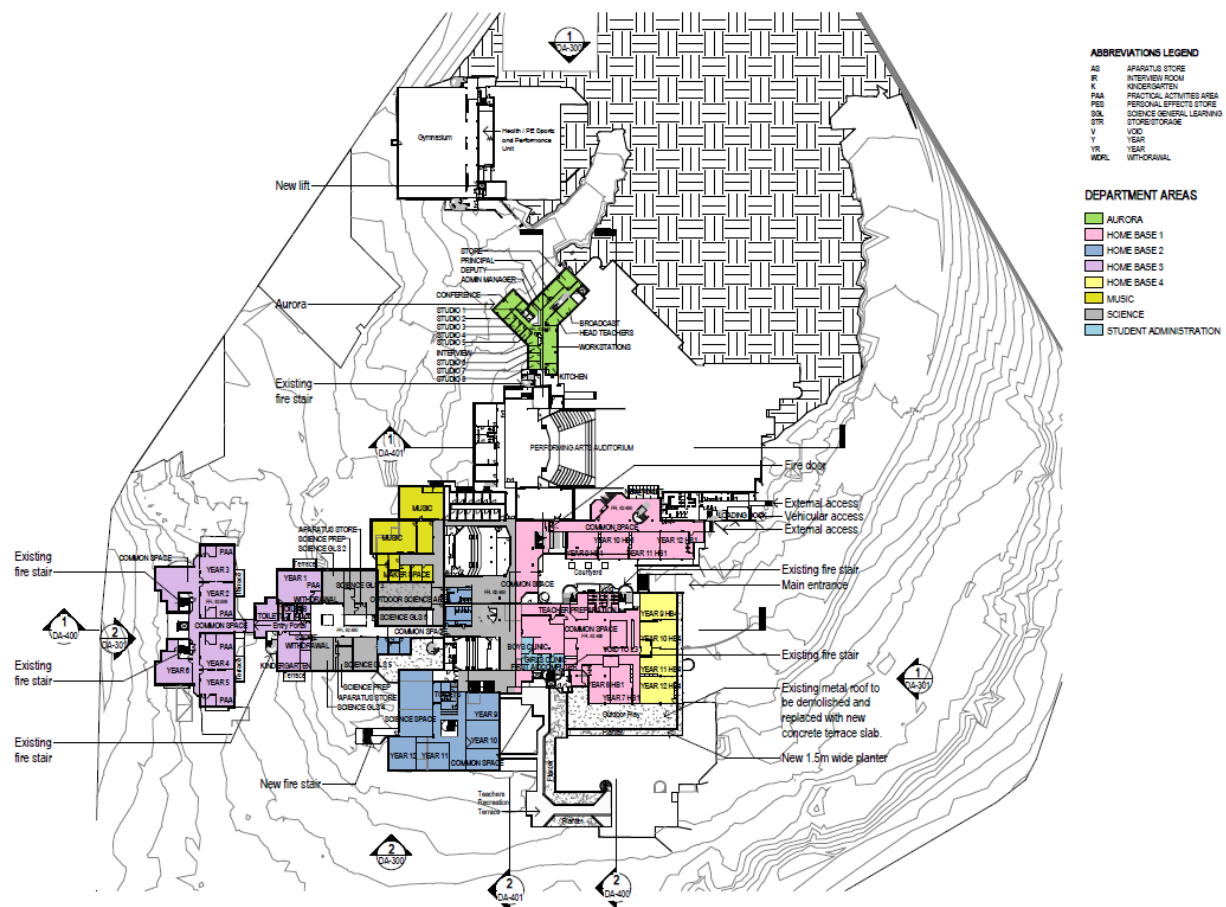
Many of the internal brick walls within the building will be demolished and replaced with glazed sliding walls that define learning spaces and create an interconnected and open plan arrangement. The general learning spaces within the home bases are arranged around the external perimeters of the building to maximise solar access, natural ventilation and outlook. Shared practical activity areas are provided for the junior years and low height glass enclosed spaces are provided for collaborative learning.

Voids will be created between various floors to provide vertical visual connection between the home bases and to provide natural light from new skylights. The internal structural concrete columns will be retained as a framework for the various spaces and will be revitalised through the application of colour and a variety of finishes.

Shared specialised learning spaces, including the library resource centre, science labs, wood and metal technology, visual areas, food and textiles and student counselling, will occupy refurbished facilities throughout the building.

The existing Greenhalgh Auditorium will be upgraded to address BCA requirements and will be available for school concerts and assemblies as well as for external community use.

Figure 7 – Concept Masterplan for Level 4



Source: DesignInc

3.3.2. External Works

As the extent of works largely involve internal refurbishment of the existing building, there is no change to the overall height, bulk, scale and setbacks of the building.

External works across the site will be minimal and are generally limited to the following:

- Minor demolition works to accommodate new access stairs and fire stairs within the eastern, western and southern elevations.
- Pre-finished coloured panels applied to the exterior of the building as shown in **Figure 8**.
- Construction of a new Level 7 addition to the eastern side of the building comprising lightweight pavilions. The additional area would comprise new internal spaces for the child care centre.
- Existing courtyard tiles will be replaced with a concrete topping slab to create a uniformity of surface.
- The rooftop terrace areas will be used for outdoor play by students and will be covered with 'astro turf' materials and feature lightweight unobtrusive mesh screens to prevent falls and thrown objects. Two of these areas will be located on Level 5 and one each on Level 3, 4 and 6. The design of the roof outdoor play areas has not been resolved at this stage. It is anticipated that these areas will require play equipment etc., new balustrades and the replacement of existing surfaces. Existing landscaped planters at these levels will largely be retained and upgraded where necessary for access and safety.
- Non-accessible roofs will be cleaned and repaired with new waterproofing membranes protected by a layer of pebbles.

- Replacement of all asbestos filled windows and glass doors with new toughened glass windows and doors. In various areas, it is proposed to alter the proportions of the existing openings such that the roof terraces beyond are accessible from a wider area.
- New landscaping works including pathways around the building and detailed works to courtyards. The proposed landscaping has not been resolved at this stage.
- Installation of shade structures within the grassed areas to the south and east of the building.
- Installation of new perforated steel mesh attached to the inside of existing concrete balustrades to ensure BCA compliance and DoE requirements.
- Installation of retractable fabric awnings to extend shade to courtyards.
- A 2.1m high security fence will be erected around the perimeter of the site.

Figure 8 – Perspectives Detailing Proposed External Works



Source: DesignInc



Source: DesignInc

The existing sports oval adjacent to the school will be used for outdoor sports and will be shared with community activities. No works are proposed to the existing sports oval.

3.4. ACCESS AND CAR PARKING

3.4.1. Vehicle Access

The proposal will utilise the existing vehicular access and car parking available from Eton Road.

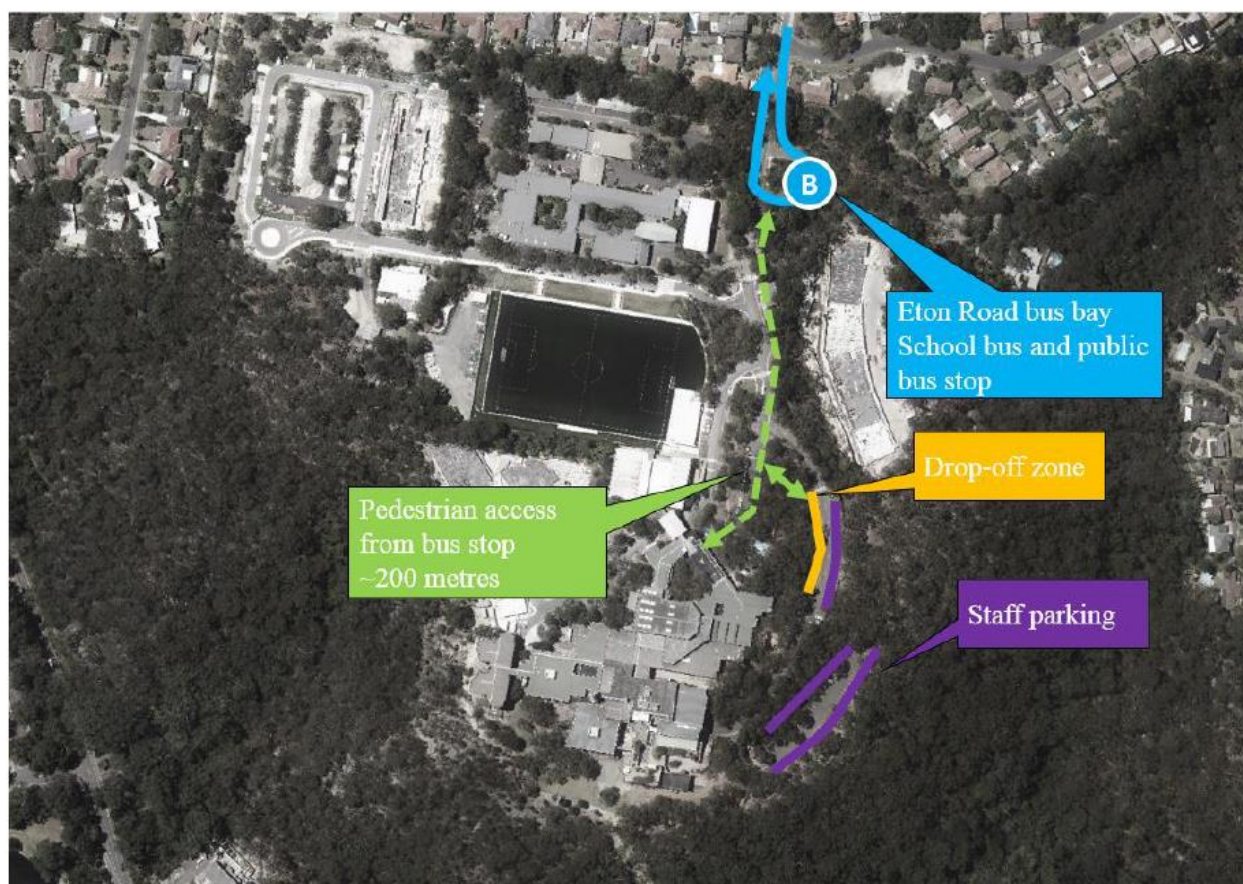
3.4.2. Drop-off and Pick-up

The proposed drop-off and pick-up location is on the upper level car park and consists of 62 at-grade parking spaces, as shown in **Figure 9**. Minor works to the existing kerbs is proposed to create a turning head at the existing loading dock area, thereby allowing vehicles to make a U-turn to access the drop-off bays. The drop-off arrangement would allow 10 vehicles to queue at the drop-off bay at any one-time and would require 21 spaces to be converted to drop-off bays during the morning peak. It is anticipated that these bays would then function as parking spaces for visitors, outside of the school peak hours. A similar arrangement is proposed for the pick-up arrangement during the afternoon.

3.4.3. Bus Access

School and public buses will continue to use the existing bus bay on Eton Road at the entrance to the site. Students and staff will then walk approximately 200 metres to the school. Pedestrian access from the bus stop to the campus is efficient with a comprehensive network of pedestrian crossing facilities. It is expected that traffic wardens will be positioned at key crossing locations to ensure safety of students and staff.

Figure 9 – Drop-Off and Pick-Up Locations



Source: Arup

3.4.4. Car Parking

The site currently has 184 car parking spaces across the basement and at-grade parking locations. Due to the topographic, vegetation and heritage constraints associated with the site, additional parking is not proposed and therefore parking allocations are based on existing provisions. Discussion of the proposed car parking provision having regard to the requirements of the Ku-ring-gai Development Control Plan 2015 (DCP) is provided at **Section 7.4**. The following allocation of car parking is proposed:

- 151 spaces for the 160 staff of the proposed school;
- 23 spaces for the child care centre;
- 9 spaces for staff of the Aurora College; and
- No car parking spaces will be made available for Year 12 students.

3.5. WASTE

3.5.1. Construction Waste

The contractor will comply with the relevant Australian Standards, conditions of consent and the measures outlined within the Construction & Demolition Waste Management Plan prepared by Foresight Environmental at **Appendix T** 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.

3.5.2. Ongoing Waste

An Operational Waste Management Plan has been prepared by Foresight Environmental and is attached at **Appendix S**. 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 development would be:

- Cardboard/paper recycling
- Comingled recycling
- Food organics recycling
- General waste

Additional smaller waste streams may include toner cartridge recycling, fluoro tube/globe recycling and battery recycling.

The two existing waste storage areas provide sufficient capacity for the bins proposed, which include:

- 2 x 1,110L and 29 x 240L bins for paper/cardboard recycling;
- 2 660L bins for comingled recycling; and
- 3 x 1,110L bins for general waste.

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.

3.6. STAGING AND CONSTRUCTION MANAGEMENT

The site will be redeveloped in two stages. Stage 1 will comprise:

- 3 home-bases totalling approximately 1,100 students from K-12 in the eastern wing of the building;
- All requisite technical spaces to support a full primary and secondary curriculum;
- Administration space for approximately 160 staff;
- 94-place child care facility catering for ages 0-5;
- Fencing of the green space around the perimeter of the site;
- Remediation of targeted roof areas to create additional outdoor play areas; and,
- Traffic and transport infrastructure associated with the parking and drop-off / pick-up area.

Stage 2 will comprise:

- 3 home-bases totalling approximately 1,000 students from K-12 in the western wing of the building; and,
- remediation of targeted roof areas to expand outdoor play areas.

A Preliminary Construction Management Plan is attached at **Appendix V**.

4. CONCEPT PLAN APPROVAL MP 06_130

On 11 June 2008, the Minister for Planning approved Concept Plan number MP 06_130, and gazetted an amendment to Schedule 3 of the then State Environmental Planning Policy (Major Projects) 2005 for the redevelopment of the UTS Ku-ring-gai Campus at Lindfield. The approved Concept Plan included:

- Part demolition of existing campus buildings;
- Retention and adaptive reuse of the main campus building, a significant 20th century building, for continued education and commercial use, and including the existing auditorium and libraries;
- Provision of a 9,800m² sports field and 300m² community space to be dedicated to Ku-ring-gai Council;
- Dedication of 34,570m² of bushland to the NSW Government;
- New residential development comprising 345 dwellings including 10 single lot dwellings, 25 integrated dwellings or town houses and 310 apartments; and
- A street and pedestrian network that extends and integrates with the existing streets and footpaths.

Despite the broad range of courses offered at the Ku-ring-gai UTS campus, student numbers declined as students preferred to attend UTS's CBD campus. The Concept Plan facilitated a broader range of land uses on the site, including residential in addition to educational uses.

The Concept Plan was first modified on 7 November 2008 (MP 06_0130 Mod 1) to rectify some typographical errors and to amend the provisions relating to contributions (Condition B13).

The Concept approval was subsequently modified on 21 May 2010 (MP 06_130 Mod 2). The approval was modified as follows:

- Retention of the existing gymnasium building, which was approved for demolition;
- Reconfiguration of Precinct 2 in response to the dwelling yield reductions and setback requirements by consolidating blocks B, C and D into one building (91 dwellings);
- Reconfiguration of Precinct 3 to delete block F (where the existing gymnasium is located), and enlarge proposed Block E (129 dwellings) to incorporate dwellings originally proposed within block F; and,
- Changes to the Concept Plan to satisfy modifications imposed by the Minister.

Subsequent MP 06_130 Mod 3 related to the requirements in the Instrument of Approval regarding the location of the community facility and the timing of the dedication of land, roads and community facility. MP 06_130 Mod 4 related to amending Figure 1 of the Instrument of Approval regarding the maximum number of dwellings within each precinct and amendment to Schedule 3 of the MD SEPP to allow interim land use for 'Exhibition and Sales Office' in the Zone RE1 Public Recreation.

The approved Concept Plan (MP 06_130) established the fundamental design and built form parameters applicable to the future development of the site. A compliance assessment of the proposed works against the conditions of approved Concept Plan and the Statement of Commitments has been undertaken in **Appendix F**.

5. STATUTORY POLICY CONTEXT

5.1. OVERVIEW

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

- *State Environmental Planning Policy (State and Regional Development) 2011;*
- *State Environmental Planning Policy (Infrastructure) 2007;*
- *State Environmental Planning Policy 55 - Remediation of Land;*
- *Ku-ring-gai Local Environmental Plan 2015; and*
- *Ku-ring-gai Development Control Plan 2015.*

5.2. STATE ENVIRONMENTAL PLANNING POLICY (STATE AND REGIONAL DEVELOPMENT) 2011

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) identifies development types that are of state significance, or infrastructure types that are of state or critical significance. Pursuant to Schedule 1 of the SRD SEPP:

“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 more than \$30 million. This meets the minimum threshold of \$30 million and accordingly, an SSD application has been lodged with DPE.

5.3. 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 development application for ‘educational establishments’. Clause 28(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):

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

Clause 32(3) 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.

The above standards are no longer fully relied on as the guidelines for school design. The proposal has been designed to be consistent with several other industry and government benchmarks including the NSW Educational Facilities Standards and Guidelines (EFSG).

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 (now RMS). Consultation with RMS was undertaken during the SEARs stage and as part of the preparation of the EIS. The Traffic and Transport Assessment addresses the transport related matters outlined in the SEARs. A referral to the RMS will be undertaken during the assessment of the EIS in accordance with Schedule 3.

5.4. 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 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 the consent of a development application

A Preliminary Environmental Site Assessment was undertaken by Environmental Investigation Services and is attached at **Appendix P**. This report concludes:

“As the proposed development does not involve excavation or construction, based on the assessment and the perceived potential for contamination, widespread investigation of the contamination conditions is not considered to be required at this stage. However, we would recommend an investigation of any unpaved areas where children could potentially come into regular contact with soil (e.g. play areas associated with the kindergarten).

A hazardous building material assessment should be undertaken prior to any refurbishment works. An asbestos register for the buildings may already have been completed.

EIS are of the opinion that the site can be made suitable for the proposed development provided that the recommendations are completed.”

On this basis, it is considered that the proposal satisfies the requirements of SEPP 55.

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

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.

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 proposal involves largely internal alterations and will not adversely impact on the significance of the site's setting, landscape and heritage.
- **Principle 2 – Sustainable, Efficient and Durable:** The proposal adopts a range of ESD initiatives as outlined in **Section 7.5** and **Appendix K** and will provide positive social and economic benefits for the local community, particularly in terms of job creation and reducing pressure of surrounding public schools.
- **Principle 3 – Accessible and Inclusive:** Where possible, the existing building will be upgraded to address accessibility requirements. It is also intended that the auditorium facilities and sports oval will be made available to the community outside of school hours.
- **Principle 4 – Health and Safety:** CPTED measures will be incorporated into the design and management of the site to ensure a high level of safety and security for students and staff. A range of open spaces and sports facilities will be available for students to encourage passive recreation.

- **Principle 5 – Amenity:** The proposal will contain state of the art facilities, spaces and equipment for use by students and staff. These areas will provide students with a pleasant learning environment. Subject to careful management and implementation of the recommended mitigation measures in **Section 9**, the proposal will not result in any unacceptable impacts on neighbouring properties.
- **Principle 6 – Whole of Life, Flexible and Adaptive:** The proposal provides for the re-purposing of the former UTS Ku-ring-gai Campus and the internal reconfiguration will create adaptable learning spaces and facilities.
- **Principle 7 – Aesthetics:** The proposal involves minimal alterations to the external appearance of the building and landscape setting.

5.6. KU-RING-GAI LOCAL ENVIRONMENTAL PLAN 2015

The *Ku-ring-gai Local Environmental Plan 2015* (KLEP) is the principal environmental planning instrument governing development at the subject site. An assessment against the relevant controls of the KLEP has been undertaken in the subsections below. Overall, the proposal complies with all relevant provisions.

5.6.1. Zoning and Permissibility

The majority of the built form within the site is zoned B4 Mixed Use, with the balance of the site zoned R1 General Residential and E3 Environmental Management, see **Figure 10**.

B4 Mixed Use Zone

Within the B4 Zone, 'educational establishments' are permitted with consent. An educational establishment is defined under the KLEP 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.

R1 General Residential

Educational establishments are prohibited in the R1 Zone. The proposal is permissible within the R1 zoned portions of the site by virtue of Clause 28(1) of ISEPP, which states:

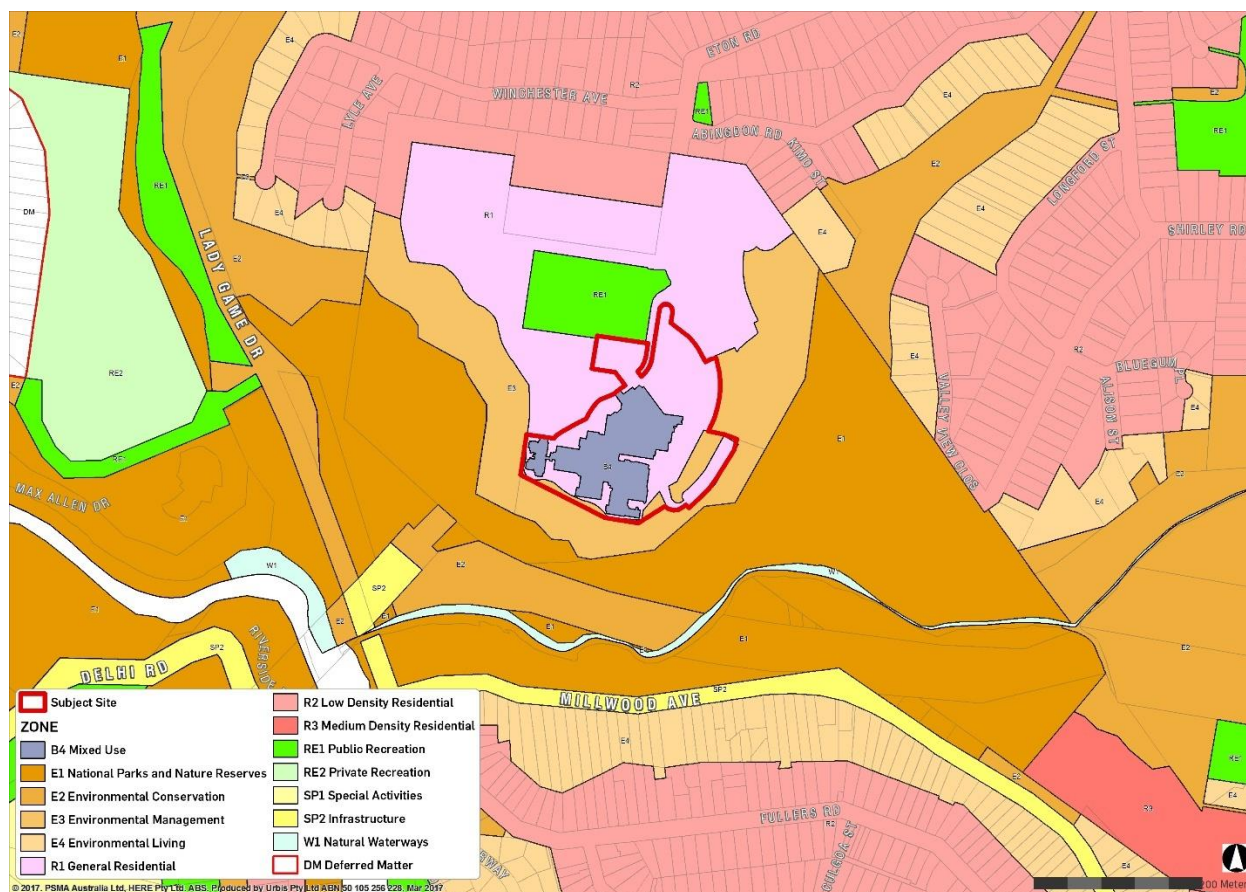
"Development for the purpose of educational establishments may be carried out by any person with consent on land in a prescribed zone."

The R1 General Residential Zone is listed as a prescribed zone at Clause 27 of the ISEPP.

E3 Environmental Management

Educational establishments are prohibited within the E3 Environmental Management zone. No works are proposed or will be permitted in this zone.

Figure 10 – Extract from KLEP Zoning Map



Source: KLEP and Urbis

5.6.2. Zone Objectives

The relevant zone objectives are outlined below:

B4 Mixed Use

- “To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.”

R1 General Residential

- “To provide for the housing needs of the community.
- To provide for a variety of housing types and densities.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for development that is compatible with the environmental and heritage qualities of the locality.
- To promote a high standard of urban and architectural design of development,
- To promote the establishment of a sustainable community.”

E3 Environmental Management

- “To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
- To provide for a limited range of development that does not have an adverse effect on those values.”

The proposal is consistent with the objectives of the B4, R1 and E3 Zones as follows:

- It provides for the adaptive and sustainable use of existing educational facilities;
- It satisfies the educational needs of students in the area, and provides increased employment opportunities;
- The proposed improvements to public transport services to the site, including a dedicated bus route, will reduce dependence on the private car and encourage alternate modes of travel by public transport and walking;
- The proposed works are generally internal to the building and will not adversely impact on the identified ecological and heritage qualities of the site;
- The external alterations to the building are minimal ensuring the proposal will not impact on the architectural integrity of the development; and
- The proposed school can be appropriately managed to ensure it will not unreasonably impact on the amenity of surrounding properties.

5.6.3. Other LEP Provisions

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

Table 4 – KLEP Compliance Table

Consideration	Control	Proposal	Compliance
Clause 4.3 – Building Height	B4 Mixed Use - 20m R1 General Residential – 9.5m	The proposed works have a max height of 17.63m. No change to residential	Yes
Clause 4.4 - Floor Space Ratio (FSR)	N/A	Increase of 1,720m ²	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 development consent.	This SSD does not seek development consent to remove existing trees from the site.	N/A
Clause 5.10 - Heritage Conservation	The site is a local heritage item (I422) under the KLEP. The proposal must conserve the heritage significance of heritage items; heritage conservation areas; archaeological sites; and Aboriginal objects and places of heritage significance.	A Heritage Impact Statement and Aboriginal Due Diligence Assessment were prepared by Urbis and are attached at Appendix H and Appendix I respectively. Built Heritage and Aboriginal Heritage matters are discussed in more detail at Section 7.8 and Section 7.9 , however the proposal is not expected to unreasonably impact on the heritage significance of the site, subject to the implementation of the recommended mitigation measures.	Yes
Clause 7.2 - Earthworks	Earthworks must not have a detrimental impact on	The proposed earthworks will be limited to the construction of a pedestrian ramp,	Yes

Consideration	Control	Proposal	Compliance
	environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.	footpaths, shade structure and fencing. Given the minor nature of these works, the earthworks are not expected to have an adverse environmental impact. The statement provided by Birzulis Associates at Appendix O indicates that a sediment and erosion control plan is not required for this project.	
Clause 7.3 – Flood Planning	The proposal must be designed to minimise flood risk.	A Flood Study was undertaken by Birzulis Associates and is attached at Appendix S . This study indicates that the finished relative level of the existing building is RL 53.09, which is above the identified Flood Planning Level of RL 50.50. On this basis, no further design considerations are required in accordance with the <i>Floodplain Development Manual 2005</i> .	Yes
Clause 7.4 - Biodiversity	The proposal must be designed to maintain terrestrial biodiversity.	This SSD does not seek development consent to remove existing trees or vegetation from the site.	N/A

5.7. KU-RING-GAI DEVELOPMENT CONTROL PLAN 2015

The *Ku-ring-gai Development Control Plan 2015* (KDCP) provides detailed controls for specific developments types and locations. Most controls in the KDCP relate to design and built form, streetscape character and the public domain and are therefore of limited relevance to the proposed development, which is generally limited to internal works. Furthermore, under Clause 11 of SEPP (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 key relevant controls of the KDCP in **Table 5**.

Table 5 – KDCP Compliance Table

Consideration	Control	Proposal	Compliance
Section A Part 10 – Child Care Centre			
10A – Site Design	- Preferred Location: - Share two or less common boundaries with surrounding properties zoned for residential purposes.	The proposed child care centre will be integrated with the Lindfield Learning Village and is not located adjacent to the neighbouring residential developments.	Yes

Consideration	Control	Proposal	Compliance
	• Frontage to a park or other open space. • Located close to local shopping facilities, public transport and other community facilities.		
10B – Vehicle Access and Car Parking	• 1 space per 4 children to be provided. • Car parking to include a designated footpath from the car park to the building entrance. • Car parking to be located away from outdoor play areas. • The centre is to be accessible to all potential users of the facility.	• 94 children are proposed, which requires a minimum of 23 car spaces. The proposal will allocate 23 of the existing car spaces to the child care centre. • The car spaces will be conveniently located close to the child care centre entrance and a footpath will be available. • The car spaces are located away from outdoor play areas. • A continuous path of travel from the car park and bus stop to the centre will be available and a lift will provide access to each level of the child care centre.	Yes
10C – Building Design and Sustainability	• Design and siting of the child care centre should maintain a reasonable level of daylight and sunlight. • Minimise the impact on the acoustic privacy of neighbouring developments.	• The location of the child care centre within the northern portion of the existing building will maximise solar access to internal spaces and outdoor play areas. • The child care centre is appropriately separated from neighbouring residential properties to avoid potential noise impacts.	Yes
	• To provide effective and functional indoor and outdoor areas.	• The internal fitout of the child care centre will be the subject of a separate DA to Ku-ring-gai Council, but it capable of meeting the relevant requirements.	

Consideration	Control	Proposal	Compliance
Section B Part 16 – Bushfire Risk			
16.1 – Bushfire Risk Management	- Any proposed development is to consider safe access for emergency services, and safe evacuation for users of the development. - Asset Protection Zones (APZs), access and perimeter roads are to be designed to minimise impact on habitat and/or significant vegetation.	- A Bushfire Assessment Report was prepared by Advanced Bushfire Performance Solutions and is attached at Appendix U. - This report states “<i>This development balances the lack of complying asset protection zone (APZ) with more resilient construction, an extensive water supply network and comprehensive Emergency Evacuation Plan.</i>”	Variation considered acceptable, refer Section 7.11
Section B Part 18 – Biodiversity			
18.1 – All Greenweb Categories	Retain, consolidate and improve existing bushland, significant vegetation and habitat for flora and fauna.	This SSD does not seek development consent to remove existing trees or vegetation from the site.	Yes
Section B Part 19 – Heritage and Conservation Areas			
19E – Building Design	- External alterations and additions are to respect the scale, form, height, location, materials and colours of the heritage item. - Major internal alterations resulting in the loss of significant interior details, finishes, built fabric, room layout and original floor plan are unlikely to be	See Section 7.8 and Heritage Impact Statement at Appendix H.	Yes

Consideration	Control	Proposal	Compliance
	supported unless it can be demonstrated that there is no adverse impact on heritage significance. Adaptive reuse of a Heritage Item is permissible under Clause 5.10.10 of the KLEP where the conservation of the Heritage Item is facilitated. Adaptive reuse requires the preparation of a Conservation Management Plan.		
Section C Part 22 – General Access and Parking			
22.1 – Equitable Access	Applications are to demonstrate how access to and within developments meets the requirements of the <i>Disability Discrimination Act 1992</i>.	A High-Level Access Assessment was prepared by BCA Logic and is attached at Appendix X.	Can comply
22R.1 – Car Parking Rates	- Child care centres: 1 space per 4 children in care. - Schools: 1 space per equivalent full-time employee plus 1 space per 8 Year 12 students. Where an auditorium or similar rooms are proposed, additional parking might be required. Provision for on site set down / pick up of students and a	See Section 7.4 and Traffic and Transport Assessment at Appendix J.	Does not comply

Consideration	Control	Proposal	Compliance
	set down / pick up management plan is required. Offices: 1 space per 33m² gross floor area (GFA) plus 1 space if resident manager or caretaker. Suggested split: 90%: employee parking 10% visitor parking.		

5.8. SECTION 94 CONTRIBUTIONS

Ku-ring-gai Council holds the view that development by the Crown is subject to development contributions in the same manner as development by a private developer. However, Council's Section 94 Plans states that in respect of education projects, the policy position of the NSW Government is as follows:

“Education projects The Policy for both government and non-government education projects approved under the Nation Building and Jobs Plan Act is that:

- neither government nor non-government projects will be required to pay development contributions for the component that is funded by the Nation Building Stimulus Plan;*
- the Infrastructure Coordinator General may apply conditions requiring contributions to school projects that contain components that are not funded by the Nation Building Economic Stimulus Plan.*

The Minister for Planning has formalised this policy position by the issue of a s94E Direction on 9 September 2009 to the effect that any component of a development that is a BER project is not subject to development contributions in the manner of other comparable developments. BER projects were completed between 2009 and 2011. However, the above principles are still applicable to current education projects.

Government schools provide enormous economic and non-economic benefits to the local Council and its community in the form of community infrastructure, and it is considered such benefits far outweigh any additional costs that it might cause for the Council. The following planning policies support the best practice of exempting community infrastructure from paying contributions:

Development Contributions Practice Note – July 2005

In relation to the principles underlying development contributions and exemptions, the Practice Note states that there are some specific exclusions from s94, including Crown development:

1. Crown development

The current limitation on imposition of levies on Crown developments as outlined in Circular D6 – Crown Development Applications and Conditions of Consent remain in force. However, this is the subject of review and a practice note will be issued on this topic after this review.

DoE understands such review and subsequent practice note not yet issued.

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

8.3 Public sector development

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

Public sector development generally falls into the following 2 categories:

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

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

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

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

Circular D6 Crown Development Applications and Conditions of Consent

Exemption from contributions is supported by Planning Circular (Circular D6) relating to Crown Development Applications. The Circular (from 1995) is referenced in the Department's draft Development Contributions Guidelines 2009 as providing the 'current limitations on the imposition of development contributions on public sector developments'. The Circular provides a guide to Councils and Crown agencies as to which categories of section 94 contributions are applicable to Crown Developments stating that:

"Crown activities providing a public service of 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"

The circular includes a Matrix, and for education establishments the Matrix indicates:

Open Space	Community Facilities	Parking	Drainage	Local Roads	Sub-Arterial Non-Classified Roads	Arterial (Classified) roads	Upgrading of Local Roads Local Traffic Management
No	No	No	Yes	No	No	No	Yes (bus bays and works associated with the site entrance only)

6. STRATEGIC PLANNING CONTEXT

6.1. OVERVIEW

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

- *NSW State Priorities;*
- *A Plan for Growing Sydney;*
- *NSW Long Term Transport Master Plan 2012;*
- *Sydney's Cycling Future 2013;*
- *Sydney's Walking Future 2013;*
- *Sydney's Bus Future 2013;*
- *Healthy Urban Development Checklist, NSW Health.*

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

6.2. NSW STATE PRIORITIES

NSW State Priorities is the State Government's plan to guide policy and decision making across the State. The proposed redevelopment of the site is consistent with relevant priorities 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 significant job opportunities in teaching and administration at the project's completion.

- **Building Infrastructure:** Key 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. Population growth 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 public schools in the surrounding area.

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

The proposed public school 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.

- **Improving Road Travel Reliability:** Ensure 90% of peak travel on key road routes is on time.

The proposal is located near the Lindfield and Roseville train stations and improvements to the bus services are proposed, including a dedicated school bus linking Lindfield station with the site. As such, future parents, students and employees of the school will have an opportunity to access the site via active or public transport. This has the potential to reduce reliance on cars and decrease congestion on surrounding roads for those who need to use them.

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

6.3. 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 in the Strategy is:

“Plan for education and health services to meet Sydney’s growing needs”.

In accordance with the Plan, this SSD will ensure a new integrated primary and high school can be delivered to meet Sydney’s growing educational needs. This will take enrolment pressure off surrounding public schools that are currently exceeding student capacity and ensure a high quality educational facility is provided for the future population of Lindfield.

The proposed development is also consistent with the wider goals and directions contained within the Plan, 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 Lindfield and the wider Ku-ring-gai LGA.

- **Direction 1.11: Deliver infrastructure;**

The proposal will deliver a vital piece of educational infrastructure for Lindfield that will take enrolment pressure of existing public schools currently exceeding student capacity.

- **Direction 3.1: Revitalise existing suburbs; and**

The proposed development provides for the adaptive re-purposing of the former UTS facilities and will contribute to increased jobs and growth for the Ku-ring-gai LGA

- **Direction 3.3: Create healthy built environments.**

The site is close to established residential neighbourhoods and two train stations. Accordingly, future students, parents and employees will be encouraged to access the site via public transport or walking. This will reduce reliance on cars, decrease road congestion and generally create a healthy built environment.

The proposed development will deliver a sustainable and adaptive re-use of the existing building in a manner that promotes the use of public and active transport. The redevelopment of the site will also make a valued contribution to economic growth in Sydney and provide increased employment opportunities.

6.4. NSW LONG TERM TRANSPORT MASTER PLAN 2012

NSW Long Term Transport Masterplan (2012) seeks to promote the use of public transport as an effective travel option. The subject site benefits from being near two train stations, comprising Lindfield Station and Roseville Station.

Future parents, students and employees of the School will be able to use the train network in conjunction with proposed improvements to bus services to access the site. This will reduce reliance on cars, decrease road congestion and promote sustainable outcomes.

6.5. SYDNEY’S CYCLING FUTURE 2013

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

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

Whilst the Pacific Highway does not provide a dedicated cycle route, the site can be accessed from a network of smaller, more accessible local streets. Future parents, students and employees of the school will be able to use these roads to access the site via bike. This will reduce reliance on cars, decrease congestion and promote sustainable outcomes.

6.6. 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 close to residential neighbourhoods and the dedicated school bus linking the train station with the school will encourage future parents, students and employees to access the site by walking. This will increasingly promote healthy practise within Lindfield and decrease vehicular use.

6.7. 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 to meet current and future customer needs.

The site is directly serviced by the No. 565 bus route and a dedicated school bus is proposed linking the nearby train station with the school. These services provide future parents, students and employees with an opportunity to access the site via other means than the private car.

6.8. HEALTHY URBAN DEVELOPMENT CHECKLIST, NSW HEALTH

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

7. KEY ASSESSMENT ISSUES

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

- Built Form and Urban Design;
- Environmental Amenity;
- Crime Prevention Through Environmental Design (CPTED);
- Transport and Accessibility;
- Ecologically Sustainable Development;
- Social Impacts;
- Biodiversity;
- Built Heritage;
- Aboriginal Heritage;
- Noise and Vibration;
- Bushfire;
- Site Suitability; and
- Public Interest.

7.1. BUILT FORM AND URBAN DESIGN

The campus is made up of six homebases and a child care. The homebases are arranged around the perimeter of the building, interconnected by common learning areas and walkways. The topography and site layout creates different heights across the building, but it is predominantly five storeys. The new additions to roof spaces have a maximum height of 17.63m for the child care centre. The maximum height of the new fire stair is 13m. All new additions are below the 20m KLEP height limit.

The building is well setback from the nearest residential development. The gymnasium building is approximately 90m and the child care centre is approximately 100m from the residential development to the east, separated by roadway and vegetation. The building for Homebase 3 is approximately 19m from the residential building to the north, separated by roadway. The setbacks are shown in Figure 11.

The design of the existing building was inspired by the Italian Hill Village and steps down the hill on which it is located. The site is an example of Brutalist style of architecture, characterised by robust materials including concrete and brickwork. The building consists of a single concrete structure; however the massing consists of modulated volumes of various heights in response to the topography of the site. As the extent of the works largely relate to the internal refurbishment of the existing building, there is no change to the overall height, bulk, scale and setbacks of the building.

The proposed external alterations to the existing building are limited to:

- Construction of new access stairs and fire stairs within the eastern, western and southern elevations.
- Application of prefinished coloured panels to the facades of the building.
- Construction of a new addition at Level 7 comprising lightweight pavilions to accommodate additional internal spaces for the child care centre.
- Installation of retractable fabric awnings in discreet locations.

The new roof structure for the child care centre will be setback behind the existing façade of the building and will appear lightweight in construction given the curvilinear form and use of large windows connecting the spaces to the rooftop play areas. In addition, the proposed coloured panels applied to the facades of the building will:

- Break up the concrete appearance to make the building appear more attractive to the younger students;
- Identify various parts of the building and highlight entry points; and
- Clearly define the six home bases.

These alterations are considered minor in the context of the overall building and will not detract from the heritage significance and character of the building. Given the considerable separation to neighbouring properties, there will be no built form impacts caused by the external works.

Figure 11 – Site Plan and Setbacks



7.2. ENVIRONMENTAL AMENITY

Given the nature of the proposed works, the following observations are made regarding potential amenity impacts on neighbouring properties:

- There will be no changes to the existing shadows cast by the development.
- There is no view loss from the proposal.
- The existing building is adequately separated from the neighbouring residential buildings to minimise visual privacy impacts.

The proposal will generate some noise during construction and operation:

- Outdoor play areas;
- Internal (classroom/hall) areas;
- Sports fields;
- Public roads from traffic generated by the site;
- Mechanical plant, PA system and school bells;

- Construction works (predominantly behind a closed façade, however there are some external alterations/refurbishments).

The Noise Impact Assessment prepared by Acoustic Logic concludes that noise emissions generated by the proposal exceed non-mandatory acoustic. However, Acoustic Logic further conclude:

- *The layout of the school (position of playgrounds relative to residences) is not out of keeping with typical school design in residential areas; and*
- *Acoustic treatment (where practicable) and noise management controls have been recommended in section 7 of this report to ensure that the amenity of nearby residents is protected as much as practicable while avoiding outcomes which will have significant visual impacts (noise screens or similar).*
- *An analysis of noise from classrooms indicates that compliance with noise emission goals for the site is achievable. Noise emissions from the school gymnasium and main auditorium are predicted to have no noticeable change from the previous UTS use. Noise emissions from mechanical plant and equipment are capable of complying with the project noise emission goals, subject to review at CC.*

To mitigate noise impacts, Acoustic Logic make the following recommendations, that can be incorporated as conditions of consent:

- Intensive use (recess, lunch, school sport) of outdoor play areas on Dunstan Grove should not exceed 2 hours per day.
- Use of planting along the western and north Eastern boundaries should be considered to maximise the distance between active play (noisy) areas and the residences to the west and north east.
- Relocation of the student queuing area for buses further within the school grounds should be considered to reduce noise impact on the residences at Tubbs View.
- Detailed acoustic review of all external plant items should be undertaken following equipment selection and duct layout design.
- A complete construction noise and vibration management plan should be prepared after the appointment of the builder.
- Residents should be notified of the likely noise levels, the duration of works and contact details for the site. In addition, it may be appropriate to apply respite periods, however this should be considered on a case by case basis.

These measures will ensure no unreasonable noise disturbance during construction and operation.

7.3. CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

A CPTED Assessment was prepared by Urbis and is attached at **Appendix L**. The *Safer by Design* evaluation process is used by the NSW Police to identify and quantify crime risks. The evaluation measures statistical probability of crime, consequence, 'hotspots' analysis and situational opportunity.

The four key principles to minimise the opportunity for crime are outlined **Table 6**.

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.

	Principle	Definition
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 /ownership	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.

The CPTED Assessment has considered the design of the Lindfield Learning Village and has made a range of recommendations that have been informed by best-practice CPTED principles for schools. A summary of these recommendations is provided below:

Principle 1 – Natural Surveillance

Surveillance will be maximised by:

- External areas of the building that are well lit, with sensor installed in key areas.
- Passive and informal surveillance will be available from the upper levels of the building (rooftop, balconies and windows).
- The installation of CCTV.
- Break-resistant materials should be considered for windows and access points where appropriate.

Principle 2 - Access Control

Access control will be maximised by:

- The Main Entrance on Level 5 should be the principal sign-in entrance for visitors to the school.
- During school hours, access to the school by visitors should be restricted to main entry points, which will be monitored. Secondary entry points should only be open for morning drop off and afternoon pick up.
- Controlling public access to the site via fencing/gates.
- During school hours, access to the school should only occur after visitors sign-in at the main reception.
- Rooms with restricted student access should have adequate signs and be locked when not in use. Similarly, emergency exits should be adequately labelled and students informed of their appropriate use.
- The Administrative office should be locked after-hours and there should be constant staff presence in this area during school hours
- Auditoriums and lecture theatres should be regularly monitored by staff and be locked after-hours.

- The child care centre has its own entrance and exit point on level 5. This is considered good CPTED practice, as it contributes to the monitoring of people who access the child care centre, keeps the area quiet, and restricts access by students.
- All staff are issued keys which provide them access to buildings. Access levels vary depending on the needs of staff and their roles.

Principle 3 - Territorial Reinforcement/Ownership

Territorial reinforcement will be maximised by:

- Providing physical barriers (fencing) to preclude access from the surrounding area.
- Teacher presence throughout the building is important to maximise passive surveillance and sense of ownership.
- Signage will be used to direct pedestrian and vehicular access.
- An open palisade fence allows views into the site.

Principle 4 - Space Management

Space management will be maximised by:

- The Plan of Management for the school should include risk minimisation methods for play spaces, such as staff monitoring and surveillance roster, hours of operation of rooftop areas, and strategies to educate students on the appropriate use of these areas.
- All roof top areas should include adequate screening (e.g. landscaping and fences) to prevent accidents and objects falling to the lower levels, whilst maximising passive surveillance and preserving the heritage character of the building exterior.
- The building will be well maintained and regular maintenance work will be scheduled.

The proposal will provide a high level of security and design elements will deter criminal behaviour. The proposal is therefore consistent with CPTED principles.

7.4. TRANSPORT AND ACCESSIBILITY

7.4.1. Parking

A Traffic Impact Assessment was prepared by Arup and is attached at **Appendix J**. There are currently 184 car spaces within the site and due to topographic and heritage constraints, additional parking is not proposed. The proposed parking allocation for the various components has therefore had to rely on the existing provision of car parking spaces and is detailed in **Table 7**.

Table 7 – Proposed Allocation of Parking Spaces

School use	No. of people	K DCP Standards 2015 Minimum parking	KDCP Minimum	Proposed
Year 12 students	166	1 space per 8 Year 12 students	21	0
Teachers	160	1 space per equivalent full-time employee	160	151
Childcare	94	1 space per 4 children in care	23	23
Aurora College staff and visitors	17	1 space per 33m ² gross floor area (GFA) plus 1 space if resident manager or caretaker. Suggested split: 90%: employee parking 10% visitor parking based on 20m ² GFA per person this equates to approximately 60% provision per person	9	9
Total			296	184
Greenhalgh Auditorium After hours	750	Public Halls - Minimum parking provision to be 1 space per 10 seats, for day time parking. Recommended parking provision is 1 space per 6 seats, for Friday / Saturday evening	125	125 after hours shared
Lecture theatres After hours	280			
Gymnasium* After hours	100	1 space per 17m ² gross floor area.	70	70 after hours shared
Total			195	184

*Gym derived based on a typical gym occupancy of 70%, with all visitors driving

Source: Arup

In summary, the Traffic and Transport Assessment supports the proposed allocation of car parking on the following basis:

- The majority of schools in the surrounding area, including Ravenswood Girls School, Lindfield Public School and Chatswood High School, do not provide parking for students. The provision of parking for students would encourage a non-sustainable mode of transport and would likely compromise pedestrian safety within the site.
- The requirement for 50 per cent of staff to rely on the use of public transport is achievable through public transport improvements, as discussed in **Section 7.4.2**.
- After hours parking demand for the Greenhalgh Auditorium can be mitigated through several measures, such as providing a shuttle bus during operational hours or restricting the maximum patronage to events.

7.4.2. Traffic

The Traffic and Transport Assessment prepared by Arup assesses the traffic impact of the proposal on the surrounding road network and concludes as follows:

- *“Residents along Eton Road and Grosvenor Road would inevitably experience a higher peak hour traffic volume. However, the daily road volumes are expected to be similar during the operational period of the UTS campus.”*

- *Alternative travel strategies as opposed to private vehicle usage, and the improvement of the surrounding infrastructure, would alleviate the traffic generated by the learning village to a manageable level. It is within the interest of the learning village and stakeholders that these travel strategies be implemented and promoted.*
- *A staged opening of the proposed school is essential to reasonably allow for traffic impact monitoring and review of final operating scale.*
- *As a conservative estimate, some on 50 staff and 66 students parking on-street, would equate to 36% of the 319 available on-street parking spaces being occupied by the learning village (within a 500 metre catchment). On-street parking utilisation would likely be lower than when the UTS campus was operational.*
- *Extending the right turn bay along the Pacific Highway into Grosvenor Road would improve the performance of the intersection to a level of service C or better.*
- *The busiest period at the Lindfield Public School is during the drop-off period, from 8:45am to 9:00am. With the opening of the Learning Village, the queue lengths are likely to be exacerbated. As a worst case scenario, an additional 50 cars during the peak 15 minute period would cause a queue length to Austral Avenue / Grosvenor Road roundabout. This however would only occur periodically and would clear once the zebra crossing is no longer in effect (typically at 9am).*
- *The implementation and promotion of the proposed strategies are therefore paramount in enabling the transport functionality of the Lindfield Learning Village. Upgrades of the Grosvenor Road / Pacific Highway would still be required regardless of the effectiveness of the travel strategies implemented."*

The alternative transport strategies being considered by DoE to alleviate the traffic generated by the Lindfield Learning Village include:

- Appropriate school bus routes, in consultation with Transport for NSW (TfNSW), bus companies and surrounding schools;
- Improvements to the frequency of the existing bus route 565;
- Subsidised public transport for eligible students;
- Shuttle buses between the site and Lindfield train station for students and staff;
- Carpooling initiatives; and
- Walking school bus.

Given that the site will be used by students and teachers in a new location, sustainable travel alternatives would be more easily implemented as well as adopted.

7.4.3. Pedestrian Access

The local roads leading to the site currently have poor pedestrian accessibility, with several footpaths and key crossing facilities missing. As recommended in the Traffic and Transport Assessment, a comprehensive Pedestrian Accessibility Mobility Plan will be undertaken prior to the commencement of the school to assess the required pedestrian safety improvements. The PAMP can be incorporated in the conditions of consent. Implementation of school zones on Grosvenor Road, Austral Avenue, Eton Road and Westbourne Road will also be required.

7.5. ECOLOGICALLY SUSTAINABLE DEVELOPMENT

An Ecologically Sustainable Development report was prepared by Umow Lai and is attached at **Appendix K**. The proposal will include the following ESD initiatives (amongst others):

- The informal Green Star rating for the proposed development achieves at least a 4 Star Best Practice outcome;
- 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;

- Facilities for the separation and recycling of waste streams;
- Indoor noise levels will provide a high level of acoustic comfort in terms of noise and reverberation;
- All habitable rooms will be naturally ventilated where possible, however due to the nature of the existing building, many spaces will not be able to achieve effective natural cross ventilation. Mechanical ventilation and air conditioning will be required in these instances;
- The domestic hot water system will be low-emission and powered by either natural gas with solar pre-heat, waste heat or heat-pump technology;
- Solar photovoltaic (PV) arrays to offset daytime energy demand and reduce ongoing operating costs;
- Rainwater harvest and re-use for landscape irrigation;
- All bathroom fixtures (toilet pans, urinals, hand basin taps and showers) will meet minimum WELS ratings;
- Areas with massing planting will be irrigated using sub-soil drip drippers and soil moisture sensors to further minimise water consumption and costs.

The proposal has implemented the above measures to minimise consumption of resources, energy and water, and to demonstrate that the project has been assessed against a suitable accredited rating scheme.

7.6. SOCIAL IMPACTS

The proposal will have an overall beneficial impact on the local community in terms of social and economic outcomes. Impacts of the proposal are more environmental than social and economic, and can be managed or mitigated if recommended measures are incorporated or implemented as part of the development. The social and economic impacts are detailed in the Social Impact Assessment attached at **Appendix M** and are summarised as:

- The provision of a high-quality education facility will take enrolment pressure off existing child care, primary and secondary schools in the surrounding area.
- The development will provide opportunities for rural and remote students to be part of the education model through the operation of the Aurora College operating from site
- The proposal provides for the adaptive re-use of existing facilities and will create a facility that not only provides education, but includes spaces can be used by the wider community. These spaces include the existing auditorium, lecture theatres and the gymnasium and present an opportunity to enhance cultural vitality by catering to a diverse range of cultural, sport and education requirements.
- Sharing of the Charles Bean Sportsground with the Lindfield community for outdoor sports may offer a space for students and the community to interact. Arrangements to ensure the sustainable use of this shared space should be made.
- The proposal will create job opportunities in teaching and administration and temporary job opportunities during the construction phase.
- The site is currently subject to vandalism and graffiti due to it being unoccupied and unused for a period of time. The development of the Lindfield Learning Village will activate the site and include a number of active and passive surveillance measures, which will have a positive impact on crime.

7.7. BIODIVERSITY

A Biodiversity Assessment and Biodiversity Offset Policy have been prepared by Ecoplaning. Two native vegetation types were identified by Ecoplaning in the site. Most native vegetation within the subject site is

- Dwarf Apple - Broad-leaved Scribbly Gum - Sydney Peppermint low open woodland on sandstone ridges with subtle enrichment in northern Sydney (PCT1782); and
- Smooth-barked Apple - Red Bloodwood open forest on enriched sandstone slopes around Sydney and the Central Coast (PCT1776).

Neither communities are listed as threatened ecological communities under the *NSW Threatened Species Conservation Act 1995* or the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Sections of plantings 'exotic and non-indigenous occur surrounding the buildings. This vegetation contains occasional species representative of Red Bloodwood – Scribbly Gum Heathy Woodland but is in a modified condition.

Direct impacts to the ecological values of the site are limited as the works are mostly internal. Direct impacts will occur to the vegetation surrounding the development site with the installation of a new boundary fence and associated 3 metre buffer for vehicle movement (6 metres total). An additional small impact is caused through the construction of a Covered Outdoor Learning Area (COLA) at the southern end of the subject site. The total impact is 0.22 ha, and the impacts have been assessed using the FBA (OEH 2014). The ecosystem credits required to offset the proposal are 12.

No credits of the type required are currently available in the Biobanking market. The final offset solution will be determined as the development application process proceeds.

7.8. BUILT HERITAGE

As indicated previously at **Section 2.7**, the former UTS Ku-ring-gai Campus is a local heritage item (I422) under the KLEP. As such, a Heritage Impact Statement is required to assess the impact of the proposed works on the identified heritage significance of the site and is attached at **Appendix H**. Key matters raised in the heritage Impact Assessment are:

- The heritage item is significant for its historic, aesthetic, associative values. It was originally constructed as a tertiary education establishment (William Balmain Teachers' College). The reuse of the place as a school is appropriate and the proposal is for minimal physical intervention.
- The new use allows for the reuse of many of the principal existing elements, which can be reused for their original purpose including the auditoriums, the cafeteria and the gymnasium.
- The proposed external alterations including the installation of various fire stairs, the child care and pre-finished coloured panels would not notably change the form of the building.
- The robust character of the building is such that it lends itself well to necessary contemporary additions, whilst still presenting as a unified series of modulated elements that represent the Brutalist style.
- The colouring of various elements enhances the application of bright feature colours in various areas whilst serving to highlight contemporary elements and ensure they are readily identifiable as such.
- The proposal requires significant internal reconfiguration to accommodate the proposed school functions. The spaces were designed for the education of tertiary level students and the accommodation of a large number of staff in small offices. The proposed reuse of the building for school students requires larger and more transparent spaces.
- Internal demolition is necessary to facilitate the desired sympathetic reuse of the place.
- Many of the replacement glazed walls will be introduced along generally the same alignment as the existing brick walls, such that the essential layout of the public spaces would be retained.

The Heritage Impact Statement acknowledges that the proposed works are necessary in facilitating the future use of the place and subject to the following recommendations, the proposal will not obscure the original, significant character of the building:

- *A methodology should be prepared for the cleaning of the concrete in consultation with the heritage consultant.*
- *A genuine effort must be made to retain the extant timber ceiling of the existing library area. A methodology should be prepared for the installation of services through the ceiling such that removal of fabric is minimised;*
- *There is one set of spiral stairs towards the southern boundary of the building (Stage 1 area) between level 2 and 3 which is understood to require removal as it does not satisfy BCA standards and is not*

required to connect the home bases. As this stair constitutes original, characteristic fabric it is recommended that it is not removed as proposed, but that it be locked and retained in situ for potential future reuse.

- Detailed design development should be subject to ongoing and demonstrated heritage consultant input as a condition of consent. Areas for further design development which should be subject to heritage consultant input include but are not limited to the following:
 - o Application of any coloured panels to the facades;
- Landscaping including play equipment in courtyards and application of shade structure;
- Opportunities for retention of built in furniture;
- Areas for application of new floor finishes (epoxy, bright coloured carpet).

7.9. ABORIGINAL HERITAGE

The Aboriginal Due Diligence Assessment attached at **Appendix I** has assessed that the archaeological potential and sensitivity of the Study Area is very low. It has not identified any Aboriginal sites or objects within the Study Area. Therefore, there is no identified risk of harm to any Aboriginal sites or objects associated with the proposed works and no further Aboriginal archaeological investigation is required. In lieu of further investigations, the following recommendations are made:

“Recommendation 1

All relevant on-site staff and contractors should generally be made aware of their statutory obligations for heritage under NSW National Parks and Wildlife Act 1974 and the NSW Heritage Act 1977.

Recommendation 2

In the event that further proposals are made that will result in sub-surface disturbance within the Study Area, or which have the potential to impact known Aboriginal sites in the vicinity, further assessment and consultation with relevant Aboriginal stakeholders will be required.

Recommendation 3

This Due Diligence Assessment report must be kept by the property owner so that it can be presented, if needed, as a defence from prosecution.

Recommendation 4

If Aboriginal object/s are identified in the Study Area during works, then all works in the immediate area must cease and the area cordoned off. The Office of Environment and Heritage must be notified by ringing the Enviroline 131 555 so that the site can be adequately assessed and managed.

Recommendation 5

In the event that skeletal remains are uncovered, work must cease immediately in that area and the area cordoned off. Santos Limited must contact the NSW Police with no further action taken until written advice is provided by the Police. If the remains are determined to be of Aboriginal origin, the Office of Environment and Heritage must be notified by ringing the Enviroline 131 555 and a management plan prior to works re-commencing must be developed in consultation with the relevant Aboriginal stakeholders.”

The Due Diligence concludes that “there is no identified risk of harm to any Aboriginal sites or objects associated with the proposed works. It has therefore been determined that no further Aboriginal archaeological investigation is required for the Study Area.”

7.10. NOISE AND VIBRATION

A Noise Impact Assessment was prepared by Acoustic Logic and is attached at **Appendix N**. This assessment has considered construction and operational noise associated within the proposal.

7.10.1. Construction Noise

As there is no extensive demolition associated with the proposal, the excavation of trenches and erection of poles will be the main sources of construction noise. The requirement to prepare a Construction Noise and Vibration Management Plan for the project can be incorporated in the conditions of consent.

7.10.2. Operational Noise

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

- *Noise from outdoor play areas;*
- *Noise from internal (classroom/hall) areas;*
- *Noise created on public roads as a result of traffic generated by the site; and*
- *Noise from mechanical plant, PA systems and school bells.*

Given the limited separation between the site and neighbouring residential properties, Acoustic Logic have recommended the following mitigation techniques to control noise from the outdoor play areas:

- *Intensive use (recess, lunch and school sport) of outdoor play areas on Dunstan Grove should not exceed two hours per day;*
- *Use of vegetation/planting along the western and north-eastern boundaries of the site should be considered to increase the distance between active play and nearby dwellings;*
- *Relocation of the student queuing area for buses further within the school grounds should be considered to reduce noise impact on residents of Tubbs View.*
- *Detailed acoustic review of all external plant following equipment selection and duct layout design.*

Notwithstanding the above recommendations, Acoustic Logic have stated:

“While it is acknowledged that the proposed playground layout results in non-compliances with (non-mandatory) acoustic guidelines, in our opinion it is still in keeping with typical school design in the Ku-ring-gai LGA.

We note that a similar level of acoustic separation between playgrounds and residences also occurs at Lindfield Public School, Chatswood High School, Killara Public School and St Ives Preparatory School (all of which have playgrounds or sports courts with residential receivers overlooking the play areas.

The proposal is, in our opinion, as reasonable balance between the school’s needs (to provide suitable outdoor play space for the students) competing acoustic impacts and is not out of keeping to similar school development in the Ku-ring-gai LGA.”

The noise mitigation measures can be incorporated in the conditions of consent.

7.11. BUSHFIRE

An Bushfire Assessment report was prepared by Advanced Bushfire Performance Solutions and is attached at **Appendix U**. The site is identified as bushfire prone land on the Ku-ring-gai LGA Bush Fire Prone Land Map. The report highlights the following (amongst other things):

- *“The minimum setbacks to comply with the Planning for Bush Fire Protection 2006 performance targets are not supported by the existing buildings and the site does not provide an opportunity to increase the managed setbacks.*
- *The development is classified as ‘infill’ and as such it is recognised that full compliance with the acceptable solutions for each Bushfire Protection Measure may not be possible. The development does not increase the size or footprint of the buildings. All works are internal with the exception of replacing windows and glass doors.*
- *This development balances the lack of complying asset protection zone (APZ) with more resilient construction, an extensive water supply network and comprehensive Emergency Evacuation Plan.*

- *There is no opportunity to practically provide a perimeter through road to the entire site. The existing access road network will facilitate suitable access for fire-fighters to all parts of the buildings and APZs."*

The preparation of a Bush Fire Emergency Management and Evacuation Plan are recommended in the Bushfire Assessment report can be incorporated in the conditions of consent.

7.12. SITE SUITABILITY

The site is considered highly suitable for the proposed development for the following reasons:

- The proposal involves the re-purposing of a former educational establishment and involves minimal external works to the existing built form and site in general.
- The land is zoned B4 Mixed Use and R1 General Residential under the KLEP. The proposed development is permissible with consent and consistent with the land use objectives of the B4 and R1 zoning. No works are proposed within the area of the site zoned E3 Environmental Management.
- 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.

7.13. PUBLIC INTEREST

The proposal is in the public interest for the following reasons:

- It has been prepared having regard to ISEPP and the KLEP, and the works are permissible with consent.
- It has been prepared having regard to Council's planning policies and generally complies with the aims and objectives of the controls for the site.
- It provides for the re-purposing of a former educational establishment and involves minimal external works to the existing built form and site in general.
- It is suitable for the site as evidenced by the site analysis and various site investigations, including site contamination, biodiversity and heritage.
- Subject to the various mitigation measures recommended by the specialist consultants, it does not have any unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, heritage, social and environmental impacts.
- It will result in a high quality educational environment for staff and students by:
 - Adopting a collaborative, home base model;
 - Creating adaptable learning spaces that contain state of the art facilities;
 - Providing a range of open spaces for students; and
 - Developing efficient, effective, expressive and environmentally sustainable facilities.
- It will contribute positively to energy efficiency and environmental sustainability. The design has adopted and incorporated many ESD features to reduce energy consumption during the life of the proposed development.

8. CONSULTATION

Consultation has commenced on the project and will continue as the assessment of the application progresses and throughout the entire development of the project. The purpose of the consultation process to date has been to inform and seek feedback from key stakeholders. DoE and Savills 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 SSD application.
- 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 preliminary consultation undertaken in respect of the proposed development to date is documented in the Community Consultation Report attached at **Appendix Y**. The key stakeholders identified in the SEARs and the Community Consultation Report are:

- Ku-ring-gai Council;
- RMS;
- TfNSW
- NSW Rural Fire Service; and
- Local community.

Stakeholder consultation commenced in 2016 and has involved:

- Information booths;
- Newspaper advertisements informing of the proposal and the information booth sessions;
- Pre-DA meeting with Ku-ring-gai Council on 19 April 2016; and,
- Formal consultation with agency stakeholders regarding infrastructure provision, input into design and impacts of the development.

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

8.1. LOCAL COMMUNITY

During October and November 2016, Savills undertook a community consultation process for the proposed new school. Engagement activities supporting this stage of consultation included:

- Three community information booths on 8 and 22 October 2016 at Dunstan Grove, Lindfield (next to Charles Bean Oval Pavilion) and on 9 November 2016 at Lindfield Train Station;
- Feedback form at the information booth provided an opportunity for the community to comment on the proposal.
- Newspaper advertisements informing of the proposal and the information booth sessions;

Savills provided answers to issues and questions raised, which are summarised in the Stakeholder Consultation Summary at **Appendix Y**. Most of the feedback received related to school operations rather than design matters. Matters raised included traffic and transport management, pedestrian access, safety and privacy impacts on nearby residential areas. Importantly, the feedback from the community has been positive with much of the queries relating to the proposed educational model.

DoE is committed to working closely with the community throughout the construction and operation process.

8.2. ROADS AND MARITIME SERVICES

Consultation was undertaken with Roads and Maritime Services (RMS) with meetings held on 7 and 16 March 2017. The following matters were raised and requested by RMS:

- Requested modelling of the full school on the basis that staggered start times are not adopted;
- Request a letter from DoE confirming that staggered start times are planned and can be delivered;
- Road junction congestion;
- School zones are standard and cannot be adjusted to fit with staggered start times;
- Drop off zone does not appear sufficient;
- Summary of students and the mode of transport split;
- Staff parking is not sufficient; and
- On-street parking and increased bus routes may cause issues in the future.

These matters have been addressed in the Traffic and Transport Assessment prepared by Arup at **Appendix J**.

8.3. RURAL FIRE SERVICE

Consultation was undertaken with the Rural Fire Service (RFS) with a meeting held on 21 March 2017.

The following matters were raised and requested by RMS:

- Non-compliances of the Asset Protection Zone around the site;
- Proximity of the proposed learning areas to the bushland;
- No easy accessibility to the bushfire areas; and
- Evacuation procedures will be heavily scrutinised due to the position of the site.

These matters have been addressed in the Bushfire Assessment Report prepared by Advanced Bushfire Performance Solutions at **Appendix U**.

9. 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. Several impacts of development for the school have been addressed in the early works DA to Council. These have not been considered in this section as Council will impose conditions of consent to mitigate impacts.

Table 8 – Mitigation Measures

Item	Potential Impact	Mitigation Measure
Crime and Safety	Crime risk to safety to students, staff and visitors.	• Appropriate lighting. • CCTV. • Security for larger events. • Controlled public access through gates. • Way finding signage. • Keys for staff for access. • Staff management of all areas.
Traffic	Traffic generation in the surrounding road network.	The following transport strategies are being considered by DoE to manage traffic generated by the proposal: • Appropriate school bus routes, in consultation with Transport for NSW (TfNSW), bus companies and surrounding schools. • Improvements to the frequency of the existing bus route 565. • Subsidised public transport for eligible students. • Shuttle buses between the site and Lindfield train station for students and staff. • Carpooling initiatives. • Walking school bus.
Biodiversity	Proposed works damage or destroy biodiversity	• 12 ecosystem credits are required.
Built Heritage	Proposed works damage or destroy built heritage	• A methodology should be prepared for the cleaning of the concrete in consultation with the heritage consultant. • There is one set of spiral stairs towards the southern boundary of the building (Stage 1 area) between level 2 and 3 which is understood to require removal as it does not satisfy BCA standards and is not required to connect the home bases. As this stair constitutes original,

Item	Potential Impact	Mitigation Measure
		characteristic fabric it is recommended that it is not removed as proposed, but that it be locked and retained in situ for potential future reuse. • Detailed design development should be subject to ongoing and demonstrated heritage consultant input as a condition of consent. Areas for further design development which should be subject to heritage consultant input include but are not limited to the following: ○ Application of coloured panels to the facades; ○ Landscaping including floor treatments in courtyards, play equipment in courtyards, application of shade structure and introduction of new plant species; ○ Appropriate methodologies for the installation of services including through the timber ceiling of the existing library area; ○ Opportunities for retention of built in furniture; and ○ Areas for application of new floor finishes (epoxy, bright coloured carpet).
Aboriginal Heritage	Proposed works damage or destroy Aboriginal object/s	• All relevant on-site staff and contractors should generally be made aware of their statutory obligations for heritage under NSW National Parks and Wildlife Act 1974 and the NSW Heritage Act 1977. • In the event that further proposals are made that will result in sub-surface disturbance within the Study Area, or which have the potential to impact known Aboriginal sites in the vicinity, further assessment and consultation with relevant Aboriginal stakeholders will be required. • This Due Diligence Assessment report must be kept by the property owner so that it can be presented, if needed, as a defence from prosecution. • If Aboriginal object/s are identified in the Study Area during works, then all works in the immediate area must cease and the area cordoned off. The Office of Environment and Heritage must be notified by ringing the Enviroline

Item	Potential Impact	Mitigation Measure
		131 555 so that the site can be adequately assessed and managed. In the event that skeletal remains are uncovered, work must cease immediately in that area and the area cordoned off. Santos Limited must contact the NSW Police with no further action taken until written advice is provided by the Police. If the remains are determined to be of Aboriginal origin, the Office of Environment and Heritage must be notified by ringing the Enviroline 131 555 and a management plan prior to works re-commencing must developed in consultation with the relevant Aboriginal stakeholders.
Construction Noise and Vibration	Noise generation during construction.	Preparation of Construction Noise and Vibration Management Plan.
Operational Noise and Vibration	Operational noise from use of the school and facilities.	- Intensive use (recess, lunch and school sport) of outdoor play areas on Dunstan Grove should not exceed two hours per day; - Use of vegetation/planting along the western and north-eastern boundaries of the site should be considered to increase the distance between active play and nearby dwellings; - Relocation of the student queuing area for buses further within the school grounds should be considered to reduce noise impact on residents of Tubbs View. - Detailed acoustic review of all external plant following equipment selection and duct layout design.
Bushfire	Risk to property and humans of bushfire	- The subject lots shall be managed to outer protection area standards as described in the RFS documents Planning for Bush Fire Protection 2006 and Standards for Asset Protection Zones. - Trees and shrubs within 2m of windows should be removed or pruned. - The existing building shall be upgraded, where relevant, as described in the RFS Building Best Practice Guideline – Upgrading Existing Buildings. - Existing windows and glass doors shall be replaced with toughened glass (min 6mm) or grade A safety glass in metal frames with metal fittings and draught excluders/seals.

Item	Potential Impact	Mitigation Measure
		• All external vents and weepholes shall be screened with metal mesh screening with an aperture no greater than 2mm. • External timber doors shall be repaired or replaced to comply with AS3959-2009 BAL-29. • Roller doors and external doors shall be provided with brush seals or draught excluders to ensure no openings greater than 3mm. • Gates shall be provided in the proposed fence to permit access for emergency service vehicles to the southern and western APZs. • Prepare a Bush Fire Emergency Management and Evacuation Plan as described in the RFS guide to developing the plan.
Waste	Excessive waste generation	• 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. • 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

10. SUMMARY AND CONCLUSIONS

This EIS has been prepared by Urbis Pty Ltd on behalf of the NSW Department of Education in support of SSD Application (SSD 16_8114) for the development of the 'Lindfield Learning Village' at 100 Eton Road, Lindfield.

The school will accommodate approximately 2,100 students to take enrolment pressure off surrounding public schools exceeding design capacity. The proposed school will contain high quality learning spaces, offices, child care centre, open play spaces, and associated facilities.

The proposal has been assessed against all items contained to the SEARs and it is concluded that:

- The proposal satisfies the applicable local and state planning policies;
- The proposal provides for the adaptive re-use of a former education facility;
- 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 SEARs.

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

DISCLAIMER

This report is dated 11 April 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).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

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

QUANTITY SURVEYORS COST
ASSESSMENT

APPENDIX C

SITE SURVEY

APPENDIX D ARCHITECTURAL DRAWINGS

APPENDIX E

BUILT FORM & URBAN DESIGN REPORT

APPENDIX F

COMPLIANCE WITH MP 06_130

APPENDIX G BIODIVERSITY

APPENDIX H HERITAGE IMPACT STATEMENT

APPENDIX I

ABORIGINAL DUE DILIGENCE ASSESSMENT

APPENDIX J

TRAFFIC AND TRANSPORT ASSESSMENT

APPENDIX K

ESD ASSESSMENT REPORT

APPENDIX L CPTED ASSESSMENT

APPENDIX M

SOCIAL IMPACT ASSESSMENT

APPENDIX N NOISE IMPACT ASSESSMENT

APPENDIX O

SEDIMENT, EROSION AND DUST CONTROL STATEMENT

APPENDIX P

PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT

APPENDIX Q

INFRASTRUCTURE AND SERVICES REPORT

APPENDIX R

REPORT ON EXISTING DRAINAGE INFRASTRUCTURE

APPENDIX S FLOOD STUDY

APPENDIX T CONSTRUCTION AND OPERATIONAL WASTE MANAGEMENT PLANS

APPENDIX U

BUSHFIRE ASSESSMENT REPORT

APPENDIX V

PRELIMINARY CONSTRUCTION MANAGEMENT PLAN

APPENDIX W REPORT ON STRUCTURAL ADEQUACY

APPENDIX X

HIGH-LEVEL ACCESS ASSESSMENT

APPENDIX Y

COMMUNITY CONSULTATION REPORT



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