



Environmental Impact Statement

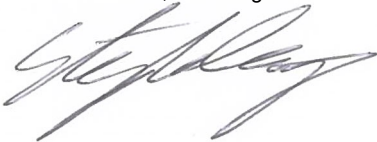

St Luke's Grammar School – Senior School Campus

210 Headland Road & 800 Pittwater Road, Dee Why and 224 Headland Road,
North Curl Curl

PLANNING. URBAN DESIGN.
RETAIL AND ECONOMIC. HERITAGE

DECLARATION

ENVIRONMENTAL IMPACT STATEMENT

Applicant Name:	St Luke's Grammar School
Applicant Address:	210 Headland Road, Dee Why
Land to be developed:	210 Headland Road and 800 Pittwater Road, Dee Why and 224 Headland Road, North Curl Curl (Lot 2112 DP 752038; Lot 100 DP 1251179; SP 45082 and Lot 6 DP 523299)
SSD Application Number:	SSD-10291
Proposed development:	New Senior School Campus and Sports Centre.
ENVIRONMENTAL IMPACT STATEMENT	This report is an Environmental Impact Statement which addresses all relevant matters required by Section 4.12(8) of the <i>Environmental Planning and Assessment Act 1979</i> and Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> .
DECLARATION	<p>The undersigned certify that we have prepared the contents of this Environmental Impact Statement and to the best of our knowledge it:</p> <ul style="list-style-type: none"> • addresses all relevant matters listed under Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>; • contains all available information that is relevant to the environmental assessment of the development to which the EIS relates; and • is not, by its presentation or omission of information, false nor misleading.
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Contents

Executive Summary	ix
1 Introduction	1
1.1 Purpose of this Report	1
1.2 Project Objectives and Summary	1
2 Background	3
2.1 Site History	3
2.2 Previous Development Applications	4
2.2.1 210 Headland Road, Dee Why	4
2.2.2 224 Headland Road, North Curl Curl	4
2.2.3 800 Pittwater Road, Dee Why	5
3 Site Context	7
3.1 Location	7
3.2 Site Description	7
3.2.1 210 Headland Road	8
3.2.2 224 Headland Road	9
3.2.3 800 Pittwater Road	13
3.3 Surrounding Development	15
3.4 Surrounding Road and Transport Network	17
3.4.1 Road Network	17
3.4.2 Bus Network	18
3.4.3 Cycling and Pedestrian Network	18
3.5 Current Operations	19
4 Proposed Development	21
4.1 Project Summary	21
4.2 Demolition and Site Preparation	24
4.3 New Sports Centre - 224 Headland Road	24
4.4 New Senior Campus – 800 Pittwater Road	25
4.4.1 Stage 2	25
4.4.2 Stage 3	26
4.5 Landscaping	26
4.6 Sound Barrier Wall	27
4.7 Signage	28
4.8 Vehicular Access and Car Parking	29
4.9 Waste Management	29
4.10 Stormwater Management	30
4.10.1 Sediment and Erosion Control	30
4.11 Operation of School – Staff and Students and Hours of Operation	30
4.12 Ecologically Sustainable Development	31

Contents

4.13	Building Code of Australia and Accessibility	32
5	Consultation	33
5.1	General	33
5.2	Northern Beaches Council	33
5.3	Government Architect NSW (GANSW)	34
5.4	Roads and Maritime Services	35
5.5	Transport for NSW	37
5.6	Local Aboriginal Council and Community	37
5.7	Neighbouring Landowners and Relevant Community Groups	38
5.7.1	Communication and Engagement Activities	38
5.7.2	Adjoining Neighbours Briefing	38
5.7.3	Community Information and Feedback Session	40
5.7.4	Stony Range Botanic Gardens Volunteers Briefing	40
5.7.5	Existing tenants at 800 Pittwater Road	41
5.7.6	Ongoing Consultation	41
6	Environmental Assessment	42
6.1	General	42
6.2	Environmental Planning and Assessment Act, 1979	42
6.2.1	Section 1.3 – Objectives of the EP&A Act	42
6.2.2	Section 1.7 – Application of Part 7 of Biodiversity Conservation Act 2016 and Part 7A of Fisheries Management Act 1994	43
6.2.3	Section 4.38(3) – Partially Prohibited Development	43
6.3	Biodiversity Conservation Act	43
6.4	Planning Controls	45
6.4.1	State Environmental Planning Policy (State and Regional Development) 2011	45
6.4.2	State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017	46
6.4.3	State Environmental Planning Policy (Infrastructure) 2007	47
6.4.4	State Environmental Planning Policy No. 55 – Remediation of Land	50
6.4.5	State Environmental Planning Policy No. 64 – Advertising and Signage	52
6.4.6	Draft State Environmental Planning Policy (Environment)	54
6.4.7	Draft State Environmental Planning Policy (Remediation of Land)	54
6.4.8	Warringah Local Environmental Plan 2011	55
6.5	Policies	62
6.5.1	State and regional policies	62
6.5.2	Towards 2040- Local Strategic Planning Statement	65
6.5.3	Final Draft Brookvale Structure Plan (August 2017)	65
6.5.4	Warringah Development Control Plan 2011	66
6.6	Likely Impacts of the Development	71
6.6.1	Built Form and Urban Design	71
6.6.2	Heritage Significance	73
6.6.3	Aboriginal Cultural Heritage	76

Contents

6.6.4	Environmental Amenity	77
6.6.5	Transport and Accessibility	80
6.6.6	Ecologically Sustainable Development	85
6.6.7	Social Impacts	86
6.6.8	CPTED Assessment	87
6.6.9	Noise and Vibration	88
6.6.10	Stormwater Drainage and Flooding	90
6.6.11	Biodiversity Assessment	91
6.6.12	Construction Management	92
6.6.13	Waste	95
6.6.14	Staging	96
6.6.15	Contributions	96
6.7	Suitability of the Site for Development	97
6.7.1	Contamination, Salinity and Acid Sulfate Soils	97
6.7.2	Bushfire	98
6.7.3	Utilities and Services	98
6.8	Public Interest	99
7	Other Statutory Approvals	101
7.1	General	101
7.2	Commonwealth Department of Agriculture, Water and the Environment	101
7.2.1	Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	101
7.3	NSW Department of Premier and Cabinet – Heritage NSW	101
7.3.1	Heritage Act 1977	101
7.4	NSW Department of Planning, Industry and Environment – Environment, Energy and Science (EES) Group	102
7.4.1	National Parks and Wildlife Act 1974 (NPW Act)	102
7.5	Natural Resources Access Regulator (NRAR)	102
7.5.1	Water Management Act 2000 (WM Act)	102
7.6	Transport NSW – Roads and Maritime Services (RMS)	103
7.6.1	Roads Act 1993	103
8	Conclusion	104

Contents

Figures

Figure 1	Top Dog Building (c. 1956) (Source: State Library of NSW)	4
Figure 2	Extract from approved site plan (DA-01) prepared by studio djgeenen	5
Figure 3	Site Location	7
Figure 4	Aerial photograph	8
Figure 5	Aerial photograph 210 Headland Road	8
Figure 6	Existing main entry to St Luke's Grammar School from Headland Road	9
Figure 7	Aerial photograph of 224 Headland Road	9
Figure 8	View of the western elevation of 224 Headland from the Clock Tower at 800 Pittwater Road	10
Figure 9	Interior of Unit 7 (Sports Training Facility)	10
Figure 10	Exiting shared driveway access to 222 and 224 Headland Road	11
Figure 11	Parking forecourt at 224 Headland Road	12
Figure 12	View of suspended slab	12
Figure 13	Aerial photograph of 800 Pittwater Road	13
Figure 14	View of 800 Pittwater Road from western side of Pittwater Road.	14
Figure 15	Curved former canteen	14
Figure 16	Clock tower and front entrance	15
Figure 17	Stage located within Stony Range Regional Botanic Garden	16
Figure 18	Views from Stony Range Botanic Garden to 800 Pittwater Road	16
Figure 19	Road hierarchy	17
Figure 20	Existing off-road shared pedestrian and cycleway along the eastern side of Pittwater Road.	19
Figure 21	Aerial photomontage of proposed buildings	22
Figure 22	Photomontage of 800 Pittwater Road	23
Figure 23	Proposed Site Plan	23
Figure 24	View of proposed basketball courts	25
Figure 25	Landscape Concept Plan (Stage 3)	27
Figure 26	View of proposed sound barrier wall	28
Figure 27	Example of Signage Type 2: School Logo "Christ Our Light"	28
Figure 28	Vegetation Zones and Survey Plots (Source: Eco Logical)	45
Figure 29	Required Road Traffic Noise Reduction (Day Design)	49
Figure 30	Revised Required Road Traffic Noise Reduction with sound barrier wall (Day Design)	50
Figure 31	Location of soil sampling	52
Figure 32	Zoning Map	57
Figure 33	Height of Buildings	58
Figure 34	Roof Plan – Height Points	59
Figure 35	Sections – Height Points	60
Figure 36	Building Massing	61
Figure 37	View of the existing and proposed development from the western side of Pittwater Road	73
Figure 38	Heritage Map	74
Figure 39	Existing Pittwater Road (West) Elevation) – heritage significant fabric is identified with a brown hatch	74
Figure 40	Shadow Diagrams – neighbouring properties	78
Figure 41	Existing and proposed view of the proposed development at the intersection of Pittwater Road and Warringah Road	79

Contents

Figure 42	Existing and proposed view from the western side of Harbord Road	79
Figure 43	School traffic generation rates.	80
Figure 44	Existing transport modal split	85
Figure 45	Target transport modal split	85
Figure 46	Location of Sensitive receivers	89
Figure 47	Northern Beaches Council flood hazard map	91

Tables

Table 1	Site Description	7
Table 2	Development Statistics	22
Table 3	GANSW	34
Table 4	Consultation with RMS	35
Table 5	Consultation with Aboriginal Council and Community	37
Table 6	Response to Key Issues Raised by Adjoining Neighbours	39
Table 7	Response to Key Issues Raised in Community Information and Feedback Session	40
Table 8	Response to Key Issues Raised in Stony Range Volunteers Briefing	40
Table 9	Proposed Development's Consistency with the Objects of the EP&A Act	42
Table 10	Assessment under SEPP 64 – Advertising and Signage	53
Table 11	Assessment against Relevant Provisions of WLEP 2011	55
Table 12	Proposed building heights at 800 Pittwater Road	59
Table 13	Assessment against the objectives of height of buildings development standard	61
Table 14	Response to Provisions, Goals and Objectives of State and regional Policies	62
Table 15	Assessment against relevant provisions of Warringah DCP 2011	66

Contents

Appendices

1. Secretary's Environmental Assessment Requirements (SEARs) – Reference Table
2. Previous Development Consents
3. Planning Certificates – *Northern Beaches Council*
4. Site Survey– *Stephen R. Carr Registered Surveyor*
5. Photo Sheets – *DFP Planning*
6. Architectural Drawings – *Tonkin Zulaikha Greer Architects (TZG)*
7. Architectural Design Report – *Tonkin Zulaikha Greer Architects (TZG)*
8. Staging Report – *DFP Planning*
9. Social Impact Report – *Sarah George*
10. Landscape Architecture Drawings – *Spackman Mossop Michaels*
11. Arboricultural Impact Assessment – *ArborSafe*
12. Geotechnical Report – *Martens Consulting Engineers*
13. Access Review – *Funktion*
14. BCA Design Compliance Review – *Group DLA*
15. DA Support Statement – *MCD Fire Engineering*
16. Concept Fire Engineering Strategy – *MCD Fire Engineering*
17. Preliminary Site Investigation Report – *Martens Consulting Engineers*
18. Detailed Site Investigation Report – *Martens Consulting Engineers*
19. Asbestos Survey 2016 – *Solutions in Engineering*
Asbestos Register and Management Plan (800 Pittwater Road – *KPMG SGA*
Hazardous Building Materials Survey Officeworks – *Hibbs & Associates Pty Ltd*
20. Aboriginal Cultural Heritage Assessment Report (ACHAR) – *Eco Logical Australia*
21. Civil Engineering Works Package – *Northrop*
22. Hydraulic Services Infrastructure Management Plan – *Northrop*
23. Electrical Services Infrastructure Management Plan – *Wood & Grieve Engineers*
24. Transport and Parking Assessment Report– *Varga Traffic Planning*
25. Green Travel Plan – *Varga Traffic Planning*
26. Preliminary Construction Traffic Management Plan – *Varga Traffic Planning*
27. Preliminary Construction Management Plan – *Midson Group*
28. Ecologically Sustainable Development (ESD) Report – *Wood & Grieve Engineers*
29. Heritage Impact Statement – *City Plan Heritage*
30. Non-Indigenous Archaeological Assessment – *City Plan Heritage*
31. Demolition & Construction Waste Management Plan – *Waste Audit & Consultancy Services*
32. Operation Waste Management Plan – *Waste Audit & Consultancy Services*
33. Environmental Noise Assessment – *Day Design*
34. Traffic Noise Intrusion Assessment – *Day Design*
35. Construction Noise & Vibration Management Plan – *Day Design*
36. Biodiversity Development Assessment Report – *Eco Logical Australia*
37. Operational Plan of Management – *St Luke's Grammar School*
38. EIS Stakeholder Consultation Report – *Elton Consulting*
39. Pre-Lodgement Advice – *Northern Beaches Council*
40. Correspondence with Government Architects NSW – *GANSW*
41. Correspondence with Roads and Maritime Authority – *RMS*

Contents

Abbreviations

AADT	annual average daily vehicle trips
AHD	Australian Height Datum
AHIP	Aboriginal Heritage Impact Permit
AS	Australian Standard
ASS	acid sulfate soils
BC Act	Biodiversity Conservation Act 2016
BCA	Building Code of Australia
CC	construction certificate
CIV	capital investment value
Council	Northern Beaches Council
DA	development application
DCP	development control plan
DFP	DFP Planning Pty Limited
DPIE	NSW Department of Planning, Industry and Environment
DVT	daily vehicle trip
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPI	environmental planning instrument
ESCP	erosion and sedimentation control plan
ESD	ecologically sustainable development
FPL	flood planning level
FSR	floor space ratio
GFA	gross floor area
GSC	Greater Sydney Commission
HIS	heritage impact statement
IPC	Independent Planning Commission
LEP	local environmental plan
LGA	local government area
NPW Act	<i>National Parks and Wildlife Act 1974</i>
PAD	potential archaeological deposit
PVT	peak hour vehicle trip
RL	reduced level
RMS	NSW Roads and Maritime Services
SCC	site compatibility certificate
SCI	site contamination investigation
SEE	Statement of Environmental Effects
SEPP	state environmental planning policy
SSD	State significant development
SULE	safe useful life expectancy
TSC Act	<i>Threatened Species Conservation Act 1995</i>
vtph	vehicle trips per hour
WM Act	<i>Water Management Act 2000</i>
WSUD	water sensitive urban design

Executive Summary

The Anglican Schools Corporation and St Luke's Grammar School propose to construct a new senior school campus and sports centre. The proposed development comprises the adaptive re-use of two (2) existing industrial buildings. The sports centre includes two (2) basketball courts, a half-sized basketball court and gymnasium. The new senior school campus contains a range of flexible, multi-modal general and specialist learning spaces, along with an assembly theatre, drama theatre, library, outdoor multi-purpose sports court and new landscaping. The new senior school campus and sports centre will be linked by a new vertical connection building. The senior school campus will accommodate 600 senior school students (Years 10 -12). The overall student population, including the existing campus, is forecast to be 1,600 students attending the school by 2030. No physical works are proposed at the existing campus.

As the works have a capital investment value exceeding \$20 million, the project is deemed to be *State Significant Development under State Environmental Planning Policy (State and Regional Development) 2011*. The proposed works will generate up to 149 new full time-equivalent construction jobs and up to 60 new full time equivalent operational jobs.

The existing campus of St Luke's Grammar School is located at 210 Headland Road, Dee Why, within the Northern Beaches Local Government Area. The new senior school campus is to be located at 800 Pittwater Road, Dee Why, with the new sports centre at 224 Headland Road, Dee Why. 800 Pittwater Road is listed as a heritage item of local significance under *Warringah Local Environmental Plan 2011*.

The existing school campus is zoned R2 Low Density Residential, with the proposed sports centre zoned IN1 General Industrial and the proposed senior school campus zoned B5 Business Development under *Warringah Local Environmental Plan 2011*. Both the R2 and B5 zones are prescribed zones under Clause 33 of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* and development for the purposes of an educational establishment is permitted with consent in these zones. Development for the purposes of an educational establishment is not permitted in the IN1 zone, and therefore, the proposed development relies on the provisions of Section 4.38(3) of the *Environmental Planning and Assessment Act 1979* relating to State Significant development, whereby development consent may be granted despite the development being partly prohibited by an environmental planning instrument.

The Anglican Schools Corporation and St Luke's Grammar School have consulted with the local community, Northern Beaches Council and State government agencies throughout the design of the development. Feedback provided through this time has been incorporated and addressed in the final design and documentation.

Environmental impacts associated with the proposed development have been the subject of detailed assessment, including impacts associated with urban design, heritage, biodiversity, site contamination and traffic/parking. The assessment finds that while the proposal will generate impacts, these impacts can generally be mitigated such that their outcomes are acceptable.

The proposed works have been assessed on balance as providing significant public benefit to the immediate local and surrounding district through the provision of increased enrolment capacity for senior school students within new high-quality learning and teach spaces with flexible layout arrangements.

This Environmental Impact Statement has been prepared under Part 4 of the Environmental Planning and Assessment Act 1979, in accordance with the Secretary's Environmental Assessment Requirements for SSD-10291, and Schedule 2 of the Environmental Planning and Assessment Regulation 2000. The works proposed under this DA will be subject to the recommendations of specialist reports so as to ensure appropriate outcomes are achieved.

The proposed works have been designed to, and will be carried out in, the interests of the public. The works will meet the project objectives to provide a senior campus with an adult learning environment that can support diverse pedagogical approaches and allow collaborative and inter-disciplinary learning in flexible learning spaces.

Accordingly, it is requested that the Minister for Planning and Public Spaces grant approval to the proposed State Significant Development application as set out in this report.

1 Introduction

1.1 Purpose of this Report

DFP Planning Pty Ltd (DFP) has been commissioned by The Anglican Schools Corporation (TASC) and St Luke's Grammar School (the School) to prepare an Environmental Impact Statement (EIS) to accompany a development application (DA) to the NSW Department of Planning, Industry and Environment (DPIE) for the proposed development of a new senior school campus for St Luke's Grammar School at 210 Headland Road and 800 Pittwater Road, Dee Why and 224 Headland Road, North Curl Curl (the Site).

The proposed development is for an educational establishment with a Capital Investment Value (CIV) of more than \$20 million and accordingly, is deemed to be State Significant Development (SSD) pursuant to Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (the SRD SEPP).

On 3 May 2019, the Secretary of the DPIE issued Secretary's Environmental Assessment Requirements (the SEARs) (see **Appendix 1**), which were reissued on 1 July 2019 for SSD Application No. SSD-10291.

This report has been prepared in accordance with the SEARs, Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation) to provide the DPIE and relevant NSW State Government Agencies with all relevant information necessary to assess the proposed development and for the Minister to determine the DA in accordance with Section 4.38 of the EP&A Act.

1.2 Project Objectives and Summary

St Luke's Grammar School is an independent Anglican co-educational day school. The school was established in 1993, following the amalgamation of three (3) Sydney Anglican Schools Corporation Schools located within the Northern Beaches: Roseby Preparatory (Junior) School, Peninsula Grammar (Boys) School and St Luke's Anglican School for Girls. In 2016, Loquat Valley Anglican School became part of St Luke's Grammar School.

The School currently has two (2) campuses, Dee Why (Pre-Kindergarten to Year 12) and Bayview (Pre-Kindergarten to Year 6). The Dee Why campus has grown to be a 2-stream Junior School and 4-stream Senior School.

The project scope of works is as follows:

- A new senior school campus and indoor pool for St Luke's Grammar School located at 800 Pittwater Road with sporting facilities at 224 Headland Road.
- Accommodation for the growing number of students.
- A senior campus with an adult learning environment that can support diverse pedagogical approaches and allow collaborative and inter-disciplinary learning in flexible learning spaces.
- A vertical connection linking 224 Headland Road and 800 Pittwater Road.
- A staged development to suit the availability of the existing tenancies.
- An ideal delivery solution that will allow staging of the school's expansion as the surrounding residential population grows and enrolment demand is generated.

As part of project brief, educational planning objectives were developed by Education Consultant Anne Knock, in close consultation with the school and design team. These objectives guide all future decision-making, planning and evaluation of the learning environment. The education planning principles and objectives are:

- *Learning shifted from separate to connected.*
- *Focus on inquiry approaches to learning.*
- *Include multi-modal learning*

1 Introduction

- *Involve teachers as designers.*
- *Focus on overall wellbeing.*
- *Plan for and embrace technological disruption.*
- *Be flexible and allow customisation to suit different contexts by providing both core and optional space types.*
- *Provide public and community spaces to welcome the community into the building.*
- *Allow response to changes in student numbers.*
- *Offer a safe and secure learning and working environment that invites community participation and engagement.*
- *Be mindful of the needs of learners at different learning stages.*
- *Offer an engaging and supportive student experience suited to a range of learning styles.*
- *Offer flexible and well-connected teaching and learning spaces.*
- *Offer technology-enabled settings with an emphasis on mobility.*
- *Have the capacity to support comprehensive curriculum delivery.*
- *Be configured to maximise meaningful and functional relationships and links between people, disciplines and resources.*
- *Support teachers in their roles as student mentors and members of a professional community.*
- *Maximise outdoor learning opportunities.*
- *Create a healthy and environmentally sustainable environment that serves as a tool for learning.*
- *Respond to varied access and usage patterns.*

2 Background

2.1 Site History

A detailed site history has been prepared by City Plan in the Heritage Impact Statement (**Appendix 29**) and Non-Indigenous Archaeological Assessment (**Appendix 30**). A brief summary is provided below:

- Old Pittwater Road (from Balgowlah to Long Reef) was constructed in 1826 by James Jenkins with the aid of convict labourers;
- In 1831, James Wheeler purchased one of the first properties in the area, a 90 hectare property that included the site.
- Between 1881 and 1886, the site was subdivided into Lots 367-371.
- On 3 April 1886, Lot 369 was reserved by the Crown for 'Public Recreation' (now Stony Range Regional Botanic Garden). Site of the Dee Why Hill (Cable Hill) quarry, which provided ballast for the construction of the Narrabeen tramway (1910s).
- In 1886, Jane Malcolm occupied Lots 370 and 371 (includes 800 Pittwater Road and 224 Headland Road). However, the site remained undeveloped.
- In 1927, F.J. Sargood and William Gardiner merged to form Sargood Gardiner Limited. Sargood Gardiner Limited was a manufacturer and importer of clothing, with offices across Australia and in New Zealand.
- In 1940s, Sargood Gardiner Limited closed Sydney offices to establish new office and warehouse in the developing suburb of Dee Why.
- 1950, Top Dog factory opened. The building was designed by the architectural firm Spencer, Spencer & Bloomfield and won the Sir John Sulman Medal for Architecture awarded by the Royal Australian Institute of Architects (**Figure 1**).
- In 1957, Top Dog products ceased production and the factory building was sold to Bonds. The Stony Range Botanic Garden was established on the site of the former quarry.
- During the 1960s, Brookvale developed from predominately market gardens to industrial uses.
- Bonds owned and operated the factory at 800 Pittwater Road until 1972 when it was sold to Wormald International. Interior of the factory was subdivided for commercial, retail and industrial uses.
- Industrial unit building at 224 Headland Road built late 1980s / early 1990s.
- In February 1993, St Luke's Grammar School was established, following the amalgamation of three Sydney Anglican School Corporation schools on the Northern Beaches: Roseby Preparatory (Junior) School, Peninsula Grammar (Boys) School and St Luke's Anglican School for Girls. School commenced an extensive program of upgrades and building work at 210 Headland Road.
- During the 1990s, major alterations and additions were undertaken to the building at 800 Pittwater Road. Only clock tower, part of the western façade and curved former canteen were retained.
- In 2013, St Luke's Grammar School purchased 800 Pittwater Road.
- In 2016, a Sports Training / Basketball Facility was opened within Unit 7 at 224 Headland Road, North Curl Curl.

2 Background

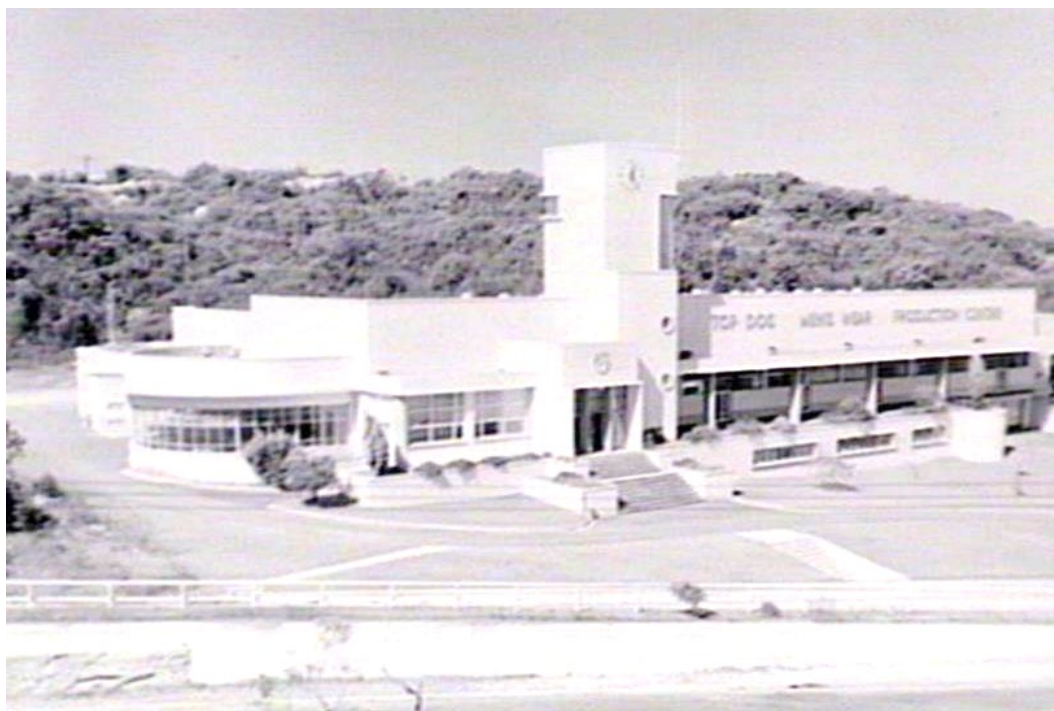


Figure 1 Top Dog Building (c. 1956) (Source: State Library of NSW)

2.2 Previous Development Applications

2.2.1 210 Headland Road, Dee Why

There are two (2) recent development application and consents for 210 Headland Road that are relevant to this application:

- GDL180084

On 12 December 2018, a Complying Development Certificate (CDC) was approved by Group DLA under the complying development provisions of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (the Education SEPP). The works comprised the demolition of the existing pre-school building and construction of a new four (4) storey junior school building comprising parking and storage on the ground floor; 12 classrooms, administrative / office areas on levels one to three; and pre-school and covered outdoor learning areas on level 4. The works are currently under construction.

- MOD2018/0412

On 26 June 2019, the Sydney North Planning Panel approved a Section 4.55(2) modification application to amend DA2011/0466 (as modified) to increase the student enrolment of St Luke's Grammar School from 992 to 1,092 (refer **Appendix 2**).

It is the intention of this State Significant Development Application (SSDA) to have a total student enrolment at 210 Headland Road of 1,000 students.

2.2.2 224 Headland Road, North Curl Curl

There are two (2) recent development applications for 224 Headland Road:

- DA2015/1041

On 16 December 2015, a development application was approved by Council under delegated authority for:

Alterations and additions to a commercial premises, internal layout and use of premises as a recreation (indoor)

2 Background

The application enabled the use of Unit 7 at 224 Headland Road as an indoor basketball recreation facility.

- DA2019/0977

On 21 February 2020, a development application was approved by Council under delegated authority in relation to Units 3, 4 and 7, 224 Headland Road (A copy of the consent is provided in **Appendix 2**). The development comprised:

- Internal fit out of Units 3 and 4 and minor alterations to Unit 7 for use as a sports training facility; and
- New 1.2m wide pedestrian pathway and stairs from Headland Road (**Figure 2**).

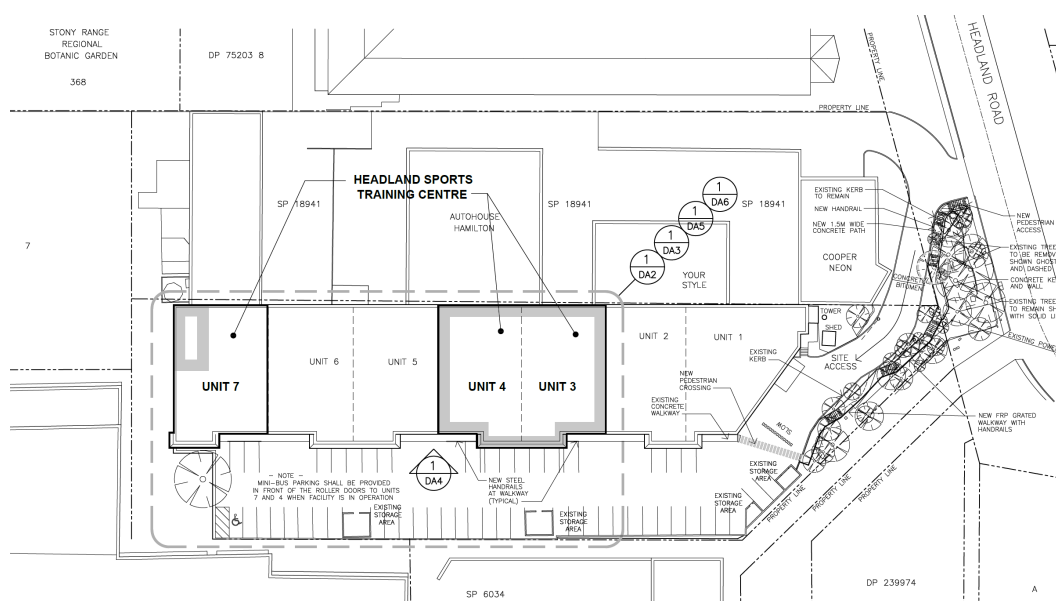


Figure 2 Extract from approved site plan (DA-01) prepared by studio djgeenen

2.2.3 800 Pittwater Road, Dee Why

Units 1 and 3 - “Fitness First”

On 17 May 1993, Development Consent No. 93/189 was approved for the use of Units 1 and 3 as a gymnasium and ancillary facilities. This development consent was subsequently modified (9 September 1998) to extend the ancillary facility, being a child care centre, into part of Unit 5.

On 27 June 2014, a CDC (CDC No. 14/0987/01) was issued by Steve Watson & Partners for an internal fit-out of the first floor. Subsequent CDCs have been issued for internal fit-out works.

On 27 October 2017, Northern Beaches Council granted development consent (DA2017/0881) to amend the hours of operation of “Fitness First” to 24 hours of operation seven (7) days a week.

Units 2 and 4 – “Officeworks”

On 28 February 1997, Development Application No.96/362 (Development Consent No. 97/59) was approved for the use of Units 2 and 4 at 800 Pittwater Road as a bulky goods retail premises. A copy of the development consent is provided as **Appendix 2**. Condition 9 of this approval states:

9. The provision of 119 paved carparking spaces to be used solely for carparking purposes, of which 40 are to be used solely for “Officeworks” in Units 2 and 4, and 64 to be used solely for Units 1, 3 and 5. Area for staff carparking to be clearly marked.

Separate applications were lodged and approved by Council in relation to the Officeworks signage including the pylon sign (Consent Numbers 97/96 and 97/139).

2 Background

On 8 March 2011, Council approved alterations and additions to Officeworks under DA 2010/1836. This DA did not amend the number of parking spaces allocated to Officeworks.

Unit 5 – “I-MED”

On 19 March 2010, Unit 5 was approved for use as a medical centre (DA 2009/1421).

3 Site Context

3.1 Location

The site is located in the coastal suburbs of Dee Why and North Curl Curl, within the Northern Beaches Local Government Area (see **Figure 3**).

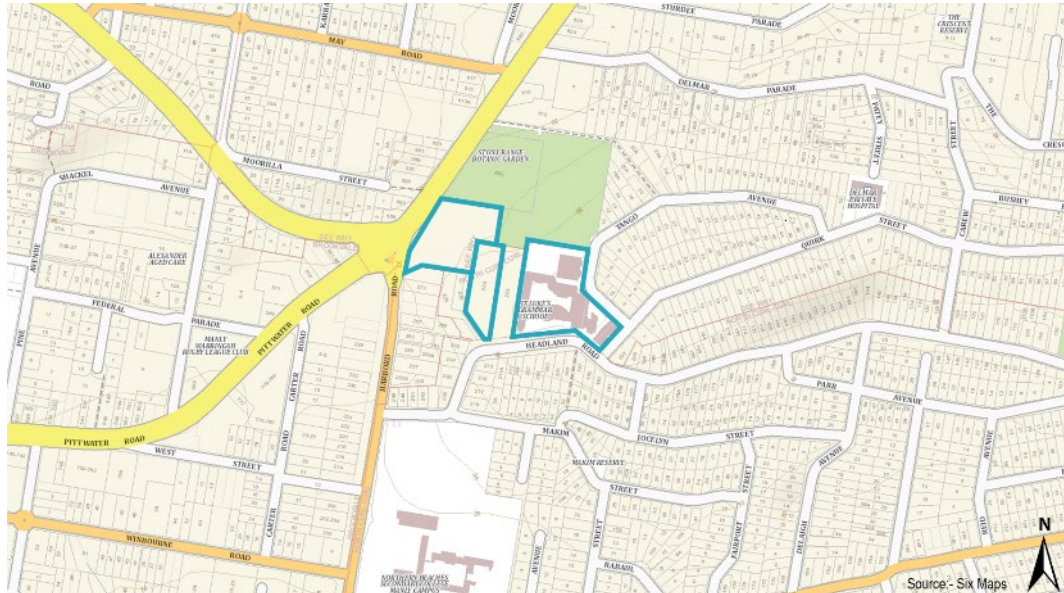


Figure 3 Site Location

3.2 Site Description

The site comprises four (4) allotments as described in **Table 1** (see also site surveys at **Appendix 4**).

Table 1 Site Description		
Property Address	Lot / DP	Area (m ²)
210 Headland Road, Dee Why	2112 / 752038	15,209
210 Headland Road, Dee Why (also known as 2-4 Tango Avenue, Dee Why)	100 / 1251179	
224 Headland Road, North Curl Curl	SP 45082	5,235
800 Pittwater Road, Dee Why	6 / 523299	10,240
TOTAL		30,684m²

Figure 4 is an aerial photograph of the overall site.

3 Site Context



Figure 4 Aerial photograph

3.2.1 210 Headland Road

210 Headland Road comprises the existing St Luke's Grammar School Dee Why campus (**Figure 5**). The site is irregular in shape and has frontage to Headland Road, Quirk Street and Tango Avenue. The main entry to the school is from Headland Road (**Figure 6**). Current improvements on the site include junior, middle and senior school buildings, along with a multi-purpose hall, playing courts, grass areas and off-street parking (total 133 spaces). A new four-storey junior school building is under construction in the south-east corner of the site (refer **Section 2.2.1**).



Figure 5 Aerial photograph 210 Headland Road

3 Site Context



Figure 6 Existing main entry to St Luke's Grammar School from Headland Road

Vehicular access to the site is from Headland Road and Tango Avenue. There is a total of 29 car parking spaces accessed from Headland Road including two (2) accessible spaces, one (1) visitor space and one (1) delivery space. There is a multi-storey staff carpark access from Tango Avenue, that contains a total of 104 car parking spaces/

3.2.2 224 Headland Road

224 Headland is an irregular shaped site with frontage to Headland Road (**Figure 7**). The existing building is a light industrial complex containing seven (7) industrial units (**Figure 8**). Each of the units has an office mezzanine and warehouse space and can be accessed by a large metal roller door. Unit 7 is used as an indoor recreation facility (**Figure 9**).



Figure 7 Aerial photograph of 224 Headland Road

3 Site Context



Figure 8 View of the western elevation of 224 Headland from the Clock Tower at 800 Pittwater Road



Figure 9 Interior of Unit 7 (Sports Training Facility)

3 Site Context

Access to 224 Headland Road is via a shared driveway with 222 Headland Road (**Figure 10**). A new pedestrian pathway will be constructed between the street frontage and the site in accordance with development consent DA2019/0977.



Figure 10 Exiting shared driveway access to 222 and 224 Headland Road

There are a total of 45 car parking spaces, including one (1) accessible parking space, located on a large bitumen forecourt (**Figure 11**). The forecourt is partially suspended over a sandstone outcrop (**Figure 12**).

3 Site Context



Figure 11 Parking forecourt at 224 Headland Road



Figure 12 View of suspended slab

There is limited existing vegetation on the site except for the vegetation adjacent to Headland Road and weed growth at the northern-most end of the site.

Photographs of 224 Headland Road are provided in **Appendix 5**.

3 Site Context

3.2.3 800 Pittwater Road

800 Pittwater Road is an irregular shaped site with frontage to Pittwater Road and Harbord Road (**Figure 13**). The site contains a three (3) storey mixed-use building with basement carparking. The building contains five (5) tenancies as follows:

- Units 1 and 3: “Fitness First” gymnasium and ancillary facilities;
- Units 2 and 4: “Officeworks” retail premises; and
- Unit 5: “I-Med” health services facility.



Figure 13 Aerial photograph of 800 Pittwater Road

The building is an example of a “post-war factory building”, with light-coloured rendered masonry walls, large expanses of curtain-wall glazing and a metal roof (**Figure 14**). The building is identified as a local heritage item under Warringah Local Environmental Plan 2011 (WLEP 2011), with the heritage elements being the curved former canteen (**Figure 15**) clocktower, and part of the original western façade and front entrance (**Figure 16**).

3 Site Context



Figure 14 View of 800 Pittwater Road from western side of Pittwater Road.



Figure 15 Curved former canteen

3 Site Context



Figure 16 Clock tower and front entrance

Vehicular access to the site is from Harbord Road. There is a total of 182 car parking spaces located on the site including 95 car parking spaces (including two (2) accessible spaces) located in the basement and 87 at-grade spaces (including two (2) accessible spaces). Entry to the basement carpark is via a one-way ramp along the northern boundary of the site. The exit from the basement carpark is in the south-west corner of the building.

There is a dedicated loading dock in south-east corner of the site adjacent to Officeworks. This can accommodate 12.5m long Heavy Rigid Vehicles (HRV).

Pedestrian access to the site is in the north-west corner. There is no separate pedestrian access from the south-west corner of the site, save for the driveway used for vehicular access to the car park.

The site is sparsely vegetated and comprises planted native species and horticultural plantings. The vegetation is located along the western (Pittwater Road) and southern site boundaries.

Photographs of 800 Pittwater Road are found in **Appendix 5**.

3.3 Surrounding Development

North of the site is Stony Range Regional Botanic Garden (**Figure 17** and **18**). Stony Range Regional Botanic Garden was established in the 1950s on the site of a disused stone quarry and contains native plants from across Australia.

South and south-west of 800 Pittwater Road along Harbord Road and Pittwater Road is the Brookvale Industrial Area (East) and comprises a mix of general industrial uses. Development along Pittwater Road, south of Warringah Road is characterised by bulky goods retailers, automotive dealers, and automotive repairs premises.

East and south-east of the school is the low-density residential suburbs of Dee Why and North Curl Curl.

3 Site Context



Figure 17 Stage located within Stony Range Regional Botanic Garden



Figure 18 Views from Stony Range Botanic Garden to 800 Pittwater Road

3 Site Context

3.4 Surrounding Road and Transport Network

3.4.1 Road Network

The site has frontages to Pittwater Road, Harbord Road, Headland Road, Quirk Street and Tango Avenue.

The hierarchy of the broader road network is shown in **Figure 19**.

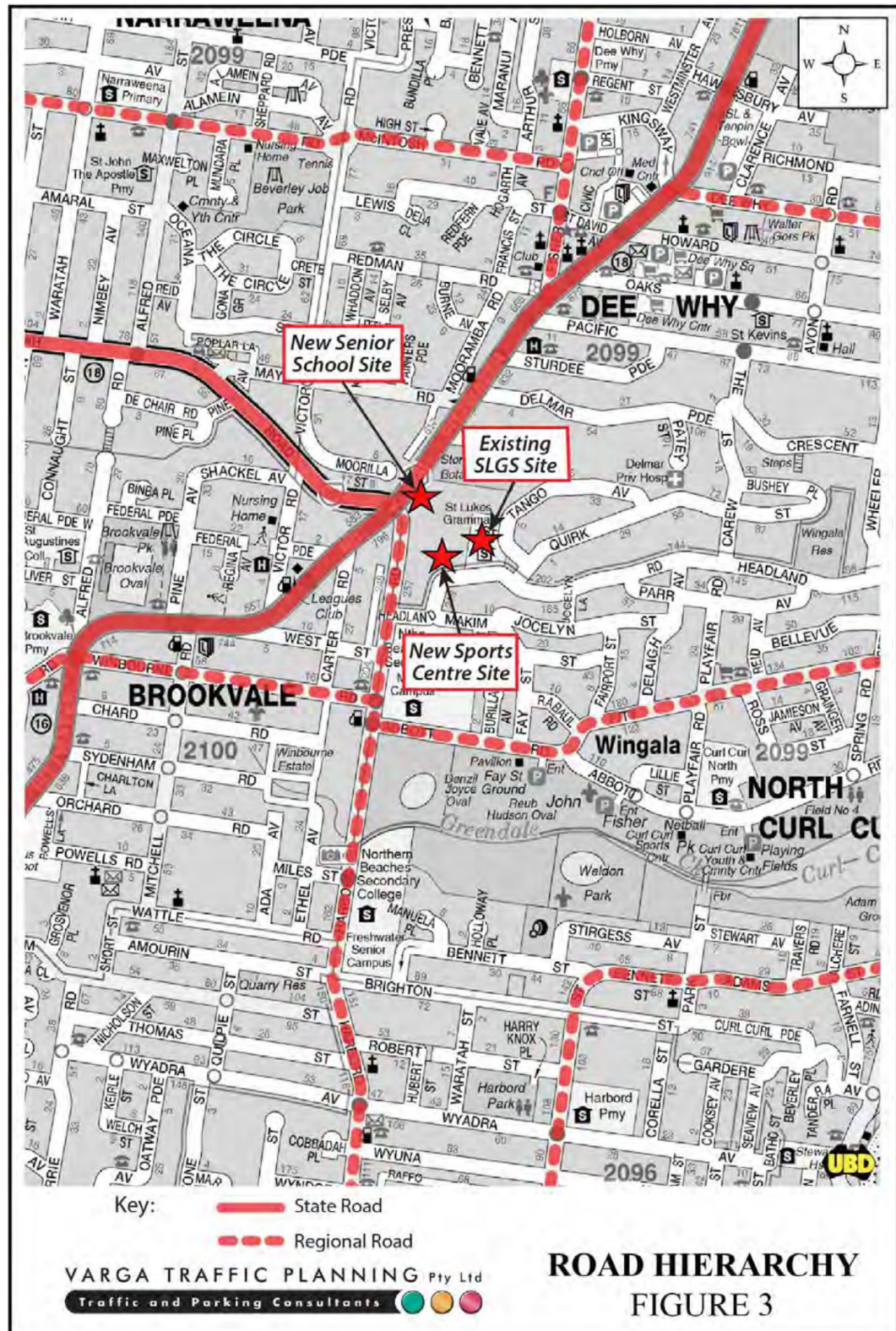


Figure 19 Road hierarchy

3 Site Context

In classification terms, the road network surrounding the St Luke's Grammar School includes:

- **Pittwater Road** is classified as a State Road and provides a key north-south transport corridor linking North Manly to Church Point. In the vicinity of the school, it generally has two (2) traffic lanes in both directions with auxiliary turning lanes at the major intersection. There is also a dedicated bus lane in both directions. The opposing traffic flows are separated by a central median island.
- **Warringah Road** is classified as a State Road and provides a key east-west traffic connection between Boundary Road in the west and Pittwater Road in the east.
- **Harbord Road** is classified as a Regional Road. It typically carries two lanes of traffic with kerbside parking permitted at selected locations. Access to 800 Pittwater Road is restricted to left-in/left-out.
- **Headland Road** is a local road, which functions as a collector road, connecting the local residential area to the higher order roads. Headland Road provides access to local properties including the existing school at 210 Headland Road and the sports centre at 224 Headland Road. There is an indented bus bay within Headland Road at the front of the existing school campus, which has the capacity to accommodate three (3) buses. There is also a drop-off/pick-up zone for up to two (2) cars.
- **Quirk Street** is a local road, which provides vehicular and pedestrian access to residential properties. There is no vehicle access to the existing school campus from Quirk Street. There is a bus stop located on the western side of Quirk Street that can accommodate two (2) school buses.
- **Tango Avenue** is a local road, which provides access to the existing school along with residential properties. There is an indented drop-off and pick-up bay in front of the exiting entry to the Junior School that has capacity for up to 12 vehicles. Access to the multi-storey staff carpark is accessed from Tango Avenue.

3.4.2 Bus Network

There are currently 13 public bus services that operate along Pittwater Road, with the nearest bus stops located within 250 metres of the site. In the addition, the B1 (B-Line) has stops at Dee Why Town Centre to the north and Warringah Mall to the south.

There are 13 dedicated school buses that service St Luke's and other Northern Beaches educational establishments. Bus zones for the school are located on Headland Road and Quirk Street.

3.4.3 Cycling and Pedestrian Network

North Beaches Council has developed a detailed pedestrian and cycle network across the LGA. There is an off-road shared path along the eastern side of Pittwater Road and Harbord Road, which links south to Greendale Creek and north to Pacific Parade.

3 Site Context



Figure 20 Existing off-road shared pedestrian and cycleway along the eastern side of Pittwater Road.

3.5 Current Operations

210 Headland Road

St Luke's Grammar School is co-educational school with students from Cottage (Pre-Kindergarten) to Year 12. Under MOD 2018/0412, a maximum enrolment of 1092 students are permitted. There are 125 full-time equivalent (FTE) staff.

St Luke's Grammar School's current core school hours are 8:30am to 3:20pm Monday to Friday on School Days. Class times are staggered as follows:

- Cottage (Pre-kindergarten): 8:30am to 2:45pm;
- Kindergarten – Year 2: 8:30am to 2:55pm;
- Years 3 – 6: 8:30am to 3:05pm; and
- Years 7 – 12: 8:30am to 3:20pm.

Before-School Care operates from 7am to 8:30am and After-School-Care operates between 2:45pm and 6pm.

The school holds limited after-school and special events on campus after 4pm and on weekends/public holidays. Major events such as School speech days and HSC exams are held off-site.

An Operational Plan of Management has been prepared by the School (**Appendix 37**).

Unit 7, 224 Headland Road

Unit 7 is currently used as the Headland Road Sports Training Centre. The Headland Road Sports Training Centre is available for booking by school and sports groups in 45-minute blocks. There is a maximum of two (2) staff on site at any one time. The hours of operation are:

- 7am to 8pm Monday to Friday; and

3 Site Context

- 8am to 6pm Saturday.

The Headland Road Sports Training Centre is not open on Sundays.

800 Pittwater Road

The existing tenancies at 800 Pittwater Road have the following operating hours:

- Fitness First:
 - 24 hours / 7 days a week;
- Officeworks:
 - Monday – Friday: 7am to 9pm;
 - Saturday: 8am to 7pm; and
 - Sunday: 9am to 7pm;
- I-Med:
 - Monday – Friday: 8am to 5pm;
 - Saturday: 8am to 12 noon; and
 - Sunday and Public Holidays: Closed.

4 Proposed Development

4.1 Project Summary

The proposed development comprises alterations and additions to the existing building at 800 Pittwater Road and 224 Headland Road.

210 Headland Road, Dee Why

No physical works are proposed to the existing school campus at 210 Headland Road.

224 Headland Road, North Curl Curl

The scope of works for 224 Headland Road comprises alterations and additions to provide:

- Two (2) x Basketball courts;
- 1 x Half sized basketball court;
- Gymnasium;
- School uniform shop;
- Amended parking layout including bus turning circle and student parking; and
- New vertical circulation (comprising lift and stair) between 800 Pittwater Road and 224 Headland Road.

224 Headland Road will be for the use of all students attending St Luke's Grammar School.

800 Pittwater Road, Dee Why

The scope of works at 800 Pittwater Road comprises the development of a new senior school campus (Years 10 – 12) for 600 students including:

- Science and Maths Precinct;
- Arts Precinct;
- Design and Technology Precinct;
- Humanities Precinct;
- Wellness Precinct (including 25 metre indoor pool);
- Administration and Staff facilities;
- Social Hubs, Library Hubs and Study Hubs;
- Assembly Theatre (700 seats);
- Drama Theatre (220 seats);
- Café and Atrium;
- Staff and student parking;
- Drop-off / pick-up zone that can accommodate up to 10 vehicles; and
- New landscaping including multi-purpose court.

Staging

The development is required to be staged to accommodate existing lease agreements. The work is proposed to be undertaken in three (3) stages as follows:

- Stage 1: All works at 224 Headland Road;
- Stage 2: Works within existing Units 1, 3 and 5 (Fitness First and I-Med), 800 Pittwater Road; and
- Stage 3: Works within existing Units 2 and 4 (Officeworks), 800 Pittwater Road.

4 Proposed Development

A separate Staging Report has been prepared by DFP to describe and assess the proposed staging of the development (**Appendix 8**).

The key development statistics of the development are detailed in **Table 2**.

Development Statistic	210 Headland Rd	224 Headland Rd	800 Pittwater Rd	Total
Site Area	15,209m ²	5,235m ²	10,240m ²	30,684m ²
Proposed GFA	N/A	2,235m ²	11,278m ²	-
Existing Car Parking	133 (including 2 accessible spaces and 1 loading space)	45 (including 1 accessible space)	182 (including 4 accessible spaces)	360 (including 7 accessible spaces and 1 loading space)
Proposed Car Parking (Stage 1)			182 (including 4 accessible spaces)	356 (including 8 accessible spaces and 1 loading space)
Proposed Car Parking (Stage 2)	133 (including 2 accessible spaces and 1 loading space)	41 (including 2 accessible spaces)	131 (including 3 accessible spaces)	305 (including 7 accessible spaces and 1 loading space)
Proposed Car Parking (Stage 3)			91 (including 2 accessible spaces)	265 (including 6 accessible spaces and 1 loading space)

Tonkin Zulaikha Greer (TZG) has prepared a suite of Architectural Plans and photomontages (**Appendix 6**) that detail the works proposed under the application. **Figure 21** and **Figure 22** are photomontages of the proposed development. An extract of the overall Site Plan for 800 Pittwater Road and 224 Headland Road is provided as **Figure 23**.



Figure 21 Aerial photomontage of proposed buildings

4 Proposed Development



Figure 22 Photomontage of 800 Pittwater Road

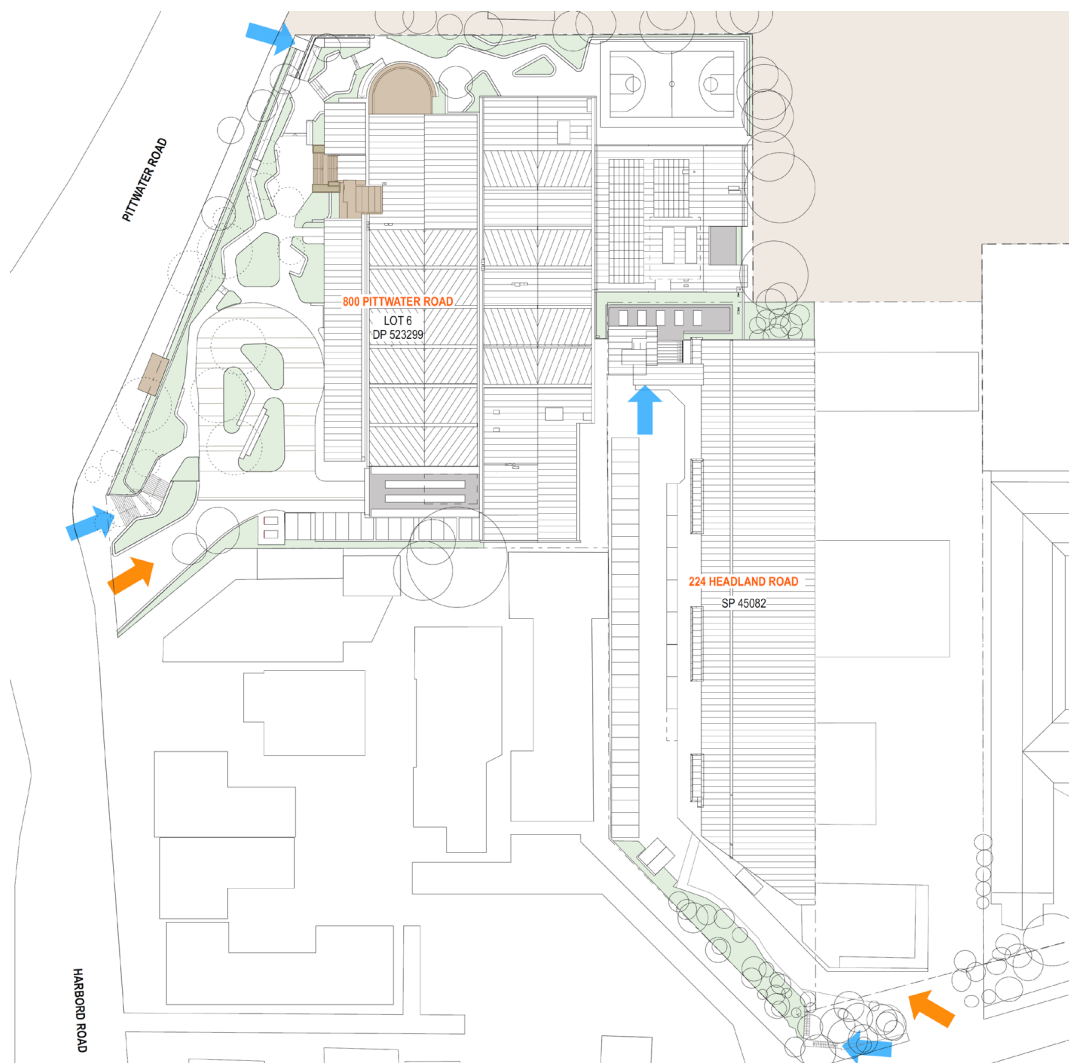


Figure 23 Proposed Site Plan

The following subsections provide a more detailed description of the proposed development.

4 Proposed Development

4.2 Demolition and Site Preparation

Demolition plans are provided in the Architectural Plans set out in **Appendix 6**. The demolition will be undertaken in three (3) stages reflecting the proposed staging of the development. The demolition works include:

Stage 1 – 224 Headland Road

- Demolition of internal walls, stairs, mezzanine level, fittings and fixtures;
- Removal of existing car parking line marking and concrete planter boxes;

Stage 2 – 800 Pittwater Road

- Demolition and removal of existing tenancy fitouts (I-MED and Fitness First) including demolition of existing Fitness First swimming pool;
- Demolition of part of the existing basement carparking along with northern carpark access ramp;
- Excavation and bulk earthworks for new vertical circulation connection between 224 Headland Road and 800 Pittwater Road;

Stage 3 – 800 Pittwater Road

- Demolition and removal of existing tenancy fitout within Units 2 and 4 (Officeworks);
- Demolition and removal of temporary fitout within Stage 2; and
- Removal of existing pylon sign.

Tree Removal

A total of 36 trees are identified for removal across the site. This includes 26 trees that are required to be removed to facilitate the proposed development. The project's Arborist (ArborSafe) has assessed the trees to be removed and has determined that 25 of these trees have low retention value (Category C) with an estimated life expectancy of 5-15 years. The other tree to be removed has medium retention value (Category B with an estimated life expectancy of 15-25 years. Ten (10) trees have been identified for removal that are unsuitable for retention.

4.3 New Sports Centre - 224 Headland Road

The work at 224 Headland Road comprises alterations and additions to the existing industrial unit building for use as a sports centre for the whole school. The works generally comprise:

- Internal alterations and additions to construct two (2) full size basketball courts with dance/exercise floor including installation of a new roof truss system that spans the entire width of the building (**Figure 24**);
- Installation of new lift at southern end of building to provide access to school uniform store on the first floor;
- New external works including new concrete pavers footpath, new line marking for 41 car spaces including two (2) accessible spaces; and
- New landscaping.

The work at 224 Headland Road will be undertaken as Stage 1 of the works.

4 Proposed Development



Figure 24 View of proposed basketball courts

4.4 New Senior Campus – 800 Pittwater Road

4.4.1 Stage 2

The Stage 2 works are located within Units 1, 3 and 5 of 800 Pittwater Road, as well as the northern portion of the site. Units 1, 3 and 5 are currently occupied by I-Med and Fitness First. The Stage 2 works comprise:

- Reconfiguration of basement carpark to provide a total of 73 spaces (including 2 accessible spaces);
- New internal fitout of Units 1, 3 and 5 of 800 Pittwater Road as Senior School campus for St Luke's Grammar School comprising:
 - Ground Floor (Level 1): School Entry, administration and staff offices, café; general learning areas, multi-purpose area, and new Wellness Precinct including 25 metre internal swimming pool along with male and female amenities and change rooms;
 - First Floor (Level 2): Humanities Precinct, library and Wellness Precinct;
 - Second Floor (Level 3): General learning areas, Visual Arts Precinct, and Design and Technology Precinct;
 - Third Floor (Level 4): Roof terrace;
 - Fourth Floor (Level 5): Access to 224 Headland Road;
- Construction of new vertical circulation (lift and stairs) between 800 Pittwater Road and 224 Headland Road;
- New roof to part of the building including sawtooth elements;
- New landscaping of northern portion of site including new sports court;
- New acoustic wall to Pittwater Road;
- Reconfiguration of southern on-grade carpark to provide drop-off / pick-up area for students (equivalent to 7 spaces) along with 51 carparking spaces (including 1 accessible spaces);
- New electrical substation adjacent to southern boundary; and

4 Proposed Development

- New access pathways from Pittwater Road and Harbord Road to Officeworks Entry.

No works are proposed within Units 2 and 4 (Officeworks).

4.4.2 Stage 3

The Stage 3 works are predominately located within Units 2 and 4 at 800 Pittwater, although there will be some works across the site. Units 2 and 4 are currently occupied by Officeworks. The works comprise:

- Reconfiguration of southern portion of basement parking including relocation of carpark entry to southern side of building. There will be a total of 76 spaces (including 2 accessible spaces) located in the basement;
- Construction of new southern extension to building (four (4) storeys equivalent);
- Internal fitout of 800 Pittwater Road as Senior School campus for St Luke's Grammar School comprising:
 - Ground Floor (Level 1): Administration area and staff rooms, Auditorium, Village Centre, Café, Theatre and Performing Arts Precinct, Wellness Precinct and staff and student amenities;
 - First Floor (Level 2): Library; Humanities Precinct; Media Centre; Wellness Precinct, Roof Terrace above curved 'former Canteen' and staff and student amenities;
 - Second Floor (Level 3): Visual Arts Precinct, Maths Precinct, Science Precinct, Design and Technology Precinct, Roof Terrace above southern extension and staff and student amenities;
 - Third Floor (Level 4): No change from Stage 2;
 - Fourth Floor (Level 5): No change from Stage 2;
- New sawtooth roof to southern portion of building;
- Landscaping to southern portion of site;
- Extension of acoustic wall along full length of site;
- New pedestrian entry and stairs from Harbord Road;
- New signage for the school; and
- Reconfiguration of driveway entry and forecourt to provide pick-up and drop-off area, bus turning and 15 spaces.

4.5 Landscaping

Detailed landscaping plans have been prepared by Spackman Mossop Michaels (SMM) (**Appendix 10**). The landscape design has been prepared in consultation with the architects and heritage consultants to ensure an integrated design that respects the heritage elements of the site, whilst responding to the proposed educational use of the building and the ecological values of Stony Range Regional Botanic Garden.

New landscaping for the site will be undertaken over the three (3) stages of works. Works during Stage 1 at 224 Headland Road include raised planter beds containing a mix of endemic and native plants. Landscaping works during Stage 2 are located within the northern portion of the site and comprise a mix of hard and soft landscaping. A new multi-purpose court is located in the north-east corner of the site. The landscaping has been designed to enable pedestrian access to Officeworks, whilst also maintaining appropriate security for students at the school. Stage 3 of the landscape works comprise the southern portion of the site (**Figure 25**).

4 Proposed Development

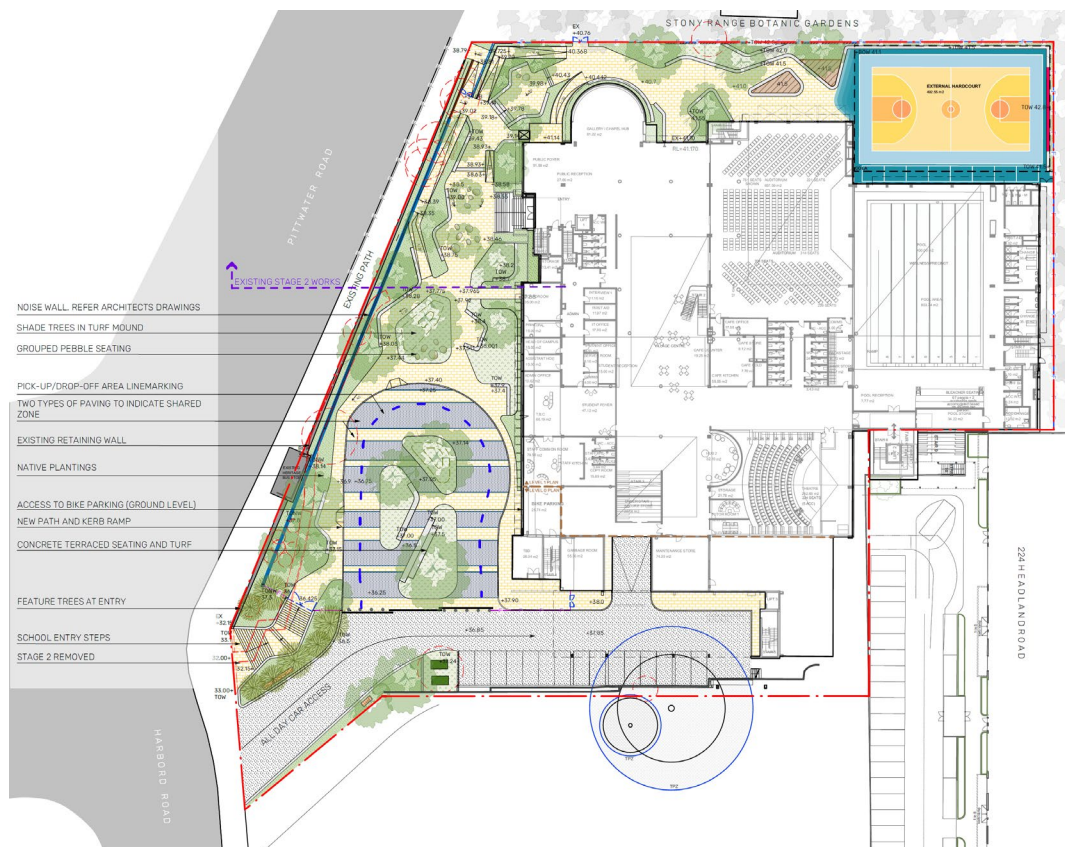


Figure 25 Landscape Concept Plan (Stage 3)

In addition to the landscaping works around the exterior the building, roof gardens are proposed in four (4) locations:

- Level 2 above the curved former canteen in the north-west corner of the building;
- Level 3 in the south-west corner of the building adjacent to the Science Precinct;
- Level 3 in the north-east corner integrated with the Design and Technology Precinct; and
- Level 4 adjacent to the vertical connection to 224 Headland Road.

Within the 'Village Centre' on Level 1, raised planters are provided.

4.6 Sound Barrier Wall

A 1.8m high sound barrier (noise) wall is required to be constructed along the Pittwater Road frontage (**Figure 26**). The noise wall comprises three major elements:

- A solid masonry base with sandstone cladding;
- A clear acrylic top; and
- Vertical fins.

The sound barrier wall has been designed to complement the heritage elements of 800 Pittwater Road, as well as ensure views towards the building from the surrounding public domain.

4 Proposed Development



Figure 26 View of proposed sound barrier wall

4.7 Signage

Two types of “business identification” signs are proposed:

- **Signage Type 1:** Individual stainless-steel lettering that states “St Luke’s Grammar School” (Size = 4.7m x 0.23m); and
- **Signage Type 2:** School logo “Christ Our Light” with individual stainless-steel lettering that states “St Luke’s Grammar School” (Size = 2.67m x 3.4m) (**Figure 27**).

At 800 Pittwater Road, the new signs will be mounted on the acoustic wall and on the building’s western façade.



Figure 27 Example of Signage Type 2: School Logo “Christ Our Light”

4 Proposed Development

4.8 Vehicular Access and Car Parking

210 Headland Road

There are no proposed changes to car parking numbers or vehicle access at 210 Headland Road.

224 Headland Road

A total of 41 at-grade parking spaces will be located at 224 Headland Road including two (2) accessible spaces. Vehicular access to 224 Headland Road is unchanged. It is proposed to allocate these parking spaces for the use of Year 12 students.

800 Pittwater Road

Stage 2

Stage 2 of the works will result in a total of 131 parking spaces comprising 73 parking spaces (including two (2) accessible spaces) in the basement; 51 at-grade parking spaces (include one (1) accessible space); and seven (7) drop-off/pick-up spaces. 40 of the at-grade parking spaces will be allocated for the use of Officeworks customers. 60 spaces will be allocated to staff, 15 spaces to students with the remaining car parking to be allocated for visitors.

Entry and exit to the basement carpark will be from the south-west corner of the building. The basement carpark will be for school use only.

No changes to the existing vehicle driveway access from Harbord Road are proposed as part of Stage 2.

A temporary pedestrian pathway and stairs will be constructed adjacent to the driveway to provide pedestrian access to the site from the south-west.

Stage 3

Stage 3 will result in a total of 91 parking spaces comprising 76 parking spaces (including 2 accessible) in the basement and 15 at-grade spaces. The 91 spaces will be allocated as follows:

- 60 staff parking spaces;
- 25 student parking spaces; and
- 5 visitor parking spaces.

Access to the basement carpark will be via a new entry and exit on the southern side of the building.

A drop-off and pick-up area for up to 12 vehicles is also located within the forecourt. This drop-off and pick-up area will also be capable of accommodating buses. During school hours, the drop-off and pick-up area forms part of the school's open play space.

A total of 16 bicycle parking spaces are proposed to be provided in the south-west corner of the building in the location of the former car park entry. End-of-trip facilities are co-located within the Wellness Centre changing room facilities.

4.9 Waste Management

An Operational Waste Management Plan (OWMP) has been prepared by Waste Audit & Consultancy Services (Aust) Pty Ltd to provide guidance on the management of general waste and recyclable materials (**Appendix 32**). The OWMP identifies three streams for operational waste and recycling:

- General Waste;
- Cardboard & paper recycling; and

4 Proposed Development

- Commingled recycling (all mixed plastic bottles and containers, glass bottles and steel and aluminium cans).

210 Headland Road

There are no changes proposed to existing waste management arrangements at 210 Headland Road.

224 Headland Road

A dedicated bin storage enclosure (approximately 12m²) is located within the carpark. The enclosure is capable of accommodating one (1) 1100L bin for general waste and 2 x 660L bins for cardboard and paper recycling and commingled recycling. The enclosure will be screened. Waste collection will be undertaken by a specialist contractor.

800 Pittwater Road

Stage 2

A temporary bin storage area will be established for the school as part of Stage 2. The bin storage area will be located adjacent to the existing Officeworks loading dock. It will have capacity for 4 x 1100L bins and 2 x 660L bins.

Stage 3

The permanent bin storage arrangement will be provided at Stage 3, comprising a 55m² room for storage of all operational general waste and recycling. The waste storage will have capacity 4 x 1100L general waste bins, 4 x 1100 recycling bins and 6 x 660 comingled recycling bins.

4.10 Stormwater Management

The proposal is supported by a stormwater management strategy prepared by Northrop (**Appendix 21**) inclusive of an Integrated Water Management Plan that addresses drainage, detention and quality/water sensitive urban design (WSUD), and was developed with consideration to Council's Water Management Policy and OSD Technical Specification.

210 Headland Road

No civil stormwater works are proposed to the existing arrangements at 210 Headland Road.

224 Headland Road

As there are no major changes to this site, there are no required changes to the existing stormwater system.

800 Pittwater Road

Stormwater runoff from the new works will be captured and conveyed via the existing in-ground stormwater pit and pipe network to the existing underground OSD tanks in the car parking area. Works to the loading bay at Stage 3 will conflict with the existing OSD tank in that location, and therefore the existing OSD tank to the west of the building will be extended to provide a larger tank. Stormwater quality will achieve required targets through the inclusion of stormfilters and pit baskets.

4.10.1 Sediment and Erosion Control

Sediment and erosion control measures have been prepared by Northrop for each stage of works (**Appendix 21**) which essentially reflect the protection of the existing pit and pipe network.

4.11 Operation of School – Staff and Students and Hours of Operation

An Operational Plan of Management has been prepared by St Luke's Grammar School (**Appendix 37**)

4 Proposed Development

210 Headland Road

210 Headland Road will be the campus for Cottage (Pre-Kindergarten) – Year 9 students. A maximum of 1,000 students will be enrolled at this campus. There will be 120 full-time equivalent (FTE) staff.

The school's standard operating hours at 7am to 4pm, Monday to Friday.

Class times will be staggered to minimise peak traffic and parking demands. The proposed core school hours are as follows:

- Cottage (Pre-Kindergarten): 8:30am – 2:45pm;
- Kindergarten to Year 2: 8:30am – 2:55pm;
- Years 3 – 6: 8:30am – 3:05pm; and
- Years 7 – 9: 8:30am – 3:20pm.

Before-School Care and After-School Care will be provided at 210 Headland Road.

800 Pittwater Road

800 Pittwater Road will be the campus for senior school students (Years 10 -12). Following the completion of the Stage 2 works in 2026, there will be a total of 360 students and 36 FTE staff. This is expected to grow to 480 students and 48 FTE staff by 2030. Following the completion of Stage 3, there will be a total of 600 students on the senior school campus, with 60 FTE staff.

Class times for senior school students are generally 8:30am to 3:20pm. Some specialist classes may occur outside of these times.

It is anticipated that three (3) swim school classes and squad training sessions with up to 50 children may be held within the new pool between 4pm and 7pm.

224 Headland Road

224 Headland Road is proposed to be used as a sports centre for all students at St Luke's Grammar School. In addition, the sports centre will be made available for hire by local schools and sporting groups. The proposed hours of operation for the facility are between 7am and 9pm Monday to Friday and 7am to 5pm on Saturday.

Students from Kindergarten to Year 5 will be transported to the facility by mini bus. Students in Years 6 – 9 will walk down to the site from the 210 Headland Campus. Students in Years 10 – 12 will be able to access the site via the internal vertical circulation connection to 800 Pittwater Road.

4.12 Ecologically Sustainable Development

An Ecological Sustainable Development (ESD) report has been prepared by Wood & Grieve Engineers (**Appendix 28**) that provides an overview of the proposed Ecologically Sustainable Development (ESD) principles and sustainability initiatives proposed for the proposed senior school campus and sports centre development in response to the SEARs and the requirements of Schedule 2 of the EP&A Regulations. In addition, the ESD report references the Green Building Council of Australia, Green Star Design & As Built v1.3 Rating Tool, and CSIRO projected impacts of climate change.

It is proposed to achieve a minimum of a 4 Star Green Star (Design & As Built) certification for 800 Pittwater Road, which is consistent with Australian Best Practice sustainable building principles. It is also noted that it is proposed to achieve a single Design & As-built Certification project in relation to the development during Stages 2 and 3.

4 Proposed Development

4.13 Building Code of Australia and Accessibility

A Building Code of Australia (BCA) Compliance Statement has been prepared by Group DLA (**Appendix 14**), which demonstrates that the proposed development is capable of compliance with the relevant performance requirements of the BCA. MCD Engineering has also provided a DA Support Statement (**Appendix 15**) and Concept Fire Engineering Strategy (**Appendix 16**) that demonstrates that the proposed development is capable of complying with the requirements of the BCA and Australian Standards.

5 Consultation

5.1 General

In accordance with the SEARs issued by the Department of Planning, Industry and Environment, the project team has carried out consultation with the following stakeholders:

- Northern Beaches Council;
- Government Architect NSW;
- Transport for NSW;
- NSW Roads and Maritime Services;
- Local Aboriginal Council and Registered Aboriginal Parties; and
- Adjoining and affected landowners and relevant community groups.

Details of the consultation carried out by the project team are set out in the following sections.

5.2 Northern Beaches Council

A meeting was undertaken between the project team and Council officers on 16 May 2019. Pre-lodgement advice was provided by Council on 12 December 2019 (**Appendix 39**).

The key matters raised by Council were as follows:

- **Heritage:** 800 Pittwater Road is a local heritage item. Opportunity exists to reinstate and/or restore earlier features of the building (particularly the western façade) and remove previous unsympathetic additions. Design to consider the adjoining heritage listed bus shelter and its integration within the development. Any alterations to the building
- **Urban Design:** Site is in a topographically prominent position at the confluence of three main arterial roads. Palisade fencing is not supported along the Pittwater Road frontage. Removal of the existing pylon sign is supported.
- **Traffic and Parking:** Proposal reduces the number of parking spaces at 800 Pittwater Road. A traffic and parking study will be required. This should include an analysis of existing and future traffic movements including bus movements. Traffic and parking study to include 210 Headland Road. Traffic and parking study to review traffic generation and cumulative impacts including the identification of any additional infrastructure required.
- **Transport and Pedestrian Links:** Importance of provide pedestrian links between the campuses.
- **Stormwater:** Development is to comply with relevant Council policies relating to civil engineering and stormwater.
- **Compliance with relevant planning controls:** The proposed development is to comply with the relevant planning controls.

Discussions were also held between Council officers and the project team in relation to providing a direct pedestrian link between 800 Pittwater Road and 210 Headland Road. This pedestrian link would theoretically be located above Stony Range Regional Botanic Garden. It was concluded that this link would be inconsistent with the management objectives of the *Stony Range Flora Reserve Final Management Strategy Plan* (Warringah Council 1994) and would not be supported by Council or be capable of proceeding due to requirements under the Local Government Act 1993.

5 Consultation

5.3 Government Architect NSW (GANSW)

An initial meeting was held with staff from the Government Architect NSW's office on 27 February 2019. The meeting resolved that the Proposal would be the subject of the in-house design review process in lieu of the State Design Review Panel process.

An in-house design review was held at GANSW offices on 4 September 2019. At this meeting, TZG and SMM provided an overview of the proposed development. The following comments were provided by GANSW following the meeting (**Appendix 40**):

Thank you for the opportunity to review the design for this project at an early stage. Below is a summary of the main points raised at the meeting:

Generally the design and approach to the project is supported, in particular:

- *Concept and staging masterplan*
- *Design approach to the heritage building retaining strong horizontal banding and improving environmental performance*
- *Landscape design concept based on heritage landscape re-interpretation*
- *Deep soil planting and shared zone in the western forecourt*
- *Consolidation of vehicular access at the southern end of the site and removal of northern carpark*
- *4-star Greenstar rating target and ESD objectives*

The following commentary provides advice and recommendations for the project:

- *Provide further information on and illustrate water collection and reuse strategies*
- *Provide information on the daylighting and thermal comfort modelling*
- *Provide view studies of the school from public paths in the Stony Range Botanic Garden*
- *The use of plexiglass or similar materials for the noise barrier along Pittwater Rd is not supported. A material more sympathetic to the ecology and heritage of the area, such as sandstone or rendered masonry, is encouraged. Provide a view analysis from key vantage points to illustrate visual impacts of the noise barrier on the presentation of the Top Dog building to the public domain*
- *Provide further details regarding incorporation, rather than applique, of indigenous stories into the landscape design and an integrated art strategy for the project.*

The advice above should be incorporated into the EIS submission.

Table 3 provides a response to each of the advice and recommendations made by GANSW.

Table 3 GANSW	
Advice and Recommendations	Comment
<i>Provide further information on and illustrate water collection and reuse strategies</i>	An Integrated Water Management Plan has been prepared by Northrop Consulting Engineers (Appendix 21). This includes a description of the proposed rainwater harvesting system.
<i>Provide information on the daylighting and thermal comfort modelling.</i>	<p>An Ecological Sustainable Development (ESD) Report has been prepared by Wood & Grieve Engineers (Appendix 28), which provides a daylight analysis to determine the levels of daylight achieved in all spaces of the building. This daylight analysis has informed the design of the proposed skylights and demonstrates that optimum levels of daylight is provided to learning areas. The south facing high-level skylights provide diffuse daylight with good natural colour rendering into the space, as well as providing a connection to the outdoors within direct solar heat gains.</p> <p>The ESD Report also outlines the proposed passive thermal design elements that have been incorporated into the proposal. Fixed external shading to the northern and western façade will have a significant positive impact on the overall energy performance of the building. The existing concrete precast wall panels and glazed</p>

5 Consultation

Table 3 GANSW

Advice and Recommendations	Comment
	curtain walls to the western façade will be replaced with new high-performance façade elements. In addition, the design takes advantage of the 'stack effect' to facilitate natural ventilation through the building.
<i>Provide view studies of the school from the public paths in the Stony Range Botanic Garden</i>	A view study of the school from the public paths within Stony Range Regional Botanic Garden is provided in the Architectural Design Report (Appendix 7).
<i>The use of plexiglass or similar materials for the noise barrier along Pittwater Rd is not supported. A material more sympathetic to the ecology and heritage of the area, such as sandstone or rendered masonry, is encouraged. Provide a view analysis from key vantage points to illustrate visual impacts of the noise barrier on the presentation of the Top Dog building to the public domain</i>	Multiple design options were considered for the noise barrier located along Pittwater Road. The selected design comprises three major elements: a solid masonry base with sandstone cladding that responds to the geology of the area; a clear acrylic top to enable visual connections between the heritage building and the adjacent public domain; and an array of vertical fins that respond the rhythm of shading fins on the western façade and interpret the earlier timber fence along the Pittwater Road frontage. Photomontages have been prepared by TZG (Appendix 6 and 7) from key vantage points including Pittwater Road, Warringah Road and Harbord Road. The design of the noise barrier reduces the impact of traffic noise upon the operation of the school whilst also maintaining views of the building from the surrounding public domain.
<i>Provide further details regarding incorporation, rather than applique, of Indigenous stories into the landscape design and in integrated art strategy for the project.</i>	It is proposed to develop an integrated art strategy for the project that will incorporate indigenous stories into the architectural and landscape architectural design. However, it is noted that procurement of inputs will be prolonged as it will require extensive consultation with local Aboriginal groups and the Metropolitan Land Council. Therefore, appropriate locations for artworks have been identified.

5.4 Roads and Maritime Services

On 18 April 2019, RMS provided written input to DPIE as part of the SEARs consultation process, identifying five (5) matters to be included in the transport and traffic impact assessment of the proposed development. These requirements were reflected in the SEARs issued by DPIE on 1 July 2019. These matters are addressed in the assessment carried out under this EIS (refer to **Section 6.6.5** and **Appendix 24**).

On 7 November 2019, members of the project team met with RMS to discuss the proposal in response to the matters RMS had raised in its submission to the SEARs. On 20 November 2019, RMS provided meeting minutes (**Appendix 41**).

Table 4 provides a response to each of the issues raised by RMS.

Table 4 Consultation with RMS

Key Issue / Comment	Response	Reference
Applicant to investigate the possibility of removing all vehicular access from Harbord Road.	Due to the topography of the site and the 20m difference in ground level between 800 Pittwater Road and 224 Headland Road it is not feasible to remove all vehicular access from Harbord Road. The number of vehicles movements generated by the proposed development are less than those currently generated by the site.	Appendix 4 Appendix 24 Section 6.6.5
Roads and Maritime Request that modelling is conducted to reflect the changes to the proposed development. Daily and peak traffic movements likely to be generated by the proposed development including the impact of nearby intersections and	SIDRA modelling and traffic surveys of the intersections of Pittwater Road and Harbord Road, and Harbord Road and Headland Road have been undertaken. An assessment of the daily and peak traffic movements has been undertaken that concludes that the proposed development will result in a significantly less intensive use of the site, when compared to the existing uses of the site. Daily traffic flows at 800 Pittwater will reduce from 2931 vehicles per day to 740 vehicles per day. Daily traffic flows at 224 Headland Road	Appendix 24 Section 6.6.5

5 Consultation

Table 4 Consultation with RMS

Key Issue / Comment	Response	Reference
<p>the need/associated funding to for upgrading or road improvement works (if required). Key Intersections to be examined and modelled include:</p> <ul style="list-style-type: none"> • Pittwater Road / Harbord Road - Existing, Proposed with no 40 km/h school zone and • Proposed with 40 km/h School Zone on all four legs of the signalised intersection. • Harbord Road / Headland Road – Existing and Proposed. 	<p>will also decrease from 201 vehicles per day to 78 vehicles per day.</p> <p>The SIDRA capacity analysis concludes that the intersections will continue to operate at their current Levels of Service following the completion of Stage 3 of the proposed development. This includes analysis of the operation of the Pittwater Road/Harbord Road intersection, if a 40km/h School Zone speed limit was implemented on all four approaches to the intersection.</p>	
<p>Details of the proposed accesses and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle widths, etc) and relevant parking codes (If parking is to be changed).</p>	<p>The proposed driveways, drop-off/pick-up, loading areas and parking have been designed to comply with the relevant Australian Standards. Drawings have been provided within the Traffic and Parking Assessment that illustrate the swept turning paths of the 99th percentile vehicles, mini-buses and 12.5m Heavy Rigid Vehicles.</p>	<p>Appendix 24</p> <p>Section 6.6.5</p>
<p>Details of service vehicle movements (including vehicle type and likely arrival and departure times).</p>	<p>Loading and servicing of the new senior school campus is proposed to be undertaken by both light commercial vehicles, along with small to medium sized rigid vehicles. Deliveries will be undertaken outside of the AM and PM school peak periods.</p>	<p>Appendix 24</p> <p>Appendix 37</p> <p>Section 6.6.5</p>
<p>Roads and Maritime require justification for the large amount of onsite parking needed for St Luke's Grammar School and if car parking can be removed from 800 Pittwater Road, Dee Why.</p>	<p>Car parking at 800 Pittwater Road will be reduced from the 182 spaces (existing) to 131 spaces at the completion of Stage 2. There will 91 spaces at 800 Pittwater Road at the conclusion of Stage 3.</p>	<p>Appendix 24</p> <p>Section 6.6.5</p>
<p>Roads and Maritime require further clarification in relation to the mixed use of the site until 2026 with Officeworks Dee Why. How is the school going to manage this and how it will operate?</p>	<p>A detailed staging report has been prepared by DFP Planning that describes how the school will operate during Stage 2. This should be read in conjunction with the Traffic and Parking Assessment Report, Preliminary Construction Management Plan, Preliminary Construction Traffic Management Plan and St Luke Grammar School's Operational Plan of Management.</p>	<p>Appendix 8</p> <p>Appendix 24</p> <p>Appendix 26</p> <p>Appendix 27</p> <p>Appendix 37</p>
<p>Roads and Maritime requires the environmental assessment report to assess the implications of the proposed development for non-car travel modes (including public transport use, walking and cycling); the potential for implementing a location-specific sustainable travel plan and the provision of facilities to increase the</p>	<p>A Green Travel Plan has been prepared that provides an assessment of the proposed development on non-car travel modes and the accessibility of the development site by public transport. The proposed development will improve accessibility to public transport for staff and students at St Luke's Grammar School.</p>	<p>Appendix 25</p> <p>Section 6.6.5</p>

5 Consultation

Table 4 Consultation with RMS

Key Issue / Comment	Response	Reference
non-car mode share for travel to and from the site. This will entail an assessment of the accessibility of the development site by public transport.		
Further information in relation to school access points along Pittwater Road.	<p>A new separate pedestrian access point will be constructed adjacent to the existing driveway from Harbord Road.</p> <p>The existing pedestrian entry from Pittwater Road will be retained. This school access point is separated from the road traffic along Pittwater Road by the a 2m high concrete retaining wall topped by a pedestrian safety fence.</p>	Appendix 6

5.5 Transport for NSW

On 23 April 2019, Transport for NSW (TfNSW) provided written input to DPIE as part of the SEARs consultation process, identifying four (4) issues to be considered in the preparation of the EIS. These requirements were reflected in the SEARs and have been addressed in **Section 6.6.5** and in **Appendix 24**.

Representatives from TfNSW were invited to attend the meeting on 7 November 2019 with RMS but were unable to attend. It is expected further comments will be provided by TfNSW as part of the SSDA referral process.

5.6 Local Aboriginal Council and Community

As part of the preparation of the Aboriginal Cultural Heritage Assessment Report (ACHAR) (**Appendix 20**) for the proposed development, consultation with Registered Aboriginal Parties (RAPs) has been undertaken and is ongoing, in accordance with the 'Aboriginal Cultural Heritage Consultation Requirements for Proponents' (published by the former Department of Environment, Climate Change and Water 2010). The consultation comprises four (4) stages and detailed in **Table 5**.

Table 5 Consultation with Aboriginal Council and Community

Stage	Consultation
1. Notification of project proposal and registration of interest	<ul style="list-style-type: none"> Advertisement in Manly Daily on 10 July 2019 inviting interest Aboriginal stakeholders to register interest in being consulted on the project; Written request to local organisations and government agencies to identify Aboriginal people who may hold cultural knowledge relevant to the site on 25 June 2019; and Letters to Aboriginal organisations inviting them to register an interest in the proposed development on 2 July 2019. A total of six (6) organisations were registered as RAPs for the proposed development.
2 & 3. Presentation of information about the proposed project and gathering information about cultural significance	<ul style="list-style-type: none"> A document describing the proposed development and outlining the methodology was issued to the RAPs on 15 August 2019 with a deadline for review set for 12 September 2019. One response was received confirming support for the proposed methodology. On 15 August 2019, a site survey was undertaken by Eco Logical in conjunction with members of the Metropolitan Local Aboriginal Land Council.
4. Review of draft ACHAR	<ul style="list-style-type: none"> On 27 September 2019, a copy of the draft ACHAR was issued to all RAPs. No responses were received with the 28 day review period.

5 Consultation

5.7 Neighbouring Landowners and Relevant Community Groups

Elton Consulting were engaged by the School to undertake community engagement with local residents, businesses and the school community. Elton Consulting has prepared a St Luke's Masterplan Engagement and Communication Outcomes Report (**Appendix 38**) that provides detail on the degree and level of community consultation which has been undertaken for the proposal.

The objectives of the community engagement are as follows:

- *Provide an opportunity, early on in the planning process, for interested stakeholders and the community to hear more about the plans and ask questions.*
- *Undertake face-to-face engagement with key interest groups.*
- *Showcase plans to expand the school and the new facilities that will be delivered.*
- *Keep the school community informed of the plans, as they develop.*
- *Satisfy the SEARS and comply with legislative requirements.*

Details of the engagement and communication outcomes are discussed in the following sub-sections.

5.7.1 Communication and Engagement Activities

The following communication and engagement activities were undertaken:

- Community Information and Feedback Session (CIFS) held at St Luke's Grammar School on Saturday 19 October 2019 between 11am and 1pm (refer to **Section Error! Reference source not found.**);
- Two (2) stakeholder meetings:
 - Adjoining neighbours briefing on Wednesday 16 October from 5:30pm to 7:00pm (refer to **Section 5.7.2**);
 - Stony Range Botanic Garden Volunteers on Tuesday 22 October from 11:30am to 12:30pm (refer to **Section 5.7.4**);
- Establishment of a dedicated email account for the duration of the project, which enables members of the community an opportunity to ask questions and provide feedback;
- Electronic notice to the school community (including alumni) providing information about the project and upcoming community consultation events including CIFS;
- School's website has been updated with information about the proposed development;
- Letter box drop of a two (2) page Community Newsletter to all adjacent properties, residents and business providing information about the project and CIFS; and
- Two newspaper advertisements in the Manly Daily, one in the lead up to the CIFS and one on the date of the CIFS; and
- Letters sent to the existing tenants at 800 Pittwater Road.

Copies of all notification materials and advertisements is provided in the appendices to the Engagement and Communications Outcomes Report (**Appendix 38**).

5.7.2 Adjoining Neighbours Briefing

On Wednesday 16 October 2019, a stakeholder briefing was held with adjoining neighbours and hosted by St Luke's Grammar School. There were six (6) community members in attendance.

5 Consultation

The briefing was led by members of the project team and provided a summary of the purpose and vision of the project; details on the facilities to be provided; and information about timelines and delivery.

Key issues and comments raised by the attendees are summarised and addressed in **Table 6**.

Table 6 Response to Key Issues Raised by Adjoining Neighbours		
Key Issue / Comment	Response	Reference
Total numbers of students at the school.	<p>On 26 June 2019, the Sydney North Planning Panel approved a Section 4.55(2) modification application to amend DA2011/4066 (as modified) to increase the student enrolment of St Luke's Grammar School from 992 to 1,092.</p> <p>The current proposal seeks approval for 600 senior students at the new Senior School Campus, and will adjust the cap at 210 Headland Road to 1,000 students.</p> <p>Therefore the current proposal will remain consistent with what has been previously approved, and the same traffic management measures will be implemented under this proposal that were approved under DA2011/4066 (as modified).</p>	Section 2.2.1 Section 4 Section 6.6.5
Location of parking for senior school students.	The proposal will provide car parking for staff and students at the Senior School Campus, as well as at 224 Headland Road, which has internal access to 800 Pittwater Road.	Appendix 24 Section 6.6.5
Student movement between campuses and the Sports Centre.	<p>Internal access is being provided between 224 Headland Road and 800 Pittwater Road.</p> <p>Separate pedestrian access from Headland Road onto 224 Headland Road has been approved by Council under DA2019/0977 and will be in place for the uses proposed under this application. Younger students and students with accessibility requirements at 210 Headland Road will be transported to 224 Headland Road via the school minibus as required.</p>	Appendix 6 Appendix 13 Appendix 24 Section 6.6.5
Impacts to traffic on Headland Road as a result of vehicles not being able to turn right out of 800 Pittwater Road.	The Traffic and Parking Assessment Report includes an assessment of the impacts on the intersection of Harbord Road and Headland Road. This intersection currently operates at Level of Service (LoS) A during the morning and afternoon school peak periods. Under the projected future traffic demands expected to be generated by the proposed development, the Harbord Road / Headland Road intersection will continue to operate at LoS A.	Appendix 24
Impacts on traffic on Harbord Road and use of the turning bay near Bill Buckle Auto Group.	The Traffic and Parking Assessment Report includes an assessment of the impacts on the proposed development on the operation and capacity of Harbord Road. The proposed development will reduce the traffic generation potential of 800 Pittwater Road and therefore reduce the need for vehicles to use the side road adjacent to Bill Buckle Auto Group.	Appendix 24
Project timeline including the relocation of Fitness First and Officeworks.	The staging and construction program of the project reflects the tenancy arrangements for both Fitness First and Officeworks.	Appendix 8
Impacts of the proposed development on Stony Range Regional Botanic Garden.	The proposed development will not result in any adverse impacts on the Stony Range Regional Botanic Garden, and consultation with the local government and volunteer members of the Botanic Garden has been carried out.	Section 5.7.4
Impacts of the construction works at 224 Headland Road on the community.	The construction works at 224 Headland Road will be largely contained to within the site. Traffic and noise impacts during construction have been assessed and impacts are able to be appropriately mitigated.	Appendix 26 Appendix 35

5 Consultation

5.7.3 Community Information and Feedback Session

On Saturday 19 October 2019 between 11:30am and 1:30pm, a Community Information and Feedback Session (CIFS) was hosted by St Luke's Grammar School, which enabled interested parties to drop into the school campus, review information and ask questions.

Information about the proposal development and the SSD planning pathway was presented on A0 display boards at the sessions (refer to **Appendix 38**). Representatives from the school and project team were available to discuss the proposal, answer questions and explain the SSD process, timetable and proposed traffic management.

A total of seven (7) community members attended the session.

Key issues and comments raised by the attendees are summarised and addressed in **Table 7**.

Table 7 Response to Key Issues Raised in Community Information and Feedback Session		
Key Issue / Comment	Response	Reference
General interest in relation to 800 Pittwater Road site and preservation of the clock.	The project will preserve and restore the clock, including repairing the functionality of the clock so that it can again show correct time. The heritage significance of the building has formed one of the primary drivers for design, as reflected in the supporting architectural and heritage impact assessment documentation.	Appendix 7 Appendix 29
Comments on traffic flows.	The Traffic and Parking Assessment provides a detailed assessment of the impact of the proposed development on the surrounding road network. The Traffic and Parking Assessment concludes that the proposed development will not have any unacceptable traffic implications in terms of the road network capacity.	Appendix 24
Query in relation to future opportunities for local sporting groups to utilise the new facilities.	St Luke's Grammar School has designed the proposed new Senior School facilities and basketball facilities to be capable of being used by the community outside of school hours.	Appendix 37

5.7.4 Stony Range Botanic Gardens Volunteers Briefing

On Tuesday 22 October 2019, a stakeholder briefing was held with 15 volunteers from the Stony Range Regional Botanic Garden, along with a representative from Northern Beaches Council.

Information about the proposed development was presented to the group including information in relation to biodiversity and aboriginal cultural heritage.

Key issues and comments raised by the attendees are summarised and addressed in **Table 8**.

Table 8 Response to Key Issues Raised in Stony Range Volunteers Briefing		
Key Issue / Comment	Response	Reference
Height of the building at 800 Pittwater Road.	<p>The height of the main building at 800 Pittwater Road will remain largely consistent with the existing structure, with the exception of some new roof structures to improve solar access to the interior of the building. These additions are considered minor.</p> <p>The new pedestrian access structure between 800 Pittwater Road and 224 Headland Road will have a height generally consistent with the existing structures on 224 Headland Road, suitable for accommodating a lift and stairs.</p> <p>The height of the proposal is not considered to be detrimental to the amenity or setting of the Stony Range Botanic Gardens.</p>	Appendix 6 Appendix 7

5 Consultation

Table 8 Response to Key Issues Raised in Stony Range Volunteers Briefing

Key Issue / Comment	Response	Reference
Proposed type and appearance of fencing between Stony Range Regional Botanic Garden and 800 Pittwater Road.	The Landscape Plans identify that the boundary between 800 Pittwater Road and the Stony Range Regional Botanic Garden will be finished with a new timber slat fence.	Appendix 10
Student movement between campuses and the Sports Centre.	Internal access is being provided between 224 Headland Road and 800 Pittwater Road. Separate pedestrian access from Headland Road onto 224 Headland Road has been approved by Council under DA2019/0977 and will be in place for the uses proposed under this application. Younger students and students with accessibility requirements at 210 Headland Road will be transported to 224 Headland Road via the school minibus as required.	Appendix 6 Appendix 13 Appendix 24 Section 6.6.5
Maintaining existing access between the Botanic Garden and 800 Pittwater Road for maintenance.	Access gates will be maintained between two properties for maintenance purposes.	Appendix 10
Plant selection for 800 Pittwater Road.	All shrub, groundcover and climber species which have been selected are a mix of endemic and native species of the Dee Why area. Native tree species have been selected to maximise shade on site.	Appendix 10
Stormwater management, and sediment and erosion control.	Full details of stormwater quantity and quality treatment, and sediment and erosion control measures are provided. The design responds to and satisfies Councils policies.	Appendix 21
Management of rubbish and debris from the existing school campus at 210 Headland Road ending up within the Botanic Garden.	The School is committed to improving the management of rubbish from the existing school site. Details of ongoing operational waste management is provided.	Appendix 32

5.7.5 Existing tenants at 800 Pittwater Road

In 2019, letters were sent to the existing tenants at 800 Pittwater Road. In April 2020, Officeworks requested further information in relation to the work at 800 Pittwater Road, which was provided to them. At the time of the finalisation of the EIS, no further feedback has been received.

5.7.6 Ongoing Consultation

St Luke's Grammar is committed to keep the local community, residents, business and stakeholders informed during the design and construction. Engagement will be undertaken as the planning approvals progress.

6 Environmental Assessment

6.1 General

This section provides an environmental assessment of the proposed development in respect of relevant State policies and matters for consideration under the EP&A Act.

6.2 Environmental Planning and Assessment Act, 1979

6.2.1 Section 1.3 – Objectives of the EP&A Act

Section 1.3 of the EP&A Act sets out the Objects of the Act and **Table 9** provides an assessment of the proposed development's consistency with these Objects.

Table 9 Proposed Development's Consistency with the Objects of the EP&A Act

Object of the EP&A Act	Assessment	Consistent
(a) <i>To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,</i>	The proposed development will provide a new senior campus and sports centre for the use of the school and wider community. Better environmental outcomes are achieved through the management of impacts from the works; restoration of the heritage elements of the building; and improvements to the landscape setting of the building.	Yes
(b) <i>To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,</i>	The principles of ecologically sustainable development (ESD) have been integrated into the design of the proposed development. This includes the incorporation of ESD initiatives such as achieving a 4-Star Green Rating, use of passive thermal design elements; and provision of natural daylighting to teaching spaces (addressed in detail in Section 6.6.6).	Yes
(c) <i>To promote the orderly and economic use and development of land,</i>	The Site is zoned for urban development and the proposal will result in the orderly and economic development of the land.	Yes
(d) <i>To promote the delivery and maintenance of affordable housing,</i>	This object is not applicable to the proposal, as it will have no impact on the delivery and maintenance of affordable housing.	N/A
(e) <i>To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,</i>	A Biodiversity Development Assessment Report (BDAR) has been prepared by Eco Logical (Appendix 36), which identifies measures taken to avoid, minimise and mitigate impacts to threatened and other species of native animals, plants, ecological communities and their habitats (refer Section 6.3).	Yes
(f) <i>To promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),</i>	A Heritage Impact Statement and Non-Indigenous Archaeological Assessment have been prepared by City Plan Heritage (Appendices 29 and 30). These reports conclude that the works are acceptable from a heritage perspective and will not have an adverse impact on the heritage elements of the existing building (refer to Section 6.6.2). An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Eco-Logical (Appendix 20). The ACHAR found that there are no registered Aboriginal objects and/or archaeological sites within the area and no landscape features with potential for Aboriginal objects or archaeological deposits are located within the site.	Yes
(g) <i>To promote good design and amenity of the built environment,</i>	The proposed development comprises the adaptive re-use of existing buildings for use as a sports centre and senior school campus for an existing educational establishment. The development will provide new architecturally designed fit-for-purpose spaces that will provide improved safety, amenity and accessibility for students, teachers and the overall school community.	Yes

6 Environmental Assessment

Table 9 Proposed Development's Consistency with the Objects of the EP&A Act

Object of the EP&A Act	Assessment	Consistent
	<p>Consultation has been undertaken with GANSW with positive feedback received.</p> <p>A Design Report has been prepared by TZG (Appendix 7) which addresses good design and amenity of the built environment. The proposal satisfies the design quality principles of the Education SEPP and provides for a positive contribution to the built environment (refer to Section 6.4.2).</p>	
(h) <i>To promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,</i>	The building has been designed in accordance with the Building Code of Australia (BCA) (see Appendix 14), Australian Standards and the Disability Discrimination Act (DDA) (see Appendix 13).	Yes
(i) <i>To promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State, and</i>	The proposed development has been assessed against the various Commonwealth and State statutes and local policies and has involved consultation with relevant levels of government.	Yes
(j) <i>To provide increased opportunity for community participation in environmental planning and assessment.</i>	The proponent has actively engaged with relevant government agencies and further consultation will be undertaken during the statutory assessment process.	Yes

6.2.2 Section 1.7 – Application of Part 7 of Biodiversity Conservation Act 2016 and Part 7A of Fisheries Management Act 1994

Section 1.7 of the EP&A Act has effect subject to the provisions of Part 7 of the Biodiversity Conservation Act 2016 (we note that the Fisheries Management act does not apply to the site) that relate to the operation of this Act in connection with the terrestrial and aquatic environment. The Biodiversity Conservation Act 2016 is addressed in **Section 6.3** of this EIS.

6.2.3 Section 4.38(3) – Partially Prohibited Development

Section 4.38 of the EP&A Act sets out provisions relating to consent issued for State significant development. Section 4.38(3) outlines that “*development consent may be granted despite the development being partly prohibited by an environmental planning instrument*”.

As discussed in **Section 6.4.8**, 224 Headland Road is zoned IN1 General Industrial, within which development for the purpose of an educational establishment is prohibited. However, as this development type is permissible in both the 210 Headland Road site and the 800 Pittwater Road site, all of which form part of this Development Application, DPIE may grant development despite the proposal being ‘partially prohibited’ by an environmental planning instrument.

6.3 Biodiversity Conservation Act

Part 7 of the Biodiversity Conservation Act 2016 (BC Act) sets out provisions relevant to biodiversity assessment and approvals under the EP&A Act. Specifically, Section 7.9 applies to an application for development consent under Part 4 of the EP&A Act for SSD. This states as follows:

7.9 Biodiversity assessment for State significant development

(1) *This section applies to:*

(a) *an application for development consent under Part 4 of the Environmental Planning and Assessment Act 1979 for State significant development, and*

6 Environmental Assessment

- (b) an application for approval under Division 5.2 of the Environmental Planning and Assessment Act 1979 to carry out State significant infrastructure.*
- (2) Any such application is to be accompanied by a biodiversity development assessment report unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.*
- (3) The environmental impact statement that accompanies any such application is to include the biodiversity assessment required by the environmental assessment requirements of the Planning Agency Head under the Environmental Planning and Assessment Act 1979.*

Additionally, General Requirements No. 19 ('Biodiversity Assessment') of the SEARs states the following:

Biodiversity impacts related to the proposed development (SSD 10291) are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method.

A Biodiversity Development Assessment Report (BDAR) has been prepared by Eco Logical (**Appendix 36**) in accordance with the BC Act and Biodiversity Assessment Method (BAM). The BDAR has been prepared by an assessor who has been accredited under the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under Section 6.10 of the BC Act.

The BDAR addresses the requirements under Section 6.12 of the BC Act. Based on a review of EES (former OEH) mapping, the soil profile, fieldwork and the adjoining vegetation at Stony Range Regional Botanic Garden, the planted native vegetation on site is identified as *PCT 1776 Smooth-barked Apple – Red Bloodwood open forest on enriched sandstone slopes around Sydney and the Central Coast (Figure 28)*. The total area of PCT 1776_planted on the site is 0.14 hectares. Other vegetation on the site is exotic. No threatened flora or fauna species were recorded on or within the development site. There is potential that highly mobile threatened species may utilise the vegetation for foraging and this has been considered as part of the assessment.

6 Environmental Assessment



Figure 28 Vegetation Zones and Survey Plots (Source: Eco Logical)

The BDAR identifies firstly how the proposed development seeks to avoid and minimise any impacts on vegetation and habitat. It also provides an assessment of the direct and indirect impacts of the proposed development on the native vegetation and prescribed biodiversity impacts. This includes an assessment on the impacts to the Stony Range Regional Botanic Garden. Measures to mitigate and manage any impacts before, during and after construction are detailed. The assessment concludes that the proposed development will not result in any Serious and Irreversible Impacts (SAIL).

The area of PCT 1776_planted to be removed is 0.035ha. A vegetation integrity assessment using the Biodiversity Assessment Method Credit calculator (BAMC) found that the current vegetation integrity score is 36.3. Under the BAM, one (1) ecosystem credit is required to offset the removal of 0.035ha of PCT 1776_planted.

6.4 Planning Controls

The following subsections assess the proposal against the relevant provisions of applicable Environmental Planning Instruments (EPIs), Draft EPIs, Development Control Plans (DCPs), Planning Agreements and matters prescribed by the Regulation in accordance with Section 4.15(1)(a) of the EP&A Act, and as required by the SEARs.

6.4.1 State Environmental Planning Policy (State and Regional Development) 2011

Clause 15 of Schedule 1 of the SRD SEPP identifies development for an educational establishment that has a CIV of more than \$20 million as SSD.

Donald Cant Watts Corke has prepared a Capital Investment Value Report which confirms that the CIV of the proposed development will be greater than \$20 million. For confidentiality purposes, the CIV Report will be submitted to DPE separate to the DA submission.

Clause 11 of the SRD SEPP outlines that DCPs (whether made before or after the commencement of the SEPP) do not apply to SSD.

6 Environmental Assessment

6.4.2 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

Clause 35 – Schools – Development permitted with consent

Part 4 of the Education SEPP sets out specific development controls for schools. Clause 35(1) of the Education SEPP provides that development for the purpose of a school may be carried out by any person with development consent on land in a 'prescribed zone' (as defined within Clause 33 of the Education SEPP).

The B5 Business Development Zone (800 Pittwater Road) and R2 Low Density Residential Zone (210 Headland Road) are identified as prescribed zones for the purposes of Clause 35(1) and as discussed in **Section 6.4.8** this makes the proposal permissible with consent on these sites.

The IN1 General Industrial Zone (224 Headland Road) is not a prescribed zone. Therefore, development for the purpose of an educational establishment is prohibited on this site. Under Section 4.38(3) of the EP&A Act, development consent for SSD may be granted despite the development being partly prohibited by an environmental planning instrument.

Clause 35(6) sets out the following provisions:

- (6) *Before determining a development application for development of a kind referred to in subclause (1), (3) or (5), the consent authority must take into consideration:*
 - (a) *the design quality of the development when evaluated in accordance with the design quality principles set out in Schedule 4, and*
 - (b) *whether the development enables the use of school facilities (including recreational facilities) to be shared with the community.*

In response to Clause 35(6)(a), TZG Architects has prepared a Design Statement which assesses the proposal against the seven (7) design quality principles set out under Schedule 4 of the Education SEPP (see **Appendix 7**). The assessment provided by TZG Architects in regard to the design quality principles is detailed and it is reasonable to conclude that, pursuant to the evaluation of the Design Analysis Report, the proposal represents a high level of design quality, as required by Clause 35(6)(a).

In response to Clause 35(6)(b), the proposed development seeks to enable the use of the school facilities by community groups, including after-hours use (refer to **Section 4.11**). The potential impacts of the use of school facilities by the community is addressed in the documentation supporting this EIS, in particular the Environmental Noise Assessment Report (**Appendix 33**); Traffic and Parking Assessment Report (**Appendix 24**); and Operational Plan of Management (**Appendix 37**).

Clause 35(9) outlines that the provisions of a development control plan that applies to a development of a kind referred to in Clause 35(1) (including this proposal) is of no effect.

Clause 42 – State significant development for the purposes of schools – application of development standards in environmental planning instruments

Clause 42 of the Education SEPP states the following in relation to the application of development standards to SSD:

Development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted.

Under Warringah LEP 2011, a maximum height of building development standard of 11m applies to 800 Pittwater Road. The existing building and the proposed skylights breach this development standard. Clause 42 has the effect of removing the requirement for a Clause 4.6 variation, however a detailed assessment of potential impacts is carried out in this EIS to enable a full and proper assessment (refer to **Section 6.4.8**).

6 Environmental Assessment

Clause 57 – Traffic Generating Development

Part 7 of the Education SEPP sets out general development controls for traffic-generating development as follows:

- (1) *This clause applies to development for the purpose of an educational establishment:*
 - (a) *that will result in the educational establishment being able to accommodate 50 or more additional students, and*
 - (b) *that involves:*
 - (i) *an enlargement or extension of existing premises, or*
 - (ii) *new premises,*

on a site that has direct vehicular or pedestrian access to any road.
- (2) *Before determining a development application for development to which this clause applies, the consent authority must:*
 - (a) *give written notice of the application to Roads and Maritime Services (RMS) within 7 days after the application is made, and*
 - (b) *take into consideration the matters referred to in subclause (3).*

The proposed development involves an enlargement and extension of an existing school. The new buildings will be able to accommodate 50 or more students and, accordingly, DPIE must give written notice of the application to RMS and take into consideration the matters set out under Clause 57 of the Education SEPP. As discussed at **Section 5.4**, the project team has carried out consultation with RMS and has incorporated that feedback into the submission.

A Traffic Report has been prepared by Varga Traffic Planning is provided at **Appendix 24**, with transport and accessibility matters discussed in further detail in **Section 0**.

6.4.3 State Environmental Planning Policy (Infrastructure) 2007

Clause 101 – Development with frontage to a classified road

Clause 101 of *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP) applies to the Site as it fronts two Classified Roads (Pittwater Road and Warringah Road). Clause 101 provides as follows:

- (2) *The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that:*
 - (a) *where practicable, vehicular access to the land is provided by a road other than the classified road, and*
 - (b) *the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of:*
 - (i) *the design of the vehicular access to the land, or*
 - (ii) *the emission of smoke or dust from the development, or*
 - (iii) *the nature, volume or frequency of vehicles using the classified road to gain access to the land, and*
 - (c) *the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.*

Vehicular access to 800 Pittwater Road is via the existing driveway from Harbord Road. There are no proposed changes to this access. Current access is left-in and left-out only. Vehicular access to 800 Pittwater Road from 224 Headland Road is not practical due to the topography of the site and the approximately 20-metre difference in ground level between the two lots.

The safety, efficiency and operation of Pittwater Road and Warringah Road will not be adversely impacted by the proposed development. At the completion of Stage 3, there will be a reduction in the daily traffic generation potential of 800 Pittwater Road from 2,931 vehicles

6 Environmental Assessment

per day (vpd) to 740 vpd. However, there will be an increase in vehicle movements per hour (vph) during the AM school peak (7:30 – 8:30am). This is equivalent to

The Pittwater Road/Harbord Road/Warringah Road intersection will continue to operate at its current Level of Service (LoS), which is LOS D, with minimal increases in total average delays.

The pick-up and drop-off area within the forecourt of 800 Pittwater Road has been designed to provide for seven (7) spaces during Stage 2, increasing to 12 spaces during Stage 3. Queuing for an additional four (4) to five (5) cars can be accommodated on the driveway without impeding other vehicles entering or exiting the site and without impacting on the operation of Harbord Road.

A Traffic Noise Intrusion Assessment Report (TNIAR) has been prepared by Day Design (**Appendix 34**), that provides an assessment of the impacts of traffic noise on the proposed development. Existing levels of road traffic noise were measured along Pittwater Road, adjacent to the site. The TNIAR provides recommendations in relation to appropriate noise control mitigation measures including the construction of 1.8m noise barrier wall along the entire Pittwater Road frontage (refer to discussion below).

Clause 102 – Impact of road noise or vibration on non-road development

Clause 102 of the Infrastructure SEPP relates to the impacts of road noise or vibration on non-road development, and is triggered for land which adjoins a road corridor with an annual average daily traffic (AADT) volume of more than 20,000 vehicles. If triggered, it requires the consent authority to consider the potential effects of road noise or vibration on an educational establishment.

Both Pittwater Road and Warringah Road have an AADT for more than 20,000 vehicles. A TNIAR has been prepared by Day Design (**Appendix 34**) that addresses Clause 102 of the Infrastructure SEPP. The objective of the TNIAR is determine the traffic noise impact from Pittwater Road, determine the acceptable noise levels within the senior school campus and identify appropriate noise controls to reduce noise intrusion to be within acceptable internal and external noise levels.

Acceptable intrusive noise levels were based on the following legislation and guidelines:

- Development Near Rail Corridors and Busy Roads – Interim Guidelines (2008);
- NSW Road Noise Policy;
- Infrastructure SEPP; and
- Education SEPP: Design Quality Principle 5: Amenity.

Based on the legislation and guidelines, the following acceptable noise criteria was established for the proposed development:

- Habitable rooms with windows closed including General Learning Areas (GLAs), Speciality Learning Areas (SLAs) and office areas = Leq (1 hour) 40dBA;
- Habitable rooms with windows open including GLAs, SLAs and office areas = Leq (1 hour) 50dBA; and
- External play areas = Leq (15 hour) 55dBA.

Noise monitoring was undertaken over a period of nine (9) days, from 28 May to 5 June 2019. The noise monitoring including long term monitoring as well as short term attended noise measurements. Based on this noise monitoring and the acceptable noise criteria, the required noise reduction from road traffic was identified in the TNIAR (**Figure 29**).

6 Environmental Assessment

Table 7 Required Road Traffic Noise Reduction (TNR)

Location	Room Description	Required TNR
<i>800 Pittwater Rd – Western Façade</i>		
Level 1	Boardroom, Principal, Head of Campus, Assistant HOC, Admin Office	Up to 23 dB
Level 1	Staff Common Room, Admin Office (Large), Staff Lounge	Up to 22 dB
Level 1	GLA 1	Up to 18 dB
Level 2	GLA 1	Up to 24 dB
Level 2	Seminar Room, GLA 2 & 3, Hub 1	Up to 23 dB
Level 2	GLA 4 to 7, Student Lounge	Up to 22 dB
Level 3	GLA 1 to 3, GLA 7 & 8, Chemistry SLA, Hub 2 & 3, Flexible Learning, Biology SLA	Up to 8 dB
Level 3	GLA 11	Up to 9 dB
<i>800 Pittwater Rd – Northern Façade</i>		
Level 1	Auditorium	Up to 4 dB
Level 2	GLA 1 (Humanities Precinct)	Up to 24 dB
Level 2	Flexible Learning	Up to 21 dB
Level 2	GLA 1 (Wellness Precinct)	Up to 0 dB
Level 3	GLA 1 & 4	Up to 8 dB
Level 3	Art SLA, Food Tech SLA 1 & 2	Up to 0 dB
<i>800 Pittwater Rd – Southern Façade</i>		
Level 1	Staff Lounge, Admin Office	Up to 17 dB
Level 1	GLA 1 & 2, Tutor Room	Up to 15 dB
Level 2	Student Lounge, GLA	Up to 17 dB
Level 2	Flexible Learning, GLA 8, Staff Study	Up to 15 dB
Level 3	GLA 11, Physics SLA	Up to 13 dB
<i>224 Headland Rd – Western Façade</i>		
All Levels	Staff Lounge, Admin Office	Up to 12 dB

Figure 29 Required Road Traffic Noise Reduction (Day Design)

The TNIAR makes recommendations on appropriate acoustic treatments that will provide the necessary noise reduction to achieve the acceptable noise criteria. The TNIAR recommends the construction of 1.8m high sound barrier wall to be located along the Pittwater Road frontage. The 1.8m high sound barrier wall may be constructed from masonry, 10mm thick solid polycarbonate sheeting, 3 rail 'solid capped and lapped' timber or 6.28mm thick laminated glass. The proposed sound barrier wall comprises solid masonry based with clear acrylic top (refer to **Section 4.6** of the EIS).

Once the sound barrier wall was incorporated into the proposed design, the required road traffic noise reduction is reduced into some locations (**Figure 30**).

6 Environmental Assessment

Table 8 Revised Required Road Traffic Noise Reduction (TNR)

Location	Room Description	Required TNR
800 Pittwater Rd – Western Façade		
Level 1	Boardroom, Principal, Head of Campus, Assistant HOC, Admin Office	Up to 17 dB
Level 1	Staff Common Room, Admin Office (Large), Staff Lounge	Up to 16 dB
Level 1	GLA 1	Up to 17 dB
Level 2	GLA 1	Up to 21 dB
Level 2	Seminar Room	Up to 19 dB
Level 2	GLA 2 & 3, Hub 1	Up to 18 dB
Level 2	GLA 4 to 7, Student Lounge	Up to 17 dB
Level 3	GLA 1 to 3, GLA 7 & 8, Chemistry SLA, Hub 2 & 3, Flexible Learning, Biology SLA	Up to 8 dB
Level 3	GLA 11	Up to 9 dB
800 Pittwater Rd – Northern Façade		
Level 1	Auditorium	Up to 4 dB
Level 2	GLA 1 (Humanities Precinct)	Up to 17 dB
Level 2	Flexible Learning	Up to 10 dB
Level 2	GLA 1 (Wellness Precinct)	Up to 0 dB
Level 3	GLA 1 & 4	Up to 8 dB
Level 3	Art SLA, Food Tech SLA 1& 2	Up to 0 dB
800 Pittwater Rd – Southern Façade		
Level 1	Staff Lounge, Admin Office	Up to 15 dB
Level 1	GLA 1 & 2, Tutor Room	Up to 13 dB
Level 2	Student Lounge, GLA	Up to 15 dB
Level 2	Flexible Learning, GLA 8, Staff Study	Up to 14 dB
Level 3	GLA 11, Physics SLA	Up to 13 dB
224 Headland Rd – Western Façade		
All Levels	Staff Lounge, Admin Office	Up to 11 dB

Figure 30 Revised Required Road Traffic Noise Reduction with sound barrier wall (Day Design)

The TNIAR identifies minimum construction specifications for external walls, external glazing and glazed doors and mechanical ventilation systems. Based on adoption of the recommendations in the TNIAR, the proposed development satisfies the requirements of clause 102 of the Infrastructure SEPP.

6.4.4 State Environmental Planning Policy No. 55 – Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) relates to remediation of contaminated land and requires, amongst other things, investigations to be undertaken as part of the development assessment process, to determine whether the subject land is likely to be contaminated and if so, what remediation work is required.

The State Government publication *Managing Land Contamination: Planning Guidelines* sets out the process for consideration of land contamination. Based on an initial consideration of

6 Environmental Assessment

known historical land uses, the guidelines may require, in certain circumstances, one or more of the following steps:

- A Preliminary Investigation – where contamination is likely to be an issue;
- A Detailed investigation – where a Preliminary Investigation highlights the need for further detailed investigations or where it is known that the land is likely to be contaminated and/or that the proposed use would increase the risk of contamination;
- A Remedial Action Plan (RAP) – to set the objectives and process for remediation;
- Validation and Monitoring – to demonstrate that the objectives of the RAP and any conditions of development consent have been met.

A Preliminary Site Investigation (PSI) was undertaken by Martens Consulting Engineers (**Appendix 17**). The PSI identified historic and current potentially contaminating site activities; assessed areas of environmental concern (AEC) and associated contaminants of potential concern (COPC); provided an assessment of the site's suitability for the future development; and provided recommendations for any additional investigations, in accordance with the requirements of SEPP 55.

The PSI identified that the site was bushland until 1951 and was developed for commercial use from this time. Two AECs were identified being the footprint of the existing industrial building at 224 Headland Road and areas of on-site fill. The existing building at 800 Pittwater Road was not considered an AEC as it comprises a building situated above a basement carpark that was excavated into sandstone bedrock. However, where any additional excavation is required, further investigation is required.

The following potential contamination sources were identified:

- Contaminants from building construction and maintenance such as asbestos, pesticides and heavy metals (HM);
- Previous commercial activities on site could have introduced Potential asbestos containing material (PACM), HM, hydrocarbons and pesticides; and
- Fill material with unknown origins could contains PACM, HM, hydrocarbons and pesticides.

Overall, the site was considered to generally have a risk of broad scale contamination within the AECS. Therefore, the PSI recommended that a Detailed Site Investigation (DSI) was undertaken including intrusive soil sampling and analysis.

The scope of works for the DSI (**Appendix 18**) is to:

- Review of the PSI;
- Undertake subsurface investigations and sampling;
- Provide an analysis and assessment of representative samples;
- Provide recommendations based on the proposed development;
- Provide a preliminary waste classification in accordance with the requirements of the NSW Environmental Protection Authority *Waste Classification Guidelines: Part 1 Classifying Waste* (2014); and
- Prepare a report in accordance with the relevant guidelines of the NSW Environmental Protection Authority, Office of Environment and Heritage (OEH), and National Environmental Protection Measure (2013).

Subsurface investigations and sampling was undertaken in June and July 2018. The location of the sampling is shown in **Figure 31**.

6 Environmental Assessment



Figure 31 Location of soil sampling

Laboratory analysis for Heavy metals, Total recoverable hydrocarbons (TRH), Benzene, toluene, ethylbenzene, xylene, naphthalene (BTEXN), Organochloride pesticides (OCP), Organophosphorus pesticides (OPP), Polycyclic aromatic hydrocarbons (PAH) and Asbestos in soil was all found to be below the site assessment criteria adopted for the DSI. Therefore, they are not considered to pose a significant risk to human health and is suitable for the proposed development.

If any unexpected finds (such as fibro material, odours or soil staining) are encountered during the site works, then assessment will determine whether any additional investigation or remediation is required.

The preliminary classification for materials to be removed off-site is 'General Solid Waste (non-putrescible). A formal waste classification assessment shall be required if any soil materials are to be removed from site.

6.4.5 State Environmental Planning Policy No. 64 – Advertising and Signage

State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64) applies to all signage that can be displayed with or without development consent and is visible from any public place or public reserve.

The proposal includes the installation of two types of business identification signage (refer to **Figure 27**). The signs are deemed to be “business identification signs” which are permissible within the B5 zone. The signage is required to comply with the aims of clause 3(1)(a) of SEPP 64 and the assessment criteria in Schedule 1 of the SEPP. Part 3 ‘Advertisements’ of SEPP 64 does not apply to business identifications signs.

6 Environmental Assessment

An assessment of the proposed signage against these objectives and assessment criteria is provided in **Table 10**.

Table 10 Assessment under SEPP 64 – Advertising and Signage		
Provision	Assessment	Consistent
Clause 3 – Aims, Objectives		
(a) to ensure that signage (including advertising): (i) is compatible with the desired amenity and visual character of any area, and (ii) provides effective communication in suitable locations, and (iii) is of high quality design and finish, and	<p>The character of the area is predominately commercial and industrial. Signage in the area comprises a mix of business identification signage and advertisements.</p> <p>The proposed signage is of a low scale which responds to the heritage significance of the existing building. It will not dominate the existing building or detract from significant façade elements including the clock tower.</p> <p>The proposed signs will be of a high-quality design and finish.</p>	Yes
(b) to regulate signage (but not content) under Part 4 of the Act, and	An assessment of the proposed signage in respect to Part of the EP&A Act, in particular the relevant matters for consideration under Section 4.15 is provided within this SEE.	Yes
(c) to provide time-limited consents for the display of advertisements in transport corridors, and	N/A	N/A
(d) to regulate the display of advertisements in transport corridors, and	N/A	N/A
(e) to ensure that public benefits may be derived from advertising in and adjacent to transport corridors.	N/A	N/A
Schedule 1 Criteria		
Character of the Area	<p>The proposed 'business identification signage' is consistent with the existing character of the commercial and general industrial development along Pittwater Road between Brookvale and Dee Why.</p> <p>The works involve the removal of a large pylon sign and other signage from the existing building. These will be replaced with high quality signs that identify the school.</p>	Yes
Special Areas	The proposed signage is low scale and doesn't detract from the heritage significance of the former Wormald Factory building. The signs will be installed on parts of the building with low or no heritage significance.	Yes
Views and Vistas	<p>The proposed signs do not obscure or comprise any important views from the public domain to the heritage item. The landmark qualities of the existing building will be maintained.</p> <p>The proposed signage will not dominate the skyline or impact on the view rights of other businesses or advertisers.</p> <p>Signage for "Officeworks" will be retained during Stage 2 of the proposed works.</p>	Yes
Streetscape, Setting or Landscape	<p>The scale, proportion and form of the proposed signage is appropriate for the existing streetscape.</p> <p>The removal of the existing signage from the building and replacement with new signage for the school will reduce clutter.</p>	Yes

6 Environmental Assessment

Table 10 Assessment under SEPP 64 – Advertising and Signage

Provision	Assessment	Consistent
Site and Building	The proposed signage is compatible with the scale and proportion of the existing building. The new signage respects the heritage features of the building.	Yes
Associated devices with advertisements and advertising	No associated devices are proposed.	Yes
Illumination	It is proposed to illuminate the signage. The illumination will not result in unacceptable glare or impact on the safety of pedestrian, vehicles or aircraft. The illumination will not detract from the amenity of any residential properties.	Yes
Safety	The signage will not reduce the safety of any public road or for pedestrians, cyclists or motorists within the area. In addition, the proposed signs will not obscure or interfere with road traffic signs and signals.	Yes

The proposed signage is considered to be minor in nature and of an appropriate scale for the development. Accordingly, the proposal is considered to be consistent with the objectives of the SEPP as it is compatible with the character of the locality, provides effective communication and will be of high design quality and finishes.

6.4.6 Draft State Environmental Planning Policy (Environment)

DPIE exhibited the proposed SEPP between 31 October 2017 and 31 January 2018. The SEPP seeks to protect and manage the natural environment and proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property.

The SEPP will consolidate the following seven existing SEPPs:

- *State Environmental Planning Policy No. 19 – Bushland in Urban Areas;*
- *State Environmental Planning Policy No. 50 – Canal Estate Development;*
- *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011;*
- *Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment;*
- *Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2 – 1997);*
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005; and*
- *Willandra Lakes Regional Environmental Plan No. 1 – World Heritage Property.*

It is considered that the previous SEPP assessment contained within the report and environmental assessment in **Section 6.6** satisfactorily considers all relevant matters and the proposal is acceptable in these regards.

6.4.7 Draft State Environmental Planning Policy (Remediation of Land)

DPIE exhibited the proposed SEPP from 1 January to 13 April 2018. It is proposed that the new Remediation of Land SEPP will:

- Provide a state-wide planning framework for the remediation of land, maintain the objectives and reinforce those aspects of the existing framework that have worked well;
- Require planning authorities to consider the potential for land to be contaminated when determined development applications and rezoning land;
- Clearly list the remediation works that require development consent; and

6 Environmental Assessment

- Introduce certification and operational requirements for remediation works that can be undertaken without development consent.

In light of the above, it is considered that the assessment of the proposed development within this report and the environmental assessment within **Section 6.4.4** satisfactorily considers relevant matters and the proposal is accept in these regards.

6.4.8 Warringah Local Environmental Plan 2011

Table 11 provides a summary assessment of the proposed development against the relevant provisions of the Warringah Local Environmental Plan 2011 (WLEP 2011).

Table 11 Assessment against Relevant Provisions of WLEP 2011	
Provision	Assessment
Clause 2.2 – Zoning	800 Pittwater Road is zoned B5 Business Development (the B5 zone), 224 Headland Road is zoned IN1 General Industrial (the IN1 zone) and 210 Headland Road is zoned R2 Low Density Residential (the R2 zone) (Figure 32).
Clause 2.3 – Zone Objectives and land use table	Refer to detailed discussion at the end of the table
Clause 4.3 – Height of Buildings	Refer to detailed discussion at the end of the table
Clause 5.10 – Heritage conservation	<p>800 Pittwater Road is identified as a local heritage item (Item I49 'Former Wormald Building (front entrance, tower and curved former canteen only)'). The site is also located in the vicinity of a local heritage item (Item I5 'Bus Shelter') and heritage conservation area (Item C6 Stony Range Flora Reserve).</p> <p>A Heritage Impact Statement (HIS) has been prepared by City Plan Heritage, which provides an assessment of the proposed development against the relevant provisions of Clause 5.10 of the LEP (Appendix 29). The HIS has been prepared in accordance with the guidelines in the NSW Heritage Manual, including Statements of Heritage Impact (2002) and Assessing Heritage Significance (2001).</p> <p>The HIS noted that the proposed development are acceptable from a heritage perspective and will not have an adverse impact on the identified significant heritage elements of the 'Former Wormald Building' (refer to Section 6.6.2).</p> <p>A Non-Indigenous Archaeological Assessment (AA) report has been prepared by City Plan Heritage that addresses the non-indigenous archaeological potential and significance of the site, and the impacts that the proposed development may have on this significance (Appendix 30).</p> <p>The AA report concludes that the site has low archaeological potential on the basis that it was not developed until the mid-late 20th century and the site has been subject to significant disturbance as a result of the construction of the existing buildings. The site does not contain any known archaeological relics of either local or State significance. It is therefore considered unlikely that the proposed development will impact on any non-Indigenous relics or sites (refer to Section 6.6.2).</p> <p>An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Eco Logical Australia (Appendix 20). The ACHAR considers the impact of the proposed development on the Aboriginal cultural heritage values of the site. The site is identified as having no Aboriginal archaeological potential and is not identified as Aboriginal cultural site. Therefore, the proposed development will not have an adverse impact on Aboriginal cultural heritage (refer to Section 6.6.3).</p>
Clause 6.2 – Earthworks In accordance with clause 6.2(3), the consent authority must consider the following matters:	Earthworks are required to extend the basement carpark and to construct the new vertical connection between 800 Pittwater Road and 224 Headland Road.

6 Environmental Assessment

Table 11 Assessment against Relevant Provisions of WLEP 2011

Provision	Assessment
(a) <i>the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,</i>	The disruption of, or any detrimental effect on, any existing drainage patterns and soil stability in the locality of the proposed development is highly unlikely. An Integrated Stormwater Management Plan has been prepared by Northrop Engineers to assess the impact of the proposed development on existing drainage patterns (Appendix 21) (refer to Section 6.6.10). The stormwater and drainage works include management of site drainage during construction via suitable erosion and sediment control controls, to be maintained throughout each stage of the works. The preliminary geotechnical investigation does not indicate that the site will be the subject of any soil instability (Appendix 12).
(b) <i>the effect of the proposed development on the likely future use or redevelopment of the land,</i>	The proposed earthworks will not preclude any future development on the site. The earthworks are required to facilitate the development and provide a vertical circulation link between 800 Pittwater Road and 224 Headland Road.
(c) <i>the quality of the fill or the soil to be excavated, or both,</i>	The DSI prepared by Martens Consulting Engineers provides a preliminary waste classification for the test fill material within the main excavation areas as 'General Solid Waste (non-putrescible)' (Appendix 12). A formal waste classification assessment in accordance with NSW EPA Waste Classification Guidelines will be required to be undertaken if any soil materials are to be removed from the site.
(d) <i>the effect of the proposed development on the existing and likely amenity of adjoining properties,</i>	The EIS provides a review of the impacts of the proposed development on the existing and likely amenity of adjoining properties. The preliminary geotechnical investigations provides recommendations to ensure that the development does not have an adverse impact on any adjoining properties (Appendix 12).
(e) <i>the source of any fill material and the destination of any excavated material,</i>	Excavated material removed from the site (post waste classification) will be either re-used on site or disposed of at an appropriately licensed facility able to accept the spoil (Appendix 31).
(f) <i>the likelihood of disturbing relics,</i>	The Non-Indigenous Archaeological Assessment Report (Appendix 30) and the Aboriginal Cultural Heritage Assessment Report (Appendix 20) both concluded that there is a low likelihood of disturbing any relics during the excavation.
(g) <i>the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area</i>	The site is not in the vicinity of any watercourse or drinking water catchment. Consideration of the impacts of the proposed development on Stony Range Regional Botanic Garden have been undertaken throughout this EIS.
Clause 6.4 – Development on sloping land	<p>The site is identified is mapped as 'Area A' (western portion of 800 Pittwater Road and southern portion of 224 Headland Road) and 'Area B' (remainder of the site) on Council's landslip risk map. A Preliminary Geotechnical Assessment has been undertaken by Martens Consulting Engineers (Appendix 12) to review the impacts of the proposed development on the stability of the land.</p> <p>Four (4) boreholes were drilled across the site using a truck-mounted hydraulic drill rig. In addition, soil samples were collected, and Dynamic cone Penetrometer testing was undertaken. The Preliminary Geotechnical Assessment found no evidence of former land instability within the site and surrounding land.</p> <p>Two (2) potential geotechnical hazards were identified:</p> <ul style="list-style-type: none"> • Shallow rotational slide through soils and/or weathered rock; and • Rock block falling or failure. <p>The Preliminary Geotechnical Report concluded that the proposed development is considered to constitute an acceptable risk to life and a low risk to property. This is subject to the detailed recommendations outlined in the Preliminary Geotechnical Report.</p>

6 Environmental Assessment

Zoning and Zone Objectives

Figure 32 is an extract from the zoning map under WLEP 2011.

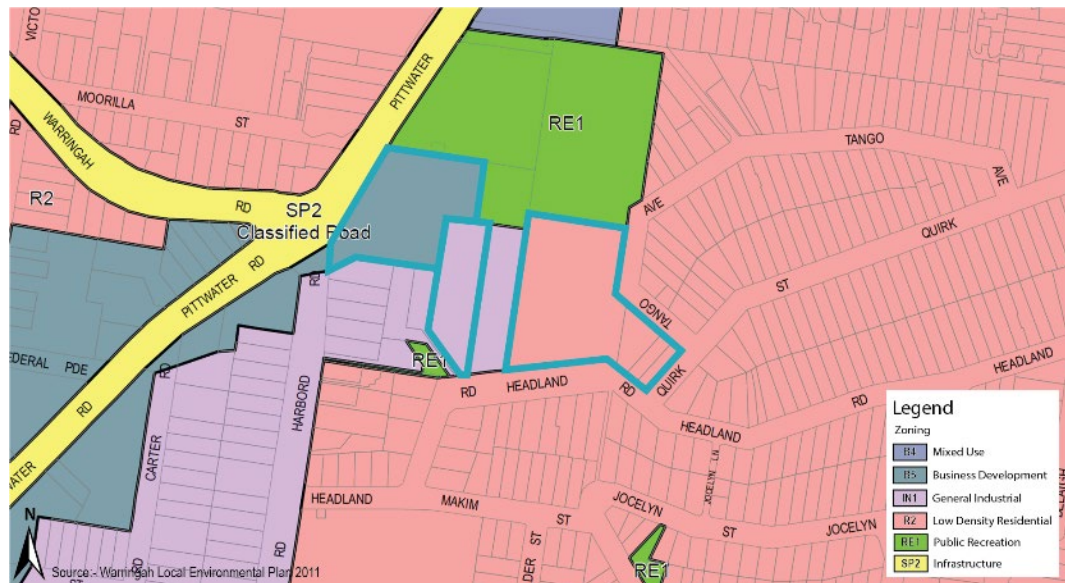


Figure 32 Zoning Map

800 Pittwater Road is zoned B5 Business Development. Development for the purposes of an educational establishment is permissible in the B5 zone under WLEP 2011, by virtue that the land use table specifies any other development not listed as 'permitted without consent' or 'prohibited' is permitted with consent. In addition, the B5 zone is a 'prescribed zone' under the Education SEPP and accordingly the proposed development is permissible by virtue of Clause 35(1) of the Education SEPP.

The objectives of the B5 zone are:

- To enable a mix of business and warehouse uses, and specialised retail premises that require a large floor area, in locations that are close to, and that support the viability of, centres.
- To provide for the location of vehicle sales or hire premises.
- To create a pedestrian environment that is safe, active and interesting by incorporating street level retailing and business uses.

The proposed development for the purpose of an educational establishment is not considered to be inconsistent with the objectives of the zone as a permitted land use, as it will not detract from broad mix of businesses, warehouse and retail uses permitted along the B5 corridor and does not jeopardise the viability of any commercial centres. The use of the site for an educational establishment will maintain an active use of the site and will promote safe pedestrian movements for students and visitors.

224 Headland Road is zoned IN1 General Industrial under WLEP 2011. Educational establishments are prohibited in the IN1 zone. The IN1 zone is not a prescribed zone under Clause 33 of the Education SEPP. Nevertheless, section 4.38(3) of the EP&A Act states in relation to development consent for State significant development that:

- (3) *Development consent may be granted despite the development being partly prohibited by an environmental planning instrument.*

The proposed senior campus and sports centre is permitted with consent in the B5 and R2 zone and is therefore partly prohibited. DPIE is capable of granting consent to a 'partially prohibited' development pursuant to Section 4.38(3) of the EP&A Act.

6 Environmental Assessment

The objectives of the IN1 zone are:

- To provide a wide range of industrial and warehouse land uses.
- To encourage employment opportunities.
- To minimise any adverse effect of industry on other land uses.
- To support and protect industrial land for industrial uses.
- To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.
- To enable a range of compatible community and leisure uses.
- To maintain the industrial character of the land in landscaped settings.

The proposed educational establishment is consistent with these objectives as it provides employment opportunities, provides a facility that meets the day to day needs of workers and their families; provides a for afterhours community use; and maintains the industrial character of the site.

Height of Buildings

A maximum height of buildings development standard of 11m applies to 800 Pittwater Road and 224 Headland Road (**Figure 33**).

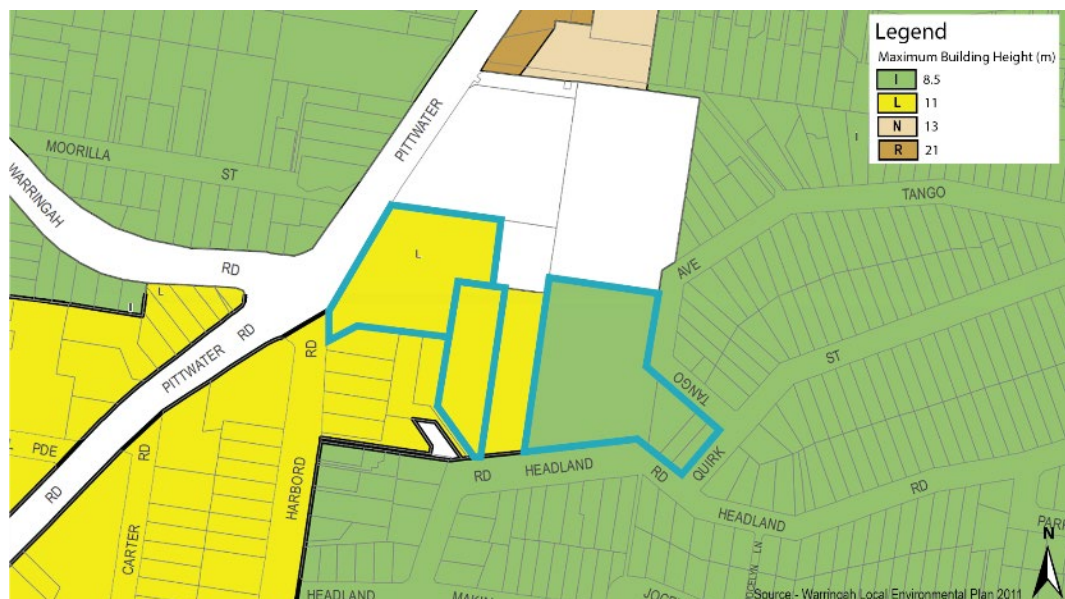


Figure 33 Height of Buildings

There are no changes to the height of the existing building at 224 Headland Road, which has a maximum building height of RL 64.692 to the top ridge. This is equivalent to maximum building height of 7.252m and complies with the 11m maximum height of building development standard.

The existing building at 800 Pittwater Road has a maximum HOB that is greater than 11m. The proposed works include a new roof with saw tooth elements that provide light into the internal spaces of the building.

Table 12 provides an assessment of a range of points across the building at 800 Pittwater Road against the building height controls. **Table 12** should be read in conjunction with **Figures 34** and **35**.

6 Environmental Assessment

Table 12 Proposed building heights at 800 Pittwater Road

Point	Existing Ground RL	Top RL	Height	Compliance / Exceedance
A	41.170	57.998	16.828m (existing)	+5.828m (existing)
B	40.7	46.455	5.755m	Complies
C	37.866	51.298	13.432m (existing)	+2.432m (existing)
D	37.866	53.191	15.325m	+4.325m
E	37.866	53.356	15.49m (existing)	+4.49m (existing)
F	37.866	55.280	17.714m	+6.714m
G	41.170	55.280	14.11m	+3.11m
H	47 (approx.)	53.360	6.36m	Complies
I	37.866	53.386	15.52m	+4.52m
J	37.866	51.362	13.492m	+2.492m
K	54 (approx.)	60.990	6.99m	Complies

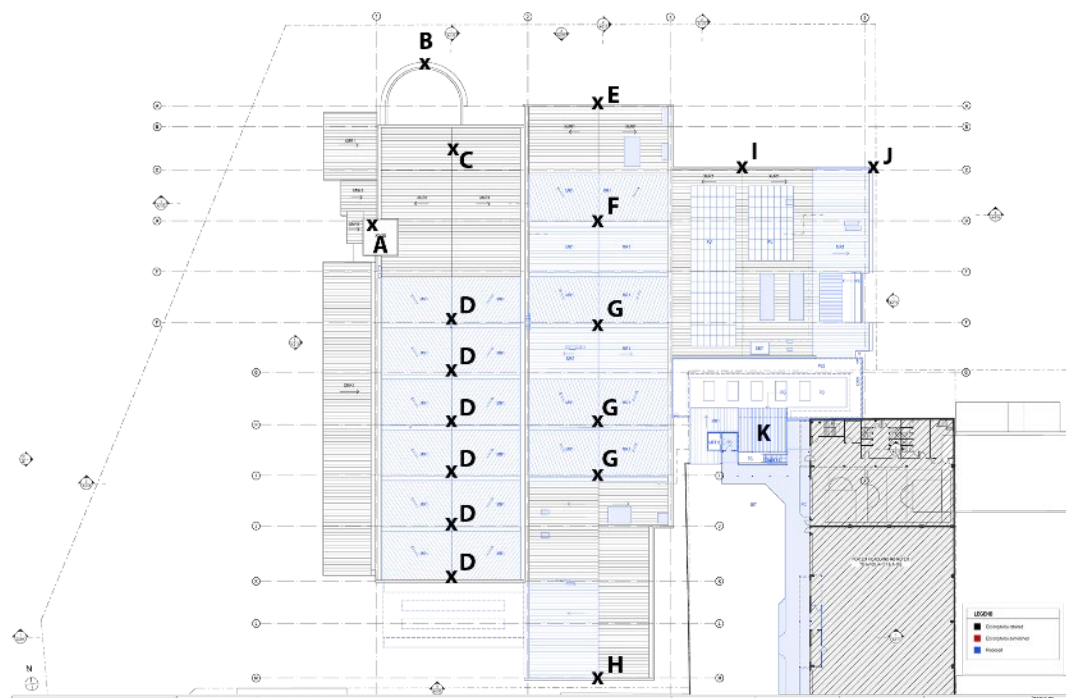


Figure 34 Roof Plan – Height Points

6 Environmental Assessment

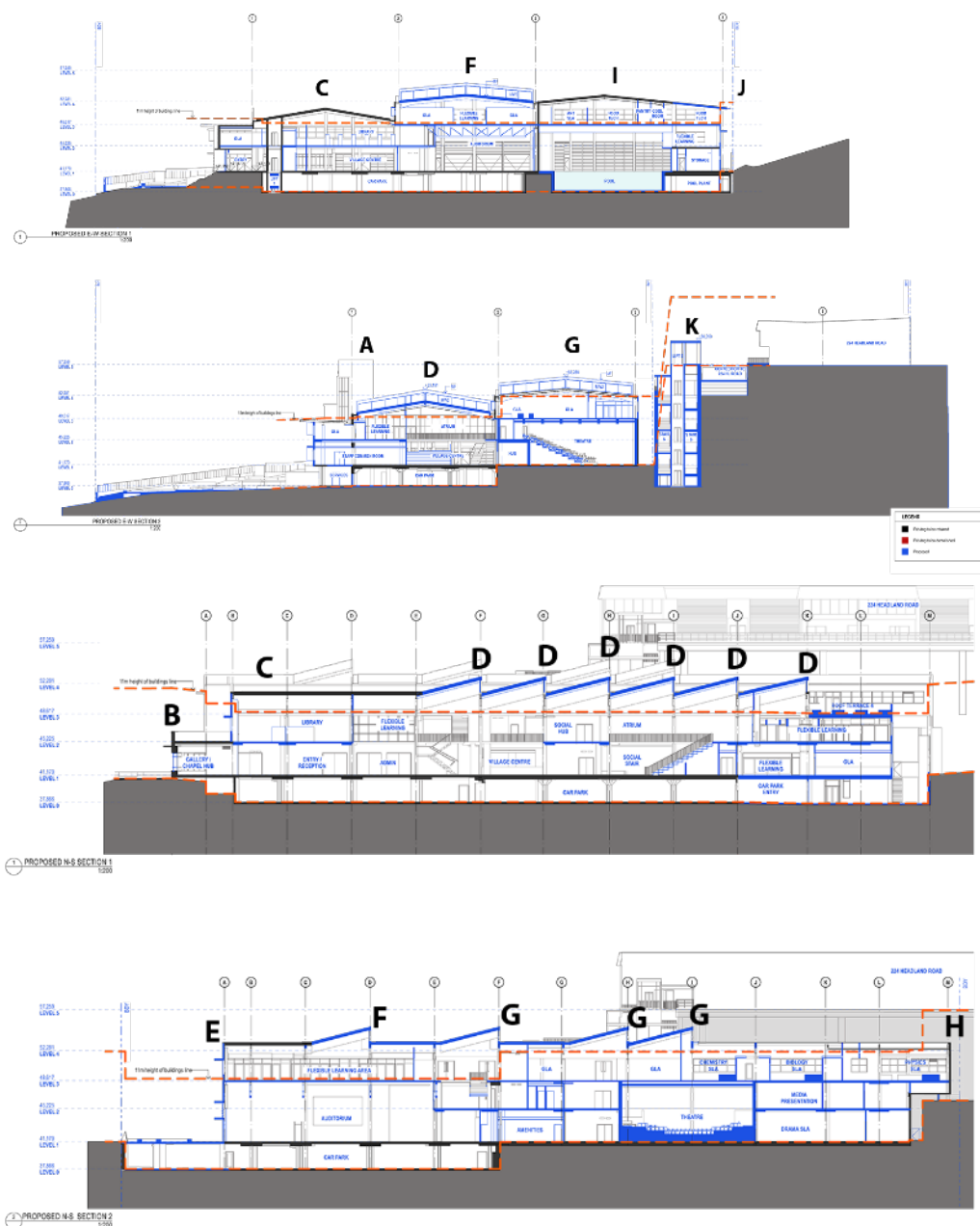


Figure 35 Sections – Height Points

As set out in **Table 12**, the maximum exceedance of the 11m height limit is 6.71m to the top of the saw-tooth roof (Point F) above the flexible learning areas. However, as illustrated in **Figure 36** the extent of new built form is modest in relation to the overall building envelope and is consistent with the scale and form of the existing building and surrounding industrial development.

6 Environmental Assessment

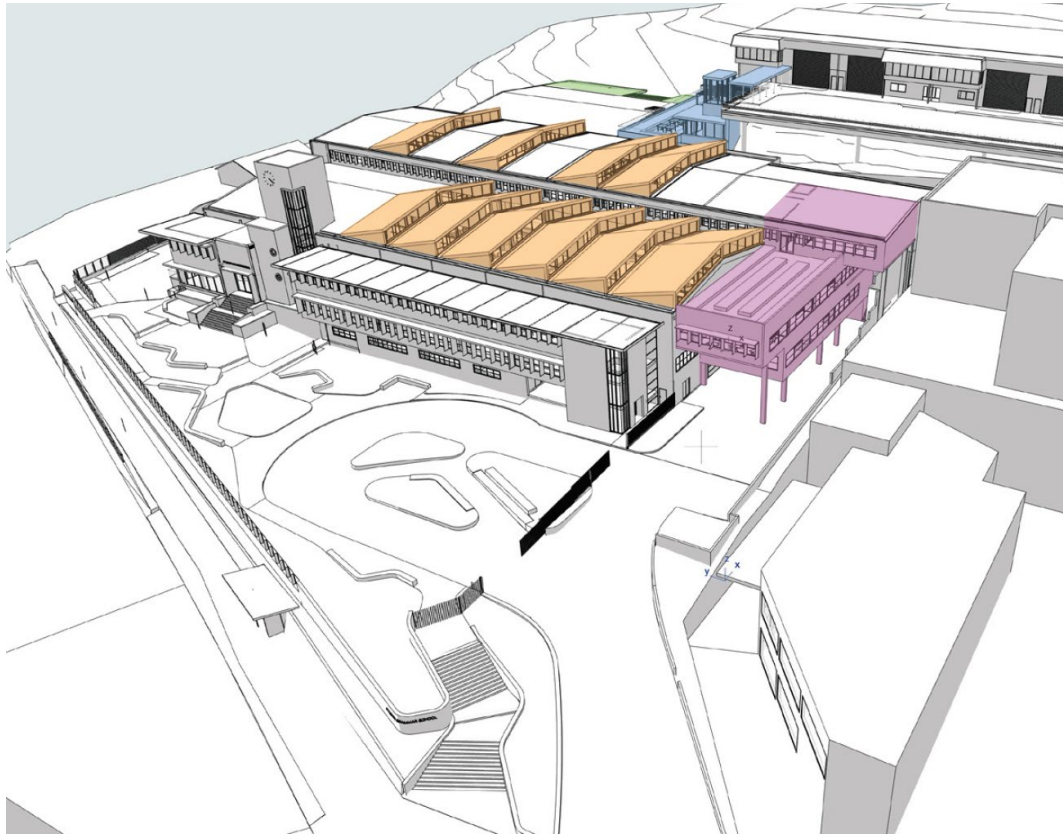


Figure 36 Building Massing

Clause 42 of the Education SEPP states:

Development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted.

Pursuant to this clause, a written variation request to address clause 4.6 of Warringah LEP is not required. Nevertheless, a review against the objectives of the height of buildings development standard is provided in **Table 13**.

Table 13 Assessment against the objectives of height of buildings development standard

Objective	Assessment
(a) to ensure that buildings are compatible with the height and scale of surrounding and nearby development,	The proposed development comprises adaptive re-use of an existing heritage building. The new additions are subservient to the overall form and scale of the building and consistent with the existing scale and character of the adjacent industrial development.
(b) to minimise visual impact, disruption of views, loss of privacy and loss of solar access,	The proposed alterations and additions have been designed to have a positive visual impact. Views to and from the heritage elements at 800 Pittwater Road will be enhanced. There are no impacts on visual or acoustic privacy as a result of the additional height. The proposed development does not result in the loss of solar access to any adjoining properties or the public domain.
(c) to minimise any adverse impact of development on the scenic quality of Warringah's coastal and bush environments,	The exceedance of the height of buildings development standard does not have an adverse impact on the scenic values of the Stony Range Regional Botanic Garden.
(d) to manage the visual impact of development when viewed from public places such as parks and reserves, roads and community facilities.	The proposed development will provide a positive contribution to the locality and streetscape. The proposed development will maintain the prominence of the clock tower as key landmark within the Brookvale-Dee Why Strategic Centre.

6 Environmental Assessment

6.5 Policies

6.5.1 State and regional policies

Table 14 provides a summary assessment of the proposed development against the relevant provisions, goals and objectives of relevant State policies.

Table 14 Response to Provisions, Goals and Objectives of State and regional Policies

State / Regional Policy	Response
Premier's Priorities: <ul style="list-style-type: none"> • Bumping up education results for children; • Increasing the number of Aboriginal young people reaching their learning potential; • Protecting our most vulnerable children; • Increasing permanency for children in out-of-home care; • Reducing domestic violence reoffending; • Reducing recidivism in the prison population; • Reducing homelessness; • Improving service levels in hospitals; • Improving outpatient and community care; • Towards zero suicides; • Greener public spaces; • Greening our city; • Government made easy; and • World class public service. 	<p>The proposal is consistent with relevant State and Premier priorities as it will:</p> <ul style="list-style-type: none"> • Create new jobs for construction workers, teachers, support staff and maintenance workers • New jobs will be created over the construction period, including construction personnel and consultant team; • Additional staff for St Luke's Grammar School; • Support growing population in the locality • Provide education to children to help reduce domestic violence now and in the future; • Provide special education opportunities; • Provide intellectual and physical education to children with the aim of reducing reliance on health services in the future; • Provide physical education programmes to children to encourage active living and reduce obesity; • Provide a balanced education in line with prevailing NSW education curriculum; • Provide a safe learning environment and education regarding personal protection and welfare; • Provide support to our youth and education to enable them to transition to meaningful employment or high education post school; • Provide employment opportunities for people of all backgrounds, races or religions; • Promote, through educational programmes, protection of our environment; and • Provide a high-quality environment to enable a high-quality education.
The Greater Sydney Region Plan – A Metropolis of Three Cities	<p>The <i>Greater Sydney Region Plan – A Metropolis of Three Cities</i>:</p> <ul style="list-style-type: none"> • Sets a 40-year vision (to 2056) and establishes a 20-year plan to manage growth and change for Greater Sydney in the context of social, economic and environmental matters; • Informs district and local plans and the assessment of planning proposals; • Assists infrastructure agencies to plan and deliver for growth and change, and to align their infrastructure plans to place-based outcomes; and • Informs the private sector and the wider community of the growth management and infrastructure investments of the NSW government. <p>A Metropolis of Three Cities applies to the Greater Sydney Region and sets the strategic planning framework for the five districts that make up the region. Northern Beaches LGA is located in the Northern District. As discussed below, the proposed development is generally consistent with the vision, objectives and planning priorities articulated by the North District Plan and therefore consistent with the directions and objectives of the Greater Sydney Region Plan.</p> <p>In particular, the proposed development is consistent with Objective 6 'Services and infrastructure meet communities' changing needs' of the Greater Sydney Region Plan, as it will increase the size of an existing school providing additional enrolment for senior school students. The proposal provides for community use of the facilities out-of-school hours. The design incorporates flexible and collaborative learning spaces that respond to changing education needs.</p>
Future Transport Strategy 2056	<p>The strategy sets six state-wide outcomes to guide investment, policy and reform and service provision. The proposal will support</p>

6 Environmental Assessment

Table 14 Response to Provisions, Goals and Objectives of State and regional Policies

State / Regional Policy	Response
Relevant vision outcomes: <ul style="list-style-type: none"> • Successful places • Accessible services • Sustainability 	the relevant vision outcomes identified in the NSW Future Transport Strategy 2056 by: <ul style="list-style-type: none"> • Encouraging active travel by being located adjacent to the Brookvale-Dee Why Strategic Centre, thereby minimising walking and cycling distances from within the precinct and encouraging multi-purpose trips. Active travel to the school, (particularly for school staff) is further encouraged through the provision of end of trip facilities such as bicycle parking, amenities, change areas and showers. • Public transport options are readily available for use by staff and students, all within close proximity (easily walkable) locations, which will enable students to be transport over longer distances where walking and cycling are less likely; and • A Green Travel Plan (Appendix 25) assists in supporting more environmentally sustainable travel by adopting green travel initiatives to discourage private car use in favour of more sustainable means.
State Infrastructure Strategy 2018 – 2038 Building the Momentum	<p>This 20-year Strategy sets out Infrastructure NSW's independent advice on the current state of NSW's infrastructure and identifies the needs and priorities over the next 20 years.</p> <p>A strategic objective relating education is to 'deliver infrastructure to keep pace with student numbers and provide modern, digitally enabled learning environments for all students.' The proposed development is consistent with the objective as it will accommodate an increase in student numbers. The new senior campus and sports centre at St Luke's Grammar School will be a modern, digitally enabled, fit-for-purpose facility with flexible, adaptable and collaborative learning spaces.</p>
Sydney's Cycling Future 2013	<p><i>Sydney's Cycling Future 2013</i> aims to make cycling a safe, convenient and enjoyable transport option for short trips. The three pillars of Sydney's Cycling Future are:</p> <ol style="list-style-type: none"> 1. Connect: Safe, connected networks. 2. Promote: Better use of existing infrastructure. 3. Engage: Policy and partnerships. <p>The site is located within a well-connected bicycle network. There is an existing off-road cycleway along Pittwater Road / Harbord Road, which links with the broader cycleway network across the Northern Beaches. The Green Travel Plan (Appendix 25) describes how cycling will be promoted as an active transport option for students and staff and that it is a healthy, low cost and environmentally-friendly method of travel. Bicycle parking facilities are provided, along with end-of-trip facilities located within the new senior campus. Overall, the proposal is consistent with this policy.</p>
Sydney's Walking Future 2013	<p><i>Sydney's Walking Future 2013</i> aims to promote walking as a viable and attractive transport option and supports the integration of walking as part of the city's transport system. The three pillars of Sydney's Walking Future are:</p> <ol style="list-style-type: none"> 1. Promote the benefits of walking and provide quality information to customers 2. Connect communities by delivering safe walking infrastructure and networks. 3. Engage with partners in the public and private sector. <p>The Green Travel Plan has found that the Site has excellent connectivity to pedestrian networks (Appendix 25). The new vertical connection between 224 Headland Road and 800 Pittwater Road will improve access for students and staff to the existing bus services along Pittwater Road. The proposed development also provides for new pedestrian entry points including dedicated pathways linking 800 Pittwater Road directly to Pittwater Road/Harbord Road frontages. These new pedestrian entries improve safety and security for pedestrians. Overall, the proposed development is consistent with this policy.</p>

6 Environmental Assessment

Table 14 Response to Provisions, Goals and Objectives of State and regional Policies

State / Regional Policy	Response
Sydney's Bus Future 2013	<p><i>Sydney's Bus Future 2013</i> identifies that buses are a key element of Sydney's public transport network. The policy identifies step-by-step actions to deliver fast and reliable bush services. A three-tiered network will operate across Sydney comprising:</p> <ul style="list-style-type: none"> • Rapid service routes; • Suburban service routes; and • Local service routes. <p>The Green Travel Plan (Appendix 25) notes that the proposed development aligns with the objectives of <i>Sydney's Bus Future</i> by providing direct and safe internal links to enable staff and students to use the range of bus services along Pittwater Road. The Green Travel Plan establishes targets to increase bus usage for staff and students.</p>
Crime Prevention Through Environmental Design (CPTED) Principles	CPTED principles are addressed in detail within Section 6.6.8 .
Better Placed: An integrated design policy for the built environment of New South Wales	<p><i>Better Placed: An integrated design policy for the built environment of New South Wales</i> (Better Placed) is the GANSW's policy detailing the aspirations of the GANSW for the design of future buildings, infrastructure, public spaces and environments within NSW.</p> <p>Consultation has been undertaken with the GANSW office throughout the design of the proposed development with positive feedback received (see Section 5.3). The Architectural Report (Appendix 7) prepared by TZG Architects provides an assessment of the proposed development against the design quality principles outlined in the Education SEPP. These design quality principles align with the objectives for good design detailed in Better Placed.</p>
North District Plan	<p>St Luke's Grammar School is located within the North District Plan area which covers the City of Ryde, Hornsby, Hunters Hill, Ku-ring-gai, Lane Cove, Mosman, North Sydney, Northern Beaches and Willoughby Local Government Areas (LGAs). The North District Plan seeks to manage growth in the context of economic, social and environmental matters. It contains the planning priorities and actions for implementing the Greater Sydney Region Plan A Metropolis of Three Cities, at a district level and is a bridge between regional and local planning.</p> <p>The proposed development is considered to be generally consistent with the planning priorities identified in the North District Plan, in particular the following planning priority under the theme of 'Liveability':</p> <p><i>Planning Priority N3 – Providing services and social infrastructure to meet people's changing needs.</i></p> <p>The NSW Department of Education estimates that an additional 21,900 students will need to be accommodated in both government and non-government school in the North District by 2036. This includes 3,454 additional students within the Northern Beaches LGA. The proposed development will assist in achieving this target through the provision of a new senior school campus and increase in student enrolment at the school to cater for 1600 students.</p> <p>The proposed development is considered to be an innovative response to the growth and changing demand and provides for a contemporary design that incorporates flexible learning spaces. The proposed development also provides for out-of-hours community use of the site as a sports centre and Wellness centre.</p>

6 Environmental Assessment

6.5.2 Towards 2040- Local Strategic Planning Statement

On 20 March 2020, the Greater Sydney Commission endorsed Northern Beaches Council's 'Towards 2040: Local Strategic Planning Statement' (LSPS). The LSPS provides a 20-year vision to guide land-use planning across the Northern Beaches LGA. The LSPS identifies planning priorities and actions and has been prepared by Council in accordance with the requirements of Section 3.9 of the EP&A Act. It will inform Council's consolidated Local Environmental Plan and Development Control Plan as well as Council's policies and strategies. The LSPS aligns with the Greater Sydney Regional Plan and the North District Plan, providing a bridge between strategic land use planning at a district level and local statutory planning.

The proposal is consistent with the following Planning Priorities identified in the LSPS:

- Sustainability
 - Landscape
 - Priority 2: Protected and enhanced bushland and biodiversity.
 - Priority 5: Greener Urban Environments.
 - Efficiency
 - Priority 7: A low-carbon community, with high energy, water and waste efficiency.
- Infrastructure and collaboration
 - Priority 9: Infrastructure delivered with employment and housing growth.
- Liveability
 - People
 - Priority 10: World-class education facilities, including a university.
 - Priority 11: Community facilities and services that meet changing community needs.
 - Priority 12: An inclusive, healthy, safe and socially connected community.
 - Priority 13: Strong engagement and cooperation with Aboriginal communities.
 - Great places
 - Priority 18: Protected, conserved and celebrated heritage.

In particular the proposed development is consistent with Priority 10, which seeks to provide world-class education facilities across the LGA. The proposed development will increase the availability of local education opportunities and provide for education services required as the number of students increases. The new educational buildings exhibit design excellence and integrates with the surrounding precinct.

6.5.3 Final Draft Brookvale Structure Plan (August 2017)

Northern Beaches Council exhibited the final draft Brookvale Structure Plan (the draft Structure Plan) between September 2017 and January 2018. The draft Structure Plan provides a strategic land use planning framework for the Brookvale Strategic Centre over the next 20 years, guiding future development whilst also protecting employment lands. Brookvale is identified as a major employment centre for the Northern Beaches.

The draft Structure Plan identified for the following development principles:

- Principle 01: Recognise the importance of Brookvale's employment lands to the Northern Beaches;

6 Environmental Assessment

- Principle 02: Create green links and green destinations;
- Principle 03: Leverage the B-Line;
- Principle 04: Activate the Brookvale Town Centre;

The site is located within the boundary of the area addressed by the draft Structure Plan. The proposed development is generally consistent with the draft Structure Plan as it provides employment opportunities within Brookvale; restores a landmark building within the Brookvale Strategic Centre; and provide visual connections between the school and the Stony Range Regional Botanic Garden.

6.5.4 Warringah Development Control Plan 2011

It is noted that Clause 11 of the State and Regional Development SEPP and Clause 35(9) of the Education SEPP excludes the application of Development Control Plans to SSD DAs. Notwithstanding, **Table 15** provides a summary assessment of the proposed development against the provisions of Warringah Development Control Plan 2011 that may otherwise be deemed relevant.

Table 15 Assessment against relevant provisions of Warringah DCP 2011		
Provision	Assessment	Consistent
Part B: Built Form Controls		
B6 Merit assessment of side boundary setbacks	<p>The existing northern side boundary setback which ranges from a minimum of 6.5m to a maximum of 22.1m is being retained. This setback zone between the existing building and Stony Range Regional Botanic Garden will be landscaped with a hard and soft landscaping to provide an appropriate transition and opportunities for passive and active recreation.</p> <p>The existing building at 800 Pittwater Road is setback a minimum of 900mm from the southern boundary. The extent of this setback will be extended. Appropriate mitigation measures in relation to fire protection and visual privacy have been incorporated to minimise amenity impacts on the existing industrial unit developments at 226 and 228 Headland Road and 275 Harbord Road.</p> <p>There are no changes to the side setbacks of the existing building at 224 Headland Road.</p>	Yes
B8 Merit assessment of front boundary setbacks	There are no changes to the existing front setbacks of the buildings at 800 Pittwater Road and 224 Headland Road. The proposed development maintains the prominence of the clock tower within the Pittwater Road streetscape. New landscaping will be provided within the front setback area.	Yes
B10 Merit assessment of rear boundary setbacks	The existing rear setbacks to 800 Pittwater Road and 224 Headland Road are to be maintained.	Yes
Part C: Siting Factors		
C2 Traffic, access and safety	<p>A Traffic and Parking Assessment Report has been prepared by Varga Traffic Planning (Appendix 24) that addresses how the proposed development meets the objectives of Part C2 of the DCP.</p> <p>There are no changes to the proposed location of vehicle access to the site from Harbord Road and Headland Road. It is not possible to remove the existing vehicle access from Harbord Road due to the topography of the site.</p> <p>Vehicle access to and from the site has been designed to ensure that all vehicles can enter and exit the site in a forward direction. The pick-up and drop-off zone at 800 Pittwater Road has been designed to ensure that cars are able to queue within the site. Swept path analysis has been provided within the Traffic and Parking Assessment Report.</p>	Yes

6 Environmental Assessment

Table 15 Assessment against relevant provisions of Warringah DCP 2011

Provision	Assessment	Consistent
	<p>Loading and unloading facilities for service and delivery vehicles are provided within the site. During Stage 2, deliveries to the senior school campus will be undertake using the drop-off/pick-up bay (outside of peak periods). Delivery for Officeworks will continue to operate from their existing loading dock. Following Stage 3, this will occur within the southern driveway / parking area.</p>	
C3 Parking facilities	<p>Off-street parking is provided for the use of staff, visitors, and Year 12 students in accordance with the requirements of Part C3 and Appendix 1 of the DCP. The overall number of parking spaces at 800 Pittwater Road and 224 Headland Road will be reduced from 227 spaces to 132 spaces (reflecting the change from retail/business use to educational establishment use), whilst still achieving compliance with the DCP's parking rates. These includes a total of four (4) accessible parking spaces.</p> <p>The off-street parking comprises a mix of basement and on-grade parking. The parking has been designed to have minimal visual impact from the surrounding public domain and is integrated with the landscape design.</p>	Yes
C3(A) Bicycle Parking and End of Trip facilities	<p>Bicycle parking and end-of-trip facilities have been incorporated into the development at 800 Pittwater Road for the use of staff and students.</p>	Yes
C4 Stormwater	<p>An Integrated Stormwater Management Plan has been prepared by Northrop Consulting Engineers (Appendix 21). This includes the adoption of stormwater quality targets as per Council's Water Management Policy. This adopted water quality objectives aim to reduce the pollutant load of stormwater runoff using a series of treatment devices prior to discharge. The treatment devices include stormwater filters and pit baskets that are to be inserted into all existing and proposed stormwater pits. The water quality modelling software MUSIC was used to demonstrate that the stormwater runoff will achieve Council's water quality targets and will have a minimal environmental impact.</p> <p>There is no on-site detention at 224 Headland Road.</p> <p>There are currently two existing on-site detention (OSD) tanks at 800 Pittwater Road. One of these OSD is proposed to be removed as part of the Stage 3 works and other tank is proposed to be extended to provide a total on-site detention storage capacity of 183m³.</p>	Yes
C5 Erosion and sedimentation	<p>Erosion and Sediment Control Plans have been prepared by Northrop Consulting Engineers (Appendix 21) to demonstrate how erosion and sedimentation will be managed during the demolition and construction process. These control measures minimise the potential impacts of soil erosion and sedimentation upon the environment and the adjacent Stony Range Regional Botanic Garden.</p>	Yes
C7 Excavation and landfill	<p>The proposed development requires extensive excavation to construct the new vertical circulation building between 800 Pittwater Road and 224 Headland Road, and to increase the size of the existing basement carpark. A Preliminary Site Investigation (Appendix 17) and Detailed Site Investigation (Appendix 18) have been prepared by Martens Consulting Engineers to assess the suitability of the site for development. The investigations concluded that the site has low risk to humans and does not require remediation. The preliminary classification for any materials to removed off site is 'General Solid Waste (non-putrescible)'.</p> <p>The Preliminary Geotechnical Assessment (Appendix 12) provides a preliminary assessment of the stability of the site and the potential impacts of the proposed excavation. Detailed geotechnical recommendations are outlined in Section 5 of the report to ensure that the excavation will not have an adverse impact on the adjoining land or the geological stability of the site. These recommendations have also been incorporated in the Preliminary Construction Management Plan prepared by Midson Group (Appendix 27).</p>	Yes
C8 Demolition and construction	<p>A Demolition and Construction Waste Management Plan (DCWMP) has been prepared by Waste Audit & Consultancy Services (Appendix 31) to</p>	Yes

6 Environmental Assessment

Table 15 Assessment against relevant provisions of Warringah DCP 2011

Provision	Assessment	Consistent
	outline the proposed arrangements for the management of general waste and recyclable materials that will be generated during the demolition and construction process. The waste management provisions have been designed to ensure safe and sustainable management of materials, consistent with the SEARs requirements, best practice standards and AS 2601 – 2001 <i>Demolition of Structures</i> . The DCWMP also summarises the principles for the work plan to be developed by the Principal Contractor in relation to the demolition activities on site.	
C9 Waste Management	An Operational Waste Management Plan (OWMP) has been prepared by Waste Audit & Consultancy (Appendix 32) to describe the management of general waste and recyclable materials that will be generated during the operation of the new senior school campus and sports centre. The OWMP describes all waste management provisions including internal bins, central storage areas, management and handling protocol to ensure safe and sustainable management of materials (refer to Section 4.9).	Yes
Part D: Design		
D3 Noise	An Environmental Noise Assessment (ENA) has been prepared by Day Design that provides an assessment of the noise emissions from the proposed development (Appendix 33). The sources of noise emissions include students playing outside; teaching activities within classrooms, public address system and school bell, mechanical plant, use of the basketballs; use of the auditorium and carparking. The ENA concludes that the provided the acoustic recommendations are implemented that the level of noise emitted from the proposed development will meet the requirements of the Education SEPP, NSW Environmental Protection Authority's (EPA) <i>NSW Noise Policy for Industry</i> and EPA's <i>NSW Road Noise Policy</i> . The acoustic amenity of adjoining sensitive receivers will be maintained (refer to Section 6.6.9).	Yes
D6 Access to sunlight	Shadow diagrams (plan and elevation) have been prepared by TZG Architects to illustrate the existing and proposed solar access to the adjoining industrial properties at 226 and 228 Headland Road and 275 Harbord Road between 9am and 3pm on June 21 (Appendix 6). The southern extension at 800 Pittwater Road will result in additional overshadowing of the north-facing windows of the adjoining buildings before noon on June 21. However, these northern windows will receive adequate sunlight after 1pm on June 21. The proposed development does not result in any overshadowing of any public open space or residential development (refer to Section 6.6.4).	Yes
D7 Views	The proposed development has been designed to maintain and enhance existing views to and from the heritage elements of the existing building at 800 Pittwater Road. The proposed development allows for reasonable sharing of views to and from adjoining development. A view analysis has been prepared in Architectural Design Report prepared by TZG Architects (Appendix 7).	Yes
D8: Privacy	The proposed development has been designed to provide a high level of visual and acoustic privacy for occupants and neighbours. Windows on the southern elevation of 800 Pittwater Road have been located with regard to the location of windows to the industrial unit developments at 226 and 228 Headland Road and 275 Harbord Road. Potential noise emissions from the new senior school campus and sports centre have been assessed as part of the ENA (Appendix 33), which concluded that the proposed development will have an acceptable impact on the acoustic amenity of surrounding development (refer to Section 6.6.9).	Yes
D9: Building bulk	The proposed development has been designed to reinstate the prominence and landmark qualities of the heritage clock tower when viewed from the surrounding urban environment.	Yes

6 Environmental Assessment

Table 15 Assessment against relevant provisions of Warringah DCP 2011

Provision	Assessment	Consistent
	The new additions to 800 Pittwater Road have been designed to have minimal impact to the existing setting of the building and the surrounding industrial precinct. This includes the new vertical circulation link building which is set well back from the street frontage and set within the escarpment.	
D10 Building colours and materials	The proposed building colours and materials have been selected to complement the historic building façade whilst linking to the colour and material palette developed for the existing school campus at 210 Headland Road. The heritage fabric at 800 Pittwater Road will be rendered white to reflect the building's original colour. New elements such as the new vertical fins to the western façade will be a mix of toned-down blue colours. The proposed colours and materials provide a contemporary interpretation of the original materials.	Yes
D11 Roofs	A new saw tooth roof is to be introduced at 800 Pittwater Road. This roof has been designed to improve daylight penetration into the internal spaces within the building and reduce the reliance on artificial lighting. This is a key element in the building's ESD strategy, and the roof form has been designed to maximum daylight using 3D daylight modelling software (Appendix 28 and Section 6.6.6). The new roof design also responds to the historic built form of the former factory building.	Yes
D12 Glare and reflection	<p>The proposed development will not result in overspill or glare from artificial illumination or sun reflection. Existing business identification signage will be removed and replaced by signage of the school.</p> <p>Materials and finishes have low reflectivity. Sun shading will be provided to the new northern and western glazing. This will assist in minimising sunlight reflectivity from the glazing.</p> <p>The new photovoltaic panels are to be located on the westernmost roof of 800 Pittwater Road.</p>	Yes
D13 Front fences and front walls	A new 1.8m noise barrier wall is to be constructed to the Pittwater Road frontage. The noise barrier comprises of a masonry base with sandstone cladding and a clear acrylic top with vertical fins. The design of the noise barrier has been designed to complement the heritage fabric; provide a visual connection between the building and the surrounding public domain; and satisfies the acoustic requirements.	Yes
D14 Site facilities	Dedicated waste storage areas have been provided at 800 Pittwater Road and 224 Headland Road. These have been located so that they can be accessed by service vehicles but are screened from the public domain (refer to Section 4.9).	Yes
D15 Side and rear fences	<p>New fencing is to be installed between 800 Pittwater Road and Stony Range Regional Botanic Garden. Proposed Fence Type A comprises a new 1.8m high timber slat fence. The existing access gate between 800 Pittwater Road and Stony Range Botanic Garden is to be retained.</p> <p>During Stage 2, a temporary steel palisade fence will be located between the school's outdoor space and the existing carpark.</p>	Yes
D17 Tennis courts	The new outdoor multi-purpose court is located in the north-east corner of the site and is setback behind the building line.	Yes
D18 Accessibility and adaptability	An Access Review of the proposed development has been undertaken by Funktion (Appendix 13), that concludes that the proposed development can comply with the accessibility requirements of the BCA, relevant Australian Standards and Disability (Access to Premises – Buildings) Standards.	Yes
D20 Safety and security	The principles of Crime Prevention Through Environmental Design (CPTED) have been incorporated into the proposed design. This includes adequate lighting of entrances, paths and car parking areas; minimising the number of areas where people could hide; providing security fencing and incorporating territorial reinforcement (refer to Appendix 9 and Section 9).	Yes

6 Environmental Assessment

Table 15 Assessment against relevant provisions of Warringah DCP 2011

Provision	Assessment	Consistent
D21 Provision and location of utility services	<p>A Hydraulic Services Infrastructure Management Plan has been prepared by Northrop Consulting Engineers (Appendix 22) that identifies the existing utility infrastructure (water, sewer and natural gas) that is available on the site and whether any additional infrastructure is required to meet any additional load. The Plan concludes that the existing sewer, water mains and natural gas infrastructure is suitable, subject to detailed design (refer to Section 6.7.3).</p> <p>An Electrical Services Infrastructure Management Plan has been prepared by Wood & Grieve Engineers in relation to the existing electrical and communications infrastructure (Appendix 22). There is an existing (750kVA) kiosk substation at 800 Pittwater Road located in the north-west corner of the site. It is proposed to remove this substation as part of the Stage 2 works and provide two new kiosk substations in the south-west corner of the site adjacent to the top of the driveway entry. This location improves accessibility for servicing. It is proposed that the existing communications services will be removed and that new communications services will share the same trench as the electrical services (refer to Section 6.7.3).</p>	Yes
D22 Conservation of energy and water	<p>The development is proposed to achieve a minimum 4 Star Green Star (Design & As Built) Certification. The ESD Report prepared by Wood & Grieve Engineers includes a review against Part D22 of the DCP (Appendix 28). The overall building design incorporates a variety of design elements that seek to minimise energy and water consumption. These design measures include façade design for optimised passive thermal performance, use of efficient LED lighting, design of the new saw tooth roof to maximum daylight penetration and reduce reliance and demand on lighting systems and use of low energy and water efficient appliances, fittings and fixtures (refer to Section 6.6.6).</p>	Yes
D23 Signs	<p>Existing business identification signage is to be removed at 224 Headland Road and 800 Pittwater Road. This includes the existing large pylon sign at 800 Pittwater Road that will be removed as part of Stage 3.</p> <p>New signage for the school is proposed that is contemporary in design and compatible with the design, scale, and architectural character of the building. The new signs comprise clear finished stainless-steel plate. The signs do not obscure any views to and from the heritage item and do not result in adverse impact on the streetscape or surrounding locality.</p>	Yes
Part E: The Natural Environment		
E1 Preservation of trees and bushland vegetation	<p>The proposed works require the removal of a total of 36 trees to facilitate the development. An Arboricultural Impact Assessment has been prepared by ArborSafe (Appendix 11) to provide an assessment of the proposed trees to be removed; identify areas required for tree protection; and identify methods and techniques to be ensure that high retention value trees are trained and protected during the works. These recommendations have been incorporated into the design of the proposed development and within the Preliminary Construction Management Plan (Appendix 27) (refer to Section Error! Reference source not found.).</p> <p>The development has been designed to minimise the impacts on the adjoining Stony Range Regional Botanic Garden. Only one (1) tree located within Stony Range Regional Botanic Garden (Tree 22: <i>Banksia integrifolia</i>) is required to be removed as a result of a major encroachment into the Tree Protection Zone (TPZ). This tree is classified as a Category B tree with a Moderate Retention Value.</p>	Yes
E2 Prescribed vegetation	<p>A Biodiversity Development Assessment Report (BDAR) has been prepared by Eco Logical Australia (Appendix 36) that includes an assessment against Part E of the DCP. Stony Range Regional Botanic Garden is mapped as Native Vegetation under the DCP. The BDAR notes that the proposed development of the site will result in the removal of approximately 0.035ha of native planted vegetation. The BDAR notes that the proposed development is consistent with the objectives of Part E5 and that the development does not directly impact on any areas mapped as native vegetation. The indirect impacts of the proposed development on</p>	Yes
E5 Native vegetation		

6 Environmental Assessment

Table 15 Assessment against relevant provisions of Warringah DCP 2011

Provision	Assessment	Consistent
	Stony Range Regional Botanic Garden are assessed and appropriate mitigation measures are identified (refer to Section 6.3 and Section 6.6.11).	
E7 Development on land adjoining public open space	The site is mapped as land adjoining public open space under the DCP. The proposed development increases the permeability of the site. The proposed landscape within the northern setback provides a visual transition between the existing buildings and Stony Range Regional Botanic Garden to the north. New windows to the northern elevation of 800 Pittwater Road provide a visual connection between the school and the public open space, as well as provide opportunities for casual surveillance.	Yes
E10 Landslip risk	The site is mapped as Area A and Area B on the Landslip Risk Map. A Preliminary Geotechnical Assessment has been prepared by Martens Consulting Engineers (Appendix 12) to ensure that the proposed development is geotechnically stable. The Preliminary Geotechnical Assessment concludes that there is no evidence of former land stability and the proposed development is considered to constitute an acceptable risk to life and a low risk to property resulting from the assessed geotechnical hazards. This is subject to the detailed recommendations outlined in the Preliminary Geotechnical Assessment.	Yes

6.6 Likely Impacts of the Development

The following subsections assess the likely impacts of the development in accordance with Section 4.15(1)(b) of the EP&A Act.

6.6.1 Built Form and Urban Design

TZG has prepared an Architectural Design Report (**Appendix 7**) which provides an analysis of the site context; identifies the opportunities and constraints of the site; design options considered; and details the design strategies for the site. The Architectural Design Report provides an assessment of the proposal against the Design Quality Principles established under the Education SEPP.

The Architectural Design Report provides details of the materials and finishes, landscape treatments and other information that provides details of the design analysis that has informed the final design. During the design development stage, a number of design options were explored including:

- Location of the 25m pool and Drama Theatre;
- Design of the roof profile to maximise daylight penetration into the building whilst retaining the existing steel portal structure and responding to the building's heritage; and
- Design of the Pittwater Road façade to respond to the building's original fenestration pattern, provide adequate sun-shading and maximise views.

The Architectural Design Report provides a detailed assessment of the site's opportunities and constraints. This site analysis results in the following key urban design principles:

- School campus connectivity: The proposed development will provide opportunities for enhanced connections between the broader community and the school. The proposed development will provide a high level of pedestrian connectivity and accessibility between the proposed senior school campus at 800 Pittwater Road, the new sports centre at 224 Headland Road and the existing school campus at 210 Headland Road. In addition, there will be improved connectivity for staff, students and visitors between the school campus and Pittwater Road.

6 Environmental Assessment

- **Building Height:** The proposed development introduces new building elements including the new saw tooth roof, the new vertical circulation link building and building extensions to the south and east. The new saw tooth roof provides daylight into the central spaces of the building, improving internal amenity and responding to the historic forms of the original factory building. All the new built elements are designed to be subservient in scale and prominence to the Clock Tower.
- **Building Massing:** The proposed development comprises the adaptive re-use of two existing industrial buildings, with a complete reconfiguration of the internal spaces of the building to provide flexible learning areas linked by extensive circulation zones. The design introduces four (4) new additions:
 - The southern extension provides additional floor space for learning areas with a roof terrace above;
 - The new south-facing skylights that create a saw tooth roof form that provide additional daylight into the building;
 - The eastern extension to the third floor of the existing I-Med building; and
 - The new link building that provides pedestrian connectivity between 800 Pittwater Road and 224 Headland Road.

These new additions have been designed so that will have minimal visual impact and maintain the overall built form of the existing buildings. The overall building massing is consistent with the built form and scale of the surrounding industrial development and Stony Range Regional Botanic Garden.

- **Setbacks:** The proposed alterations and additions maintain the existing site setbacks where possible. There is a reduction in the setback to the southern boundary, however adequate amenity is provided to the existing industrial development to the south of the site.
- **View Analysis:** An analysis of views of the proposed development from key vantage point including Pittwater Road, Warringah Road and Harbord Road demonstrate that the proposed development will make a positive contribution to the surrounding public domain and built environment (**Figure 37**).

6 Environmental Assessment



Figure 37 View of the existing and proposed development from the western side of Pittwater Road

Overall, the proposed development is considered to be a well-designed building that reinstates the heritage elements of the former factory building at 800 Pittwater Road; provides a public presence for the school to Pittwater Road; incorporates the school's vision for a future-focused learning environment; and contains well-connected, flexible, multi-modal learning spaces that allow customisation and suit a range of learning styles.

6.6.2 Heritage Significance

Built

800 Pittwater Road is identified as a local heritage item (Item I49 'Former Wormald Building (front entrance, tower and curved former canteen only)' under Schedule 5 of the LEP (**Figure 38**). It is also located in the vicinity of two heritage items (Item I5 'Bus Shelter' and Item C6 'Stony Range Flora Reserve'). It is noted that there are not items of environmental heritage identified or listed at either 210 Headland Road or 224 Headland Road.

A Heritage Impact Statement (HIS) has been prepared by City Plan Heritage in accordance with the NSW Heritage Manual, in particular the guidelines *Assessing Heritage Significance* (2001) and *Statements of Heritage Impact* (2002) (**Appendix 29**).

The HIS is also guided by the philosophy and processes included in the *Burra Charter: The Australian ICOMOS Charter for Place of Cultural Significance* (2013) (The Burra Charter). The HIS identifies the heritage values of the site and its surrounds, provides an assessment of the proposed development on the significance of the heritage item, and makes recommendations to ensure that the cultural values of the item are conserved as part of the proposed development.

6 Environmental Assessment

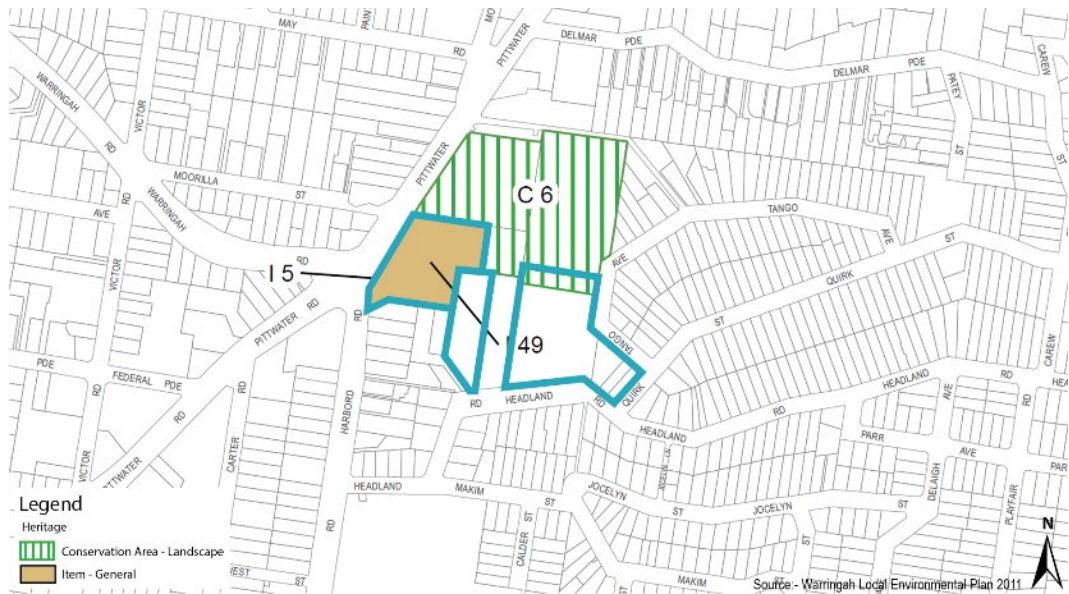


Figure 38 Heritage Map

As illustrated in **Figure 39**, the following elements of the existing building at 800 Pittwater Road have been identified as having heritage significance:

- Clock tower;
- Curved former canteen; and
- Front entrance.

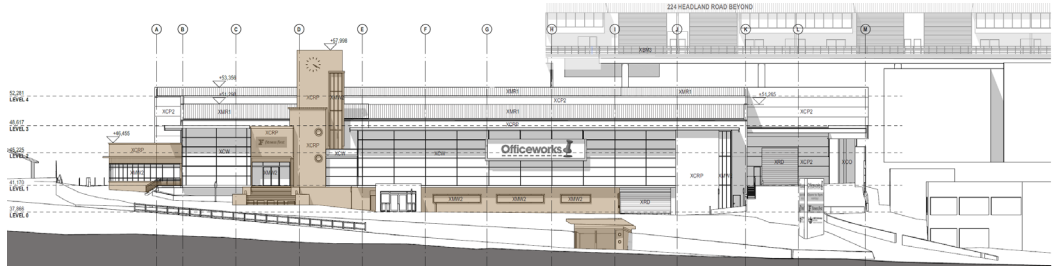


Figure 39 Existing Pittwater Road (West) Elevation) – heritage significant fabric is identified with a brown hatch

The HIS provides a detailed description of the existing site, a history of the site and its surrounds, and provides an assessment of the cultural heritage values of the site. The following Statement of Significance for the “Former Wormald Building (front entrance, tower and curved former canteen only)” has been extracted from the NSW State Heritage Inventory:

An excellent representative & relatively rare example of early post-war factory architecture. Displays high creative & technical integrity. Historically evidence of the growth of industry in the area. Socially, a landmark which many local people worked in.

The HIS provides an assessment of the design options considered during the design development process and analyses the impacts of each of these options on the heritage significance of the item. Design options reviewed in the HIS included:

- Location of the entrance to the basement carpark;
- Design of the new sawtooth skylights;
- Design of the noise barrier wall; and
- Selection of materials and finishes.

6 Environmental Assessment

Feedback from the heritage consultant was incorporated into the design of the proposed development, which is consistent with the methodology established by Heritage NSW (Department of Premier and Cabinet) in relation to the preparation of Heritage Impact Statements.

Section 5.4 of the HIS provides an assessment of the proposed development against Clause 5.10 of the LEP and relevant provisions of the Warringah DCP. In particular in relation to the Warringah DCP, the HIS notes that:

- The proposed development maintains all elements that have been identified to have historical and architectural significance including the clock tower, curved former canteen and front entrance.
- Internally, the works are proposed to highly modified interiors of little or no heritage significance.
- Demolition of non-significant and intrusive building fabric including the glazed curtain wall and other non-original fabric and elements is not considered to have an adverse impact.
- The new western façade design including new windows with shading is considered to be sympathetic and compatible with the significant heritage fabric. The design references the former aesthetic of the building including the solidity and fenestration patterns of the original factory building. Overall, it is considered that the works to the western façade will provide a better heritage outcome with no adverse impact to the identified heritage significance of the building.
- An interpretive heritage approach has been adopted in relation to the design of the new sawtooth roof. The new roof has been designed to improve amenity of the interior of the building. The skylights will only be visible from above and do not impact on any of the building's significant fabric.
- The overall form of the existing buildings at 800 Pittwater Road and 224 Headland Road will be maintained. Any additional storeys are created within the existing building envelopes. Where new additions are proposed, these additions have been located so that they do not impact on the visual prominence of the clock tower.
- Significant views to 800 Pittwater Road from the west will be maintained. The noise barrier wall has been designed to allow for views from the public domain towards 800 Pittwater Road.
- The proposed signage is neutral in colour, being fabricated from clear finished stainless steel and will be located and attached to new fabric or fabric with little or no heritage significance.
- Materials, colours and finishes are sympathetic to the former building. The series of muted exterior colours with blue accents, are clearly discernible from the original fabric but complement the existing façade.

The EIS supports the findings of the HIS in relation to the proposed built form, demolition of low or insignificant heritage fabric, introduction of new sawtooth roof, design of the western façade of 800 Pittwater Road and selection of materials and finishes. It is therefore considered that the proposed development is acceptable from a heritage perspective subject to the recommendations outlined in the HIS:

- Undertake a photographic archival recording of the site (before, during and after construction) in accordance with Heritage NSW guidelines.
- Development of a heritage interpretation plan that provides policies, strategies and detailed advice for the interpretation of the building and its cultural and historic values.

6 Environmental Assessment

The heritage interpretation plan is to be prepared in accordance with Heritage NSW guidelines.

- Preparation of a Schedule of Conservation Works that identifies any works that are required to repair, conserve and maintain the significant heritage fabric.
- Ongoing inspections and monitoring of the works by a built heritage specialist during the demolition and construction process.

These recommendations would be suitably enforced via a condition of any subsequent development consent issued by DPIE.

Non-Indigenous Archaeology

A Non-Indigenous Archaeological Assessment (AA) report has been prepared by City Plan Heritage (**Appendix 30**) that provides an assessment of the non-Indigenous archaeological potential and significance of the site and the impacts of the proposed development on the archaeological significance of the site. The AA report has been prepared in accordance with the methodology established by the NSW Heritage Manual and The Burra Charter.

The AA Report provides a description of the underlying geology of the site along with a description of the existing buildings on the site. The archaeological potential of the site is described. This refers to the probability of archaeological relics to survive at the site and is based on a review of previous scholarship of relevance to the site, an understanding of the formation process of the site and available historical information such as historical maps and photographs. The assessment of the archaeological potential of the site concludes that a section of Old Pittwater Road and an early bridge were located within the curtilage of the site. However, significant modifications to the site and the construction of buildings since the late 20th century means that the survival of these features is unlikely and therefore the archaeological potential of the site is low.

The proposed development includes excavation in association with the extension of the basement carpark and construction of the new vertical circulation (lift and stairs) between 800 Pittwater Road and 224 Headland Road. The excavation works are primarily contained to the removal of culturally sterile-fill and existing sandstone. Therefore, the AA report concludes that there is low potential for the proposed development to impact non-Indigenous relics or sites. If during the course of excavation, any relics are unexpectedly discovered, then work must cease in the affected area and Heritage NSW be notified in accordance with the relevant provision of the *NSW Heritage Act 1977*.

6.6.3 Aboriginal Cultural Heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Eco Logical Australia (**Appendix 20**). The ACHAR identifies Aboriginal cultural heritage values, outlines consultation with Aboriginal people who hold cultural knowledge of Aboriginal objects and/or places in the proposed project area, assesses the impacts of the proposed development on the Aboriginal cultural heritage values of the site, and demonstrates that any impacts have been avoided or mitigated.

The ACHAR has been prepared in accordance with the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (former Office of Environment and Heritage 2011), *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* (OEH 2010) and *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (former Department of Environment, Climate Change and Water (DECCW) 2010).

As discussed in **Section 5.6** of the EIS, a four (4) stage consultation process was undertaken. Six (6) Aboriginal organisations were registered as Registered Aboriginal Parties (RAPs) through this consultation process and their feedback has been incorporated into the ACHAR. A search of the Aboriginal Heritage Information Management System (AHIMS) identified six

6 Environmental Assessment

(6) registered Aboriginal sites and no Aboriginal places located within 2 kilometres of the study area.

On 15 August 2019, a field survey was undertaken by an archaeologist from Eco Logical in conjunction with a representative from the Metropolitan Local Aboriginal Land Council (LALC). The field survey noted that both 800 Pittwater Road and 224 Headland Road are highly disturbed sites, where the site's original's topography has been modified to accommodate the construction of buildings and associated infrastructure. The field survey concluded that the site has low to nil archaeological potential.

An assessment of the Aboriginal cultural values of the site identified the following statement of significance:

The study area contained zero Aboriginal archaeological sites as defined under the National Parks and Wildlife Act 1974.

Site inspection revealed a high degree of disturbance across both properties proposed to be included in the St Luke's Grammar expansion. 224 Headland Road (SP45082) is situated upon a cut sandstone outcropping that has been almost entirely developed, with the exception of a small portion of regrowth vegetation in the southwest of the lot. 800 Pittwater Road (Lot 6 DP523299) contains an underground carpark across a large portion of the property, while the remainder of the property has been covered by carparks and the heritage-listed Wormald Building. Although both lots are located adjacent a flora reserve, there have been no Aboriginal heritage values identified within this reserve as it is a former quarry and there will be no impacts to the reserve as a result of the proposed campus expansion. There is nil archaeological potential across the entirety of the study area and there is no requirement for further archaeological assessment.

Based on this statement of significance, the ACHAR concluded that no Aboriginal heritage sites or cultural values will be harmed by the proposed development. Therefore, no archaeological mitigation measures are required.

The following recommendations have been identified in the ACHAR:

- Recommendation 1 – No further Aboriginal cultural heritage assessment is required, works may proceed with caution. If any suspected Aboriginal objects are uncovered during the works, the works must cease in the affected area and a suitably qualified archaeologist notified.
- Recommendation 2 – A copy of the ACHAR is to be registered on the AHIMS register and sent to all RAPs.

6.6.4 Environmental Amenity

Solar Access and Overshadowing

Shadow diagrams (plan and elevation) have been prepared by TZG Architects (**Appendix 6**). These illustrate the existing and proposed shadows at 11am, 12pm (noon), 1pm and 2pm on 21 June (mid-winter). There will be some additional overshadowing of the industrial properties directly to the south of 800 Pittwater Road. Analysis of the overshadowing of the northern windows of 226 and 228 Headland Road and 275 Harbord Road shows that there will be some additional overshadowing of these windows before 1pm (**Figure 40**). However, the northern windows will still receive approximately two (2) hours of sunlight between 1pm and 3pm.

6 Environmental Assessment

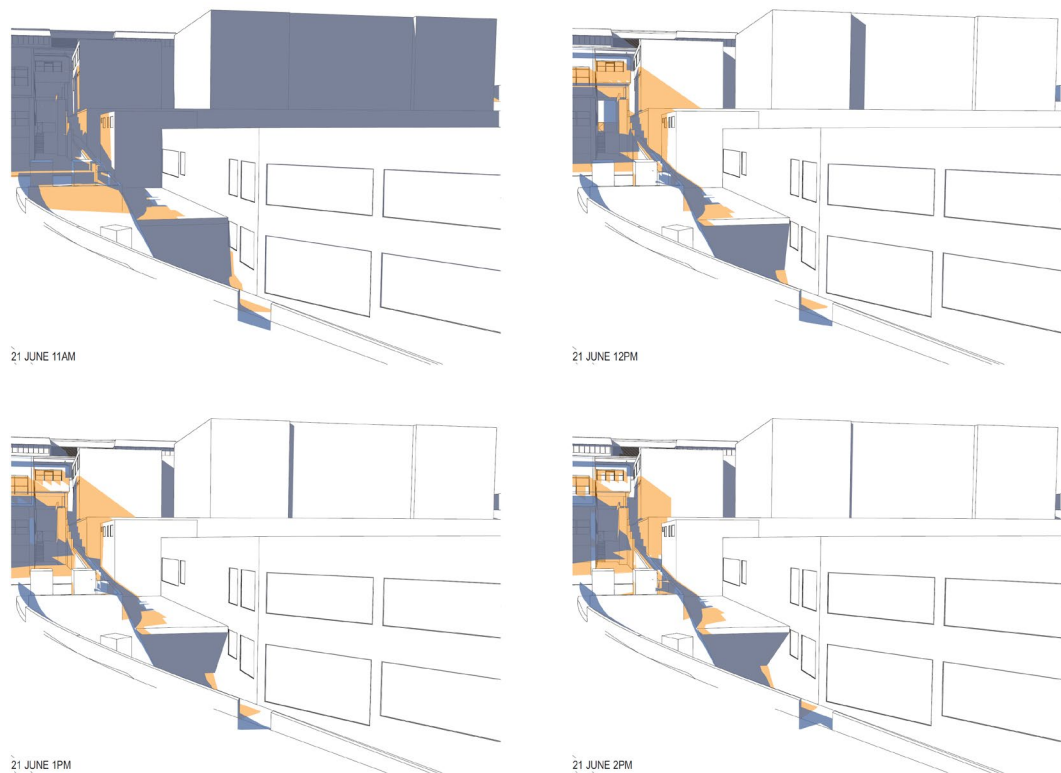


Figure 40 Shadow Diagrams – neighbouring properties

The proposal will not give rise to change to the existing solar access and overshadowing conditions at either the 210 Headland Road or 224 Headland Road sites.

Visual Privacy

800 Pittwater Road is situated within a visual setting which incorporates the Stoney Range Botanic Garden, industrial development and the intersection of Pittwater Road and Warringah Road with commercial and residential development beyond. The only potential for impacts upon visual privacy are those with the immediately adjoining industrial properties, however there are no close or aligned glazed facades between these elements and therefore the privacy of users of both sites will be maintained.

There is no impact to the privacy of residential properties located to the west of the 800 Pittwater Road site due to the separation and vegetation which exists.

The proposal will not alter the existing visual privacy amenity or give rise to new visual privacy impacts between both the 210 and 224 Headland Road sites and their neighbours.

Views and Visual Impact

800 Pittwater Road is a prominent landmark building located at the intersection of Pittwater, Warringah and Harbord Roads. A view analysis has been undertaken by TZG Architects within the Architectural Design Report (**Appendix 7**) to provide a comparison between the existing and proposed views from key vantage points. These views include the existing and proposed view from the intersection of Pittwater Road and Warringah Road (**Figure 41**) and the existing and proposed view from the western side of Harbord Road (**Figure 42**). The visual analysis demonstrates that the proposed development is consistent with the built form and scale to the existing development and the surrounding industrial precinct; reinstates the significance of clock tower; and provides a positive contribution to the streetscape.

The proposed development does not impact on any significant views or view corridors. Views to and from the heritage item are maintained.

6 Environmental Assessment



Figure 41 Existing and proposed view of the proposed development at the intersection of Pittwater Road and Warringah Road



Figure 42 Existing and proposed view from the western side of Harbord Road

6 Environmental Assessment

6.6.5 Transport and Accessibility

A Parking and Traffic Assessment Report has been prepared by Varga Traffic Planning (VTP), which is provided at **Appendix 24**. The objective of the Parking and Traffic Assessment Report is to assess the traffic and parking implications of the proposed development in response to the SEARs requirements for Transport and Accessibility.

Existing Traffic Conditions

210 Headland Road

On 19 September 2019, VTP undertook a survey of the traffic and parking demands generated by the existing school at 210 Headland Road during both the 2 hour AM school peak period (7am to 9am) and 2 hour PM school peak period (2:30pm to 4:30pm). Traffic generated by the school outside of these periods is minimal. The survey revealed that:

- During the AM school peak period:
 - 144 students travelled in 9 buses, including a total of 50 senior school students (Years 10 – 12); and
 - 373 students were dropped-off by 275 cars, including a total of 68 senior students dropped-off by 60 cards.
- During the PM school peak period:
 - 271 students travelled in 10 buses, including a total of 50 senior school students; and
 - 208 students were picked up by 143 cars, including a total of 33 senior school students picked by 30 cars.

Based on this survey, the following traffic generation rates were identified:

- Typical bus occupancy rates:
 - 18 students per bus during the AM school peak period;
 - 27 students per bus during the PM school peak period;
- Typical car occupancy rates:
 - 1 vehicle/1.55 students during the AM school peak period; and
 - 1 vehicle/1.45 students during the PM school peak period.

Therefore, VTP calculated that the cumulative daily traffic generation potential of the existing school, including the staff, is 1,126 vehicles (vpd) per day comprising 563 vpd to the school and 563 vpd from the school.

The following traffic generation rates were identified for the existing school (vehicles per hour/student) that distinguishes between younger students (K – Y9) and senior school students (Y10-12) (**Figure 43**). It is noted that senior students generate substantially less traffic on a per student basis than younger students.

Existing School Traffic Generation (vehicles per hour/student)						
	AM Peak Hour			PM Peak Hour		
	IN	OUT	TOTAL	IN	OUT	TOTAL
K-Y9	0.273	0.273	0.545	0.160	0.160	0.319
Y10-Y12	0.172	0.172	0.343	0.086	0.086	0.172

Figure 43 School traffic generation rates.

6 Environmental Assessment

The school has developed a comprehensive Traffic Management Plan (Appendix A of the Traffic and Parking Assessment) that details the drop-off and pick-up operations at the school. This includes the management and supervision of private vehicle and bus pick-up and drop-off during the school's AM and PM peak periods. The school's Traffic Management Plan is required to be implemented in accordance with Development Consent for MOD2018/0412 (a copy of this consent is provided in **Appendix 2**).

224 Headland Road

Traffic surveys were undertaken of the existing site access driveway at 224 Headland Road by VTP. Based on this, there are currently a total of 201 vehicles per day generated by the existing uses on the site between 6am and 6pm on weekdays. This includes 23 vehicle movements between 7:30am and 8:30am (1 hour AM school peak) and 16 vehicle movements between 3:00pm and 4:00pm (1 hour PM school peak).

800 Pittwater Road

VTP surveys of the existing two way traffic flows using the site access driveway to 800 Pittwater Road demonstrated that during the 1 hour AM school peak period (7.30am – 8.30am) there was 170 vph (92 vph in and 72 vph out). During the 1 hour PM school peak period (3.00pm – 4.00pm) there was a total of 244 vph using the access driveway (131 vph in and 113 vph out). During the 12 hour period from 6.00am to 6.00pm the total two way traffic flows using the existing access driveway was 2,931 vehicle movements, including 17 heavy vehicle movements.

It is noted that existing use of the site for Fitness First and Officeworks generates additional traffic before 6am and after 6pm.

Intersections

Traffic surveys were undertaken at the nearby intersections of Pittwater Road/Warringah Road/Harbord Road and Harbord Road/Headland Road. These surveys were undertaken to gain an accurate appreciation of the existing traffic conditions of the road network in the vicinity of the site and to assess the impact of the proposed development on the operation of these intersections. An analysis using the SIDRA traffic modelling programme found that the Pittwater Road/Harbord Road intersection currently operates at Level of Service (Los) 'D' with a total average vehicle delays in the order of 49 seconds/vehicle. The Harbord Road/Headland Road intersection currently operates at LoS A with total average vehicle delays in the order of 10.6 and 5.9 seconds/vehicle respectively.

Traffic Generation

The RMS publication *Guide to Traffic Generating Development* (2002) does not identify a traffic generation rate for educational establishments. Therefore, traffic generation rates were based on the rates outlined in **Figure 43**.

210 Headland Road

At the completion of Stage 3 of the proposed development, there is proposed to be a total of 1,000 students (K-Year 9) enrolled at the existing school campus at 210 Headland Road. As a result of the change in the student mix, the daily traffic generation of the school is projected to increase by 89 vpd to 1,215vpd. This includes an additional 25 drop-offs during the 1 hour AM school peak and an additional 22 pick-ups during the 1 hour PM school peak. This is because students in K-Y9 generate more vehicle trips compared to senior school. Nevertheless, a capacity analysis of the nearby intersections and road network confirms that this will not have any unacceptable traffic implications in terms of road network capacity. Drop-off and pick-up at the existing campus will be managed by the school in accordance with the principles identified in the school's Traffic Management Plan.

6 Environmental Assessment

224 Headland Road

224 Headland Road is proposed to be used as a sports centre (for both school and community use). Parking at 224 Headland Road is to be used for Year 12 students during school hours. Parking for the community use of the sports centre (after school hours and on Saturdays) is proposed to be located at 800 Pittwater Road.

The proposed development is anticipated to increase the number of vehicle movements during the AM and PM school peak periods (by 18 vph during the AM school peak and 25 vph in PM school peak)), overall, the number of vehicle movements is expected to decrease from 201 vehicles per day to 78 vehicles per day. This is a reduction in the overall volume of traffic generated by uses on the site and therefore are unlikely to impact on traffic movements associated with businesses located at 222 Headland Road.

800 Pittwater Road

A comparison between existing and projected traffic flows for 800 Pittwater Road at the completion of the Stage 3 works indicates that during the 1 hour AM school peak period, traffic movements will increase by 96 vph when compared to the existing uses of the site. However, during the 1 hour PM school peak period, traffic movements will decrease by 80 vph.

Parking for the after-hours use of the sports centre (224 Headland Road) and swimming pool (800 Pittwater Road) is proposed to be accommodated at 800 Pittwater Road. Based on the use of the pool for up to three (3) swim school classes and squad training sessions, it is anticipated that this use could generate approximately 85 vehicles per hour between 4pm and 7pm. Community use of the basketball courts is expected to be used by 10 persons per court. Based on a vehicle occupancy rate of 1.2 people / vehicle, the use of the sports centre is anticipated to generate approximately 33 vph between 4pm and 7pm.

Therefore, the daily traffic generation of 800 Pittwater Road at the completion of Stage 3 is expected to be 508 vehicles per day (including student and staff parking) plus an additional 232 vehicles per day associated with the after hours uses. This results in a cumulative daily traffic generation for the site of 740 vpd. This represents a substantial reduction in the daily traffic generation potential of the site from 2,931 vpd to 740 vpd.

Overall, the use of 800 Pittwater Road as a seniors school campus will result in significantly reduced traffic generation from this site.

Intersections

Before/after SIDRA capacity analysis of the Pittwater Road/Harbord Road/Warringah Road and Harbord Road/Headland Road intersections has found that both intersections will continue to operate at current Levels of Service, with minimal increases in total average delays upon completion of the senior school campus on 800 Pittwater Road. Therefore, it is concluded that the proposed development will not have any unacceptable traffic implications in terms of the road network capacity and no road upgrades or intersection improvements are required.

School Zone

There is currently a 40km/hour school speed limit around the perimeter of the existing school site in Headland Road, Quirk Street and Tango Avenue. It is anticipated that this 40km/hour zone will be extended to the west to incorporate the vehicular and pedestrian entrances of 224 Headland Road.

Whilst strict application of the RMS Technical Direction TDT2003/RS02 suggests that a 40 km/h School Zone speed limit would be required on all four approaches to the Pittwater Road/Harbor Road intersection, the need to implement a 40 km/h School Zone speed limit as a result of the use of 800 Pittwater Road for the purposes of a school is mitigated by the following factors:

6 Environmental Assessment

- the pedestrian-only gate located at the north-western corner of the site frontage provides pedestrian access to the public footpath only. It is not possible for pedestrians on the footpath to access the road pavement due to the 2m high concrete retaining wall topped by a pedestrian fence; and
- the pedestrian entrance proposed on the south-western corner of the site in Harbord Road will be located directly opposite the signalised pedestrian crossings at the Pittwater Road/Harbord Road intersection which provide access to the bi-directional bus stops for regular bus services on Pittwater Road.

Therefore, whilst in general terms, use of a new site for the purposes of a school might justify 40km/hour signage, in this instance it is not considered warranted on Pittwater Road, Harbord Road and Warringah Road.

Notwithstanding, a SIDRA capacity analysis of the Pittwater Road/Harbord Road intersection was undertaken assuming that a 40km/hour School Zone speed limit applied to all four approaches. This analysis indicates that the intersection will continue to operate at LoS D with total average vehicle delays of 52 seconds/vehicle. Therefore, if a 40km/h School Zone speed limit was applied to 800 Pittwater Road, it would have little impact on the operation of the intersection.

Access and Parking

210 Headland Road

There are no proposed changes to the access arrangements or existing number of parking spaces at 210 Headland Road, comprising 112 spaces for staff and 17 spaces for students (total of 133 spaces).

224 Headland Road

Vehicular access to 224 Headland Road is via a steep driveway from Headland Road. This driveway is shared with 222 Headland Road.

No changes are proposed to this vehicular access. A new path and stairs will be constructed to provide pedestrian access to 224 Headland Road from the Headland Road pedestrian footpath. The path and stairs were approved on 22 February 2020 as part of a separate development application to Northern Beaches Council (DA 2019/0877).

There are currently 45 car parking spaces (including one (1) accessible car parking space) located at 224 Headland Road. The number of spaces will be reduced by four (4) spaces to 41 spaces (including 2 accessible spaces). This parking is to be used by Year 12 students.

Occasionally, it might be necessary to transport students to the sports courts by bus. This will be undertaken using a minibus such as a Toyota Coaster or similar sized community bus. Swept turning path analysis undertaken by VPT confirms that these minibuses can be accommodated at both sites, and that they will be able to enter and exit both sites in a forward direction.

800 Pittwater Road

The existing ingress/egress driveway from Harbord Road to 800 Pittwater Road will be retained.

There is currently a total of 182 parking spaces at 800 Pittwater Road. This comprises 94 car parking spaces in the basement carpark (including two (2) accessible car parking spaces) and 88 on-grade car parking spaces (including two (2) accessible car parking spaces).

As part of the Stage 2 works, parking at 800 Pittwater Road will be reduced to a total of 131 spaces comprising:

- 73 basement car parking (including two (2) accessible spaces);

6 Environmental Assessment

- 51 at-grade parking spaces (including one (1) accessible space); and
- 7 pick-up / drop-off drop off spaces.

Forty (40) of these spaces will be for the use of Officeworks and the remaining 91 spaces will be for drop-off/pick-up (7 spaces), visitors (9 spaces), staff (60 spaces) and Year 12 students (15 spaces).

At the completion of Stage 3, parking on site will be further reduced to a total of 91 spaces. This comprises 76 car parking spaces (including two (2) accessible spaces) located within the basement and 15 at-grade car parking spaces located adjacent to the southern boundary. 60 of these car parking spaces will be provided for staff, in accordance with the parking rates in Council's DCP. Five (5) spaces will be allocated to visitors with the reminder to be used by Year 12 students.

The proposed car parking at 800 Pittwater Road represents a balance between the RMS request to reduce car parking at 800 Pittwater Road, whilst still achieving the Council's DCP parking rates and minimising the impacts on parking within the surrounding streets.

12 pick-up and drop-off spaces will be provided within the forecourt for use during the AM and PM school peak periods. This area can also be used by buses. Outside of pick-up and drop-off times, the area will be secured and will form part of the school's play area.

Analysis of the survey data indicates that a drop-off/pick-up capacity of 2 to 4 cars will be required in Stage 2, increasing to 3 to 5 cars in Stage 3.

The drop-off/pick-up facility proposed on the senior campus will have a capacity of 7 spaces in Stage 2, increasing to 12 spaces in Stage 3.

Queueing for a further 5 cars is provided on the driveway approaching the drop-off/ pick-up bay in both stages without impeding other traffic flows entering the site, and without extending beyond the property boundary.

Thus, the drop-off/pick-up bay proposed on the senior campus site at the completion of Stage 3 will substantially exceed projected future demands at all times.

Green Travel

A Green Travel Plan (GTP) has been prepared by VPT (**Appendix 25**). The GTP outlines proposals to encourage sustainable and alternative travel choices based on the following objectives:

- Reducing dependence on private cars;
- Improving pedestrian and cycling facilities;
- Promoting public transport; and
- Reducing congestion in the local area.

The GTP has been prepared in accordance with the City of Sydney's *Guide to Travel Plans*. It has also been prepared with regard to Council's transport plan 'Move – Northern Beaches Transport Strategy 2038', which aims to provide real alternatives to help break the community's reliance on cars over the next 20 years.

Based on surveys undertaken in September, the GTP identifies the following existing transport modal split for staff, senior school students and junior/middle school students (**Figure 44**).

6 Environmental Assessment

Main Method of Travel	Modal Split (Teachers)		Modal Split (Students Years 10-12)		Modal Split (Students Years K-9)	
	Number of Trips	% of Total Trips	Number of Trips	% of Total Trips	Number of Trips	% of Total Trips
Vehicle - Driver	118	94.4%	47	15.5%	N/A	N/A
Vehicle - Passenger	2	1.6%	68	22.4%	305	42.4%
Bus	3	2.4%	50	16.5%	94	13.1%
Bicycle	N/A	N/A	16	5.3%	N/A	N/A
Walk	2	1.6%	122	40.3%	320	44.5%
TOTAL	125	100%	303	100%	719	100%

Figure 44 Existing transport modal split

The GTP identifies the following target transport modal split (**Figure 45**).

Main Method of Travel	Modal Split (Teachers)		Modal Split (Students Years 10-12)		Modal Split (Students Years K-9)	
	Existing Modal Split	Target Modal Split	Existing Modal Split	Target Modal Split	Existing Modal Split	Target Modal Split
Vehicle - Driver	94.4%	90%	15.5%	11%	N/A	N/A
Vehicle - Passenger	1.6%	5%	22.4%	18%	42.4%	40%
Bus	2.4%	3%	16.5%	18%	13.1%	15%
Bicycle	N/A	N/A	5.3%	6%	N/A	N/A
Walk	1.6%	2%	40.3%	47%	44.5%	45%
TOTAL	100%	100%	100%	100%	100%	100%

Figure 45 Target transport modal split

These targets seek to reduce car usage and increase bus patronage to take advantage of the extensive bus network that is available in the vicinity of the site. The proposed development will provide improved connectivity and accessibility to both the regular and express bus services along Pittwater Road. End-of-trip facilities and bicycle parking facilities located at 800 Pittwater Road will encourage cycling and walking for senior school students.

The GTP identifies a series of actions that can be implemented to achieve the desired transport modal split. These actions should be regularly monitored, with a review of the progress of the targets undertaken half yearly. This monitoring includes regular travel mode surveys and the establishment of a Travel Plan Coordinator, who will have responsibility for the GTP.

Through the implementation of the GTP, the traffic generation potential of the site will be further reduced.

6.6.6 Ecologically Sustainable Development

An Ecological Sustainable Development (ESD) report has been prepared by Wood & Grieve Engineers (**Appendix 28**) that provides an overview of the proposed Ecologically Sustainable Development (ESD) principles and sustainability initiatives proposed for the proposed senior school campus and sports centre development. As noted in **Section 4.12**, it is proposed to achieve a minimum 4 star Green Star (Design & As Built Certification) for 800 Pittwater Road, consistent with Australian Best Practice sustainable building principles.

In addition to identifying ESD and environmental initiatives in accordance with Green Star framework, the ESD report includes an assessment against the NSW Government Architect – Environmental Design in Schools Guideline, Council's DCP and the performance requirements of Section J of the National Construction Code (NCC) 2019. The ESD report also provides an assessment of project risks against the predicted impacts of Climate Change.

6 Environmental Assessment

The ESD report finds that ecologically sustainable design is a driving consideration in the design and operation of the proposed development. Key ESD initiatives incorporated into the design include:

- Adaptive re-use of existing buildings and conservation of heritage fabric;
- Upgrade of external facades to improve thermal performance;
- New saw tooth roof structure to provide natural daylight into internal spaces and reduce reliance on artificial lighting;
- Removal of bitumen and hardstand and increase the landscaped area;
- Use of light-coloured roofing to minimise heat island effects;
- Use of 'stack effect' to naturally ventilate circulation spaces and Village Centre; and
- Provision of sun shading to northern and western glazing.

6.6.7 Social Impacts

A Social Impact Assessment (SIA) has been prepared by Sarah George Consulting to provide an assessment of the social impacts of the proposed development including the impacts of the redistribution of the senior school students from the existing school campus at 210 Headland Road to the new senior school campus (**Appendix 9**). The SIA provides the following:

- Description of the existing sites and the proposed development;
- Review of the socio-economic and demographic characteristics of the suburbs of Dee Why and North Curl Curl, the Northern Beaches LGA and Greater Sydney;
- Summary of the community consultation that has been undertaken during the preparation of the SSDA;
- Identification of the likely changes to that population brought about by the proposed development;
- Assessment of the potential social impacts of the proposed development and whether these potential social impacts are likely to be short or long term; and
- Assessment of whether the development is likely to generate unreasonable or unexpected social impacts to the local community, when balanced against the potentially positive social impacts generated.

The assessment of the social impact of the proposed social impact of the proposed development was undertaken against the following criteria:

- Population change;
- Housing;
- Access and mobility;
- Community recreation, facilities, and links;
- Cultural values and beliefs;
- Community identity and connectedness;
- Health and wellbeing;
- Crime and safety;
- Local economy and employment;
- Amenity; and
- Public interest.

6 Environmental Assessment

In addition, to these matters of consideration, any issues raised during the consultation process have also been addressed as part of the SIA.

The SIA identifies that the proposed development is unlikely to generate any long term negative social impacts that require mitigation. Short term negative impacts are likely to be associated with the excavation and construction of the school. However, these impacts can be appropriately managed and mitigated through conditions of consent.

The Operational Plan of Management prepared by St Luke's Grammar School (**Appendix 37**) provides strategies for the management and operation of the school, including student movement between the campuses to ensure student safety and to minimise potential disturbance to nearby residential dwellings. It is proposed that student enrolments at the senior school campus will gradually increase from 360 senior school students and 36 full-time-equivalent (FTE) at the completion of Stage 2, to 480 students and 48 FTE by 2030. At the completion of Stage 3, the school will have capacity of 600 senior school students and 60 FTE staff. This gradual increase in student numbers will mean that negative impacts can be appropriately managed and the proposal will not result in any adverse social implications for the surrounding area.

6.6.8 CPTED Assessment

Crime Prevention Through Environmental Design (CPTED) consists of four (4) universal design principles, which are aimed at assessing crime risk and reducing preventable risk before a development is approved. The proposed development has been designed to have regard to CPTED principles as assessed below.

Principle 1 – Surveillance

The proposed development orientates active areas such as building entrances, learning precincts and open spaces towards the surrounding roads, driveways, pedestrian paths and carparking to provide opportunities for passive surveillance. Low level landscape and the use of security lighting ensure the maintenance of sight lines across the site.

CCTV will provide monitoring of building entrances and internal areas for the whole campus.

Principle 2 – Access Control

Access to and within the site will be managed through the use of security fencing and monitored entry points. All visitors to the school are required to sign-in with the administration office. Access from 224 Headland Road, via the vertical connection to 800 Pittwater Road will be controlled using keypad or swipe card access. After-hours access to the Wellness Centre and Sports Centre will be managed by the school.

The existing topography, along with the building and landscaping of the site assists with access control.

Directional signage and design features will facilitate legibility and direct all site-users across the site.

Principle 3 – Territorial Reinforcement

Separation between public and private spaces is clearly delineated through the use of fencing and boundary treatments. Well-maintained gardens and landscaping will indicate that the school is well cared for. During school days and hours, the school will be heavily used by staff and students. After hours and during school holiday periods, access to the school will be restricted.

Principle 4 – Space Management

Space management strategies include activity coordination, site cleanliness, rapid repair of vandalism and graffiti, the replacement of lighting and the removal or refurbishment of decayed physical elements. The use of high-quality materials, varied façade treatments and landscaping will assist in discouraging vandalism and graffiti.

6 Environmental Assessment

In addition, a detailed assessment of the proposal against the CPTED principles is included in the SIA prepared by Sarah George (**Appendix 9**). Both the SIA and the Staging Report prepared by DFP (**Appendix 8**) describe the careful consideration given to CPTED principles during the staging of the proposed development, when the school and Officeworks are co-located at 800 Pittwater Road. The development incorporates short term measures during Stage 2 to ensure the safety of students and prevent any unauthorised access.

Overall, the upgrade to the buildings will assist in improving the presentation of the school, which will improve the amenity, casual surveillance and ultimately public safety and sense of security within the site and surrounding precinct.

6.6.9 Noise and Vibration

Day Design has prepared three (3) reports that assess the noise and vibration impacts of the proposed development:

- Environmental Noise Assessment (**Appendix 33**);
- Traffic Noise Intrusion Assessment (**Appendix 34**); and
- Construction Noise & Vibration Management Plan (**Appendix 35**).

Each of these reports is discussed in the sections below.

Environmental Noise Assessment

The Environmental Noise Assessment (ENA) Report that identifies and assesses potential noise emissions from the proposed development, and outlines measures to minimise and mitigate the potential noise impacts on surrounding land uses and development.

The ENA has been prepared in accordance with the following policies and guidelines:

- EPA's *Noise Policy for Industry 2017*;
- EPA's *NSW Road Noise Policy*; and
- Education SEPP (in particular Design Quality Principle 5 – Amenity).

The policies and guidelines were used to establish specific noise criteria for the project. Criteria was established based on the operation of the school between 6am and 10pm. In addition, daytime and evening ambient noise levels were measured at three locations to provide an understanding of the existing background noise levels.

A total of 10 noise sensitive receptors were identified within the vicinity of the site including residential, industrial, and recreational land uses (**Figure 46**).

6 Environmental Assessment



Figure 46 Location of Sensitive receivers

The potential noise emission sources from the school included the public address system and school; outdoor play areas; general and speciality learning areas; mechanical plant; enclosed basketball courts, auditorium, and vehicle movements. The assessment considered the staging of the project including the acoustic impacts on the existing commercial tenants at 800 Pittwater Road (Sensitive receptors R9 and R10).

The ENA concluded that the proposed development will have an acceptable impact on the acoustic amenity of the locality. This is subject to the following noise control recommendations:

- **Management Procedures:** Deliveries to the school to only occur between 7am and 6pm. Ground maintenance, such as leaf blowing or grass cutting, to only occur during the hours of 7am and 6pm.
- **Mechanical Plant:** Whilst the specifications of the mechanical plant have not been finalised, the ENA provides recommendations in relation to the maximum sound power levels of any equipment. It is recommended that following plant selection, a detailed acoustic assessment should be undertaken.
- **Common Wall:** In order to ensure that the school operations do not impact on the Officeworks tenancy that will remain operational whilst Stage 2 is used as a senior school campus, the common wall between the Stage 2 development and Officeworks should be maintained. If any noise transfer does occur, this wall may need to be acoustically treated.

6 Environmental Assessment

Traffic Noise Intrusion Assessment

As discussed in **Section 6.4.3** of the EIS, a Traffic Noise Intrusion Assessment (TNIA) Report was prepared to assess the impacts of noise and vibration on the operation of the proposed educational establishment. The assessment found that a 1.8m high noise barrier wall is required to be constructed along the Pittwater Road frontage. The noise barrier wall is required to be constructed in two (2) stages that correspond to Stages 2 and 3 of the proposed development.

Even with the installation of the noise barrier wall, additional acoustic treatments are required including minimum construction specifications for external walls; external glazing and glazed doors; and mechanical ventilation systems. Based on the adherence to the acoustic recommendations outlined in the report, the TNIA concludes that the internal noise levels will comply with requirements of *Development Near Rail Corridors and Bush Roads – Interim Guidelines* (Department of Planning 2008) and EPA's *NSW Road Noise Policy*.

6.6.10 Stormwater Drainage and Flooding

Stormwater Drainage

Northrop Consulting Engineers have prepared a comprehensive Civil services and stormwater design package for the proposed development, including the preparation of a Stormwater Management Report (**Appendix 21**).

224 Headland Road

The existing stormwater system for 224 Headland Road, comprises a combination of in-ground and suspended pipe and pit system. This network runs from the most northern part of the carpark, towards the south and discharges into a kerb inlet pit on Headland Road. The existing overland flow path generally follows the existing in-ground stormwater system.

Given that the existing building and car park will remain on this site, no changes to the existing stormwater drainage for 224 Headland Road is required.

800 Pittwater Road

The existing stormwater system at 800 Pittwater Road comprises two (2) in-ground pit and pipe systems that run into two (2) separate OSD tanks. Stormwater from the northern part of the site leads to an OSD tank located beneath the existing carpark within the building forecourt. This OSD tank has an approximate volume of 130m³. Stormwater from the roof runs into the second OSD tank located to the south of the existing building adjacent to the existing loading dock. The volume of the second OSD tank is unknown. Both OSD tanks and associated discharge control pits connect via an in-ground pit and pipe systems along the entry driveway before discharging to Council's stormwater main via a kerb inlet pit on Harbord Road.

During the Stage 2 works, stormwater run-off will be captured and conveyed predominately via the existing stormwater drainage system into one the existing OSD tanks.

For the Stage 3 works the inground pit and pipe system will predominantly be new infrastructure located and sized to suit the reconfigured carpark. The proposed Stage 3 works will include replacement of the existing loading bay with new carparking spaces and a new entrance into the existing basement carpark by lowering the existing surface level. This work conflicts with the existing loading bay OSD tank and as such this tank will be demolished. To achieve Council's OSD requirements, the underground OSD tank to the west of the building will be extended to provide a larger tank servicing the overall catchment. A 183m³ OSD storage system has been designed to ensure post-development discharge is less than or equal to that of pre-development discharge.

6 Environmental Assessment

In accordance with Council's DCP, the project civil engineers (Northrop) have assumed that the pre-development site is fully pervious (notwithstanding that this is not the case in this instance). The OSD tank has been designed such that the peak flows under proposed conditions can be appropriately managed to ensure that the peak stormwater flows do not exceed the pre-development conditions.

In order to meet Council's water quality targets, the proposed water quality treatment train includes proprietary stormfilters and proprietary pit baskets.

Pit baskets have been provided as a pre-treatment to target the pollutant reduction of gross pollutants, litter, grit, sediments and associated oils prior to stormwater discharging into OSD tank where the stormfilters provide tertiary treatment.

Stormwater quality management measures have been modelled using MUSIC software. The results show that the proposed treatments will achieve the water quality targets established by Council's DCP and PL850 – Water Management Policy.

Flooding

Part of the site is located within Dee Why Lagoon South Catchment and part of the site is located within the Curl Curl Lagoon Catchment. A review of the *Dee Why South Catchment Floodplain Risk Management Plan* (Warringah Council 2015) and *Dee Why and Curl Curl Lagoons Floodplain Risk Management Plan* (Lyll & Associates Consulting Water Engineers 2005) indicates that the site is not identified as flood prone land (**Figure 47**). Therefore, further consideration of flooding is not required.

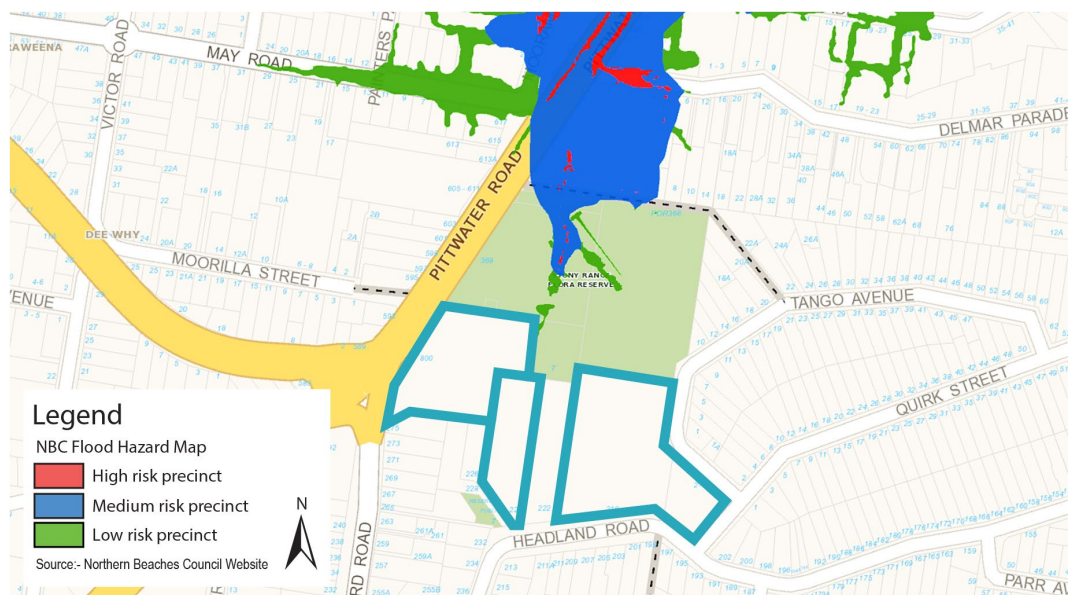


Figure 47 Northern Beaches Council flood hazard map

6.6.11 Biodiversity Assessment

As described in **Section 6.3** of the EIS, a Biodiversity Development Report (BDAR) has been prepared by Eco Logical Australia in accordance with the Biodiversity Assessment Method and as required under Section 6.12 of the BC Act and Clause 6.8 of the Biodiversity Conservation Regulation 2017 (BC Regulation). Under the BAM, one (1) ecosystem credit is required to offset the removal of 0.035ha of PCT 1776_planted (*Smooth-barked Apple – Red Bloodwood open forest on enriched sandstone slopes around Sydney and the Central Coast*).

6 Environmental Assessment

6.6.12 Construction Management

General

A preliminary Construction Management Plan (CMP) has been prepared by Midson Group (**Appendix 27**). The preliminary CMP provides an overall framework to guide the demolition, excavation and construction phases of work in order to ensure impacts are minimised. The final and more detailed CMP to be implemented is the responsibility of the Principal Contractor. The CMP will outline the methodologies for carrying out the work to minimise the impacts of construction activities on project stakeholders, particularly nearby residents, students of St Luke's Grammar School and the broader public who may interface with the project.

The final CMP may include the following supporting documentation:

- Site Management Plan;
- Work Health & Safety Management Plan;
- Environmental Management Plan;
- Air Quality Management Plan;
- Risk Management Plan;
- Traffic Management Plan;
- Industrial Relations Plan;
- Communications Plan;
- Hazardous Materials and Asbestos Management Plan;
- Emergency Management Plan;
- Hazardous Substances Management Plan;
- Waste Management Plan;
- Construction Program; and
- Copy of the Development Consent and approved documentation.

The proposed construction hours are:

- 7:00am – 6:00pm Monday to Friday;
- 7:00am – 5:00pm Saturday; and
- No work to be undertaken on Sundays or Public Holidays.

If required, after hours permits will be sought from the relevant authorities. After hours work may be required for the following reasons:

- Reduce impact on public or nearby residents;
- Emergency event / incident;
- Authority shutdowns or disconnections; and
- Other reasons as required.

Erosion and Sediment Control

A detailed project specific erosion and sediment control plan has been prepared by Northrop Consulting Engineers (**Appendix 21**). Prior to the commencement of works, all erosion and sediment control measures will be implemented on site in accordance with the erosion and sediment control plan and the document *Managing Urban Stormwater – Soils & Construction*

6 Environmental Assessment

Volume 2004 (the Blue Book) (prepared by Landcom). All measures identified for each stage of the construction works will be maintained for the duration of that stage.

Dust Control

An Air Quality Management Plan will be implemented to minimise dust emissions during the construction works. This includes measures such as watering down roads and short-term stockpiles, temporary revegetation of long-term stockpiles, covering loads on all departing trucks and working to weather conditions.

The principal contractor for the works will be responsible for the monitoring, reporting and providing necessary corrective dust control actions in accordance with the requirements of the CMP. This will ensure the protection of workers on-site, the public, the environment and minimising the potential for air pollution within the locality. The proposal is not expected to give rise to any long term or adverse impact on local or regional air quality.

Construction Traffic

A Preliminary Construction Traffic & Pedestrian Management Plan (preliminary CTPMP) has been prepared by VPT (**Appendix 26**). The aim of the CTPMP is to review the traffic and parking arrangements to be implemented during the staged demolition and construction works.

Generally, all demolition and construction vehicles are to be contained wholly within the site. All demolition and construction vehicles are to enter and exit the site in a forward direction via the existing site access from Headland Road or Harbord Road. All materials are to be stored on site. At no time are materials to be stored on Pittwater Road, Harbord Road or any other road or Council property.

RMS-accredited traffic controllers will be present at all times during construction to assist with traffic flows and to ensure pedestrian safety.

Indicative Traffic Control Plans have been prepared for each stage of the works and are included in the preliminary CTPMP. The Traffic Control Plans have been prepared in accordance with the requirements of the RMS's publication *Traffic Control at Works Sites* (2018) and Australian Standard AS1742.3: *Traffic Control Devices for Work Sites on Road*. Key features of the Traffic Control Plans include:

- Advance warning signs alerting approaching traffic and cyclists of the presence of possible road works and traffic controllers ahead;
- Warning signs alerting pedestrians to watch their steps as they walk in the vicinity of the construction vehicular access driveway.
- A-Class Hoarding and/or secure fencing with shade-cloth along the perimeter of the construction zone to prevent unauthorised access of the public; and
- Traffic controllers suited outside the vehicular access driveways off Headland Road or Harbord Road.

The preliminary CTPMP anticipates the following truck movements:

- Stage 1 (224 Headland Road) – average peak of six (6) truck movements per day;
- Stage 2 (800 Pittwater Road) – average peak of 10 truck movements per day; and
- Stage 3 (800 Pittwater Road) – average peak of 10 truck movements per day.

Proposed construction truck routes have been identified for approaching and departing traffic. These routes avoid the use of local roads. In addition, the site manager will endeavour to minimise heavy vehicle movements during school peak periods.

Parking for contractors and construction vehicles will be accommodated on-site, where practical. In addition, construction staff will be encouraged to utilise public or active transport

6 Environmental Assessment

options. There are a number of bus routes servicing Pittwater Road, with the nearest bus stop within 250 metres of the site.

Preliminary Construction Noise & Vibration Management Plan

The Preliminary Construction Noise & Vibration Management Plan (preliminary CNVMP) has been prepared by Day Design to identify and provide a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation and construction (**Appendix 35**). The CNVMP provides an assessment against the following policies, guidelines and standards:

- *Interim Construction Noise Guideline* (DECC);
- *Assessing Vibration: A Technical Guideline 2006*; and
- *Australian Standard AS2436:2010 'Guide to noise and vibration control on construction, demolition and maintenance sites'*.

The preliminary CNVMP provides an assessment of the noise and vibration generated by the demolition and construction activities at each stage of the works.

The main sources of noise during the works are associated with excavation, demolition and construction, including noise associated with construction traffic. The main source of vibration will occur during the excavation phases of works.

Day Design estimates that there will be periods where the noise generated as a result of the demolition, excavation and construction activities will exceed acceptable standards at some of the sensitive receiver locations. These exceedances can be mitigated through the implementation of recommended noise control measures. These noise control measures are recommended to be incorporated into the CMP and are to be implemented during construction to minimise the noise impacts associated with these activities, including:

- Limiting the duration of noise generating activities to 2 -3 hours in order to provide respite to affected receivers.
- Following the noise management controls as detailed in AS2436:2010 and the EPA's *Interim Construction Noise Guideline*.
- Implementing work practices which will minimise noise emissions.
- Locating vehicular entrances to work sites away from residences, if practicable.
- Limiting access to work sites before 7am.
- Appointing a community liaison officer to maintain open communication with the community.

In relation to vibration impacts, the preliminary CNVMP recommends that ground vibration monitoring be undertaken. In the event, of any rock hammering or internal jackhammering, it is recommended that vibration measurements are carried out using a vibration monitor. An unattended vibration monitor should be fitting with an alarm to make the plant operator immediately aware when the vibration limit is exceeded. The vibration monitor should be set to trigger the alarm with the overall Peak Particle Velocity (PPV) exceeds 15mm/second at the nearest residential building or 50mm/second at the nearest industrial building.

The preliminary CNVMP also recommends the commissioning of dilapidation reports for potentially affected residential and industrial premises.

Demolition and Construction Waste

A Demolition & Construction Waste Management Plan (DCWMP) has been prepared by Waste Audit & Consultancy Services (Aust) Pty Ltd to provide guidance on the management of general waste and recyclable materials that will be generated during the demolition and construction phases (**Appendix 31**). The DCWMP provides a review against the requirements

6 Environmental Assessment

of Australian Standard AS2601-2001: *The Demolition of Structures* and Section 143 of the *Protection of the Environment Operations Act 1997*.

The DCWMP provides an estimate of the waste generated during Stage 1 and during Stages 2 and 3. The majority of demolition and construction waste will be capable of being reused or recycled off-site at specialised facility.

Principles for the demolition work plan have been identified as part of the DCWMP. Appropriate locations for materials, recycling and waste stockpiles will be identified as part of the final Construction Management Plan to be prepared by the appointed contractor(s).

6.6.13 Waste

An Operational Waste Management Plan (OWMP) has been prepared by Waste Audit & Consultancy Services (Aust) Pty Ltd to provide guidance on the management of operational general waste and recyclable materials (**Appendix 32**). The OWMP identifies three streams for operational waste and recycling:

- General Waste;
- Cardboard & paper recycling; and
- Co-mingled recycling (all mixed plastic bottles and containers, glass bottles and steel and aluminium cans).

The following waste generation rates have been based on typical waste and recycling generation rates for the specific educational uses which will be provided as part of the proposed development:

- Basketball Courts / Gym:
 - General Waste = 110.2 litres/day;
 - Paper/Cardboard recycling = 66.1 litres/day;
 - Co-mingled Recycling = 44 litres/day;
- Clothing Store:
 - General Waste = 3.9 litres/day;
 - Paper/Cardboard recycling = 5.2 litres/day; and
 - Co-mingled Recycling = 1.3 litres/day.
- Teaching / Office / Support / Administration:
 - General Waste = 10L/Day per 100m² of GFA;
 - Paper/Cardboard recycling = 7L/Day per 100m² of GFA;
 - Co-mingled recycling = 3L/Day per 100m;
- Café (for student and staff only):
 - General Waste = 10L/Day per 100m² of GFA;
 - Paper/Cardboard recycling = 6L/Day per 100m² of GFA; and
 - Co-mingled recycling = 3L/Day per 100m² of GFA.

224 Headland Road

Based on the above waste generation rates, the operation of 224 Headland Road (Stage 1) will require:

- 1 x 1100L bin for general waste to be collected twice a week;
- 1 x 660L bin for paper /cardboard recycling to be completed twice a week; and

6 Environmental Assessment

- 1 x 660L bin for co-mingled recycling to be collected once a week.

A dedicated bin storage enclosure (approximately 12m²) is to be located in the carpark. The enclosure will be screened. Waste removal will be undertaken by a specialist contractor.

No dedicated storage facility for bulky or reusable waste will be provided as it will be removed subject to special arrangements with the waste contractor. The waste contractor will also undertake regular bin washing.

Designated bins will be located throughout 224 Headland Road for the use of staff and students. The purpose of the designated bins will be clearly identified, whether for general waste, paper / cardboard recycling or commingled recycling. Cleaners will collect the material daily and transfer to the bulk waste bins within the storage area. The specialist waste contractor will then service the bins in accordance with the schedule.

800 Pittwater Road

During stage 2, a temporary bin storage area has been identified at the southern site boundary adjacent to the Officeworks loading dock.

At the completion of Stage 3, the senior school campus on 800 Pittwater Road will require:

- 4 x 1100L bins for general waste to be collected three times a week;
- 4 x 1100L bins for paper/cardboard recycling to be collected twice a week; and
- 4 x 660L bins for co-mingled recycling to be collected twice a week.

The bin storage area will be located within the basement adjacent to the relocated car park entry, to the south of the building. The room has adequate space for circulation between bins and for bin movement in and out of the room. In addition, there is an area for bulky and/or reusable waste, along with a dedicated bin wash area.

Three-stream bins will be located across the campus for staff and students to dispose of waste. This waste will be transferred by cleaning staff to the temporary bin storage location before it is collected by the waste contractor in accordance with the agreed schedule.

The largest truck expected to access the site will be a medium sized rigid truck for garbage collection. This vehicle will service the site on an after-hours basis only when the school is closed, consistent with the existing garbage collection arrangements at the existing school campus.

6.6.14 Staging

A detailed Staging Report has been prepared by DFP Planning to provide details regarding the staging of the proposal including the identification of the potential environmental impacts associated with each stage of the proposed development and a description of the measures proposed to mitigate any potential adverse impacts for each stage (**Appendix 8**).

The Staging Report concludes that, subject to the implementation of the recommended mitigation measures, the works are able to be undertaken in a manner which will allow for the continued operation of other tenants on the site (in the case of 800 Pittwater Road) and will ensure impacts on adjoining and nearby businesses and residents are appropriately managed during both the construction phases of work and once the school is operational.

6.6.15 Contributions

The *Northern Beaches Section 7.12 Contributions Plan 2019* (Section 7.12 Plan) applies to all development in the Northern Beaches LGA except for development located within the Dee Why Town Centre or Warriewood Valley Release Area and development exempted under Section 2.5 of the Section 7.12 Plan. Types of exempt development include:

- *Development of the purpose of the adaptive re-use of an item of environmental heritage.*

6 Environmental Assessment

The proposed development does include adaptive re-use of an item of environmental heritage; therefore a portion of the proposed development may be exempt from the payment of development contributions.

Under the Section 7.12 plan, contributions are payable based on a percentage of the proposed cost of the development. As the works, have a development cost that exceeds \$200,000, the maximum contribution payable will be 1% of the cost of works (see Section 7.12 levy rates below)

Development Type	Levy Rate
Up to and including \$100,000	Nil
More than \$100,000 and up to and including \$200,000	0.5% of that cost
<u>More than \$200,000</u>	<u>1% of that cost</u>

It is acknowledged that a condition of any subsequent consent issue may impose the payment of contributions to Council in accordance with the Section 7.12 plan.

6.7 Suitability of the Site for Development

The following subsections assess the suitability of the Site in accordance with Section 4.15(1)(c) of the EP&A Act.

6.7.1 Contamination, Salinity and Acid Sulfate Soils

Contamination

Site contamination matters have been addressed in **Section 6.4.4** of this EIS. A PSI and DSI have been prepared by Martens Consulting Engineers (**Appendices 17 & 18**). The DSI concludes that the site has a low risk to human receptors and that the site does not require further investigation or remediation.

In addition, the planning certificates obtained for the 210 and 224 Headland Road and 800 Pittwater Road (**Appendix 3**) also state that the land is not identified as significantly contaminated land under the *Contaminated Land Management Act 1997*.

Hazardous Materials

224 Headland Road

An Asbestos Survey was undertaken by Solutions in Engineering in 28 October 2016 in relation to the existing building at 224 Headland Road (**Appendix 19**). The Asbestos Survey found that no asbestos or asbestos containing materials (ACM) were found on site. In the event the ACM is identified on site, then an updated survey should be prepared, along with an Asbestos Register and Asbestos Management Plan.

800 Pittwater Road

A Hazardous Building Materials Survey was prepared in August 2005 in relation to the Officeworks (Units 2 and 4) by Hibbs & Associates (**Appendix 19**). The visual inspection survey included an audit of the following hazardous building materials including:

- Asbestos containing materials;
- Synthetic Mineral Fibre (SMF) materials;
- Fluorescent light capacitor fittings containing polychlorinated biphenyls (PCB)I and
- Deteriorating or flaking lead based paint systems.

The Hazardous Building Materials Survey found no asbestos, PCB or lead based paints. Synthetic mineral fibre was identified in relation to the foil backed insulation to the roof and the semi-transparent roof sheeting. The SMF was found to have a negligible risk in its present

6 Environmental Assessment

condition. The removal of any SMF containing materials should be undertaken in accordance with the current requirements of Worksafe Australia's standards and codes of practice.

In October 2015, KPMG SGA prepared an Asbestos Register and Management Plan for 800 Pittwater Road (excluding the Officeworks tenancy) (**Appendix 19**). A site inspection was undertaken on 23 September 2015 and identified ACMs in the form of black waterproofing membrane and black bituminous sealant material around the concrete pillar on the floor of the Clock Tower roof top area. In addition, potential asbestos containing materials (PACMs) were identified in the form of fibre cement sheet soffits within the eaves around the former curved canteen element and the building façade; and fibre cement sheet panel above the front door entrance into the south-west corner of the building. The identified ACM and PACM was observed as being in good condition and posing a low risk in their current condition.

The KPMG SGA Asbestos Register and Management Plan recommends that all demolition and removal work should be undertaken in accordance with the SafeWork NSW (2019) *Code of Practice – How to safely remove asbestos*. Any asbestos removal is to be carried out by a licensed asbestos removalist in accordance with the Code of Practice. In addition, the Asbestos Register and Management Plan should be provided to site workers and contractors during their induction process to the site.

Salinity

The site has not been mapped as having saline soil.

Acid Sulfate Soils

The site has not been mapped as having a risk of containing acid sulfate soils.

Ground Water

The Preliminary Geotechnical Investigation prepared by Martens Consulting Engineers (**Appendix 12**) provides a hydrogeological assessment. The Preliminary Geotechnical Investigation concludes that due to the site's topography, location and elevation as well as site observations that it is unlikely that the proposed excavations will intercept the permanent groundwater table.

6.7.2 Bushfire

No part of the site is identified as bushfire prone land on Council's Bushfire Prone Land Map nor is the site in close proximity to Bushfire Prone Land such that a detailed assessment in this regard is warranted.

6.7.3 Utilities and Services

An Hydraulic Services Infrastructure Management Plan has been prepared by Northrop Engineers, that addresses existing capacity and any augmentation and easement requirements in relation to water, sewer and natural gas requirements (**Appendix 22**). An Electrical Services Infrastructure Management Plan has been prepared by Wood & Grieve Engineers, that addresses infrastructure requirements relating to electrical and communications services (**Appendix 23**).

Sewer

There are three existing sewer mains located in the vicinity of the site:

- 1,219mm x 1,701mm concrete encased unlined rock sewer main that traverses the approximate centre of the site in a north-south orientation;
- DN 225 Salt Glazed Ware (SGW) sewer main located within Harbord Road;
- DN 225 SGW sewer main located within Headland Road.

Non-invasive investigations undertaken by Northrop have indicated that the DN 225 Sydney Water sewer service will be available for connection at both the Harbord Road and

6 Environmental Assessment

Headland Road frontages. All works will be subject to assessment by Sydney Water and require approval through a Section 73 application following development consent.

Water

There are several existing water mains located in the vicinity of the site including:

- DN 450 Cast Iron Cement Lined water main located within Pittwater Road / Harbord Road;
- DN 250 Cast Iron Cement Lined water main located within Pittwater Road;
- DN 100 Cast Iron Cement Lined water main located within Pittwater Road; and
- DN 150 Cast Iron Cement Lined water main located within Headland Road.

Non-invasive investigations by Northrop have indicated that the proposed development will be able to connect to the DN 250 Sydney Water potable water service at the Pittwater Road frontage and to the DN 150 Sydney Water potable water service at the Headland Road frontage. All works will be subject to assessment by Sydney Water and require approval through a Section 73 application following development consent.

Natural Gas

Jemena natural gas infrastructure is located within Pittwater Road and Headland Road as follows:

- DN 160 pe 210kPa gas main located within Pittwater Road;
- DN 50 Nylon 210kPa gas main located within Pittwater Road at the north-west property boundary;
- DN 32 Nylon 210kPa gas main located within Pittwater Road at the south-west property boundary; and
- DN 40 Nylon 210kPa gas main located within Headland Road.

The non-invasive investigations undertaken by Northrop indicate that the DN 50 Jemena natural gas service will be available for connection at the Pittwater Road frontage and the DN 40 Jemena natural gas service will be available for connection at the Headland Road frontage. Connection to the natural gas infrastructure will be the subject of connection application to Jemena following development consent.

Electricity

The existing building at 800 Pittwater is supplied via a dedicated 750kVA kiosk substation located in the north-west corner of the site. As part of the Stage 2 works, it is proposed to remove the existing substation and provide two (2) new substations adjacent to the top of the driveway. This location has been selected as it improves accessibility for servicing and maintenance of the substations.

Communications

Incoming communications services are located from Pittwater Road. It is anticipated that these existing incoming communications services will be demolished and redirected through the driveway. The communications services will share the same trench as the electrical services.

6.8 Public Interest

Section 4.15(1)(e) of the EP&A Act requires the consent authority to consider the public interest. The public interest is an overarching requirement, which includes the consideration of the matters discussed in this report. The proposed development is considered to generally meet the provisions of relevant environmental planning instruments and subsequently, as

6 Environmental Assessment

these instruments have been created having regard to the objects of the Act following community consultation, they are considered to express planning controls that seek to protect the public interest. Accordingly, it is considered that the proposal is not prejudicial to the public interest.

7 Other Statutory Approvals

7.1 General

The proposed development may require, or may be construed as requiring, several approvals, consents, licences, permits or permissions from various government departments, pursuant to legislation other than the EP&A Act and accordingly, this section provides a brief assessment of relevant other legislation.

7.2 Commonwealth Department of Agriculture, Water and the Environment

7.2.1 Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

Part 3 Division 1 Subdivision C of the EPBC Act provides, amongst other things, that a person must not take an action that has, will have or is likely to have a significant impact on:

- a listed threatened species included in the extinct in the wild, critically endangered, endangered or vulnerable categories; or
- a listed threatened ecological community included in the critically endangered or endangered categories;

unless a '*controlled action*' approval has been granted under Part 9 Section 133 of the EPBC Act. The Commonwealth Minister for the Environment is responsible for the decision on such an approval.

Pursuant to section 45 of the EPBC Act, a bi-lateral agreement has been signed between the Commonwealth Department of Agriculture, Water and the Environment and DPIE which authorises DPIE to undertake the environmental assessment required pursuant to the EPBC Act and to furnish the Commonwealth Minister with an assessment report which may recommend whether approval should be granted and conditions that may be imposed on any approval. The Commonwealth Minister is responsible for the final decision.

One matter of National Environmental Significance (MNES) was identified as potentially being impacted by the proposed development. The Grey-headed Flying-fox (*Pteropus poliocephalus*) is listed as a vulnerable species under the EPBC Act and it is considered that this species is likely to use some of the development site for foraging. Eco Logical undertook an assessment against the Commonwealth Significant Impact Criteria guidelines for the Grey-headed Flying Fox and concluded that the development would not have a significant impact on the species (**Appendix 36**). Accordingly, a controlled action approval is not required under Section 133 of the EPBC Act.

7.3 NSW Department of Premier and Cabinet – Heritage NSW

7.3.1 Heritage Act 1977

The Heritage Act 1977 contains provisions relating to the protection of items of State heritage significance or items of potential significance.

Section 57 relates to items listed in the State Heritage Register or to which an interim heritage order applies and development relating to such items triggers the integrated development provision of the EP&A Act. The site does not contain these items.

Section 139 of the Heritage Act requires that an Excavation Permit is required prior to undertaking any development which involves excavation of land where there is reasonable cause to expect that a relic¹ will be discovered or disturbed. Pursuant to Section 4.41(1)(c) of the EP&A Act, granting of development consent to a SSD exempts a proponent from the requirement to obtain a Section 139 permit.

¹ **relic** means any deposit, artefact, object or material evidence that:

(a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
(b) is of State or local heritage significance.

7 Other Statutory Approvals

The Non-Indigenous Archaeological Assessment prepared by City Plan Heritage notes that the site has low non-indigenous archaeological potential as it was not developed until the middle of the 20th century and has been subject to previous site disturbance (**Appendix 30**). The site does not contain any known archaeological relics of either local or State significance. The Non-Indigenous Archaeological Assessment also notes that the excavation works are confined to the removal of fill and sandstone. Nevertheless, in the event that any archaeological relics are uncovered during excavation, then work in the affected area should cease and Heritage NSW should be informed in accordance with Section 146 of the Heritage Act.

7.4 NSW Department of Planning, Industry and Environment – Environment, Energy and Science (EES) Group

7.4.1 National Parks and Wildlife Act 1974 (NPW Act)

Aboriginal Cultural Heritage is afforded protection under the provisions of the NPW Act. Section 90 of the NPW Act requires an Aboriginal Heritage Impact Permit (AHIP) to be granted by EES Group for any works likely to impact on an Aboriginal Place or Aboriginal object². Pursuant to Section 4.41(1)(d) of the EP&A Act, granting of development consent to a SSD exempts a proponent from the requirement to obtain a AHIP.

Notwithstanding, an ACHAR has been prepared by Eco Logical (**Appendix 20**) in accordance with the 'Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW' (OEH 2011) and 'Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW' (OEH 2010).

As recommended by the ACHAR, if any unexpected Aboriginal objects are uncovered during the proposed works, then works are to cease and

7.5 Natural Resources Access Regulator (NRAR)

7.5.1 Water Management Act 2000 (WM Act)

The object of the WM Act is the *"sustainable and integrated management of the State's water for the benefit of both present and future generations"*.

Part 3 of Chapter 3 of the WM Act relates to Approvals and Section 91(2) requires a 'controlled activity approval' (CAA) for works at a specified location in, on or under 'waterfront land'. The site does not contain any 'waterfront land' that is land. Pursuant to Section 4.41(1)(g) of the EP&A Act, granting of development consent to a SSD exempts a proponent from the requirement to obtain a CAA.

Section 91(3) of the WM Act requires an 'aquifer interference approval' (AIA) for an aquifer interference activity³. Granting of development consent to a SSD does not exempt a proponent from the requirement to obtain a AIA.

The Preliminary Geotechnical Investigation Assessment Report prepared by Martens Consulting Engineers includes a hydrogeological assessment (**Appendix 12**), which found that groundwater was not observed in the boreholes up to 3.3m below ground level (approximately 33.9m AHD). In addition, no groundwater seepage was observed from basement rock or rock cuttings. The Preliminary Geotechnical Investigation Report did note that ephemeral perched groundwater may be encountered during excavation, however this is

² **Aboriginal object** means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.

³ **aquifer interference activity** means an activity involving any of the following:

- (a) the penetration of an aquifer,
- (b) the interference with water in an aquifer,
- (c) the obstruction of the flow of water in an aquifer,
- (d) the taking of water from an aquifer in the course of carrying out mining, or any other activity prescribed by the regulations,
- (e) the disposal of water taken from an aquifer as referred to in paragraph (d).

7 Other Statutory Approvals

expected to limited and able to be appropriately managed by sump and pump measures. The proposed excavation is not expected to intercept the permanent groundwater tables and, accordingly, an AIA is not required.

7.6 Transport NSW – Roads and Maritime Services (RMS)

7.6.1 Roads Act 1993

Section 138(1) of the *Roads Act 1993* relates to works associated with public roads and provides that a person must not:

- “(a) erect a structure or carry out a work in, on or over a public road, or*
 - (b) dig up or disturb the surface of a public road, or*
 - (c) remove or interfere with a structure, work or tree on a public road, or*
 - (d) pump water into a public road from any land adjoining the road, or*
 - (e) connect a road (whether public or private) to a classified road,*
- otherwise than with the consent of the appropriate roads authority.”*

No works are proposed to be undertaken in association with any public roads.

In addition, pursuant to Section 4.42 of the EP&A Act, should development consent be granted to the proposed SSD, consent under s138 cannot be refused if it is necessary for carrying out of the development and must be substantially consistent with the SSD development consent.

8 Conclusion

The proposed senior school campus and sports centre for St Luke's Grammar School, Dee Why have been assessed in accordance with the SEARs issued by DPIE and consultation carried out with the public and relevant public agencies.

The proposal is consistent with the objects of the EP&A Act, including ecologically sustainable development, and is consistent with the State's strategic planning objectives for the site as set out in the Greater Sydney Regional Plan – North District plan as it will create jobs and will provide additional contemporary educational facilities to meet the future educational needs of the local community. The proposed development is also consistent with Councils Local Strategic Planning Statement as it provides world-class educational facilities within the Northern Beaches LGA.

The proposed works have been assessed on balance as providing significant public benefit to the immediate local and surrounding district through the provision of increased enrolment capacity.

The project team has carried consultation with a wide range of stakeholders, including State government departments, local government, community and experts in the design of schools. The advice received throughout the consultation process has informed the consideration of the key issues including heritage significance, built form impacts and traffic management and these have been incorporated into the current proposal where possible, reflecting a commitment to provide a quality and objective-driven outcome.

The public interest is served by the proposed development through the provision of:

- Increased supply of classrooms and facilities, which will cater for increased enrolment pressures and be available for the use of the broader community;
- Additional investment in educational infrastructure in an established centre with excellent connectivity to public transport and active transport networks;
- Works with a significant capital investment value that will provide new educational infrastructure to support the local community; and
- New construction jobs and up to 60 additional full-time equivalent operational jobs.

Environmental impacts of the proposed have been assessed and are capable of mitigation to achieve acceptable levels of impact subject to a number of measures being adopted as set out in the EIS and the assessment material supporting this EIS.

Accordingly, it is recommended that the Minister for Planning and Public Spaces approves the proposed SSDA.