

Statement of Environmental Effects



Proposed Alterations and Additions to an Existing Educational Establishment

Lot 53 DP 774913 No 1 Echunga Road, Duffys Forest

Northern Beaches Christian School 0099A July 2019

Prepared for Project No Date

Statement of Environmental Effects 1 Echunga Road, Duffys Forest

Printed: 18 July 2019

File Name: D:\Dropbox\State Planning Services\Projects\0099A NBCS 1 Echunga Road, Duffys

Forest\Reports\0099A.docx

Project Manager: John McFadden

Client: Northern Beaches Christian School

Project Number: 0099A

Document History and Status

Version	Issued To	Qty	Date	Reviewed
Draft	Project Manager	1	07/05/2019	J. McFadden
Draft	Client	1	11/07/2019	L. Kenchington
Final	Council	1	18/07/2019	J. McFadden





Contents

1	Introduction	5
1.1	Commission	5
1.2	Type of Application	5
1.3	Purpose of this Report	5
1.4	Project Team	5
1.5	Background	6
1.6	Material Relied Upon	6
2	Context	7
2.1	Subject Site	7
2.2	Surrounding Development	10
3	Proposal	11
3.1	Alterations and Additions to an Existing Educational Establishment	11
4	Evaluation	13
4.1	Section 4.15C(1)(a) - Environmental Planning Instruments	13
4.1.1	Warringah Local Environmental Plan 2011	13
4.2	State Environmental Planning Policy (Educational Establishments and Child Car Facilities) 2017	
4.3	State Environmental Planning Policy No 55 – Remediation of Land	23
4.4	State Environmental Planning Policy (State and Regional Development) 2011	23
4.5	Section 4.15(1)(a)(ii) – Proposed Instruments	23
4.6	Section 4.15(1)(a)(iii) - Development Control Plans	24
4.6.1	Warringah Development Control Plan 2011	24
4.6.2	Side Setbacks	29
4.7	Section 4.15(1)(a)(iv) - Regulations	30
4.7.1	Information and Documentation	30
4.7.2	Subdivision 3, 7.11 Local Infrastructure Contributions	30
4.7.3	National Construction Code (NCC)	30
4.7.4	AS 2601 – Demolition of Structures	30
4.8	Section 4.15(1)(b) – Impacts	30
4.8.1	Built Environment Impacts	31
4.8.2	Natural Environment Impacts	31
4.8.3	Social and Economic Impacts	31
4.9	Section 4.15(1)(c) – Suitability of the Site for Development	31
4.10	Section 4.15(1)(d) – Submissions	34
4.11	Section 4.15(1)(e) – Public Interest	34
5	Conclusion	35

Statement of Environmental Effects 1 Echunga Road, Duffys Forest

Figures

Figure 1	Locality Plan	
Figure 2	Subject Site - DP 774913 Extract	8
Figure 3	Cadastral Plan – Subject Site	9
Figure 4	Regional Context	9
Figure 5	Aerial Photograph	10
Figure 6	WLEP Zoning Extract	
Figure 7	WLEP Minimum Lot Size Map Extract	
Figure 8	WLEP Maximum Building Height Map	16
Figure 9	Landslip Risk Map WLEP 2011	
Figure 10	Bushfire Prone Land Map 2016	32
Tables		
Table 1	The Project Team	
Table 2	ESEPP	
Table 3	WDCP	25

Appendices

- A. Pre-lodgement Advice
- Site Survey Plan
- C. Site Plan, Architectural Plans, Elevations and Sections
- D. Playground Equipment Plans
- E. Landscape Plan
- Title Search and Deposited Plan F.
- G. Planning Certificate
- H. Bushfire Report
- Arboricultural Impact Assessment I.
- Cost Summary Report J.
- Waste Management Plan K.
- L. **Ecological Report**

1 Introduction

1.1 Commission

State Planning Services Pty Limited (**SPS**) has been commissioned by Northern Beaches Christian School (**NBCS**) to prepare a Statement of Environmental Effects (**statement**) for proposed alterations and additions to an existing educational establishment (**proposal**) on the subject site at Lot 53 in Deposited Plan (**DP**) 774913 No 1 Echunga Road, Duffys Forest (**site**).

1.2 Type of Application

This statement accompanies a development application (**DA**) to Northern Beaches Council (**Council**) with the main purpose being to address the key environmental and amenity impacts associated with the proposal in order to satisfy the assessment criteria prescribed by section 4.15 (**s.4.15**) of the *Environmental Planning and Assessment Act 1979* (**EPA Act**).

The proposal is defined as 'development' pursuant to section 1.5 (s.1.5) of the EPA Act as it involves the 'carrying out of a work'. The proposal is neither exempt development, nor complying development and does not constitute state significant development or designated development.

The proposal is integrated development as an educational establishment is a 'special fire protection purpose' and requires a bushfire safety authority under s.100B of the *Rural Fires Act 1997*.

The proposal has a capital investment value (**CIV**) of \$4,772,882 and Council is the consent authority for this DA.

1.3 Purpose of this Report

This statement has been prepared to accompany a DA for alterations and additions to an existing educational establishment including the demolition of structures, minor internal and external alterations to buildings, construction of awnings, landscaping, retaining walls, installation of playground equipment, refurbishment of existing courts/grounds and construction of a new machinery/equipment shed and associated ancillary works.

The purpose of this statement is to provide all of the relevant information required for Council to assess and determine the subject DA in accordance with section 4.16 (**s.4.16**) of the EPA Act and clause 50/schedule 1 of the *Environmental Planning and Assessment Regulation* 2000 (**EPA Regulation**).

1.4 Project Team

The preparation of this DA has been a collaborative effort by a team of consultants (**Table 1**):

Table 1 The Project Team		
Project Manager	NBCS	
Surveyor	C.M.S. Surveyors	
Architect	WMK Architecture	
Town Planner	SPS	
Bushfire Consultant	Peterson Bushfire	
Play Equipment Consultant	Kompan Design Studio	
Landscape Architect	Babbington Landscapes	
Ecologist	Kingfisher Urban Ecology Wetlands	

Table 1 The Project Team		
Arboricultural Consultant	ArborSafe	
Cost Planner	МВМ	

1.5 Background

1.5.1 DA2012/1361

On 6 March 2013, the Sydney East Region Joint Planning Panel issued Notice of Determination No. DA2012/1361 as lodged with Warringah Council (now known as Northern Beaches Council) for alterations and additions to an existing educational establishment.

1.5.1 Pre-DA Consultation Meeting

On 4 September 2018 a pre-lodgement meeting was held between Council officers and representatives from NBCS, WMK and SPS (**Appendix A**).

In summary, the pre-lodgement advice indicated that:

'As the proposal seeks to replace and refurbish the outdoor learning spaces of the school with no increase in student enrolments, the additions and alterations proposed are supportable subject to addressing and responding to the advice provided within these notes. Based upon the above comments you are advised to satisfactorily address the matters raised in these notes prior to lodging a development application.'

1.6 Material Relied Upon

For the purposes of preparing this statement, SPS has inspected the site and reviewed documents and information attached as **Appendices A - L**.

2 Context

2.1 Subject Site

The site is described as Lot 53 DP 774913, No 1 Echunga Road, Duffys Forest and is located within the Northern Beaches Local Government Area (**LGA**) (**Figures 1** to **4** inclusive).

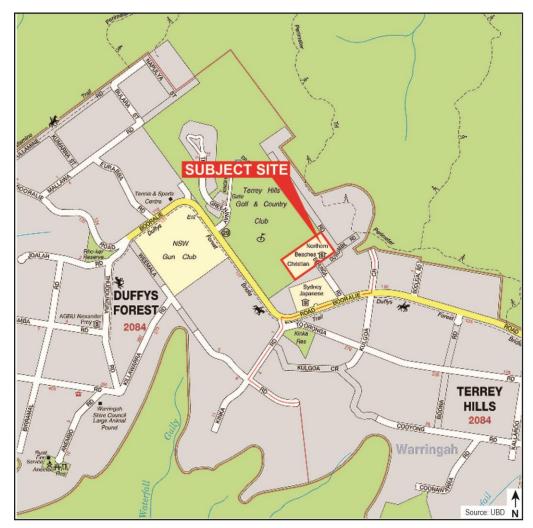


Figure 1 Locality Plan

The site is a rectangular shaped allotment with an area of approximately 4.443ha comprising a 59.69m access and frontage to Echunga Road and a secondary 108m frontage to the unsealed Durimbal Road.

The site contains an educational establishment known as NBCS which is a mixture of one, two and three storey buildings containing classrooms, sporting, administration and ancillary uses with a playing field, basketball, tennis court and parking areas.

The site also contains landscaped areas for passive recreation with a number of semimature native trees providing natural shade in addition to textile shade structures.

The site contains its own stormwater retention and detention system. Waste water is currently treated on site via a septic tank and on-site waste water treatment without relying upon connection to a reticulated sewerage system.

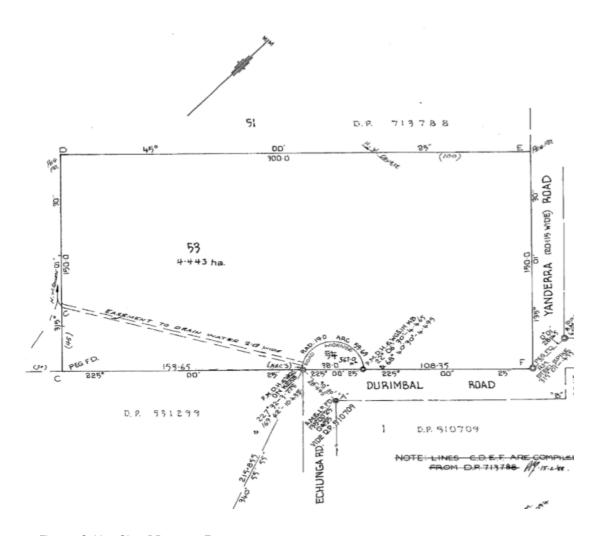


Figure 2 Subject Site - DP 774913 Extract

A 2m wide easement to drain water traverses the southern corner of the site and will remain unaffected by this proposal.

The site is approximately 26km by road from the Sydney Central Business District (**CBD**) and is linked to the Pacific Highway via Mona Vale Road and Warringah Road via Forest Way.

The site is also 2.6km from the Terrey Hills neighbourhood shops in Booralie Road. A public transport bus route is located near the site in Booralie Road, and school buses service the site directly during school terms.

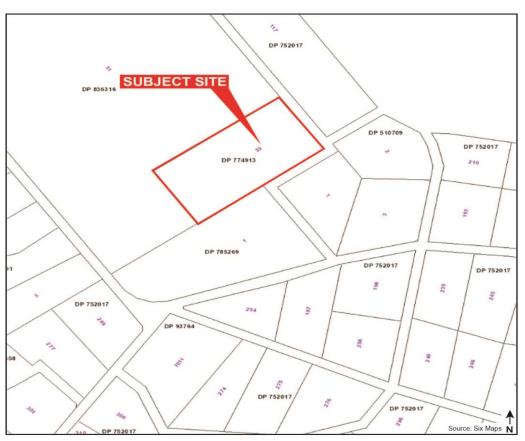


Figure 3 Cadastral Plan – Subject Site

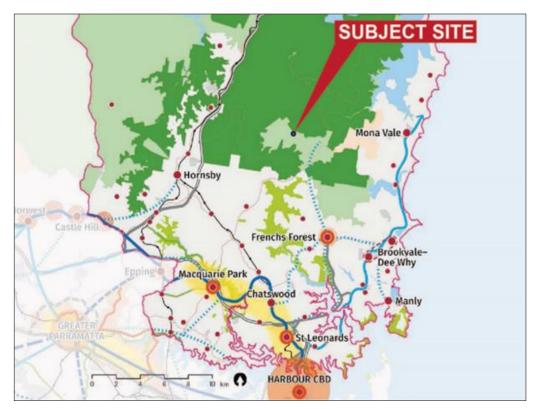


Figure 4 Regional Context

2.2 Surrounding Development

Development surrounding the site comprises the Terrey Hills Golf Course to the north and west, to the east is the Ku-ring-gai Chase National Park, whilst to the south is the Sydney Japanese International School and a Child Care Centre. Nearby residential development in the form of a rural residential development exists to the southeast (**Figure 5**).



Figure 5 Aerial Photograph

3 Proposal

3.1 Alterations and Additions to an Existing Educational Establishment

The proposed alterations and additions to the existing educational establishment will provide additional playground equipment and landscaping for increased student and staff amenity. No intensification of staff or students is proposed.

The plans prepared by WMK propose modifications to buildings, playground equipment, landscaping and outdoor learning areas in six sections of the school site. Full details of the proposed works are outlined in the drawings at **Appendix C** and summarised as follows:

1) Infant School Playground Works

- Raised cube seating:
- Overhead shade structure:
- Adventure slide:
- · Interactive play wall;
- Various art display structures, sculptures and 'communication tubes';
- Play spaces with 'softfall' surfaces;
- Supplementary planting to existing garden beds; and
- New landscaping with shade tolerant plantings where required.

2) Water Playground

- · Water course:
- · Contoured water feature;
- Outdoor learning space around a feature tree with seating;
- Covered 'breakout' space;
- Retention of existing 'avenue planting' between the water playground and 'Infant School Playground'; and
- New plantings of palms and lush vegetation with 'Amazon Rainforest' theme.

3) Primary School and Playground

- Demolish 3 internal walls and construct 2 new walls to existing Block E building;
- Sliding doors to replace existing windows on southern elevation of Block G building;
- Two new outdoor covered learning areas with seating and landscaping;
- Large scale play equipment ('tree house') with softfall surfaces;
- Sunken play zones in the central portion of the area with timber bridge over;
- Concrete/timber seating;
- Informal amphitheatre of concrete and sandstone block construction;
- Lounge net;
- Elevated 'adventure course':
- Balance logs and totem pole forest play equipment; and
- Extensive landscaping with various rainforest themes as well as local endemic Duffys Forest themed plantings.

4) Art Play Redevelopment

- · Raised concrete plinth for artwork display;
- 'Floating' timber bench seat with planting beneath;
- · Breakout learning space;
- Timber platform seating;
- Raised timber seating/performance area with canopy over;
- Decorative indigenous (Guringai inspired) decorative paving;
- · Feature deciduous tree planting; and
- Art wall/mural zone.

5) High School Landscape Plan

- · Overhead canopy structure;
- Decked flexible use area with disabled access ramp and performance area;
- Tiered timber capped concrete seating;
- · Lawn areas for passive recreation;
- Proposed deciduous tree planting; and
- Natural stone paving.

6) Gym building and Tree Top Walkway

- New internal wall to foyer of gym hall;
- · Accessible ramp to tree top walkway;
- Raised timber deck with glass balustrades for safety with deck 'cutouts' to retain and feature existing trees;
- Raised mesh walkway for viewing ground below;
- Timber bench seating with amphitheatre for outdoor learning; and
- Landscaping surrounding including native grasses below the deck.

7) New sports ground shed

- A new shed is proposed in the southwest corner of site adjacent to the sports ground. The shed will have a floor area of 84.5m² and be constructed of Colorbond steel cladding with a low pitched, metal roof of hipped design.
- The shed will accommodate machinery and equipment necessary for the maintenance of the playing fields and landscaped areas.

4 Evaluation

An evaluation and assessment of the relevant matters for consideration under s.4.15 of the EPA Act is provided below.

4.1 Section 4.15C(1)(a) - Environmental Planning Instruments

4.1.1 Warringah Local Environmental Plan 2011

Clause 2.2 of *Warringah Local Environmental Plan 2011* (**WLEP**) indicates that the site is located within the RU4 Primary Production Small Lots zone (**Figure 6**).

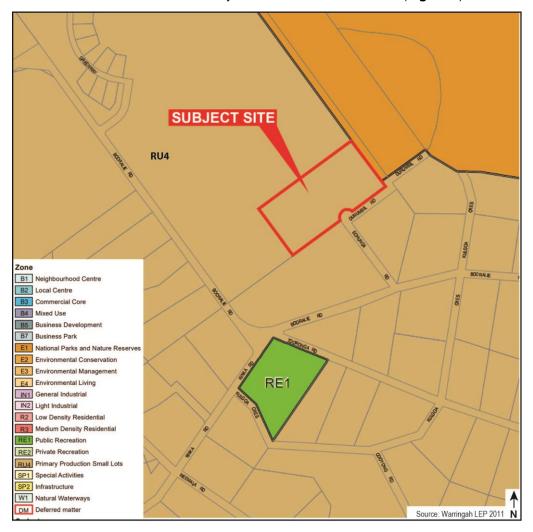


Figure 6 WLEP Zoning Extract

Clause 2.3(2) of WLEP states that "the consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone."

The objectives of the RU4 Primary Production Small Lots zone under WLEP are:

- 'To enable sustainable primary industry and other compatible land uses.
- To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.

- To minimise the impact of development on long distance views of the area and on views to and from adjacent national parks and bushland.
- To maintain and enhance the natural landscape including landform and vegetation.
- To ensure low intensity of land use other than land uses that are primary industry enterprises.
- To maintain the rural and scenic character of the land.'

Clause 1.4 of WLEP defines an 'educational establishment' as follows:

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

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

Clause 1.4 of WLEP defines a 'school' as follows:

"school means a government school or non-government school within the meaning of the Education Act 1990."

An educational establishment is prohibited in the RU4 - Primary Production Small Lots zone under Clause 2.3(1)(d) of WLEP. However, an educational establishment is permitted with consent under SEPP (Educational Establishments and Child Care Facilities) 2017 (ESEPP) as the RU4 - Primary Production Small Lots zone is a 'prescribed zone'. ESEPP prevails over WLEP to the extent of any inconsistency.

Other development standards under WLEP are noted below:

Minimum Lot Size

Clause 4.1(3) of WLEP prescribes a minimum lot size of 2ha for the site (Figure 7).

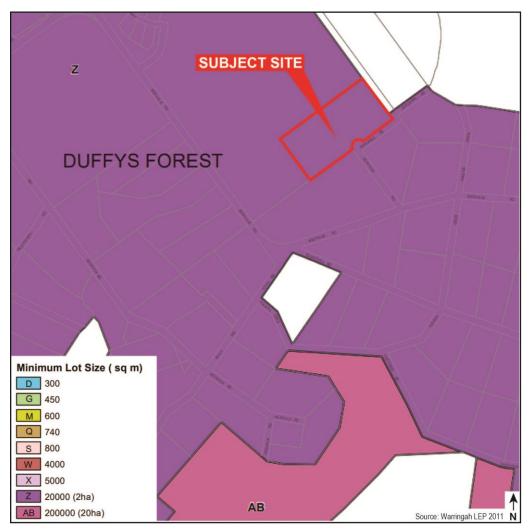


Figure 7 WLEP Minimum Lot Size Map Extract

The current site area of 4.443ha exceeds the 2ha minimum site area requirements of clause 4.1(3) of WLEP.

Height

Clause 4.3 of WLEP prescribes an 8.5m maximum building height control for the site (**Figure 8**).

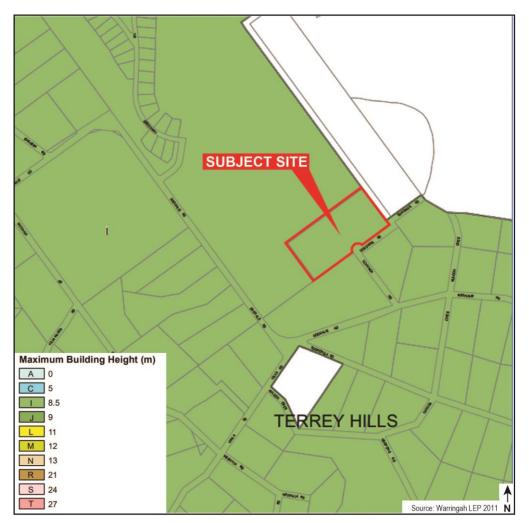


Figure 8 WLEP Maximum Building Height Map

The proposed works include awnings, canopies, landscaping, paving, seating and play structures none of which will exceed the 8.5m height development standard within clause 4.3 of WLEP.

Floor Space Ratio

Under Clause 4.4 of WLEP, no prescribed maximum floor space ratio (**FSR**) applies to the site.

The proposed works are primarily the installation of landscaping, play equipment, paved areas and shade structures. With the exception of a new 84.5m² machinery shed, no increase in gross floor area (**GFA**) is proposed.

Heritage

The site does not contain any items of heritage significance and is not located within a heritage conservation area (**HCA**). The site is also not located within close proximity to any items of heritage significance listed in Schedule 5 of WLEP.

The proposal is to be sited generally on the footprint of existing development. Therefore, the likelihood of any impact to items of Aboriginal archaeological significance is low.

Acid Sulfate Soil

The site is not low-lying land and is not classified as having any acid sulfate soil affectation.

Excavation

No significant excavation is proposed by the development which will be generally at or near ground level with limited excavation for footings and surrounding landscaping works.

A Waste Management Plan (**WMP**) is able to be conditioned for this DA submission indicating the location of site storage for building materials and the destination of building waste.

Flooding

There is no evidence to indicate that the site will incur any significant adverse impact from flooding.

Landslip

The site is included within Area 'A', and, a small portion Area 'B', of Council's Landslip Risk Map (**Figure 9**). However, most of the site contains a slope less than 5°, therefore a geotechnical engineering report is not required as confirmed during the Pre-lodgement meeting.

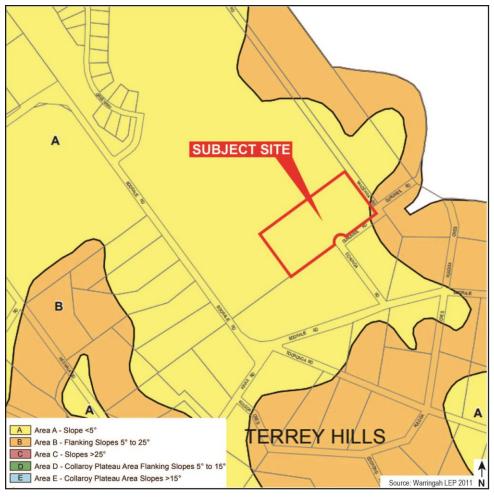


Figure 9 Landslip Risk Map WLEP 2011

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

Clause 5 of ESEPP defines an 'educational establishment' as follows:

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

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

The proposal involves alterations and additions to an existing educational establishment and is permitted on the site with consent under *ESEPP*.

Table 2 summarises pertinent controls within ESEPP that are relevant to a school on the site.

Table 2 ESEPP		
Proposal	Compliance	
	Compilarioc	
Clause 33 defines 'prescribed zone' which includes <i>inter alia</i> , the RU4 Primary Production Small Lots zone.	Yes	
The site contains an existing school and therefore a range of complying development options may apply in addition to development requiring consent (on that part of the site that is not bushfire prone).	Yes	
Site is located in a prescribed zone and the school is an existing development.	N/A	
WLEP requires consent for development involving an educational establishment.	N/A	
Able to be accommodated.	Yes	
Schedule 4 design quality principles (evaluated below). The architectural design can allow community use if required.	Yes	
	zone' which includes inter alia, the RU4 Primary Production Small Lots zone. The site contains an existing school and therefore a range of complying development options may apply in addition to development requiring consent (on that part of the site that is not bushfire prone). Site is located in a prescribed zone and the school is an existing development. WLEP requires consent for development involving an educational establishment. Able to be accommodated. Schedule 4 design quality principles (evaluated below). The architectural design can allow	

Table 2 ESEPP		
Control	Proposal	Compliance
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.		
(7) Subject to subclause (8), the requirement in subclause (6) (a) applies to the exclusion of any provision in another environmental planning instrument that requires, or that relates to a requirement for, excellence (or like standard) in design as a prerequisite to the granting of development consent for development of that kind.	Schedule 4 design quality principles to prevail as evaluated below.	Yes
(8) A provision in another environmental planning instrument that requires a competitive design process to be held as a prerequisite to the granting of development consent does not apply to development to which subclause (6) (a) applies that has a capital investment value of less than \$50 million.	WLEP does not require any other competitive design process.	N/A
(9) A provision of a development control plan that specifies a requirement, standard or control in relation to development of a kind referred to in subclause (1), (2), (3) or (5) is of no effect, regardless of when the development control plan was made.	ESEPP to prevail over WDCP.	Yes
(10) Development for the purpose of a centre-based child care facility may be carried out by any person with development consent on land within the boundaries of an existing school.	N/A	N/A
(11) Development for the purpose of residential accommodation for students that is associated with a school may be carried out by any person with development consent on land within the boundaries of an existing school.	N/A	N/A

Table 2 ESEPP		
Control	Proposal	Compliance
Schedule 4 – Design Quality Principles		
Principle 1—context, built form and I Schools should be designed to respond to and enhance the positive qualities of their setting, landscape and heritage, including Aboriginal cultural heritage.	Architectural design to respect topographical constraints and promote natural ventilation and light while supporting appropriate character and streetscape appeal.	Yes
The design and spatial organisation of buildings and the spaces between them should be informed by site conditions such as topography, orientation and climate.	Landscape plan provided.	
Landscape should be integrated into the design of school developments to enhance on-site amenity, contribute to the streetscape and mitigate negative impacts on neighbouring sites.	Landscape plan includes plantings to represent various ecosystems such as rainforest themes (Amazon/Daintree) for educational purposes, addition to planting endemic to the adjacent Duffys Forest.	
School buildings and their grounds on land that is identified in or under a local environmental plan as a scenic protection area should be designed to recognise and protect the special visual qualities and natural environment of the area, and located and designed to minimise the development's visual impact on those qualities and that natural environment.		
Principle 2—sustainable, efficient an	d durable	
Good design combines positive environmental, social and economic outcomes. Schools and school buildings should be designed to minimise the consumption of energy, water and natural resources and reduce waste and encourage recycling.	Environmentally sustainable development (ESD) principles to have been taken into account in the design of the play equipment, outdoor learning spaces and landscaping.	Yes
Schools should be designed to be durable, resilient and adaptable, enabling them to evolve over time to meet future requirements.		

Table 2 ESEPP			
Control	Proposal	Compliance	
Principle 3—accessible and inclusive)		
School buildings and their grounds should provide good wayfinding and be welcoming, accessible and inclusive to people with differing needs and capabilities.	Good urban design has been used in the current proposal and community use of the facilities can be supported if required.	Yes	
Note:			
Wayfinding refers to information systems that guide people through a physical environment and enhance their understanding and experience of the space.			
Schools should actively seek opportunities for their facilities to be shared with the community and cater for activities outside of school hours.			
Principle 4—health and safety			
Good school development optimizes health, safety and security within its boundaries and the surrounding public domain, and balances this with the need to create a welcoming and accessible environment.	Outdoor learning areas and playground equipment have been designed to balance the benefits of outdoor teaching and recreation with solar protection.	Yes	
Principle 5—amenity			
Schools should provide pleasant and engaging spaces that are accessible for a wide range of educational, informal and community activities, while also considering the amenity of adjacent development and the local neighbourhood.	Existing passive recreation areas have been augmented with the current proposal.	Yes	
Schools located near busy roads or near rail corridors should incorporate appropriate noise mitigation measures to ensure a high level of amenity for occupants.			
Schools should include appropriate, efficient, stage and age appropriate indoor and outdoor learning and play spaces, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage and service areas.			

Table 2 ESEPP			
Control	Proposal	Compliance	
Principle 6—whole of life, flexible an			
School design should consider future needs and take a whole-of-life-cycle approach underpinned by site wide strategic and spatial planning. Good design for schools should deliver high environmental performance, ease of adaptation and maximize multi-use facilities.	Urban design incorporates adaptable facilities. Perspectives/montages have been prepared to demonstrate suitable context and impact on surrounding development and public domain.	Yes	
Principle 7—aesthetics			
School buildings and their landscape setting should be aesthetically pleasing by achieving a built form that has good proportions and a balanced composition of elements.	High quality architectural and urban design has been incorporated into the proposal.	Yes	
Schools should respond to positive elements from the site and surrounding neighbourhood and have a positive impact on the quality and character of a neighbourhood.			
The built form should respond to the existing or desired future context, particularly, positive elements from the site and surrounding neighbourhood, and have a positive impact on the quality and sense of identity of the neighbourhood.			
57 – Traffic Generating Development			
"(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.	The development does not propose any increase in student/staff numbers and current parking provision is considered adequate.	Yes	
(2) Before determining a DA 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).			

Table 2 ESEPP		
Control	Proposal	Compliance
(3) The consent authority must take into consideration:		
(a) any submission that RMS provides in response to that notice within 21 days after the notice was given (unless, before the 21 days have passed, RMS advises that it will not be making a submission), and (b) the accessibility of the site concerned, including: (i) the efficiency of movement of people and freight to and from the site and the extent of multi-purpose trips, and (ii) the potential to minimise the need for travel by car, and (c) any potential traffic safety, road congestion or parking implications		
of the development. (4) The consent authority must give RMS a copy of the determination of the application within 7 days after the determination is made.		

The proposal complies with the requirements of ESEPP and adequately responds to the relevant design quality principles.

4.3 State Environmental Planning Policy No 55 – Remediation of Land

State Environmental Planning Policy No 55 (SEPP 55) requires the consent authority to consider the likelihood of contamination on the site together with the need for remediation.

As the proposal is to be generally sited over existing landscaped and hard surface areas of the school, it is unlikely there is any need for remediation pursuant to SEPP 55. A Phase 1/desktop contamination assessment is not considered to be required as the proposal largely involves existing developed area.

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

Clause 20 of State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD) applies to development of a class or description included in schedule 7 of SEPP SRD.

Pursuant to schedule 2 of the EPA Act, at present, the Sydney North Planning Panel (**SNPP**) operates within the Northern Beaches LGA and would be authorised to exercise consent authority functions of Council for an educational establishment development with a CIV in excess of \$5 million.

However, as the Development is less than \$5 million dollars, the proposal is likely to be assessed by Council's internal Development Determination Panel (**DDP**) if 3 or more unresolved objections are received.

4.5 Section 4.15(1)(a)(ii) - Proposed Instruments

No relevant draft environmental planning instruments are known to apply to the site or the proposed development.

Council's s.10.7(2) and (5) Planning Certificate confirms this status (Appendix G).

4.6 Section 4.15(1)(a)(iii) - Development Control Plans

4.6.1 Warringah Development Control Plan 2011

Warringah Development Control Plan 2011 (WDCP) applies to the site and primary controls summarised in **Table 3**.

TABLE 3 WDCP		
Description	Control	Comment
Objectives	General	
	'To create and maintain a high level of environmental quality throughout Warringah.	The proposal will provide a high quality learning experience to the students of NBCS through quality design
	Development should result in an increased level of local amenity and environmental sustainability.'	whilst maintaining a significant proportion of endemic species in the landscaping plan.
	Specific	
	'To ensure development responds to the characteristics of the site and the qualities of the surrounding neighbourhood	
	To ensure new development is a good neighbour, creates a unified landscape, contributes to the street, reinforces the importance of pedestrian areas and creates an attractive design outcome	
	To inspire design innovation for residential, commercial and industrial development	
	To provide a high level of access to and within development.	
	To protect environmentally sensitive areas from overdevelopment or visually intrusive development so that scenic qualities, as well as the biological and ecological values of those areas, are maintained	
	To achieve environmentally, economically and socially sustainable development for the community of Warringah'	
Wall Height	7.2m	The current proposal is for landscaping, playground equipment, outdoor learning areas and paving, the wall height control will not be exceeded.
No of Storeys	N/A	N/A
Side Boundary Envelope	N/A	N/A
Site Coverage	20%	Minor Improvement from Increased Landscaped Area.
		The site coverage has been slightly reduced/improved by the increase in overall landscaped area.

TABLE 3 WDCP		-
Description	Control	Comment
Side Setback	10m	1.5m. No encroachment of buildings is proposed with the exception of the sports ground machinery shed which will have little impact on adjoining properties.
Front Setback	20m	Complies
Rear Setback	10m	Complies
Foreshore Setback	N/A	N/A
National Parks Setback	N/A	N/A
Coastal Cliff Setback	N/A	N/A
Main Road Setback	N/A	N/A
Subdivision	N/A	N/A
Traffic, Access and Safety	Safe and efficient access to be provided. Various controls.	Acceptable/minor impact.
Parking	1 space per staff member in attendance;	No increase to staff/student
, aming	plus - as relevant, adequate pickup/setdown area on site; plus - adequate provision of bicycle racks; plus - adequate provision for student parking; plus - provision of bus standing and turning area.	levels is proposed by this application – No additional classrooms proposed.
Bicycle Parking and End of Trip Facilities	1 per 5 students over Year 4 – protected from weather	Bicycle parking facilities exist on-site, the current proposal will not increase student/staff numbers.
Stormwater	Stormwater drainage system to comply with Council's Water Management Policy.	Stormwater details submitted.
Erosion and Sedimentation	Erosion and sediment control plan required.	Sediment control plan submitted.
Building Over or Adjacent to Constructed Council Drainage Easements	N/A	N/A
Excavation and Landfill	Landfill to be free of contamination and excavated material must not result in adverse impacts.	No significant excavation or filling proposed.
Demolition and Construction	WMP required.	Waste management plan submitted with the proposal.
Waste Management	WMP to address minimisation of waste and encouragement of recycling.	Details provided with WMP.
Landscape Open Space and Bushland Setting	30% minimum	14.4%. A Landscape Plan has been
		included indicating pre and post development landscaped areas.
		(see discussion below).
Private Open Space Noise	N/A Maximum 5(dB(A) at any receiving boundary.	N/A Acceptable/minor impact.
Electromagnetic Radiation	N/A	N/A
Access to Sunlight	50% of the required area of private open space of adjoining dwellings are to receive a minimum of 3 hours of sunlight between 9am and 3pm on June 21	No significant impact on any adjoining properties.

TABLE 3 WDCP		
Description	Control	Comment
Views	Provide for reasonable sharing of views.	N/A
Privacy	Visual and acoustic privacy of surrounding development to be maintained.	No impact on any adjoining properties.
Building Bulk	Side and rear setbacks are to be progressively increased as wall height increases. Large areas of continuous wall planes are to be avoided by varying building setbacks and using appropriate techniques to provide visual relief.	With the exception of the new machinery shed proposed shade and play structures are well within the school site.
	On sloping land, the height and bulk of development (particularly on the downhill side) is to be minimized, and the need for cut and fill reduced by designs which minimise the building footprint and allow the building mass to step down the slope.	
	In particular:	
	 The amount of fill is not to exceed one metre in depth. Fill is not to spread beyond the footprint of the building. Excavation of the landform is to be minimized. 	
	Building height and scale needs to relate to topography and site conditions.	
	Orientate development to address the street.	
	Use colour, materials and surface treatment to reduce building bulk.	
	Landscape plantings are to be provided to reduce the visual bulk of new building and works.	
	Articulate walls to reduce building mass.	
Building Colours and Materials	Use of appropriate colours, materials and landscaping to be adopted.	Refer Landscaping Plans and Precedent Images Plan for details. (Appendix E)
Roofs	Lift overruns, plant and other mechanical equipment are not to detract from the appearance of roofs.	N/A
	Roofs should complement the roof pitch and forms of the existing buildings in the streetscape.	New shed roof designed with low pitch to minimise visual impact.
	Articulate the roof with elements such as dormers, gables, balconies, verandahs and pergolas.	N/A
	Roofs shall incorporate eaves for shading.	Shade structures and awnings incorporated into the

TABLE 3 WDCP		
Description	Control	Comment
	Roofing materials should not cause excessive glare and reflection.	play areas and outdoor learning areas.
	Service equipment, lift overruns, plant and other mechanical equipment on the roof shall be minimized by integrating as many services, etc as possible into the building.	
Glare and Reflection	Glare and reflection to be minimised.	Awnings and shade structures finished to reduce glare.
Front Fences and Walls	Streetscape, character, safety and security to be considered.	No changes to the school fencing is proposed.
Site Facilities	Site facilities including garbage and recycling enclosures, mail boxes and clothes drying facilities are to be adequate and convenient for users and services and are to have minimal visual impact from public places.	Site facilities are to be located away from public areas and will have little visual impact.
	In particular:	
	Waste and recycling bin enclosures are to be durable, integrated with the building design and site landscaping, suitably screened from public places or streets and located for convenient access for collection.	
	Garbage areas are to be designed to avoid common problems such as smell, noise from collection vehicles and the visibility of containers.	
	Landscaping is to be provided to reduce the impact of all garbage and recycling enclosures. They are to be located away from habitable rooms, bedrooms or living areas that may detract from the amenity of occupants.	
	Mail boxes are to be incorporated into the front fence or landscaping design. They are to be easily accessible and clearly identifiable.	
Side and Rear Fences	1.8m general height	Existing
Swimming Pools and Spa Pools	Not to be located in front building setback of primary street frontage.	N/A
	Australian Standard AS4970-2009 Protection of trees on development sites is to be used to determine an appropriate setback.	
Tennis Courts	Tennis courts are to be located behind the front building setback.	Existing court - complies
	Where there are 2 frontages, the location of the tennis court is not to be in the primary street frontage.	
	Tennis courts are to be setback from any trees. Australian Standard AS4970- 2009 Protection of trees on development sites is to be used to	

TADI E 2 WDCD		
TABLE 3 WDCP	Control	Commont
Description	determine an appropriate setback.	Comment
	The height and location of court fencing is to enable:	
	a) Sharing of views from surrounding residences; and b) Provision of sunlight to surrounding properties.	
	Fencing material is to be a dark colour. Fences are to be setback a minimum of	
	1.5 metres from front, side and rear boundaries.	
Accessibility	Various controls. AS1428.2 to be complied with.	Accessibility to and comply with AS1428.2.
Site Consolidation	N/A	N/A
Safety and Security	Crime Prevention through Environmental Design (CPTED) principles apply.	Play areas have been designed with CPTED principles in mind.
Provision and Location of Utility Services	Supply of water, gas, telecommunications and electricity and the satisfactory management of sewage and drainage to be addressed.	Existing school is provided with Utility services.
Conservation of Energy and Water	Energy and water consumption to be minimised.	Energy and water usage has been minimised to comply with sustainability principles.
Signs	Various requirements.	No additional signage currently proposed.
Preservation of Trees or Bushland Vegetation	Various controls.	Tree removal and replacement has been addressed by Arboricultural Impact Assessment prepared by ArborSafe a part of this DA submission (Appendix I).
Prescribed Vegetation	Development is to be situated and designed to minimise the impact on prescribed vegetation, including remnant canopy trees, understorey vegetation, and ground cover species.	N/A
Threatened Species, Populations, Ecological Communities Listed under State or Commonwealth legislation, or High Conservation Habitat	Land in the adjoining Terrey Hills Golf Course and Ku-ring-gai Chase National Parks contain Threatened and High Conservation Habitat.	Development is well within the school site unlikely to impact adjoining land. Whilst a number of trees are to be removed, they will be replaced by a similar number of native and some exotic species to compensate for their loss (Appendix L).
Wildlife Corridors	Wildlife corridors identified on adjoining Terrey Hills Golf Course land and eastern corner of site.	The proposed works are sufficiently remote from wildlife corridors to have little impact.

Native Vegetation	N/A	Whist the development works are sited generally on existing paved areas, a number of native trees are to be removed. These are addressed in the Arboricultural Impact Assessment.
Retaining Unique Environmental Features	Development is to be designed to address any distinctive environmental features of the site and on adjoining nearby land. Development should respond to these features through location of structures, outlook, design and materials.	The development is generally limited to existing spaces between school buildings, with the exception of the 'Tree Walk' structure which is located to the northwest of the school playing fields and adjacent to a tree corridor linking to Duffys Forest.
Development on Land Adjoining Public Open Space	N/A	N/A
Waterways and Riparian Lands	N/A	N/A
Coastline Hazard	N/A	N/A
Landslip Risk	Geotechnical stability to be demonstrated.	Site >5% minimal risk – Pre- lodgement advice confirmed that a preliminary 'Geotech report' will not be required.
Flood Prone Land	N/A	N/A
Zones and Sensitive Areas	N/A	N/A
Special Area Controls	N/A	N/A
Appendices	Various controls such as carparking, retention or removal of trees and noxious weeds etc.	No alteration to parking requirements as student/staff numbers are not changing. Tree removal/retention has been addressed in the Arborist Report included with this DA submission.

4.6.2 Side Setbacks

The proposed new sports ground shed will encroach on the 10m side setbacks with a 1.1m setback to the southwest boundary and 1.5m setback to the southeast boundary. Whilst theses variations appear substantial, as the shed is located in a relatively discrete location adjacent to the northwest corner of the existing sports ground carpark and screened by trees of the Terrey Hills Golf Course to the southwest, the impact of the setbacks proposed will be negligible.

4.6.3 Landscape Open Space

The WDCP requirement for landscaped open space is a minimum 30% of the site area, which equates to a requirement of 13,329m² for the overall site area of 44,430m².

The existing level of dedicated landscaping is 14.4% or 6,391m². This level of provision could be viewed as being deficient by almost 15%. However, it should be noted that the school was established prior to the adoption of WDCP and its landscaping requirements.

It should also be noted that if the sports ground area was included as landscaped area, the proposal would comply.

The current definition excludes tennis courts but does not expressly exclude playing fields.

The existing playing fields are natural turf and not artificial grass as many sports fields are currently.

It is considered that the playing field meets at least two of the objectives listed in WDCP for Landscaped Open Space and Bushland Setting, namely:

- To accommodate appropriate outdoor recreational opportunities that meet the needs of the occupants;
- To facilitate water management, including on-site detention and infiltration of stormwater.

The first objective being that the playing fields provide the opportunity for team sports such as football, hockey, cricket, track and field etc to be practiced/played and which cannot be accommodated in the confines of a smaller area such as the gym. Secondly, the area contributes to the pervious areas of the site and can accept water captured on site by other hard surfaces.

It is noted that, the 'Standard Instrument' definition of landscaped area is:

'Landscaped area means that part of the site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area.'

It is suggested that the playing field should be included in the overall landscaped area calculation and would therefore result in the development complying.

If Council is of a mind that the playing field should not be included, the current application has not reduced the existing provision of landscaped area but has increased the provision by a modest 43m^2 , meaning the status quo has not just been maintained, but a slight improvement of provision has occurred.

4.7 Section 4.15(1)(a)(iv) - Regulations

4.7.1 Information and Documentation

The proposal has provided information which is consistent with the DA requirements under clause 50 and schedule 1 of the EPA Regulation together with Council's DA lodgement requirements.

4.7.2 Section 7.11 Local Infrastructure Contributions

Section 7.11 contributions are subject to the *Northern Beaches Council Section 94A Plan* 2017. Contributions are imposed where the need for embellishment or provision of public amenities and services has been identified.

Currently the levy for all Development Applications and applications for Complying Development Certificates for development more than \$200,000, is 1% of the cost of carrying out the development. In this case, a preliminary costing of \$4,772,882 would require a contribution of \$47,728.82.

4.7.3 National Construction Code (NCC)

The application is required to satisfy either the deemed-to-satisfy provisions and/or the performance requirements of the NCC.

4.7.4 AS 2601 – Demolition of Structures

The demolition of various small structures will need to satisfy Clause 92 of the EPA Regulation which designates *AS 2601-2014: The Demolition of Structures* as a prescribed matter for consideration in the determination of a DA.

4.8 Section 4.15(1)(b) – Impacts

SPS has undertaken a planning assessment having regard to the impacts of the proposal after considering the architectural plans and information received by relevant specialist consultants.

4.8.1 Built Environment Impacts

The alterations and additions to the existing educational establishment in the form of minor internal and external alterations to various school buildings, landscaping and playground works have been appropriately designed on the site, having regard to the impact on the built environment.

The orientation and size of the site is such that overshadowing from the new shed and other canopy/awning structures will not cause any significant adverse impacts on surrounding development in relation to solar access.

Photomontages have been provided to accompany this proposal in order to demonstrate appropriate context, bulk and scale, as well as streetscape and character impacts having regard to the built environment.

4.8.2 Natural Environment Impacts

As the development is generally proposed over existing paved and previously landscaped areas, little impact to the natural environment will occur, with the exception of tree removal and replacement planting.

Appropriate drainage, protection and maintenance of flora and minimal disturbance to the natural topography of the site are indicated by the proposal with little impact on the natural environment. Sediment and erosion control will ensure mitigation of any potential contamination impacts.

4.8.3 Social and Economic Impacts

The social and economic impact of the proposal on the site is likely to be acceptable as it will provide a positive contribution to society by way of employment opportunities during the construction phase together with an improved learning environment for students within both a local and regional catchment.

4.9 Section 4.15(1)(c) – Suitability of the Site for Development

Permissibility

The RU4 Primary Production Small Lots zone under ESEPP is a 'prescribed zone' as defined by clause 33 of ESEPP. Consequently, the proposed alterations and additions are permitted with consent under clause 35(1) of ESEPP. It is noted that ESEPP will prevail over WLEP to the extent of any inconsistency.

Accessibility

The site contains a road frontage without the need for any rights or carriageway and is accessible by private motor vehicle or public transport bus services. The nearest train station (on the North Shore Railway Line) is approximately 11km away.

The site is approximately 26km by road from the Sydney CBD and is linked to the Pacific Highway via Mona Vale Road and Warringah Road via Forest Way. The site is also 2.6km from the Terrey Hills neighbourhood shops in Booralie Road and approximately 12km from Mona Vale Beach. A public transport bus route is nearby and school buses service the site directly and offers good accessibility.

Constraints

The proposal will not be affected by the following constraints:

Title encumbrances

An easement to drain water 2m wide exists on the southern portion of the site with Warringah Council being the authority benefitted.

An easement for electricity and two positive covenants and two restrictions to user area also registered on the title. However, none would directly prevent the proposed development being carried out.

Council's s.10.7(2) and (5) Planning Certificate does not identify that any property vegetation plan or biodiversity certification applies to the site (**Appendix G**).

Bushfire Prone Land

The northwest and eastern parts of the site are located within the bush fire prone land buffer (**Figure 10**).

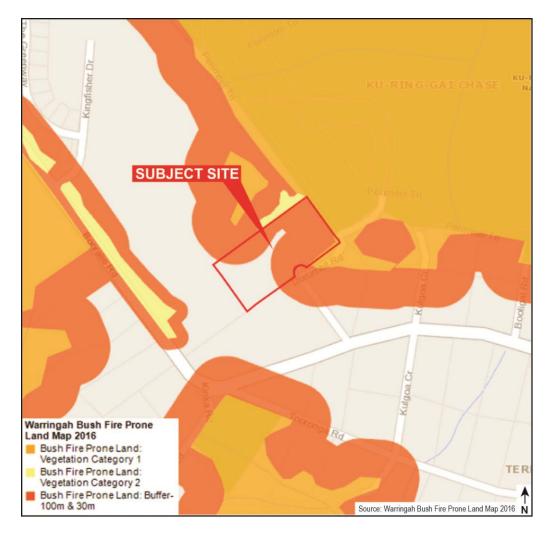


Figure 10 Bushfire Prone Land Map 2016

Pursuant to s.4.46 of the EPA Act the proposal constitutes 'integrated development' and the DA will be referred to the RFS for approval.

Consequently, a bushfire hazard assessment statement (having regard to 'Planning for Bushfire Protection') has been prepared and submitted with this DA.

The Bushfire Statement has been prepared by David Petersen, Bushfire Consultant who reported that:

'Overall the proposed works are acceptable within the IPA (Inner Protection Area) environment surrounding the school buildings. This is due to the fact that most of the works involve playground elements, seating and landscape infrastructure. Proposed vegetation management focuses on retaining and complementing the existing garden beds, and, promotes fire resisting species.'

The report also made the following comments/recommendations:

- "'1 Care is to be taken in plant species selection across the school, particularly at the north-eastern end of the school adjacent the direction of the primary bushfire threat. Fire-resisting species should be used over sclerophyllous species (eg eucalypts). Trees with natural fire-resistant qualities (eg high moisture content such as mesic species) are preferred.
- 2 It is important that the tree crowns do not grow within 2m of the roofline. Crowns between trees should also be separated by a minimum of 2m.
- 3 Plants should be separated from the building facade by 2m. This reduces combustion and allows fire-fighter access for suppression.
- 4 Covered structures for outdoor learning are structurally non-combustible (steel). Hardwood battens and seating are acceptable as all structures are in BALs no higher than BAL-29.
- 5 The raised hardwood decking and seating adjacent the Senior School, and hardwood seating between the Gym and Block F, are acceptable as they are located in areas not subject to a BAL higher than BAL-29.
- 6 The timber boardwalk in the southern-western corner is adjacent the boundary opposite the low hazard vegetation, placing the structure in BAL-FZ. This is acceptable as the structure will be separated from the nearest building by more than 10m.
- 7 Window or door installation are to comply with the relevant BAL. A BAL-29 standard will ensure compliance is met for all installations.
- 8 Internal works do not require compliance with bushfire standards."

The recommendations/comments have been taken into consideration during the preparation of this DA.

On-Site Waste Water Treatment

The site is not connected to a reticulated sewerage system and relies upon on-site waste water treatment.

The capacity of the existing waste water system will not change as there is no proposed increase in students or staff.

Potential Land Use Conflicts

Surrounding development comprises of Terrey Hills Golf Club to the north and west, Kuring-gai Chase National Park to the east, a school and childcare centre to the south, with only limited rural/residential uses to the south east.

Due to the location of the proposed development well within the site, the potential for land use conflict with adjoining land uses is minimal.

Objects

The current proposal needs to uphold the Objects of section 1.5 of the EPA Act which include, *inter alia*:

- "(a) to encourage:
 - the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,
 - (ii) the promotion and co-ordination of the orderly and economic use and development of land".

Educational establishments (including alterations and additions) are likely to be considered amongst a range of development outcomes that would constitute the highest and best use of the site. Accordingly, the proposal would facilitate the economic and orderly development of the site and is generally consistent with objects of the EPA Act.

It is considered that the site is suitable for the development proposed by this DA.

4.10 Section 4.15(1)(d) - Submissions

Pursuant to s4.15(1)(d) of the EPA Act, the consent authority is to give due consideration to any submissions made during the notification period associated with a DA.

4.11 Section 4.15(1)(e) – Public Interest

The proposed development of the site is generally consistent with the applicable environmental planning instruments and controls without any significant adverse environmental impacts.

Therefore, it is unlikely that favourable consideration of the proposal would not be construed as being in the public interest.

5 Conclusion

SPS has been commissioned by NBCS to prepare a Statement of Environmental Effects for the proposed alterations and additions to an educational establishment on approximately 4.443ha of land at Lot 53 DP 774913 No 1 Echunga Road, Duffys Forest.

The proposal involves minor internal and external building works, but primarily the refurbishment of playgrounds and landscaping throughout the school site.

The proposal is satisfactory having regard to s.4.15 of the EPA Act for the following reasons:

- The proposal is permitted with consent under ESEPP and is able to respect the objectives of the RU4 Primary Production Small Lots zone under WLEP;
- The proposal will not create any significant environmental and amenity impacts and will not impact on the streetscape of Echunga Road, or the surrounding locality;
- The proposal will not result in an increase in student/staff numbers, classrooms or floorspace and represents an improvement to the provision of soft and hard landscaping as well as play facilities for the school;
- The proposal will not create any adverse social and economic impact; and
- The site is suitable for the development and the proposal is able to be supported within the public interest.

The proposal warrants the support of Council for the reasons outlined in this statement.

Consequently, SPS recommends approval of the DA, subject to conditions pursuant to s.4.16 of the EPA Act.