

Statement of Environmental Effects

Proposed Upgrades to Narrabeen Education Precinct
Narrabeen North Public School and Narrabeen Sports High School
6 & 10 Namona Street, North Narrabeen



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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
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 and Environment

DVT daily vehicle trip

EP&A Act Environmental Planning and Assessment Act 1979
EP&A Regulation Environmental Planning and Assessment Regulation 2021

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
LEP local environmental plan
LGA local government area
LPP Local Planning Panel

NPW Act National Parks and Wildlife Act 1974

NPWS NSW National Parks and Wildlife Service

PA planning agreement

OEH NSW Office of Environment and Heritage

PAD potential archaeological deposit

PVT peak hour vehicle trip

RFI Act Rivers and Foreshore Improvement Act 1948

Abbreviations

vtph

RL reduced level

SCI site contamination investigation
SEE Statement of Environmental Effects
SEPP state environmental planning policy

vehicle trips per hour

SIS species impact statement
SULE safe useful life expectancy
TfNSW Transport for NSW

WM Act Water Management Act 2000
WSUD water sensitive urban design

1.1 Commission

DFP has been commissioned by the NSW Department of Education to prepare a Statement of Environmental Effects (SEE) for the proposed upgrades to the Narrabeen Education Precinct (NEP) comprising Narrabeen North Public School (NNPS) and Narrabeen Sports High School (NSHS) at 6 and 10 Namona Street, North Narrabeen (the site).

The proposed Narrabeen Education Precinct development includes redevelopment of Narrabeen North Public School (NNPS) and Narrabeen Sports High School (NSHS). The Public School and High School have been identified by the NSW Department of Education (DoE) as requiring upgrade works.

The works at NNPS upgrade the school including demolition of existing buildings (Blocks H and J), construction of three (3) new buildings with refurbishment of three (3) existing buildings (Blocks B, K and V).

The works at NSHS upgrade the school including addition of new two (2) storey extension to Building A and refurbishment of three (3) existing buildings (Buildings A, C and K).

This report is to accompany a development application (DA) to Northern Beaches Council (Council). The site is zoned SP2 Infrastructure (Educational Establishment) (the SP2 Zone) under the *Pittwater Local Environmental Plan 2014* (the LEP).

This Development Application (DA) will seek consent for the following works at NNPS & NSHS:

- Narrabeen North Public School (NNPS):
 - Removal of three (3) trees;
 - Construction of a new part-one and part-two storey administration building, multipurpose hall, staff hub and out-of-school hours care (OSHC) building with associated Covered Outdoor Learning Area (COLA) (to be known as Building D);
 - New entry pathway from Northern Beaches Indoor Sports Centre (NBISC) car park to new building;
 - New hard and soft landscaping in the vicinity of the new building;
- Narrabeen Sports High School (NSHS):
 - Removal of three (3) trees;
 - o Alterations and additions to Building A3 including:
 - Demolition of existing two (2) storey structure to the west of the existing gymnasium;
 - Construction of a two (2) storey extension to Building A3 comprising new stage to gymnasium, girls and boys amenities, girls and boys change rooms, storage and first aid room on the ground floor and movement studios, Physical Education (PE) classrooms, amenities and storage on the first floor;
 - Internal alterations to Building A3;
 - New lift access:
 - New Covered Outdoor Learning Area (COLA) to the south of Building A3 with new hard and soft landscaping.

The proposed development does not seek to increase staff or student numbers.

At NNPS, the proposed Building D has a maximum height of 9.63m above the existing ground level to the ridge of the COLA roof. Therefore, the proposed NNPS development exceeds the height of buildings development standard of 8.5m by 1.13m, which is equivalent to a variation of 13.3%. A written request to vary the height of buildings development standard pursuant to clause 4.6 of the LEP for NNPS has been prepared by DFP.

At NSHS, the proposed alterations and additions to Building A3 has a maximum height of 10.69m above the existing ground level, which exceeds the height of buildings development standard of 8.5m by 2.19m. This is equivalent to a variation of 25.8%. A written request to vary the height of buildings standard pursuant to clause of the LEP for NSHS has been prepared by DFP.

1.2 Purpose of this Statement

The purpose of this report is to provide Council and relevant NSW State Government Agencies with all relevant information necessary to assess the subject development proposal and to determine the DA in accordance with section 4.16 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2021* (the Regulation).

The proposed development is assessable pursuant to Part 4 of the EP&A Act.

Pursuant to Section 4.33 of the EP&A Act, the DA will be a Crown Development Application. Section 4.32 of the EP&A Act defines a crown development application as a "development made by or on behalf of the crown". The proposed works are being undertaken on behalf of the NSW Department of Education.

As the applicant is the Department of Education and the development has a Capital Investment Value (CIV) of more than \$5 million but less than \$50 million, the consent authority will be the Sydney North Planning Panel (SNPP).

NNPS is identified as containing an item (Block B Double Bini Dome) of State heritage significance (SHR No. 02037 "The Binishell Collection (Department of Education)) on the State Heritage Register (SHR) under the *Heritage Act 1977*. The proposed development includes works located within the SHR curtilage. Pursuant to section 4.44(2) of the EP&A Act, the proposed development is integrated development as it requires approval under section 58 of the Heritage Act. Following lodgement of the DA, Council will refer to the application to Heritage NSW.

The proposed development includes works located within 40m of Mullet Creek. Pursuant to clause 41 of the *Water Management (General) Regulation 2018* (WM Regulations), as the proposed development is being undertaken by a public authority, a controlled activity approval issued under Section 91 of the *Water Management Act 2000* (WM Act) is not required. Nevertheless, Council may refer the DA to the Natural Resources Access Regulator (NRAR).

No new development is located on the part of the site mapped as 'coastal wetlands' under Chapter 2 of State Environmental Planning Policy (Resilience and Hazards) 2021 (R&H SEPP), therefore the development is not declared as designated development pursuant to section 4.10 of the EP&A Act. It is proposed to lodge a separate designated development application in relation to any works located on this part of the site.

1.3 Material Relied Upon

This SEE has been prepared by DFP based on the information listed below and a site inspection undertaken on 30 January 2020.

- Pre-lodgement Meeting Minutes (prepared by Northern Beaches Council);
- Boundary Identified and Detailed Survey Plan (prepared by CMS Surveyors);
- Architectural Plans NNPS (prepared by DesignInc);

- Architectural Plans NSHS (prepared by DesignInc);
- Architectural and Landscape Design Statement; (prepared by DesignInc)
- Landscape Plans NNPS (prepared by DesignInc);
- Landscape Plans NSHS (prepared by DesignInc);
- Environmentally Sustainable Design (ESD) Report (prepared by Steensen Varming);
- Arboricultural Impact Assessment Report NNPS (prepared by Independent Arboricultural Services);
- Arboricultural Impact Assessment Report NSHS (prepared by Independent Arboricultural Services);
- Ecological Assessment Report (prepared by ADE Consulting Group);
- Civil Engineering Report and Plans NNPS (prepared by enstruct);
- Civil Engineering Report and Plans NSHS (prepared by enstruct);
- Structural DA Report (prepared by enstruct);
- Floor Risk and Impact Assessment (prepared by BMT);
- Geotechnical Investigation Report (prepared by Douglas Partners);
- Preliminary Site (Contamination) Investigation Report (prepared by Douglas Partners);
- Detailed Site Investigation (Contamination) Report (prepared by Douglas Partners);
- Remediation Action Plan (prepared by Douglas Partners);
- Acid Sulfate Soil Management Plan (prepared by Douglas Partners);
- Hazardous Building Materials (HBM) Assessment NNPS (prepared by Douglas Partners);
- Hazardous Building Materials (HBM) Assessment NSHS (prepared by Douglas Partners);
- Waste Management Plan NNPS (prepared by MRA Consulting Group);
- Waste Management Plan NSHS (prepared by MRA Consulting Group);
- Heritage Impact Statement (prepared by CityPlan Heritage);
- Aboriginal Cultural Heritage Assessment Report (prepared by Kayandel);
- Noise and Vibration Impact Assessment (prepared by Acoustic Studio);
- Transport Assessment NNPS (prepared by Ason Group);
- Construction Traffic Management Plan NNPS (prepared by Ason Group);
- Preliminary School Travel Plan NNPS (prepared by Ason Group);
- Transport Assessment NSHS (prepared by Ason Group);
- Construction Traffic Management Plan NSHS (prepared by Ason Group);
- Preliminary School Travel Plan NSHS (prepared by Ason Group);
- DDA Capability Statement NNPS (prepared by Philip Chun);
- DDA Capability Statement NSHS (prepared by Philip Chun);
- BCA Capability Statement NNPS (prepared by Philip Chun);
- BCA Capability Statement NSHS (prepared by Philip Chun);
- Preliminary Construction Management Plan (prepared by Johnstaff);

- Clause 4.6 Variation request: Height of Buildings NNPS (prepared by DFP Planning);
- Clause 4.6 Variation request: Height of Buildings NSHS (prepared by DFP Planning);
- Capital Investment Report (prepared by Turner & Townsend); and
- Cost Summary Report (prepared by Turner & Townsend).

1.4 Glossary

The following terminology is used in this SEE and in the supporting documentation.

Table 1 Glossary		
Site / Narrabeen Education Precinct (NEP) site This refers to the following two (2) lots: • Lot 3 Deposited Plan (DP) 1018621 (6 Namona Street, North Narahad • Lot 12 DP 1119562 (10 Namona Street, North Narrabeen).		
Narrabeen North Public School (NNPS) Site	This refers to Lot 3 DP 1018621, 6 Namona Street, North Narrabeen.	
Narrabeen Sports High School (NSHS) Site	This refers to Lot 12 DP 1119562, 10 Namona Street, North Narrabeen.	

2.1 Previous Development Consents

A review of Council's Development Application tracker has identified the following previous approvals:

Narrabeen North Public School

- Consent No. N0213/05: New building containing canteen, covered learning area and toilets. Approved by Council on 4 July 2005; and
- Consent No. N0509/15: Installation of two demountable classrooms. Approved by Council on 30 March 2015.
- Tree Removal Permit. TA2020/0501: Tree removal (1 tree). Approved by Council on 1 July 2020.

Narrabeen Sports High School

 Complying Development Certificate CDC0016/12: Construction of a building trade centre including refurbishment of existing workshop & construction of new outdoor work area. Submitted on 21 February 2012.

2.2 Tree Removal and Replacement DA

On 3 August 2022, DA2022/1259 was lodged with Northern Beaches Council for:

Tree removal and replacement planting of trees at Narrabeen North Public School (NNPS) and Narrabeen Sports High School (NSHS)

The tree removal and replacement DA comprises:

- Removal of a total of 39 trees (2,673m² tree canopy) comprising the removal of 30 trees at NNPS and nine (9) trees at NSHS;
- Planting of a total of 53 trees (3,314m² tree canopy) comprising the planting of 13 trees at NNPS and 40 trees at NSHS.

The proposed tree removal and replacement works will increase the total tree canopy on site by 641m². The proposed tree removal and replacement DA seeks consent for tree removal to facilitate works proposed under other planning pathways including Part 4 development application (DA), Part 5 development without consent (REF) and exempt development.

The DA was notified between 19 August and 16 September 2022. DA2022/1259 is currently under assessment with Council.

2.3 Pre-Lodgement Meeting

A pre-lodgement meeting (PLM) was held with Council officers on 14 July 2022 (Council reference PLM2022/0125). A copy of the PLM minutes are included as part of the DA package. Matters discussed with Council at the PLM have been identified in **Table 2**.

Table 2 Pre-Lodgement Meeting				
Matter	Comment			
Specific issues raised by ap	Specific issues raised by applicant for discussion			
New extension to Block A at Narrabeen Sports High	The proposed alterations and additions to Building A3 at NSHS has a maximum height of 10.69m which exceeds the 8.5m height of buildings development standard by 2.19m (this is equivalent to a variation of 25.8%). A Clause 4.6 written request to vary the height of buildings development standard has been prepared by DFP Planning (refer to Section 6.1.7).	Section 6.1.7		
New buildings at Narrabeen North Public School	The Architectural Design Statement prepared by DesignInc provides a detailed response to Council's PLM feedback. It is considered that the siting and design	Architectural Design Statement		

Matter	Comment	Reference
	of the proposed buildings at the NNPS site provides an appropriate balance between heritage, biodiversity, flooding, visual and operational considerations. This DA doesn't seek approval for any development located on the part of the site mapped as 'coastal wetlands' or having 'high biodiversity values'.	
Height breach at Narrabeen North Public School Hall and Admin Block	The proposed administration, multi-purpose hall building hall (Building D) has a maximum height of 9.63m which exceeds the 8.5m height of buildings development standard by 1.13m (this is equivalent to a variation of 13.3%). A Clause 4.6 written request to vary the height of buildings development standard has been prepared by DFP Planning (refer to Section 6.1.7).	
Designated Development (Coastal Wetlands Area)	On 4 August 2022, an application for Secretary's Environmental Assessment Requirements (SEARs) was made to the NSW Department of Planning and Environment (DPE) in relation to the development located on the part of the site mapped as coastal wetlands under Chapter 2 of State Environmental Planning Policy (Resilience and Hazards) 2021 (R&H SEPP). SEARs were issued by DPE on 9 September 2022 (DPE Application Number SEAR 1718). As part of this DA, no development is proposed on the part of the site mapped as coastal wetlands under the R&H SEPP.	Sections 6.1.3 and 6.2.1
Traffic and Parking	It is noted that the proposed development does not seek to increase staff or student numbers within the NEP site. The following traffic and parking reports have been prepared by Ason Group for each of the school sites (NNPS and NSHS): Transport Assessment, Preliminary School Travel Plan; and Construction Traffic Management Plan. In addition to providing an assessment of the relevant access, traffic and parking characteristics of the site and determining the impacts of the proposed development on these characteristics, the traffic and parking reports consider opportunities to improve access, parking and active travel arrangements at the site.	Section 6.2.8
Flooding	The site is located within the Narrabeen Lagoon Catchment and has been identified as containing flood prone land. A Flood Risk and Impact Assessment has been prepared by BMT that provides an assessment of the potential impacts of the proposed development on existing flood behaviour, provides a flood emergency assessment; and responds to the relevant provisions of the LEP and Pittwater 21 Development Control Plan (the DCP).	
Separate tree removal application	On 3 August 2022, a separate tree removal and replacement DA (DA/2022/1259) was lodged with Council. The DA was publicly notified between 19 August and 16 September 2022. DA/2022/1259 is currently under assessment by Council.	Section 2.2
Pittwater Local Environmen	tal Plan 2014	
Zoning and Permissibility	The site is zoned SP2 Infrastructure (Educational Establishment) under the LEP. Educational establishments are permitted with consent in the SP2 zone under the LEP. The SP2 zone is also a prescribed zone for schools under section 3.34 of State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP)	Sections 6.1.4 and 6.1.7.

Matter	Comment	Reference
Clause 4.6 – Exceptions to Development Standards	A Clause 4.6 variation request to vary of the height of buildings development standard under the LEP at NNPS has been prepared by DFP Planning.	Section 6.1.7
	A Clause 4.6 variation request to vary the height of buildings development standard under the LEP at NSHS has been prepared by DFP Planning.	
Pittwater 21 Development Co	ontrol Plan	
Urban Design	A detailed response to the matters raised by Council's urban design advisor is provided in Section 1.07 of the Architectural Design Report prepared by DesignInc.	
Heritage	Narrabeen North Public School (NNPS) is identified as a local heritage item under schedule 5 of the the LEP (Item 2270341). Building A (single binishell dome) and Building B (double binishell dome) are listed on the Department of Education's Section 170 Heritage and Conservation Register. Building B is identified as an item on the State Heritage Register (SHR #02037 "Binishell Collection (Department of Education)". A Heritage Impact Statement has been prepared by	Sections 5.3 and 6.2.3
	CityPlan Heritage that provides an assessment of the impacts of the proposed development on the heritage significance of the NNPS site. The HIS concludes that the proposed development is deemed acceptable from a heritage perspective and is consistent with the relevant heritage controls under the LEP and DCP.	
Flooding	A Flood Risk and Impact Assessment report has been prepared by BMT to address Council's flood planning and development control requirements under Section B3.11 of the DCP.	
Traffic Engineer	Traffic and parking reports have been prepared by Ason Group that assess the transport impacts of the proposed development. Options are detailed in the Transport Assessment for NNPS in relation to future pick-up and drop-off arrangements for the school.	Section 6.2.8
Bushland and Biodiversity	An Ecological Assessment report has been prepared by ADE Consulting Group that assesses the impact of the proposed development on the biodiversity values of the site.	Sections 5.2 and 6.2.1
	No areas identified as coastal wetlands or as having high biodiversity values are proposed to be directly impacted by the proposed development.	
Landscape	Landscape plans have been prepared by DesignInc that address the required provisions of the DCP.	Sections 4.3.4, 4.4.4 and 6.2.2
	Two (2) Arboricultural Impact Assessment (AIA) reports have been prepared by Independent Arboricultural Services to address Section B4.22 of the DCP.	
Coast and Catchment	An assessment against the relevant provisions of Chapter 2 of R&H SEPP is provided in Table 5 of this SEE.	Section 6.1.3
	No works are located within the parts of the site mapped as 'coastal wetlands' under the R&H SEPP.	
Riparian Corridor and Water Management Civil and stormwater plans and reports have be prepared by Enstruct Group, including sedimer erosion control plans. The proposed stormwater has been designed in accordance with the releprovisions of the DCP and Council's Water Mater Tourist Policy.		Sections 6.2.9 and 6.3.2

Table 2 Pre-Lodgement Meeting			
Matter	Comment	Reference	
	Geotechnical reports have been prepared by Douglas Partners that include an assessment of the presence of groundwater on the site.		
Development Engineering	Concept stormwater plans have been prepared by Enstruct in accordance with Council's Water Management for Development Policy.	Section 6.2.9	
Documentation to accompany the Development Application	Noted A full list of the documentation lodged as part of this DA is provided in Section 1.3 .	Section 1.3	

2.4 Staging and Planning Pathways

The objectives of the works within the Narrabeen Education Precinct (NEP) are to upgrade both schools to support high-quality educational outcomes to the meet the needs of students within the local community. It is proposed to undertake the upgrades under multiple planning pathways to enable the works to be staged on site which maintains operational continuity and minimises programme risks, whilst delivering the upgrades in a safe, effective and efficient manner.

2.4.1 Narrabeen North Public School

The works at NNPS are proposed to be undertaken in eight (8) stages as described in the **Table 3** below. (The works the subject of this DA are identified in **bold** text).

Table 3 NNPS Staging of works				
Stage	Description	Planning Pathway		
1	Removal / relocation of existing demountable classrooms at NNPS to temporary location with NSHS site.	Exempt development		
2	Tree Removal	Development Application (DA/2022/125)		
	Demolition of existing amphitheatre / COLA	Development without consent (REF)		
3	Construction of new Building E (two (2) storey classroom and amenities building)	Development without consent (REF)		
	Refurbishment and conservation works to Building B (Double Bini Dome)	Development without consent (REF)		
4	Refurbishment of ground floor of Building V	Development without consent (REF)		
5	Demolition of Buildings J & H	Development without consent (REF)		
	Tree Removal	Development Application (DA/2022/125)		
	Removal of existing demountable classrooms from NNPS site	Exempt development		
6	Construction of new Building D	Subject of this Development Application		
7	Refurbishment of Building K	Development without consent (REF)		
8	Landscape works	Multiple planning pathways		
	Removal of demountable classrooms from NSHS	Exempt development		

Table 3 NNPS Staging of works			
Stage Description Planning Pathway			
	Installation of substation and hydrant booster	Designated development	
	Drop-off / pick-up facility (Kiss and Ride)	Development Application (separate)	

Further information about the staging of the works at NNPS is provided in the Preliminary Construction Management Plan (PCMP) prepared by Johnstaff (refer to **Section 6.2.13**).

The NNPS site plan prepared DesignInc indicates the works that are the subject of different planning pathways as follows (**Figure 1**):

Development Application Blue
 Development without consent Pink
 Designated Development Green

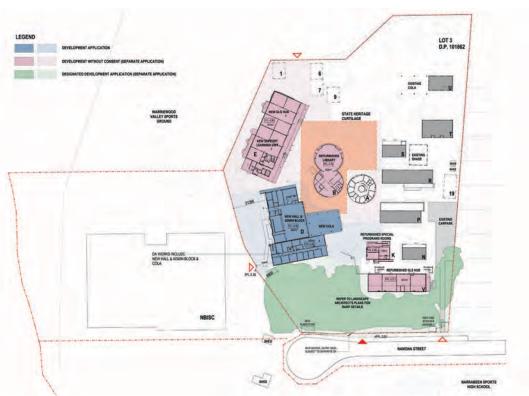


Figure 1 Proposed NNPS Site Plan

2.4.2 Narrabeen Sports High School

The works at NSHS are proposed to be undertaken in six (6) stages as described in the **Table 4** below. (The works the subject of this DA are identified in **bold** text).

Table 4 NSHS Staging of works			
Stage	Description	Planning Pathway	
1	Internal refurbishment of Building C	Development without consent (REF)	
	Tree removal	Development Application (DA/2022/125)	
2/3	Student decanting across the NSHS campus	N/A	
4	Internal refurbishment of Buildings A1 and A2	Development without consent (REF)	
	Demolition of part of Building A3, internal refurbishment of Building A3 Alterations and additions to Building A3	Subject of this Development Application	
5	New extension to Building A3	Subject of this Development Application	
6	Refurbishment of Building K	Development without consent (REF)	
	Landscaping	Exempt development	

Further information about the staging of the works at NSHS is provided in the Preliminary Construction Management Plan (PCMP) prepared by Johnstaff (refer to **Section 6.2.13**).

The NSHS site plan prepared by DesignInc indicates the works that are the subject of the different planning pathways as follows (**Figure 2**):

• Development Application Blue; and

• Development without consent Pink.



Figure 2 Proposed NSHS Site Plan

2.5 Consultation

2.5.1 Community Engagement Channels and Activities

The NSW Department of Education uses a range of standard community engagement channels, tools and activities on an as-needs basis across all projects as shown in Table 5.

Table 5 Community Engagement approaches		
Activity	Strategic intent	
School community engagement (project review group, meetings, workshops, school tours, and design user group sessions)	 Discuss aspects of the design, consultation and construction approach and seek feedback and input from members. Design user groups seek input from end users including staff and students about the proposed design and its applicability 	
Community information sessions	 Provide an opportunity for face-to-face engagement between residents, school community, staff and members of the project team. Allow for Q&A and concerns to be raised. Information sessions are widely advertised through the communication channels listed in this table. May be virtual, with the same materials available and feedback/question forms (depending on public health advice) 	
Communications (project webpage, information pack, project updates and works notifications)	Distribution of project information to stakeholders delivered via letterbox drop and school newsletter.	
Contact channels (emails and project information number)	Direct responses to stakeholder and community contact.	
School community communication (newsletter input, Parents and Citizens' Association meetings)	Ongoing updates as required and direct responses to questions.	

In relation to the works within the NEP, the following community information sessions have been held:

- Narrabeen Sports High School 16 August 2022 (separate sessions for staff and parents);
- Narrabeen North Public School 23 August 2022 (separate sessions for staff and parents); and
- Virtual information sessions for both schools running live from 22 August 5
 September 2022.

2.5.2 Stakeholder Consultation

A key factor of the project is the governance provided through the Project Reference Group (PRG) and supported by the Technical Support Group (TSG).

The PRG is comprised of the Director Educational Learning; the School Performance Executive Director; senior SINSW officers from Asset Utilisation, Commissioning & Temporary Schools and Asset Management units; the project directors and manager of the project; a teacher representative; a parent representative and the project architect. The PRG provides feedback on critical design elements and the overall project direction.

The TSG is comprised of technical specialists within SINSW in the areas of design, heritage, disability access and standards, sustainability, IT services, safety and school transport. The TSG ensures the project design meets education facility standards and operational needs.

Additional stakeholder groups include:

 Design Advisory: A group of advisors who advise on Educational Facilities Standards and Guidelines (EFSG) compliance of the project. The EFSG is a suite of information to aid in the planning, design and use of NSW Department of Education school facilities. The information includes:

- NSW Department of Education school types with content on educational principles, accommodation recommendations, design intent on rooms and spaces, relationships between accommodation components and associated technical data.
- o Technical Design Guide
- Technical Specification Guide
- o Links to relevant industry design and specification information

The design and construction of DoE schools will be required to comply with the EFSG.

- Expert Review Group (ERG): A panel of experts who advise across all SINSW projects in regard to design, buildability, compliance etc.
- · Residents and local community members.

A summary of consultation is provided in the **Table 6**.

Table 6 Stakeholder Consultation		
Activity	Summary of consultation	
Design Advisory	 Updated design register discussed with the developing Schematic Design, including services and transport access, general learning spaces, acoustics, and outdoor learning areas. Discussion of the particular characteristics and relationships of spaces. Review of design, detailed discussions on hall, bicycle parking and end-of-trip facilities, security and fencing, Support Unit, specialist unit storage requirements and acoustic separation. Discussion on project staging, EFSG guidelines for specific learning spaces, floor and height guidelines. Preview of developing design to check compliance with EFSG guidelines. 	
Technical Support Group (TSG)	Design consultation on gym, hall, canteen, admin, library and office spaces. Detailed discussion on general learning spaces. Interconnection between general learning spaces and, supervision Flexibility of internal furniture and fittings Perimeter fencing and security considerations in design Cabling and Comms Room provisions Cleaning facilities allowances Ongoing discussions on developing design, feedback and advice on SINSW expectations and requirements	
Project Reference Group	Introduction, governance, terms of reference, PRG membership / invitees roles and responsibilities. Overview of project phases and status. Ongoing discussions on developing design, feedback and advice on School expectations and requirements	

2.6 Return and Earn

There is an existing "Return and Earn" facility located within the existing NBSIC carpark. This is to be removed by others.

3.1 Location

The Narrabeen Education Precinct is located at 6 and 10 Namona Street, North Narrabeen (**Figure 3**). The site is located to the north of Narrabeen Lagoon and east of Mullet Creek. The Tasman Sea is located approximately 900 metres to the west of the site.



Figure 3 Site Location

3.2 Site Description

NNPS is located at 6 Namona Street, North Narrabeen and is legally described as Lot 3 Deposited Plan (DP) 1018621. NSHS is located at 10 Namona Street, North Narrabeen and is legally described as Lot 12 DP 1119562. The site has a total area of 9.84 hectares.

The two schools are separated by Namona Street which is a no-through road from Pittwater Road. NSHS is located on the southern side of Namona Street and NNPS is located on the northern side of Namona Street.



Figure 4 Aerial Photograph – Narrabeen Education Precinct

3.2.1 Narrabeen North Public School

NNPS has a total site area of 23,750m². The site is irregularly shaped with a street frontage to Namona Street of 92m.

Figure 5 is an aerial photograph of NNPS and its immediate context.



Figure 5 Aerial Photograph – Narrabeen North Public School

The site topography rises in the centre of the site, with the majority of buildings situated at RL4.3. There is a retaining wall along the Namona Street frontage.

Photos of NNPS are provided in Figure 6.

Existing buildings at NNPS include:

- <u>Building A:</u> Administration Building (single-storey Bini Shell);
- <u>Building B:</u> Before and After School Care (single-storey with two interconnected Bini Shells)
- <u>Building H:</u> Staff Rooms;
- <u>Building J:</u> Homebases, computer room, storage and amenities;
- <u>Building K:</u> Special programs (1938 single-storey brick classroom building);
- <u>Building N:</u> Homebases;
- Building P: Homebases and storage;
- <u>Building R:</u> Homebases and amenities;
- <u>Building S:</u> Homebases;
- <u>Building T:</u> Homebases;
- Building U: Canteen, amenities and covered outdoor learning area (COLA); and
- <u>Building V:</u> Two storey building with homebases on the ground floor and library/music room on the first floor.

Other structures include the amphitheatre located on the western part of the site and 19 demountable buildings.

The main open play space is at the northern end of the site, along with a multi-purpose sports court.

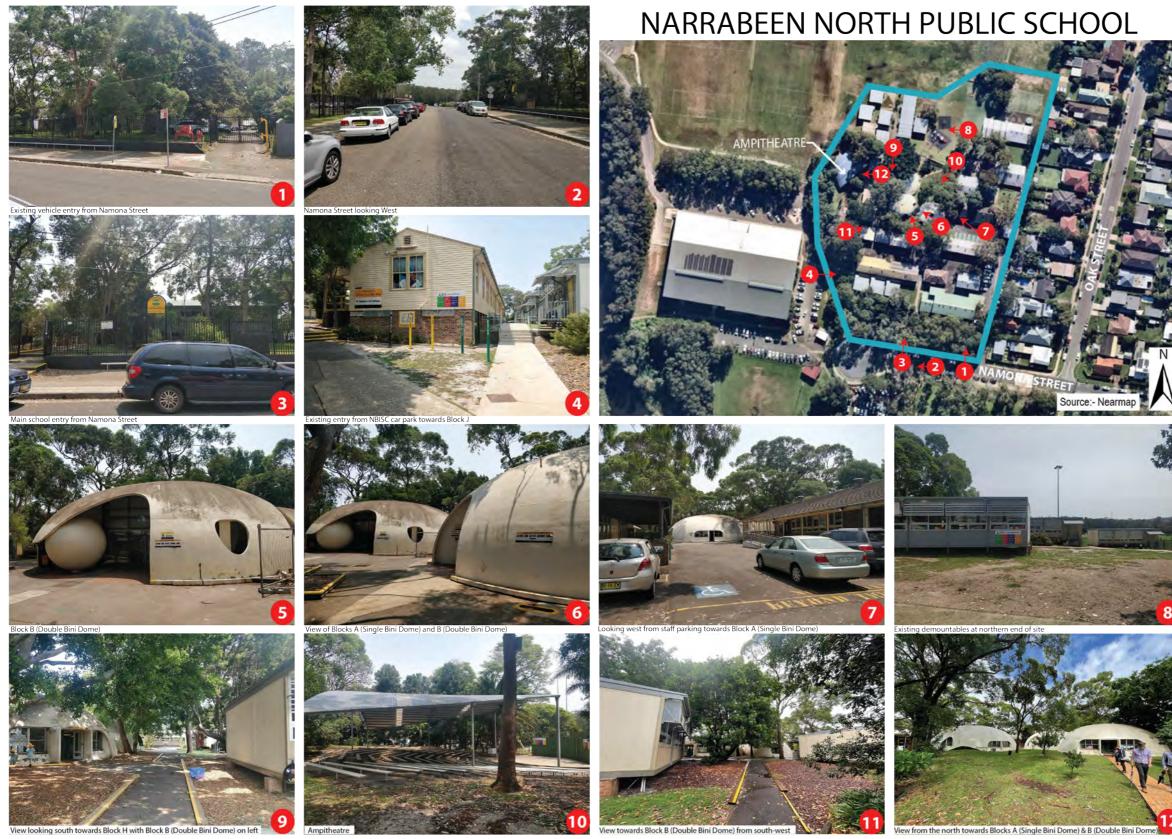


Figure 6 Photographs of NNPS

Vegetation on the site includes a mixture of native and exotic species. Vegetation along the southern boundary of the site has been identified as the vegetation community 'South-Coast Sands Bangalay Forest' (PCT 3638).

In 2022, the school has an enrolment of 719 students (Kindergarten to Year 6) and 62 staff (including full-time equivalent (FTE), temporary and casual staff).

3.2.2 Narrabeen Sports High School

NSHS has a total site area of 74,710m². The site is irregularly shaped with a street frontage to Namona Street of approximately 250m and a street frontage to Pittwater Road of 266m.

Figure 7 is an aerial photograph of the site and its immediate surrounds.



Figure 7 Aerial Photograph – Narrabeen Sports High School

The site topography is relatively flat with most of the school buildings located at RL2.3.

Existing buildings at NSHS include:

- Building A: Gymnasium and teaching spaces;
- <u>Building B:</u> Teaching spaces;
- <u>Building C:</u> Teaching spaces;
- <u>Building D:</u> Library;
- <u>Building E</u>: Administration and teaching spaces;
- <u>Building F:</u> Teaching Spaces;
- Building G: Hall; and
- <u>Building K:</u> Leased to Northern Beaches Community College.

Most of the buildings are two storeys except for Building E which is three storeys and Buildings G and K which are single storey.

The site includes two large sports fields along with multi-purpose sports courts.

Vegetation on the site is characterised by scattered trees. Vegetation along Mullet Creek (to the west of the school) is characterised as 'Swamp Oak Swamp Forest fringing estuaries, Sydney Basin Bioregion & South East Corner Bioregion (PCT 4027)'.

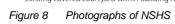
In 2022, NSHS has a student enrolment of 1,024 students across Years 7-12 with 106 staff (including FTE and non-teaching staff).

NARRABEEN SPORTS HIGH SCHOOL





















3.2.3 Access and Transport

Narrabeen North Public School

NNPS has the following existing access and transport facilities:

- On-site car parking spaces for staff accessed via Namona Street (a total of 46 spaces comprising 20 formal car parking spaces, including one (1) accessible car space and 16 informal car parking spaces);
- On-site bicycle parking rails (total 94 spaces);
- Three (3) pedestrian access points:
 - One (1) pedestrian access point from Warriewood Valley Sportsground;
 - One (1) pedestrian access point from Namona Street; and
 - One (1) pedestrian access point from the Northern Beaches Indoor Sports Centre (NBISC) car park;
- School bus zones along both sides of Namona Street (shared with NSHS); and
- Pedestrian crossing on Namona Street.

NNPS does not have formalised drop-off / pick-up facilities. Service vehicles (deliveries and waste) use the existing staff car park and driveway.

Narrabeen Sports High School

NSHS has the following existing access and transport facilities:

- On-site car parking for staff accessed via Namona Street (a total of 44 spaces including one (1) accessible car parking space);
- On-site bicycle parking spaces (total 91 spaces);
- Seven (7) pedestrian access points:
 - Three (3) pedestrian access points from Namona Street;
 - Two (2) pedestrian access points from Pittwater Road;
 - Two (2) pedestrian access points from Garden Street (via bridges across Mullet Creek);
- School bus zones along both sides of Namona Street (shared with NNPS);
- Pedestrian crossing on Namona Street and two (2) signalised pedestrian crossings on Pittwater Road.

NSHS does not have any formalised drop-off / pick up facilities. Service vehicles (deliveries and waste) use the hardstand area to the north of Block F access from the Pittwater Sports Centre (PSC) carpark.

Public Transport

The following State bus routes are located in the vicinity of the NEP:

- Pittwater Road:
 - o 182: Narrabeen Mona Vale
 - o 185: Narrabeen Mona Vale via Warriewood
 - o 190X: City Wynard to Avalon Beach (Express Service)
 - o 199: Manly Palm Beach
- Jacksons Road:
 - o 182: Narrabeen Mona Vale

- 185: Warringah Mall Mona Vale via Warriewood
- Garden Street
 - 182: Narrabeen Mona Vale.

The Warriewood B-Line stop is located to the north of the intersection of Jacksons Road and Pittwater Road.

Active Transport

The site is located within a locality with an established and extensive pedestrian and cycling network.

3.3 Surrounding Development

Existing development within the immediate vicinity of the site includes the Northern Beaches Indoor Sports Centre (NBISC) located to the west of NNPS and Warriewood Valley Sports Ground located to the north-west. Immediately adjoining the eastern boundary of NNPS are low density residential properties which are located on Oak Street. South of NSHS is the Pittwater Sports Centre (PSC). To the west of the site is Mullet Creek which flows into the Narrabeen Lagoon. East of the site is Pittwater Road, Narrabeen Lagoon and public reserves as well as commercial buildings and low-density residential properties to the east of Pittwater Road.

4.1 Summary of Proposed Development

The proposed development comprises:

- Narrabeen North Public School (NNPS):
 - Removal of three (3) trees;
 - Construction of a new part-one and part-two storey administration building, multipurpose hall, staff hub and out-of-school hours care (OSHC) building with associated Covered Outdoor Learning Area (COLA) (to be known as Building D);
 - New entry pathway from Northern Beaches Indoor Sports Centre (NBISC) car park to new building;
 - New hard and soft landscaping in the vicinity of the new building;
- Narrabeen Sports High School (NSHS):
 - Removal of three (3) trees;
 - Alterations and additions to Building A3 including:
 - Demolition of existing two (2) storey structure to the west of the existing gymnasium;
 - Construction of a two (2) storey extension to Building A3 comprising new stage to gymnasium, girls and boys amenities, girls and boys change rooms, storage and first aid room on the ground floor and movement studios, Physical Education (PE) classrooms, amenities and storage on the first floor;
 - Internal alterations to Building A3;
 - New lift access;
 - New Covered Outdoor Learning Area (COLA) to the south of Building A3 with new hard and soft landscaping.

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

4.2 Master Planning and Design Development

A comprehensive masterplan for the redevelopment of the Narrabeen Education Precinct (NEP) has been undertaken by DesignInc. This is described in detail in the Architectural Design Statement prepared by DesignInc.

The following master plan and design principles have guided the location of the new buildings on both school sites:

Narrabeen North Public School

- Maximise the retention of existing permanent buildings on the eastern part of the site with the new buildings replacing existing demountable classrooms;
- Creation of a new welcoming entrance and accessible pathway from Namona Street to the school buildings;
- Incorporation of the principles of design with country;
- Development of the 'treehouse' design strategy with the new buildings being sited amongst the trees providing a strong connection with nature and allowing for opportunities for indoor-outdoor learning;

- New two (2) storey buildings located away from existing low density residential development to the east of the site to minimise amenity impacts (overshadowing, noise, visual and acoustic privacy);
- New buildings have been sited outside of the SHR curtilage. The new buildings have been sited to provide views and vistas towards the heritage listed Bini domes (Blocks A and B) from the south (Namona Street) and west;
- New buildings have been sited to avoid impacting on the part of the site mapped as 'high biodiversity value' under the Biodiversity Conservation Act 2016 (BC Act) and 'coastal wetland' under Chapter 2 of State Environmental Planning Policy (Biodiversity and Conservation) 2021 (B&C SEPP);
- Retention of the existing trees along the western boundary of the site to provide landscape screening of the new buildings;
- Maintain existing cleared play space at the northern end of the school;
- Locating the new buildings above the probable maximum flood (PMF) level, which
 results in increased ramp lengths and maximum building height to Building D;
- Trees to be removed will be offset with new tree planting at NNPS and NSHS.

Figure 9 is an extract of the proposed masterplan for NNPS.

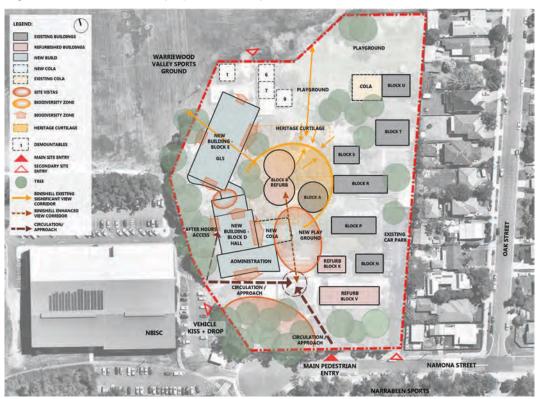


Figure 9 Proposed NNPS Master Plan (DesignInc)

Narrabeen Sports High School

- New buildings and alterations and additions to existing buildings sited to avoid areas mapped as 'high biodiversity value' and 'coastal wetland':
- Provide an accessible and clear path of travel through the school via a covered walkway that links all buildings. Provide passive surveillance from the accessible path of travel to outdoor courtyards and open space;
- Maximise the space for the school's sporting and play fields; and

Trees to be removed will be offset with new tree planting at NNPS and NSHS.

Figure 10 is an extract of the proposed masterplan for NSHS.

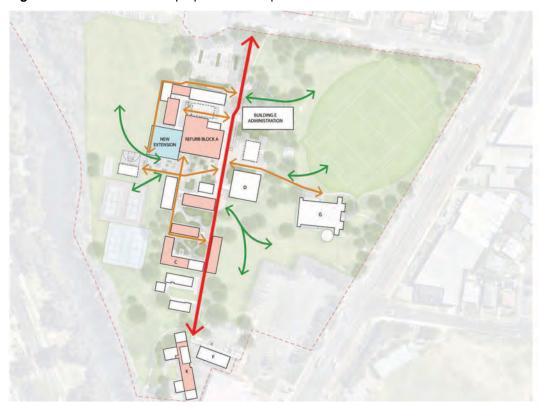


Figure 10 Proposed NSHS Masterplan (DesignInc)

The size of the new proposed buildings footprints has been determined by the requirements of the NSW Department of Education's Educational Facilities Standards and Guidelines (EFSG) to provide modern fit-for-purpose facilities that reflect the current best practice for educational facilities in NSW.

4.3 Narrabeen North Public School

4.3.1 Demolition and Site Preparation

Demolition works at NNPS are proposed to be undertaken under alternative planning pathways as described in **Section 2.4.1** of this SEE.

Earthworks are required to facilitate the construction of the new building and achieve the required finished floor levels. A total of 125m³ of cut is required for proposed Building D.

4.3.2 Tree Removal

In addition to the 30 trees already identified for removal under the separate tree removal and replacement DA (DA/2022/1259), three (3) additional trees are proposed to be removed as a part of this DA:

• Three (3) x Eucalyptus botryoides (Southern Mahogany) (Trees 55, 57 and 58);

Trees 57 and 58 are required to be removed to facilitate the upgrade to Building B (the double binishell dome). Tree 55 is required to be removed as it is impacted by the construction of the new school hall and COLA.

All other trees on the NNPS site are to be retained and protected during the works in accordance with the recommendations outlined in the Arboricultural Impact Assessment (AIA) report prepared by Independent Arboricultural Services (refer to **Section 6.2.2**).

4.3.3 Proposed Building D

The proposed development at NNPS comprises the construction of a part one (1) and part (2) storey building containing administration, school hall, OSHC facilities and staff hub with associated COLA. This building is to be known as Building D.

The new Building D comprises:

Ground Floor

- New administration building containing:
 - Open office with reception counters;
 - Principal's office;
 - Three (3) x Deputy Principal's offices;
 - Three (3) x interview rooms,
 - Sick bay;
 - Security store;
 - Main switch board (MSB) room;
 - o Comms room;
 - Male and female ambulant toilets; and
 - Unisex accessible toilet.
- School hall containing:
 - Hall with stage;
 - o OSHC kitchen, office and store;
 - Store rooms for chairs / performance, Sports and Physical Education (PE),
 Garden and Bulk;
 - Boys, girls, student accessible and staff accessible amenities;
 - Cleaner's room: and
 - Service cupboards.
- Covered Outdoor Learning Area.

First Floor

- Staff Hub comprising:
 - Staff lounge;
 - o Kitchen; and
 - o Male, female and accessible amenities.

Architectural plans for the proposed development at NNPS have been prepared by DesignInc. **Figure 11** is an extract of the ground floor plan of Building D



Figure 11 Proposed Ground Floor Plan of Building D (NNPS) (DesignInc)

Proposed Building D has a total gross floor area of approximately 1,319m² comprising 1,133m² on the ground floor and 186m² on the first floor. Building D has a maximum height of 9.63m to the ridge of the COLA roof. A description of the design of the building is provided in the Architectural Design Report prepared by DesignInc.





Figure 12 3D Photomontage of the proposed Building D (DesignInc)

Proposed materials for Building D have been inspired by the existing trees, timber and the traditional timber-weather board cladding of the coastal location. Building D incorporates a darker colour 'weather-board look' fibre-cement cladding to the ground floor and a medium tone cladding to the first floor. Vertical aluminium battens in mix of warm earthy colours to the upper part of the hall and COLA create visual interest and provide façade articulation.

4.3.4 Landscape

Landscape plans for NNPS have been prepared by DesignInc. This includes an overall landscape master plan for the site that seeks to improve connectivity across the NNPS site and provide a range of types of multi-function outdoor spaces such as outdoor learning areas, passive and active recreation spaces, and special needs and reflection space.

Landscape works proposed as part of the DA include:

- New entry and pedestrian pathway from NBISC carpark to Building D with native planting along the pathway and new feature trees;
- New broom-finished concrete pavement around Building D and beneath COLA;
- 50 bicycle hoops (total 100 spaces);
- New secondary fence and gate.

Figure 13 shows the extent of the hard and soft landscaping proposed to be provided as part of the DA (extent of the DA works indicated by a red line).

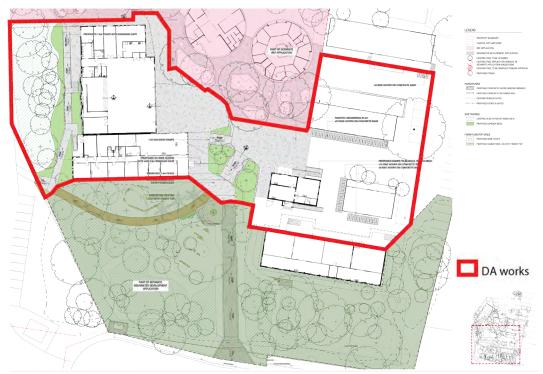


Figure 13 Extract landscape plan (DesignInc)

A total of seven (7) new trees are proposed to be planted as part of the DA as follows:

- Five (5) x Eleocarpus reticulatus (Blueberry Ash);
- One (1) x Ficus microcarp hillii (Hills Weeping Fig); and
- One (1) x Melaleuca stypheliodes (Prickly Leaved Paperbark).

4.3.5 Stormwater

A Civil and stormwater report has been prepared by Enstruct. The proposed stormwater management has been designed to address the requirements of the Education Facilities Standards Guidelines (EFSG), Council's Development Control Plan (DCP) and Council's Water Management Policy for Development Policy.

The proposed stormwater drainage system for Building D at NNPS comprises:

- A new pit and pipe drainage that has been sized for the 5% annual exceedance probability (AEP) design storm event and provision for overland flow path in the event of larger or more extreme storm events.
- Use of pollution control devices including litter screens in all pits; and
- Use of 34.5m long bio-retention swale with a 300mm perforated pipe for filtration and dispersion of all collected stormwater.

The bio-retention swale is located to the west of Building D and will filter the stormwater to reduce the total suspended solids, gross pollutants, total nitrogen and total phosphorus concentration. A MUSIC model has been prepared by Enstruct to assess the suitability of the proposed WSUD measures.

No on-site detention is proposed.

4.3.6 Vehicular Access, Pedestrian Access and Parking

No changes to existing vehicular access to the site is proposed. No changes to existing onsite car parking or site servicing are proposed.

As part of the DA, the existing pedestrian access to the site from the NBISC carpark will be upgraded to provided after-hours access to admin and the hall.

4.3.7 BCA and Access

A BCA Capability Statement has been prepared by Philip Chun Building Compliance for the development at NNPS to address the requirements of Section 19(1)(c) of the *Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.* The BCA Capability Statement confirms that the proposed development at NNPS is capable of complying with the relevant deemed-to-satisfy and Performance Requirements of the Building Code of Australia, subject to the recommendations of the BCA Capability Statement.

An Access Capability Statement has been prepared by Philip Chun Building Compliance for the development at NNPS to address the requirements of the Commonwealth *Disability Discrimination Act 1992* (DDA Act), *Disability (Access to Premises Standards) 2010*, BCA and relevant Australian Standards. The Access Capability Statement confirms that the proposed NNPS development is capable of complying with the BCA as it relates to accessibility, subject to the recommendations of the Access Capability Statement.

The final development will be documented as being capable of fulfilling the requirements of Section 6.28 of the EP&A Act, as is required for Crown building works.

4.3.8 Signage

An indicative design for new signage at NNPS is provided within the Architectural Design Report. However, this will be subject to a separate application.

4.3.9 Operation

The proposed development does not seek to increase staff or student numbers at NNPS and no changes to the school's existing operations are proposed.

The school is generally open between 8am and 3:30pm during school term. The OSHC will operate both before school (7 - 8:30am) and after school (3 - 6pm). The OSHC also provides vacation care during school holidays.

The proposed school hall will also on occasion by used for after-hours school events or functions (typically between 6pm and 9pm) and will also be available for hiring by community groups subject to Department of Education's policies.

4.4 Narrabeen Sports High School

4.4.1 Demolition and Site Preparation

The extent of demolition at NSHS is shown on the architectural plans prepared by DesignInc. The proposed demolition works the subject of this application include:

- Demolition of part of Building A3 comprising storerooms, boys toilets and change room on the ground floor and two (2) music learning spaces on the first floor;
- External demolition of part of the western walkway between Building A3 and Building B2, removal of existing outdoor seating and planters; and
- Internal demolition with Building A3 including removal of internal walls on ground and first floors, removal of part of the first floor walkway and removal of existing doors on the southern elevation of the gymnasium.

Earthworks are required to facilitate the extension of Building A3. A total of 105m³ of cut is required to achieve the required finished floor levels.

4.4.2 Tree Removal

In addition to the six (6) trees already identified for removal under the separate tree removal and replacement DA (DA/2022/1259), three (3) additional trees are proposed to be removed as a part of this DA:

- Two (2) x Eucalyptus robusta (Swamp Mahogany) (Trees 65 and 66); and
- One (1) x Lophostemon confertus (Queensland Brush Box) (Tree 67).

These trees are located within the footprint of the proposed COLA located to the south of Building A3.

4.4.3 Alterations and Additions to Building A3

The proposed development at NSHS includes alterations and additions to existing Building A3:

- New extension to the west of Building A3:
 - Ground floor comprising new stage for the gymnasium, girls and boys change rooms, girls and boys toilets, student accessible toilet, first aid room, storerooms and cleaners store;
 - First floor comprising movement studio with tiered platform, two (2) physical education classrooms, student accessible and ambulant toilets and storage rooms;
- Internal alterations to Building A3 including:
 - Ground floor works including refurbishment of gymnasium, new large equipment store and sports store, control room and ALU café;
 - First floor works including new staff room, staff ambulant and accessible toilets, unitform shop;
- New lift to the east of Building A3; and
- New COLA to the south of Building A3.

Architectural plans have been prepared by DesignInc. **Figure 14** is an extract of the proposed ground floor of Building A3.

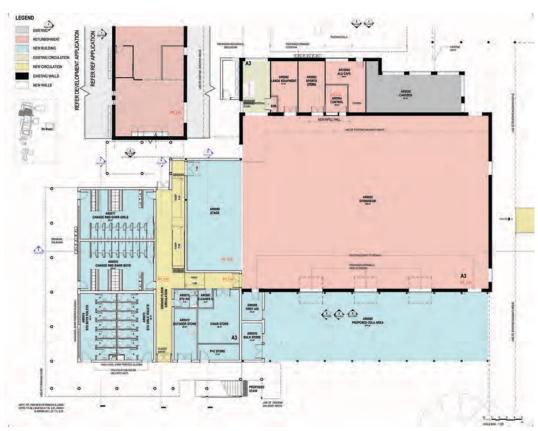


Figure 14 Ground Floor Plan of Building A3 (DesignInc)

Building A3 (including the new extension) has a total gross floor area of approximately 2,053m² comprising 1,463m² on the ground floor and 590m² on the first floor. The new extension to Building A3 has a maximum height of 10.63m from the existing ground level and the proposed alterations to the existing part of Building A3 has a maximum height of 10.69m. A description of the design of the building is provided in the Architectural Design Report prepared by DesignInc.

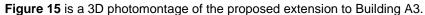




Figure 15 3D Photomontage of the extension to Building A3 (DesignInc)

The proposed NSHS building extension has been designed to respond to the existing Brutalist aesthetic of the campus which features pale brickwork, pebblecrete balustrades and shading devices, and exposed concrete and steel concretes. Proposed external materials and finishes include:

- Textured pre-cast concrete panels on the ground floor;
- Light grey aluminium façade panels;
- Light grey perforated aluminum façade panels; and
- Colour trims providing visual interest.

4.4.4 Landscape

Landscape plans for NSHS have been prepared by DesignInc. The overall landscape masterplan for the site seeks to enhance passive recreation spaces located across the NSHS site and refresh existing planting. Most of the new landscaping at NSHS is proposed to be undertaken under a separate planning pathway.

Landscape works proposed as part of the DA include:

- New broom-finished concrete pavement beneath the COLA; and
- 100 bicycle spaces.

4.4.5 Stormwater

A Civil and stormwater report has been prepared by Enstruct. The proposed stormwater management has been designed to address the requirements of the Education Facilities Standards Guidelines (EFSG), Council's Development Control Plan (DCP) and Council's Water Management Policy for Development Policy.

The proposed stormwater drainage system for the extension to Building A at NSHS comprises:

- A new pit and pipe drainage that has been sized for the 5% annual exceedance probability (AEP) design storm event and provision for overland flow path in the event of larger or more extreme storm events.
- Use of pollution control devices including litter screens in all pits; and
- Use of 10m long bio-retention swale with a 150mm perforated pipe for filtration and dispersion of all collected stormwater.

The bio-retention swale is located to the west of Building D and will filter the stormwater to reduce the total suspended solids, gross pollutants, total nitrogen and total phosphorus concentration. A MUSIC model has been prepared by Enstruct to assess the suitability of the proposed WSUD measures.

No on-site detention is proposed.

4.4.6 Vehicular Access, Pedestrian Access and Parking

No changes to existing vehicle or pedestrian access to the site. No changes to the existing provision of on-site parking are proposed.

4.4.7 BCA and Access

A BCA Capability Statement has been prepared by Philip Chun Building Compliance to address the requirements of Section 19(1)(c) of the *Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021*. The BCA Capability Statement confirms that the proposed development at NSHS is capable of complying with the relevant deemed-to-satisfy and Performance Requirements of the Building Code of Australia, subject to the recommendations of the BCA Capability Statement.

4 Proposed Development

An Access Capability Statement has been prepared by Philip Chun Building Compliance to address the requirements of the Commonwealth *Disability Discrimination Act 1992* (DDA Act), *Disability (Access to Premises Standards) 2010*, BCA and relevant Australian Standards. The Access Capability Statement confirms that the proposed development at NSHS is capable of complying with the BCA as it relates to accessibility, subject to the recommendations of the Access Capability Statement.

The final NSHS development will be documented as being capable of fulfilling the requirements of Section 6.28 of the EP&A Act, as is required for Crown building works.

4.4.8 Operation

The proposed development does not seek to increase staff or student numbers at NSHS and no changes to the school's existing operations are proposed.

School hours are generally between 8am and 3:30pm (during the school term), with the office administration open between 8:15am and 3:30pm. There will be occasional out of hours usage of the gymnasium for school events and performances (6pm – 10pm). The gymnasium may also be available for community use subject to the Department of Education's community use policies.

4.5 **ESD**

An Environmentally Sustainable Design (ESD) report has been prepared by Steensen Varming to describe the ESD strategies and measures that have been incorporated into the design of the proposed development. The following ESD initiatives have been incorporated into the design:

- Narrabeen North Public School:
 - Solar control through use of sun shading and verandahs to reduce excess solar gain and glare;
 - Good crossflow ventilation;
 - Photovoltaic panels on the roof of Building D;
 - Use of building components which include recycled content;
 - Consideration of WELs and energy ratings when specifying products;
 - Flexible layouts to allow for adaptation and future school needs; and
 - The buildings have been raised above the Probable Maximum Flood level to ensure that the buildings and occupants are safe in the event of a flood.
- Narrabeen Sports High School:
 - Solar control through use of sun shading to reduce excess solar gain and glare;
 - Photovoltaic panels;
 - Use of building components which include recycled content; and
 - Consideration of WELs and energy ratings when specifying products.

5.1 General

The proposed development requires or may be deemed to require several approvals, consents, licences, permits or permissions from various government departments, pursuant to legislation other than the EP&A Act.

This section outlines relevant other legislation including the approvals, licences and permits which may need to be sought concurrently with the subject DA. This outline is structured under headings relating to the relevant legislation.

5.2 Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* (BC Act) commenced on 25 August 2017 and repealed the *Threatened Species Conservation Act 1995*, *Nature Conservation Trust Act 2001* and *Native Vegetation Act 2003*. Under the BC Act, preparation of a Biodiversity Development Assessment Report (BDAR) is required for a Development Application that meets any of the following criteria:

- State Significant Development;
- Development that has the potential to impact Areas of Outstanding Biodiversity Values as declared under Part 3 of the BC Act:
- Development that has the potential to impact areas mapped as having 'high biodiversity values' on the Biodiversity Value Map published by the NSW Environment, Energy and Science Group (former Office of Environment and Heritage);
- Development that involves the clearing of native vegetation that exceeds the Biodiversity Offset Scheme (BOS) thresholds; and
- Development that has the potential to cause a significant impact on a threatened species, population or ecological community, as determined by the application of the test of significance under Section 7.3 of the BC Act.

The site is identified as containing areas mapped as having 'high biodiversity values' on the Biodiversity Values Map (**Figure 16**).



Figure 16 Biodiversity Value Map

No development is proposed on the part of the site mapped as containing high biodiversity values under the BC Act. An Ecological Assessment report has been prepared by ADE Consulting Group.

Existing flora and fauna

Based on an ecological survey of the site by ADE Consulting Group, the following two (2) Plant Community Types (PCTs) have been identified on the site:

- PCT 4027 "Swamp Oak Floodplain Forest of New south Wales North Coast, Sydney Basin and South East Corner Bioregions" (Swamp Oak Forest); and
- PCT 3638 "Bangalay Sand Forest of the Sydney Basin and South East Corner Bioregions" (Bangalay Forest).

Figure 17 shows the extent of these PCTs on the site, along with the location of planted vegetation including both planted exotic and native species. PCT 4027 is located along Mullet Creek along the western boundary of the NSHS site and has a total area of 1.56 hectares. PCT 3638 is located within the NNPS site between Namona Street and the existing school buildings.

Both PCTs correspond to Threatened Ecological Communities (TECs) identified under the BC Act,

The ecological survey identified a total of 96 flora species recorded on the site. Of the 96 flora species, 31 are considered to be introduced or weed species. One threatened flora species *Eucalyptus scoparia* (Wallangarra Gum) was identified on the site. However, it is native to northern New South Wales and southern Queensland and is identified as an exempt species in the Northern Beaches Local Government Area. No other threatened flora species or conservation significant flora species were recorded on or adjacent to the site.

The ecological survey identified 13 fauna species comprising common avian and mammalian species. No threatened avian, mammal, reptile or amphibian species were observed during the site inspection. An assessment of the likely occurrence of threatened fauna species found that the following species may have some potential to occur on the site:

- Southern Myotis (Myotis macropus);
- Eastern Freetail Bat (Micronomus norfolkensis);
- Eastern Long-eared Bat (Nyctophilus bifax),
- Grey-headed Flying Fox (Pteropus poliocephalis);
- Fork-tailed Swift (Apus pacificus); and
- Powerful Owl (Ninox strenua).

Test of significance

Section 7.3 of the BC Act outlines the test of significance to assess the likelihood of significant impacts upon any listed species, populations or ecological communities listed under the BC Act. Sections 5 and 6 of the Ecological Assessment Report provides an assessment of the potential impacts of the proposed tree removal on any listed species, populations or ecological communities and provide an assessment against section 7.3 of the BC Act.



Figure 17 Plant communities located on the site (AED Consulting)

The Ecological Assessment Report concludes as follows:

7.1 Direct Impacts

7.1.1 Threatened Ecological Communities

Two threatened ecological communities (TEC's) were identified as occurring on the Subject Site. The vegetation present along the banks of Mullet Creek corresponds to "Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions" TEC. Further to this, the vegetation community Bangalay Open Forest may also correspond to the "Bangalay Sand Forest of the Sydney Basin and South East Corner bioregion TEC. As no clearing will be undertaken within these TEC's, the proposed

school upgrade is not expected to impact on these communities. As a consequence, regulations under the BC Act do not require the preparation of a Biodiversity Assessment Report (BDAR).

7.1.2 Wetland Areas

The development site contains mapped Plant Community Type (PCT) 4027 Swamp Oak Swamp Forest Fringing Estuaries, Sydney Basin and South East Corner Bioregion along the riparian buffer of Mullet Creek as well as two patches of vegetation adjacent to Namona Street. This community is classified as a wetland in accordance with the Coastal Resilience and Hazards SEPP and falls under the vegetation formation of a forested wetland. This vegetation community is not located within the proposed development footprint. To ensure no impacts result on this community, it will be important to outline its presence, the implications of any associated construction activities occurring within the boundaries of this area on all construction personnel. This information should be outlined to all personnel prior to works commencing or personnel commencing work on the site.

7.1.3 Threatened Flora

Two specimens of Eucalyptus scoparia (Wallangarra Gum) will be cleared as a consequence of the proposed development¹. This species is listed as Endangered under BC Act. This species natural range is from far northern NSW and southern Queensland. This species has been extensively planted as an urban landscaping tree. Under the Pittwater LEP, this species is identified as and "Exempt Tree" and can be cleared unless it's identified as a Heritage Item or occurs within a Heritage Area.

No other threatened flora species have previously been recorded on the Subject Site. Due to the historic disturbance to the Subject Site, and the ongoing use and maintenance of the site as a school ground, no threatened flora species are expected to occur. As a consequence, regulations under the BC Act do not require the preparation of a BDAR.

7.1.4 Threatened Fauna

The proposed works will impact 3 trees on the NNPS site and 3 trees on the NSHS site, which may provide highly limited potential foraging habitat for the above listed threatened species. This habitat is unlikely to be important to the survival of any of these species as the trees occur in patches, experiencing high levels of disturbance and edge effects. Additionally, within the locality, larger and more suitable patches of vegetation for these species occur within a number of reserves including Warriewood Reserve. Furthermore, all of these species are highly mobile and the proposed works will not decrease the movement of individuals and gene flow between areas of potential habitat throughout the locality or within or between their local populations. For these reasons, the proposed development is considered unlikely to have a significant impact on any of these threatened species. As a consequence, regulations under the BC Act do not require the preparation of a BDAR.

7.2 Indirect Impacts

7.2.1 Erosion and Sedimentation Control

It is recommended that a site-specific sedimentation and erosion control plan be developed for the Subject Site. This will ensure that no downstream impacts will occur on any conservation significant species.

7.2.2 Weed Management

Given construction access will be over dedicated hardstand and aggregate, it is considered that there will be a low risk for the ingress or egress of weeds. As a consequence, no specific weed management recommendations are required.

It is therefore concluded that the proposed tree removal and replacement will not have any significant impacts upon any listed species, populations or ecological communities and that the impacts of the proposed development have been appropriately avoided, minimised and managed in accordance with the relevant provisions of the BC Act. The recommendations of the Ecological Assessment Report should be implemented prior to any development occurring on the site.

¹ The two (2) specimens of Eucalyptus scoparia (Wallangarra Gum) are being removed as part DA 2022/1259

5.3 Heritage Act 1977

The *Heritage Act 1977* contains provisions relating to the protection of items of heritage significance. Section 58 of the Heritage Act requires that approval from the Heritage Council of NSW is obtained prior to undertaking any development likely to have an impact on an item listed on the State Heritage Register or subject to an interim heritage order.

NNPS is identified as containing an item (Block B Double Bini Dome) of State heritage significance (SHR No. 02037 "The Binishell Collection (Department of Education)) on the State Heritage Register under the Heritage Act. The extent of the SHR curtilage is shown in **Figure 18**. The SHR listing curtilage excludes Block A (Single Bini Dome) which forms part of the local heritage item under Schedule 5 of the LEP. Both Blocks A and B are identified on the Department of Education's Section 170 Heritage and Conservation Register under the Heritage Act.



State Heritage Register - Proposed Curtilage for Investigation: North Narrabeen Public School Library(under consideration). Plan:3245 6 Namona Street, Narrabeen

Figure 18 State Heritage Register Curtilage

The proposed development includes the following works located within the SHR curtilage:

- Removal of three (3) trees (Trees 55, 57 and 58); and
- Small portion of the multi-purpose hall and COLA.

Therefore, approval for the proposed development is required from the Heritage Council of NSW and this triggers the integrated development provisions under the EP&A Act.

A Heritage Impact Statement (HIS) has been prepared by CityPlan Heritage that assesses the impact of the proposed DA works on the heritage significance of the item in accordance with the NSW Heritage Manual publications *Statements of Heritage Impact* (2002) and *Assessing Heritage Significance* (2021). The HIS also has regard to the principles and process detailed in *The Burra Charter: The Australian ICOMOS Charter for Places of Cultural Significance* (2013) (the Burra Charter).

The HIS concludes that the proposed development, in conjunction with works proposed under other planning pathways such as the demolition of Building H and J, will have an acceptable impact on the heritage significance of the site for the following reasons:

- There will be no impacts on any heritage items located within the vicinity of the site due to limited visual connections.
- The proposed development seeks to upgrade the school's existing facilities to ensure
 the ongoing use of NNPS as an educational establishment and that will achieve the
 delivery of modern pedagogical learning to studentsm and the continued maintenance
 and conservation of the NNPS site's significant heritage values as part of the State
 significant Department of Education's Binishell collection.
- The new buildings are located as much as possible outside of the SHR curtilage, whilst balancing site considerations including biodiversity; relationship between the binidomes and the new buildings; new building design including façade and mass articulation, retention of mature trees and employing a compatible but contemporary palette of materials and finishes.
- The proposed development provides an opportunity to enhance the visual curtilage to the binidomes including creation of view between Namona Street and the binidomes (following the demolition of Buildings H and J) (Figure 19).
- New buildings are located along the western edge of the site away from the existing
 residential precinct to the east of the site. Therefore, the proposed development will not
 adversely impact the character of the existing residential precinct (Oak Street) to the
 east of the site.

The HIS provides the following recommendations:

The following recommendations have been made to ensure the assessed heritage values of the subject site, and its layered history is conserved and communicated to its future users:

- A temporary protection plan should be prepared to ensure Binidomes and in particular Binidome B are protected during works and to guide the demolition works of the buildings and relocation of demountable structures around the Binidomes;
- A photographic archival recording of Binidomes and their surroundings where the
 proposed development will take place should be undertaken prior to the
 commencement of any works in accordance with the Heritage NSW guidelines for
 Photographic recording of Heritage Items Using Film or Digital Capture (2006):
- A built heritage specialist should be involved and be on site during all critical processes that require specialist heritage expertise and detailing; and
- Ensure STOP WORK provisions are in place for any unexpected findings that could be considered archaeological relics or an Aboriginal object during the works to prevent any harm to the finds. Consult a suitably qualified archaeologist to inspect the find and advice on the appropriate management approach.

Subject to the implementation of the recommendations of the HIS, it is considered that the proposed development is acceptable from a heritage perspective and is consistent with the relevant heritage requirements under the LEP and DCP.

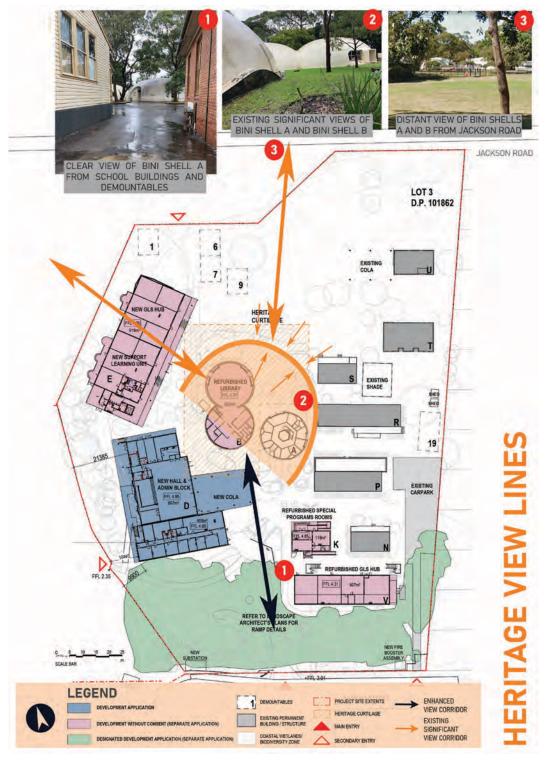


Figure 19 Proposed views and vistas at NNPS (City Plan Heritage)

5.4 National Parks and Wildlife Act 1974

The National Parks and Wildlife Act 1974 (NPW Act), administered by Heritage NSW, is the primary legislation for the protection of Aboriginal cultural heritage in NSW. The NPW Act gives the Director General of Heritage NSW responsibility for the proper care, preservation and protection of 'Aboriginal objects' and 'Aboriginal places', defined under the Act as follows:

- an Aboriginal object is any deposit, object or material evidence (that is not a handicraft
 made for sale) relating to Aboriginal habitation of NSW, before or during the occupation
 of that area by persons of non-Aboriginal extraction (and includes Aboriginal remains).
- an Aboriginal place is a place declared so by the Minister administering the NPW Act because the place is or was of special significance to Aboriginal culture. It may or may not contain Aboriginal objects.

Section 90 of the NPW Act requires an Aboriginal Heritage Impact Permit (AHIP) to be granted by Heritage NSW for any works likely to destroy, deface, damage or knowingly cause or permit the destruction or defacement of a relic or Aboriginal place or object. In addition, section 87 provides that it is a defence to a prosecution if harm or desecration to a relic or Aboriginal place or object was authorised by an Aboriginal heritage impact permit and the conditions to which that permit was subject were not contravened.

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Kayandel to detail the Aboriginal heritage on the site and provide sufficient information to facilitate an informed decision regarding the impact of the proposed development on known and unknown Aboriginal heritage. The ACHAR has been prepared in accordance with the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* (2010) (Department of Environment, Climate Change and Water NSW) and the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (2011) (Former Office of Environment and Heritage). The ACHAR identifies Aboriginal cultural values, outlines consultation with Aboriginal people who hold cultural knowledge of Aboriginal objects and/or places on the site, assesses the impacts of the proposed development on the Aboriginal cultural heritage values of the site, and demonstrates that any impacts can be avoided or appropriately mitigated.

As a result of a survey and field assessment, no previously unrecorded Aboriginal sites were identified, however, an archaeological sensitive landform has been identified along the western boundary of the site adjoining Mullet Creek (**Figure 20**). No development is proposed on the part of the site identified as being an archaeological sensitive landform. Elsewhere on the site where high levels of ground disturbance have occurred have been assessed as having low archaeological potential. The ACHAR concludes that:

On consideration of previous disturbance, the archaeological context and the significance of the above Aboriginal sites within the Subject Area, it has been determined that no further investigation is required to inform the Development Application to the Northern Beaches Council.

Should the design or extent of the proposed works be altered in such a way that would impact the archaeologically sensitive landform, further archaeological investigation in the form of a test excavation may be necessary. This test excavation would be used to inform the assessment of impact to any identified Aboriginal sites.

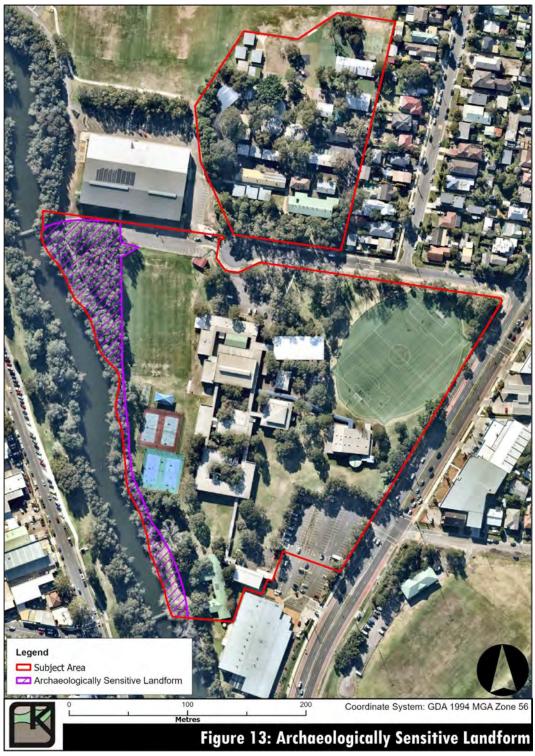


Figure 20 Archaeologically Sensitive Landform (Source: Kayandel)

The ACHAR identifies the following management principles and recommendations

The following management principles and recommendations are based on:

- The legal requirements of the National Parks and Wildlife Act 1974 (as amended), whereby it is illegal to damage, deface or destroy an Aboriginal relic without first obtaining the written consent of the Director General of National Parks & Wildlife Service;
- The legal requirements of the Heritage Act 1977, whereby it is illegal to disturb or excavate any land knowing or having reasonable cause to suspect that the

disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged, or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit;

- The requirements of the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010b);
- The requirements of the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011); and,
- The findings presented within this Aboriginal Cultural Heritage Assessment Report.

Kayandel recommends the following:

- No further assessment of the Aboriginal heritage within the Subject Area is required to inform the DA for the proposed works;
- Should the proposed works be amended and result in potential impacts to areas
 previously not inspected as part of this assessment, further investigations may be
 required;
- 3. That where the archaeologically sensitive landform (refer to Figure 13) may be potentially impacted by development activities, that either of the management strategies presented in Section 11.3 [of the ACHAR] is implemented;
- All relevant staff and contractors should be made aware of their statutory obligations for heritage under the National Parks and Wildlife Act 1974, which may be implemented as a heritage induction;
- If, during the course of development works, suspected Aboriginal cultural heritage material is uncovered, work should cease in that area immediately. Heritage NSW should be notified and works only recommence when an approved management strategy has been developed;
- 6. In the unlikely event that skeletal remains are identified, work must cease immediately in the vicinity of the remains and the area must be cordoned off. The Proponent must contact the local NSW Police who will make an initial assessment as to whether the remains are part of a crime scene, or possible Aboriginal remains. If the remains are thought to be Aboriginal, Heritage NSW must be contacted by ringing the Enviroline 131 555. A Heritage NSW officer will determine if the remains are Aboriginal or not; and a management plan must be developed in consultation with the relevant Aboriginal stakeholders before works recommence; and,
- 7. A copy of the final report should be sent to the Registered Aboriginal Parties (RAPs) identified in Table 4 [of the ACHAR].

It is concluded that the proposed development will not have an impact on items of Aboriginal Cultural Heritage significance and therefore, the proposed development does not require any approvals under Part 6 of the NPW Act.

5.5 Water Management Act 2000

The objects of the WM Act are generally "to provide for the sustainable and integrated management of the water sources of the State 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' for works at a specified location in, on or under 'waterfront land'. The requirement for an approval of this nature triggers the integrated approval provisions of the EP&A Act. 'Controlled activity' and 'waterfront land' are defined by the WM Act as follows:

"controlled activity means:

- (a) the erection of a building or the carrying out of a work (within the meaning of the Environmental Planning and Assessment Act 1979), or
- (b) the removal of material (whether or not extractive material) or vegetation from land, whether by way of excavation or otherwise, or
- (c) the deposition of material (whether or not extractive material) on land, whether by way of landfill operations or otherwise, or

(d) the carrying out of any other activity that affects the quantity or flow of water in a water source.

. . .

waterfront land means:

- (a) the bed of any river, together with any land lying between the bed of the river and a line drawn parallel to, and the prescribed distance inland of, the highest bank of the river, or
- (a1) the bed of any lake, together with any land lying between the bed of the lake and a line drawn parallel to, and the prescribed distance inland of, the shore of the lake, or
- (a2) the bed of any estuary, together with any land lying between the bed of the estuary and a line drawn parallel to, and the prescribed distance inland of, the mean high water mark of the estuary, or
- (b) if the regulations so provide, the bed of the coastal waters of the State, and any land lying between the shoreline of the coastal waters and a line drawn parallel to, and the prescribed distance inland of, the mean high water mark of the coastal waters,

where the prescribed distance is 40 metres or (if the regulations prescribe a lesser distance, either generally or in relation to a particular location or class of locations) that lesser distance. Land that falls into 2 or more of the categories referred to in paragraphs (a), (a1) and (a2) may be waterfront land by virtue of any of the paragraphs relevant to that land."

The proposed development includes works located on waterfront land as the proposed bioretention swale associated with the extension to Building A at the NSHS site is located within
40m of Mullet Creek. However pursuant to clause 41 of the *Water Management (General) Regulation 2018*, public authorities are exempt from requiring approval under the WM Act for
controlled activities that it carries out in, on or under waterfront land. Therefore, a control
activity approval is not required to be issued by the Natural Resources Access Regulator
(NRAR) in relation to the proposed development. Nevertheless, it is likely that Council will
refer the DA to the NRAR.

This section provides an environmental assessment of the proposed development in respect of the relevant matters for consideration under section 4.15(1) of the *Environmental Planning and Assessment Act*, 1979 (EP&A Act).

The key environmental planning issues associated with the proposed development are:

- Compliance with relevant planning policies and controls;
- Biodiversity and Tree Removal/Replacement;
- Flooding, Stormwater and Drainage;
- Built Form and Streetscape;
- Heritage Conservation;
- Transport, Traffic and Parking;
- Crime Prevention: and
- Contamination.

An assessment of these issues is provided in the following subsections.

6.1 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.

6.1.1 State Environmental Planning Policy (Planning Systems) 2021

On 1 March 2022, the following SEPPs were repealed and the relevant provisions transferred to *State Environmental Planning Policy (Planning Systems)* 2021 (Planning Systems SEPP):

- State Environmental Planning Policy (State and Regional Development) 2011;
- State Environmental Planning Policy (Aboriginal Land) 2019; and
- State Environmental Planning Policy (Concurrences and Consents) 2018.

Chapter 2 State and Regional Development

Section 15 of Schedule 1 of the Planning Systems SEPP establishes that any proposed development that has a capital investment value of more than \$50 million for the purpose of alterations and additions to an existing school is state significant development (SSD). The capital investment value (CIV) of the proposed works is less than \$50 million as determined by the cost report prepared by Turner & Townsend and therefore, the proposed development does not meet the SSD threshold.

The CIV of the proposed development is greater than \$5 million. Therefore, the development meets the definition of regionally significant development under Schedule 6 of the Planning Systems SEPP and the consent authority for the DA will be the Sydney North Planning Panel (SNPP).

6.1.2 State Environmental Planning Policy (Biodiversity and Conservation) 2021

On 1 March 2022, the following SEPPs and deemed SEPPs were repealed and the relevant provisions transferred to *State Environmental Planning Policy (Biodiversity and Conservation)* 2021 (B&C SEPP):

- State Environmental Planning Policy (Vegetation in non-rural areas) 2017;
- State Environmental Planning Policy (Koala Habitat Protection) 2020;
- State Environmental Planning Policy (Koala Habitat Protection) 2021;

- Murray River Regional Environmental Plan No 2 Riverine Land;
- 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;
- Sydney Regional Environmental Plan 20 Hawkesbury-Nepean River No. 2 1997;
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
- Greater Metropolitan Regional Environmental Plan No 2 Georges River Catchment, and
- Willandra Lakes Regional Environmental Plan No 1 World Heritage Property.

Chapter 2 Vegetation in non-rural areas

The provisions of Chapter 2 of the B&C SEPP are a relevant consideration in relation to the proposed development as the works will require the removal of vegetation. The tree removal forms part of the development application.

The aims of Chapter 2 are as follows:

- (a) to protect the biodiversity values of trees and other vegetation in non-rural areas of the State, and
- (b) to preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation.

An assessment of the impacts of the proposed development on the biodiversity values of the site is addressed in the Ecological Assessment report prepared by ADE Consulting Group (refer to **Section 5.2**).

Pursuant to Section 2.10(3) of the B&C SEPP, Council cannot issue a tree removal permit that allows the clearing of vegetation that forms part of a heritage item. NNPS is identified as a local heritage item under the LEP and contains an item of State significance (Building B the double Binidome), therefore Council can not issue a tree removal permit in relation to the tree removal at the NNPS site.

Two (2) Arboricultural Impact Assessment (AIA) reports have been prepared by Independent Arboricultural Services to assess the impacts of the proposed development on trees. In addition to the trees identified for removal under the tree removal and replacement DA (DA2022/1259), a further six (6) trees are proposed to be removed to facilitate the proposed development under the subject DA. This comprises three (3) trees at NNPS and three (3) trees at NSHS. The removal of the six (6) trees will be offset by the planting of new trees across both sites (refer to DA 2022/1259).

Chapter 4 Koala Habitat Protection 2021

Chapter 4 of the B&C SEPP aims to "encourage the conservation and management of areas of natural vegetation that provide habitat for Koalas to support a permanent free-living population over their present range and reverse the current trend of Koala population decline."

Chapter 4 of the SEPP applies to the site as it is within the Northern Beaches LGA (which is listed in Schedule 1 of the SEPP) and comprises land greater than 1 ha. Northern Beaches Council does not have an approved Koala Plan of Management.

Pursuant to section 4.9 of the B&C SEPP, prior to the granting of development consent the consent authority must assess whether the proposed development is likely to have an impact on koalas or koala habitat. The Ecological Assessment report prepared by ADE Consulting Group provides an assessment of the site and whether it constitutes core koala habitat. The Ecological Assessment report notes the following:

- A review of the Bionet database has identified that no Koalas have been recorded on or within 1.5 kilometres of the site;
- The site has been previously disturbed and is surrounded by security fencing;
- Koala feed tree species have been identified on the site including Eucalyptus botryoides (Bangalay), Eucalyptus robusta (Swamp Mahogany), Casuarina glauca (Swamp Oak), Eucalyptus saligna (Sydney Blue Gum), Eucalyptus siderophloia (Grey Ironbark) and Melaleuca quinquenervia (Broad-leaved Paperbark). A targeted survey of these trees do not identify any koalas or evidence such as Koala scats or scratch marks on trees.

It is therefore considered that the site does not comprise core koala habitat and that the proposed development is likely to have a low or negligible impact on koalas or koala habitat.

Chapter 6 Bushland in urban areas

The aim of Chapter 6 of the B&C SEPP is to protect bushland in public open space zones and reservations and to ensure that bushland preservation is given a high priority where new urban development takes place. The site adjoins land zoned RE1 Public Recreation (the RE1 zone) under the LEP and therefore the provisions of Chapter 6 of the B&C SEPP are a relevant consideration.

Section 6.8 of the B&C SEPP applies to land which adjoins bushland zoned or reserved for public open space. Development consent cannot be granted unless the consent authority has taken into account the requirements of section 6.8(2) as follows:

- (c) the need to retain any bushland on the land,
- (d) the effect of the proposed development on bushland zoned or reserved for public open space purposes and, in particular, on the erosion of soils, the siltation of streams and waterways and the spread of weeds and exotic plants within the bushland, and
- (e) any other matters which, in the opinion of the approving or consent authority, are relevant to the protection and preservation of bushland zoned or reserved for public open space purposes.

In this regard,

- No development is proposed to be located on land reserved for public open space and the works do not encroach into the RE1 zoned land;
- Appropriate tree protection measures will be established by the project arborist to protect all of the trees to be retained on site;
- Erosion and sediment control measures will be implemented prior to the commencement of any works on site to minimise stormwater contamination and the siltation of nearby streams and waterways; and
- A series of pollution control devices and other Water Sensitive Urban Design (WSUD)
 measures will be incorporated into the site's stormwater drainage to ensure that the
 development achieves Council's and the EPA's water quality targets before it is
 discharged into Council's stormwater system or impacts upon adjoining bushland and
 waterways.

6.1.3 State Environmental Planning Policy (Resilience and Hazards) 2021

On 1 March 2022, the following SEPPs were repealed, and the relevant provisions transferred to *State Environmental Planning Policy (Resilience and Hazards) 2021* (R&H SEPP):

- State Environmental Planning Policy (Coastal Management) 2018;
- State Environmental Planning Policy No 33 Hazardous and Offensive Development, and

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

Chapter 2 Coastal Management

The Coastal Management Act 2016 (CM Act) was gazetted by the NSW Government on 3 April 2018, replacing the Coastal Protection Act 1979. It establishes a new strategic framework and objectives for managing the NSW coastal areas.

Chapter 2 of the R&H SEPP gives effect to the objectives of the CM Act and establishes DA assessment criteria. Under Chapter 2 of the R&H SEPP, the site is mapped as containing 'coastal wetlands' and 'proximity to coastal wetlands' (**Figure 21**). No tree removal works are proposed on the part of the site mapped as 'coastal wetlands'. It is also mapped as containing 'coastal environment area' and 'coastal use area' under the R&H SEPP.



Figure 21 Coastal Wetland and Proximity Area for Coastal Wetlands Map

Table 5 provides an assessment against the relevant sections of Chapter 2 of the R&H SEPP.

Table 7 Assessment against relevant provisions of Chapter 2 of the R&H SEPP		
Provision	Comment	Consistent
2.7 Development on certain land within coastal wetlands and littoral rainforests area.	No development is proposed on the part of the site mapped as coastal wetlands under the B&C SEPP. A separate designated development application will be lodged in relation to the any works on this part of the site.	N/A
2.8 Development on land in proximity to coastal wetlands or littoral rainforest (1) Development consent must not be granted to development on land identified as "proximity area for coastal wetlands" or "proximity area for littoral rainforest" on the Coastal Wetlands and Littoral Rainforests Area Map unless the consent authority is satisfied that the proposed development will not significantly impact on— (a) the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or	The proposed development includes works on land identified as 'proximity area for coastal wetlands' on the Coastal Wetlands and Littoral Rainforests Area Map (Figure 21). The proposed development is located on parts of the site that have been previously disturbed. As discussed in the Ecological Assessment report prepared by ADE Consulting Group, the proposed development will not significantly impact on the ecological integrity of the adjacent coastal wetlands. The works do not involve the removal of any endangered ecological communities including PCT 4027 or PCT 3638. Appropriate tree protection measures will be established on site to protect this vegetation during the construction stage of the	Yes

Table 7 Assessment against relevant provisions of Chapter 2 of the R&H SEPP

Provision Comment Consistent

(b) the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest. development. The planting of new trees to offset the tree removal will enhance the environmental values of the site.

Appropriate erosion and sediment control measures will be installed prior to the commencement of the works to protect the quantity and quality of surface water to and from the adjacent coastal wetland.

The proposed stormwater drainage system incorporates WSUD principles such as water reuse, pollutant removal via natural systems and the minimisations of hard structures to control stormwater. The proposed development incorporates water treatments and pollutant removal devices to achieve Council's water quality targets and ensure that the proposed NEP development does not adversely impact upon the adjacent coastal wetlands.

2.10 Development on land within the coastal environment area

- (1) Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following—
 - (a) the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment,
 - (b) coastal environmental values and natural coastal processes,
 - (c) the water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1.
 - (d) marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms,
 - (e) existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,
 - (f) Aboriginal cultural heritage, practices and places,
 - (g) the use of the surf zone.

Part of the site is mapped as being located within the 'coastal environment area' under Chapter 2 of the R&H SEPP.

The proposed new development within the Narrabeen Education Precinct will not adversely impact on the biophysical, hydrological, and ecological environment. It will not affect any coastal environment values or natural coastal processes.

Suitable erosion and sediment control measures will be implemented prior to the commencement of works to ensure that there are no impacts on the water quality of the marine estate. No marine vegetation is proposed to be removed. Impacts on native vegetation and fauna and their habitats has been assessed by a suitably qualified ecologist who has concluded that the proposed development will not have any impacts on endangered ecological communities or threatened species.

The NEP development does not impact upon any existing public open space or access to any public open space.

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Kayandel which provides an assessment of the impacts of the proposed development upon Aboriginal cultural heritage, practices and places. The ACHAR concludes that the proposed development will not impact upon any Aboriginal sites, subject to the implementation of the recommendations of the ACHAR. This includes recommendations in the event that any items of Aboriginal cultural significance are uncovered during the works (refer to **Sections 5.4** and **6.2.4**).

The proposed development will not impact upon the use of the surf zone.

It is considered that proposed development at NNPS and NSHS is unlikely to have an adverse impact on land located within the coastal

Yes

Table 7 Assessment against relevant provisions of Chapter 2 of the R&H SEPP			
Provision	Comment	Consistent	
	environment area and any adverse impacts can be appropriately managed and mitigated in accordance with section 2.10(2) of the R&H SEPP.		
2.11 Development on land within the coastal use area (1) Development consent must not be granted to development on land that is within the coastal use area unless the consent authority— (a) has considered whether the proposed development is likely to cause an adverse impact on the following— (i) existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability, (ii) overshadowing, wind funnelling and the loss of views from public places to foreshores, (iii) the visual amenity and scenic qualities of the coast, including coastal headlands, (iv) Aboriginal cultural heritage, practices and places, (v) cultural and built environment heritage, and	Part of the site is mapped as being located within the 'coastal use area' under the R&H SEPP. The NEP development will not have any adverse impacts on public access to any foreshore, beach, headland or rock platform. The work will not result in any overshadowing, wind funnelling or loss of views from public places. There will be short-term impacts on the visual amenity and scenic qualities of the area during the demolition and construction works. However, long-term the proposed buildings and landscaping will maintain the existing bushland and low density residential character of the locality. An ACHAR has been prepared by Kayandel that confirms that the works will not impact upon any Aboriginal cultural heritage, practices and places. Recommendations have been made in the event that any items of Aboriginal cultural significance are uncovered during the works (refer to Sections 5.4 and 6.2.4). A HIS has been prepared by City Plan Heritage that reviews the impacts of the proposed development on the cultural and built environment heritage of the site. The HIS concludes that subject to the recommendations of the HIS that the proposed development will not have an adverse impact on the cultural or built heritage on the site and within the vicinity of the site. Therefore, it is concluded that the proposed development has been designed, sited and will be managed to avoid any adverse impacts on the coastal use area in accordance with section 2.11(2) of the R&H SEPP.	Yes	
2.12 Development in coastal zones generally – development not to increase risk of coastal hazards	The proposed development will not increase the risk of coastal hazards such as beach erosion, shoreline recession, watercourse instability, coastal inundation, coastal cliff or slope instability, tidal inundation or the action of waves.	Yes	

Chapter 4 Remediation of Land

Chapter 4 of the R&H SEPP 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.

Depending on the level of contamination, remediation may be required with the consent (Category 1) or without the consent (Category 2) of the consent authority.

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

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) Report was prepared by Douglas Partners in March 2020. As a result of the findings of the PSI, a Detailed Site Investigation (DSI) Contamination Report was prepared in August 2022. The DSI report identified contamination on the site predominantly relating to asbestos in soils and asbestos containing materials (ACM) particularly within the NNPS site. In addition, the Hazardous Building Materials (HBM) Assessment reports prepared for NNPS and NSHS also identified ACM and other HBM within school buildings and as a result there is potential for HBM to further impact on surface soils as a result of the demolition and refurbishment works.

Acid Sulfate Soils (ASS) were also identified in the natural soils profiles within the NNPS site (predominantly in the deeper soil profile) and the NSHS site (predominantly in the natural soil around and beneath the groundwater table) (refer to discussion in **Section 6.3.4**).

The DSI provided the following comments and recommendations:

- Post demolition investigations should be conducted in the building footprints, where appropriate. Assessment would include asbestos and other contaminants of potential concern (COPC) for comparison against the adopted site assessment criteria (SAC);
- Development of a remediation action plan (RAP) to address the asbestos impacted soils within the investigation areas / proposed works areas, most notably in the central, western and northern sections of the NNPS investigation area. From a contaminated land perspective, soils with low levels of asbestos (i.e., below the SAC) may not require remediation, although from DP's experience on NSW school sites, a more stringent approach has been applied on occasions resulting in all asbestos impacted soils being remediated. DP has been advised NSW Department of Education that this more stringent approach to asbestos impacted fill is to be applied for this project. Remediation approaches would typically comprise:
 - Dig and dump strategy which removes the impacted material from the school and disposes it to a suitable licensed disposal facility; and / or
 - Cap and contain strategy where a barrier is constructed over the impacted soils (e.g., building slab) and managed in the long term under the school's Asbestos Management Plan (AMP).
- Additional ASS assessment may be required for the new NNPS buildings depending
 on the final depth and nature of works, e.g., if works are limited to 2.5 m or a driven
 pile approach then further investigations may not be warranted;
- Development of an ASS management plan. This is expected to be required on the NSHS site, whilst its need on the NNPS will be informed by the final depth and nature of the proposed works. In this regard, if soils on NSHS below 1.5 m bgl are proposed to be disturbed as part of the works, these would require treatment for ASS (e.g., liming);
- For all buildings where proposed disturbance of the building materials is proposed (e.g., maintenance, refurbishment, demolition), a HBM assessment should be undertaken. Subsequently the HBM to be disturbed during the works is to be removed and disposal of by an appropriately licensed and qualified contractor, at an appropriately licensed disposal facility;
- Validation / clearance of the works area post-demolition of buildings should be conducted by a qualified occupational hygienist upon completion of demolition and

removal of the buildings. The validation / clearance is to confirm that there are no residual ACM or other HBM remaining on the site; and

 Implementation of an unexpected finds and asbestos finds protocol by the contractor, and in agreement with the client, prior to commencing works.

The DSI concluded that the NNPS and NSHS sites could be made suitable for the proposed educational establishment development subject to the recommendations outlined in the DSI and any associated remediation and/or management requirements.

A Remediation Action Plan (RAP) has been prepared by Douglas Partners in relation to the NNPS site. The objectives of the remediation works are to remove residual contaminant concentration levels at the NNPS site so that the NNPS site can be made as suitable for its intended purpose as an educational establishment and so that it does not pose an unacceptable risk to human health or the environment.

The preferred remediation strategy is detailed in the RAP and includes:

- Pre-remediation works existing building inspection and demolition;
- Capping for asbestos impacted soils;
- Consolidation of asbestos impacted soils; and
- Off-site disposal for minor works and/or small isolated areas.

Validation of the remediation works will be required by a qualified environmental consultant. The RAP recommends that at the completion of the works a Long Term Environmental Management Plan (LTEMP) or updates to the existing Asbestos Management Plan (AMP) are undertaken.

It is therefore concluded that in accordance with Section 4.6 of the R&H SEPP, that subject to the recommendations of the DSI report and RAP being implemented that the site can be made suitable for its ongoing use as an educational establishment.

6.1.4 State Environmental Planning Policy (Transport and Infrastructure) 2021

On 1 March 2022, the following SEPPs were repealed, and the relevant provisions transferred to State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP):

- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017;
- State Environmental Planning Policy (Major Infrastructure Corridors) 2020; and
- State Environmental Planning Policy (Three Ports) 2013.

Chapter 2 Infrastructure

Section 2.119 Development with frontage to classified road

Section 2.119 of the T&I SEPP applies to the NSHS site as it fronts a Classified Road being Pittwater Road (Main Road 164). Section 2.119 states 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 and safe, 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.

The main vehicle access to NNPS and NSHS is from Namona Street rather than Pittwater Road. The proposed development does not seek to increase staff or student numbers and therefore it is not anticipated to generate any additional traffic that would impact on the safety, efficiency and ongoing operation of Pittwater Road.

Building D at NNPS is located approximately 260m from Pittwater Road to the east and 160m from Jacksons Road to the north. Building A3 at NSHS is located approximately 150m from Pittwater Road to the east and 140m from Garden Street to the west. It is considered both proposed buildings have been located to minimise impacts from traffic noise and vehicle emissions within the locality. An assessment of the impacts of the road noise on the proposed development is provided in the Noise and Vibration Assessment Report prepared by Acoustic Studio (refer to **Section 6.2.5**).

Section 2.120 Impact of road noise or vibration on non-road development

Section 2.120 applies to development for the following purposes that is on land adjacent to a road with an annual average daily traffic volume of more than 20,000 vehicles (based on the traffic volume data published on the website of the TfNSW) and that the consent authority considers is likely to be adversely affected by road noise or vibration:

- (a) a building for residential use;
- (b) a place of public worship;
- (c) a hospital;
- (d) an educational establishment or child care centre.

Pittwater Road, North Narrabeen has an annual average daily traffic volume of less than 20,000 vehicles. Nevertheless, as the proposal is for the purposes of upgrades to two (2) existing educational establishments, a Noise and Vibration Impact Assessment report has been prepared by Acoustic Studio which includes an assessment against the requirements of Section 2.120 of the T&I SEPP and the impacts of road traffic noise on the proposed development.

Under the requirements of the NSW Department of Planning's *Development near Busy Roads* and Rail Corridors – Interim Guidelines (2008) an internal noise target of 40 dB LAeq is set for educational establishments. The Noise and Vibration Impact Assessment concludes that the proposed internal spaces at NNPS and NSHS are capable of achieving the relevant internal noise criteria with windows closed and standard single glazing with a minimum performance of Rw 30-32.

Chapter 3 Educational Establishments and Child Care Facilities

Section 3.36 Schools - Development permitted with consent

Chapter 3 of the T&I SEPP applies to the proposed development. Pursuant to section 3.36(1) of the T&I SEPP, development for the purposes of a school may carried out by any person with development consent on land in a prescribed zone. The SP2 Infrastructure zone is a prescribed zone for the purposes of schools under section 3.34 of the T&I SEPP. In addition, educational establishments are permitted with consent in the SP2 zone under the LEP.

Pursuant to section 3.36(1) of the T&I SEPP development for the purposes of a school is permitted with development consent on land within a prescribed zone.

Section 3.36(6) states as follows:

(6) Before determining a development application for development of a kind referred to in subsection (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 8, and
- (b) whether the development enables the use of school facilities (including recreational facilities) to be shared with the community.

In regard to section 3.36(6)(a), DesignInc has prepared an Architectural Design Statement which addresses the proposal at NNPS and NSHS against the design quality principles set out in Schedule 8 of the T&I SEPP.

In regard to section 3.36(6)(b), the new and upgraded educational facilities at NNPS and NSHS can be used by the local community, subject to the Department of Education's policies such as 'Share Our Space' which provides access to the schools' outdoor facilities during school holidays or other community use arrangements. The new school halls at both NNPS and NSHS may be used for after school events such as assemblies, performances and other events (typically 6 – 9pm on weeknights and 8am – 5pm on weekends).

Section 3.36(9) of the T&I SEPP sets out that the provisions of a DCP have no effect in relation to development proposed under section 3.36(1), (2), (3) or (5) (i.e. development with consent). Accordingly, the provisions of the Pittwater 21 Development Control Plan (the DCP) have no effect on the proposal. Notwithstanding, an assessment of the proposed development against the relevant provisions of the DCP is provided in **Table 7**.

Section 3.58 Traffic-generating development

Part 3.7 of the T&I SEPP does not apply to the proposed development as the development does not result in either school being able to accommodate 50 or more students. The proposed development does not seek to increase student numbers.

6.1.5 Draft Remediation SEPP

The Department of Planning, Industry and Environment (DPIE) exhibited the proposed SEPP from 1 January to 13 April 2018. It is proposed that the new Remediation 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 determining development applications and land rezonings;
- Clearly list the remediation works that require development consent; and
- 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 6.1.3** satisfactorily considers relevant matters and the proposal is acceptable in this regard.

6.1.6 Draft Environment SEPP

Draft State Environmental Planning Policy (Environment) (Environment SEPP) was exhibited from 31 October 2017 to the 31 January 2018. The draft SEPP proposed to repeal certain SEPPs and SREPs including the former *State Environmental Planning Policy No. 19 – Bushland in Urban Areas* (SEPP 19). Amendments include the transfer of some provisions of the SEPP 19 to the draft Environment SEPP, updating references, and updating or removing definitions to be consistent with the Standard Instrument.

6.1.7 Pittwater Local Environmental Plan 2014

Table 6 provides a summary assessment of the proposed development against the relevant provisions of the LEP.

Provision	Assessment	Consistent
Clause 2.2 – Zoning	The site is zoned SP2 Infrastructure (Educational Establishment) under the LEP. Alterations and additions to an existing educational establishment is permitted with consent in the SP2 zone under the LEP.	Yes
	The proposed development is consistent with the objectives of the SP2 zone as it involves upgrades to two (2) existing educational establishments to provide new and improved contemporary education facilities to support the local student community. The proposed development is compatible with the existing school buildings and facilities.	
Clause 4.3 – Height of Buildings	A 8.5m height of buildings development standard applies to the site under the LEP. The proposed development does not comply with the height of buildings development standard and therefore, two (2) clause 4.6 variation requests have been prepared by DFP Planning.	No
	Refer to the discussion below.	
Clause 5.10 – Heritage Conservation	The following heritage listings apply to NNPS: State Heritage Register (SHR) No. 02037 "Binishell Collection (Department of Education)"; Item 5065693 Narrabeen North Public School – Buildings B00A and B00B on the Department of Education's Section 170 Heritage and Conservation Register; and Item 2270341 "Concrete geodesic domes (North Narrabeen Public School)" under Schedule 5 of the LEP. The proposed development includes works located	Yes
	within the SHR curtilage.	
	A Heritage Impact Statement (HIS) has been prepared by City Plan Heritage that assesses the impact of the proposed development on the heritage significance of NNPS in accordance with clause 5.10 of the LEP. This HIS concludes that the proposed development is acceptable from a heritage perspective, subject to the recommendations of the HIS (refer to Sections 5.3 and 6.2.3). The HIS has also assessed the impact of the proposed development on the Warriewood Wetlands (Item 2270516) and "Alma's Tree 'Morton Bay Fig Tree" at 1468 Pittwater Road, Warriewood (Item 2270331), which are located in proximity to the site. The HIS concludes that the proposed development will have no adverse impact on the heritage significance of these two (2) items.	
	An ACHAR has been prepared by Kayandel that considers the impacts of the proposed development on Aboriginal cultural heritage values and sites. The ACHAR concludes that the proposed development is unlikely to impact on any Aboriginal cultural heritage values or sites as no works are located within the part of the site mapped as an archaeologically sensitive landform (refer to Sections 5.4 and 6.2.4).	
Clause 5.21 – Flood Planning	The site is identified within the part low-risk, part medium-risk and part high-risk flooding precincts on Council's Flood Hazard Map. A Flood Risk and Impact Assessment report has been prepared by BMT that provides an assessment of the impacts of the proposed development on existing flood function and behaviour, and provides recommendations in relation to building construction, finished floor levels and safe evacuation of staff and students in the event of a flood. It is considered that the proposed development is capable of satisfying	Yes

Provision	Assessment	Consistent
	the relevant requirements of clause 5.21 of the LEP, subject to the implementation of the recommendations outlined in the Flood Risk and Impact Assessment Report (refer to Section 6.3.3).	
Clause 7.1 – Acid Sulfate Soils	The site is identified as containing Class 2 and 3 Acid Sulfate Soils under the LEP. The Detailed Site Investigation (Contamination) report prepared by Douglas Partners identified that potential acid sulfate soils (PASS) are unlikely to be encountered at NNPS at depths less than 2.5m below the existing ground level, whilst PASS is expected to be encountered at depths of approximately 1.5m below ground level (or greater) at NSHS. Therefore, an Acid Sulfate Soils Management Plan (ASSMP) has been prepared by Douglas Partners. The ASSMP has been prepared with regard to the Acid Sulfate Soils Manual and describes the proposed development, proposed ASS management, verification testing for treated materials, groundwater management strategies and emergency response procedures. It is therefore considered that the potential impacts of acid sulfate soils can be appropriately managed for the proposed development in accordance with the recommendations of the ASSMP (refer to Section 6.3.4).	Yes
Clause 7.2 - Earthworks	The earthworks include 125m² of cut to facilitate the construction of Building D at NNPS and 105m² of cut to facilitate the alterations and additions of Building A3. Civil engineering plans and reports have been prepared by Enstruct, which confirm that the proposed development is consistent with the provisions of section	Yes
	7.2 of the LEP, and that appropriate measures are proposed to avoid, minimise and mitigate any adverse impacts of the proposed development (refer to Section 6.2.9).	
Clause 7.4 – Floodplain risk management	A Flood Emergency Assessment is provided in the Flood Risk and Impact Assessment report prepared by BMT. The Flood Emergency Assessment provides information on flood risk to occupants of the proposed development for flood events up to and including the PMF, potential for site evacuation, shelter-in-place requirements, and preliminary guidance on how to respond in the event of a flood. It is recommended that both schools prepared detailed flood emergency response plans prior to occupation of the new buildings. Therefore, the proposed development achieves the objective of clause 7.4 of the LEP, as it provides detailed recommendations to ensure the safe evacuation of the site during extreme flood events (refer to Section 6.3.3).	Yes
Clause 7.6 - Biodiversity	The site is mapped as containing terrestrial biodiversity under the LEP. An Ecological Assessment report has been prepared by ADE Consulting Group that addresses clause 7.6 of the LEP and provisions of the BC Act. Pursuant to clause 7.6(3) of the LEP, the proposed development is not likely to have an adverse impact on the biodiversity and ecological values of the site and it has been designed, sited and will be managed to avoid impacts on the parts of the site mapped as having high biodiversity values and Coastal Wetland (refer to Sections 5.2 and 6.2.1).	Yes

Height of Buildings

Under clause 4.3 of the LEP, the site has a maximum 8.5m height of building development standard under the LEP (**Figure 22**).

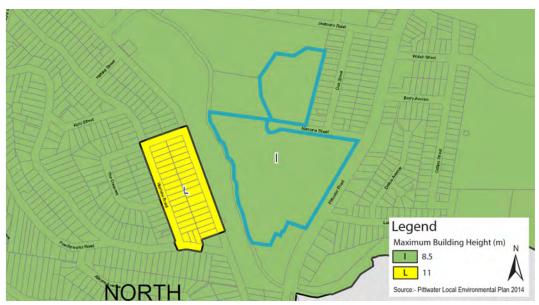


Figure 22 Height of Building Map

Narrabeen North Public School

Proposed Building D has a maximum height of 9.63m above the existing ground level to the ridge of the COLA roof. Therefore, the proposed development exceeds the maximum height of buildings development standard of 8.5m by 1.13m, which is equivalent to a variation of 13.3%. Additionally, the proposed new two (2) storey Staff Hub in Building D will exceed the 8.5m maximum height of buildings standard having a maximum height of 8.69 for a small portion at the roof ridgeline being a variation of 0.19m or 2.2%.

A height plane diagram has been prepared by DesignInc showing the extent of Building D that exceeds the 8.5m height of buildings development standard (**Figure 23**).

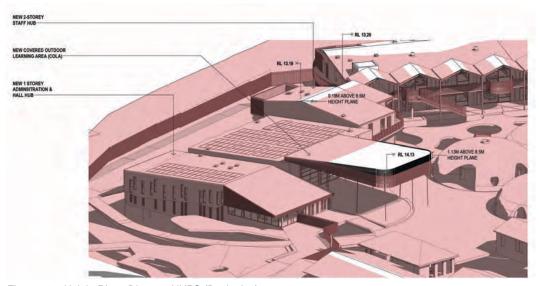


Figure 23 Height Plane Diagram NNPS (DesignInc)

A clause 4.6 written request to vary the development standard has been prepared by DFP Planning, that concludes that compliance with the height of buildings development standard is unreasonable and unnecessary and that there are sufficient planning grounds to justify contravening the development standard. The Clause 4.6 written request concludes that:

This written request to vary the development standard has been prepared in accordance with Clause 4.6(3) of the LEP and demonstrates that strict compliance with the development standard is unreasonable and unnecessary for the following reasons:

- Notwithstanding the contravention of the 8.5m height of buildings development standard, the proposed new administration building, multi-purpose hall, staff hub and COLA at the NNPS site is consistent with the relevant objectives of the development standard under Clause 4.3 of the LEP and is consistent with the relevant objectives of the SP2 Infrastructure zone and therefore, the proposed development is in the public interests; and
- Notwithstanding the contravention of the 8.5m maximum height of buildings development standard, the building height of the roof sections above the proposed new two (2) storey staff hub in Building D and part of the COLA roof, will not result in any significant adverse environmental harm in that the environmental amenity of neighbouring residential and non-residential properties will be preserved and potential adverse impacts on the amenity (such as overshadowing, bulk and scale, view loss) of the locality will be minimised to a reasonable level.

In addition, this written request outlines sufficient environmental planning grounds to justify the contravention of the height of buildings development standard including:

- The extent of the building height variation is relatively minor being attributed to small sections of the roof area of the proposed new 2 storey staff hub in Building D and a section of the COLA roof;
- The variation in the 8.5m maximum height of building standard arises due to the characteristics of the site including the site's topography and the flood planning level requirements of the LEP and the DCP as well as the design requirements of the built form necessitated by the intended school purposes of the proposed new administration building, multi-purpose hall, staff hub and COLA at the NNPS site;
- The exceedance of the 8.5m maximum height of building standard of the COLA roof has been sensitively designed to frame and open up the view corridor from the main pedestrian entry of Namona Street of the Binidomes heritage item and its curtilage and to other existing and proposed school buildings and vegetated open space areas at the site;
- The proposed Building D have been carefully positioned to have minimal environmental impact on existing vegetation including the Coastal Wetlands area and to not have an adverse impact on the significance of the Binidomes heritage item:
- The environmental amenity impacts of the proposal are minimal (if any) or otherwise capable of being mitigated such that the proposal will not impact surrounding private or public land; and
- The positioning, characteristics and design requirements for the proposal at the NNPS site cannot be modified any further to reduce the building height and dimensions of the fit-for-purpose educational facilities as required under the NSW Department of Education's Educational Facilities Standards and Guidelines (EFSG).

Narrabeen Sports High School

The proposed development at NSHS exceeds the height of buildings development standard under clause 4.3 of the LEP having a maximum height of 10.63m at the top of the roof of the new 2 storey extension of Building A3. Therefore, the proposed development exceeds the maximum height of building standard of 8.5m by 2.13m, which is equivalent to a variation of 25%. Additionally, the proposed alterations to existing Building A3 will exceed the 8.5m maximum height of building standard, having a maximum height of 10.69m at the top of the roof level above the skylight windows being a variation of 2.19m or 25.8%.

A height plane diagram has been prepared by DesignInc showing the extent of Building A3 that exceeds the 8.5m height of buildings development standard (**Figure 24**).

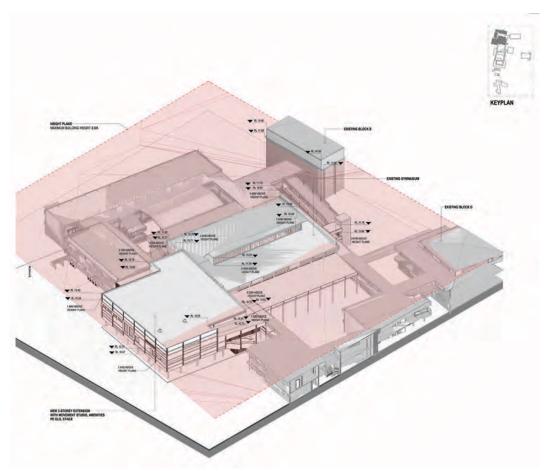


Figure 24 Height Plane Diagram NSHS (DesignInc)

A clause 4.6 written request to vary the development standard has been prepared by DFP Planning, that concludes that compliance with the height of buildings development standard is unreasonable and unnecessary and that there are sufficient planning grounds to justify contravening the development standard. The Clause 4.6 written request concludes that:

This written request to vary the development standard has been prepared in accordance with Clause 4.6(3) of the LEP and demonstrates that strict compliance with the development standard is unreasonable and unnecessary for the following reasons:

- Notwithstanding the contravention of the 8.5m height of buildings development standard, the proposed alterations and additions to Building A3 at the NSHS site is consistent with the relevant objectives of the development standard under Clause 4.3 of the LEP and is consistent with the relevant objectives of the SP2 Infrastructure zone and therefore, the proposed development is in the public interest; and
- Notwithstanding the contravention of the 8.5m maximum height of buildings development standard for the proposed alterations and additions to Building A3 at the NSHS site, it will not result in any significant adverse environmental harm in that the environmental amenity of neighbouring residential and non-residential properties will be preserved and potential adverse impacts on the amenity (such as overshadowing, bulk and scale, view loss) of the locality will be minimised to a reasonable level.

In addition, this written request outlines sufficient environmental planning grounds to justify the contravention of the height of buildings development standard including:

 The variation in the 8.5m maximum height of building standard arises due to the characteristics of the site and the constraints of existing school buildings and accessible pathways, as well as the design requirements of the built form necessitated by the intended school purposes of the proposed Building A3 at the NSHS site;

- The proposed alterations and additions to Building A3 at the NSHS site have been carefully positioned and designed to have minimal environmental impact on existing vegetation including the Coast Wetlands area and includes additional planting of native and shade trees;
- The environmental amenity impacts of the proposal are minimal (if any) or otherwise capable of being mitigated such that the proposal will not impact surrounding private or public land; and
- The positioning, characteristics and design requirements for the proposal at the NSHS site cannot be modified any further to reduce the building height having regard to the dimensions required for fit-for-purpose educational facilities and to marry proposed Building A3 in with existing school buildings and accessible pathways as required under the NSW Department of Education's Educational Facilities Standards and Guidelines (EFSG).

6.1.8 Pittwater 21 Development Control Plan

Table 7 provides a summary assessment of the proposed development against the relevant provisions of the DCP.

Provision	Assessment	Consistent
Section A Shaping Development in Pittwater		
A4.14 Warriewood Locality	The site is located within the Warriewood locality under the DCP. The proposed development is generally consistent with the desired future character of the Warriewood locality as the development upgrades two (2) existing educational establishments in this locality and will maintain the existing bushland and low-density residential character of the locality and also avoids impacts on threatened species and areas of natural environmental significance. The maximum building height of the new development is generally below the existing tree canopy. Where possible, existing trees and vegetation have been integrated into the design of the new buildings. Building colours and materials have been inspired by the Australian native bushland.	Yes
Section B General Controls	S	
B1 Heritage Controls	NNPS is identified as a local heritage item under Schedule 5 of the LEP. It also contains an item of State heritage significance. A HIS has been prepared by City Plan Heritage that assesses the impact of the proposed development on the heritage significance of the site including an assessment against Section B1.1 of the DCP. The HIS concludes that the works are acceptable from a heritage perspective and will not have an adverse impact on the Binidomes or their setting (refer to Sections 5.3 and 6.2.3). The HIS concludes that the proposed development will not impact on the heritage significance of any other heritage items located within the vicinity of the site. An ACHAR has been prepared by Kayandel that assesses the impact of the proposed development on any items of Aboriginal cultural heritage significance located on the site. Part of the site is mapped as an 'archaeologically sensitive landform' being the eastern bank of Mullet Creek. No development is located on this part of the site. The ACHAR provides recommendations have been made in the event that any items of Aboriginal cultural significance are uncovered during the proposed development.	Yes

Provision	Assessment	Consistent
B3 Hazard Controls B3.6 Contaminated land and potentially contaminated land	A Remediation Action Plan (RAP) has been prepared by Douglas Partners to address the relevant requirements of Chapter 4 of the R&H SEPP (refer to Sections 6.1.3 and 6.3.5).	Yes
B3.11 Flood Prone Land	The site is identified as being located within the low-risk, medium-risk and high-risk flood precincts on Council's Flood Risk Precinct Maps.	Yes
	A detailed assessment against the relevant provisions of Section B3.11 of the DCP is provided in the Flood Risk and Impact Assessment report prepared by BMT (refer to Section 6.3.3).	
B3.12 Climate change (Sea Level Rise and Increased Rainfall Volume)	The Flood Risk and Impact Assessment report prepared by BMT includes consideration of the impacts of climate change including sea level rise on flood behaviour.	Yes
B4 Controls relating to the natural environment B4.4 Flora and Fauna Habitat Enhancement Category 2 and Wildlife Corridor	An assessment against the relevant provisions of Section B4 of the DCP are provided in the Ecological Assessment report prepared by ADE Consulting Group including Section B4.2 Flora and Fauna Category 1 and Wildlife Corridor, Section B4.6 Wildlife Corridors, and Section B4.8 Freshwater Wetland Endangered Ecological Community. A test of significance was undertaken in accordance with Section 7.3 of the BC Act that concluded that the works will not have any impacts on any threatened species or ecological communities or their habitats (refer to Section 5.2 and 6.2.1).	Yes
B4.14 Development in the vicinity of wetlands	The proposed development is located within the vicinity of coastal wetlands. The civil and stormwater design reports for NNPS and NSHS demonstrate that the proposed development complies with the Council's Water Management for Development Policy including achieving the water quality targets. Erosion and sediment control measures will be installed on site prior to the commencement of demolition and construction to protect the coastal wetlands (refer to Section 6.2.9).	Yes
B4.22 Preservation of Trees and Bushland Vegetation	Two (2) Arboricultural Impact Assessment reports have been prepared in accordance with the requirements of Council's DCP. The proposed upgrade works to NNPS and NSHS have been designed to minimise the impacts on existing vegetation.	Yes
	In addition to the trees proposed to be removed as part of the tree removal and replacement DA (DA 2022/1259), a further six (6) trees are proposed to be removed to facilitate the proposed development. The removal of these trees will be offset by the planting of new trees across of the site with a total canopy area of 3,523m². These works will increase the overall tree canopy on the site. Offset tree species include endemic species as well as shade trees for students and teachers.	
B5 Water management B5.15 Stormwater	Civil and stormwater plans for NNPS and NSHS have been prepared by Enstruct Group. These are supported by stormwater management reports that demonstrate compliance with the requirements of Council's Water Management for Development Policy (refer to Section 6.2.9).	Yes
B6 Access and parking	The proposed development does not seek to increase staff or student, therefore no changes to the existing traffic, transport and parking arrangements are proposed as part of this DA.	Yes

Provision	Assessment	Consistent
	A total of 200 new bicycle parking spaces will be provided across the NEP site (100 spaces at NNPS and 100 spaces at NSHS). These bicycle parking spaces will be designed as a Class B facility in accordance with the requirements of AS 2890.3 (2015) In addition, an end-of-trip facility will be provided at NSHS for the use of staff.	
	Preliminary School Travel Plans have been prepared for NNPS and NSHS. These Preliminary School Travel Plans identify a package of site-specific measures to promote and maximise the use of sustainable travel modes, including active transport, public transport and carpooling. These strategies will assist in less resilience on private vehicle usage, support sustainability initiatives and promote healthy outcomes for students (refer to Section 6.2.8).	
B8 Site works management B8.1 Construction and demolition – excavation and landfill	The proposed development includes a total of 230m³ of cut (125m³ cut at NNPS and 105m³ cut at NSHS). A Geotechnical Investigation Report has been prepared by Douglas Partners that provides advice on the existing sub-surface conditions of the site and recommendations in relation to site preparation, excavation, foundation design and other geotechnical information. It is concluded that the subject to the recommendations of the geotechnical investigation report that the proposed development will not have any adverse impact on land stability at the NNPS and NSHS sites (refer to Section 6.3.2).	Yes
B8.3 Construction and Demolition – Waste minimisation	A Demolition and Construction Waste Management Plan has been prepared for both NNPS and NSHS (refer to Section 6.2.10).	Yes
B8.4 Construction and Demolition – Site Fencing and Security	Appropriate site fencing including the implementation of erosion and sediment control measures will be established prior to the commencement of any works. A Construction Management Plan will be prepared to address construction issues such as the staging of the works, ongoing community consultation, tree protection measures, dust management, construction noise and vibration, protection of staff and students and installation of temporary site amenities (refer to Section 6.2.13).	Yes
B8.5 Construction and Demolition – Traffic Management	Two (2) Construction Traffic Management Plans have been prepared by Ason Group, one (1) for the NNPS site and one (1) for the NSHS site. This includes a description of the proposed truck movements and truck routes (refer to Section 6.2.8).	Yes
Section C Development Type Co C5 Design Criteria for Other Dev		
C5.1 Landscaping	Landscape plans for NSHS and NNPS have been prepared by DesignInc in accordance with the requirements of Section C5.1 of the DCP. The Architectural Design Report also provides a description of the proposed landscape design strategies for the site.	Yes
C5.2 Safety and Security	An assessment against the principles of Crime Prevention through Environmental Design (CPTED) is provided in Section 6.2.12 of this SEE.	
C5.4 View Sharing	The proposed development at NNPS seeks to improve the views between Namona Street and the Binidomes This will be achieved through the demolition of Building H and J (subject to separate planning pathways) and provides an opportunity to enhance the distinctive, landmark aesthetic qualities of the Binidomes. Views to the Binidomes from Jacksons Road will also be improved.	Yes

Provision Assessment			
	The proposed alterations and additions to Building A3 at NSHS will only be partially visible from the public domain and therefore will not have any impacts on views or vistas within the locality.	Consistent	
C5.5 Accessibility	An Access Capability Statement has been prepared by Philip Chun Accessibility for the proposed upgrades at NNPS (refer to Section 4.3.7). An Access Capability Statement has been prepared by Philip Chun Accessibility for the proposed upgrades to NSHS (refer to Section 4.4.7). Both of the Access Capability Statements confirm that the proposed development is capable of compliance with the relevant access provisions of the BCA, subject to the recommendations of the BCA statements for NNPS and NSHS.	Yes	
C5.7 Energy and water conservation	An ESD report has been prepared by Steensen Varming that confirms that the principles of sustainability have been incorporated into the design of the proposed development including energy and water conservation strategies (refer to Section 6.2.11).	Yes	
C5.8 Waste and recycling facilities	Two (2) Waste Management Plans have been prepared by MRA Consulting Group, one (1) for NNPS and one (1) for NSHS. Whilst no changes to existing waste and recycling facilities are proposed as part of the DA, the waste management plans provide recommendations to improve the delivery of better practice operational waste management across the site (refer to Section 6.2.10).	Yes	
C5.9 Signage	New signage will be the subject of a separate development application.	Yes	
C5.10 Protection of residential amenity	The site adjoins land zoned R2 Low Density Residential under the LEP. However, proposed Building D at NNPS and the alterations and additions to Building A3 at NSHS are not located near the boundaries with any residential properties. As demonstrated in the shadow diagrams prepared by DesignInc, the proposed development will not result in any additional overshadowing of adjoining residential	Yes	
	properties or public domain. The proposed development will not result in any visual privacy impacts.		
C5.16 Building facades	All building services have been incorporated into the design of the buildings.	Yes	
C5.17 Pollution control	A Noise and Vibration Assessment has been prepared by Acoustic Studio that confirms that the proposed development complies with the requirements of the NSW Environment Protection Authority's Industrial Noise Policy and will not adversely impact on the acoustic amenity of any surrounding land uses (refer to Section 6.2.5).	Yes	
	The demolition, construction and operation of the proposed development will comply with the relevant requirements of the <i>Protection of the Environment Operations Act 1997</i> (POEO Act) and any other relevant legislation.		
C5.18 Public Road Reserve – Landscaping and Infrastructure	No works are proposed within the road reserve as part of this DA.		
C5.21 Plant, equipment boxes and lift over run	All noise generating equipment such as mechanical plant, air-condition units etc will be located and designed to protect the acoustic amenity of the precinct.	Yes	

Table 9 Assessment against Relevant Provisions of DCP		
Provision	Assessment	Consistent
C5.22 Environmental sustainability	The design of development has been guided by the requirements of Green Star Design and As-Build (DAB) v1.3 tool as well as the ESD requirements under the EFSG. The proposed development seeks to achieve an improvement of at least 10% above the deemed-to-satisfy provisions of Section J of the National Construction Code (BCA).	Yes
Section D Locality Specific Development D14 Warriewood Locality	elopment Controls	
D14.1 Character as viewed from a public place	Whilst the proposed development will have a short-term impact (during demolition and construction) on the character of the site as viewed from the surrounding public domain. Long-term the proposed development is consistent with the desired future character of the Warriewood locality.	Yes
	At NNPS, the existing vegetation is retained and will be protected along the eastern, western and southern boundaries of the site. This provides landscaping screening of the new Building and assists in mitigating any visual impacts of the proposed development. The removal of Buildings H and J (subject to a separate planning pathway) provides the opportunity to enhance the views to the Binidomes from Namona Street and improve the visual setting of the Binidomes.	
	At NSHS, the proposed alterations and additions to Building A3 will be only partially visible from the surrounding public domain, as it is screened by the existing school buildings to the north, east and south. The new extension will be visible from the end of the Namona Street cul-de-sac. Existing vegetation on both sides of Mullet Creek screen the new extension to Building A3 from the west.	
D14.2 Scenic Protection - General	Overall, the proposed development will enhance the bushland character of the site and the surrounding precinct. Overall, the proposed development (in conjunction with works proposed under separate planning pathways) will increase the quantity of tree canopy on the site. The proposed development will achieve the desired future character of the Warriewood locality.	Yes
D14.3 Building colours and materials	A predominantly neutral and earthy palette of materials and finishes have been selected for both schools that responds to the existing character of the locality.	Yes
D14.7 Front building line	At NNPS, Building D has been located by the front building line established by the existing buildings on site. Building D is set back from Namona Street to avoid impacting on the coastal wetlands.	Yes
	At NSHS, the extension to Building A3 is well located behind the front building line of both Pittwater Road and Namona Street.	
D14.16 Fences – Flora and Fauna Conservation	At NNPS, the existing 2.1m high security fencing around the site boundary is to be retained. New fencing is provided within the site to provide a secondary line of security and restrict access the central part of the site after hours.	Yes
	No changes are proposed to the fencing at NSHS.	

6.1.9 Australian Standard AS2601 – Demolition of Structures

Section 61(1) of the EP&A Regulation designates *AS 2601-1991: The Demolition of Structures* as a prescribed matter for consideration in the determination of a DA.

All demolition work will be carried out in accordance with AS 2601. Further details on demolition practices, identification and management of hazardous substances and recycling of material will be provided in the form of a Work Plan and a Hazardous Substances Audit and Management Plan prepared in accordance with AS 2601 with an application for a Crown Certificate.

6.1.10 Development Contributions

The Northern Beaches Section 7.12 Contributions Plan 2022 (the Development Contributions Plan) applies to the site. In accordance with Section 2.5 of the Development Contributions Plan, local infrastructure to be carried out on behalf of any public authority is exempt from the payment of a development contribution. The proposed development comprises upgrades to NNPS and NSHS which are two (2) existing educational establishments and being carried out on behalf of the NSW Department of Education. Therefore, the proposed NEP development should be exempt from the payment of a levy under the Development Contributions Plan.

6.2 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.

6.2.1 Biodiversity, Coastal Wetlands and Koala Habitat

Biodiversity

The site is mapped as containing terrestrial biodiversity under the LEP (**Figure 25**). It is also mapped as containing 'high biodiversity values' on the Biodiversity Values Map under the BC Act. An Ecological Assessment report has been prepared by ADE Consulting Group that provides an assessment of the proposed works in accordance with the test of significance under Section 7.3 of the BC Act (refer to **Section 5.2**). The Ecological Assessment report notes that the site contains the following vegetation and Plant Community Types:

- PCT 4027 "Swamp Oak Floodplain Forest of New south Wales North Coast, Sydney Basin and South East Corner Bioregions";
- PCT 3638 "Bangalay Sand Forest of the Sydney Basin and South East Corner Bioregions"; and
- Planted vegetation (exotic and native species).



Figure 25 Terrestrial Biodiversity Map

The Ecological Assessment concludes that the proposed development will not have any significant adverse impacts on the biodiversity values of the site and does not involve the removal of any vegetation mapped as PCT 4027 or 3638. No development is located on the part of the site mapped as having high biodiversity values under the BC Act. In accordance with section 7.3 of the BC Act, the proposed development will not have any significant impacts upon any listed species, populations or ecological communities.

The proposed development has been designed and sited to avoid, minimise and mitigate impacts on existing vegetation and species habitat. It is considered that the proposed development will have an acceptable impact on the biodiversity values of the site.

Coastal Wetlands

No works are proposed on the part of the site mapped as 'Coastal Wetlands' under Chapter 2 of the R&H SEPP. The works will not significantly impact on the biophysical, hydrological or ecological integrity of the Coastal Wetlands. The works are unlikely to cause an adverse impact on the coastal environment area or coastal use area.

Erosion and sediment control measures will be established prior to the commencement of any works on site. In addition, the proposed stormwater drainage system has been designed to achieve the water quality targets detailed in Council's Water Management for Development Policy.

Koala Habitat

A review against the relevant provisions of Chapter 4 of the B&C SEPP has been undertaken in the Ecological Assessment report prepared by ADE Consulting Group. The Ecological Assessment report concludes that the site does not constitute core koala habitat and therefore the proposed development is unlikely to affect any koalas or koala habitat.

6.2.2 Tree Removal and Replacement

Tree Removal

Independent Arboricultural Services have prepared two (2) Arboricultural Impact Assessment (AIA) reports to assess the impacts of the proposed development on the existing trees located on the site in accordance with the requirements of AS 4970 (2009) *Protection of trees on development site* and *AS 4373 (2007) Pruning of amenity trees*. The retention value of each of the trees has been determined in accordance with the International Society of Arboriculture (ISA) Tree Risk Assessment Qualification (TRAQ) guidelines.

In addition to the 39 trees proposed to be removed as part of DA 2022/1259, a total of six (6) trees are proposed to be removed as part of this DA to facilitate the proposed development. This includes three (3) trees at NNPS (Tree No 55, 57 and 58) and three (3) trees at NSHS (Trees 65-67). Of the trees to be removed, the three (3) at NNPS are identified as having high retention value and the three (3) trees at NSHS are identified as having medium retention value.

All other trees on site are proposed to be retained in accordance with the recommendations of the AIA reports as they are subject to no impacts from the proposed building works.

The AIA reports provide the following recommendations:

As part of the design process and operational works it is recommended that the following is undertaken,

- The Project Arborist is to be consulted during the detailed design phase to minimise impacts to retainable vegetation.
- Current retention/removal recommendations are based on plans provided.
 Detailed assessment of final design plans and bulk earthworks are required prior to final retention/removal recommendations.
- Ensure all approvals and permits are in place before works commence.
- Undertake a pre-start meeting with contractors before works commence.
- Tree Protection Fencing is to be erected before works commence and audited by the Project Arborist (Min AQF Level 5).
- Supervision by a Project Arborist (Min AQF Level 5) and Fauna Spotter/Catcher of the approved tree removals.
- Any works proposed within the TPZ of retained trees requires supervision of a minimum AQF5 Project Arborist.
- Tree Pruning is to be undertaken by a minimum AQF Level 3 Arborist.
- Laydown areas and site shed/office locations are to be identified/finalised and excluded from the Tree Protection Zones of retained trees and minimise public impact.
- Route vehicles and equipment outside of TPZs. If access is required within TPZ, mulch to a depth of 100mm and tree padding needs to be installed with the option of track mats as determined and signed off by a minimum AQF5 Project Arborist.
- Construction materials, spoil, stockpiles, tools and equipment are not permitted within the TPZs of retained trees.

Tree Management Plans and tree protection guidelines for NNPS and NSHS have been prepared by Independent Arboricultural Services and are included as part of the DA package.

Tree Replacement

Tree canopy cover plans for NNPS and NSHS have been prepared by DesignInc. The following table provides a summary of existing and proposed canopy cover at each site. It is noted that this includes trees that are proposed to be planted under separate planning pathways.

Table 10 Tree Canopy cover at NEP			
	NNPS	NSHS	NEP
Existing tree canopy cover area	11,988m²	17,583m²	29,571m²
Retained tree canopy cover area	9,241m²	17,206m²	26,447m²
Removed tree canopy cover area	2,747m²	377m²	3,124m²
Proposed tree canopy cover area	1,006m²	2,517m²	3,523m²
Net result	10,247m² (-1,741m²)	19,723m² (+2,140m²)	29,970m ² (+399m ²)

Overall, the proposed development works within the Narrabeen Education Precinct will increase the total tree canopy cover on the site by 399m².

6.2.3 Heritage

The following heritage listing apply to the NNPS:

- State Heritage Register (SHR) No. 02037 "Binishell Collection (Department of Education)";
- Item 5065693 Narrabeen North Public School Buildings B00A and B00B under the Department of Education's Section 170 Heritage and Conservation Register; and
- Item 2270341 "Concrete geodesic domes (North Narrabeen Public School) under Schedule 5 of the LEP (**Figure 26**).



Figure 26 Heritage Map

An assessment of the impacts of the proposed development on the heritage significance of the site has been undertaken by City Plan Heritage in a Heritage Impact Statement (HIS). As detailed in **Section 5.3**, the HIS concludes that the proposed development will have an acceptable heritage impact on the heritage significance of the Binidomes, subject to the recommendations detailed in the HIS.

6.2.4 Aboriginal Cultural Heritage

As discussed in **Section 5.4**, an Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Kayandel to assess the potential for Aboriginal heritage to be present in the site. The ACHAR has been prepared in accordance with the requirements of the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* (2010) and the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (2011).

As a result of the desktop investigations, field surveys and feedback from Registered Aboriginal Parties, an Archaeological Sensitive Landform was identified along the eastern bank of Mullet Creek (**Figure 20**). No development is located on the part of the site mapped as an archaeological sensitive landform and therefore, the works are unlikely to impact upon any items of Aboriginal cultural heritage significance. Detailed recommendations are provided in the ACHAR in the event that any unexpected finds are uncovered during the works.

6.2.5 Noise and Vibration

A Noise and Vibration Impact Assessment report has been prepared by Acoustic Studio that provides an assessment of the noise and vibration impacts of the proposed development as follows:

- External noise intrusion;
- Operational noise emissions; and
- Construction noise and vibration.

Site Specific Noise Criteria

The following acoustic standards and guidelines have been considered to establish site specific noise and vibration criteria for the site:

- NSW Environmental Protection Authority (EPA) Noise Policy for Industry (2017);
- NSW EPA Road Noise Policy (2011);
- NSW Department of Planning Development near rail corridors and busy roads interim guidelines (2008);
- Educational Facilities Standards and Guidelines (EFSG);
- State Environmental Planning (Transport and Infrastructure) 2021;
- Pittwater Local Environmental Plan 2014; and
- Pittwater Development Control Plan 21.

Figure 27 shows the location of noise receivers in the vicinity of the site. This includes residential, commercial and industrial receivers.

Unattended long-term noise monitoring was carried out during two (2) periods:

- Period 1: Friday 8 April to Friday 15 April 2022 (during school holidays); and
- Period 2: Tuesday 26 April to Monday 2 May 2022 (during school term).

The location of the unattended long-term noise monitoring is indicated by the yellow dot (Logger 1) in **Figure 27**. On 2 May 2022, short-term noise monitoring was undertaken at various locations within the precinct (indicated by the purple dot in **Figure 27**).

External Noise Intrusion

External noise intrusion relates to the impacts of external noise such as plant, equipment and traffic on the internal amenity of new Building D at NNPS and Building A3 at NSHS. Within NEP, traffic noise from Namona Street and Pittwater Road is considered to be dominant source of external noise impacting the existing schools.

A noise target of 40 dB(A) has been established for internal spaces and a noise target of 60 db(A) of active open space and 55dB(A) of passive open spaces. The internal noise level can be achieved through closed windows and standard single glazing with a minimum performance of Rw 30 -32. The COLA at NNPS is considered to be sufficiently shielded from traffic noise and therefore, predicated noise levels are expected to be within the target for covered outdoor learning spaces.



Figure 27 Sensitive receivers and location of short and long-term noise monitoring (Acoustic Studio)

Operational Noise Emissions

Operational noise emissions relate to the potential noise emissions from the proposed development and includes measures to minimise and mitigate the potential noise impacts on surrounding land uses and development. Operational noise emissions include:

- Noise from mechanical plant and services;
- School bells:
- Use of the school buildings during the day;

- Use of the OSHC (before and after school);
- Out of hours use of the school halls' and
- Traffic noise generated by the schools.

In relation to noise from mechanical plant and equipment, the Noise and Vibration Assessment report provides recommendations such as acoustic treatments that will ensure that any noise emissions are not intrusive, will not impact on the acoustic amenity of any sensitive noise receivers in the vicinity of the site and achieve the relevant noise criteria at the site boundary.

In relation to operational noise for the use of the school buildings during the day, the Noise and Vibration Assessment report notes the new facilities are not expected to generate any additional impact above the existing noise emissions from the schools. Therefore, no adverse impacts are anticipated on any sensitive noise receivers during the normal operation of NNPS and NSHS

Out-of-hours use of the new hall at NNPS is also expected to comply with the relevant noise criteria at the nearest residential boundary during the evening period (6pm to 10pm), assuming that the internal noise level (with windows open) does not exceed 85 dB LAeq.

Construction Noise and Vibration

The Noise and Vibration Assessment report includes an assessment of the potential impacts of demolition and construction on the acoustic amenity of the surrounding sensitive noise recievers. This includes an assessment against the NSW EPA's *Interim Construction Noise Guidelines* (ICNG).

Construction noise impacts are anticipated to be the greatest within the existing classrooms located on the site. A range of noise and vibration generating equipment will be used during the proposed demolition and construction works and noise from this plant and equipment are generally predicted to be above the noise management levels (NMLs) established for the site. The worst-case noise impacts are from the use of excavators within hammers with noise levels predicted to above the NMLs by up to 32dB.

The Noise and Vibration Assessment report identifies that the following mitigation measures could be incorporated in the demolition and construction processes:

- Schedule noisy activities to less sensitive times of the day for each nominated receiver (i.e. daytime hours).
- Hoarding that may already be included as part of the site works can reduce noise levels by 5 to 10 dB.
- Including Respite Periods where activities are found to exceed the 75 dB(A) Highly Affected Noise Level at receivers, such as 3 hours on and 1 hour off.
- The predictions for noise levels above NMLs is not unusual given the heavy plant and equipment that must be used, such as excavators and hammers, and the proximity to on campus sensitive receivers (some of which are within 20m).
- Implementation of all reasonable and feasible mitigation measures for all works will
 ensure that any adverse noise impacts to surrounding residential, commercial and
 recreational receivers are minimised when NMLs cannot be met due to safety or
 space constraints.

In relation to construction vibration, the Noise and Vibration Assessment report notes that there is potential for human perception vibration impacts on nearby school buildings and therefore recommends that more detailed review of vibration impacts is undertaken once detailed design is completed. It is recommended that a Construction Environmental Management Plan (CEMP) is prepared prior to any works commencing on site.

6.2.6 Solar Access

Shadow diagrams have been prepared by DesignInc illustrating the existing and proposed shadows at 9am, noon and 3pm on 21 June (mid-winter) and 21 December (mid-summer). The shadow diagrams confirm that the proposed development will not result in any overshadowing of any adjoining public domain or residential properties.

6.2.7 Visual Impact and Views

Narrabeen North Public School

Whilst the proposed construction and demolition works will have a short-term impact on the appearance of the site, long-term the proposed development will not have an adverse impact on the existing bushland character of the site. The proposed development does not impact upon any significant views to or from the site or public domain.

Existing trees will be retained along the eastern, western and southern site boundaries which will assist in screening the new buildings and softening the proposed development (**Figure 28**). Views from the public domain to the Binidomes (heritage item) will be improved through the removal of Buildings J and H (subject to a separate planning pathway). This will enhance the setting of the Binidomes heritage item and provide the opportunity an appreciation of their distinctive landmark and aesthetic qualities. The proposed COLA structure has been designed to frame the views towards the Binidomes (heritage items) (**Figure 12**).

The overall built form and scale of the proposed Building D is considered to be appropriate and consistent with the existing buildings on site and will not dominant the existing school buildings on site including the heritage Binidomes.

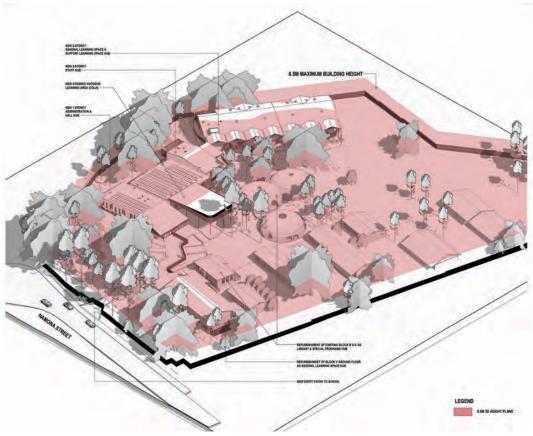


Figure 28 Axonometric of the overall upgrades to NNPS (DesignInc)

Narrabeen Sports High School

The new alterations and additions to Building A3 is barely visible from the public domain due to the existing school buildings located to the north, east and south, and the existing screening trees. It will only be visible from the end of the Namona Street cul-de-sac The alterations and additions to Building A3 will not be visible in views from the west due to the existing dense vegetation along both sides of Mullet Creek.

The overall two (2) storey built form, height and scale of the proposed extension to Building A3 is consistent with the existing school buildings on the NSHS site.

6.2.8 Traffic and Parking

The following transport reports have been prepared by Ason Group:

- Transport Assessment Narrabeen North Public School;
- Transport Assessment Narrabeen Sports High School;
- Preliminary School Travel Plan Narrabeen North Public School;
- Preliminary School Travel Plan Narrabeen Sports High School;
- Construction Traffic Management Plan Narrabeen North Public School; and
- Construction Traffic Management Plan Narrabeen Sports High School.

Each of these reports is discussed below.

Narrabeen North Public School - Operational Traffic, Parking and Access

Transport Assessment

A Transport Assessment Report has been prepared by Ason Group that provides an assessment of the proposed development on the existing and future operation of the nearby road network, as well as other traffic and transport-related issues including access to and from the NNPS site, public and active transport accessibility, car parking requirements and service vehicle access.

The Transport Assessment Report notes that the proposed development does not seek to increase the number of staff or students at NNPS and therefore, it is expected that the traffic generated by the proposed development will be consistent with the existing conditions and will not adversely impact on the existing road network.

No changes to the existing on-site car parking is proposed. Servicing including waste and deliveries will continue to occur within the existing staff car park. This servicing arrangement has previously operated safely, and it is anticipated that it will be adequate for the proposed upgrades to NNPS.

A total of 100 bicycle parking spaces are to be provided as part of the development. These will replace the existing 94 spaces located on the site and will be designed in accordance with the requirements of AS 2890.3 (2015) Parking Facilities – Part 3: Bicycle Parking.

Drop-off / Pick-up facility

It is noted that the NNPS does not currently have any formal drop-off / pick-up facilities (also known as 'Kiss and Ride') as a result Ason Group have identified the potential for a new formal drop-off/pick-up facility to be provided within the existing NSHS site off-street overflow carpark (**Figure 29**). It can be used by both NNPS and NSHS students.

A preliminary design has been prepared by Ason Group that accommodates 17 drop-off / pick-up spaces with a turning circle at the end. Access to the drop-off / pick-up facility will be from the end of Namona Street. A new footpath will located around the new facility, which will ensure that students can safely exit vehicles without crossing into any vehicle paths.

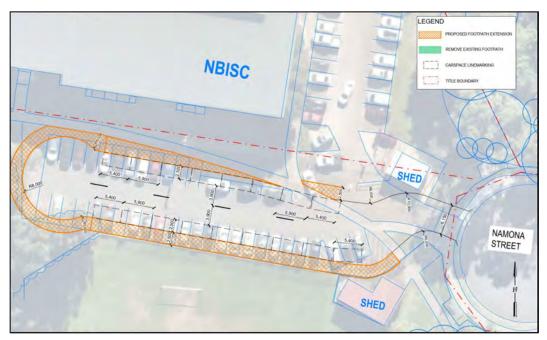


Figure 29 Preliminary drop-off /pick-up facility design (Ason Group)

This design is preliminary only and will be the subject of a separate DA to Council.

Narrabeen Sports High School Operational Traffic Parking and Access

The Transport Assessment Report prepared by Ason Group for Narrabeen Sports High School concludes that as the proposed development at NSHS does not seek to increase staff or student numbers then it is not anticipated to result in any adverse impact on the surrounding road network or the availability of on-street parking.

No changes are proposed to the existing servicing of the site. The existing waste loading area to the north of Building F has previously operated safely, and it is anticipated that it will be adequate for the proposed upgrades to the school.

A total 100 bicycle parking spaces are to be provided as part of the development. These will replace the existing 94 spaces located on the site and will be designed in accordance with the requirements of *AS 2890.3 (2015) Parking Facilities – Part 3: Bicycle Parking.* In addition, end-of-trip facilities are provided for staff to encourage active transport usage.

Preliminary School Travel Plan

The Preliminary School Travel Plans prepared for NNPS and NSHS are intended to provide a package of specific measures to promote and maximise the use of sustainable travel modes, including active transport, public transport and carpooling. These strategies will lessen the reliance on the use of public vehicles and promote health benefits. The PSTP review the existing transport choices of staff and students and sets targets against which the effective implementation of the PSTP can be measured.

In addition, the PSTPs provide guidance in relation to the traffic management arrangements for the NNPS and NSHS sites to ensure the safe and efficient movement of vehicles, students, visitors and staff.

It is intended that the PSTPs will be subject to ongoing review and monitoring.

Construction Traffic Management Plan

Preliminary Construction Traffic Management Plans have been prepared by Ason Group for NNPS and NSHS to identify general principles for managing construction traffic and provide an understanding of the likely traffic impacts during the construction period.

Construction traffic will generally incorporate:

- Truck and dog trailers for removal of spoil and transportation of materials;
- Concrete mixer trucks (up to 12m); and
- Up to 19m long Articulated vehicles for delivery of large format materials such as steel, façade panels and roof panels.

All heavy vehicles associated with construction activities will access the site from Namona Street via Pittwater Road. This will minimise the impacts on the local road network.

A detailed CTMP will need to be prepared prior to any works commencing on the site.

6.2.9 Stormwater and Water Quality

Enstruct have prepared Civil and Stormwater Plans and Reports for the NNPS site and NSHS site that detail existing site drainage, proposed WSUD strategies and proposed stormwater management. The proposed stormwater drainage systems have been designed with regard to Council's DCP and Water Management for Developments Policy.

Generally, the proposed stormwater drainage system has been designed as follows:

- A new pit and pipe drainage that has been sized for the 5% annual exceedance probability (AEP) design storm event and provision for overland flow path in the event of larger or more extreme storm events; and
- Use of pollution control devices including litter screens in all pits.

At both the NNPS site and NSHS site, it is proposed to collect the stormwater into a bioretention swale (35.4m long at NNPS and 10m long at NSHS). The bio-retention swale will filter the stormwater and reduce the Total Suspended Solids, Gross Pollutants, Total Nitrogen and Total Phosphorus concentration. A MUSIC model has been prepared by Enstruct to demonstrate the suitability of the proposed WSUD design.

As the site is identified a flood prone land, no on-site detention of stormwater is required.

Prior to any works commencing on site, erosion prevention and sediment control measures will be established on site to prevent contamination of the downstream stormwater system and tracking of grit and sediment onto the roadway. These measures have been design in accordance with Landcom's *Managing Urban Stormwater: Soils and construction – Volume 1* (the Blue Book).

6.2.10 Waste Management

Two (2) Waste Management Plans (WMP) have been prepared by MRA Consulting Group for the proposed developments at NNPS and NSHS

Demolition and Construction

The WMP provides an estimate of the quantities of demolition and construction waste. The majority of the waste generated during the construction works will be re-used or recycled where possible. Any residual waste will be transferred off site for recycling or disposed to appropriately licenced waste facilities.

Any materials or soils requiring off-site disposal will need a waste classification undertaken in accordance with the relevant requirements of the *Protection of the Environment Operations Act 1997* and NSW EPA Waste Classification Guidelines.

Operational

An overall waste management strategy has been prepared for the NNPS site and NSHS site. Whilst it is noted that the proposed developments at NNPS and NSHS are not anticipated to result in an increase in the total waste generated by the site, ongoing waste management practices have been identified so that the proposed development will contribute to the NSW's Waste Avoidance and Resource Recovery (WARR) Strategy target recycling rate of 70% for commercial and industrial waste by 2021 – 24.

6.2.11 Ecological Sustainable Design

The proposed development has been designed with regard to the principles of ecological sustainable design (ESD) and a commitment to reducing the overall environmental impact of the works at the NNPS site and NSHS site.

An ESD Report has been prepared by Steensen Varming that sets out the ESD and environmentally conscious initiatives both in design and operation at NNPS and NSHS in accordance with the Educational Facilities Standards and Guidelines (EFSG), DCP, NCC Section JV3 and the Green building Council of Australia's Green Star Design and As-built (DAB) v1.3 tool. A list of some of the ESD initiatives incorporated into the design are provided in **Section 4.5.**

6.2.12 Crime and Safety

The four (4) key strategies of Crime Prevention Through Environmental Design (CPTED) are:

- Surveillance Measures;
- Territorial Reinforcement;
- Access Control; and
- Space / Activity Movement.

Each of these principles are discussed below.

Surveillance

Opportunities for crime can be reduced by providing effective surveillance. The surveillance principle indicates that offenders are often deterred from committing a crime in area with high levels of surveillance. From a design perspective, deterrence of crime can be achieved by providing:

- Clear sight lines between public and private places and maximising natural surveillance;
- Appropriate lighting and effective guardianship of communal and/or public areas; and
- Landscaping that makes places attractive but does not provide offenders with a place to hide or entrap victims.

At NNPS, the proposed development has been designed to provide passive surveillance opportunities across the site. As part of the overall development, the entry from Namona Street will be upgraded to provide a clear line of sight between the street and the central area of the site.

At NSHS, the overall masterplan seeks to reinforce the main circulation corridor running through the site providing opportunities for staff to monitor student activities within each of the courtvards.

Territorial Reinforcement

This principle involves the community ownership of public spaces and that staff, students and visitors will be more comfortable in visiting a communal area that is well-cared for and to which they feel they own. Well used places also reduce opportunities for crime and present as a deterrent to criminals. Also, designing with clear transitions and boundaries between public and private spaces, and clear design cues on what the area is used for is recommended.

During school term, the NEP will be heavily used by staff and students. Outside of school term, the school will be under surveillance.

Territorial reinforcement such as fences, signs, doors and other physical thresholds will clearly indicate the separation between public and private spaces, which helps to convey where people should and should not be within the NEP.

Access Control

The principle of access control is to use physical and symbolic barriers to attract, channel or restrict the movement of people to minimise opportunities for crime and increase the effort required to commit a crime.

Access to NNPS and NSHS is restricted with all visitors being required to sign in. Both schools property are surrounded by a security fence. Additional fencing is proposed at NNPS to provide a secondary line of security when the site is being used after hours. NNPS and NSHS are secure education facilities with access control minimising opportunities for crime. This will also discourage vandalism and activism.

Space / Activity Management

This principle provides that space which is appropriately utilised and well cared for reduces the risk of crime and antisocial behaviour. 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.

Presentation of NNPS and NSHS are managed by the schools themselves, with general repairs and maintenance of replacement lighting, broken equipment, unsafe courtyard areas, graffiti occurring as required. The proposed development seeks to upgrade the school's existing education facilities at NNPS and NSHS and this will assist in improving the overall presentation of the schools, which will improve the amenity, casual surveillance, and ultimately student / staff safety and sense of security within the site and surrounding area.

6.2.13 Construction Management

A Preliminary Construction Management Plan (PCMP) has been prepared by Johnstaff to outline the general construction management principles and controls to be implemented at the site. The PCMP provides the following:

- Description of the site and the proposed works including the proposed works construction staging;
- Description of the key roles and responsibilities during the demolition and construction works;
- Site operations and management processes including construction environmental management including contamination, noise and vibration, archaeology, air quality, odour control, vegetation protection, and sediment and erosion control;
- Construction traffic management;
- Construction waste management; and
- Management of stakeholder consultation and communication.

6.2.14 Air Quality and Dust Management

Some dust is anticipated during the demolition and construction works, however this can be managed through measure such as wetting down work areas/stockpiles, stabilising exposed areas, preventing material tracking out onto the school driveway and public roadways, covering loads on all departing trucks and working to weather conditions.

6.3 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.

6.3.1 Location

In the assessment of site suitability, there are two key questions to consider:

Does the proposal fit within the locality?

The proposed school development at NNPS and NSHS is considered to fit well within the locality. Consideration of the compatibility of the proposal and its surroundings can be undertaken with regard to the Land Environment Court Planning Principle on "compatibility with context" in *Project Venture Developments v Pittwater Council* [2005] NSWLEC 191. In order to test whether a proposal is compatible with its context, the following two questions can be asked:

Are the proposal's physical impacts on surrounding development acceptable? The physical impacts include constraints on the development potential of surrounding sites.

The proposed development at NNPS and NSHS will not create any significant physical impacts on adjoining land or established surrounding developments. The new buildings are not located adjacent to any residential development being located on the central and western parts of the site and this minimises the impacts of overshadowing, along with visual privacy and noise impacts on the neighbouring residential development. It is considered there will not be any reduction in the development potential of surrounding properties as a result of the proposal as NNPS and NSHS are long-term educational establishment uses within the area and as such land use conflict matters are negligible.

<u>Is the proposal's appearance in harmony with the buildings around it and the character of the street?</u>

The proposed development at NNPS and NSHS provides an opportunity to transition from the scale of the existing school buildings to the north-west of the site to the residential development to the south-west of the site. The proposed development will not have an adverse impact on the heritage items at the NNPS site and those located within the vicinity of the site.

Are the site attributes conducive to the proposed development?

The proposed development is located within two (2) existing educational establishments. The site is able to physically cater for the proposed development without detriment to the natural or built environment. Appropriate mitigation and management measures will be implemented prior to the works ensure that the proposed development does not adversely impact on the environment. All relevant essential services and infrastructure are understood to be existing and/or available to the site. The site attributes are therefore considered to be more than conducive to accommodating the proposed development.

6.3.2 Land Stability and Groundwater

A Preliminary Geotechnical Assessment report was prepared by Douglas Partners in 2020 that assessed the likely subsurface conditions underlying the site including highlighting any potential geotechnical issues or constraints for the development, providing general recommendations on excavation conditions, groundwater and foundations; and identification of any requirements for further intrusive geotechnical investigations.

In 2022, additional intrusive site investigations were undertaken by Douglas Partners and the results are provided in the Detailed Geotechnical Assessment report.

The site is underlain by Quatemary alluvial and estuarine sediments and is identified as containing 'disturbed terrain' on the NSW soil landscape maps. The following geotechnical model has been developed for the site:

Narrabeen North Public School

- Surface fill about 0.2 m to 0.9 m thick (RL 2.7 m to 4.4 m, AHD);
- Variable strength sands (alluvial and estuarine) to depths of about 2.2 m to 2.3 m (RL 2.4 to 2.5 m, AHD);
- Medium dense sands to depths of about 10.6 m to 11.2 m (RL 5.9 to 6.5 m, AHD);
 and

 Interbedded sands and clays of loose to medium dense sand and stiff to very stiff clay to depths of about 28 m (RL- 25 AHD) to where interpreted weathered rock was encountered.

Narrabeen Sports High School

- Surface fill about 0.4 m to 1.4 m thick (RL 1.5 m to 1.7 m, AHD);
- Variable strength sands (alluvial and estuarine) to depths of about 2.7 m to 6.05 m (RL - 0.4 to RL - 4.15, AHD);
- Medium dense sand, with some loose to medium dense bands, to depths of about 11.35 m to 11.95 m (RL - 9.05 to RL - 10.05, AHD);
- Medium dense to dense sand to a depth of about 13.05 m to 15.85 m (RL 13.5 to RL - 13.65, AHD); and
- Very stiff to hard clay to depths of about 18.7 m to 19.25 m (RL 16.25 to RL 17.05, AHD) to where interpreted weathered rock was encountered.

Groundwater is expected to occur on the site at levels approximately 0.7m to 1.8m below the existing ground level.

The Geotechnical Investigation Report provides recommendations in relation to site preparation, excavation, excavation support, design of foundations (shallow footings, piles and raft foundations) and pavement design. It is considered that subject to the recommendations detailed in the Geotechnical Investigation report, the proposed development will not adversely impact on land stability or groundwater on the site or any adjoining properties.

6.3.3 Flooding

The site is located within the Narrabeen Lagoon Catchment and is mapped as containing land within the 'high-risk', 'medium-risk' and 'low-risk' flood precincts (**Figure 30**). A Flood Risk and Impact Assessment Report has been prepared by BMT that provides the following:

- Description of the existing (baseline) flood conditions and proposed flood conditions;
- Assessment of the impacts of the proposed development on existing flood behaviours;
- Assessment against the relevant provisions of the DCP relating to flood planning levels, finished floor level requirements, building components and structural soundness and storage of goods; and
- Completion of a flood emergency assessment.

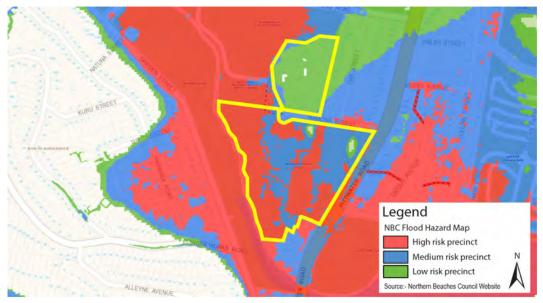


Figure 30 Council Flood Hazard Map

Existing Conditions

Previous flood studies of the Narrabeen Lagoon Catchment include:

- Narrabeen Lagoon Flood Study (2013) prepared by BMT;
- Narrabeen Lagoon Floodplain Risk Management Study and Plan (2019) prepared by Cardno; and
- Narrabeen Sports High School Flood Impact Assessment (2021).

A TUFLOW hydraulic model of the existing conditions was prepared by BMT that establishes the baseline flood conditions based on existing building footprints, local landforms and land uses. The baseline TUFLOW model was used to simulate the 1% annual exceedance Probability (AEP) flood and Probable Maximum Flood (PMF). The exiting flood behaviour within the NEP site can be summarised as follows:

- Mullet Creek is predicted to flow in a south-easterly direction into South Creek under normal conditions. Outflows from South Creek are restricted by the berm downstream of Ocean Street.
- During rare and extreme flood such as the 1% AEP flood and PMF, the NEP is inundated by high floodwater depths, with initial inundation occurring as a result of flow breakout from Mullet Creek and excess backwater flow from South Creek then contributing to flooding within the site.
- Predicted peak 1% AEP flood and PMF levels within the NEP are 2.96 mAHD and 4.87 mAHD, respectively.
- Within NNPS:
 - Inundation during the 1% AEP flood is restricted to areas immediately adjoining the western boundary of the site, whilst the remainder of the NNPS site is above the 1% AEP flood level. Maximum peak floodwater depths of 1.0 m are predicted, however floodwater depths are typically less than 0.5 m.
 - More significant extent of inundation is predicted during the PMF. Maximum peak floodwater depths exceed 2 m along the western site boundary, however floodwater depths across the majority of NNPS are generally less than 0.8 m.
- Within NSHS:
 - o The majority of the site is inundated during both the 1% AEP flood and PMF.
 - Peak 1% AEP floodwater depths are typically less than 0.8 m, reaching a maximum of 4.6 m within Mullet Creek along the western boundary of the site
 - More significant depths of inundation are predicted during the PMF, ranging up to a maximum depth of approximately 6 m within Mullet Creek along the western site boundary. However, depths are typically less than 2.2 m across the majority of the site.

Proposed Flood Conditions

A proposed scenario TUFLOW model was prepared by BMT to simulate the 1% AEP and PMF to establish the post-development flood conditions. Generally, flood behaviour across the site is similar to the existing condition. However, the Flood Risk and Impact Assessment Report notes the following:

- Within NNPS:
 - o The new two (2) storey building (Block D) is outside the 1% AEP flood extent.
 - o PMF depths in the vicinity of Block D are typically less than 0.2 metres.
 - o The predicted peak 1% AEP flood level of 2.96 mAHD and PMF level of 4.87 mAHD are both below the ground FFL of 4.95 mAHD for Block D.
- Within NSHS:

The predicted peak 1% AEP flood level of 2.96 mAHD and PMF level of 4.87 mAHD are both above the minimum FFL of the ground floor of the new build extension to Building A (i.e. 2.55 mAHD). However, the Level 1 FFL will be 5.90 mAHD and therefore above the predicted PMF level.

The Flood Risk and Impact Assessment Report concludes that the proposed development will result in minor modifications to existing flood conditions. In a 1% AEP flood event, the proposed development will result in a reduction of flood extent, will not impact upon flood levels and negligible changes to 1% AEP flood velocities are predicted. In a PMF event, the proposed development will result in minimal impacts on flood levels and velocities. However, these impacts are localised and are unlikely to impact on existing flood risk.

Finished Floor Levels

Under Section B3.11 of the DCP, educational establishments are classified as a "Vulnerable and Critical Use" and the minimum finished habitable floor level must be set at the higher of the Flood Planning Level (FPL) or the PMF. Under the DCP, the FPL is defined as the 1% AEP level plus 0.5m freeboard. Based on a 1% AEP flood level for the site of 2.96m, the FPL is 3.46m. The PMF level is 4.87m. Therefore, the minimum habitable finished floor level of development on the site must be 4.87m.

Figure 31 lists the proposed finished floor levels (FFLs) of the ground and first floors of Building D at NNPS and the Building A extension at NSHS against the minimum requirements under the DCP.

Building	FFL Requirement (mAHD)	Proposed Ground FFL (mAHD)	Proposed Level 1 FFL (mAHD)	BMT Comment
NNPS - Block D	4.87	4.95	8.55	Complies with FFL requirement.
NSHS – Building A extension	4.87	2.55 (minimum)	5.90	Whilst the ground floor level does not comply with FFL requirement due to functional requirements to connect to existing Building A facilities, Level 1 is located higher than the PMF level (refer further discussion below).

Figure 31 Finished Floor Levels for the proposed development (BMT)

The FFL of the ground floor of the extension to Building A at NSHS does not comply with the minimum FFL requirements. The rooms on the ground floor of the extension to Building A3 include student change rooms and amenities, a stage for the gymnasium and storerooms. The proposed FFL is a result of functional and operational requirements for NSHS including the need to provide direct connections between the ground floor of the Building A extension and the ground floor of the rest of Building A (RL 2.42m). In addition, a shelter in place refuge will be provided on the first floor of the extension to Building A3, which has a FFL of RL 5.9 and is above the PMF. The shelter-in-place refuge could accommodate up to 150 staff and students with suitable supplies including sufficient clean water, portal radio with spare batteries, torch with spare batteries, first aid kit, emergency power and a means of medical evacuation. The structural report prepared by Enstruct Group confirms that the design of Building A3 will be structurally adequate in a flood event.

Flood Emergency Assessment

The Flood Risk and Impact Assessment Report includes a flood emergency assessment. The assessment included a review of the flood risks to occupants for flood events including the PMF, potential for evacuation from site, shelter-in-place requirements and preliminary guidance on how to respond in the event of a flood. It is recommended that the existing emergency plans for NNPS and NSHS are updated prior to the occupation of the new school buildings.

6.3.4 Acid Sulfate Soils

The site is identified as potentially containing Class 2 and 3 acid sulfate soils (ASS) under the LEP. The proposed development at NNPS and NSHS is located on the part of the site mapped as Class 3 acid sulfate soils.

As part of the Detailed Site Investigation (Contamination) (DSI) report prepared by Douglas Partners, potential acid sulfate soils (PASS) were identified as follows:

- At NNPS, acid sulfate soils are unlikely to be encountered at a depths less than 2.5m below ground level, although they are likely to be present in the deeper soils;
- At NSHS, PASS is expected to be encountered at depths of 1.5m below ground level or grater.

As it is likely that the proposed development will require disturbance of soils below these depths, the DSI report recommended that an Acid Sulfate Soils Management Plan (ASSMP) be prepared.

An ASSMP has been prepared by Douglas Partners with reference to the Acid Sulfate Soils Management Advisory Committee's *Acid Sulfate Soils Manual* (1998). The ASSMP details management methods and procedures to minimise the environmental impacts resulting from the disturbance of any ASS during the proposed development. The ASSMP includes ASS management requirements for both off-site disposal and on-site retention, neutralisation of soils, verification testing of treated materials, water and groundwater, general site monitoring and emergency response procedures. It is considered that subject to the recommendations of the ASSMP, that any ASS or PASS encountered during the demolition and construction works can be appropriately managed and will not result in any adverse impacts on the environment of the site and the Warriewood locality.

6.3.5 Contamination

As noted in **Section 6.1.3**, a Preliminary Site Investigation (Contamination) (PSI) report and Detailed Site Investigation (Contamination) (DSI) report have been prepared by Douglas Partners. These reports identified the presence of contaminated soil at NNPS, predominantly relating to asbestos. Hazardous Building Materials Assessments prepared by Douglas Partners for both the NNPS and NSHS sites also identified asbestos, asbestos containing materials (ACM) and other hazardous building materials within existing buildings.

In response to the recommendations contained in the DSI report a Remediation Action Plan (RAP) was prepared by Douglas Partners to address the asbestos impacted soils at NNPS and identify remediation strategies and processes. Subject to the implementation of the recommendations of the RAP it is considered that the site can be made suitable from a contamination perspective for its ongoing use as an educational establishment.

6.3.6 Essential Services and Infrastructure

The proposed development will be serviced with all essential utility infrastructure including water, sewer, electricity, gas and telecommunications reticulation.

A new substation and fire hydrant booster are proposed to be installed as part of the separate designated development application.

6.4 Public Interest

In accordance with section 4.15(1)(e) of the EP&A Act, the consent authority is required to consider the public interest. The proposed development seeks to upgrade two (2) existing educational establishments to provide modern fit-for-purpose educational facilities for the local community. 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 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.

In addition, the proposed development is generally consistent with the provisions of 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 Priories 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 Northern Beaches LGA. The proposed development will increase the availability of local education opportunities and provide for contemporary education services for local students. The new educational buildings exhibit design excellence and integrates with the surrounding precinct.

7 Conclusion

The proposed upgrades at Narrabeen North Public School, 6 Namona Street, North Narrabeen and Narrabeen Sports High School, 10 Namona Street, North Narrabeen have been assessed in accordance with the requirements of the EP&A Act and other relevant legislation. The proposed development the subject of the DA comprises:

- Narrabeen North Public School (NNPS):
 - Removal of three (3) trees;
 - Construction of a new part-one and part-two storey administration building, multipurpose hall, staff hub and out-of-school hours care (OSHC) building with associated Covered Outdoor Learning Area (COLA) (to be known as Building D);
 - New entry pathway from Northern Beaches Indoor Sports Centre (NBISC) car park to new building;
 - New hard and soft landscaping in the vicinity of the new building;
- Narrabeen Sports High School (NSHS):
 - Removal of three (3) trees;
 - Alterations and additions to Building A3 including:
 - Demolition of existing two (2) storey structure to the west of the existing gymnasium;
 - Construction of a two (2) storey extension to Building A3 comprising new stage to gymnasium, girls and boys amenities, girls and boys change rooms, storage and first aid room on the ground floor and movement studios, Physical Education (PE) classrooms, amenities and storage on the first floor;
 - Internal alterations to Building A3;
 - New lift access;
 - New Covered Outdoor Learning Area (COLA) to the south of Building A3 with new hard and soft landscaping.

The proposed development does not seek to increase staff or student numbers.

This DA package is part of larger project to upgrade the existing facilities at NNPS and NSHS to support high-quality educational outcomes to the meet the needs of students within the local community.

The site is zoned SP2 Infrastructure (Educational Establishment) under the LEP and the proposed development is located within two (2) existing and long-established educational establishments.

The proposed Building D at NNPS will exceed the maximum height of buildings development standard of 8.5m by 1.13m (having a maximum height of 9.63m above the existing ground level). This is equivalent to a variation of 13.3% and accordingly a Clause 4.6 written request to vary the development standard has been prepared. The written request concludes that compliance with the height of buildings development standard is unreasonable and unnecessary in the circumstances, and that there are sufficient planning grounds to justify contravening the development standard.

7 Conclusion

The proposed alterations and additions to Building A3 at NSHS will exceed the maximum height of buildings standard of 8.5m by 2.19m (having a maximum height of 10.69m above the existing ground level). This is equivalent to a variation of 25.8% and accordingly, a clause 4.6 written request to vary the height of buildings development has been prepared. The written request concludes that compliance with the height of buildings development standard is unreasonable and unnecessary in the circumstances, and that there are sufficient planning grounds to justify contravening the development standard.

The new buildings at NNPS and NSHS has been sited having regard to the environmental opportunities and constraints of the site including heritage, biodiversity, existing trees, flooding and Coastal wetlands. Appropriate mitigation measures have been identified to protect the amenity of the environment and that the existing character of the Warriewood locality.

Accordingly, the proposal is considered to satisfactorily respond to the opportunities and constraints of the site and the relevant legislation, is unlikely to result in adverse impacts in the locality and is worthy of Council approval.