



New The Forest High School

State Significant Development Assessment
SSD 26876801

November 2023



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Abbreviation	Definition
AAR	Acoustic Assessment Report
ACHAR	Aboriginal Cultural Heritage Assessment Report
ACHMP	Aboriginal Cultural Heritage Management Plan
AEP	Annual Exceedance Probability
AIA	Arboricultural Impact Assessment
Applicant	Department of Education
APZ	Asset Protection Zone
BAL	Bushfire Attack Level
BAM	Biodiversity Assessment Method 2020
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
CEMP	Construction Environmental Management Plan
CIV	Capital Investment Value
CNVMP	Construction Noise and Vibration Management Plan
COLA	Covered Outdoor Learning Area
Council	Northern Beaches Council
COWA	Covered Outdoor Working Area
DCP	Development Control Plan
Department	Department of Planning and Environment
DoE	Department of Education
DOPU	Drop-off / pick-up
EEC	Endangered Ecological Community
EHG	Environment and Heritage Group, Department of Planning and Environment
EIS	Environmental Impact Statement

Abbreviation	Definition
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2021
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
GANSW	Government Architect NSW
Heritage NSW	Heritage NSW, Department of Planning and Environment
Heritage ACH	Heritage NSW, Aboriginal Cultural Heritage, Department of Planning and Environment
ICNG	Interim Construction Noise Guideline
LEP	Local Environmental Plan
LGA	Local government area
LoS	Level of service
Minister	Minister for Planning and Public Spaces
NML	Noise Management Level
NPFI	Noise Policy for Industry 2017
NRAR	Water and the Natural Resources Access Regulator
NVIA	Noise and Vibration Impact Assessment
OMP	Operational Management Plan
OSD	Onsite Stormwater Detention
PBP	Planning for Bush Fire Protection 2019
PCT	Plant Community Type
Planning Secretary	Secretary of the Department of Planning and Environment
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021
PMF	Probable Maximum Flood

Abbreviation	Definition
RFI	Request for Information
RFS	Rural Fire Service
RtS	Response to Submissions
SDRP	State Design Review Panel
SEARs	Planning Secretary's Environmental Assessment Requirements
SES	State Emergency Service
SEPP	State Environmental Planning Policy
SRtS	Supplementary Response to Submissions and additional information
SSD	State Significant Development
STP	School Travel Plan
TAIA	Transport and Accessibility Impact Assessment
TfNSW	Transport for NSW
VMP	Vegetation management plan
WAL	Water Access Licence

Executive Summary

This report provides an assessment of a State significant development (SSD) application for the development of New The Forest High School (SSD 26876801). The application has been lodged by the NSW Department of Education (the Applicant) and the site is located within the Northern Beaches local government area.

The proposal

The proposal seeks approval for the construction and operation of a new high school with a total student capacity of 1500 students. The development includes site preparation works, construction of single and two storey buildings, sports courts, landscaping works, car and bicycle parking, drop-off / pick-up (DOPU) and bus bay facilities, drainage works, services infrastructure, fencing and signage.

The proposal has a capital investment value (CIV) of \$112,497,000 and would facilitate 120 operational jobs (80 existing and 40 new jobs) and 163 direct construction jobs.

The site

The site is located on the corner of Allambie Road and Aquatic Drive, Allambie Heights, approximately 17 kilometres (km) north of the Sydney central business district. The existing Forest High School is located within the proposed Frenchs Forest Precinct, and as part of the Frenchs Forest 2041 Place Strategy, the relocation of the existing high school to the subject site is proposed to facilitate rezoning for more dwellings and employment opportunities within the Frenchs Forest Precinct.

The site is located approximately 1km south east from the existing The Forest High School and the proposed future Frenchs Forest Precinct. It is accessible from Warringah Road, Wakehurst Parkway and Pittwater Road via Allambie Road.

The site covers an area of approximately 4.5 hectares, is irregular in shape and fronts Allambie Road and Aquatic Drive.

Statutory context

The proposal is SSD under section 4.36 of the EP&A Act as the development is for the purpose of a new school in accordance with Clause 15(1) of Schedule 1 of the State Environmental Planning Policy (Planning Systems) 2021. Therefore, the Minister for Planning and Public Spaces is the consent authority.

Engagement

The application was publicly exhibited between 15 November 2022 and 14 December 2022 (30 days). The Department received 30 submissions, including 15 objections, 12 providing comments and 3 in support. Submissions received included submissions from Northern Beaches Council (Council) providing comments, 26 submissions from the general public, and 3 submissions from interest groups. Advice was received from 6 Government agencies. The key issues raised in the submissions include design, built form and landscaping, transport, traffic and car parking, biodiversity, flooding, and acoustics.

On 5 May 2023, the Applicant provided a Response to Submissions (RtS) which responded to the comments made in the public submissions and Government agency advice. The RtS included public domain plans, an amended Biodiversity Development Assessment Report, Civil Engineering Report, Noise and Vibration Impact Assessment, Construction Management Plan and an addendum to the Social Impact Assessment.

The RtS was referred to Council and Government agencies and advice from 5 Government agencies and advice from Council were received in response.

The Department is satisfied the outstanding concerns with the proposal have been adequately addressed through the Applicant's RtS and further information provided, and the Department's recommended conditions.

Assessment summary and conclusions

The Department of Planning and Environment (the Department) has considered the merits of the proposal in accordance with relevant matters under section 4.15(1), the objects of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the principles of ecologically sustainable development, and issues raised in all submissions as well as the Applicant's response to these.

The key assessment issues associated with the proposed development are traffic, transport and parking, noise, and built form and urban design. The Department is satisfied that these issues have been adequately addressed in the Applicant's Environmental Impact Statement (EIS) and Response to Submissions (RtS). Outstanding issues can be addressed through the Department's recommended conditions of consent.

The Department concludes the proposal is in the public interest and recommends that the application be approved subject to conditions.

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1 Introduction

This report provides an assessment of a State significant development (SSD) application for New The Forest High School (SSD 26876801) to be located on the corner of Allambie Road and Aquatic Drive in Allambie Heights and within the Northern Beaches local government area (LGA). The application has been lodged by the NSW Department of Education (the Applicant).

The proposal seeks approval for construction and operation of a new government high school comprising seven one and two storey buildings, outdoor sports facilities, covered outdoor learning areas (COLA), an underground staff carpark, bicycle and scooter parking, earthworks, landscaping, stormwater works, and supporting infrastructure. The proposal includes use of the facilities outside of school hours.

1.1 Site description

The site is located on the corner of Allambie Road and Aquatic Drive, Allambie Heights, approximately 17 kilometres (km) north of the Sydney central business district and 1km south-east of the proposed future Frenchs Forest Precinct. The site is accessible from the following State roads: Warringah Road, Wakehurst Parkway and Pittwater Road via Allambie Road.

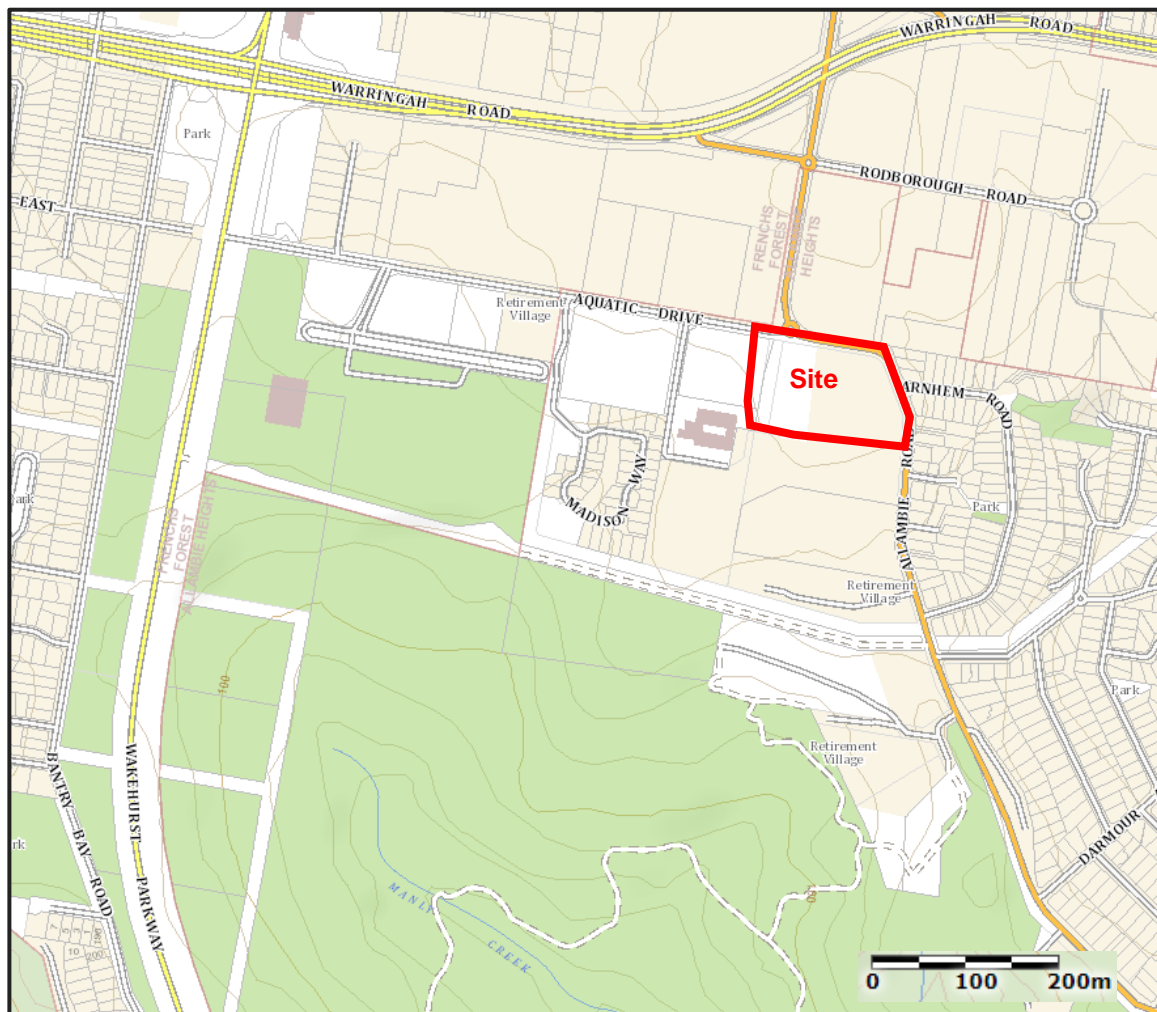


Figure 1 | Regional context map (Source: NSW SIX Viewer, 2022)

The legal description of the subject land is Lot 6 & Lot 7 DP 1280781, Lot 750 and Lot 751 DP 1271174, Lot 3 DP 1280781 and formerly formed part of 187 Allambie Road.

The site covers an area of approximately 4.5 hectares, is irregular in shape and fronts Allambie Road and Aquatic Drive. The site is also bordered by a private access road at its western boundary; however, the site is not presently accessible via this road. There is a 10 metre (m) decline in level from north to south across the site. The site is partially identified as being bushfire prone, due to vegetation located on the western side of the site and the adjoining land.

Aboriginal ownership and occupation of the Northern Beaches is evidenced by shell middens and rock art engravings throughout the area. The site is located on the land of the Garigal people. Following European settlement, the site formed part of Manly's water supply, was used to access surrounding quarry operations and then was owned by the Cerebral Palsy Alliance. A subdivision of the land was completed by Council in 2015 and a transfer of ownership is currently underway, with the land to be transferred into the ownership of the Department of Education.

The site contains the remnants of the Country Children's Hostel, later known as McLeod House. Part of the site was destroyed by fire in 2007 and following this the premises fell into disrepair, with approval issued for its demolition in 2012.



Figure 2 | Current site conditions – view from the corner of Allambie Road and Aquatic Drive (Source: Google Maps)

The site also contains landscaping associated with its former use, including car parking, remnant bushland regrowth and a high voltage transmission power line pylon and two electricity transmission lines that traverse the site in the north-western corner (refer to **Figure 3**).

1.2 Surrounding context

The site is adjoined by facilities associated with the Cerebral Palsy Alliance immediately to the south on Allambie Drive and the Arranounbai School also to the south along the private access road. The Arranounbai School caters for students with physical disabilities and medical conditions. To the east directly opposite the site along Allambie Road are residential properties, with vegetation and

residences to the west and south-west of the site. Commercial and light industrial premises are located to the north and to the north-west on Aquatic Drive. To the west of the site, across the private access road is a parcel of land identified as Lot 3 DP829747 and it is a protected vegetated area (a biobank site).



Figure 3 | Local context map (Source: Applicant's EIS)

The existing Forest High School

The existing Forest High School was founded in 1961 and fronts both Warringah Road and Frenchs Forest Road West, Frenchs Forest. The school currently operates with capacity for 800 high school students with 138 parking spaces across three car parks and 80 staff. These 80 jobs would be transferred to the new premises. The site comprises one to three storey buildings, sports courts and a large oval. The core school hours are 8:30 am to 3 pm with the facilities also utilised for out of school hours purposes. There are three formal drop-off / pick-up (DOPU) spaces within the western car park with the northern car park and Frenchs Forest Road both being utilised as informal DOPU areas. The site is well serviced by buses with students accessing the site via the school bus through the catchment area operated by the school and via public buses. A small number of students walk or cycle to the school.

The existing Forest High School is within the proposed future Frenchs Forest Precinct, as identified in the Frenchs Forest 2041 Place Strategy. The Frenchs Forest 2041 Place Strategy rezones the existing school and surrounds for the purpose of some 5,360 additional dwellings and 2,300 new jobs.

The Applicant has stated that when the new school is complete, existing students will be re-located to the new campus and development of the Frenchs Forest Precinct will progress.

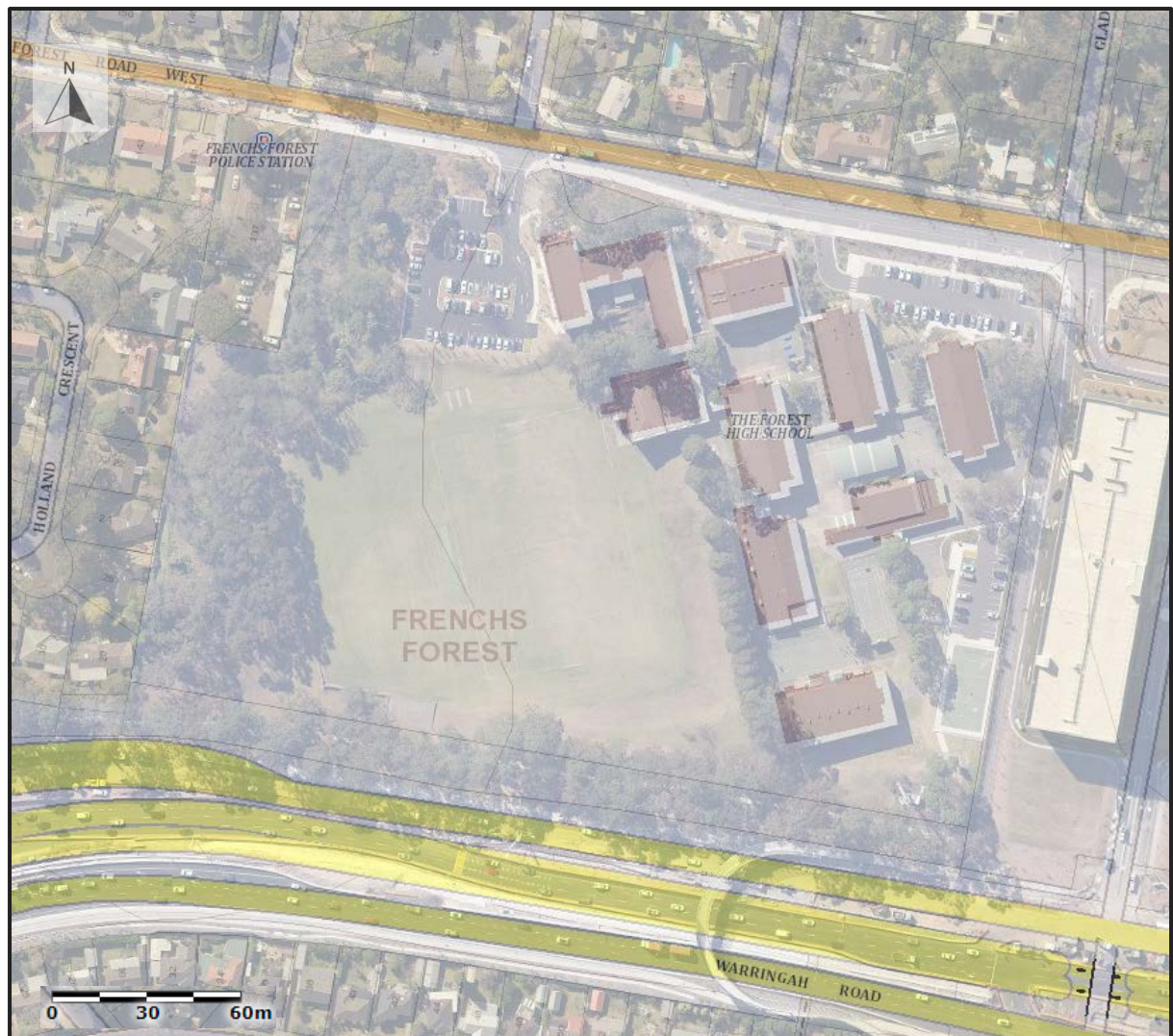


Figure 4 | Aerial view of the existing Forest High School (Base source: NSW Six Viewer)



**Figure 5 | Location of the existing Forest High School and the proposed location for the school
(Base source: Applicant's EIS)**

2 Project

The key components and features of the proposal (as refined in the RtS) are provided in **Table 1** and are shown in **Figure 6** to **Figure 15**.

Table 1 | Main components of the project

Aspect	Description
Project summary	The proposal includes the construction and operation of a new government high school for up to 1,500 students
Demolition	Does not form part of this application and would be undertaken in accordance with DA2011/1633
Site preparation	Removal of 231 trees, excavation, and civil works
Built form	<p>The built form of the development comprises seven buildings and ancillary facilities as follows:</p> <ul style="list-style-type: none"> Block A - two storey building comprising administration, staff spaces, staff amenities, and general learning spaces Block B - two storey building comprising special support unit facilities, staff spaces, amenities, and general learning spaces Block C - two storey building comprising library, general and specialist learning spaces Block D - two storey building comprising science facilities, general learning spaces, staff facilities, and amenities Block E - two storey building comprising food technology spaces, fabric and textile spaces, woodwork and metal work facilities, staff facilities, amenities and general learning spaces Block F - one and two storey building comprising a gymnasium with associated change rooms, showers, amenities and storage, first aid room, and metal work facilities Block G - two storey building comprising a hall with movement studio, stage and lecture theatre, performance facilities, visual arts facilities, canteen, amenities, staff facilities, and general learning areas Covered outdoor learning area (COLA) and covered outdoor working area (COWA)
Maximum Height	12.45m (Block C)
Site area	4.5 hectares
Uses	Educational establishment

Aspect	Description
Student and staff	1,500 students 120 staff
Access	<p>Primary pedestrian access via Allambie Road and secondary pedestrian entries from northern Allambie Road and Aquatic Drive</p> <p>Staff would access underground parking via private access road off Aquatic Drive, with a driveway to be constructed</p> <p>Covered accessible DOPU area would be accessed directly from Allambie Road</p>
Car parking	Basement parking area for 121 vehicles
Bicycle parking	Bicycle parking for 121 bicycles and scooter parking for 61 scooters
Public domain	<p>To facilitate the development, the Applicant has proposed the following public domain works:</p> <ul style="list-style-type: none"> • signalisation of intersection at Aquatic Drive and Allambie Road • pedestrian crossing on Rodborough Road adjacent to Allambie Road with associated pedestrian fencing on the western boundary of Rodborough Road approaching the pedestrian crossing • new bus zone to the west of the new pedestrian signalised intersection on Aquatic Drive • relocation and expansion to existing bus zone on the east side of Allambie Road • on-street pick-up/drop-off bays on the northern and southern sides of Aquatic Drive • an accessible on-street pick-up/drop-off zone adjacent to the main pedestrian entry to the school on Allambie Road • widening of existing shared path adjacent to the school along Aquatic Drive and Allambie Road
Stormwater and drainage	<p>Drainage infrastructure would convey stormwater to an in-ground pipe system, via gutters and down pipes from roofs and via collection pits from ground surfaces</p> <p>The in-ground pipe system would collect stormwater in three onsite stormwater detention (OSD) tanks and where pipe/tank capacity is exceeded (greater than 5% annual exceedance probability (AEP)), stormwater would be conveyed as overland flow, designed to 1% AEP</p>
Energy infrastructure	<p>As part of the development, the Applicant seeks to augment the energy supply at the site as follows:</p> <ul style="list-style-type: none"> • relocation of 11kV underground and 33kV overhead transmission cables and poles in the north-western corner of the site • installation of two x 800kVA kiosk substations adjacent to Allambie Road

Aspect	Description
	<ul style="list-style-type: none"> install of 99kW solar PV system on the roof of Blocks C, D and E
Open space	15,300sqm (10.2sqm per student)
Construction hours	07:00 am to 6:00 pm Monday to Friday 08:00 am to 1:00 pm Saturday No works on Sundays or public holidays
Hours of operation	School use: 08:30 am to 3:00 pm Monday to Friday Outside of school hours and community use via joint agreements will occur on the sports fields and courts, and in the Gym (Block F) generally between 6:00 pm and 9:00 pm on weekdays, and between 8:00 am and 5:00 pm on weekends
Signage	Signage would include the school emblem, school name and building names. All signage including school emblems would be backlit. Refer to Section 2.2 for more detail
Jobs	163 construction jobs 120 operational jobs (40 additional jobs)
CIV	\$112,497,600.



Figure 6 | Site Plan (Base source: Applicant's EIS, 2022)

2.1 Physical layout and design

The proposed site layout is shown in **Figure 6** to **Figure 15**. The built form of the development comprises two storey buildings arranged around a central playground/assembly area with buildings concentrated on the eastern half of the site. The western portion of the site would comprise a full size sports field, sports courts, basement car parking with loading dock and remnant bushland.

Facilities would be arranged as follows: creative arts in north west; wood and metal work in south west; science, tech, engineering, music to the south; and humanities to the east. The school hall, performance spaces, gym and outdoor sporting facilities would be located to the west to provide slight separation from the learning buildings and the rest of the school grounds.

The staff car park with a provision of 121 parking spaces would be located beneath the sports courts and sports field and would provide parking for staff only. Access to this car park would be via the private access road to the north of the site. The underground parking area would also include a waste collection area and a loading dock.

The building facades consist of a variety of materials including shading louvers/fins, metal cladding and fascias, elongated windows and balustrade railing to break up the facade.

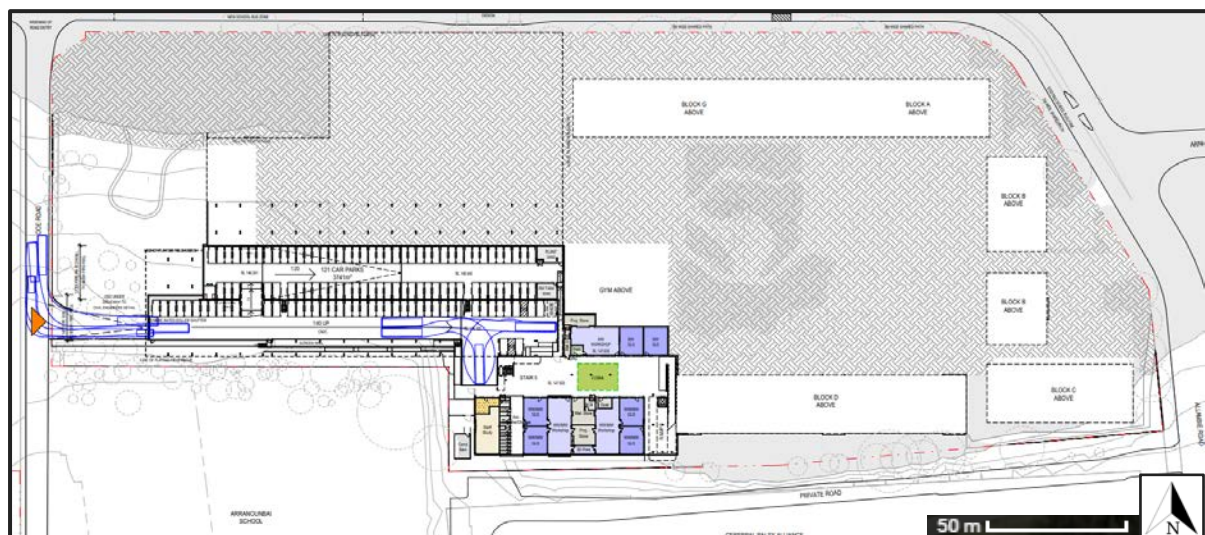


Figure 7 | Lower ground level plan – including underground parking and loading dock (Base source: Architectus, 2022)

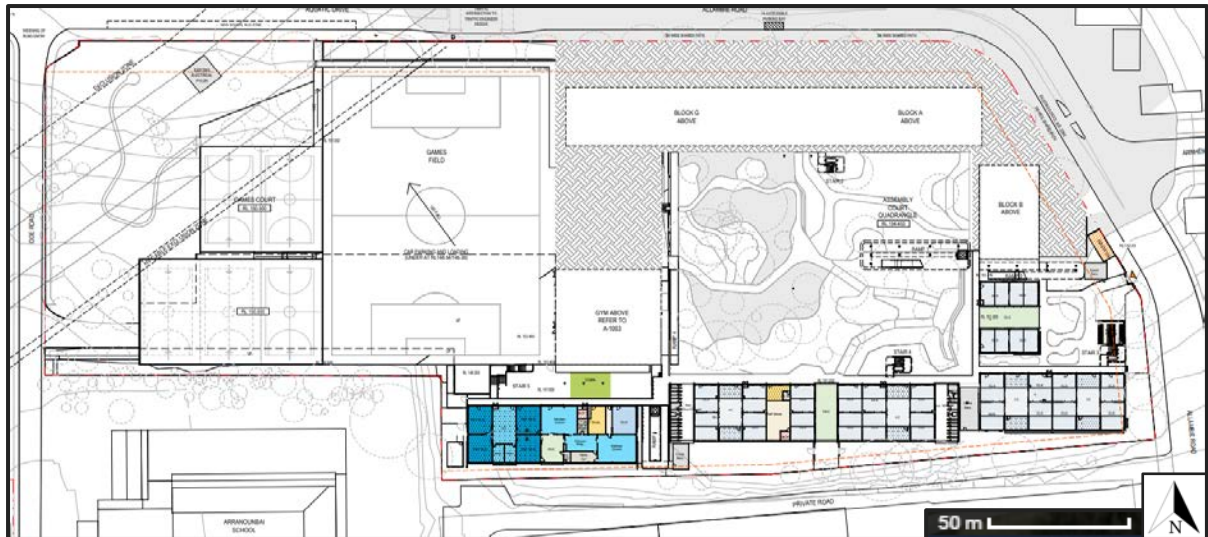


Figure 8 | Lower ground level plan (Base source: Architectus, 2022)

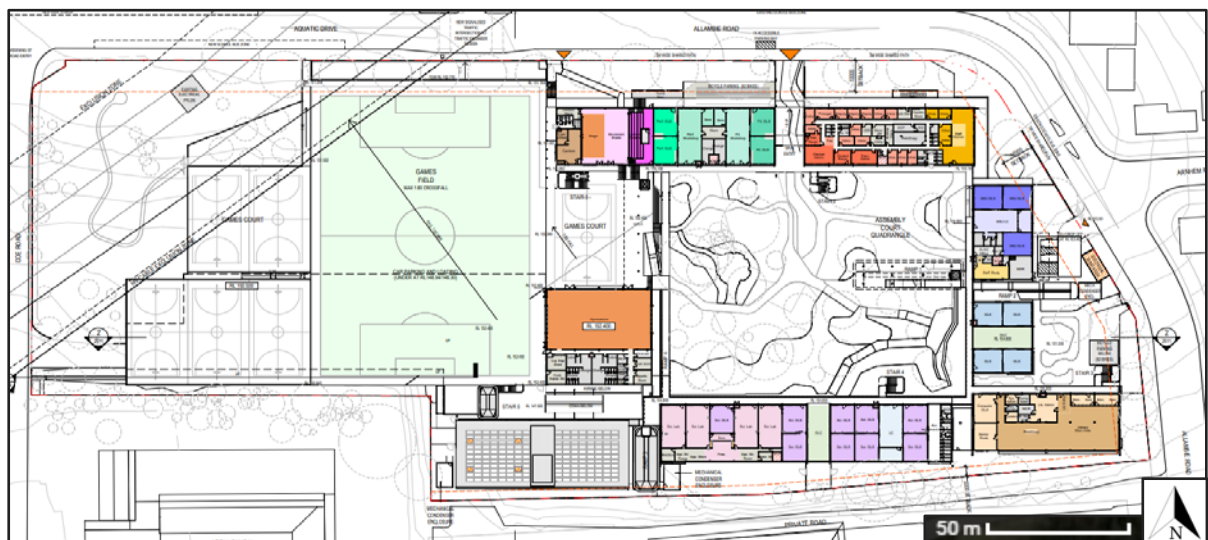


Figure 9 | Ground level plan (Base source: Architectus, 2022)

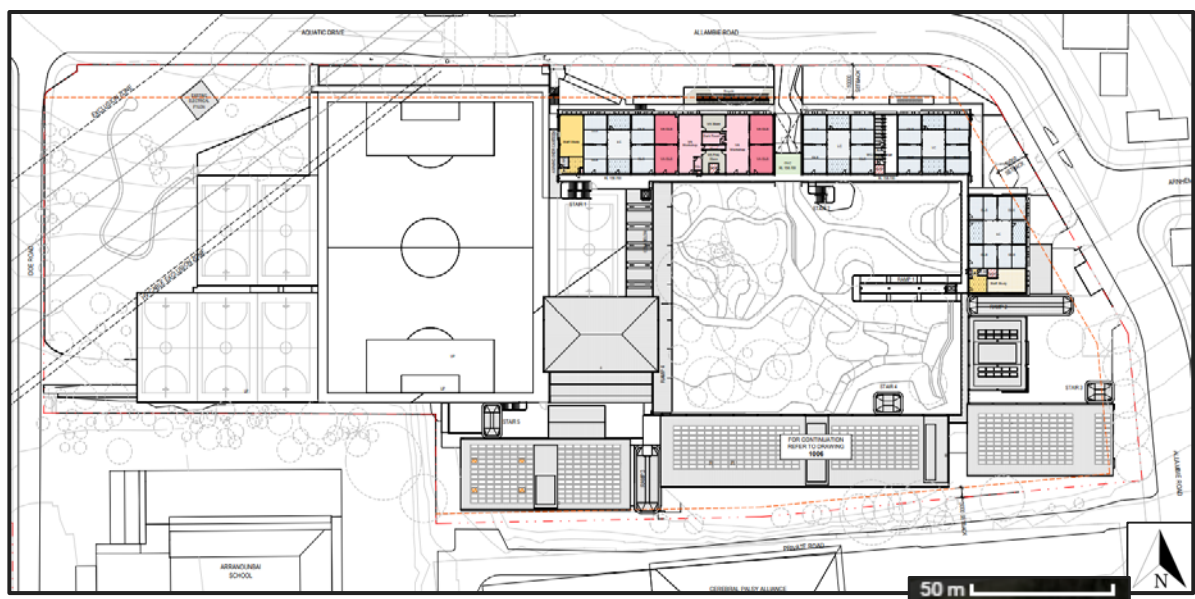


Figure 10 | Level 1 plan (Base source: Architectus, 2022)

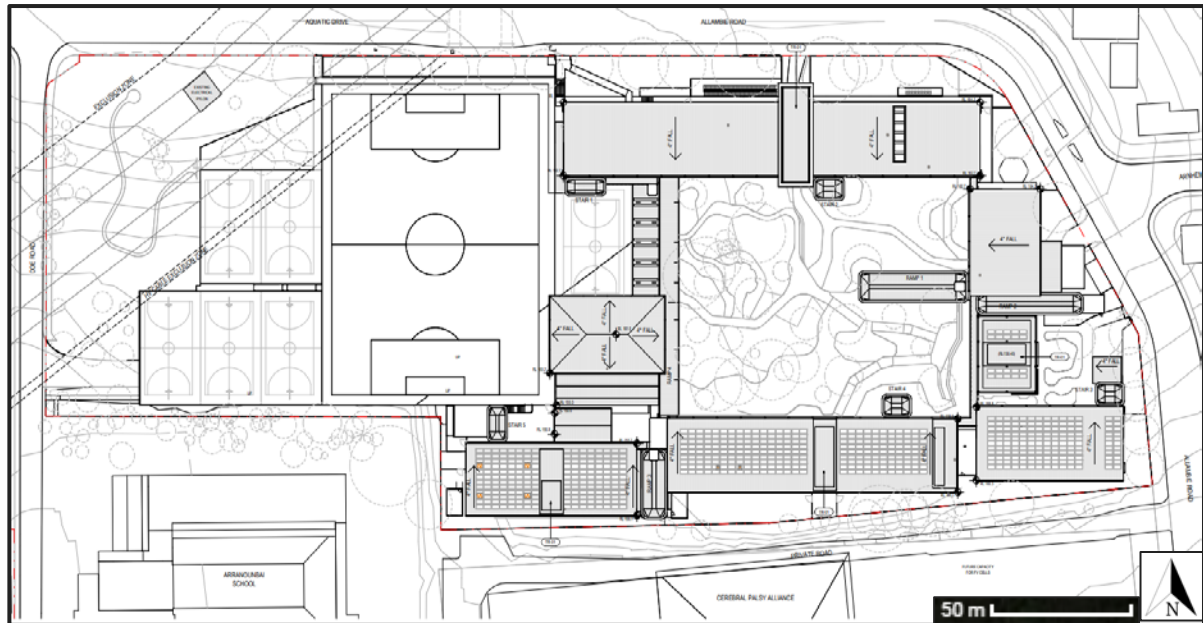


Figure 11 | Roof plan (Base source: Architectus, 2022)



Figure 12 | Northern elevation (Base source: Architectus, 2022)



Figure 13 | Southern elevation (Base source: Architectus, 2022)

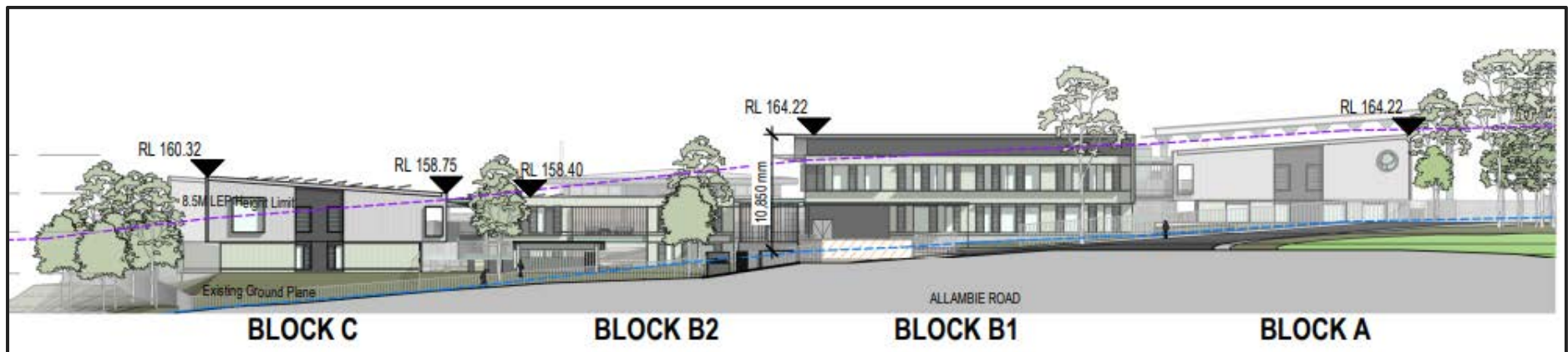


Figure 14 | Eastern elevation (Base source: Architectus, 2022)

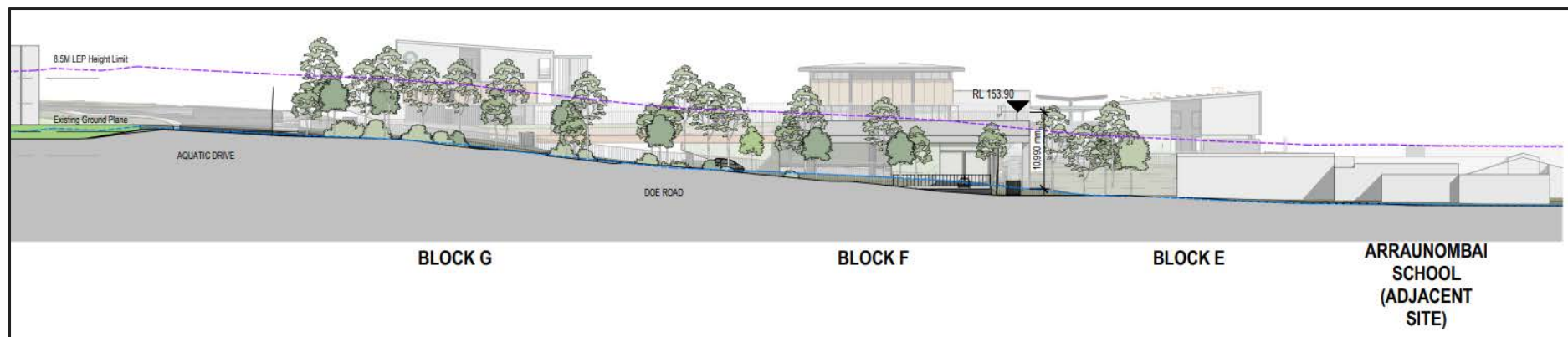


Figure 15 | Western elevation (Base source: Architectus, 2022)

The site comprises 15,300sqm of open space. Landscaping across the open spaces aims to facilitate learning and encourage physical activity, socialising and wellbeing. Elements of Country would be integrated into the landscape design, including engravings on the ground, seating and sandstone blocks to communicate Indigenous narratives. Buildings and facilities would be arranged around a central landscaped assembly area for active play with hard and soft landscaping around all other buildings and structures. Outdoor learning, sports and play facilities include a covered outdoor learning area, full size sports field (artificial turf), 6 sports courts, and a covered meeting space at the main entry. The development also seeks to remove 231 trees on site.



Figure 16 | Landscape strategy (Base source: Oculus, 2022)

The site would be surrounded by a 2.1m palisade fence that would include five entry points. A secondary perimeter fence would provide access to the gym, hall, playing field/sports courts which could remain accessible outside of school hours, and enabling the remainder of the school to be secured. The main pedestrian entrance is located on Allambie Road and would be connected to the surrounding pedestrian infrastructure on Aquatic Drive as well as the signalised pedestrian intersection to be constructed as part of the development (see **Section 2.2**).

2.2 Lighting and signage

The development provides illumination of key outdoor pathways across the site for safety and comfort whilst preventing light spill to the surrounding sensitive receivers and vegetation. Recessed ceiling lights would be provided along covered walkways with pedestrian pole lights to be provided at the two pedestrian access points on Aquatic Drive as well as at the main entry along Allambie Drive. The lighting of the sports courts would satisfy amateur and recreational lighting criteria with flood lighting provided, comprising four light poles per court, 8m in height. The sports field would be illuminated by four lighting poles, approximately 20m in height with locations to be confirmed at detailed design.

The proposed signage would include the school emblem, school name and building names (**Figure 17**). The signs would comprise:

- main entry signage of the school emblem and name mounted to a 2.4m lightweight wall fronting Aquatic Drive. The emblem would be approximately 1.8m in diameter and the lettering would be 500mm tall with a total length of 9.5m
- the theatre name would be placed in three different locations on Building G:
 - the facade fronting Allambie Road and be backlit
 - the southern facade
 - on a lightweight wall in front of Building G and be backlit
 The name of the theatre will be confirmed by the school
- secondary entry signage with the school's name on a lightweight wall (backlit) on the east elevation on Allambie
- two backlit lightboxes of the school emblem, approximately 2m in diameter and 100mm deep on both Building G and Building A.

A visual diagram of where signage would be place is shown in **Figure 18**.

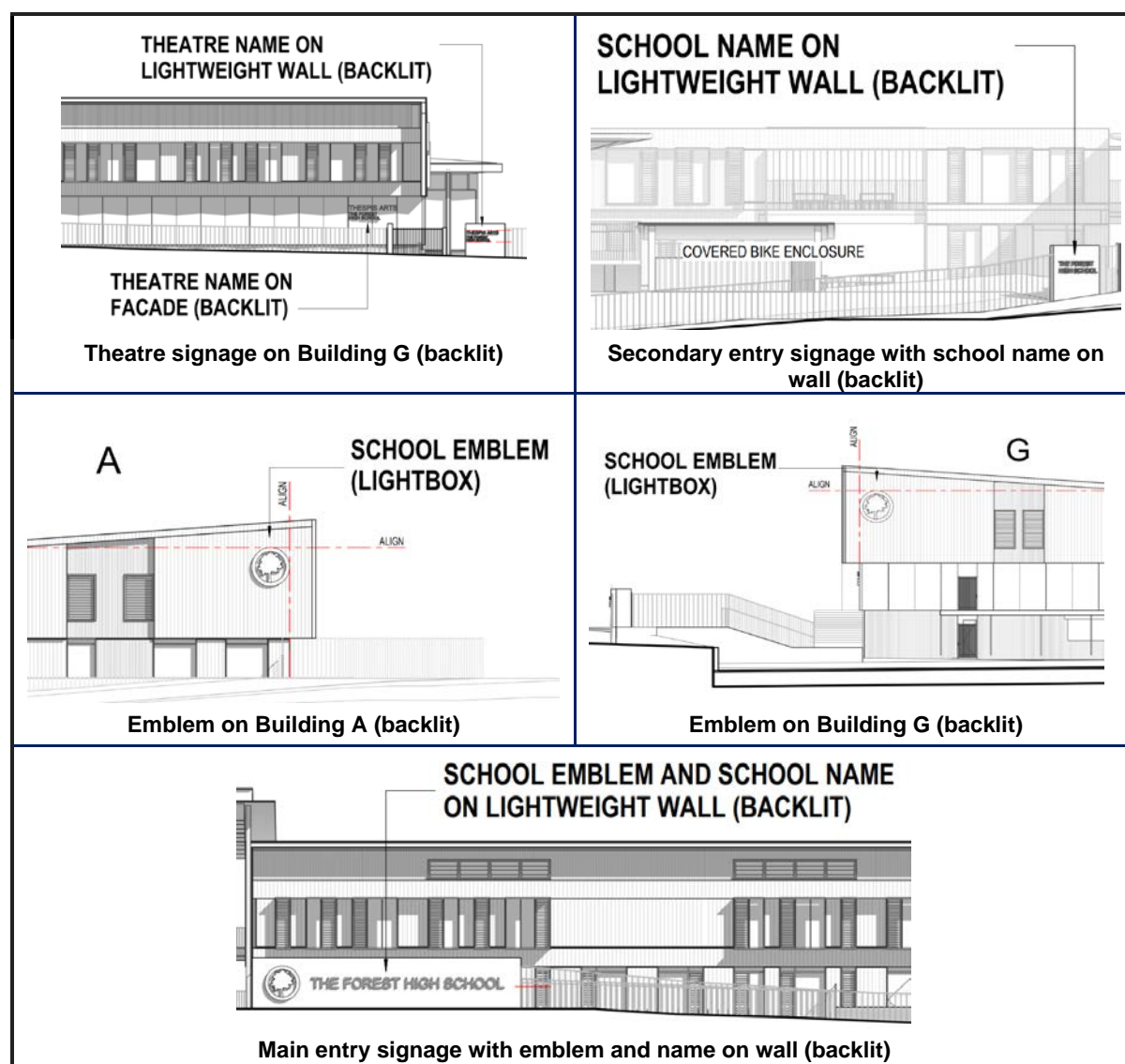


Figure 17 | Proposed signage (Source: Applicant's EIS)

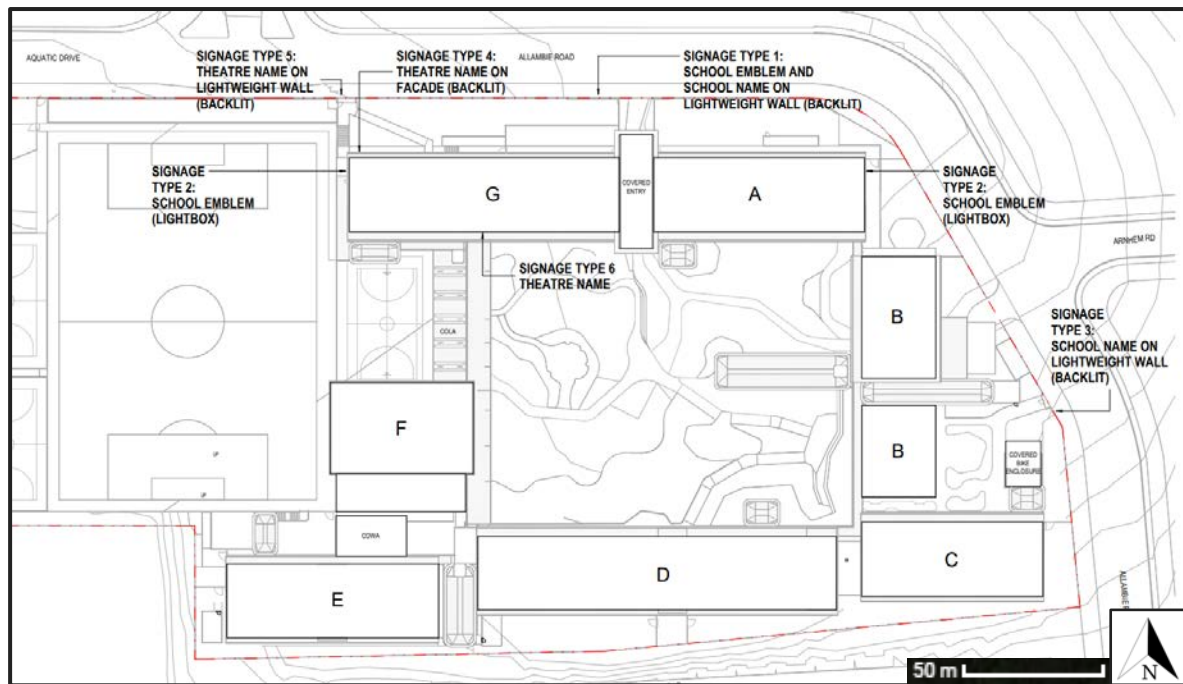


Figure 18 | Proposed signage location plan (Source: Applicant's EIS)

2.3 Public domain

The proposal would also include public domain works including (**Figure 19**):

- signalisation of intersection at Aquatic Drive and Allambie Road
- pedestrian crossing on Rodborough Road adjacent to Allambie Road with associated pedestrian fencing on the western boundary of Rodborough Road approaching the pedestrian crossing
- new bus zone to the west of the new pedestrian signalised intersection on Aquatic Drive
- relocation and expansion to existing bus zone on the eastern side of Allambie Road
- on-street pick-up/drop-off bays on the northern and southern sides of Aquatic Drive
- an accessible on-street pick-up/drop-off zone adjacent to the main pedestrian entry to the school on Allambie Road
- widening of existing shared path adjacent to the school along Aquatic Drive and Allambie Road.

The proposal would also include a dedicated support unit DOPU at the eastern side of the school within the school grounds.

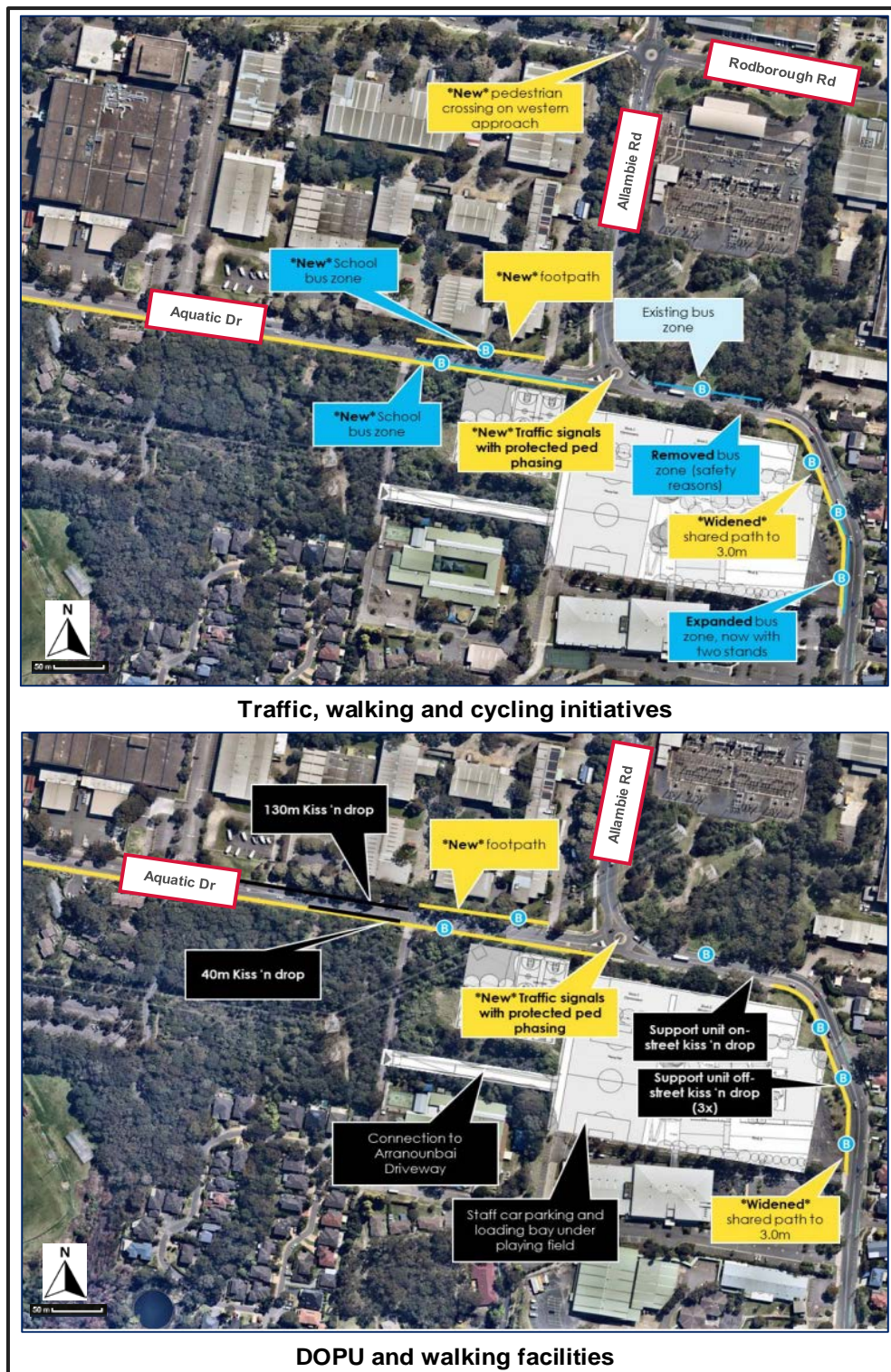


Figure 19 | Traffic infrastructure and active infrastructure initiatives (Base source: Applicant's TAIA 2022)

2.4 Uses and activities

The proposal seeks consent for a new school to accommodate the population of the existing Forest High School and provide for the anticipated growth in high school enrolments in the future. The proposal includes an uplift in the secondary school student and staff population when compared to the current situation, as summarised at **Table 2**.

Table 2 | Proposed high school population

High school population	At the current Forest High School (max)	Proposed	Difference
Students	800	1500	+700
Staff	80	120	+40

The Applicant proposes that a portion of the new facilities within the school would be available for use by the community when not required by the school. Accordingly, the design of the development has separated facilities most likely to be used by the community to enable easier access and minimise unnecessary disturbance at the site. The Applicant's community use strategy for the site is indicative at this stage and comprises potential use of the sports fields, sports courts, gym and theatre generally between the hours of 6:00 pm and 9:00 pm on weekdays, and between 8:00 am and 5:00 pm on weekends.

2.5 Timing

The Applicant anticipates full operation of the development in 2025. Construction works associated with this application would be undertaken in one stage and take approximately 20 months, with the indicative timing as follows:

- Site preparations – 3 months
- Bulk earthworks – 2 months
- Construction – 15 months.

2.6 Related development

A development application (DA2011/1633) was submitted to Council in December 2011 for the demolition of existing buildings and ancillary site works at 189 Allambie Road, Allambie Heights (also known as the McLeod House). The DA was approved in March 2012 for the demolition works, as shown in **Figure 20** and demolition works have been being carried out prior to the lapsing date of DA2011/1663. The applicant for the DA sought to demolish the McLeod House as the dilapidated state of the building and cost of upgrading was no longer warranted following completion of the new Cerebral Palsy building adjacent to the site to the south.



Figure 20 | Approved stamped plan for DA2011/1633, dated 16/03/2012 (Source: Northern Beaches Council DA Tracker)

3 Strategic context

It is anticipated that there will be a 21% growth in student numbers in NSW by 2031 compared to 2017. This means that NSW schools will need to accommodate an extra 269,000 students, with 164,000 of these students in the public system. In response to the need for additional public education infrastructure because of increased demand, the Department of Education is investing \$6.7 billion to deliver new schools and upgrade existing schools.

The Department considers that the proposal is appropriate for the site given it is consistent with:

- NSW State Priorities through the provision of new and improved teaching and education facilities
- the Frenchs Forest 2041 Place Strategy, delivering one of the five 'Big Moves', being the relocation of the high school opening up more than 60,000 square metres of land for the proposed town centre, facilitating the anticipated growth in population
- Transport for NSW's Future Transport Strategy 2056 as it would provide a new educational facility generating additional new employment opportunities within an existing urban area
- Infrastructure NSW's State Infrastructure Strategy 2022-2042 Staying Ahead as it proposes:
 - a new high school to support current and predicted growth in demand for secondary student enrolments within the school catchment
 - a school design to accommodate infrastructure and facilities sharing with communities.

The proposal would also provide a direct investment of approximately \$112,497,000 and would facilitate 120 (40 additional) operational jobs and 163 direct construction jobs.

4 Statutory context

4.1 State significance

The proposal is SSD under section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as the development has a CIV in excess of \$20 million and is for the purpose of a new school under section 15 of Schedule 1 of the State Environmental Planning Policy (Planning Systems) 2021.

The Minister for Planning and Public Spaces is the consent authority under section 4.5 of the EP&A Act.

In accordance with the Minister's delegation to determine SSD applications, signed on 9 March 2022, the Executive Director, Infrastructure Assessments may determine this application as:

- the relevant Council has not made an objection
- there are less than 50 public submissions in the nature of objection
- the application has not been made by a person who has disclosed a reportable political donation in connection with the application.

4.2 Permissibility

The site is identified as being located within the SP1 Special Activities zone of the Warringah Local Environmental Plan (WLEP). 'Educational Establishments' are listed as permissible with consent within the zone.

Clause 3.36 (Schools—development permitted with consent) of the State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP) states:

(1) Development for the purpose of a school may be carried out by any person with development consent on land in a prescribed zone.

SP1 zone is a prescribed zone under section 3.34 of the State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP) and therefore under section 3.36 of the Transport and Infrastructure SEPP, an Educational Establishment is permitted within this zone. The proposal also includes shared use of some facilities for the community which would be ancillary to the use as an Educational Establishment and is also permissible with consent.

Therefore, the Minister for Planning and Public Spaces or a delegate may determine the carrying out of the development.

4.3 Other approvals

Under section 4.41 of the EP&A Act, a number of other approvals are integrated into the SSD approval process, and consequently are not required to be separately obtained for the proposal.

Under section 4.42 of the EP&A Act, a number of further approvals are required, but must be substantially consistent with any development consent for the proposal (e.g. approvals for any works under the *Roads Act 1993*).

The Department has consulted with the relevant Government agencies responsible for integrated and other approvals, considered their advice in its assessment of the project, and included suitable conditions in the recommended conditions of consent (see **Appendix C**).

4.4 Mandatory matters for consideration

Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. These matters are summarised as:

- provisions of environmental planning instrument (EPI), including draft EPIs, development consent plans, planning agreements and the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation)
- the environmental, social, and economic impacts of the development
- the suitability of the site
- any submissions
- the public interest, including the objects of the EP&A Act and the encouragement of ecologically sustainable development.

The Department considered all these matters below and in **Section 5** and **6**.

4.4.1 Environmental planning instruments

Under section 4.15 of the EP&A Act, the consent authority is required to take into consideration any EPI (including any draft EPI) that is of relevance to the development the subject of the development application. Therefore, the assessment report must include a copy of, or reference to, the provisions of any EPIs that substantially govern the project and that have been considered in the assessment of the project.

The Department has undertaken a detailed assessment of these EPIs, including draft EPIs, in **Appendix B** and is satisfied the application is consistent with the requirements of the EPIs.

4.4.2 Objects of the EP&A Act

The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore, in making an assessment, the objects should be considered to the extent they are relevant. A response to the objects of the EP&A Act is provided at **Table 3**.

Table 3 | Response to the objects of section 1.3 of the EP&A Act

Objects of the EP&A Act	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	<p>The proposal involves the construction of a new high school and ancillary uses to replace the former The Forest High School and cater for an increase in educational demand in the area.</p> <p>The proposal is estimated to generate approximately 163 construction jobs and 40 additional operational jobs.</p> <p>The development would not unreasonably impact the economic welfare of the community or natural environment.</p>

Objects of the EP&A Act	Consideration
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal includes measures to deliver ecologically sustainable development (ESD) (Section 4.4.3).
(c) to promote the orderly and economic use and development of land,	The proposal would be an orderly and economic use and development of land as it provides for a new school that constitutes modern, fit-for-purpose educational facilities located on a site owned by the Applicant. The merits of the proposal are considered in Section 6 .
(d) to promote the delivery and maintenance of affordable housing,	Not applicable.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The proposal involves landscaping and planting to provide new habitat opportunities. Impacts of tree removal have been appropriately mitigated or are addressed through the recommended conditions of consent.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	<p>An Aboriginal Cultural Heritage Assessment Report (ACHAR) was included in the EIS which identified no known Aboriginal sites, objects or Potential Archaeological Deposits located within the study area or proposed development footprint.</p> <p>The site is not identified as, nor located within proximity to, any local or state heritage items. Further, the site is not located within, nor within proximity to, any heritage conservation area.</p>
(g) to promote good design and amenity of the built environment,	The proposal would promote good design and amenity of the built environment (Section 6).
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The proposal would promote proper construction and maintenance of buildings subject to recommended conditions of consent.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department publicly exhibited the proposal, which included consultation with Council and Government agencies and consideration of its responses (Section 5.1 and 6).
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the proposal as outlined in Section 5.1 , which included notifying adjoining landowners and displaying the proposal on the Department's website.

4.4.3 Ecologically sustainable development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- the precautionary principle
- inter-generational equity
- conservation of biological diversity and ecological integrity
- improved valuation, pricing and incentive mechanisms.

The Applicant is targeting an equivalent 5-Star Green Star (Australian Best Practice) rating under the Green Star Design & As Built v1.3 rating, which exceeds the suggested 4-Star Green Star rating in the Educational Facilities Standards and Guidelines issued by DoE.

The development proposes ESD initiatives and sustainability measures, including:

- passive design with appropriate shading and thermal performance
- an on-site 99 kilowatt photovoltaic system to generate up to 30% of energy needs
- reduction of energy consumption with efficient lighting and appliances
- use of responsible materials in construction and construction waste to be diverted from landfill where possible and practicable
- water sensitive urban design across the site
- efficient water fixtures, rainwater reuse, drip and demand-controlled irrigation and drought tolerant landscaping
- provision of bicycle facilities and scooter parking.

The Department has considered the proposed development in relation to the ESD principles. The precautionary and inter-generational equity principles have been applied in the decision-making process via a thorough assessment of the environmental impacts of the proposed development. In order to ensure that ESD is incorporated into the proposed development, the Department has recommended conditions requiring that the Applicant:

- register for a minimum 5-star Green Star rating with the Green Building Council Australia (or an alternative certificate process as agreed by the Planning Secretary), prior to the commencement of construction
- obtain Green Star certification within 12 months of the completion of the development.

Subject to these conditions, the proposed development is consistent with ESD principles as described in Appendix M of the Applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the EP&A Regulation.

Overall, the proposal is consistent with ESD principles, and the Department is satisfied the proposed sustainability initiatives would encourage ESD, in accordance with the objects of the EP&A Act.

4.4.4 Environmental Planning and Assessment Regulation 2021

Subject to any other references to compliance with the EP&A Regulation cited in this report, the requirements for Notification (Part 6, Division 6) and Fees (Part 15, Division 1AA) have been complied with.

4.4.5 Planning Secretary's Environmental Assessment Requirements

The EIS is compliant with the Planning Secretary's Environmental Assessment Requirements (SEARs) and is sufficient to enable an adequate consideration and assessment of the proposal for determination purposes.

4.4.6 Section 4.15(1) matters for consideration

Table 4 identifies the matters for consideration under section 4.15 of the EP&A Act that apply to SSD in accordance with section 4.40 of the EP&A Act. The table represents a summary for which additional information and consideration is provided in **Section 6** and relevant appendices or other sections of this report and EIS, referenced in the table.

Table 4 | Section 4.15(1) matters for consideration

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Satisfactorily complies. The Department's consideration of the relevant EPIs is provided in Appendix B .
(a)(ii) any proposed instrument	The Department's consideration of the relevant draft EPIs is provided in Appendix B .
(a)(iii) any development control plan (DCP)	Under clause 2.10 of the Planning Systems SEPP, DCPs do not apply to SSD.
(a)(iia) any planning agreement	Not applicable.
(a)(iv) the regulations <i>Refer Division 8 of the EP&A Regulation</i>	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications (Part 6 of the EP&A Regulation), public participation procedures for SSD and Schedule 2 of the EP&A Regulation relating to EIS.
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	The impacts of the proposed development have been appropriately mitigated or conditioned (Section 6).
(c) the suitability of the site for the development	The site is suitable for the development as discussed throughout this report.
(d) any submissions	Consideration has been given to the submissions received during the exhibition period (Section 5).
(e) the public interest	The proposal is considered to be in the public interest (Section 7).

4.5 Biodiversity Conservation Act 2016

Under section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act), SSD applications are "to be accompanied by a biodiversity development assessment report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values". The impact of the proposal on biodiversity values has been assessed in the BDAR accompanying the EIS and considered in **Section 6.5**.

5 Engagement

5.1 Department's engagement

In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the application from Wednesday 16 November 2022 until Wednesday 14 December 2022 (30 days). The application was exhibited on the Department's website. The Department notified adjoining landholders and relevant State and local government authorities in writing.

The Department has considered the comments raised in the public authority and public submissions during the assessment of the application (**Section 6**) and/or by way of recommended conditions in the instrument of consent at **Appendix C**.

5.2 Summary of advice received from Government agencies

Advice was received from 6 Government agencies. A summary of the issues raised in the submissions is provided in **Table 5**, **Table 6** and **Table 7** below and copies of the submissions may be viewed at **Appendix A**.

Table 5 | Summary of Government agency advice on the EIS

Transport for NSW (TfNSW)

TfNSW provided the following advice:

- School Zone requirements must be installed to TfNSW requirements in consultation with Council prior to the issue of any Occupation Certificate
- a traffic control signals (TCS) plan, concept road design plan with road design dimensions and swept path analysis of all turn movements as well as SIDRA models as part of the proposal for TCS at Allambie Road and Aquatic Drive must be submitted to TfNSW prior to the commencement of construction of the buildings on the site
- the school should not commence operation until safe pedestrian crossing facilities are provided and the network has been appropriately upgraded to accommodate the development
- a comprehensive Green Travel Plan/STP must be developed in consultation with and approved by TfNSW prior to the issue of a completion certificate
- a Construction Traffic and Pedestrian Management Plan (CTPMP) must be prepared in consultation with TfNSW
- all regulatory signage changes must be referred to Council's Local Traffic Committee for review prior to installation.

Environment and Heritage Group (EHG)

EHG provided the following advice:

- not all human-made structures on the site form part of the approved DA (DA2011/1633) (e.g. a structure near the car parking area in the south-west of the site, a structure on the boundary of Lot 8). Recent Nearmap imagery (12 September 2022) suggest there are additional structures not assessed as part of the DA. The environmental assessment and BDAR must contain an assessment of all works at the development site and content should be revised accordingly

Biodiversity

- the Arboricultural impact assessment identifies a tree of high retention value containing at least one large hollow; however, this has not included within the BDAR and this should be revised
- the exclusion of the Large-eared Pied Bat from the assessment is not supported. Provide further justification for the exclusion of the Large-eared Pied Bat from the assessment noting recent records of the species on the subject land and the suitability of the Lambert and other surrounding soil landscapes

- provide justification and clarification on the survey methodology utilised for *Grevillea caleyi*, *Persoonia hirsuta* and *Tetratheca glandulosa*
- the potential impacts of the relocation of the underground power cables to overhead transmission lines must be addressed
- classification of species must be updated in accordance with any recent changes to their status (i.e. endangered, vulnerable)
- the risk of serious and irreversible impacts must be revised in accordance with the examples provided as part of the Biodiversity Assessment Methodology (BAM)
- revise classification of *Acacia terminalis subsp. Bright yellow flower* in accordance with relevant guidelines

Biodiversity Assessment Methodology (BAM)

- the BDAR did not adequately assess the development in accordance with certain aspects of the BAM (such as identification of landscape features and associated habitat, human-made structures, non-native vegetation, measures to the replanting of Duffys Forest, etc.)

Flood risk management

- overland flow and flood impacts have not been adequately addressed and must be modelled with a comprehensive assessment undertaken.

Heritage NSW

Heritage NSW provided the following advice in relation to Aboriginal cultural heritage:

- Based on the assessment provided, completed in accordance with Heritage NSW guidelines, Heritage NSW agrees with the management recommendations and has no additional comments.

Heritage Council

Heritage Council provided the following advice:

- The proposed site is not listed on the State Heritage Register (SHR), nor is it in the vicinity of any SHR items nor known to contain any archaeological relics. Therefore, no comments are required.

NSW SES

NSW SES provided the following advice:

- Required the development to not result in an increase in risk to life, health or property of people living on the floodplain
- Stormwater and overland flow has been designed to manage a 1% AEP and as such, SES considers the development would be unlikely to increase risk of life because of flooding.

NSW RFS

NSW RFS provided the following advice:

- provide suitable emergency and evacuation arrangements for occupants of Special Fire Protection Purpose Developments (i.e. educational establishments) including providing a Bush Fire Emergency Management and Evacuation Plan
- provide suitable building design, construction and sufficient space to ensure that radiant heat levels do not exceed critical limits for firefighters and other emergency services personnel undertaking operations, including supporting or evacuating occupants
- construction must comply with Sections 3 and 5 (BAL 12.5) *Australian Standard AS3959-2018 Construction of buildings in bush fire-prone areas*
- provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building
- landscaping within the required asset protection zone must comply with Appendix 4 of *Planning for Bush Fire Protection 2019*.

5.3 Summary of submissions

During the exhibition, the Department received a total of 30 submissions from the public as follows:

- comments from Council
- three submissions from organisations, of which one is an objection and two are in the form of comments
- four in support
- 14 objections
- nine in the form of comments.

A summary of public submissions is provided in **Table 6** and **Table 7**.

Table 6 | Summary of submissions from Council and public organisations on the EIS

Council

Council did not object to the proposal and provided the following comments:

Development assessment

- concerns with the exceedance / non-compliance in height of buildings and subsequently the Applicant would require a variation justification in accordance with Clause 4.6 of the Warringah LEP
- concerns with visual dominance given the site topography - the finished floor level of the games field would be approximately 10m higher than the adjoining Arranounbai School
- concerns with visual bulk along the northern and southern blocks of the development - a dense landscape buffer is recommended to minimise impacts when viewed from adjacent properties

Traffic and transport

- School and bus services
 - concern for student safety as they would be required to cross major road corridors
 - less kerb parking spaces for bus services
- Drop-off / pick-up zones
 - locations proposed are in conflict with bus services and traffic flows in the adjoining commercial areas and should be reconsidered
- On-Street Parking
 - consideration must be given to the management of on-street parking to ensure it is not used for the benefit of senior students and to accommodate existing businesses during operational hours
- Traffic management
 - pedestrian cycles should be considered in traffic signal phasing
 - concerns remain regarding the intersection of Rodborough Road and Allambie Road and signalised controls should be considered. An interim raised pedestrian crossing is supported until the school reaches full capacity
 - pedestrian fencing locations should be considered in the immediate surrounds in a Road Safety Assessment
 - a walking catchment assessment should be undertaken to ensure provision of required infrastructure to deliver the School Travel Plan (STP)
- Green Travel Plan/STP
 - Active and Public transport should be the first option of travel to the site and a Staff Green Travel Plan should be developed
 - consideration should be given to Council's *Transport Strategy*, *Walking Plan*, *Bike Plan* and *Road Safety Plan* in developing infrastructure to support the site

Urban design

- provide a detailed concept design, including street cross-sections for the surrounding public domain demonstrating integration of sustainable modes of transport, including detail of safe, separated areas for students to walk, cycle and take public transport for the school catchment area as well as the integration with the adjoining area. This should include consideration of Council's *Public Space Vision and Design Guidelines 2040*
- provide the location of bus shelters and detail of the integration with cycleways, shared paths, vehicular traffic and accessible parking bays

- consideration should be given to provision for a separated cycleway to achieve mode share targets set by the Applicant
- the accessible parking bay obstructs the existing cycleway and should be relocated
- consider where and how the school can expand in the future, should the need arise

Engineering

- ensure additional flows as a result of the development will not impact the existing stormwater systems. The development must have a minimal impact upon the drainage systems and result in no flooding/overland flow impacts
- there is a conflict between the extension of Council's existing pit and pipe system from Aquatic Drive with proposed on site drainage and this should be amended

Landscape

- consideration to amenity of the development and surrounds with the significant building mass along street frontages and reduced setbacks
- provide confirmation that playing fields and games courts would be accessible to the public and sporting clubs outside of operational hours and provide detail on safe access to these facilities
- consideration should be given to greater tree retention and additional canopy tree planting

Coast and catchments

- Council's *Protection of Waterways and Riparian Land Policy* needs to be considered as part of the development application and must be addressed with a detailed survey, Waterways Impact Statement and a detailed Erosion and Sediment Control Plan
- provide evidence that construction and operational phases of the development would not impact upon the downstream waters and catchments

Bushland and biodiversity

- the Threatened Ecological Community (TEC) identified as being in moderate to good condition has been substantially degraded
- the existing Biobank site immediately west of the site should not be impacted by the development
- Biodiversity and Vegetation Management Plans should be included in any consent granted to the development
- tree protection measures for retained trees and native vegetation must be implemented prior to and for the duration of construction

Environmental health

- Council recommended conditions associated with environmental health in relation to noise, lighting, ventilation, dust, waste management and food premises.

Save Manly Dam Catchment Committee

The Save Manly Dam Catchment Committee objected to the development and provided the following comments:

- site selection not supported and would prefer upgrades to the existing site
- concerns associated with the removal of significant native vegetation and risk of affecting the adjoining Biobank site
- proposed development would affect the landform (increase impervious areas) and would result in water quality impacts
- no parking has been provided for senior students, parents, visitors and the community
- safety of students walking or bicycling to school along busy roads should be considered
- the development does not comply with the Warringah DCP 2011 requirement of 50% open space / bushland.

Sydney Water

Sydney Water provided the following comments:

- the design of the water and wastewater systems must have adequate capacity for the development and amplifications, adjustments or minor extensions may be required
- approved plans must be uploaded to the Sydney Water Tap In online service

- a Section 73 Compliance Certificate under the *Sydney Water Act 1994* must be obtained from Sydney Water. Detailed development requirements will be provided when the development is referred as part of this application
- Sydney Water's underground assets should be considered when planning tree plantings to avoid undue impacts
- if required, a trade waste application must be made to Sydney Water
- a Backflow Prevention Containment Device must be installed as part of the development.

Ausgrid

Ausgrid provided the following comments:

- detailed plans must be submitted to Ausgrid prior to any construction works
- impacts to the operation of the existing utility infrastructure and service provider assets must be outlined in conjunction with management and mitigation measures prior to the commencement of works
- Ausgrid's easement conditions must be satisfied.

Four public submissions supported the project overall, noting the improved facilities it would provide.

Table 7 | Summary of issues raised in public submissions

Issue	Number of Submissions	General Issue
Parking	19 (73%)	<ul style="list-style-type: none"> • inadequate parking available for the development • no parking for senior students provided • consider appropriate parking restrictions in the local area to ensure traffic flows efficiently and students do not occupy on-street parking
Traffic	18 (69%)	<ul style="list-style-type: none"> • the adequacy of the traffic modelling undertaken • Allambie Road is not suitable to accommodate the volume of additional traffic proposed due to its current performance and road geometry • adequacy of available kerb space to facilitate bus services and drop-off spaces
Safety	14 (54%)	<ul style="list-style-type: none"> • questioned pedestrian safety around Allambie Road and requested a Road Safety Assessment • suitability of the proposed location of the driveway to Allambie Road
Noise	8 (31%)	<ul style="list-style-type: none"> • adequacy of acoustic modelling
Site suitability	7 (27%)	<ul style="list-style-type: none"> • site selection not supported and would prefer upgrades to the existing site • suitability of the proposed location of the driveway to Allambie Road
Height of buildings and screening	5 (19%)	<ul style="list-style-type: none"> • visual bulk presented as a result of the proposed height exceeding the 8.5m maximum height of buildings control under the LEP

Issue	Number of Submissions	General Issue
		<ul style="list-style-type: none"> proposed building height and setbacks result in privacy impacts to dwellings on the eastern side of Allambie Road
Other matters (biodiversity, heritage, privacy, drainage, bushfire, cost, disturbance, alternatives, community use)	15%**	<p>Concerns on other matters generally relate to:</p> <ul style="list-style-type: none"> impact on the water quality and heritage values inadequate assessment of all relevant biodiversity matters for consideration impact on the endangered Duffys Forest Ecological Community, critical habitat and wildlife corridors, an adjacent biobanking site, and the Manly Dam and Curl Curl Creek catchments.

* Percentages represent the number of submissions raising the issue. Multiple issues may have been raised in the one submission.

** Number not provided as other matters were mentioned in most submissions. Percentage represents the maximum percentage of any issue mentioned.

5.4 Response to submissions

Following the exhibition of the application the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised in the submissions.

On 5 May 2023, the Applicant provided a Response to Submissions (RtS) (**Appendix A**) on the issues raised during the exhibition of the proposal. The RtS included:

- updated mitigation measures
- responses to the built form and landscaping raised by the Department, Council and the public
- updated civil engineering report to provide additional information about flooding as requested by the Department, NSW SES and Council
- an addendum to the Transport Access Impact Assessment (TAIA) report responding to the comments made in the submissions
- Public Domain Plans were provided as requested by Council
- an amended Noise and Vibration Impact Assessment (NVIA) report responding to the comments made in the submissions
- addendum to the Social Impact Assessment (SIA) report to address outstanding items raised by the Department
- updated BDAR to address EHG comments.

The RtS was made publicly available on the Department's website and was referred to the relevant government agencies and Council. Advice was received from four government agencies and a submission from Council in response to the RtS. A summary of Council's submission and the Government agency advice is provided at **Table 8**.

Table 8 | Summary of Council submission and Government agency advice on the RtS

Council

Council did not object to the proposal and provided the following comments associated with stormwater management and water quality:

- pre-development modelling is to be undertaken for a pre/post comparison demonstrating a “no impact assessment” for water quality and provide an impact analysis on the downstream detention basin located at Madison Reserve
- civil engineering report does not conform with the updated mitigation measure and EIS
- significant increase in impervious area and correlated runoff is not addressed in the submitted RTS documentation.

EHG

EHG's advice remains that flood risk has not been adequately assessed and that a Flood Impact and Risk Assessment (FIRA) must be completed by a consultant specialising in floodplain management.

Some outstanding matters remain associated with mitigating and management impacts on biodiversity values to be addressed:

- further detail on rehabilitation of the Duffys Forest is required
- clarification on lighting in areas of retained vegetation
- EHG suggest that the vegetation management plan (VMP) needs to be flexible, and it is noted that it will include adaptive management.

DPE Water

DPE Water's advice noted that groundwater is likely to be intercepted given the excavation for the basement parking and that the proposed works would require groundwater and seepage water to be treated prior to discharge into Council's stormwater system.

DPE Water required that the Applicant prepare a Dewatering Management Plan in consultation with DPE Water and refer to the Aquifer Interference Policy and if any exemptions are required under the Water Management (General) Regulation 2018, the Dewatering Management Plan must also detail mitigation measures to limit post construction groundwater take to no more than 3 ML/year.

Transport for NSW (TfNSW)

- TfNSW noted that the Applicant has agreed to the majority of the previous TfNSW requirements, and suggested a minor adjustment to the STP requirement, which is acceptable to TfNSW.
- TfNSW provided the Department an amended list of suggested conditions of consent relating to:
 - School zones
 - Approval under section 87 of the *Roads Act 1993*
 - STP
 - Construction Pedestrian and Traffic Management
 - Regulatory signage changes on local road network.

SES

SES reiterated that the assessment would need to be consistent with the NSW Floodplain Development Manual 2005. SES also noted that they do not support:

- 'Shelter in place' strategies
- mass rescue
- imposition of development consent conditions requiring private flood evacuation plans
- transfer of residual risk to SES to manage.

RFS provided the Department Conditions of Consent relating to:

- Preparation of a Bush Fire Emergency Management and Evacuation Plan consistent with the NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan and, NSW RFS Schools Program Guide and/or *Australian Standard AS 3745:2010 Planning for emergencies in facilities*
- Building works, including utilities and landscaping to be undertaken in accordance with the requirements of *Planning for Bush Fire Protection 2019, Australian Standard AS3959-2018 Construction of buildings in bush fire-prone areas or NASH Standard (1.7.14 updated) National Standard Steel Framed Construction in Bushfire Areas – 2014*.

5.5 Supplementary Response to Submissions and additional information

On 5 September 2023, the Applicant submitted Supplementary Response to Submissions (SRtS) which responded to concerns from DPE, Council and EHG, regarding outstanding matters associated with artificial turf on the sports field, traffic impacts, stormwater management, flooding and biodiversity impacts.

The Department reviewed the Applicant's response which included:

- additional information associated with the use of synthetic surfaces on the sports fields and the shared use agreeing with Council for community use of the field
- updated mitigation measures to reflect biodiversity and vegetation management
- additional assessment for traffic impacts, particularly regarding sightlines to and from the private access road off Allambie Road and proposed work zones
- updated Civil Engineering Report and additional modelling undertaken to address concerns of flooding to the site.

6 Assessment

The Department has considered the EIS, the issues raised in submissions and the Applicant's RtS in its assessment of the proposal. The Department considers the key issues associated with the proposal are:

- traffic, transport and parking
- flooding
- noise
- built form and urban design
- biodiversity.

Each of these issues is discussed in the following sections of this report. Other issues were taken into consideration during the assessment of the application and are discussed at **Section 6.4**.

6.1 Traffic, transport and parking

The EIS included a Transport Access Impact Assessment (TAIA) that was updated in the RtS and described and assessed the transport aspects and impacts of the proposal.

6.1.1 Existing conditions

The site has frontage to two public roads (**Figure 21**):

- Aquatic Drive to the north is a one lane each way local road, connecting Wakehurst Parkway in the east with Allambie Road in the west. It has a speed limit of 40km/h during school hours and 50km/h outside of the school zone. There are dedicated cycle lanes provided in both directions
- Allambie Road to the west is a two-lane, single-carriageway distributor road connecting Frenchs Forest Road in the north and Kentwell Road in the south. It has a dedicated cycle lane in both directions. The road operates with a speed limit of 60km/h.

Other nearby roads include Warringah Road, Rodborough Road and Wakehurst Parkway.



Figure 21 | Road hierarchy (Base source: Applicant's EIS)

The site would primarily be accessed via Allambie Road, which would provide direct access to the high school's main pedestrian entrance. Staff carpark and service facilities would access the site via the access road off Aquatic Drive.

The site also has provision of shared pedestrian/cycle paths along Allambie Road, Aquatic Drive, and Warringah Road. Nearby transport services include public bus services and school bus services. The main public bus services are the 142 (Manly to Skyline Shops) and the 280 (Warringah Mall to Chatswood). The 174x runs a limited PM peak service (3 pm to 5 pm) to Narrabeena only stopping at the bus stop located to the east of the site on Allambie Road (**Figure 22**). In addition to the public bus routes are the school bus routes currently serving the existing school site on Frenchs Forest Road West. Currently, there are 11 dedicated services for The Forest High School which could be diverted to the new site on Allambie Road when the school relocates.



Figure 22 | Bus routes and services in proximity to the proposed site (Source: Applicant's EIS)

6.1.2 Operational traffic

Traffic surveys of the surrounding intersections were undertaken during AM and PM peak periods on 1 December 2021. Modelling of the performance of key intersections (**Figure 23**) was undertaken using the SIDRA modelling software package to determine the potential impacts of the proposal to these intersections.



Figure 23 | Intersections assessed (Source: Nearmap 2023)

The modelling was undertaken to determine the current intersection performance as well as future performance in 2031 with and without the proposed development. The modelling considered the growth anticipated in the Frenchs Forest Precinct and additional local traffic associated with a recently approved Bunnings Warehouse store located at the corner of Warringah Road and Allambie Road. The Frenchs Forest Precinct covers the existing high school site and would include a new mixed use town centre, neighbourhood centre, Northern Beaches Hospital, low to medium density residential and public open space.

During RtS, the Department raised concerns regarding the traffic modelling years, given that the modelling is two years old (from 2021); and noting that the school is scheduled to open in 2025, modelling is only forecasted until 2031. The Department requested that future traffic modelling beyond the year of commencement of operation was required.

In their response, the Applicant noted that forecast of 2031 is beyond the year of commencement of operation and that TfNSW did not raise any concerns with modelling years, methodology or assumptions. The Department consulted with TfNSW to confirm whether the modelling year up to 2031 and the modelling data from 2021 was adequate. TfNSW confirmed that for these types of

models, the projections do not change significantly with a few years difference. The Department accepts that the modelling provided as part of the TAIA is sufficient.

There are six Level of Service (LoS) ranges (**Table 9**), with LoS A equating to very low delays and very good operating conditions and LoS F meaning over saturation, where arrival rates exceed intersection capacity. The SIDRA analysis results are shown in **Table 10**.

Table 9 | Intersection LoS criteria

LoS	Performance by intersection type		
	Average delay per vehicle (seconds)	Traffic Signals/Roundabout	Give Way/Stop Sign
A	<14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity. At signals, incidents will cause excessive delays. Roundabouts require other control mode	At capacity, requires other control mode
F	>70	Unsatisfactory with excessive queuing	Unsatisfactory with excessive queuing

Table 10 | SIDRA analysis for 2031 with and without development scenarios (Base source: EIS TAIA, 2022)

Intersection	Scenario	Average LoS	
		AM Peak	PM Peak
Allambie Rd / Warringah Rd	Existing (2021)	D	C
	2025 day of opening with background growth, development, and upgrades	D	D
	2031 with no-build	D	F
	2031 build but no upgrades	F	E
	2031 build and upgrades	F	E

Intersection	Scenario	Average LoS	
		AM Peak	PM Peak
Allambie Rd / Rodborough Rd	Existing (2021)	B	B
	2025 day of opening with background growth, development, and upgrades	B	A
	2031 with no-build	B	B
	2031 build but no upgrades	F	D
	2031 build and upgrades	B	B
Allambie Rd / Aquatic Dr	Existing (2021)	B	B
	2025 day of opening with background growth, development, and upgrades	C	B
	2031 with no-build	B	C
	2031 build but no upgrades	F	F
	2031 build and upgrades	D	C
Allambie Rd / Mortain Ave	Existing (2021)	A	A
	2025 day of opening with background growth, development, and upgrades	A	A
	2031 with no-build	A	A
	2031 build but no upgrades	A	A
	2031 build and upgrades	A	A
Allambie Rd / Flers St	Existing (2021)	A	A
	2025 day of opening with background growth, development, and upgrades	A	A
	2031 with no-build	A	A
	2031 build but no upgrades	A	A
	2031 build and upgrades	A	B

Based on the results above, the modelling found the:

- intersections currently provide reasonably good levels of operation (LoS A and B), except at the Allambie Road / Warringah Road intersection which would provide a LoS D
- intersections would continue to provide reasonable levels of operation in 2031 (LoS B, C and D) with the development, with the exception of the Allambie Road / Warringah Road intersection

which would provide a LoS F during AM peak and LoS E during PM peak. This is due to predicted traffic impacts from the Bunnings development during busy peak periods (e.g. weekends, early morning) and the operation of the school with AM and PM peak periods. Delays at Allambie Road / Warringah Road are worse in the morning peak but better in the evening peak than if the development were not to occur

- Allambie Road / Aquatic Drive intersection during AM and PM peak would decrease the level of service with the proposed development, but would operate at capacity
- intersections at Allambie Road / Rodborough Road, Allambie Road / Mortain Avenue and Allambie Road / Flers Street would maintain the same level of service rating after the build.

Table 10 also indicates where traffic infrastructure upgrades within the public domain (as detailed in **Section 2.3**) are not in place, LoS saturations would be high. As such, in consultation with Council and TfNSW, the development would also include the traffic infrastructure upgrades to improve transport and traffic outcomes.

Council's EIS submission raised concerns regarding the number of vehicles queuing at the intersection of Rodborough Road and Allambie Road. Council recommended signalised controls at this intersection but stated that an interim raised pedestrian crossing is supported until the school reaches its full capacity.

In response to Council's concerns, the Applicant's RtS noted that modelling was undertaken at this intersection and found that the signalisation of Allambie Road and Rodborough Road would increase delays in the network and as such was not considered a solution to traffic congestion. Furthermore, the signalisation of Rodborough Road / Allambie Road was not supported by TfNSW due to safety concerns. As such, there would be no changes to the proposed infrastructure upgrade at this intersection and the proposed pedestrian crossing would remain.

In response to the RtS, Council made no further comments associated with traffic queuing.

The Department has considered the information provided by the Applicant and advice provided by Council and TfNSW. The Department is satisfied that the Applicant has demonstrated that the key intersections would operate at an acceptable or have the same level of service, including with forecast population growth, Bunnings Warehouse and traffic generated by the proposal. The Department notes the intended provision of bus services for students, proposed on site DOPU facility (taking DOPU activity off public roads) and proposed public domain works (as outlined in **Section 2.3**) would alleviate traffic impacts associated with the school during peak periods. The Department is satisfied that the Applicant has demonstrated that the local road network could reasonably accommodate the additional traffic generated by the development of the school.

6.1.3 Operational parking

Basement parking (located underground at the centre of the site beneath the soccer playing field and accessed via the private access road) is proposed to cater for 121 staff parking spaces. No provision has been made for Year 12 students to drive to the school, whereas the former high school site reserved 10 parking spaces for Year 12 students.

The Department identified that it would be unrealistic to assume that zero students in later years of high school would drive to the school, particularly with less bus services to this site than the existing site and less services outside of peak times. In addition, public submissions were received which considered that there is inadequate parking available for the proposed school given its larger size and

the predicted increase of students and is concerned for overflow parking onto surrounding streets, particularly from student parking. In their advice, Council suggested that consideration must be given to the management of on-street parking to ensure it is not used for the benefit of senior students, parking in the vicinity of the school must be managed to avoid impacts to adjoining businesses as well as no parking along Allambie Road adjacent to the school site.

The Applicant noted that Council and TfNSW did not raise any concerns associated with the modelling assumption (i.e. no student parking) and the existing school primarily reserved the car parking for staff. The Applicant also stated that the proposed number of staff parking spaces would meet the DCP requirement for educational establishments by providing one parking space per staff member on site along with adequate DOPU facilities and provision of bus bays.

As part of the RtS, the Applicant provided a public domain plan with signage ('No Parking' and restricted timed parking) along Aquatic Drive to support the effective functioning of the street and to support efficient DOPU movements. In addition to this, the parking restrictions along Aquatic Drive would have limited impact on the surrounding businesses as these industrial businesses would have sufficient on-site parking and parking would be made available outside of the peak times.

The Department acknowledges the concerns raised regarding the availability of parking on site and impacts upon on-street parking in the vicinity of the site. The Department is satisfied that the proposal would provide sufficient parking to cater for staff. This would minimise overspill onto surrounding streets. The Department has recommended conditions that require the car park to be completed prior to commencement of operation. The Department also recognises that the proposal may involve a small number of students driving to school and parking on the surrounding streets given that the former high school site provided parking spaces. However, the Department is of the view that the condition of consent requiring the implementation of the STP would encourage behaviour that would ensure mode share targets are met through incentive-based programs (bicycle check-ups, cycle to school competitions, etc.) and learning programs. The STP would promote the use of active and sustainable transport modes and minimise parking impacts within the local road network.

6.1.4 Public and active transport

No provision has been made for Year 12 students to drive to the school to encourage students to walk, cycle, or take the bus to prevent additional congestion during school peaks. The proposed mode share targets for existing, short term based (where existing students have been relocated), long term base case and in the long-term moderate case are detailed in **Table 11**. The long term moderate case numbers were built on the base case and adjusted on the increased propensity to walk, cycle, and take public transport as a result of the development and its associated public domain upgrades and implementation of the STP.

Table 11 | Mode share targets

Scenario	Walk	Bicycle / Scoot	Bus	Car	Total
Current mode share (at the existing high school; 800 students)	3% (25)	2% (18)	45% (360)	50% (397)	800

Scenario	Walk	Bicycle / Scoot	Bus	Car	Total
Short term base case (800 students relocated)	6% (47)	3% (26)	36% (284)	55% (443)	800
Long term base case (with increase student population)	4% (66)	4% (66)	31% (472)	61% (936)	1540*
Long-term moderate case (with increase student population)	4% (66)	12% (182)	39% (600)	45% (692)	1540*

*notwithstanding that the Applicant proposes 1500 students

The proposal includes infrastructure to encourage public and active transport, including:

- bus zones
- parking for 121 bicycles and 61 scooters on-site
- zebra crossing
- pedestrian fencing
- widening of the shared path to 3m (where feasible) on Allambie Road along the perimeter of the school site
- footpath along the northern side of Aquatic Drive.

The proposal includes two new bus zones on Aquatic Drive to the west of the new pedestrian signalised intersection on Allambie Road and the expansion of the existing bus zone on the east side of Allambie Road (refer to **Figure 19**). The bus bay would be operational during the school peak periods to allow students to travel to and from the school.

Council's EIS submission requested further consideration of the available kerb space to provide for dedicated school bus services as the proposal has less available space than the existing school site. Public submissions raised concerns over student safety given the proposed location of the bus stops on Allambie Road just before a bend as it may lead to accidents and recommended bus stops be located on Aquatic Drive.

In response to the comments, the RtS noted that:

- the proposed bus bays have the capacity to accommodate the predicted number of students taking the bus to and from school
- the location before the bend has sufficient sight distance on the approach, with vehicles able to see buses indicating and giving way. There are existing bus stops along Allambie Road in similar locations
- the Applicant has explored opportunities for more bus stops to be located on Aquatic Drive; however, TfNSW advised that they do not support an increase in bus services undertaking U-turns in the Aquatic Centre. This would mean that any bus stops in this location would have limited benefits and coverage. To achieve the target bus mode share and reduce car impacts, increased bus stops are proposed on Allambie Road.

Council reviewed the RtS and did not raise any further concerns regarding the operation of the bus zones. TfNSW recommended that the Applicant develop an STP in consultation with TfNSW.

The Department has considered the information provided by the Applicant and advice provided by Council and TfNSW. The Department acknowledges the concerns raised by Council and the public but also recognises that the site is constrained. On balance, the Department is satisfied that the proposed bus zones along Aquatic Drive and Allambie Road are appropriate and could satisfactorily accommodate the bus services. The locations of bus zones, along with the proposed pedestrian infrastructure, would assist in decreasing the reliance on private vehicles to the site and manage student movements to access the school safely. The Department has recommended a condition that requires the STP to be prepared in consultation with Council and TfNSW.

6.1.5 Access and safety

The proposal includes multiple access points to the school (refer to **Figure 24**), including:

- staff parking and service and loading via the private access road off Aquatic Drive
- on-site DOPU for special support unit through a driveway off Allambie Road
- three pedestrian entries for pedestrian, scooter and bicycle access:
 - two entries off Aquatic Drive (right side of Block G and between Block G and Block A)
 - one entry off Allambie Road (in front of Block B).

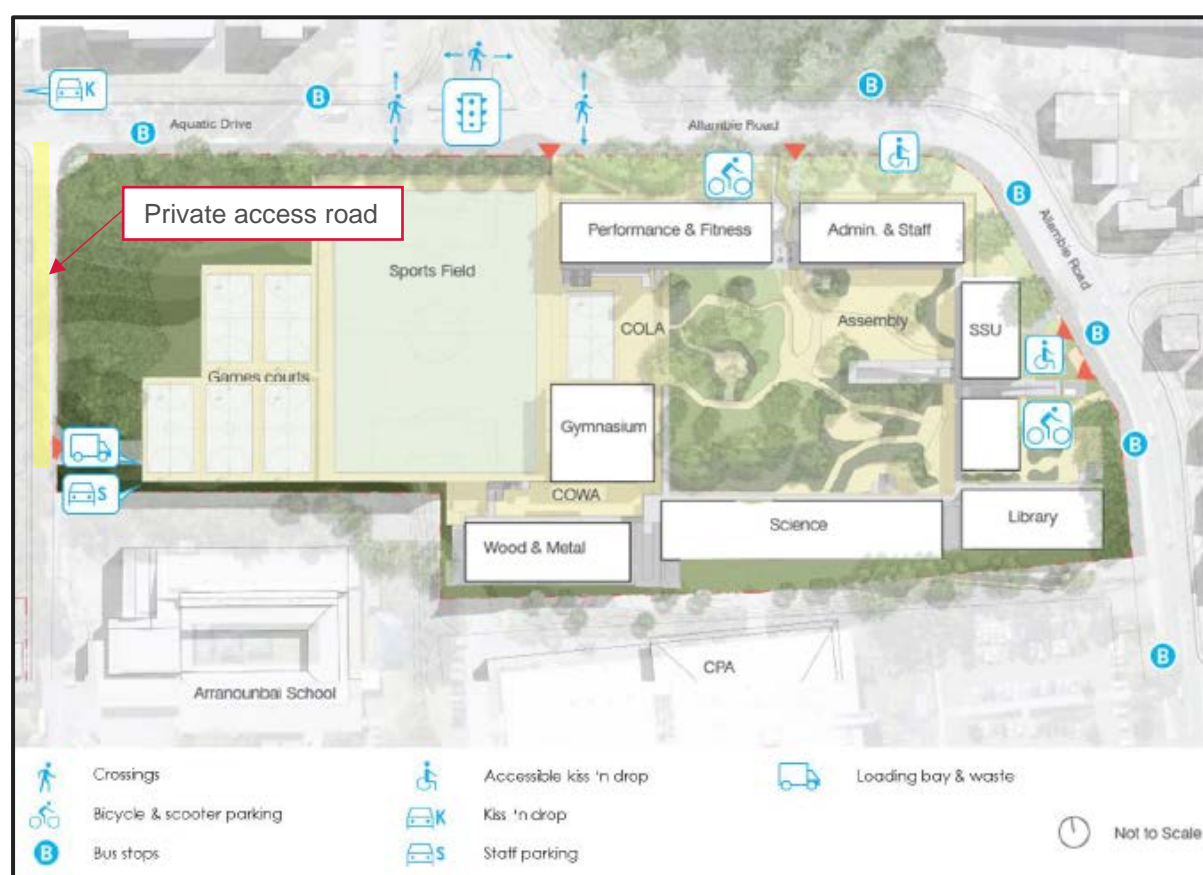


Figure 24 | School access (Source: EIS TAIA, 2022)

Following exhibition of the EIS, the Department considered Council and public submissions and requested that the RtS include an updated assessment to consider the following concerns associated with safe access to and from the school:

- suitability of the proposed location of the driveway to Allambie Road as was perceived that it could cause conflicts with drivers wanting to exit Arnhem Road into Allambie Road
- pedestrian safety around Allambie Road
- unauthorised use of the Arranounbai School car park and shared private access road
- the strategy to encourage walking and cycling to school should be reconsidered due to safety concerns associated with the proposed travel modes
- the Department requested a detailed analysis and assessment of the private access road off Aquatic Drive
- Council requested:
 - a Road Safety Assessment of the immediate surrounding environment be undertaken to determine the location of pedestrian fencing required
 - a walking catchment assessment be undertaken to assist in the provision of the required infrastructure and assist in meeting the requirements of the STP
 - public domain upgrades, which include widening/upgrading local shared paths, should consider integrating a dedicated cycle lane.

In response to the comments, the Applicant identified that the proposed use of the driveway on Allambie Road is suitable given that it is existing and would meet design standards for sightline safety. The Applicant used case studies of new schools recently opened to support the reduced mode share of private cars and suggest that the new location is within cycling distance of the new Frenchs Forest Precinct, which will have bridges to cross Wakehurst Parkway and Warringah Road. Students located to the north can use public transport to access the school and avoid crossing Warringah Road. The Applicant also agreed to undertake a road safety assessment during detailed design.

In addition, the following off-site active transport upgrades are proposed to ensure safe access to the site:

- zebra crossing at the corner of Rodborough Road and Allambie Road
- pedestrian fencing on the western boundary of Rodborough Road approaching the pedestrian crossing
- widening of the shared path (where feasible) on Allambie Road along the perimeter of the school site
- footpath along the northern side of Aquatic Drive
- parking signage to indicate bus zones, DOPU zones, No Parking and No Stopping zones.

As part of the addendum SIA, the Applicant has proposed a Project Control Group (PCG). PCG is a group that would be established to manage communication processes throughout the lifecycle of the project. The PCG is the governance mechanism for addressing residual or acute impacts during construction as recommended by the SIA in accordance with the contractor's Construction Management Plan (including a complaints handling procedure).

PCG and the school principals (The Forest High School and the Arranounbai School) would collaborate for solutions to manage concerns such as access control/fencing and secure gates around the Arranounbai School car park to facilitate safe access for vulnerable students and prevent unauthorised use of the car park, and to facilitate control for the Arranounbai School and the immediate environment.

The Department considered that the information provided for sightline safety from the private access road onto Aquatic Drive had not been adequately considered and the existing and proposed use of

the private access road had not been accurately presented. Subsequently, the Department requested further information including detailed sightline analysis to determine the safety for vehicles entering and exiting the private access road onto Aquatic Drive. The analysis was requested to also consider the bus bay location and kiss and drop on Aquatic Drive, and pedestrians crossing the private access road and surrounds.

In response, the Applicant provided supplementary assessment of the proposed bus stops and kiss and drop zones on either side of the private access road off Aquatic Drive in order to ensure appropriate safety of pedestrians, cyclists and motorists. The assessment noted that the private access road is perpendicular to the frontage road with a 20m “No Stopping” zones on either side of the private access road. A sight line review was conducted based on the Stopping Sight Distance by Austroads which identifies that, at a 50km/h road speed (which is the speed for Aquatic Drive), the stopping sight distance is a minimum of 48m. **Figure 25** demonstrates a clear sightline of 62m to the left and 61m to the right from the private access road off Aquatic Drive, both meeting the minimum sight line requirement of 48m. The assessment also identified that safety would be ensured via proposed signage along the private access road to reinforce to drivers that parking is limited to staff of The Forest High School and staff/visitors of Arranounbai School.



Figure 25 | Sight line analysis (Source: Updated TAIA, 2023)

The Department is satisfied that safety for vehicles entering and exiting the private access road onto Aquatic Drive can be achieved based on the sightline analysis. The Department also notes the proposed pedestrian infrastructure upgrades surrounding the site and supports the provision of multiple entrances and pedestrian crossings to encourage walking to school. The Department has recommended conditions that require the pedestrian crossings and pathways to be designed and constructed to the satisfaction of Council. The Department has also recommended conditions that

require the preparation, implementation, and review of a STP to ensure safe pedestrian movements and encourage sustainable transport modes.

6.1.6 Construction traffic and parking

The peak workforce is estimated to be approximately 163 full-time equivalent workers. It is anticipated that up to 75 light construction vehicles (90% of workers and assuming 2 people per vehicle) would drive to site during construction hours and approximately 20 heavy vehicle truck movements would be generated on a typical day. Vehicles would access the site via Wakehurst Parkway and then Aquatic Drive and Warringah Road and Allambie Road (**Figure 26**). Parking is available on site; however, the site only has capacity for 50 construction vehicles. As such, approximately 25 vehicles may be required to utilise on-street car parking. The TAIA identified available on street parking via satellite imagery along Aquatic Drive and Rodborough Road during school hours. The assessment also noted that upon completion of the shell of the on-site basement carpark, the area would be made available for use by construction workers for parking.

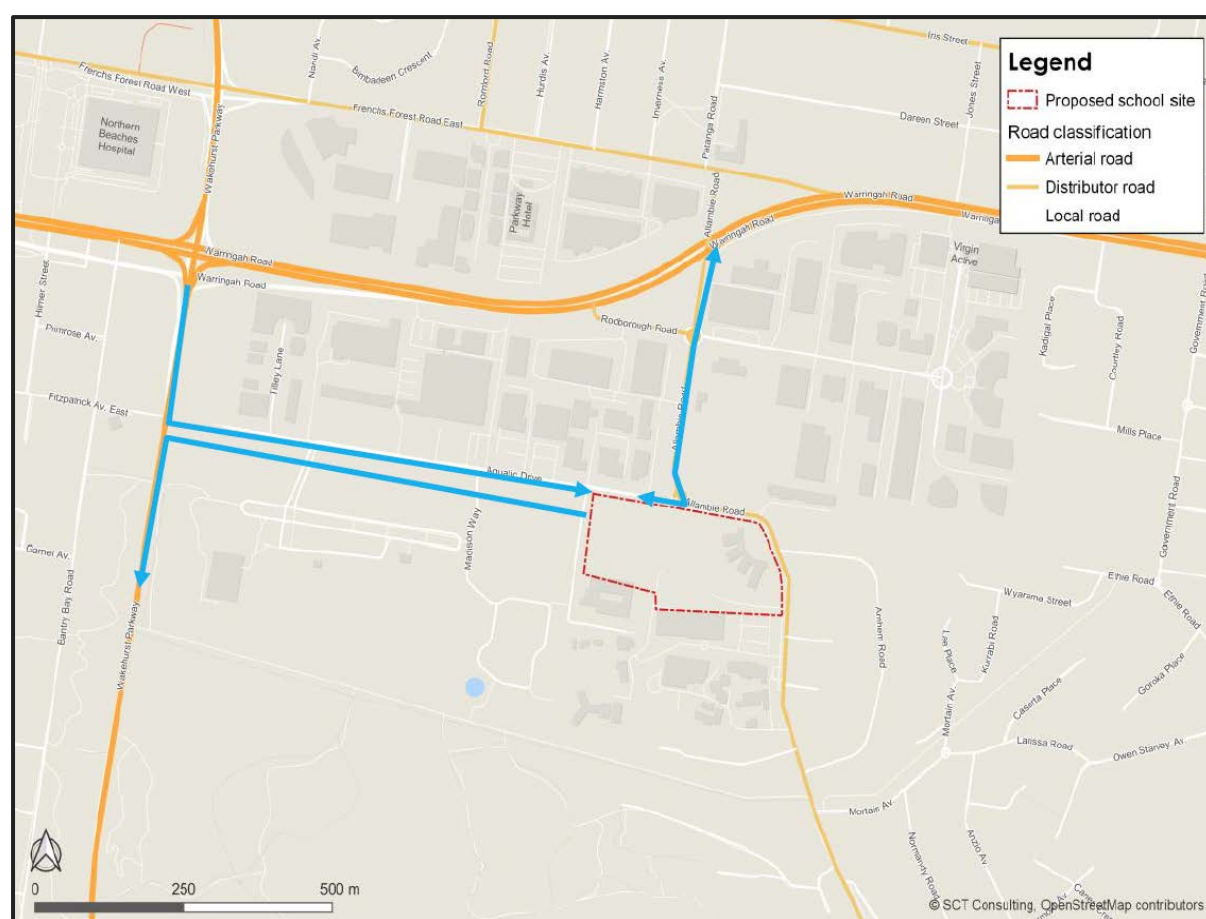


Figure 26 | Proposed construction haulage routes to/from the site (Source: TAIA, 2022)

The TAIA included a preliminary CTPMP, which detailed construction vehicle movements, truck and crane unloading details, routes of travel, parking and access arrangements, pedestrian management provisions, and measures to address potential impacts. The TAIA also noted that delivery and unloading should avoid commuter peak periods to minimise risks to vehicles and congestion arising from deliveries.

The CTPMP identified that construction works would require some temporary work zones in the kerbside traffic lane along the frontages of Allambie Road and Aquatic Drive (as shown in **Figure 27**), although these would not require full road closures as those lanes currently accommodate buses, equivalent to heavy rigid vehicles. The Transport assessment stated that it is “anticipated that some work zones would be proposed along the frontage of Allambie Road.... [which] might require the temporary decommissioning of one of the bus stops”.



Figure 27 | Potential work zones during construction of public domain (Source: RtS TAIA, 2023)

Further information was requested in relation to work zones, impacts to the shared path and the temporary decommissioned bus stop during construction. The Applicant provided an addendum Transport Response to Submissions report to respond to the issued request for information (RFI). The addendum transport report clarified the location of the work zones and stated that the full extent of the work zone would not be in operation all at once. The amended transport report further detailed that all deliveries and concrete pours would be contained on-site, and no work zones are proposed for the construction of the high school buildings. The potential work zones are required for the construction of the public domain works. The construction of public domain works would be shorter than the overall program and the final work zone locations and operation periods would be subject to Council approval.

The Department has considered the information provided by the Applicant and advice provided by Council and TfNSW. The Department considers that the development site and surrounding network has sufficient capacity to deal with the short-term increase in construction vehicle traffic and work zones required. The Department concludes that impacts could be satisfactorily managed through the preparation and implementation of a final CTPMP. The Department has recommended a condition to this effect. The Department has also recommended a condition that requires the Applicant to prepare a construction worker transportation strategy to ensure that construction traffic associated with the development does not utilise residential streets or public parking facilities. Both the CTPMP and Construction Worker Transport Strategy would have to be prepared in consultation with Council and

TfNSW. The Department also acknowledges that the final work zone locations and operation period would be subject to Council approval. The Department considers that the impact of construction works would be appropriately managed.

6.2 Flooding

A Civil Engineering report was provided as part of the EIS which included an assessment regarding flooding. It noted that the site would not be flood affected would but have localised low points and three OSD and treatments were proposed to manage the water discharge from the site. Stormwater management is further discussed in **Section 6.6**.

SES in their initial advice identified that the site and adjacent access/egress routes are not at known risk of flooding and that the development is unlikely to see an increase in risk to life because of flooding. However, the Department, Council, EHG and public submissions raised concerns associated with flooding. EHG further requested that the Applicant provide a flood impact and risk assessment. Following this, an amended Civil Engineering report and additional flood modelling was provided as part of the RtS.

During RtS, the following comments and advice were provided:

- EHG considered that overland flow and flood impacts have not been adequately addressed and must be modelled with a comprehensive assessment undertaken
- SES reiterated that the development would need to be consistent with the NSW Flood Prone Land Policy as set out in the *NSW Floodplain Development Manual 2005*. SES also stated that they do not support:
 - shelter in place strategies
 - mass rescue
 - imposition of development consent conditions requiring private flood evacuation plans
 - transfer of residual risk to SES to manage.

The amended Civil Engineering report included updated flooding assessment, where the engineering consultant met with Council's Coast and Catchment team to confirm that a previously referenced 'ephemeral creek' within the site is not a creek and has been identified as an open channel (see **Figure 28**). Further modelling was undertaken and confirmed there is no resultant flooding or overland flow impacts to the subject site. The Applicant noted that Council's Water Management for Developments Policy does not identify the site as being flood prone due to the inland location of the school buildings.



Figure 28 | Location of open channel on site (Source: updated Civil Engineering Report, October 2023)

Following the review of the amended Civil Engineering report as part of the RtS, an RFI was issued to the Applicant on 8 June 2023 requesting:

- a flood impact and risk assessment to be provided, as per EHG's request
- further modelling and assessment for water quality and to provide an impact analysis on the downstream detention basin located at Madison Reserve, as per Council's request.

Consequently, the Applicant undertook additional assessment incorporating Council's current TUFLOW data, additional flood modelling incorporating all the flood mitigation measures to reflect the proposed development and subsequently updated the Civil Engineering report. The flood mitigation measures (shown in **Figure 29**) include:

- the level of the entry to the school driveway was raised by 100mm
- 450mm diameter Aquatic Drive discharge pipe is extended and then routed through a new channel around the proposed school sports courts
- OSD basins for the proposed development
- three grated inlet pits to capture any overland flow at the northern boundary when the Aquatic Drive discharge pipe is at capacity
 - these pits would be linked to a new 600mm diameter pipe running south through the school site to convey runoff in excess of Aquatic Drive pipe system's capacity
- a level spreader weir proposed at the pipe outlet set back from the boundary of the Arranounbai School to reduce the risks associated with a concentrated discharge point
- the pipe network on the Arranounbai school driveway to be increased from a 450mm diameter pipe to a 600mm diameter pipe.



Figure 29 | Proposed flood mitigation works (Source: updated Civil Engineering Report, October 2023)

The Applicant revised the flood modelling using Council's data which captured a larger area, in order to reflect the flooding conditions specific to the site during the 1% AEP flood event. **Figure 30** shows the existing and proposed flooding of the site and adjoining during the 1% AEP flood event. **Figure 31** summarises the changes of the site (i.e., from wet to dry, vice versa and the changes in water depth).

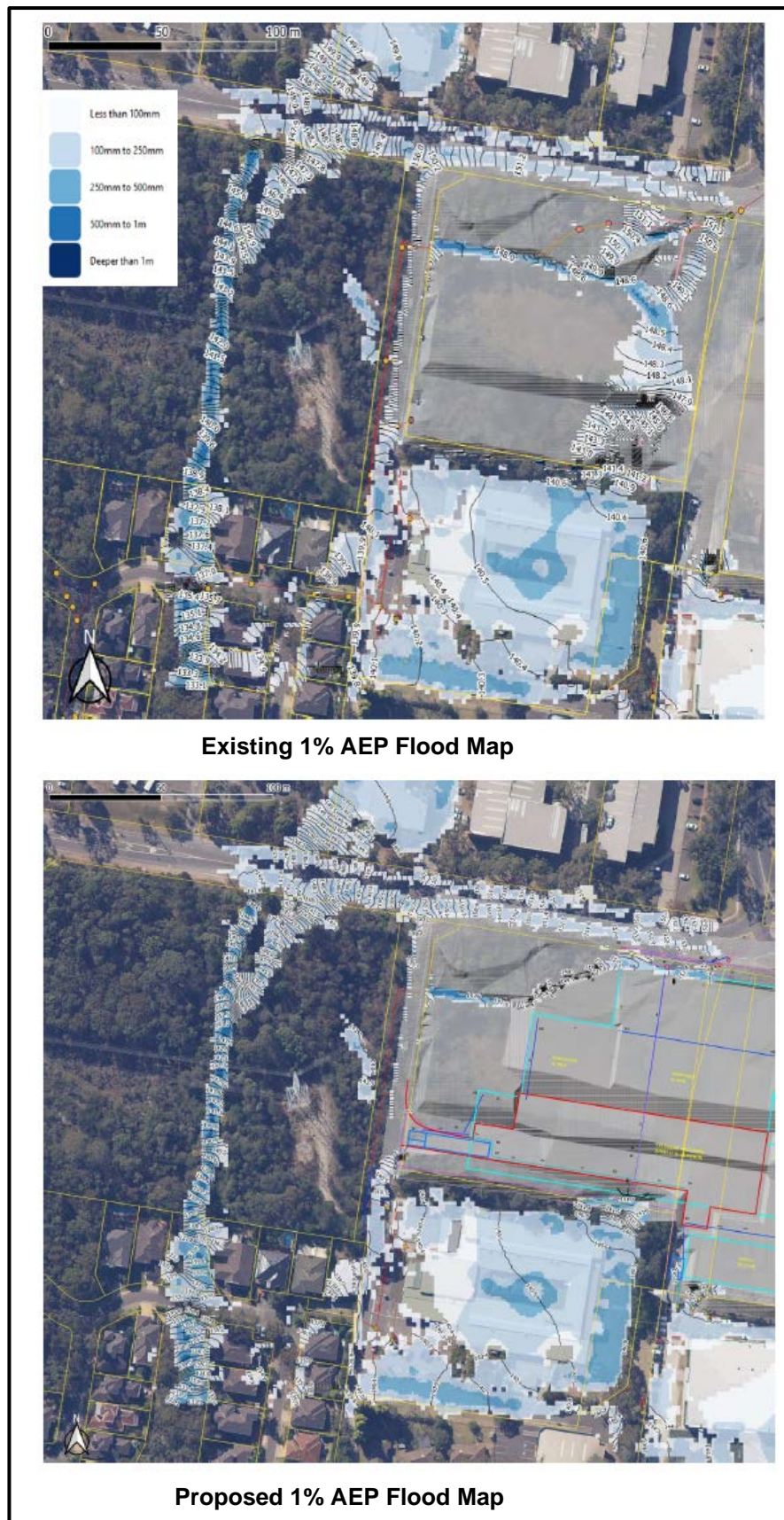


Figure 30 | TUFLOW modelling of existing and proposed flood conditions on site with Council's output data (Source: updated Civil Engineering Report, October 2023)

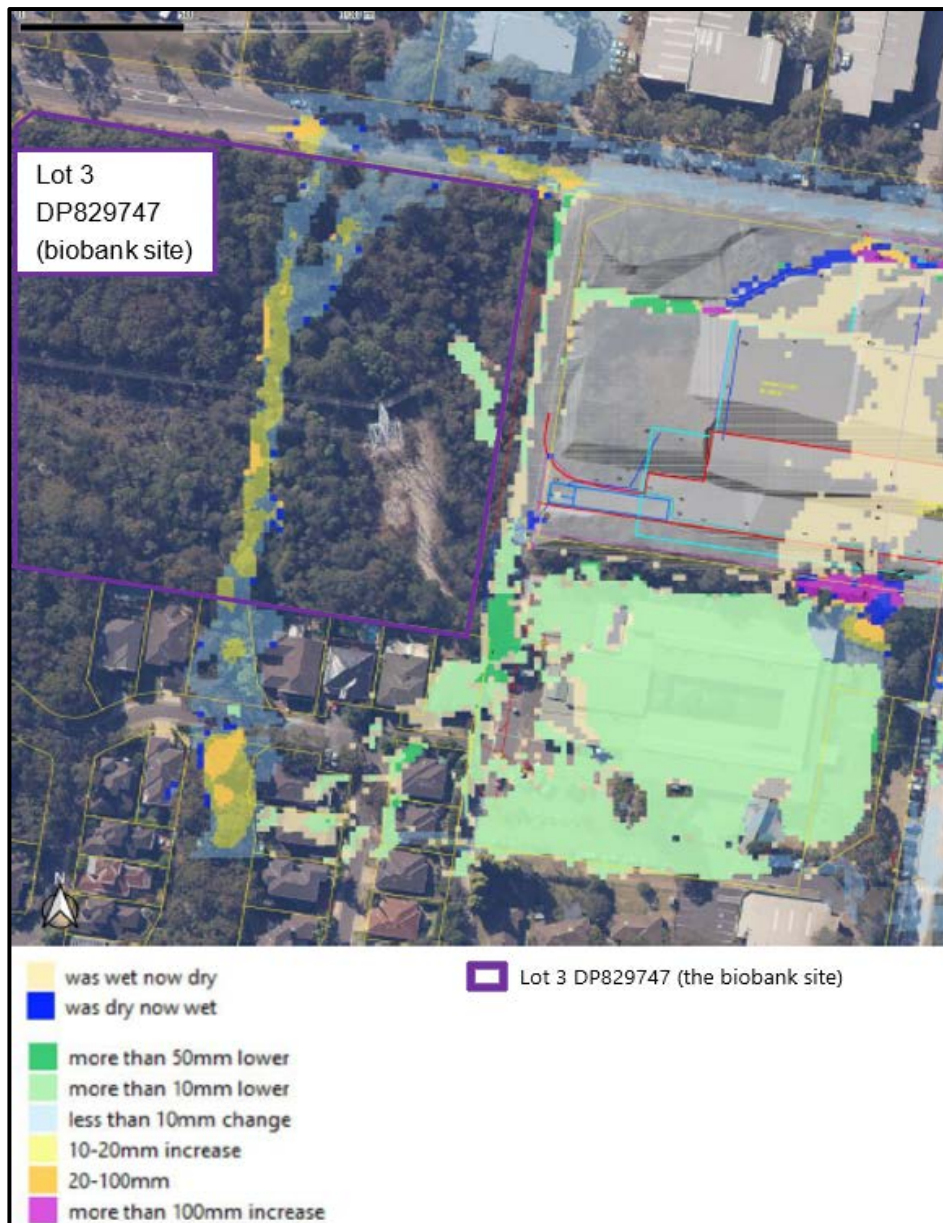


Figure 31 | Flood impact map – 1% AEP showing summary of changes (Source: updated Civil Engineering Report, October 2023)

Council’s advice dated 22 September 2023 noted that the proposal is shown to “result in adverse flood impacts on Lot 3 DP829747 (the biobank site) in a 1% AEP flood”. The biobank site is identified in **Figure 31**. Under the DCP, the flood level increase of greater than 20mm in a 1% AEP flood is considered an adverse flood impact.

Supplementary information was provided by the Applicant to address Council’s comment regarding impacts to the biobank site. The additional information identified that the biobank site is owned by NSW Health (Health Administration Corporation) and is public land which connects to Council’s drainage reserve to the south (**Figure 32**). It also noted that the stormwater from TfNSW and Council’s road networks and upstream properties (not including the subject school site) currently flows along Aquatic Drive and onto the public land at Lot 3 DP 829747. This is an existing situation and is shown in **Figure 30**.

Additionally, the updated flood modelling demonstrated changes to the flood levels on the adjoining properties:

- the increase on Lot 3 DP829747 (biobank site) would be no more than 54mm in some areas (**Figure 32**)
- other areas of increase in levels on Lot 3 DP829747 would be at a maximum of 20mm
- there would be a decrease in levels towards the boundary adjoining the private access road
- changes in flood levels in Maddison Way would be within Council's draining reserve
- there would be a reduction in flood levels to private properties to the south on Madison Way.

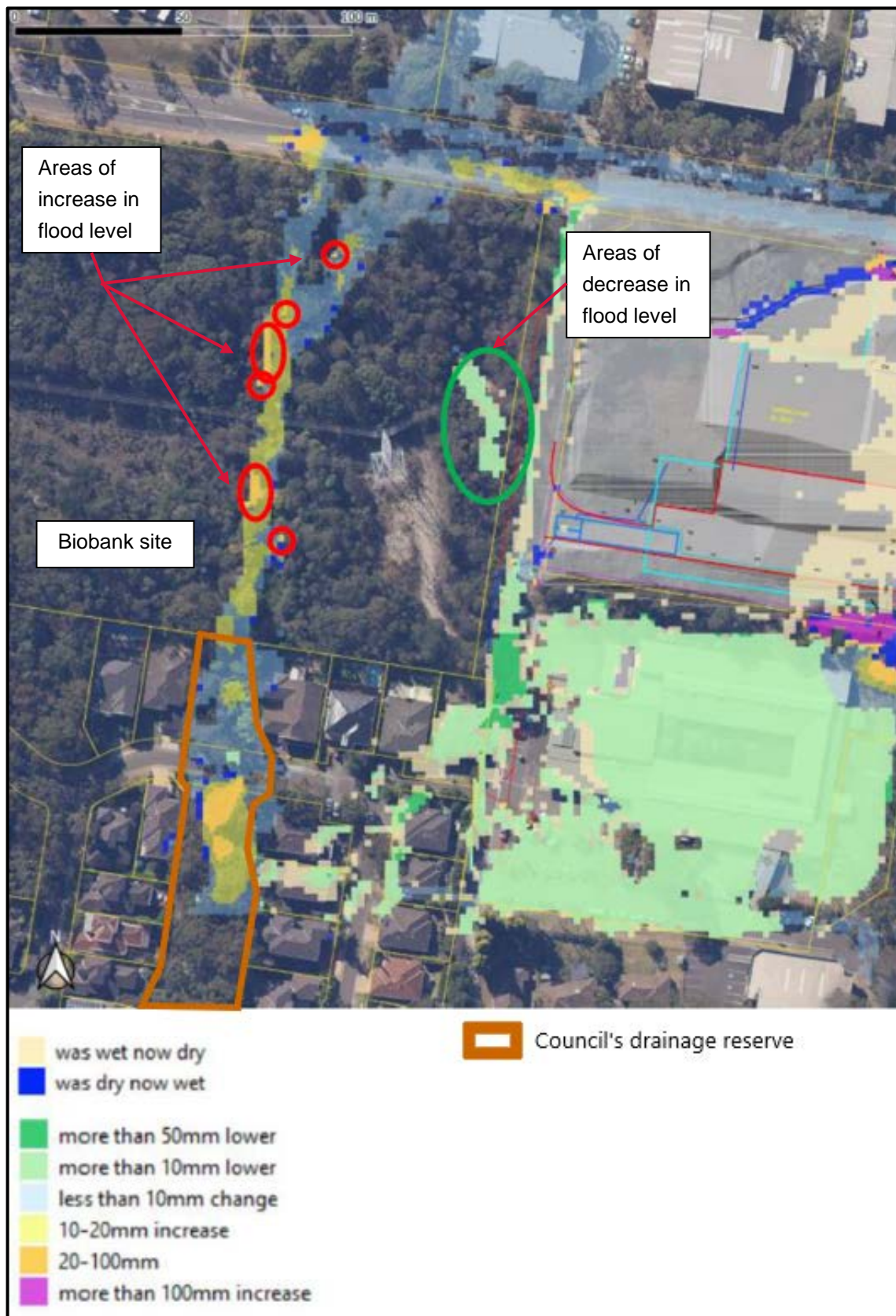


Figure 32 | Flood impact map – 1% AEP showing summary of changes on Lot 3 DP829747
(Source: updated Civil Engineering Report, October 2023)

Council's DCP requirements for flood prone land for schools (considered a 'vulnerable development') specifies that building floor levels are to be set at or above the PMF flood level. The Department noted that the additional flooding assessment demonstrated that the building floor levels would be designed to be above the PMF levels.

The Department has considered the Applicant's updated Civil Engineering report and advice from SES, EHG, and Council. The Department is satisfied that subject to conditions, the development is compatible with the flood behaviour of the land, will not adversely affect flood behaviour, will not adversely affect the safe occupation or efficient evacuation of people in the event of a flood, will incorporate measures to manage risk to life in the event of a flood and will not adversely affect the environment. The Department is satisfied that the finished floor levels of the proposed buildings would be located above the flood planning and PMF level and that safe evacuation can occur, subject to the preparation of an Operational Flood Emergency Management Plan. Conditions of consent are recommended requiring:

- an Operational Flood Emergency Management Plan be prepared in consultation with SES prior to commencement of operation
- flood mitigation measures to be adopted as per the Civil Engineering report dated October 2023.

6.3 Noise impacts

A Noise and Vibration Impact Assessment (NVIA) undertaken with regard to the Noise Policy for Industry (NPfI) was prepared as part of the EIS. The NVIA identified sensitive receivers to be the residential areas to the east and south-west of the site, the commercial premises and the Arranounbai School located immediately adjacent to the southern boundary and light industrial areas to the north and north-west. The NVIA has separated these areas into four noise catchment areas (NCA) (**Figure 33**). The four catchments represent the various uses as follows:

- NCA01 representing residential receivers to the south west
- NCA02 representing the adjoining Arranounbai School, commercial premises (Cerebral Palsy Alliance, Disability Support and NDIS Service Providers) and retirement village
- NCA03 representing residential receivers to the east and south east of the site
- NCA04 representing industrial premises to the north.



Figure 33 | Noise catchment areas (Source: Applicant's EIS)

Attended and unattended noise monitoring was undertaken on the development site to establish representative background noise levels for sensitive receivers (**Figure 34**). The noise data collected that was not affected by rain or adverse wind conditions is considered to be sufficient to provide the existing background noise levels of the nearest residential receivers. Background noise levels are used to establish noise trigger levels for residential receivers. The locations of loggers L1 and L2 were chosen as they represented the residential receivers along Allambie Road and residential receivers on Madison Way, the Cerebral Palsy Alliance and the Arranounbai School.

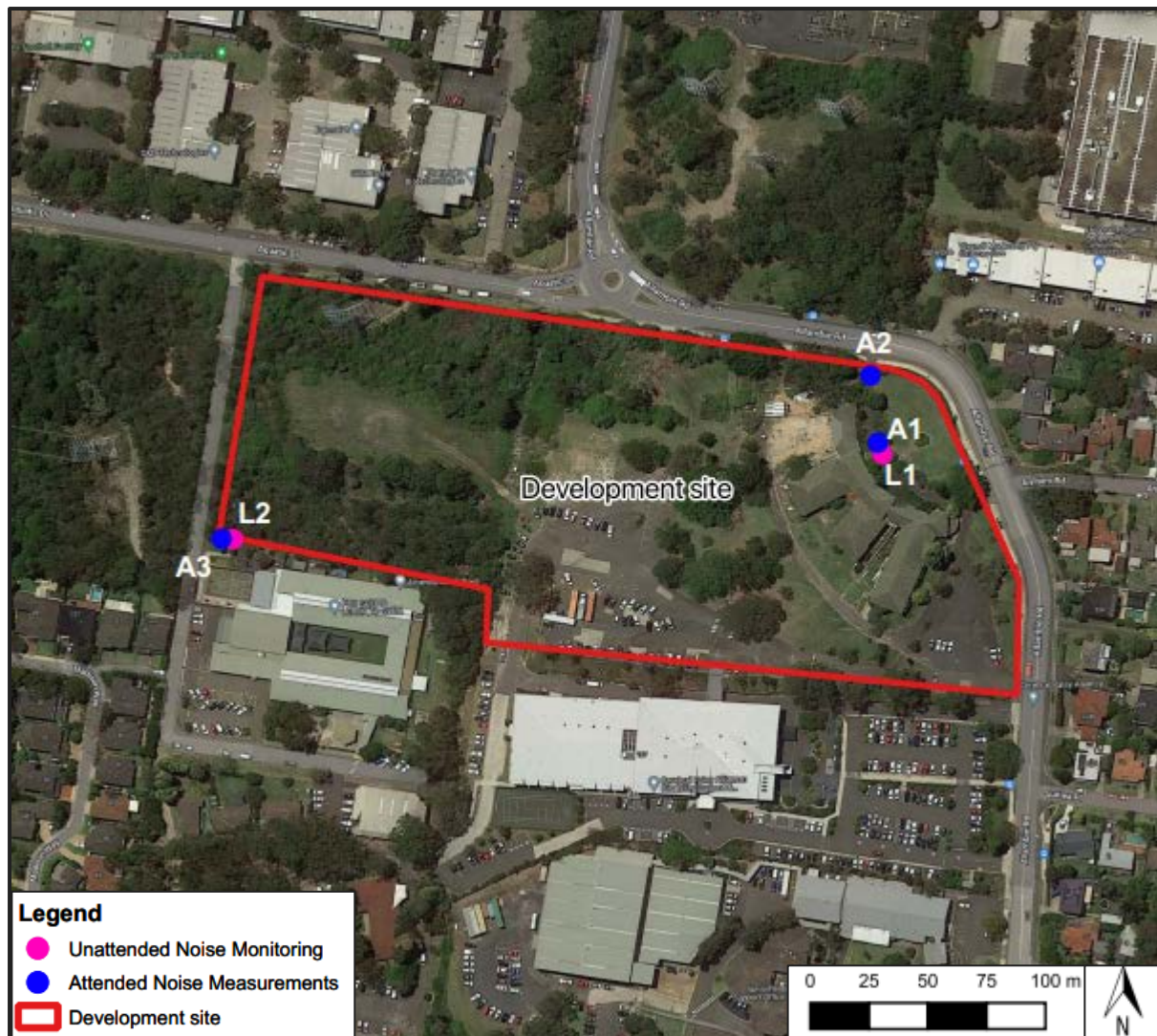


Figure 34 | Monitoring locations (Base source: Applicant's EIS)

6.3.1 Construction noise and vibration

The proposal includes site preparations, earthworks and construction that are anticipated to occur over a 21 month period. The works would be undertaken in accordance with the Interim Construction Noise Guideline (DECCW, 2009) (ICNG) standard hours of construction between 7 am to 6 pm weekdays and 8 am to 1 pm Saturday. The closest sensitive receivers to the site are identified to be residential properties fronting Allambie Road, residential properties on Madison Way and the Arranounbai School.

The assessment established construction noise management levels for the site as perceived at the noise sensitive receivers in accordance with the ICNG. In particular, it sets noise management levels (NML) including a limit of 10 dB(A) above the existing background noise level for residential properties and noise criteria of 55 dB(A) (windows open) for existing schools. The ICNG confirms impacts above 75 dB represent a point where a sensitive residential receivers may be 'highly noise affected'.

The NVIA identified NMLs to each receiver type which have been established with consideration to the requirements of the ICNG. The NVIA generally identifies that worst-case noise impacts would be during demolition; however demolition works do not form part of this application. The NMLs are

provided in **Table 12**. **Table 12** also summarises the potential construction noise impacts/exceedances to the receiver types in the four catchment areas without mitigations.

Table 12 | Potential construction noise impacts to the four catchment areas

NCA	Receiver type	NML, dB(A)	Potential impact
1	Residential	47	<ul style="list-style-type: none"> Likely to exceed 47 dB(A) NML by up to 15 dB(A) The predicted worst-case construction noise impact of 62 dB(A) would be during substructure works Noise impacts have been predicted to comply with the highly noise affected NML during construction
2	Residential	47	<ul style="list-style-type: none"> Likely to exceed 47 dB(A) NML by up to 8 dB(A) The predicted worst-case construction noise impact of 55 dB(A) would be during substructure works Noise impacts have been predicted to comply with the highly noise affected NML during construction
	Educational facility	45 (internal) 55 (windows open)	<ul style="list-style-type: none"> Likely to exceed 45 dB(A) NML by up to 29 dB(A) The predicted worst-case construction noise impact of 74 dB(A) would be during substructure works
	Commercial premises	70	<ul style="list-style-type: none"> Likely to exceed 70 dB(A) NML by up to 11 dB(A) The predicted worst-case construction noise impact of 81 dB(A) would be during substructure works
3	Residential	55	<ul style="list-style-type: none"> Likely to exceed 55 dB(A) NML by up to 20 dB(A) The predicted worst-case construction noise impact of 75 dB(A) would be during substructure works Noise impacts have been predicted to exceed the highly noise affected NML during demolition works and comply during remaining construction works (i.e. site establishment, excavations, substructure, framing, and facade works)
4	Industrial	75	<ul style="list-style-type: none"> Predicted to comply with the 75 dB(A) NML for all construction stages.

Construction noise and vibration to the Arranounbai School

As part of our assessment, the Department met with staff of the Arranounbai School and, based on the information provided, did not consider the adjoining development had been adequately considered with regards to noise and vibration impacts. Consequently, additional information was requested for an amended Social Impact Assessment (SIA) to consider the social impacts of the proposed development and bespoke construction and operational mitigation measures, particularly associated with noise and vibration impacts, upon the Arranounbai School.

As part of the preparation of the addendum SIA, an addendum to the noise assessment was also provided. The addendum involved additional noise assessment for the construction noise and vibration impacts on the Arranounbai School. Noise simulation was carried out on site to determine the nature of noise impacts that can be expected during construction. Construction noise simulation was conducted via a loud speaker at the north-east corner of the Arranounbai School (**Figure 35**).

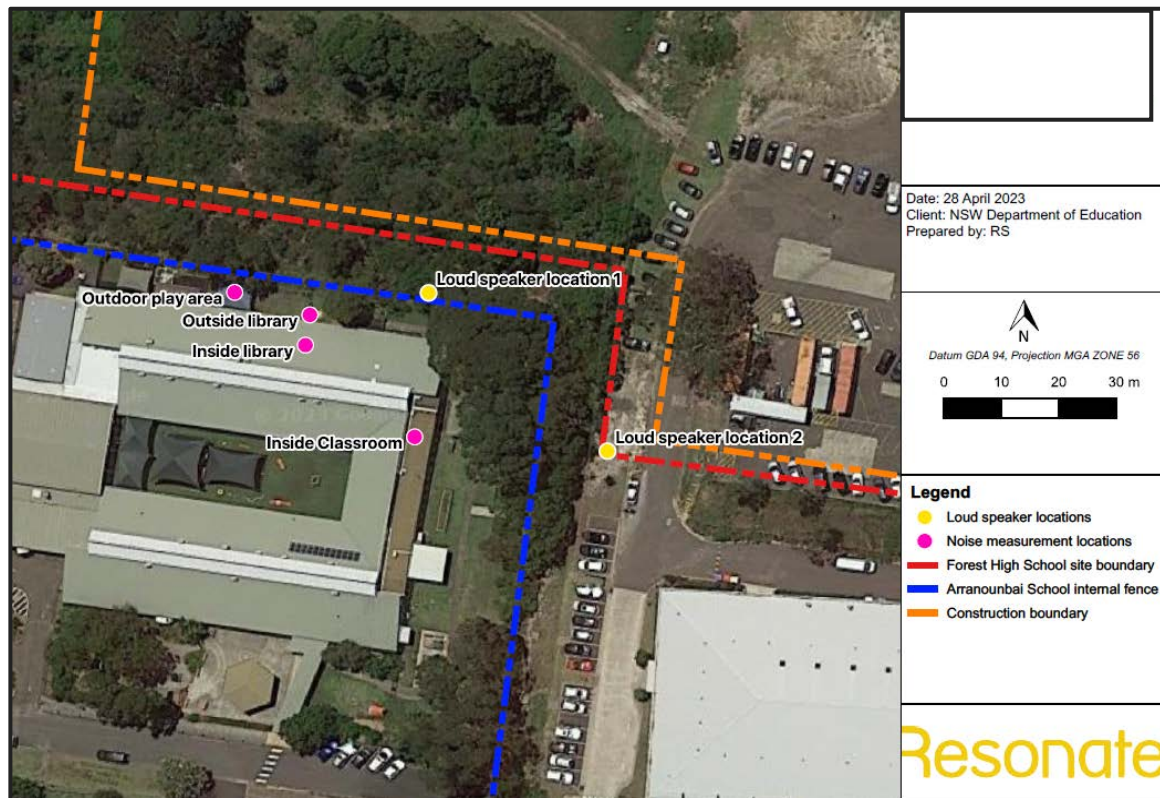


Figure 35 | Construction noise on-site simulation and measurements (Source: Applicant's RtS 2023)

During the noise measurements, the simulated construction noise was adjusted to 45 dB(A) inside the library so that the Arranounbai School principal could experience the recommended NML for classrooms and subjectively determine if this would be an appropriate level for the Arranounbai School students. The assessment noted that the principal acknowledged that the 45 dB(A) NML would likely be an appropriate level that would not result in adverse reaction from the students. Based on this advice, the 45 dB(A) NML for classrooms has been adopted for the noise assessment.

The assessment demonstrated that with a 2.5m high noise barrier along the southern boundary of the proposed school adjacent to the Arranounbai School, and without further mitigation measures, there would be noise exceedances to the 45 dB(A) NML to the northern outdoor play area, northern internal space with windows closed and opened and to the eastern classroom with the door and windows opened. However, with a 5m high noise barrier (to be removed after the completion of construction), compliance can be met with the 45 dB(A) NML in most of the classrooms and outdoor play areas with the exception to the eastern classroom with the door and windows opened. Refer to **Figure 36** for the proposed location of the noise barrier between the two school sites.

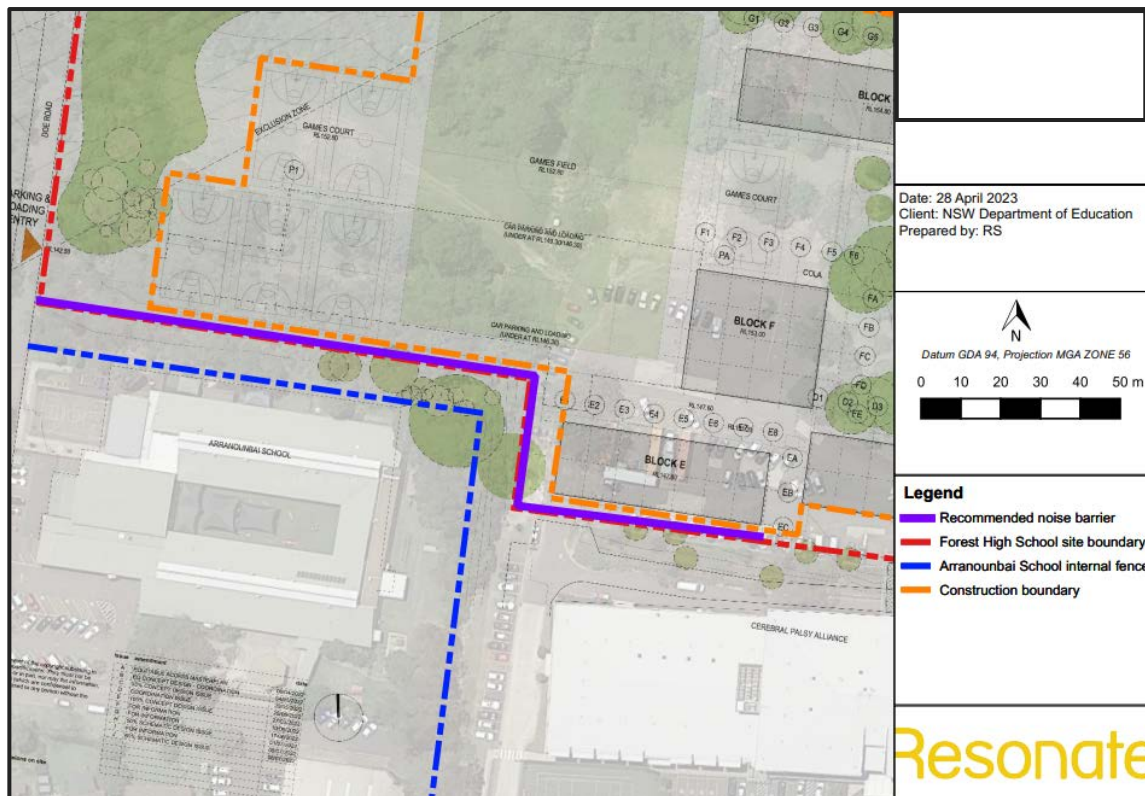


Figure 36 | Noise barrier location during construction (Source: Applicant's RtS 2023)

To address the NML exceedances of the school site, the Applicant recommended the following potential mitigation measures to manage and reduce noise impacts:

- develop a Construction Noise and Vibration Management Plan (CNVMP)
- locate equipment away from receivers and provide acoustic screens / enclosures
- implementation of noisy work respite periods and appropriate worker / contractor work practices
- undertake community liaison and relations, complaints handling / management
- site access and delivery points to be located as far away from residences as possible
- truck movements to use arterial roads and be diverted away from residential streets where feasible
- appropriate equipment selection and compliance with Australian Standards.

The following noise management and mitigation measures are proposed to be implemented to ensure that construction noise levels do not adversely impact on the students in Arranounbai School:

- a process for urgent contact between the building contractor and Arranounbai School to facilitate immediate response to noise issues arising within the Arranounbai School
- a process for unattended noise monitoring at the Arranounbai School play area fencing during the construction works
- install a 5 m high solid noise barrier along the locations indicated in **Figure 36**. The noise barrier will have no gaps at joints or at the base of the barriers (i.e. between the base of barrier and the ground)
- provision of respite periods for construction works will be agreed with the Arranounbai School to facilitate quiet use of the outdoor play areas during recess and lunchtime
- establishment of the PCG to manage communication processes

- the CNVMP would include a process for unattended noise monitoring along the northern boundary of the Arranounbai School (i.e. boundary of the play area) during the construction works including a process for monthly review by the PCG and acute review in the occasion of a complaint.

To manage vibration impacts, the NVIA concluded that where vibration intensive activities are to be carried out within 20 m from Arranounbai School, only the following vibratory roller and hydraulic hammer would be used:

- vibratory roller up to 4 tonnes
- small or medium hydraulic hammer.

On this basis, and subject to the Applicant's compliance and commitment to implement the above and all reasonable and feasible mitigation and management measures, the Department is satisfied construction works can be appropriately managed to minimise disruption to nearby receivers, including the Arranounbai School.

6.3.2 Operational noise

The NVIA included an assessment of operational noise impacts on nearby sensitive receivers using three potential operational scenarios:

- noise impacts from standard operations (e.g. noise from outdoor play areas during standard school hours, public address systems and mechanical plant and equipment)
- noise impacts from outside of school hours (including for community use) – outdoor operations (e.g. sports fields and courts, outdoor carnivals)
- noise impacts from outside of school hours (including for community use) indoor operations (e.g. noise from out-of-school-hours events located within the school's gymnasium building (Block F) and Movement Studio/Lecture Theatre building (Block G)). The term 'events' considered in the noise assessment include, but not limited to, parent-teacher events, performance and music events, speech days, etc.

As defined under **Section 2**, outside of school hours use (including for community use via joint agreements) would occur on the sports fields and courts, and in the gym generally between 6:00 pm and 9:00 pm on weekdays, and between 8:00 am and 5:00 pm on weekends. The music extension program would remain as an existing program and would be held on Monday to Thursday with hours ranging from between 5:00 pm and 8:00 pm. Further, it is noted that Council have confirmed their agreement in principle to enter into shared use arrangements with the Applicant to enable community use of the football field.

The NVIA generally concluded that noise levels from the operational use of the school meet applicable environmental noise criteria. However, the assessment found that if outdoor activities occur for more than 4 hours per day, the operational noise levels at NCA01 (south west of the site) are expected to be exceeded. As such, noise mitigation measures (i.e. construction of the 2.1m-high noise barrier) would be required to achieve compliance.

For outside of school hours use, the assessment concluded that outdoor events noise levels are expected to achieve compliance with the daytime and evening noise criteria. Note that no night time noise criteria were considered given that no operation is proposed after 9:00 pm (as defined by Npfl, night time is between 10:00 pm and 7:00 am the following day). Indoor events noise levels at the

gymnasium (Block F) and Movement Studio/Lecture Theatre (Block G) buildings have been predicted to achieve compliance with the established outside of school hours use noise criteria at most receivers. An exceedance of the evening criterion by 3 dB has been predicted at the residences in NCA01 due to indoor events from Block G. Subject to mitigation measures, this exceedance can be managed to ensure compliance with the outside of school hours noise criteria.

Mitigation measures proposed as part of the school operation include:

- the construction of a 2.1m-high timber lapped and capped fence along the southern and western edges of the sports courts to ensure that the standard hours outdoor activities noise levels comply with the noise criteria (see **Figure 37**)
- the external doors and windows to the Movement Studio/Lecture Theatre are to be closed when events are being carried out in these spaces. It is noted that mechanical ventilation would be provided to the building when doors and windows are closed.



Figure 37 | Noise barrier location during operation (Source: Applicant's RtS 2023)

The Department has considered the findings of the NVIA and concludes that the proposal would not unreasonably impact on the acoustic amenity of surrounding occupants subject to the implementation of the proposed mitigation measures and recommended conditions. The Department supports the shared use of school facilities where impacts can be managed. The Department has recommended the following conditions:

- prior to the installation of mechanical plant and equipment, a detailed assessment must be undertaken by a suitably qualified person demonstrating compliance with the noise criteria identified in the NVIA
- operational noise must not exceed the noise criteria identified in the NVIA
- the Applicant must undertake short term noise monitoring within two months following commencement of use (in accordance with the NPI). Any exceedances of the noise criteria identified during the noise monitoring must be addressed through additional noise attenuation measures
- an Out of Hours Event Management Plan must be prepared for events involving over 100 patrons for both school and community use.

6.4 Built form and urban design

6.4.1 Building height, bulk and scale

Under the WLEP, the site is subject to maximum height of building controls of 8.5m. The site is not subject to any floor space ratio (FSR) control. The maximum height proposed is 12.45m at Block C fronting Allambie Road. **Figure 38** below indicates the maximum height control along the purple dotted line (blue dotted line indicates for the existing ground level) and the exceedances of Block C.

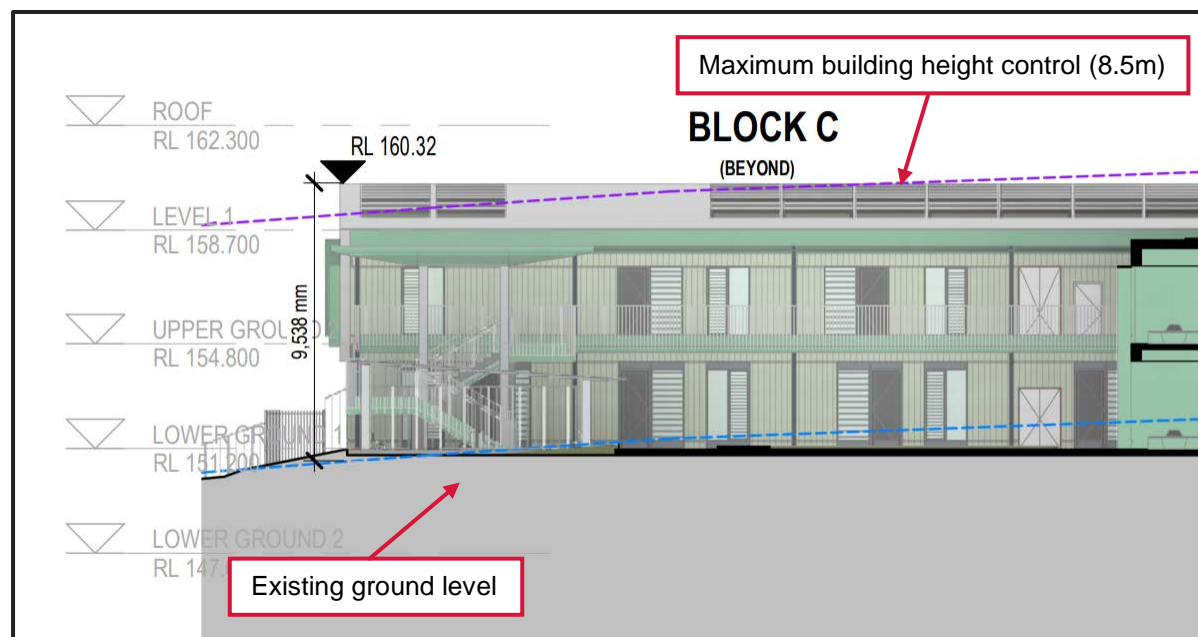


Figure 38 | Maximum building height control at Block C via site section (Source: Applicant's EIS)

Council and public submissions raised concerns regarding the height exceedances of the built form. The Government Architect NSW (GANSW) in their advice also requested the Applicant to explore strategies to suit a denser building typology.

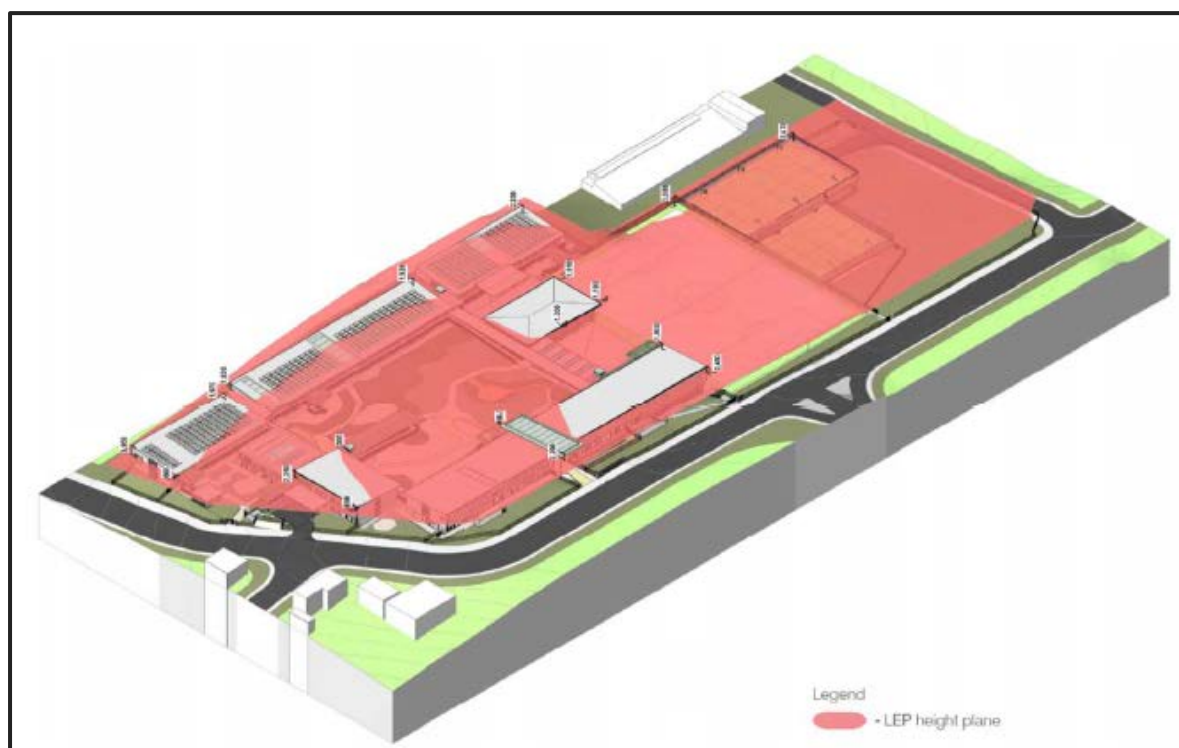
Section 3.43 of the Transport and Infrastructure SEPP states that development consent may be granted for development for the purpose of a school that is SSD even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted. As the provisions of the SEPP apply to this proposal, the proposed building height should be considered on merit.

The Applicant justified the proposed height noting:

- the height is necessary to accommodate the proposed uses that are integral to the new community facility
- there would be minimal adverse impacts on surrounding land with the area above 8.5m containing only clerestory windows that would not cause privacy impacts, would not obstruct significant views, would not cause significant adverse overshadowing and would be appropriately scaled within the development context
- the additional height would increase natural lighting into the learning spaces on the upper floors

- the proposed buildings and landscaping treatments are of a high quality that would improve the visual qualities of the site, which is currently characterised by ageing buildings and unkempt grounds.

As part of the RtS, the Applicant further justified that given the site constraints (i.e. overhead transmission lines, steep topography, bushfire prone land setbacks, etc.), the built form of the school has been designed to maximise the developable land available, whilst working with the challenging 14m change in level across the site. Whilst most of the proposed built form is within the 8.5m LEP height limit there are portions of the roof structure that protrude passed the height limit (refer to **Figure 39**). The buildings have been situated to work with the site topography, limiting cut and fill to a minimum, and limiting the building stepping to strategic locations to prioritise accessible access to the central courtyard and outdoor play areas and provide equity of movement for users of the school.



**Figure 39 | Building height control across the site with the LEP 8.5m max height plane
(Source: Applicant's RtS)**

The exceedance of the height of building controls is primarily due to the sloping topography of the site and functional requirements of the school buildings. The desire to limit school buildings to two-storey is to maintain visual privacy to adjacent residential developments. Further, the proposed height is considered to be appropriate as it is consistent with the surrounding area and achieves acceptable amenity outcomes in terms of visual impact, overshadowing, privacy and view sharing.

Overall, the Department considers that the proposal is consistent with the objectives of the height of building development standard under clause 4.3 of the WLEP, which are as follows:

- to ensure that buildings are compatible with the height and scale of surrounding and nearby development
- to minimise visual impact, disruption of views, loss of privacy and loss of solar access
- to minimise any adverse impact of development on the scenic quality of Warringah's coastal and bush environments

- to manage the visual impact of development when viewed from public places such as parks and reserves, roads and community facilities.

The Department has considered the proposed building height, bulk and scale against the objectives outlined in clause 4.3 of the WLEP and the existing context of the surrounding area and desired future character of the area. The Department is satisfied that the proposed building height, bulk and scale would be acceptable as the:

- components of the proposed buildings which do not comply with height of building control are limited to parts of the roofs and would not result in significant overshadowing, visual impact or view loss impacts
- proposed buildings include breaks in the built form to allow visual permeability which provides a reduction in the building mass
- most of the proposed buildings are sited along the northern and southern portion of the site which minimises visual and amenity impacts on the low scale residential dwellings adjoining the site to the east
- proposed external building materials predominately consist of muted tones and natural colours and this, coupled with the proposed landscaping, would visually soften the appearance of the buildings
- overall height, bulk and scale of the proposal would not significantly obstruct any views and would enable an accessible design for the users of the development.

The Department concludes that the proposed height, bulk and scale of the buildings are contextually appropriate, and the proposal would make a positive contribution to the existing and desired future character of the surrounding area.

6.4.2 Landscaping

The western portion of the site consists of thick bushland forest type cover and the eastern side consists of more scattered tree planting with some grouped trees. There is currently approximately 40% canopy cover across the site. Subsequent to the proposal, canopy coverage across the site would be 25%. The proposal involves the removal of 231 trees and the retention of approximately 141 trees, refer to **Figure 40** and **Figure 41**. Of the 231 removed trees, 10 trees have been identified as having a high retention value, with the majority of trees removed categorised as having medium to low retention value. Additional planting is proposed, with a planting strategy provided as part of the development application, see **Figure 42**. The BDAR identified that the proposed creation of the private access road on the western boundary would result in the removal of 0.43 ha of native vegetation (0.28 ha of moderate-good condition and 0.15 ha of low condition).

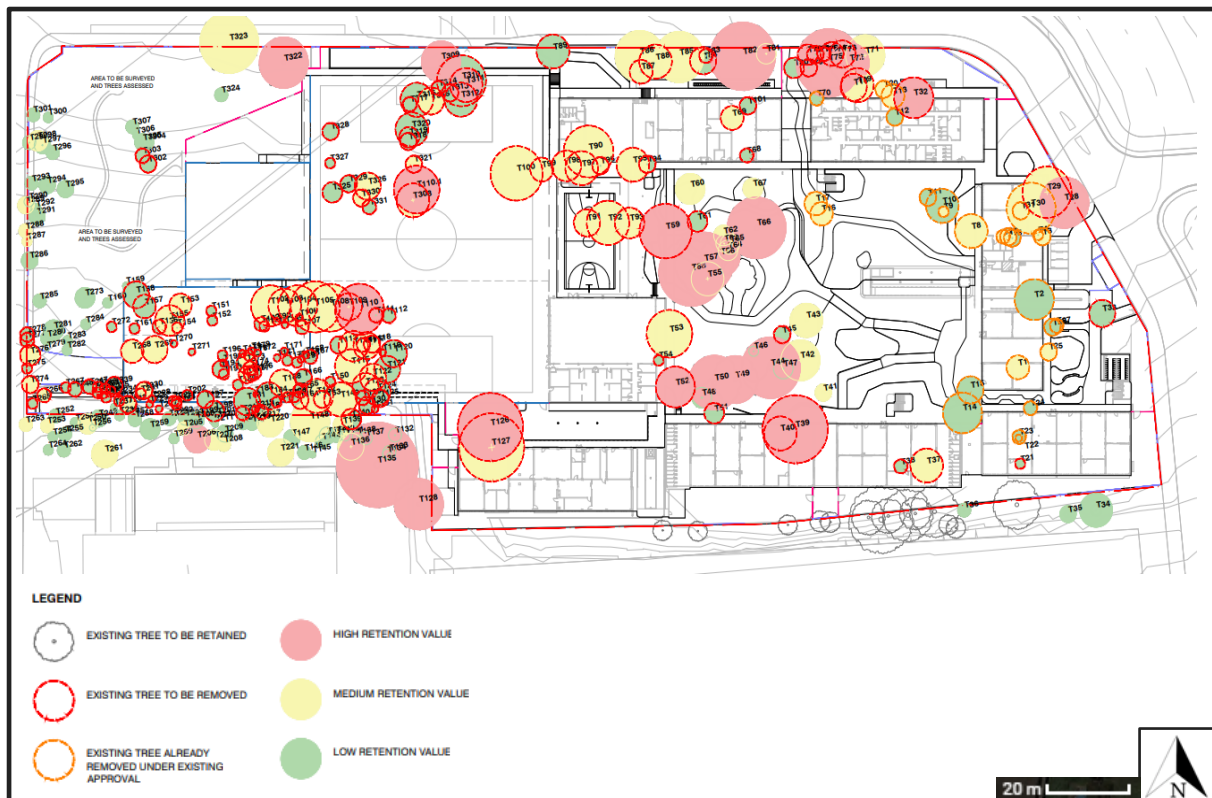


Figure 40 | High to low retention value trees across the site (Base source: Applicant's EIS)

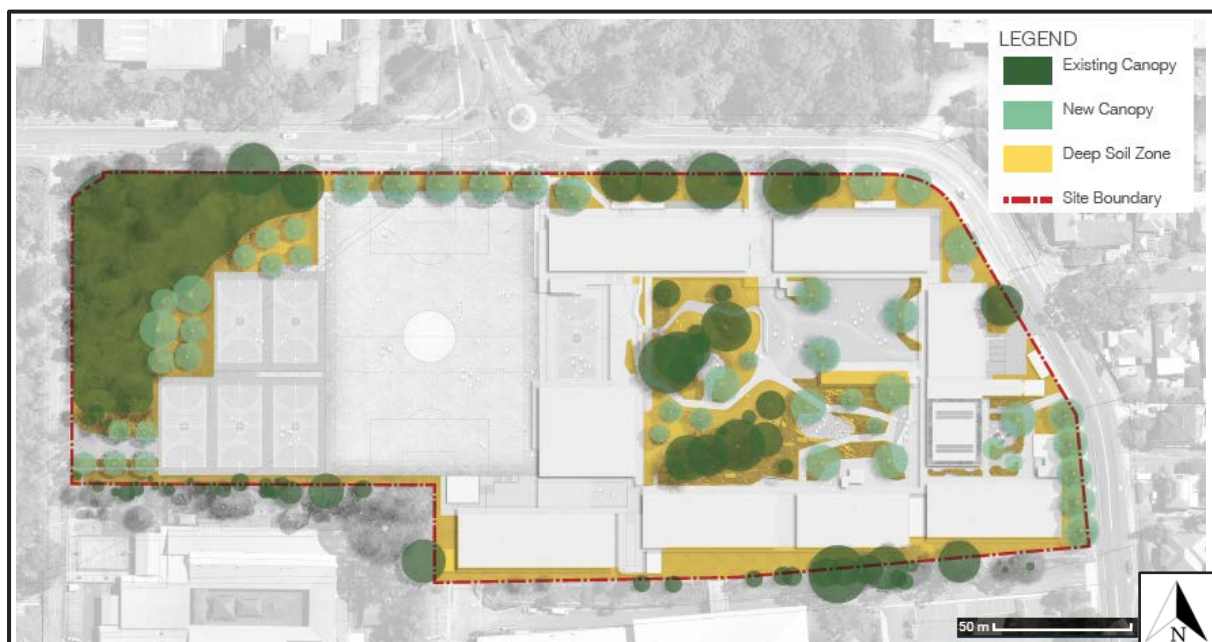


Figure 41 | Proposed canopy coverage and deep soil zones (Base source: Applicant's EIS)

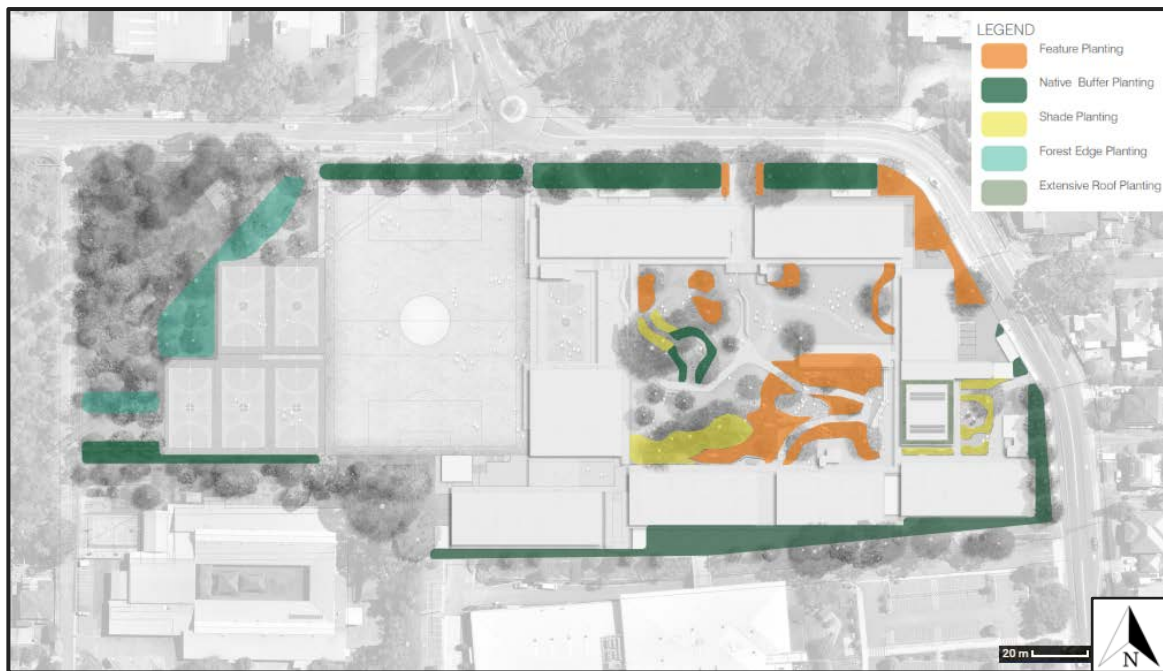


Figure 42 | Proposed planting strategy across the site (Base source: Applicant's EIS)

Following the exhibition of the EIS, the GANSW was of the view that the:

- proposed canopy cover of 25% is significantly less than their requested 40% and asked that the Applicant provide additional plantings, particularly where privacy benefits to receivers can be provided and provide justification for the reduced planting
- Applicant was to provide an alternative location for the western driveway access for the school to retain the higher quality forest while also delivering access and staff parking to the site
- natural turf is preferred for the proposed sports field, due to heat, amenity and sustainability concerns.

During the RtS, no changes were proposed to the layout and design originally submitted with the EIS. In their response the Applicant, supported by a bushfire consultant, stated that the overall landscape scheme was designed to comply with the performance objectives of the bushfire protection guidelines.

The RtS report acknowledged that in the previous design, an alternative access option was considered along the southern boundary. The Applicant identified that vegetation affected by the driveway along the southern boundary would be similar even if the driveway were to be relocated further north. Furthermore, the driveway location was chosen as it enabled the height clearances required for the loading dock, given the site constraints to the north (i.e. a high voltage transmission power line pylon in the norther eastern corner of the site, refer to **Figure 3**).

The BDAR also noted that due to the site constraints, specifically in the north western corner of the subject site, there would be limited opportunity to locate the development within areas of no or low biodiversity value. The current design with the access moved slightly north allows for a native vegetation buffer to be proposed along the southern boundary which would reduce indirect impacts on retained Duffys Forest vegetation to the south.

Council in their advice, noted that their biodiversity officers have previously inspected the property and considered that most of the property has a long history of disturbance and the small area mapped

as part of the Threatened Ecological Community (TEC), Duffys Forest, is substantially degraded despite being assessed in the BDAR as being partially in moderate to good condition. Council considered that the proposed school site is well located in terms of the potential scale of impacts to biodiversity from a large SSD development and that nearby site options within the Frenchs Forest area would have resulted in substantially greater impacts to biodiversity.

Regarding the turf material, the selected artificial material is considered to meet the needs of students during all weather conditions. The field is also proposed to be utilised by the community and discussions with Council have revolved around artificial turf to enable maximum sporting use. In addition to this, the design locates the field on top of the car park and using a natural turf surface would have structural design implications to the roof slab.

In response to this, the GANSW restated two items of concern associated with the alternative location for the western driveway and natural turf. GANSW raised no further comments in related to the proposed canopy coverage. Consequently, the Department requested further information to justify the use of the artificial turf instead of natural turf and include any agreement with Council on the surface.

The Applicant responded that a synthetic pitch surface for the football field and sports courts has been selected because it supports the expected student occupancy and potential community shared use. Council has also confirmed their agreement in principle to enter into shared use arrangements with the Applicant to utilise the football field for community uses.

While GANSW does not support the proposed private access road location and proposed turf material, the Department is of the view that the location of the proposed driveway is suitable given the justifications provided by the Applicant along with the supporting information outlined in the BDAR reviewed by EHG and Council's comments regarding the quality of the vegetation to be removed and the site selection for the school site. The Department is also of the view that the turf material proposed for the sports field and games court is acceptable based on the information provided by the Applicant and Council.

The Department has considered the comments received from GANSW and Council and the information provided by the Applicant. The Department is supportive of the tree canopy coverage proposed for the site. Whilst the proposed coverage recommended by GANSW is not met, it is acknowledged that this is primarily because of the constraints of the site (i.e. bushfire protection requirements). The proposed works have been designed to minimise clearing and maximise planting and open space for the students. In addition, to ensure that retained trees are appropriately protected, the Department has recommended conditions including the engagement of a qualified arborist to monitor works and installation/removal of tree protection structures. With the implementation of the Applicant's planting strategy and the recommended conditions, the Department is supportive of the proposed landscaping and tree removal.

6.5 Biodiversity

A Biodiversity Development Assessment Report (BDAR) has been prepared as part of the EIS in accordance with the BC Act.

Construction of the proposed development will require the removal of 0.43 ha of native vegetation, comprising 0.28 ha of PCT 1786 in moderate condition and 0.15 ha of PCT 1786 in low condition. This impact has been assessed in accordance with the Biodiversity Assessment Methodology (BAM), resulting in an offset requirement of eight ecosystem credits for PCT 1786.

The BDAR noted that there is potential for bats to be present on site and recommended translocation in the event bats are present during construction works in accordance with an approved management plan. EHG in their advice dated September 2023 recommended that where bats are present and roosting (and not breeding and not in torpor), within structures prior to demolition, these potential areas should be closed off to not allow the bats to re-enter (as opposed to be translocated). EHG advised that this would need to be done under an approved management plan prepared by a suitably qualified ecologist prior to commencement of construction.

An offset is also required for the impacts of the development on threatened species that require species credits. Field surveys undertaken did not detect any breeding or roosting habitat features (rocky areas containing caves, overhangs, escarpments, outcrops, crevices, mines or tunnels) within the subject land. Given that there is potential presence of rocky areas and cliff lines within 2km of the subject site (using Geographic Information System resources), the Large-eared Pied Bat has been assumed present. As the proposal involves the removal of 0.43 ha of vegetation, the BDAR assessment determined that the impacts to habitat for this species would result in an offset requirement of 13 species credits.

Figure 43 shows impact areas that require offsetting.



Figure 43 | Offsetting map – brown highlighted area indicates for offsetting requirement (Source: Applicant's RtS, Appendix L – BDAR 2023)

As part of Council's submission, they noted that the BDAR has reasonably described and assessed the site in accordance with the BAM. Council advised that the vegetation identified as being in moderate to good condition has been substantially degraded.

During the RtS, the BDAR was updated to address specific requirements raised by EHG. The amended BDAR provided further consideration of landscape features, man-made structures and non-native vegetation that was considered to potentially provide fauna habitat and included more targeted surveys.

The BDAR concluded that potential impacts and any further degradation of the Duffys Forest vegetation would be effectively managed via the implementation of the mitigation and management measures outlined in the BDAR. Updated mitigation measures include the management of the Duffys Forest under the VMP with the key objective being the rehabilitation and reconstruction of Duffys Forest.

The potential indirect impacts would be effectively managed via the implementation of a CEMP and other management measures identified in the BDAR. This would include the implementation of the VMP, tree protection fencing during construction, and tree protection works carried out by a qualified arborist.

The Department has considered the information provided by the Applicant and advice provided by Council and EHG. The Department considers that the biodiversity impacts have been appropriately addressed in the BDAR. The Department has recommended conditions of consent requiring that the development to be undertaken in accordance with the recommendations of the BDAR and EHG's recommendation for a microbat management plan to be prepared by a suitably qualified ecologist which includes implementation of measures to exclude microbats from potential habitat that could be used for roosting, breeding or torpor prior to works/construction commencing.

6.6 Other issues

The Department's consideration of other issues is provided at **Table 13**.

Table 13 | Department's assessment of other issues

Issue	Findings	Department's consideration and recommended conditions
Social impacts	<p>The EIS included a Social Impact Assessment (SIA) that considered the existing operation of the school facilities and its benefit to the community.</p> <p>The Applicant was advised to provide an updated SIA to assess the adjoining Arranounbai School as a sensitive and vulnerable receiver as well as be revised to address the Department's <i>'Undertaking Engagement Guidelines for State Significant Projects'</i> and the <i>'Social Impact Assessment Guideline'</i>. This is to be signed by an appropriately qualified social impact assessor.</p> <p>An addendum SIA was provided which detailed the social impacts of the proposed development on the overall operation of the Arranounbai School, including assessment of the internal and external amenity and safety as well as identified detailed management and mitigation measures to minimise social impacts.</p>	<p>The Department acknowledges the expected short-term negative impacts associated with the construction phase of the proposal and has recommended conditions to minimise the construction related impacts on the surrounding developments.</p> <p>Overall, the Department is satisfied that sufficient measures have been proposed and conditioned to mitigate these impacts. The Department has recommended that the development be undertaken in accordance with the recommendations of the SIA and addendum SIA.</p>

Issue	Findings	Department's consideration and recommended conditions
	<p>The SIA found that potential impacts would include temporary traffic and parking impacts from construction activities. It noted that these impacts would be mitigated through implementation of construction management plan, which includes agreed timeframes to utilise the private access road as well as the establishment of the PCG (as discussed in Section 6.1). As part of the addendum SIA, further noise testing was undertaken from the Arranounbai School to simulate potential construction noise. Refer to Section 6.3 for further discussion.</p> <p>The SIA also identified health and wellbeing impacts to the existing students relocating to the new school as well the Arranounbai School students during the relocation. As such, a Transition Action/Education Readiness Plan is proposed to be developed by the Applicant. This plan aims to address issues associated with the transition of students to the new school as well as consider the potential impacts of the relocation on the Arranounbai School community. The plan would provide inclusive opportunities to build awareness of the new school (e.g. tours and way finding activities) and facilitate site visits for the Arranounbai School students.</p>	
Lighting	<p>The proposal includes lighting across the school site for safety and comfort. Lights include recessed ceiling lights under covered walkways, a light pole at the entrance of the driveway access to the school carpark and floodlights for the sports field. Specifications of sports field and courts lighting are detailed in Section 2.2; however, it is noted that the locations of the light poles would be confirmed at detailed design.</p> <p>In their advice, Council referred to their DCP and advised that above ground light spill from sports fields must be contained wholly within the site. EHG in their submission noted that artificial lighting should be reduced where possible as it would have potential indirect impacts on native vegetation</p>	<p>The Department considers the proposal would not result in adverse lighting impacts, noting lighting would be designed and installed in accordance with the relevant Australian Standards and mitigation measures associated with lighting would be implemented.</p> <p>The Department has recommended conditions requiring that the Applicant must submit evidence, from a suitably qualified practitioner to the Certifier, that demonstrates that installed lighting associated</p>

Issue	Findings	Department's consideration and recommended conditions
	<p>and habitat in areas of retained vegetation.</p> <p>As part of the RtS, the Applicant noted that no light spill is to occur in areas of retained vegetation on the subject land, or adjacent to the subject land.</p> <p>Mitigation measures were proposed to address lighting impacts and included:</p> <ul style="list-style-type: none"> • sports field lighting would be designed to satisfy the amateur and recreational lighting criteria outlined in the Australian Standards (AS 2560.2.3) • lights would be turned off at night (where not required for security) • any essential lighting would be fitted with directional shades to avoid light spill into adjoining areas to reduce the likelihood of disruption to foraging activities of native animals. 	<p>with the development achieves the objective of minimising light spillage to any adjoining or adjacent sensitive receivers.</p>
Stormwater and dewatering management	<p>A Civil Engineering Report has been prepared as part of the EIS. The proposed development includes drainage works and three on site detention (OSD) tanks to be installed at the lowest points of the site to manage the water discharge from the site.</p> <p>Council requested confirmation on whether the development stormwater flows would have an impact on Council's stormwater systems as well as if there were any overland flow impacts to the subdivision development located downstream on Madison Way.</p> <p>An updated Civil Engineering Report and associated plans were provided which included further analysis and modelling. Results confirmed that the proposed development would not impact Council's stormwater system and that there would be no overland impacts to the houses on Madison Way. The Applicant and Council agreed to the realignment and lengthening of the existing open channel on site near the new basketball courts. This would reduce stormwater flow and improve the water quality of the open channel.</p> <p>During RtS, Council raised further comments associated with stormwater</p>	<p>The Department has considered the input from Council and DPE Water and recommended conditions requiring works be undertaken in accordance with designs proposed and that the stormwater management system be designed to comply with applicable Australian Standards and industry best practice guidelines.</p> <p>The Department acknowledges that dewatering is not expected to be intercepted during construction and subsequently the need to prepare a dewatering management plan is not required. Should groundwater be intercepted, a dewatering management plan will be required and a Water Access Licence (WAL) under the <i>Water Management Act 2000</i> must be obtained, unless an exemption applies under the</p>

Issue	Findings	Department's consideration and recommended conditions
	<p>quality particularly regarding the insufficient assessment for the significant increase in impervious area and correlated runoff.</p> <p>DPE Water in their advice noted that groundwater is likely to be intercepted given that the updated Civil Engineering Report stated that groundwater and seepage water are to be treated prior to discharge into Council's stormwater system. As such, DPE Water recommended that the Applicant prepare a Dewatering Management Plan in consultation with DPE Water which would detail the groundwater conditions prior to and during construction and provide an assessment against the 'minimal impact considerations' of the Aquifer Interference Policy. DPE Water advised if the Applicant were to rely on the exemptions of the Water Management (General) Regulation 2018, the Dewatering Management Plan must also detail mitigation measures to limit post construction groundwater take to no more than 3 ML/year.</p> <p>As a response, the Applicant provided additional information to clarify that most of the construction work of the site would be above ground level and where works are below ground level, the closest excavation works come to observed groundwater levels is the carpark with a finished floor level being higher than observed. The data from groundwater monitoring wells and boreholes across the site for measuring groundwater suggests the works would not intersect groundwater and as such dewatering would not be required.</p>	<p>Water Management (General) Regulation 2018.</p> <p>The Department is satisfied that stormwater would be managed across the site with the proposed civil works and recommended conditions.</p>
Contamination	<p>A Preliminary Site Investigation (PSI) and Detailed Site Investigation (DSI) was included with the EIS. The DSI has identified the likelihood of contamination on site:</p> <ul style="list-style-type: none"> anthropogenic materials were observed in subsurface fill materials broadly across the site, generally including bricks, tile fragments, clay pipes, scrap steel and PVC (Polyvinyl Chloride) 	<p>The Department has considered the information provided by the Applicant.</p> <p>The Department is satisfied that the site is suitable for the use of a school, subject to recommended conditions requiring the preparation and implementation of an unexpected finds protocol to manage any contamination.</p>

Issue	Findings	Department's consideration and recommended conditions
	<ul style="list-style-type: none"> • slight sewage odours also were noted in subsurface soils in boreholes and test pits as part of investigations undertaken at the site • while asbestos was not observed in subsurface soils across the site, confirmed asbestos containing material (ACM) was identified in pipe insulations at a fill embankment in the western portion of the site, where the proposed games field would be located • previous surveys (undertaken in 2021) also noted fragments of confirmed ACM in localised areas surrounding the McLeod House • additional unexpected finds of ACM may be present at the site in surface and subsurface soils. <p>The DSI concluded that the site can be made suitable for the proposed development as per the requirements of the Resilience and Hazards SEPP subject to the following measures:</p> <ul style="list-style-type: none"> • preparation of a Remedial Action Plan (RAP) to manage the identified risks • preparation for a Construction Environmental Management Plan (CEMP). <p>Overall, it was found that the site would be suitable for the proposed use subject to further investigation and implementation of standard mitigation measures.</p>	<p>In addition, recommended conditions include:</p> <ul style="list-style-type: none"> • recommendations as per the DSI report prepared by Tetra Tech Coffey, dated 15 June 2021 • implementation of the RAP prepared by Aurecon 27 October 2022 • preparation and implementation of an unexpected finds protocol to manage any contamination • should suspected asbestos containing materials be encountered on site, the affected area must be fenced off and assessed by a licenced asbestos assessor.
Aboriginal Cultural Heritage	<p>An Aboriginal Cultural Heritage Assessment Report (ACHAR) was included in the EIS which identified no known Aboriginal sites, objects or Potential Archaeological Deposits located within the study area or proposed development footprint.</p> <p>The site is not identified as, nor located within proximity to, any local or state heritage items. Further, the site is not located within, nor within proximity to, any heritage conservation area.</p>	<p>The Department has considered the findings and recommendations of the ACHAR and the advice provided by Heritage NSW. In accordance with Heritage NSW's advice and the ACHAR, the Department has recommended a condition that requires the implementation of an unexpected finds protocol.</p> <p>The Department considers that the proposed school can be undertaken with</p>

Issue	Findings	Department's consideration and recommended conditions
		negligible impacts upon Aboriginal Cultural Heritage.
Historic Heritage	<p>A Statement of Heritage Impact (SHI) was prepared as part of the EIS. The SHI considered the European heritage significance of the site and its former uses and concluded that the site does not contain any State or local listed heritage items.</p> <p>There is one locally listed heritage item and one locally listed Landscape Conservation Area within the vicinity of the site:</p> <ul style="list-style-type: none"> • Manly Dam and Surrounds (Item C9 under the LEP) located 300m south of the site • Warringah Reservoir and attached Valve House (Item I130 under the LEP located 400m east of the site). <p>The proposed school site is a considerable distance and is screened by development and vegetation which would ensure that the proposal would have no impact on the heritage significance of this item and conservation area.</p> <p>The SHI determined that the proposal would not have a detrimental impact on the significance of the heritage item and conservation area. However, it recommended that an interpretation plan be prepared and implemented, and interpretive materiality be used to reflect the former Country Children's Hostel that occupied the site.</p>	<p>The Department is satisfied that the SHI adequately assessed potential impacts on the heritage significance of the surrounding heritage listed items. The Department notes that the development would be outside the curtilage of the heritage items and considers it unlikely that the built form and urban context of the development would have a detrimental impact on the surrounding heritage listed items.</p> <p>The Department has recommended conditions of consent relating to the implementation of an unexpected finds protocol as well as the preparation and implementation of a Heritage Interpretation Plan.</p>
Bushfire	<p>The site is mapped as being located on bushfire prone land. A Bushfire Protection Assessment report was submitted with the EIS. The Assessment identified that the new school is located more than 240m from the primary bushfire hazard in the Manly Dam Reserve to the south and more than 300m to the hazard to the southwest.</p> <p>The Assessment determined that:</p> <ul style="list-style-type: none"> • proposed buildings need to be designed and constructed in 	<p>The Department has considered the Bushfire Protection Assessment report and advice of NSW RFS. The Department is satisfied that bushfire has been considered and that suitable bushfire protection measures have been proposed.</p> <p>The Department has recommended that the development (including landscaping) be undertaken in accordance with the</p>

Issue	Findings	Department's consideration and recommended conditions
	<p>accordance with the identified Bushfire Attack Level (BAL) of 12.5</p> <ul style="list-style-type: none"> the property around the buildings is considered the inner protection area (IPA) and would be provided a minimum 67m wide Asset Protection Zone (APZ) to the west of Block G and a 35m wide APZ to the north of Block A & G (note that only part of the site is covered by the IPA) the remaining site would be considered Outer Protection Areas (except for the Duffys Forest vegetation on the north-west and south west of the site) existing trees would have reduced hazard and the proposed trees adjacent to the buildings fronting Aquatic Drive would meet IPA requirements as per Appendix of the PBDP 2019 (i.e. 2-5m gap canopy) the proposed school access provides satisfactory emergency access for firefighting appliances and evacuation purposes. <p>NSW RFS advised that suitable emergency and evacuation arrangements for occupants of Special Fire Protection Purpose Developments (i.e. educational establishments) including a Bush Fire Emergency Management and Evacuation Plan are required. This plan would establish protocols for the initial relocation of students and staff and evacuation of the school site.</p> <p>Construction of buildings and landscaping work with the required asset protection areas must comply with Appendix 4 of <i>Planning for Bush Fire Protection 2019</i>.</p>	<p>recommendations of the Bushfire Protection Assessment, including the preparation of a Bushfire Emergency and Evacuation Plan.</p>

7 Evaluation

The Department has reviewed the EIS, the RtS and assessed the merits of the proposal, taking into consideration advice from the public authorities, including Council. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been thoroughly addressed.

The key issues identified with the proposal include traffic, transport, noise, parking and built form and urban design. All environmental issues associated with the development have been addressed. The Department concludes that the impacts of the development would be acceptable and could be appropriately mitigated through conditions of consent.

The surrounding road network and local streets could accommodate construction and operational traffic and parking demands generated by the proposal. The proposed built form is appropriate in the context of the site and would make a positive contribution to the neighbourhood. Noise and other matters have been appropriately addressed through amendments and commitments of the Applicant, as well as the Department's recommended conditions of consent. The Department has recommended conditions to manage the construction and operational impacts on the surrounding land uses and requires mitigation measures to be implemented.

The development is consistent with the objects of the EP&A Act and with the state's strategic objectives as it would improve education results through the provision of a new education facility in an area that is undergoing population growth.

The development is in the public interest as it would provide benefits including:

- a new high school to support current and predicted growth in demand for secondary student enrolments within the school catchment
- provision of new educational facilities in an accessible area for the community
- investment of \$112,497,000 and provision of 120 operational jobs and 163 direct construction jobs.

Consequently, the Department considers the development is in the public interest and should be approved.

8 Recommendation

It is recommended that the Executive Director, Infrastructure Assessments, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report.
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application.
- **agrees** with the key reasons for approval listed in the notice of decision.
- **grants consent** for the application in respect of SSD-26876801, subject to the conditions.
- **signs** the attached development consent and recommended conditions of consent (see attachment).

Prepared by:



Tuong Vi Doan
Planning Officer
Social and Infrastructure Assessments

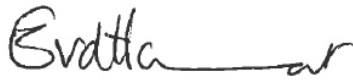
Recommended by:



Madeline Thomas
Team Leader
Social and Infrastructure Assessments

9 Determination

The recommendation is **Adopted** by:

A handwritten signature in black ink, appearing to read 'Erica van den Honert', followed by a long horizontal line.

23 November 2023

Erica van den Honert

Executive Director

Infrastructure Assessments

Appendices

Appendix A – List of referenced documents

The following supporting documents and supporting information to this assessment report can be found on the Department of Planning and Environment website as follows.

1. Environmental Impact Statement
<https://www.planningportal.nsw.gov.au/major-projects/projects/new-forest-high-school>
2. Submissions
<https://www.planningportal.nsw.gov.au/major-projects/projects/new-forest-high-school>
3. Applicant's Response to Submissions
<https://www.planningportal.nsw.gov.au/major-projects/projects/new-forest-high-school>
4. Applicant's Response to Submissions Supplementary information
<https://www.planningportal.nsw.gov.au/major-projects/projects/new-forest-high-school>

Appendix B – Statutory Considerations

Environmental Planning Instruments (EPIs)

To satisfy the requirements of section 4.15(a)(i) *Environmental Planning and Assessment Act 1979* (EP&A Act), this report includes references to the provisions of the EPIs that govern the carrying out of the project and that have been taken into consideration in the Department's environmental assessment.

Controls considered as part of the assessment of the proposal are:

- State Environmental Planning Policy (Planning Systems) 2021
- State Environmental Planning Policy (Transport and Infrastructure) 2021
- State Environmental Planning Policy (Resilience and Hazards) 2021
- State Environmental Planning Policy (Biodiversity and Conservation) 2021
- State Environmental Planning Policy (Industry and Employment) 2021
- Warringah Local Environmental Plan (WLEP) 2011.

Compliance with Controls

State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP)

Chapter 2 – State and Regional Development

The aims of the chapter 2 of the Planning Systems SEPP are to identify state significant development (SSD), state significant infrastructure (SSI), and confer functions on regional planning panels to determine development applications.

An assessment of the development against the relevant considerations of the Planning Systems SEPP is provided in **Table B1**, identifying the proposal as SSD.

Table B1 | Planning Systems SEPP compliance table

Relevant sections	Consideration and comments	Complies
2.1 Aims of Chapter The aims of this Policy are as follows: (a) to identify development that is State significant development	The proposed development is identified as SSD.	Yes
2.6 Declaration of State significant development: section 4.36 (1) Development is declared to be State significant development for the purposes of the Act if: (a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and (b) the development is specified in Schedule 1 or 2.	The proposed development is permissible with development consent. The proposal has a capital investment value of more than \$20 million for the purpose of a new school under clause 15(2) of Schedule 1 of the Planning Systems SEPP.	Yes

State Environmental Planning Policy (Transport and Infrastructure) 2021

Chapter 2 – Infrastructure

Chapter 2 of the Transport and Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the state by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to types of infrastructure development, and providing for consultation with relevant public authorities about certain development during the assessment process.

An assessment of the development against the relevant considerations of Chapter 2 is provided in **Table B2**.

Table B2 | Consideration of the relevant provisions of Infrastructure SEPP

Clause(s)	Considerations and comment
2.48 Development likely to affect an electricity transmission or distribution network	As the proposal involves works that could affect the electricity network, the application was referred to Ausgrid in accordance with the requirements of the SEPP. Refer to Section 5.4 for comments from Ausgrid. Advisory notes are included in the recommendation to ensure relevant approvals are obtained and satisfactory arrangements are made in relation to electricity supply.

Chapter 3 - Educational Establishments and Child Care Facilities

Chapter 3 of the Transport and Infrastructure SEPP aims to simplify and standardise the approval process for child care centres, schools, TAFEs and universities while minimising impacts on surrounding areas and improving the quality of the facilities. The SEPP includes planning rules for where these developments can be built, which development standards can apply and constructions requirements. The application has been assessed against the relevant provisions of Chapter 3 of the SEPP.

Section 3.36(1) states that development consent may be granted for development for the purpose of a school that is on land in a prescribed zone. Relevantly, zone SP1 Special Activities is identified as a prescribed zone.

Section 3.36(6) required the consent authority to consider the design quality of the development in accordance with the design quality principles set out in Schedule 8 and whether the development enables the use of school facilities to be shared with the community. An assessment of the development against the design principles is provided in **Table B3** and design has been considered in **Section 6.2** of this report. The sharing of facilities has been considered in **Section 6.3** and the Department supports that the Applicant is intending to offer facilities of the development for community use.

Section 3.43 states that development consent may be granted for development for the purpose of a school that is SSD even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted. The proposed school development considers the development standards under WLEP 2011 on a merit basis or any other instrument. Merit assessment is found under **Section 6.4**.

Section 3.28 requires traffic generating development that involves addition of 50 or more students or involves new premises that has direct vehicular or pedestrian access to any road to be referred to TfNSW. The application was referred to TfNSW in accordance with this section.

Table B3 | Consideration of the design quality principles

Design principles	Response
Principle 1 - context, built form and landscape	<p>As discussed in Section 6.2, the proposed built form has been designed to be sympathetic to the surrounding area, and to ensure the proposal does not result in adverse impacts upon the surroundings.</p> <p>Buildings have been separated and set back from site boundaries in consideration of surrounding residents and amenity.</p> <p>The proposal provides a design that considers Connection to Country architecturally through siting of the school with connected open space areas, built form separation, connections to land and water and consideration of materials and native plantings. The site layout provides spatial connection through provision of entry and gathering places and through linkages.</p> <p>It is noted that most of the proposed built form is within the 8.5m LEP height limit, however there are portions of the roof structure that protrude past the height limit. The exceedance of the height controls is primarily due to the sloping topography of the site, functional requirements of the school buildings and the desire to limit school buildings to two-storey to maintain visual privacy to adjacent residential developments.</p>
Principle 2 - sustainable, efficient and durable	<p>The proposal includes ecologically sustainable development (ESD) measures (Section 4.4.3).</p>
Principle 3 - accessible and inclusive	<p>The proposal has been designed to be accessible and inclusive through the two-storey design and the provision of accessible paths of travel around the school buildings.</p> <p>The design of facilities (sports courts and school hall) adjacent to the private access road allows for easy community use, without disruption to school operations, subject to agreement.</p> <p>The Department has recommended conditions requiring wayfinding signage to identify key areas within the school and assist visitors to navigate the site.</p>
Principle 4 - health and safety	<p>The design of the school buildings provides a safe and secure school environment. The proposal has considered Crime Prevention Through Environmental Design principles.</p> <p>The proposal would clearly delineate the pedestrian entrances into the school to allow the management of visitors to the site. Environmental constraints have been considered and addressed, including flooding (refer to Section 6.2), bushfire and site contamination (refer to Section 6.6).</p>
Principle 5 - amenity	<p>The proposal creates a variety of interesting and useable outdoor spaces between buildings, all surrounding the central courtyard area and circulation routes connecting across the site. The proposal has been designed with a building layout that maximises solar access during the winter solstice.</p> <p>As the site is located immediately adjacent a busy road, the design considers noise mitigation measures to ensure amenity is maintained for occupants.</p>

Principle 6 - whole of life, flexible, adaptable	The proposed learning areas are flexible and provide adaptable learning spaces throughout the buildings. The proposed built form provides a mix of undercover areas for shade that provide flexible outdoor learning areas.
Principle 7 - aesthetics	The proposal includes a purpose-built development that meets the contemporary needs of students while being sympathetic in scale, form and design to surrounding development. Building form and composition, in conjunction with site landscaping, ensures the school makes a positive contribution to the streetscape and presents as inviting and aesthetically pleasing to the surrounding public domain.

State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP)

Chapter 4: Remediation of Land

Chapter 4 of the Resilience and Hazards SEPP aims to ensure that potential contamination issues are considered in the determination of a development application. The Applicant's EIS and RtS have addressed contamination on site and concluded that the site is suitable for the use as an educational establishment. The Department has considered the Detailed Site Investigation and is satisfied that the site is suitable for the proposed use as a school as required by the SEPP.

State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP)

Chapter 2: Vegetation in non-rural areas

Chapter 2 of the Biodiversity and Conservation SEPP aims to protect the biodiversity values of trees and other vegetation in non-rural areas. The proposal would involve the removal of 231 trees and the most valuable vegetation (including Duffys Forest community) on site has been protected where practicable and would be supported by additional tree planting for canopy coverage. Refer to **Section 6.4.2** for detailed discussion.

Chapter 4: Koala Habitat Protection

Chapter 4 of the Biodiversity and Conservation SEPP aims to encourage the conservation and management of areas of natural vegetation that provide koala habitat, aiming to reverse the current trend of koala population decline.

The BDAR identifies while the site is located within the Warringah local government area, a listed government area to which Chapter 4 of the Biodiversity and Conservations SEPP applies, the site does not meet the criteria for Core or Potential Koala Habitat as the vegetation on the site consists of planted native vegetation, planted exotic vegetation and managed exotic grasslands.

The Department is satisfied that the Applicant has adequately demonstrated that the site is not core koala habitat and would not impact koala populations or habitats.

State Environmental Planning Policy (Industry and Employment) 2021 (Industry and Employment SEPP)

Chapter 3: Advertising and signage

Chapter 3 of the Industry and Employment SEPP applies to all signage that under an EPI can be displayed with or without development consent and is visible from any public place or public reserve. The proposal includes the installation school name, school emblem and building name signage (all to be backlit). The main entry sign would be a backlit metal emblem (1,800mm in diameter) and lettering (500mm tall) and have a length of 9,500mm mounted to a 2.4m lightweight wall. The school emblems on Block C and Block G would be backlit lightboxes approximately 2,000mm in diameter and 100mm deep. The school's name and theatre name would also be provided at secondary entry points to the school.

Under Section 3.11, consent must not be granted for any advertising sign application unless the proposal is consistent with the objectives of the SEPP and with the assessment criteria which are contained in Schedule 1. An assessment of the signs against Schedule 1 of SEPP 64 is provided in **Table B4** and the Department is satisfied the proposal is consistent with the assessment criteria, which have been developed to ensure the objectives of the SEPP have been achieved.

Table B4 | SEPP 64 Schedule 1 Compliance Table

Schedule 1 – Assessment Criteria	Compliance
Character of the area	
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The proposed signs would be compatible with the existing and developing character of the locality. The location of the signs would be appropriately placed at the entrance of the school and the size of the signs is considered appropriate.
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	The proposed signs are consistent with what would be expected for a school location. There are no common design themes for the locality.
Special areas	
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	<p>The proposed signs would not detract from the visual amenity of surrounding residential areas.</p> <p>The locations are not part of any environmentally sensitive area or area of identified heritage. The scale and design of the signs is considered appropriate for their context.</p>
Views and vistas	
Does the proposal obscure or compromise important views?	The proposed signs would not obscure or compromise any view.
Does the proposal dominate the skyline and reduce the quality of vistas?	The proposed signs would not dominate the skyline nor reduce the quality of any vistas.
Does the proposal respect the viewing rights of other advertisers?	The proposed signs would not affect any other advertisers.
Streetscape, setting or landscape	

Schedule 1 – Assessment Criteria	Compliance
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The scale of the proposed signs would be appropriate.
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The signs would complement the school design and do not detract from the visual interest of the streetscape.
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	The signs are simple in design and would not result in visual clutter.
Does the proposal screen unsightliness?	The signs have been designed in keeping with the site's educational establishment use.
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The signs would sit well below the height of proposed buildings and trees.
Does the proposal require ongoing vegetation management?	No vegetation management is required by the proposed signs.
Site and building	
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The signs are of appropriate scale and proportion and are considered relatively understated in the context of the entire site.
Does the proposal respect important features of the site or building, or both?	The signs are appropriately located at the site entrances and would not impact on any other important features of the site.
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposed signs have been appropriately located to fit in with the design of the proposed buildings.
Associated devices and logos with advertisements and advertising structures	
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	Safety devices are not necessary for the proposed design of the signs.
Illumination	
Would illumination result in unacceptable glare?	<p>The proposal includes the school emblems, theatre building name and naming of the school to be backlit, refer to Section 2.2 for more detail on signage proposed.</p> <p>Conditions associated with compliance with AS 4282-2019 and curfew would be imposed to the backlit signage.</p> <p>The illumination of signage must be switched off between 6 pm and 7 am.</p>
Would illumination affect safety for pedestrians, vehicles or aircraft?	
Would illumination detract from the amenity of any residence or other form of accommodation?	
Can the intensity of the illumination be adjusted, if necessary?	

Schedule 1 – Assessment Criteria Compliance

Is the illumination subject to a curfew

Safety

Would the proposal reduce the safety for any public road?	The proposed signs would not affect road safety.
Would the proposal reduce the safety for pedestrians or bicyclists?	The proposed signs would not affect pedestrian or cyclists' safety.
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The proposed signs would not obscure any sightlines from public areas.

State Environmental Planning Policy (Sustainable Buildings) 2022 (Sustainable Buildings SEPP)

The Sustainable Buildings SEPP encourages the design and delivery of more sustainable buildings across NSW. It sets sustainability standards for residential and non-residential development and starts the process of measuring and reporting on the embodied emissions of construction materials.

The sustainability provisions for non-residential development include:

- embodied emission measurement and reporting for all developments
- energy standards for large commercial development with energy performance to be verified after the building is occupied and offsets purchased for residual emissions
- minimum water standards for large commercial development
- certain developments to be 'all electric' or capable of converting to operate without fossil fuels by 2035.

The Sustainable Buildings SEPP and associated amendments to Environmental Planning and Assessment Regulation 2021 and Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 will commence on 1 October 2023. Savings and transitional provisions have also been included so that the Sustainable Buildings SEPP does not apply to development applications that have already been submitted, but not yet determined by the commencement date. A draft version of the SEPP was never exhibited. Therefore, the Sustainable Buildings SEPP is not applicable to the assessment of the subject SSD application, either as a draft or operative EPI.

Warringah Local Environmental Plan 2011 (WLEP)

The WLEP aims to encourage the development of land for arts and cultural uses, improve economic, environmental, social and cultural resources prospects for the community, promote sustainability to meet the needs of the existing and future residents of the Northern Beaches LGA. It also aims to conserve and protect natural resources, promote community health and recreational activities and foster economic, environmental and social well-being.

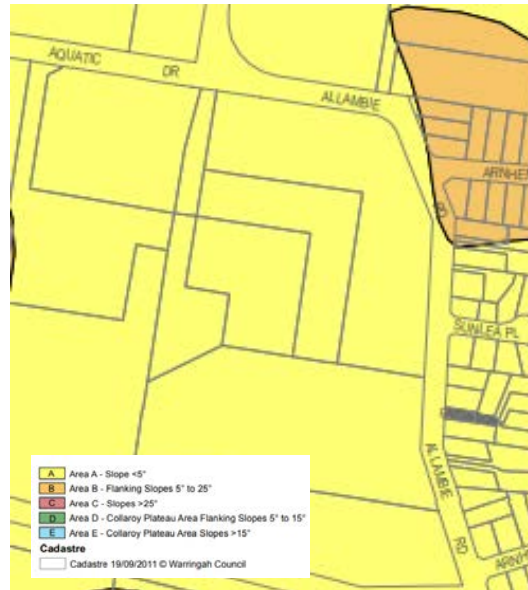
The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the WLEP and those matters raised by Council in its assessment of the development. The Department concludes the development is consistent with the relevant provisions of the WLEP. Consideration of the relevant clauses of the WLEP is provided in **Table B5**.

Table B5 | Consideration of the WLEP 2011

WLEP 2011	Department Comment/Assessment
Clause 2.3 Zone Objectives and Land Use Table	<p>The new campus is zoned SP1 Special Activities under WLEP and development for the purpose of an educational establishment is permissible with consent under this SP1 zone.</p> <p>The Development is considered to be consistent with relevant zone objectives, including:</p> <ul style="list-style-type: none"> <i>To provide for special land uses that are not provided for in other zones.</i> <i>To provide for sites with special natural characteristics that are not provided for in other zones.</i> <i>To facilitate development that is in keeping with the special characteristics of the site or its existing or intended special use, and that minimises any adverse impacts on surrounding land.</i> <p>The proposed works would provide high quality learning and teaching spaces with flexible layout arrangements and durable finishes ensuring the proposal operates as a long-life, high utility and low-maintenance educational establishment.</p>
Clause 2.7 Demolition requires development consent	<p>Demolition does not form part of this application and would be undertaken in accordance with DA2011/1633.</p>
Clause 4.3 Height of Buildings	<p>The site is subject to an 8.5m maximum height of building standard. The proposed new buildings are proposed to be limited to a maximum of two storeys.</p> <p>The proposal exceeds this development standard, with the maximum building height reaching 12.45m at Block C. Despite this non-compliance, the majority of the buildings are within the 8.5m maximum building height, and the proposal is considered to sit within the mixed built form character of the area and limits privacy impacts, overshadowing and streetscape impacts.</p> <p>Overall, the height of the building is considered to be appropriate in the context of the surrounding locality, existing buildings on site, the streetscape and proposed landscaping (see Section 6.4).</p>
Clause 4.4 Floor space ratio	<p>Not applicable.</p>
Clause 5.10 Heritage conservation	<p>The site is not identified as containing any listed heritage significance.</p> <p>No known Aboriginal archaeological sites or objects, or Aboriginal places of significance are located within the site boundary.</p>
Clause 5.21 Flood Planning	<p>The site is identified as being flood prone. A flood assessment has been provided as part of the application and discussed in Section 6.2.</p> <p>The proposal has been informed by involved input regarding flood risk and stormwater management by EHG, Council and SES.</p> <p>The Department is satisfied that subject to conditions, the development is compatible with the flood behaviour of the land, would not adversely affect flood behaviour, would not adversely affect the safe occupation or efficient evacuation of people in the event of a flood, would incorporate measures to manage risk to life in the event of a flood and would not adversely affect the environment.</p>
Clause 6.2 Earthworks	<p>Earthworks form part of the proposed development. The Department has considered the proposed extent of earthworks in its assessment.</p>

Conditions are recommended to ensure earthworks would not result in unacceptable impacts.

Clause 6.4 Development on sloping land



Whilst the site slopes to the south, it is not identified as an area of high slope in accordance with the WLEP. Nonetheless, the development has been sensitively designed to consider the slope of the site. The site proposes down pipes and collection pits to convey stormwater to three OSD tanks across the site as well as pollution control devices to manage stormwater discharge.

Part 8 – Frenchs Forest Precinct

Not applicable. The new high school is not within the Frenchs Forest Precinct.

Other policies

In accordance with clause 2.10 of the Planning Systems SEPP, Development Control Plans do not apply to SSD. However, the objectives of relevant controls under the Warringah Development Control Plan 2011, where relevant, have been considered in **Section 6**.

Appendix C – Recommended Instrument of Consent

<https://www.planningportal.nsw.gov.au/major-projects/projects/new-forest-high-school>