Review of Environmental Factors

Gledswood Hills High School

Document version: Version 3 Date: 14/04/2025



Acknowledgement of Country

The NSW Department of Education acknowledges the traditional custodians of the land on which the new school of Gledswood Hills High School is proposed.

We pay our respects to their Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of Australia.

The NSW Department of Education is committed to honouring Aboriginal peoples' cultural and spiritual connections to the land, waters and seas and their rich contribution to society.

The NSW Department of Education recognises that by acknowledging our past, we are laying the groundwork for a future that embraces all Australians; a future based on mutual respect and shared responsibility.

Declaration

This Review of Environmental Factors (REF) has been prepared by Ethos Urban on behalf of the NSW Department of Education (department) and assesses the potential environmental impacts which could arise from the development of the new Gledswood Hills High School at 9 Gregory Hills Drive, Gledswood Hills.

This REF has been prepared in accordance with the *Guidelines for Division 5.1 Assessments* and any relevant addendum (the Guidelines), and the relevant provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP).

This REF provides a true and fair review of the activity in relation to its likely impact on the environment and the information it contains is neither false nor misleading. It addresses, to the fullest extent possible, all the factors listed in Section 3 of the Guidelines, the EP&A Regulation and the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

In preparing the REF I have declared any possible conflict of interests (real, potential or perceived) and I do not consider I have any personal interests that would affect my professional judgement.

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Document Control

Document version: Version 3

Date: 14/04/2025

Version history

Version	Date	Description	Prepared by	Approved by
1	23/01/25	Draft	Charlotte Warnant Matthew Thrum	Chris McGillick
2	31/01/25	Final	Matthew Thrum	Chris McGillick
3	14/04/25	Post-Exhibition Update	Matthew Thrum	Sophie Kusznirczuk

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Abbreviations

Abbreviation	Description
AHD	Australian Height Datum
AHIP	Aboriginal Heritage Impact Permit
AHIMS	Aboriginal Heritage Information Management System
BC Act 2016	Biodiversity Conservation Act 2016
BC Regulation	Biodiversity Conservation Regulation 2017
BAM	Biodiversity Assessment Method
BCA	Building Code of Australia
BDAR	Biodiversity Development Assessment Report
СА	Certifying Authority
CM Act	Coastal Management Act 2016
СЕМР	Construction Environmental Management Plan
CWC	Connecting with Country
The department	NSW Department of Education
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DPC	Department of Premier and Cabinet
DPHI	Department of Planning, Housing and Infrastructure

Abbreviation	Description
Design Guide	Design Guide for Schools published by the Government Architect in May 2018
EIS	Environmental Impact Statement
ЕМР	Environmental Management Plan
EPA	Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2021
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPI	Environmental Planning Instrument
EPL	Environment Protection License
ESD	Ecologically Sustainable Development
FM Act	Fisheries Management Act 1994
GBCA	Green Building Council of Australia
На	Hectares
Industry and Employment SEPP	State Environmental Planning Policy (Industry and Employment) 2021
LEP	Local Environmental Plan
LGA	Local Government Area
MNES	Matters of National Environmental Significance
NCC	National Construction Code
NorBE	Neutral or Beneficial Effect on Water Quality Assessment Guideline (2022)
NPW Act	National Parks and Wildlife Act 1974
NPW Regulation	National Parks and Wildlife Regulation 2009
NPWS	National Parks and Wildlife Service (part of EES)
RFS	NSW Rural Fire Service
NT Act (Cth)	Commonwealth Native Title Act 1993
OEH	(Former) Office of Environment and Heritage
PCEMP	Preliminary Construction Environmental Management Plan
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021
POEO Act	Protection of the Environment Operations Act 1997
Proponent	NSW Department of Education
REF	Review of Environmental Factors
RF Act	Rural Fires Act 1997
Resilience and Hazards SEPP	State Environmental Planning Policy (Resilience and Hazards) 2021
Roads Act	Roads Act 1993
SCPP DoE	Stakeholder and community participation plan, published by the NSW Department of Education October 2024

Abbreviation	Description
SCPP DPHI	Stakeholder and community participation for new health services facilities and schools published by the Department of Planning, Housing and Infrastructure October 2024
SDRP	School Design Review Panel
SEPP	State Environmental Planning Policy
SIS	Species Impact Statement
TI SEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021
WM Act	Water Management Act 2000

Executive Summary

The Proposal

The proposal relates to the construction and operation of a new high school (the activity) called Gledswood Hills High School, located at 9 Gregory Hills Drive, Gledswood Hills (the site). The proposed activity seeks approval for the construction of a new high school, broadly comprising of:

- Three (3) school buildings along the northern and western site boundaries.
- A school hall.
- An assembly area, sports field, multi sports courts and landscaping.
- Car and bike parking.
- Associated on and off-site infrastructure to support the school, including a new pedestrian crossing, a kiss & drop zone and relocation of the existing bus stop on Gregory Hills Drive to the site frontage.

The site is largely unconstrained. It is not affected by flooding nor classified as bushfire prone land. The site does not contain items of environmental heritage significance. The site is not listed on the register of contaminated sites and is not required to undergo further remediation.



Figure 1 Proposed Gledswood Hills High School

Source: DJRD

Planning Pathway

The proposal involves the development of a new government school by the Department of Education (the department), a public authority, on land that does not contain an existing or approved school and is in a prescribed zone. Accordingly, pursuant to Sections 3.37A of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP), the proposed works are classified as development which may be carried out without consent.

Therefore, the proposal is considered an 'activity' for the purposes of Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and is subject to an environmental assessment. For the purposes of this proposal, the department is the proponent and the determining authority

and the required environmental assessment is in the form of a Review of Environmental Factors (REF). The REF has been prepared in the accordance with the *Guidelines for Division 5.1* Assessments (DPE, June 2022) and the *Guidelines for Division 5.1* assessments - consideration of environmental factors for hospital and school activities Addendum (Department of Planning Housing and Infrastructure (DPHI), October 2024).

Consultation

Consultation has been undertaken with in accordance with statutory requirements under the TI SEPP and having regard to the *Stakeholder and community participation plan for new health services facilities and schools* (DPHI, October 2024) (SCPP DPHI) and the Stakeholder and *Community participation plan For new schools and major school upgrade projects undertaken under Division 5.1 of the EP&A Act 1979* (Department of Education, October 2024) (SCPP DoE). The outcomes of public exhibition have been considered and are reflected in this REF.

Non-statutory consultation was also undertaken prior to lodgement with a range of community and government stakeholders throughout the design process. Stakeholder comments received included Camden Council, Transport for NSW, the NSW Rural Fire Service (RFS) and State Emergency Services (SES). Comments received have been carefully considered and responded to.

Environmental Impacts

The REF provides an assessment of the environmental impacts of the proposal. It considers, to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the proposed activity as is required under the EP&A Act. The key environmental impacts identified in the preparation of the REF are as follows:

Construction

- Noise and vibration Impact during the construction works will require management and mitigation, primarily within proximity to sensitive nearby childcare receivers. Appropriate management measures where construction activities exceed noise levels will be implemented.
- Traffic and waste These factors may cause impacts throughout construction but will be suitably mitigated through the implementation of a detailed Construction Management Plan (and supporting documentation) that will be prepared by the Principal Contractor prior to the commencement of works.
- Erosion and sediment / air and dust Impact during the construction works will require management and mitigation. Appropriate management measures will be implemented as part of the REF.
- Construction impacts are mitigated wherever possible, however, these impacts are also temporary.

• Operation

- Traffic The school will increase traffic volumes on the surrounding street network. However, there is sufficient capacity in the local traffic network and surrounding traffic intersections to accommodate the school. Measures to increase active travel and public transport usage will be promoted and have been integrated into the design which will further encourage sustainable transport options and reduce traffic.
- Noise The school will generate some noise resulting from the use of public address (PA) systems and school bell, pick up and drop off, outdoor play spaces

and services. However, these impacts are minor and will be suitability mitigated through attenuation and management measures.

The site is also subject to a wider approved Concept Development Application (Concept DA) (DA/2017/45/1). The proposed school will not unreasonably impact the ability of the broader precinct to be delivered in accordance with the Concept Approval and is generally in accordance with the relevant conditions of consent. Other relevant environmental impacts have been identified and assessed in this REF.

Justification and Conclusion

Based on the environmental assessment undertaken as part of this REF, it has been determined that the proposal will not result in any significant or long-term detrimental impacts. The potential impacts identified can be reasonably mitigated, and where necessary, managed through the adoption of suitable site practices and adherence to accepted industry standards.

The environmental impacts of the proposal are not likely to be significant. Therefore, it is not necessary for an Environmental Impact Statement (EIS) to be prepared and approval to be sought for the proposal from the Minister for Planning and Public Spaces under Part 5.1 of the EP&A Act. The proposed development will not have any effect on Matters of National Environmental Significance and approval of the activity under the Commonwealth EPBC Act is not required.

On this basis, it is recommended that the department determine the proposed activity can proceed in accordance with Part 5 of the EP&A Act and subject to the adoption and implementation of mitigation measures identified within this report.

1. Introduction

The NSW Department of Education (the department) proposes the construction and operation of a new high school (the activity) called Gledswood Hills High School located at 9 Gregory Hills Drive, Gledswood Hills (the site).

The proposal to provide the Gledswood Hills High School is consistent with the State Government's plan to expand public education in Western Sydney. The 2024-2025 budget is aiming to deliver record education funding including \$3.6 billion for new and upgraded schools in Western Sydney. The focus is on ensuring that the growing communities are receiving access to world class public education. The proposed activity will provide integral social infrastructure in an emerging urban environment experiencing significant population growth in the South West Growth Centre. The proposed activity is the direct result of the NSW Government commitment to deliver public education in Western Sydney. The department has committed to the construction of a new high school in the Gledswood Hills Area for the commencement of the 2027 school year.

This Review of Environmental Factors (REF) has been prepared by Ethos Urban on behalf of the department to determine the environmental impacts of the proposed construction and operation of Gledswood Hills High School. For the purposes of these works, the department is the proponent and the determining authority under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The purpose of this REF is to describe the proposal, examine and take into account all matters affecting or likely to affect the environment and to detail mitigation measures to be implemented to manage impacts.

The potential environmental impacts have been assessed in the accordance with the *Guidelines for Division 5.1 Assessments* (DPE, June 2022), Guidelines for Division 5.1 assessments - consideration of environmental factors for hospital and school activities Addendum (DPHI, October 2024), EP&A Act, the *Environmental Planning and Assessment Regulation 2021*, and the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The assessment contained within this REF has been prepared having regard to:

- Whether the proposed activity is likely to have a significant impact on the environment and therefore the necessity for an Environmental Impact Statement (EIS) to be prepared and approval to be sought from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act; and
- The potential for the proposal to significantly impact Matters of National Environmental Significance on Commonwealth land and the need to make a referral to the Australian Government Department of Environment and Energy for a decision by the Commonwealth Minister for the Environment on whether assessment and approval is required under the EPBC Act.

1.1 Background

The site is located within the Turner Road Precinct which forms one of the first land release precincts in the South West Growth Area that has since rapidly developed. Once complete, the Turner Road Precinct will provide over 4,000 new homes, and a range of local amenities including a 15,000m² town centre, 77 hectares (ha) of open space and 96ha of employment lands. As

indicated in **Figure 2** below, the proposed site is identified as 'business development' and is within the Turner Road Employment Area.



Figure 2 Turner Road Precinct Indicative Layout Plan (site shown indicatively in red)

Source: Camden Council, edits by Ethos Urban

The location of the proposed activity forms part of a larger site which includes eight separate lots. All eight lots are subject to an approved Concept Development Application (Concept DA) (DA/2017/45/1) for a mixed-use development comprising bulky goods premises, business premises, food and drink premises, indoor recreation facilities, two hotels and a cinema. On the subject site specifically, a series of bulky goods premises, a cinema and associated car parking were approved.

The Concept DA has undergone 13 modifications since its original approval in 2017. The most recent approval (modification 13) was determined by Camden Council on 22 February 2024. A detailed summary of the Concept DA is provided in **Section 5.1**.

2. The Site

2.1 Site Locality

The site is located at 9 Gregory Hills Drive, Gledswood Hills and is located within the Camden Local Government Area (LGA) (refer to **Figure 3**). It is located approximately 44km southwest of the Sydney CBD and 18km southwest of the Liverpool Central Business District (CBD). Gledswood Hills forms part of the Turner Road Precinct, located within the South West Growth Centre.



Figure 3 Surrounding locality Gledswood Hills

Source: Nearmap, Ethos Urban

2.2 Site Description

The site is irregular in shape and is legally described as Lot 2 in DP 1262720. The site topography consists of a 2m elevated pad that slopes steeply to each site frontage (refer to **Figure 6**). Atop this pad the site is relatively flat with a slight slope to the southwest. The school is bounded by Digitaria Drive to the north, a shared private Service Road to the east and Gregory Hills Drive to the south. The east of the site is bound by 10 and 10A Digitaria Drive, 9 (Lot 4) and 11 Gregory Hills Drive. Vehicular and pedestrian access to the eastern lots are provided by the Service Road. The west the site is bounded by 4 Digitaria Drive and 9 Gregory Hills Drive. Uses of the adjoining lots are summarised in **Table 1**, with further details in **Section 2.3.2**. The site contains no vegetation except for grass. The site is approximately 4.15ha in area, and is shown below in **Figure 4**. Additional site photos are included for reference in **Figure 5** to **Figure 10**.

Address	Lot	Description	
4 Digitaria Drive	8441/1272530	Existing childcare centre.	
10 Digitaria Drive	1/1275480	Existing childcare centre.	
10A Digitaria Drive	2/1275480	Vacant land. Concept approval for leisure centre.	
12 Digitaria Drive	4/1262720	Vacant land. Approved 90 room hotel.	
14 Digitaria Drive	843/1203105	Sydney Water infrastructure.	
7 Gregory Hills Drive	8442/1272530	Vacant land. Approved childcare centre.	
	8440/1218173	SOMA Wellness centre.	
11 Gregory Hills Drive	5/1262720	Fast food premises under construction.	







_50m

Figure 4 Site aerial

Source: Nearmap annotated by Ethos Urban

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Figure 5 Oblique aerial photo looking south (site outlined in red)

Source: Drone Wise annotated by Ethos Urban



Figure 6 Site topography (outlined in red)

Source: DJRD



Figure 7 Gregory Hills Drive looking to the east



Figure 8 Site boundary looking east along Digitaria Drive



Figure 9 Eastern boundary of the site



Figure 10

Service Road looking to the north

2.2.1 Ownership/Owners Consent

The site is legally identified as Lot 2 in DP 1262720, with the Minister for Education and Early Learning as landowner. Off-site works are proposed to be undertaken on the road reserve owned by Camden Council. A 'Notice of Intent' letter will be issued by the department to notify Council of the intended works.

2.2.2 Easements/Restrictions

In accordance with Government Gazette Number 486 (refer to **Appendix 32**), the following easements and restrictions apply to the site:

- (12) a right of carriageway 7.6m wide. This reflects the existing shared Service Road that runs along the eastern boundary.
- (14) an easement for services 9.6m wide. This easement contains the Service Road described above combined with an additional two metres in width to accommodate the necessary services.
- (23) a restriction that prohibits the placement or erection of anything within the Service Road described above.
- (25) a restriction that prohibits the placement or erection of a fence, gate or wall within 3
 metres of the easement boundaries of the Service Road described above.

• (26) – a fencing restriction, designed to prevent the original developer from having to contribute to the cost of dividing fences. The department will fund and deliver any fencing proposed.

2.3 Site Constraints and Opportunities

Consideration of site constraints and opportunities has been undertaken through a review of the Section 10.7 (2 & 5) Planning Certificates dated 2nd December 2024 (refer to **Appendix 2**), mapping under relevant Environmental Planning Instruments (EPIs), and a review of specialist consultant reports and other desktop assessments.

2.3.1 Constraints

Key site constraints considered through design development include:

- The existing Service Road is shared with the adjoining lots which rely on it for access, and further limits development in this area.
- The site has no existing tree cover, meaning an absence of shade and environmental benefits.
- The steep battered topography at the site boundaries may represent a challenge for accessibility.
- Gregory Hills Drive as a sub-arterial road generates noise.
- Digitaria Drive and Gregory Hills Drive lack appropriate opportunities for pedestrians to cross.
- Bushfire prone and flood affected land is located in proximity to the site.

Site constraints are summarised in detail in Table 2.

Table 2: Site considerations and constraints

Consideration	Y/N	Description
Land use zoning	-	The site is zoned B5 Business Development.
Critical Habitat	No	
Conservation area	No	
Item of environmental heritage	No	
Affected by coastal hazards	No	
Proclaimed to be in a mine subsidence district	No	
Affected by a road widening or road realignment	No	
Affected by a policy that restricts development of land due to the likelihood of landslip	No	
Affected by tidal inundation, subsidence, acid sulfate or any other risk	No	
Affected by any acquisition of land provision	No	
Biodiversity certified land or subject to any biobanking agreement or property vegetation plan	Yes	The site comprises biodiversity certified land.
Significantly contaminated	No	

Consideration	Y/N	Description
Subject to flood related development controls	No	Refer to Section 7.3.1.
Bush Fire Prone Land	No	
Riparian Corridor	No	
Saline Soils	Yes	Desktop Study has found that the soils likely to be disturbed and excavated during construction of the proposed school are saline.

2.3.2 Opportunities

Key opportunities considered through design development include:

- Strategic location: The site is located within an established precinct collocated with childcare centres and along existing public transport routes. It is also co-located with natural features with open space and creeks in the locality. The site is within the context of considerable urban growth, and will relieve the enrolment pressures on other schools and the existing temporary Gledswood Hills High School.
- Site characteristics: The site is large with no vegetation, favourable topography and free of contamination and archaeological risks. The site has previously been levelled with fill and therefore will require minimal cut and fill.
- Community integration and shared use: The high school will provide new social infrastructure for the area and includes potential shared uses for the wider community.
- Access: The site is well connected within the existing street network with frontages to both Gregory Hills Drive and Digitaria Drive. Digitaria Drive provides a quiet road for the proposed kiss & drop and new wombat crossing. The site's frontages onto both Digitaria and Gregory Hills Drive provide dual entrance points for pedestrians and bicycle access supported with end of trip facilities. A Service Road to the east provides a point at which staff carparking can be provided and ensures that vehicle and pedestrian circulation is separated.
- Landscape: The development of the site for a school offers an opportunity to significantly increase tree canopy and the presence of native vegetation.
- Connecting with Country: Designing and building a new high school includes opportunities to connect with and reflect Country through buildings and landscaping across the site.

2.4 Surrounding Context

Consistent with the site's location within the Turner Road Employment Area, the surrounding area is undergoing a transition from former rural uses to an employment centre characterised by a mix of uses including commercial, medical, large format retail, childcare and leisure. Beyond the employment area typically consists of contemporary low-density housing.

Surrounding development is summarised as follows:

• North: The site is bounded to the north by Digitaria Drive, beyond which lies vacant land zoned B5 Business Development, also within the Turner Road Employment Area. North of this lies Redbank Drive and the South Creek Riparian Corridor. Several shared paths provide connections from Digitaria Dr and Redbank Dr to surrounding low rise residential areas.

- East: To the east of the site lies 10, 10A, 12 and 14 Digitaria Drive and 11 Gregory Hills Drive. These lots form part of the broader Concept DA site. 10 Digitaria Drive contains an existing childcare centre. 10A Digitaria Drive is currently vacant and is not subject to any detailed development consent. 12 Digitaria Drive is currently vacant, however is subject to development consent for a 4-storey 90 room hotel. 11 Gregory Hills Drive is being developed for two fast food premises. Further to the east lies Lot 6 in DP 1267714, which comprises the Riparian Corridor. Beyond the riparian corridor is The George Centre, a private day and short stay hospital located on the corner of Gregory Hills Drive and The Hermitage Way. Concept approval for a private hospital and medical centre has been approved for 18 Digitaria Drive (Lot 6 and 7 DP 126720).
- **South:** To the south lies Gregory Hills Drive, a 4-lane sub-arterial road. Beyond Gregory Hills Drive lies the Gregory Hills Hotel, a local Pub, retail and logistics services uses, a commercial pool premises and a childcare centre. 104-114 Rodeo Road, Gregory Hills is vacant and is not understood to be subject to any development consent.
- West: To the west lies 4 Digitaria Drive and 7 Gregory Hills Drive, which also form part of the broader Concept DA site. 4 Digitaria Drive accommodates a childcare centre. 7 Gregory Hills Drive has approval for a childcare centre. Further west lies the SOMA Wellness development, which includes a medical centre, cafes, a gym and various allied-health services.

A diagram highlighting existing and future surrounding development is included in **Figure 11**. Select photos of the surrounding locality are show in **Figure 12** to **Figure 15** below.



Figure 11 Surrounding development map

Source: DJRD



Figure 12 North east childcare centre car park along Service Road



Figure 13 Fast food premises under construction to the east



Figure 14 the site

Unnamed watercourse located east of



Figure 15 SOMA Health and Wellness Centre located west of the site

Source: Ethos Urban

2.5 Related Applications

The below table outlines the approved and likely future developments which may be relevant to the assessment of the proposed activity. The Concept DA has been excluded from this section and is addressed separately in **Section 5.1.1**.

Table 3: Nearby development activity

DA Reference	Development Description	Current Status	Distance from Site	Address
SSD-7387	Concept proposal for the future development of the site as a medical precinct, including a private hospital and medical centre, comprising:	Approved	100m	Corner of The Hermitage Way and Digitaria Drive (18 Digitaria Drive)
	 indicative future uses as a medical precinct; 			
	 future building footprints, envelopes and heights; 			
	 vehicle entry and egress points; 			
	 the general car parking footprint; and 			
	• the general landscaping			

DA Reference	Development Description	Current Status	Distance from Site	Address
	footprint.			
DA/2021/1956/ 1	Construction of a 90 room hotel/motel and function room development with car parking, landscaping, civil works and associated works	Approved	Adjoining	12 Digitaria Drive
DA/2023/71/1	Early work development associated with an approved State Significant development (SSD-7387) for a private hospital and medical centre, including vehicle entry crossover access, site car parking for 141 vehicles, site fencing, site compound and site shed, substation, temporary power pole and associated site works.	Approved and completed	100m	Corner of The Hermitage Way and Digitaria Drive
DA2023/521/1	Construction of a centre based child care centre for 197 children aged 0 to 5 years, with car parking, drainage, retaining walls, landscaping, signage and associated site works	Approved	Adjoining	7 Gregory Hills Drive

3. Proposed Activity

This REF relates to the construction and operation of the new Gledswood Hills High School accommodating 1000 students, which includes the following works:

- Construction of three (3) 3-storey school buildings, including:
 - o 48 permanent teaching spaces.
 - Three (3) support teaching spaces.
 - Nine (9) specialist teaching spaces, including spaces for science, health and physical education, performing arts, visual arts and food technology.
 - A vocational education and training kitchen.
 - Photo-voltaic (PV) panels at roof level.
- Construction of a single-storey school hall building, comprising an indoor basketball court, lecture theatre, canteen, equipment storerooms and change/shower rooms.
- Ancillary works including:
 - o Site preparation including earthworks and cut and fill.
 - Associated site landscaping and open space improvements including an assembly area, sports field and three outdoor multi sports courts.
 - Associated transport and access infrastructure, including the construction of school car parking, bicycle parking, an internal pedestrian road network, service road access for deliveries, and access gates.
 - Provision of waste storage and loading area.
 - o Signage.
 - Inground building services works, utility services and communication infrastructure, including the installation of 1500kVA kiosk transformer on site, and connection to existing Telstra and NBN infrastructure.
 - Drainage works including water sensitive urban design, in-ground on-site detention tank, connections to existing drainage pit, and bioretention raingardens.
 - Associated off-site infrastructure works, including a new pedestrian crossing, relocation of the existing bus stop on Gregory Hills Drive and a kiss & drop zone on Digitaria Drive.

Table 4 provides a summary of key aspects of the activity.

Project Element	Description
Site Area	4.157ha
Project Name	Gledswood Hills High School
Project Summary	Construction and operation of new high school with associated on-site and off-site infrastructure works, landscaping, parking and access works.
Use	Educational Establishment (School)
Student and Staff Numbers	1000 Students and 80 staff
Car Parking and Bicycle Spaces	78 staff car parking spaces including 2 accessible spaces 80 bicycle parking spaces

Table 4: Summary of the activity

Project Element	Description
	10 kiss & drop spaces
Height	Maximum height: 13.61 m
	Storeys: 3 storeys
Play Space	A variety of play spaces are proposed across the site including the central assembly area including the field and court areas.
Canopy Cover at Maturity	8957.45m² (28.54%)
Off Site Works	Tree removal and planting on Digitaria Drive and Gregory Hills Drive.
	 Construction of raised pedestrian (wombat) crossing on Digitaria Drive.
	 Establishment of kiss & drop zones on the south side of Digitaria Drive.
	Signage and line marking.
	 Construction of driveway entrances on Digitaria Drive and Service Road for service and staff car park access.
	Relocation of bus stop on Gregory Hills Drive.
	Utilities and services connections.

The key features of the proposed activity are shown in Figure 16 and Figure 17.



Figure 16

Proposed Gledswood Hills High School aerial 3D

Source: DJRD Architects

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Figure 17 Gledswood Hills High School site plan

Source: DJRD Architects

3.1 Demolition and Earthworks

Only minor demolition and earthworks are required to allow for the activity as the site was previously cleared. These include:

- Removal of temporary 'for sale' signage and existing chain wire fencing and gates surrounding the site boundary.
- Demolition of a portion of kerb gutter and footpath for new driveway crossover.
- Earthworks and site leveling.

The demolition and earthworks proposed are shown in Figure 18.



Figure 18 Demolition plan

Source: DJRD Architects

3.2 Design and Built Form

3.2.1 Design Objectives

This REF is accompanied by an Architectural Design Report prepared by DRJD Architects (**Appendix 5**) which outlines the design approach to the proposed new high school. The approach was guided by five design principles which responded to the site's constraints and opportunities, as below:

- A strong street presence actively contributing to the public domain
- Main entries and alternate entries located to prioritise safe transport, green travel and community engagement
- Opportunities for community and shared use, maximised through the considered location of the hall and carpark
- Meaningful Connecting with Country engagement informs the Designing with Country response
- Environmentally Sustainable Design principles embedded within the design

3.2.2 Built form

The design objectives outlined above have informed the proposal through locating the majority of the high school's built form along the western, northern and part of the eastern boundary as demonstrated in **Figure 19**. Detailed plans of the proposed built form are available in the Architectural Plans at **Appendix 4**.

The proposed built form includes three distinct blocks surrounding a central green space. The school hall (Building D) is located along the eastern boundary at the northeastern corner of the site. It maintains a significant setback from the Service Road and existing childcare development. The main hall space maintains a double height volume which contributes to building height variation. Building A is adjacent to the main school entry which creates a place of prominence within the proposed public domain entry plaza. Building B and C which are each three storeys tall are located on the western boundary of the site adjacent to the existing and future childcare centres, protected from high activity roads.

The high school is generally configured in a L-shaped form, along the western and northern edge of the site. Buildings A, B and C which are each three storeys and are connected by a covered pedestrian walkway. Each building is regularly shaped to allow for an efficient layout and design. The administration building and school hall are located at the main pedestrian access point at Digitaria Drive with car parking being provided to the rear of the school hall.



Figure 19 Proposed built form and setbacks

Source: DRJD Architects

3.2.3 Building setbacks

Building A is setback from the northern boundary by 15m. The school hall (Building D) is setback from the eastern boundary by 12m. Building C and D are setback from the western boundary by 13m as indicated in **Figure 19**. Setbacks surrounding the site are landscaped.

3.2.4 Building height

Building A, B and C are each three storeys tall with a maximum height of 13.61m. The school hall (Building D) is one storey in height, but contains a double height indoor basketball court. Elevations of the proposed school building are shown at **Figure 20** below.



3.2.5 Materials and finishes

The materiality of the proposed activity draws inspiration from the surrounding riparian features including sand coloured brick with varying blue hues. The finishes of each building have been designed with consideration of how students will use each space. High traffic areas on the ground floor of all buildings will include face brick. While building facades which are not within high traffic areas are cladded with a durable pre-finished, colour-through Compressed Fibre Cement. The upper parts of buildings such as the hall are clad with prefinished metal cladding. All proposed materials have been selected with care and maintenance in mind, in line with the department's requirements, considering ultra-violet resilience, optimising ecologically sustainable development (ESD) features and robustness. The proposed material palette is illustrated below in **Figure 21**.

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DURABLE CLADDING - UPPER For areas where students will not come in contact with cladding eg, upper Hall profiled prefinished metal cladding is proposed	Metal Poof	SUNSHADES + FACADE ARTICULATION Where sunshades are required and for facade articulation fins - prefinished colour
DURABLE CLADDING - LOWER For areas where students will come in contact with facade cladding but are not subject to the same high traffic as the ground plane a durable pre- finished, colour-through CFC is proposed	CFC Cladding & Feature	Perforated Metal Fall Protection POWDERCOAT Selected stair cores and balustrades custom attwork applied to CFC Cladding
ROBUST BASE - HIGH TRAFFIC AREAS BRICK For high traffic locations on ground floor of all buildings including Hall a facebrick is proposed	Linicks - deep sand colcur base	Pordercoats

Figure 21 Proposed materials and colours

Source: DRJD Architects

3.2.6 Connecting with Country

The proposal provides a strong school identity based on the Connecting with County theme of water and riverbeds, with the new entry plaza at Digitaria Drive at the location where the original creek used to flow through the site. This water theme is continued in the materiality and colour themes of the buildings themselves - sand coloured brick with varying blue hues. Additionally, Metal screening and façade elements will express relevant patterns, colours related to site context and Aboriginal heritage. As described below, the landscape design has also integrated the Wianamatta walk, beginning at the Digitaria Drive Entry Plaza including inbuilt Acknowledgement of Country through to the Gregory Hills Drive with the inlaid tokens connecting either end of the path.

3.3 Landscape

Landscape Drawings (**Appendix 6**) have been prepared to support this REF, with accompanying reporting being included within the Architectural Design Report (**Appendix 5**). The proposed landscape design is envisioned as a wholistic approach to the entire site through balancing surrounding land uses, the requirements of the department and designing with Country. The proposed activity includes four main landscaped areas, the welcome plaza, Wianamatta walk, the assembly area/central green and boundary planting and carpark as illustrated in **Figure 22**. Throughout the landscape design learning spaces, gathering and play spaces, ESD initiatives and Connecting with Country elements have been integrated.

The overall approach to landscape design across the site responds to the existing native vegetation communities surrounding the site, such as the Cumberland Red Gum Riverland flat Forest and Cumberland Shale Planes Woodland.

Tree canopy coverage across the site has been developed to maximise tree planting and shading to hardstand areas, particularly assembly and court areas which will increase the amenity of these spaces for students. The site will achieve a total tree canopy coverage of 8957.45 m² (28.54%) at maturity.

In addition to the formally landscaped areas of the school, an additional seeded grass area to the south of the campus will be fenced off and not accessible by students. This area is subject to a potential future expansion of the school subject to demand. Whereas the sports field will be excavated and constructed to specific levels, this fenced off area will not and is accordingly not suitable for play.







3.3.1 Tree Removal

The site does not contain any trees, however there are 15 trees located adjacent to the site in the surrounding road reserves. It is proposed to remove four council street trees along Digitaria Drive and two along Gregory Hills Drive (refer to **Figure 23**). Two of the trees require removal due to conflicts with the footprint of a proposed driveway crossover to the northwest of the site on Digitaria Drive, and the remaining four are classified as dead. The removed and dead trees will be replaced at a ratio of at least 1:1.



Figure 23 Proposed tree removal Source: DRJD Architects annotated by TSA Riley

3.4 Access and Parking

Pedestrian and Bicycles

The site's primary pedestrian access point is located to the north-eastern boundary of the site, fronting Digitaria Drive (**Figure 24**). A wombat crossing is proposed to be constructed across Digitaria Drive in proximity to this entrance, to provide safe crossing of the road, and to connect to the shared path system that provides access through and across the South Creek riparian corridor to the north of the site. A secondary entry is provided to the south west boundary of the site along Gregory Hills Drive adjacent to Building C. This entrance is located in close proximity to the relocated bus stop on Gregory Hills Drive. Both the primary and secondary pedestrian entrances to the site have ramps for accessibility.

Two bicycle parking facilities are provided at the north-eastern and south-western sides of the campus which can be accessed via pedestrian entrances on Digitaria Drive and Gregory Hills Drive respectively as show in **Figure 24** below In total 80 spaces are provided across the two facilities for bicycle parking. Additionally, end-of-trip facilities are included for staff and students. The site can be accessed using existing pedestrian footpaths on Digitaria Drive and a shared pathway provided on the southern side of Gregory Hills Drive.

Vehicle Access and Parking

A 78 space staff car park is proposed along the eastern boundary of the site and includes two (2) accessible spaces, indicated in **Figure 24**. This can be accessed via separate entry and exit points located on the Service Road. Services and deliveries access is provided via a driveway off Digitaria Drive, located along the western boundary of the site, adjacent to Building B. A kiss & drop area with a total of ten (10) spaces on of the southern side of Digitaria Drive is proposed to support student access to the school, which would be signposted 'No Parking' (refer to **Figure 24**).



Figure 24 Proposed access and parking

Source: SCT Consulting

3.5 Construction Activities

Table 5 below provides a summary of the nature, extent and timing of the required construction activities.

Construction Activity	Description	
Construction Hours	Construction activities, including the entry and exiting of construction and delivery vehicles a the site, will be restricted to the following standard work hours:	
	 Monday to Friday inclusive: Between 7:00am to 6:00pm; 	
	Saturday: Between 8:00am to 1:00pm; and	
	 Sunday and Public Holidays: No work permitted. 	
	Construction outside these hours may be undertaken with prior approval and notification to surrounding lots.	
Site Establishment	The main contractor will provide and maintain all necessary temporary facilities required for the safe and secure performance of the works, including but not limited to:	
	First aid facilities	
	Site security and fencing	
	Site access	
	Site noticeboard	
	Site amenities	
	Materials storage	
Demolition	Refer to Section 3.1.	
Staging	The proposal will be delivered across a single construction stage.	
Earthworks	Site earthworks being undertaken at the site are outlined within the Civil Engineering Report prepared by the civil engineer at Appendix 8 . Bulk earthworks at the site will consist of reshaping the site to provide flat building pads and suitably graded pavements, car parking and play areas.	
	The activity is anticipated to involve cut and fill that will not be deeper than 2.5m from the existing ground surface. A preliminary cut and fill analysis has determined that there will be a need to import approximately 1,420m ³ of fill.	
Remediation	No remediation is required. A Preliminary Site Investigation (PSI) and Detailed Site Investigation (DSI) has been prepared at Appendix 19 , and Interim Site Audit Advice included in Appendix 20 .	
Construction Waste Management	Construction waste management has been outlined in the Construction and Demolition Waste Management Plan attached to the REF (Appendix 28).	
	As there are limited structures currently on the site, there is not a significant amount of demolition waste expected to be generated. General construction waste will be collected and placed in appropriate waste bins to be provided on site. A waste management loading zone will be provided on site for waste collection. Non-recyclable waste will be disposed of at an approved landfill or transfer station. The indicative location of a construction waste skip bin will be at the southern boundary of the site along Gregory Hills Drive.	
	The peak workforce during construction will be approximately 50 workers and 20 light	
3.6 Waste Management

The bin storage area is located adjacent to the carpark and will contain 4.5m³ bins for the collection of general and recycling waste (refer to **Figure 25**). Access will only be provided to grounds keepers, waste collection staff and cleaners.

In each room and across the campus grounds, 20L bins will be provided for waste and recycling. The groundskeeper and cleaners will monitor the capacity of the bins to prevent overflowing and transport waste to bulk bins located in the car park after hours.

A private waste contractor will service general waste and recycling bins as per an agreed collection schedule which is assumed to be three times a week for both recycling and general waste. The private waste contractor will collect waste via the staff carpark entrance accessed via the Service Road.



Figure 25 Proposed waste pad

Source: DJRD

3.7 Stormwater

New stormwater infrastructure at the site will connect to the existing stormwater pits on the Service Road, Digitaria Drive and Gregory Hills Drive. The Civil Engineering Drawings (**Appendix 7**) and Civil Engineering Report prepared by the civil engineer (**Appendix 8**) provide a detailed description of the proposed stormwater infrastructure for the site.

All roof stormwater will be collected through the use of gutters and downpipes, which will be directed to rainwater tanks to use for landscape irrigation. The overflow from rainwater tanks is conveyed to the in-ground pipes system for surface stormwater up to and including the 20% Annual Exceedance Probability (AEP) storm event.

Surface stormwater will be collected by a series of surface inlet pits and in-ground pipes. Stormwater flows in excess of the 20% AEP and up to the 1% AEP event will be directed to an onsite detention (OSD) tank. Where flows exceed the 1% AEP, surface grading will facilitate overland flow to be conveyed out of the site.

As the majority of the site falls towards the southwest corner, the main point of discharge is Council's existing stormwater pit within Gregory Hills Drive. The staff car park will drain to the service road, whilst the access driveway to the northwest of the site will drain to Digitaria Drive.

OSD is required as per the Turner Road DCP and will include an inground OSD tank towards the southwest corner of the site with a volume of 600m³.

3.8 Utilities and Services

The REF is accompanied by Utilities Services Reports (**Appendix 11** and **Appendix 12**) that describe connections to services and utilities including, electrical, mechanical services, hydraulic services, water, sewer, gas, and fire services. The table below summarises how key services and utilities will be provided. A consolidated services plan is shown in **Figure 26**.

Service	Description
Electrical	New electrical systems will be installed throughout the high school buildings and external site, including a 1500 kVA kiosk transformer substation located along Gregory Hills Drive. Further details are included in the Electrical Services Concept Report produced by Steensen Varming at Appendix 12 .
Communications	New telecommunications connections are proposed to existing Telstra and NBN infrastructure from Gregory Hills Drive and Digitaria Drive respectively.
Water	It is proposed to connect to the 150mm diameter water main asset in Digitaria Drive. It is expected this main has sufficient capacity to accommodate the proposed activity.
Sewer	It is proposed to connect the to the existing 225mm diameter sewer main asset located along Digitaria Drive. It is expected this main has sufficient capacity to accommodate the proposed activity.
Gas	There is no proposed new natural gas connections or diversions required due to the project's electrification strategy.

Table 6: Utilities and infrastructure

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Figure 26 Consolidated services plan

Source: TSA Riley

3.9 Signage and Wayfinding

The REF seeks approval for a number of signs, comprising:

- SGN01 Fascia school identification signage (refer to Figure 27)
- SGN02 Digital LED pylon entry signage (refer to Figure 27)
- Wayfinding and room identification signage

The signage will be of a high-quality and will identify the school and its location to provide information and wayfinding opportunities. The digital signage proposed will create opportunities for announcements and messages to be shared with students and the school community on arrival. Wayfinding signage will incorporate key directional signage, including building, department and room identification. A signage concept plan is shown in **Figure 28**. The details and locations of the proposed signs are illustrated within the Architectural Drawing Package prepared by the architect (**Appendix 4**).



Figure 27 Proposed entry signage elevation

Source: DJRD



Figure 28

Concept signage locations diagram

Source: DJRD

3.10 Operation

The high school will be operated by the department, with a capacity of 1,000 students and 80 staff members. Standard school hours are anticipated to occur between 8:00am and 4:00pm. Classes will be conducted within the group learning spaces during the day.

As described above, access will be provided at the pedestrian entrances on Digitaria Road and Gregory Hills Drive during drop off and pick up times from 8:00am - 9:30am and 2:30pm - 4:00pm.

3.11 Related activities

There are no other projects occurring concurrently at the site.

4. Proposal Need and Alternatives

4.1 Proposal Need

The proposal to provide the Gledswood Hills High School is consistent with the State Government's plan to expand public education in Western Sydney. The 2024-2025 budget is aiming to deliver record education funding including \$3.6 billion for new and upgraded schools in Western Sydney. The focus is on ensuring that the growing communities are receiving access to world class public education. The proposed activity will provide integral social infrastructure in an emerging urban environment experiencing significant population growth in the South West Growth Centre. The proposed activity is the direct result of the NSW Government commitment to deliver public education in Western Sydney. The department has committed to the construction of a new high school in the Gledswood Hills Area for the commencement of the 2027 school year.

In December 2024, the site was acquired by the NSW Government.

4.2 Proposal Objectives

The proposal's objectives include:

- Respond to the urban growth of Gledswood/Gregory Hills and the broader Southwest Growth Area in an effective and sustainable manner.
- Provide contemporary learning spaces that meet aspirational objectives and functional requirements.
- Minimise the proposal's environmental impacts through appropriate design and mitigation measures.
- Enable the school to become a central place in the community by acting as a hub and conduit for services that will support their education.
- Enable greater efficiency in the use of human and physical resources through collaborative use of assets and partnerships.
- Incorporate ESD principles in the school's design and operation.

4.3 Analysis of Alternatives

The proposed activity has been developed following a consideration of options and alternatives to address the need identified above. A summary of the options considered is provided in **Table 7** below.

Table 7: Assessment of options and alternatives

Option	Discussion	Preferred Option
Option 1: Do Nothing	Under the 'do nothing' option the high school would not be delivered resulting in the vacant land at the site remaining underutilised. Under this option, essential infrastructure planned for the site would not be delivered and need for educational establishment in proximity to new low density residential development will not be met. Further, there would be a significant shortfall of	Option 1 is not preferred as it does not address the identified need for intervention at the site, or expected enrolment growth within southwest Sydney.

Option	Discussion	Preferred Option
	secondary school infrastructure within the locality required to support the growing enrolment needs of southwest Sydney. The existing temporary high school, which is set to open in February 2025, does not have sufficient capacity to meet expected enrolment demand.	
Option 2: Alternative Masterplan option	 An alternative Masterplan arrangement was investigated and considered the following design features: Alignment of all buildings on the Eastern edge to be opposite to that of the natural pathway of overland water flow Buildings at varying floor-plate levels to 'step up' the natural rise of the site and reduce and fill Main entry to Eastern end of Building A Car park access from Gregory Hills Drive Hall location flipped to opposite side of site 	Option 2 is not preferred as the design included benching all buildings at different levels, which would require additional stairs, accessible covered walkway transitions between buildings and an increase of lifts required. The teaching buildings were located closer to fast food restaurants on Service access road. Camden Council was unsupportive of the carpark entry on Gregory Hills Drive.
Option 3: The Proposed Activity	 The department masterplan which was included with the Final Business Case included the following key design features: Key Main entry off Digitaria Drive Kiss & Drop on site with an entrance from the service access road. Onsite parking access from the Services Access Road The buildings placed to line Digitaria Drive, the Western boundary and Gregory Hills Drive (Stage 2 N/A) The layout of the buildings frame around the edge of play space to allow for passive surveillance While the majority of the masterplan design principles were supported, during the masterplan verification undertaken by the architect a number of additional considerations were raised: Relocation of the car park to be closer to the Hall and the Administration Building Reposition Building A to allow for more space at the Main Entry between Buildings A and B Vehicle delivery access behind Building B for the Wood and Metal & Food and Technology departments Hall location to be adjusted to allow for shift of Building A and increased space at main entry Swap the locations of the sports field and sports courts. 	Option 3 is preferred as it proposes the most suitable layout for the school which provides increased passive surveillance and facilitates the desired access points to the school and car park. The proposed activity provides additional space at the main entrance to facilitate greater engagement with the public domain. The sports courts were relocated away form Building C, to reduce noise impacts on learning spaces, and provide a soft landscaped area in the centre of the site. There is a clear strategic need for the proposed high school and alternatives are considered to be less desirable.

5. Statutory and Strategic Framework

5.1 Permissibility and Planning Approval Pathway

Section 4.1 of the EP&A Act states that if an EPI provides that development may be carried out without the need for development consent, a person may carry the development out, in accordance with the EPI, on land to which the provision applies. However, an environmental assessment of the development is required under Part 5 of the Act.

State Environmental Planning Policy (Transport and Infrastructure) 2021 (TI SEPP) aims to facilitate the effective delivery of infrastructure and educational establishments across the state and provides that various developments for the purposes of a government school are permitted without consent. The proposed activity is development permitted without consent as outlined at **Table 8**.

Division and Section within TI SEPP	Description of Works
Section 3.1 Aims	The proposed activity is consistent with the aims outlined in Section 3.1 of the TI SEPP:
	• Will be consistent with design considerations for educational establishments while minimising impacts on surrounding areas.
	 Delivers development of government owned land and provides an educational establishment for the local area.
	 Will be consistent with consultation requirements with relevant public authorities during the assessment process or prior to the activity commencing.
	• Considers joint and shared use of the facilities of educational establishments with the community through appropriate design.
Section 3.37A	New High School
	The proposed activity comprises of development for the purposes of a government school on behalf of a public authority on land which does not contain an existing or approved school. The site is located in a B5 Business Development zone which is a prescribed zone under the TI SEPP.
	The proposed activity involves the construction of building(s) with a maximum height of three storeys which is less than the four storey height limit required under the TI SEPP.
	Appropriate consultation having regard to the SCPP—new health services facilities and schools, and the stakeholder and community participation plan will be carried out, refer to Section 6 .
Schedule 8 Design quality principles in schools—Chapter 3	The Design Quality Principles set out in Schedule 8 of the TI SEPP and the Design Principles set out in the Design Guide for Schools have been considered within the Architectural Design Report at Appendix 5 .
Division 4 Electricity generating works or solar energy systems Section 2.38(4) – Solar Energy Systems	Solar Energy Systems Section 2.38 of the TI SEPP allows for development for the purpose of a solar energy system to be carried out by or on behalf of a public authority without consent on any land if it is ancillary to an educational establishment. By definition, the high school is identified as an educational establishment and therefore the proposed PV panels at roof level, to be carried out by the department, will be carried out without consent.

Table 8: Description of proposed activities under the TI SEPP

Division and Section within TI SEPP	Description of Works
Division 5, Subdivision 1 Electricity Transmissions or Distribution Networks Section 2.44 – Development for the purpose of Electricity Transmission or Distribution services	Electricity Transmission or Distribution Services Section 2.44 of the TI SEPP allows for development for the purpose of an electricity transmission or distribution network to be carried out by or on behalf of an electricity supply authority or public authority (the department). Furthermore, the works may be carried out as they do not include development on land reserved under the National Parks and Wildlife Act 1974. The kiosk transformer proposed will also necessitate written notice to Camden Council at least 21 days before works are carried out, as required by Section 2.45.
Division 17, Subdivision 1 Roads and road infrastructure facilities Section 2.109 – Development for the purpose of a road or road infrastructure facilities	Road Infrastructure Development for the purpose of a road or road infrastructure may be carried out by a public authority without consent on any land. The proposed works involve the carrying out of work on a public road. This includes the use of the road for a work zone during construction, and a new pedestrian crossing, relocation of a bus stop, and kiss & drop zone. The proposed driveway works are being carried out by the department (a public authority) and the site is not land reserved under the National Parks and Wildlife Act 1974. Therefore, the proposal is consistent with Section 2.109 of the TISEPP.
Division 18 Sewerage systems Section 2.126(6) – Development for the purpose of sewage reticulation systems	Sewerage Systems Section 2.126 permits development for the purpose of a sewage reticulation system to be carried out without consent on any land, if it is done in a 'prescribed circumstance'. Section 2.126(1) identifies that development is carried out in a 'prescribed circumstance' when it is carried out by or on behalf of a public authority (the department).
Division 20 Stormwater management systems Section 2.137 – Development for the purpose of stormwater management systems	Stormwater Management Systems The proposed stormwater system can be carried out by or on behalf of a public authority without consent on any land. The proposed works are being carried out by the department (a public authority), therefore the proposal is consistent with Section 2.137(1) of the TISEPP.
Division 21 Telecommunications and other communication facilities Section 2.141 – Development for the purposes of telecommunication facilities	Telecommunication facilities Section 2.141 allows for development for the purpose of a telecommunications facilities to be carried out without development consent on any land by or on behalf of a public authority (the department).
Division 24 Water supply systems Section 2.159(1) – Development for the purpose of water reticulation systems	Water Services The proposed water main diversions can be carried out by or on behalf of a public authority without consent on any land. The proposed works are being carried out by the department (a public authority). Therefore, the proposal is consistent with Section 2.159(1) of the TISEPP.

Activities permissible without consent require environmental impact assessment in accordance with Division 5.1 of the EP&A Act and are assessed and determined by a public authority, referred to as the determining authority. The department is the proponent and determining authority for the proposed works.

Additionally, Section 5.7 of the EP&A Act states that an activity that is likely to significantly affect the environment must be subject of an Environmental Impact Statement rather than an REF. The effects of the activity on the environment are considered in **Section 7** and have been assessed as a less than significant impact and can therefore proceed under an REF assessment.

Section 171(1) of the EP&A Regulation notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the guidelines that apply to the activity.

The Guidelines for Division 5.1 Assessments (DPE June 2022) and the Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools Addendum (DPHI, October 2024) provide a list of environmental factors that must be taken into account for an environmental assessment of the activity under Division 5.1 of the EP&A Act. These factors are considered in detail at **Section 7**.

5.1.1 Concept DA Assessment

Under Part 4 of the EP&A Act, the determination of any further development application in respect of land subject to a concept development application cannot be inconsistent with the consent for the concept proposals for the development of the site. As the proposed activity is being pursued under Part 5 of the Act, consistency with the Concept DA is not required. However, Section 5.5 of the EP&A Act requires consideration "to the fullest extent possible all matters affecting or likely to affect the environment by reason of the activity".

The proposed school lot forms part of a larger site that is made up of eight separate development lots. All eight lots are subject to an approved Concept DA (DA/2017/45/1) for a mixed-use development comprising bulky goods premises, business premises, food and drink premises, indoor recreation facilities, a hotel, childcare and a cinema. A 3D perspective of the original Concept DA approval is shown in **Figure 29**. Work has commenced on the broader site under detailed development approvals.

The consent has been modified 12 times in both a land use and administrative capacity. The modifications have included the introduction of three centre based childcare centres in lieu of leisure, business and retail premises, establishing a more diverse and education-focused character for the broader site. Of particular note is the most recent modification, DA/2017/45/13. This modification decoupled the subject site from part of 7 Gregory Hills Drive (Lot 8442 in DP1272530), which was formerly part of the bulky goods centre, but is now approved as a stand alone childcare centre. The childcare centre does not rely on the subject site for access arrangements, as these are provided via a driveway off Gregory Hills Drive, and right of ways through to 7 Gregory Hills Drive and 4 Digitaria Drive. Accordingly, no interdependence remains between the subject site and the surrounding existing and future development under the Concept DA.

For reference, ground floor plans for the original consent (DA/2017/45/1) and the latest modification (DA/2017/45/13) are included in **Figure 30** and **Figure 31** respectively. A full description of the modifications is listed in **Table 9** below.

The REF includes consideration of the development approved by the Concept DA and the conditions of the consent. All supporting technical reports have considered the impact of the

activity on the concept DA and provide conclusions with regards to the respective discipline. Key aspects of the Concept DA are discussed within the REF as follows:

- Traffic Section 7.1
- Noise and vibration Section 7.2
- Stormwater Section 7.3.2
- Land use Section 7.6
- Consistency with conditions of consent **Appendix 14**

In summary, the REF has considered the Concept DA to the fullest possible extent. Although the nature of the development is different to that envisaged under the Concept DA, the REF confirms that all impacts arising from the development are equal to or lesser than the impacts of the Concept DA, or where greater, they are mitigated appropriately, and that there are no significant impacts expected.



Figure 29 3D perspective of original Concept DA 2017/45/1 (school site shaded blue)

Source: Camden Council



Figure 30

Approved plans of original consent 2017/45/1 (school site shaded blue)

Source: Camden Council



Figure 31 Approved plans modification 2017/45/13 (school site shaded blue)

Source: Camden Council

Development Application #	Description	Date Determined		
DA2017/45/1	Concept DA for a mixed use development containing 18 bulky goods premises, nine business premises, five food and drink premises, six recreation facilities (indoor), two hotels, a cinema, subdivision and associated site works	Approved - 18/12/2017		
DA/2017/45/2	 Modification to allow staging of the approved development into two stages: Stage 1: Completion of the approved subdivision including all associated works. Stage 2: Completion of the remainder of the approved development. 	Approved 1/8/2018		
DA/2017/45/3	Modification to the approved subdivision layout, reduction in the size of the south west basement carpark and modification of the basement extent, internal layout modifications, including a designated loading bay at the frontage of unit 10, additional at grade parking of 5 spaces adjacent to building 4 and the layout of the main basement carpark amended and extended to provide for an additional 56 spaces. Modification to the floor area of various units, and deletion of Unit 38.	Approved 23/11/2018		
DA/2017/45/4	Modification to allow the early construction and interim operation of two approved driveways.	Approved 25/9/2018		
DA/2017/45/5	Modification to amend the built form and layout, car parking arrangements, stormwater drainage details and related adjustments to easements and restrictions to enable each lot to be developed independently.	Approved 21/2/2020		
DA/2017/45/6	Modification to amend the subdivision of Lot 1 into two separate lot, modify the Concept Approval of the 4-storey business premise at the north of Lot 1 to a single storey child care centre with at grade car parking and amendment to the approved road layout on Lot 1.	Approved 1/1/2021		
DA/2017/45/7	Modification to enable the subdivision of Lot 3 into two separate lots. Deletion of the approved envelope for leisure centre tenancies and replacement with a child care centre with at-grade parking and a retail food and drink premises at the northern end, and a 3-storey business premises with food and drink premises and basement care parking at the southern end.	Approved 23/6/2021		
DA/2017/45/8	Modification to amend the built form on Lot 5 from a four storey business premises to two single storey food and drink premises with at grade car parking.	Approved 18/12/2022		
DA/2017/45/9	Modification to nominate Lot 8442 (south-west corner of the site) as a residue lot and that further development will be subject to further development consent. Permit the servicing of the lot as part of the later built form proposal.	Approved 17/2/2022		
DA/2017/45/10	Modification to amend the layout of the approved hotel development on Lot 4 and related amendments to the wording of Condition 1.0 (2) relating to approved plans and documents, Condition 1.0(14) relating to roof mount equipment and Condition 1.0(24) relating to approved building height.Approved 16/2/2023			
DA/2017/45/11	Modification to amend the layout of approved centre based child care centre on Lot 3 to remove the retail premises tenancy, amend the layout and facade treatments, increase the numberApproved 9/6/2022			

Table 9: Development consents applying to the site

Development Application #	Description	Date Determined
	of places in the centre to 119 children, amend the car parking layout and remove two parking spaces, installation of solar panels and amendments to the landscaping and fencing design	
DA/2017/45/12	Modification to amend the approved stormwater drainage design as it relates to Lot 8441.	Approved 22/7/2022
DA/2017/45/13	Modification to an approved concept approval for a mixed use development from a four storey mixed use development (café, bulky goods and business premises) to permit a two storey centre based child care centre development.	Approved 22/02/2024

5.2 Environmental Protection and Biodiversity Conservation Act 1999

The provisions of the EPBC Act do not affect the proposal as it is not development that takes place on or affects Commonwealth land or waters. Further, it is not development carried out by a Commonwealth agency or development on Commonwealth land, nor does the proposed development affect any matters of national significance. An assessment against the EPBC Act checklist is provided at **Table** 10.

Table 10: EPBC Act checklist

Consideration	Yes/No
Will the activity have, or likely to have, a significant impact on a declared World Heritage Property?	No
Will the activity have, or likely to have, a significant impact on a National Heritage place?	No
Will the activity have, or likely to have, a significant impact on a declared Ramsar wetland?	No
Will the activity have, or likely to have, a significant impact on Commonwealth listed threatened species or endangered community?	No
Will the activity have, or likely to have, a significant impact on listed migratory species?	No
Will the activity involve any nuclear actions?	No
Will the activity have, or likely to have, a significant impact on Commonwealth marine areas?	No
Will the activity have any significant impact on Commonwealth land?	No
Would the activity affect a water resource, with respect to a coal seam gas development or large coal mining development?	No

5.3 Environmental Planning and Assessment Act 1979

Part 5 of the EP&A Act applies to activities that are permissible without consent and are generally carried out by a public authority. The proposed construction and operation of the school meets the definition of an activity under Section 5.1 of the EP&A Act. Activities under Part 5 of the EP&A Act are assessed and determined by a public authority, referred to as the determining authority. The department is a public authority and is the proponent and determining authority for the proposed works.

For the purpose of satisfying the objects of the EP&A Act relating to the protection and enhancement of the environment, a determining authority, in its consideration of an activity shall, notwithstanding any other provisions of the Act, the provisions of any other Act or of any instrument made under the EP&A Act or any other Act, examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity (refer to subsection 1 of section 5.5 of the EP&A Act).

The activity is not within or nearby to a wilderness area (within the meaning of the *Wilderness Act 1987*) and therefore will not have an effect on any wilderness area. Therefore, assessment under section 5.5(3) of the EP&A act is not required.

5.4 Environmental Planning and Assessment Regulation 2021

Section 171(1) of the EP&A Regulation notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the guidelines that apply to the activity.

The Guidelines for Division 5.1 Assessments (DPE June 2022) and the Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools Addendum (DPHI October 2024) provide a list of environmental factors that must be taken into account for an environmental assessment of the activity under Part 5 of the EP&A Act. These factors are considered in detail at **Section 7**.

Further, Section 171(4) outlines circumstances where an REF must be published on the department's website or the NSW Planning Portal. This REF is required to be published as the activity has an estimated development cost of more than \$5 million, in accordance with Section 171(4). In addition, Section 171A of the EP&A Regulation requires the consideration of the impact an activity in a defined catchment. This is considered further in **Table** 11 below.

5.5 Other Approvals and Legislation

Table 11 identifies any additional approvals that may be required for the proposed activity.

Legislation	Relevant?	Approval Required?	Applicability
State Legislation			
National Parks and Wildlife Act	No	No	The proposed activity is not located within or have effect on a NSW National Park. An AHIMS search completed identified two aboriginal heritage sites located within a 200m radius of

Table 11: Consideration of other approvals and legislation

Legislation	Relevant?	Approval Required?	Applicability
1974			the site. However, the ACHAR report (Appendix 23) confirms that these identified sites have no archaeological potential. Therefore, the proposed activity does not result in impacts on an impact to an Aboriginal object or place protected by this Act.
Rural Fires Act 1997	Yes	No	The proposed activity is categorised as a Special Fire Protection Purpose (SFPP) in accordance with Section 100B of the <i>Rural Fires Act 1997</i> . As the site is not on or affected by designated Bushfire Prone Land, no Bushfire Safety Authority or approval is required from the RFS as per Clause 100B(2).
Water Management Act 2000	Yes	No	An unnamed watercourse is located approximately 80m east of the site. Notwithstanding this, the former watercourse that traversed the site is still mapped as such. Accordingly, the site is within 40m of a mapped watercourse. The activity does not involve water use, water support work, drainage work or flood work. The department is a public authority and is exempt from a controlled activity approval under the Water Management Act.
Biodiversity Conservation Act 2016	No	No	The site is cleared and does not provide habitat suitable for breeding of assessed threatened species. The proposal will have no impact on threatened flora and fauna as identified in the Biodiversity Report at Appendix 24 .
Heritage Act 1977	No	No	No items, places, objects or conservation areas of European or aboriginal heritage have been identified on or adjoining the site.
Fisheries Management Act 1994	No	No	An unnamed watercourse is located approximately 80m east of the site. The proposed activity does not result in permanent obstructions to water tidal patterns or flows.
Contaminated Lands Management Act 1997	No	No	The Preliminary Site Investigation (PSI) and Detailed Site Investigation (DSI) identifies that the site is not listed on a register of contaminated sites and active remediation is not required for the site. Ground water is unlikely to be affected by the proposed activity.
Protection of the Environment Operations Act 1997	No	No	The proposed activity does not result in significant air, noise or waste pollution. Noise and waste impacts are mitigated effectively in the mitigation measures.
Roads Act 1993	Yes	Yes	Under s138 proposed works within the public road reserve surrounding the site and upgrades to road and traffic safety infrastructure, will require approval under the Roads Act. This includes demolishing portions of the existing kerb and footpath at the northern and southern boundaries of the site and the kiss & drop zone proposed on Digitaria Drive.
Local Government Act 1993	Yes	No	No approval under the Local Government Act 1993 is required.
Environmental Planning and Assessment Regulation 2021 (Section	No	No	The proposal is located within the Hawkesbury-Nepean Catchment which is a regulated catchment. Section 171A of the EP&A Regulation sets out additional matters to take into account when considering the likely impact of an activity on the environment in a regulated catchment. This assessment

Legislation	Relevant?	Approval Required?	Applicability
171A			is carried out in Section 7.
Electricity Supply Act 1995	Yes	No	The Network Operator, in carrying out its functions is required to notify Council in accordance with Section 45 prior to works on the substation commencing.
State Legislati	on – State Er	vironmental	Planning Policies
State Environmental Planning Policy (Planning Systems) 2021	No	No	N/A
State Environmental Planning Policy (Biodiversity and Conservation) 2021	Yes	No	The consent authority is required to consider the likely impact of the activity on the environment within a regulated catchment. These controls relate to water quality and quantity (Section 6.6), aquatic ecology (Section 6.7), flooding (Section 6.8), and recreation and public access (Section 6.9) and the Hawkesbury-Nepean Catchment (Section 6.13). In this regard, the proposed development will include sufficient stormwater infrastructure and mitigation measures to ensure there will be no substantial impact to the catchment. The development includes water quality controls and an OSD tank to control overland flow to control water quality and quantity. Where pipe capacity is exceeded, stormwater will be conveyed as overland flow which have been designed at the minimum 1% AEP in accordance with Council's requirements. The activity does not include the clearing of riparian vegetation that requires an approval under the <i>Water</i> <i>Management Act 2000</i> or the <i>Fisheries Management Act</i> <i>1994.</i> All erosion that results from flooding during the construction and operational stages can be mitigated through an erosion and sediment control plan. Furthermore, there will be no impacts on recreational land uses as all stormwater will be collected within pipes and the OSD tank and all overland flow have been designed in accordance with Council's requirements.
State Environmental Planning Policy (Sustainable Buildings) 2022	Yes	No	This SEPP applies to non-residential development which includes new schools with a capital investment value of more than \$5 million or alterations, enlargement, or extension of an existing building if the development has a capital investment value of \$10 million or more. As such, Chapter 3 applies to the activity. However, this SEPP does not apply to development under Part 5 of the EP&A Act. Notwithstanding, the provisions of the SEPP has been considered as part of the environmental impact assessment for the project. An ESD Report is provided at Appendix 15 which outlines the ESD measures proposed within the new high school as per Chapter 3 of the SEPP.
State Environmental Planning	Yes	No	Chapter 4 of State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP) regulates the remediation of contaminated land for the

Legislation	Relevant?	Approval Required?	Applicability
Policy (Resilience			purpose of reducing the risk of harm to human health or any other aspect of the environment.
and Hazards) 2021			The contamination assessment confirms the site is suitable for the proposed school use and that remediation is not required.
State Environmental Planning Policy (Industry and Employment) 2021	Yes	No	The proposed signage outlined in Section 3.9 is consistent with the objectives of Section 3.1(1)(a) of <i>State</i> <i>Environmental Planning Policy (Industry and Employment)</i> 2021 as they are compatible with the proposed activity. The proposed wayfinding infrastructure provides effective communication, are integrated into the proposed building design and will be of a high-quality design and finish. The proposed signs are also consistent with the assessment criteria specified in Schedule 5 of the SEPP, as demonstrated in Appendix 16 . The proposed signage plan for the activity is provided in the Architectural Plans at Appendix 4 .
State Environmental Planning Policy (Precincts – Western Parkland City) 2021	Yes	No	The site is subject to <i>State Environmental Planning Policy</i> (<i>Precincts – Western Parkland City</i>) 2021 (WPC SEPP) in lieu of the Camden Local Environmental Plan. The site is zoned 'B5 Business Development' and does not include controls relating to height of buildings, FSR, heritage or flood planning for the site.

5.6 Turner Road Development Control Plan 2018

The site is within the Turner Road Precinct as identified in the WPC SEPP. The aim of the Development Control Plan (DCP) is to promote high quality urban design outcomes and facilitate orderly, efficient and environmentally sensitive development, guided by a vision to create high quality urban design, interconnected neighbourhoods, a compatible mix of land uses, local employment opportunities and enhanced natural environmental features, and a community incorporating live, work and play options. The vision is underpinned by a number of objectives, including to provide community and social infrastructure, such as schools and sporting fields that provide for a range of facilities and opportunities, and to ensure the timely delivery of critical infrastructure.

As set out in **Section 2.5** of this REF, the activity includes the provision of a high school with associated open space and play space provision, including a sports field and multi-purpose courts, which will also be available outside of school hours to the local community. Minor departures from the DCP are noted as follows:

- Indicative land use plan the proposal does not reflect the business development use identified in the DCP. However, this departure will not adversely affect surrounding business uses, and is an appropriate land use for the site, as assessed in **Section 7.6**.
- Carparking rate No student parking is proposed, representing a variation to the DCP controls. This approach is standard for the department, and was agreed with Camden Council as appropriate (refer to Section 6). Section 7.1 assess parking impacts and confirms the suitability of the proposed variation.

5.7 Strategic Plans

Table 12 considers strategic plans that are relevant to the proposed activity.

Strategic Plan	Assessment
NSW State Priorities	 NSW State Priorities are twelve high-level priorities for the State, being: Creating jobs; Delivering infrastructure; Driving public sector diversity; Improving education results; Improving government services; Improving service levels in hospitals; Keeping our environment clean; Making houses more affordable; Protecting our kids; Reducing domestic violence reoffending; Reducing youth homelessness; and Tackling childhood obesity. The proposal seeks to deliver a new high school which will provide additional capacity for secondary education which will serve the evolving local community. The activity will contribute to strengthening the local economy and community through providing additional infrastructure, jobs and education.
Future Transport Strategy	The Future Transport Strategy sets out a 40-year vision, directions and outcomes framework for moving people in NSW and will guide transport investment over the longer term. The Future Transport Strategy was refreshed in 2022 to take into account the COVID-19 Pandemic, drought, bush fires, floods, alongside population growth and global megatrends. It includes a new focus on the six cities region, striving to revitalise and connect communities, encourage thriving local neighbourhoods, and build on economic success. The proposal is consistent with the Strategy by delivering increased educational capacity in the Camden LGA. The proposal does not prevent the objectives of the Strategy from being achieved.
Greater Sydney Region Plan	The proposed activity aligns with the Greater Sydney Region Plan by supporting an integrated planning response to the growing and changing population of Sydney. The proposed activity supports the goal to develop a city supported by infrastructure through providing essential infrastructure in a precinct undergoing transition from rural to low density residential and business development. The proposed activity will meet planning priorities for a city for people through providing a site which engages with the public domain and spaces which can be used by the broader community outside of school hours.
Western City District Plan	The Western City District plan provides 10 directions for the district relating to liveability, productivity and sustainability. In particular, the proposed activity aligns with the direction for a city supported by infrastructure by providing essential educational infrastructure to support the surrounding residential developments. The proposed activity will meet needs for the provision of services and social infrastructure to meet the changing needs of the community in

Table 12: Consideration of applicable strategic plans

Strategic Plan	Assessment
	relation to Planning Priority W3. The proposed development responds to the direction relating to a resilient city through the environmentally sustainable design which responds urban and natural hazards and climate change.
Camden Local Strategic Planning Statement (Camden LSPS)	The Camden LSPS provides vision for the Camden Local Government Area in relation to the key themes of infrastructure and collaboration, liveability, productivity and sustainability. The proposed activity aligns with the local priorities established in the LSPS by aligning infrastructure delivery with growth through the delivery of a school within a key growth area for residential development. The activity aligns with the local priority for liveability through establishing a new high school that provides a facility which will foster a healthy and socially connected community. The environmentally sustainable design of the school aligns with local priorities focused on reducing emissions, waste and increasing energy efficiency as well as improving Camden's resilience to hazards and extreme weather events.
Better Placed: Design Guide for Schools (Government Architect NSW)	The Better Placed Design Guide for Schools sets out the Design Quality Principles in accordance with Schedule 8 of the TI SEPP. The Architectural Design Report prepared by the architect (Appendix 5) sets out how the proposal has been guided by, and complies with, the 7 design quality principles in schools.

6. Consultation

6.1 Early Stakeholder Engagement

Table 13 provides a summary of early stakeholder (non-statutory) consultation undertaken to inform project development and preparation of the REF. A detailed summary of all government agency consultation and responses is available at **Appendix 13**.

Table 13: Summary of early stakeholder engagement

Stakeholder	Engagement
Aboriginal stakeholders	Stakeholders were engaged in the Connecting with Country process over 2024. This involved both the Dharawal and Dharug people. Engagement consisted of the following:
	• Two walks and talks on Country with local Aboriginal elders.
	 A combined Dharawal and Dharug workshop with local elders RAP's and community.
	 A Dharug specific online workshop with Dharug community members.
	• Independent AECG/SINSW Consultations due to contested land and cultural sensitivity.
	The key recommendations outlined were:
	• The community highlighted the importance to connect stories to local memory and knowledge through the exploration of community stories which are connected to specific sites.
	• The inclusion of shared cultural elements such as yarning circles, coolamon-shaped seating, and garden areas that reflect the natural environment.
	• Create spaces which not only meet the educational needs of a growing community but also serve as a place of cultural learning and connection.
	• Emphasis on the community's desire to see their history, heritage and connection to the land deeply embedded in the fabric of the school.
Camden Council	Engagement with Camden Council consisted of a series of meetings held between October 2023 and October 2024. The topics which were discussed during consultation with council included the following:
	General traffic impacts.
	Existing DA approvals.
	• Flooding potential, timing of surrounding public road construction.
	Size of onsite carpark.
	Timing of the rezoning of Leppington Town Centre.
	Practical sewer connections in a newly developing precinct.
	Of note, the following elements were included/developed at the request of / in collaboration with Council following the series of meetings held:
	• Approach to assessment of the Concept DA which has been reflected in the REF (refer to Section 5.1.1).

Stakeholder	Engagement
	 Kiss & drop zone and pedestrian crossing design, capacity and signposting (refer to Section 7.1). Location of bike parking across two locations co-located with school entrances (refer to Section 7.1). A shelter-in-place protocol be prepared for the site (refer to Section 7.3.1)
NSW State Emergency Service (SES)	 Engagement with the SES consisted of an online agency meeting and email correspondence between October and November 2024. The main issues discussed were the need to consider the SES Flood Evacuation Modelling Report and wider Hawkesbury-Nepean Flood Emergency Sub-Plan, various evacuation timings/strategies and the potential impacts of surrounding road flooding. Following the meeting with SES it was recommended the inclusion of the following in the site-specific Flood Impact and Risk Assessment: Consider Digitaria Drive as an evacuation route in the event Gledswood Hills Drive is unsafe. An assessment of the flood risk up to and including the Probable Maximum Flood (PMF) on the site and the access/ egress routes.
	 Climate change considerations. Time to onset, duration, velocity, and hydraulic hazard on any flooding. An assessment of the impact of the proposed development on flood behaviour. This feedback has been addressed in the Flood Risk assessment.
NSW Rural Fire Service (RFS)	Engagement with the RFS included issuing a scoping report via email in October 2024. Subsequently, the department and the Bushfire Consultant met with NSW RFS to discuss the proposed high school. At the meeting NSW RFS confirmed that the site is low risk and will be treated accordingly with no requirement for compliance with BPB 2019, NCC, or Specification 43. During the consultation with RFS, RFS noted a Bushfire Emergency Management Plan would need to prepared prior to school occupation and operation. Main Contractor is to engage Bushfire Consultant to prepare Bushfire Management Plan prior the school becoming occupied and operational.
Transport For NSW (TfNSW)	Engagement with TfNSW consisted of a Traffic Working Group led by traffic consultant SCT including the department and the project team between April and October 2024. TfNSW raised the potential need for traffic modelling to include the intersection of Camden Valley Way and Gregory Hills drive and placing a bus stop of Digitaria Drive. The traffic consultant noted the traffic modelling was deemed unnecessary as school vehicle trips using Camden Valley Way would account for a very minor proportion of demand on this road. This position was not challenged by TfNSW and was deemed closed.
NSW Government Architect	The design of the proposed Gledswood Hills High School was considered by the School Design Review Panel (SDRP) in September 2024. The comments provided by the panel on the design and built form of the development have been considered in the final design of the site.

Stakeholder	Engagement
	The key comments raised related to providing further response to Connecting with Country throughout the site, as well as landscaping and canopy coverage, architecture and sustainability. Following the SDRP Wianamatta walk has been extended to start at the new Digitaria Drive Entry Plaza and includes generous spaces for planting and native trees. Canopy cover has been evenly distributed throughout the development and additional weather protected spaces have been provided. The hall has been shifted to provide a more meaningful gathering and entrance space for students on Digitaria Drive. The sports court and sports field locations were also swapped in response to suggestions from the SDRP, do improve the overall amenity of the school and to reduce noise impacts from the courts on the learning spaces. A detailed response to each comment provided by the SDRP is provided in the Architectural Design Report at Appendix 5 .
NSW Department of Climate Change, Energy, the Environment and Water	TSA Riley issued a scoping report to the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) in October 2024. In their response, DCCEEW advised that they were not able to respond.
Sydney Water	A scoping report was issued to Sydney Water via email in October 2024. Sydney Water responded by email and phone recommending that a registered water services coordinator lodge a feasibility study for the high school proposal to invoke high-level advice from Sydney Water in response. The Main Contractor will engage a Water Services Coordinator to manage Section 73 Compliance Certificate.

6.2 Statutory Consultation

Consultation has been undertaken with in accordance with statutory requirements under the TI SEPP and having regard to the SCPP DPHI and the SCPP DoE. This included:

- Sending notices to adjoining neighbours, owners and occupiers inviting comments within 28 days.
- Sending notices to the local council and relevant state and commonwealth government agencies and service providers inviting comments within 28 days.
- Making the REF publicly available on the Planning Portal throughout the consultation period.
- Placing notification signs on both site frontages during the 28 day consultation period.
- Giving written notice of transformer/substation works to Camden Council and to the occupiers of adjoining land and taking into consideration any response to the notice that is received within 21 days. This occurred as part of the 28 day exhibition period described above.

The REF works were not advertised in local print media because it was determined that there was no local newspaper to place a public notice.

6.2.1 Summary of Submissions

During the public exhibition of the REF, a total of **6 submissions** were received, including submissions made by relevant government authorities, agencies and members from neighbouring organisations. A summary of the submissions is provided below:

- Five submissions from government agencies, comprising one from Camden Council and four from various other government agency bodies providing a general comment, recommendations or support.
- 1 submission on behalf of Futuro, the operator of the Early Leaning Centre at 10 Digitaria Drive, including an appended petition.

A numerical breakdown of the submissions received is provided in **Table 14**, and a summary of their position is provided in **Table 15**.

Table 14: Submissions received

Stakeholder Group	Submission Name	Total
Government agencies	Endeavour Energy Sydney Water Bradfield Development Authority Campbelltown City Council, on behalf of Futuro	4
Local Council	Camden Council	1
General Public and OrganisationsDesign + Planning, on behalf of Futuro		1
Total Submissions		6

Table 15: Position of submissions

Author	Support	Support with Comments	Comment / Neutral	Total
Government agencies	1	1	2	4
Local Council	0	1	0	1
Public	0	1	0	1
Total	1	3	2	6

Table 16 provides an overview of the comments received during the consultation period and how these comments have been responded to.

Consideration Raised	Response	Mitigation Measure
Design + Planning, or	n behalf of Futuro	
Parking and traffic management	Refer to the Appendix 33 for detailed responses. Whilst it is agreed that there would be some limited extent of Year 12 students driving to school, the proposed kiss 'n drop being on-street is the optimal arrangement for the school and surrounding land uses. If the kiss 'n drop facility were onsite, it would increase traffic use of the north-south driveway, which would impact on Futuro's Early Learning Centre car park. The proposed traffic and parking arrangements for the school have been developed in consultation with Camden Council and TfNSW through the Transport Working Group (TWG) process. No design changes are therefore considered necessary based	D/O-TT5 – D/O-TT9, D/O- TT14

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Consideration Raised	Response	Mitigation Measure
	on the feedback provided, but there are several mitigation measures to assist with parking and traffic management. Detailed operational measures including management of kiss 'n drop arrangements will be provided in the updated School Transport Plan (STP) that is required to be developed prior to operation. Generally, high school students do not require the	
	same extent of kiss 'n drop management as primary school students. A mitigation measure has been added to this effect. The mode share was tested in consultation with Council during TWGs and has informed the site layout and kiss 'n drop layout. Further messaging will be prepared prior to occupancy to discourage use of the service road and use of Futuro Early Learning Centre car park. Additionally, a new mitigation measure requiring the installation of speed humps at 50m intervals along the private north-south road has been included to reduce vehicle speeds.	
Kiss 'n Drop	The kiss 'n drop facilities have also been developed in close consultation with Council. Council requested that kiss 'n drop be limited to the frontage of the school to avoid impacts on other landowners, which was adopted. The details of staff management of kiss 'n drop facilities would be confirmed by the school closer to the date of opening. The proposed kiss 'n drop being on-street is the optimal	D/O-TT5
	arrangement for the school and surrounding land uses.	
School Entrance Location	The location of the main entry and pedestrian crossing has been extensively workshopped between the architect DJRD, the traffic engineer SCT, DoE and responds to the recommendations of SCT's rapid transport assessment which has been presented to Council in the TWG forum.	N/A
Camden Council		1
Site Use and Landscaping	The fencing off of part of site as seeded grassed area is in line with the SINSW masterplan prepared for the Final Business Case (FBC).The provision of an open grassed playing field (no formal line markings or goal posts) is in line with the SINSW masterplan prepared for the FBC.	N/A
Engineering and Drainage	nd Requirements noted and further details will be provided in the next phase. The DRAINS and MUSIC models will be provided for Council validation. The catchment plans relevant to the OSD and WSUD design and additional Civil photos will also be made available for reference. These have been included in the updated Civil Report at Appendix 8 .	
Flooding	Mitigation measures ensuring the preparation, implementation and periodic updating of a Flood Emergency Response Plan (FERP) have been included. The evacuation route and destination will be considered in consultation with the SES prior to the operation of the school.	D/O-FL1 – D/O-FL5
Acoustic and Environmental	The acoustic report appropriately assesses 500 students (i.e. whole school in attendance with 50% speaking/cheering) in the playing field using loud voices. Predicted noise level at nearest	Operational noise is addressed at

Consideration Raised	Response	Mitigation Measure
	residential premises is 56 dBA; compliant with LA90 + 10 dBA target (48+10 = 58 dBA). Regarding the impact of road traffic noise on the external play areas the acoustic engineers predict around 60 dBA in the play areas from traffic noise, which is satisfactory.	D/O-NV1 – D/O-NV9
Urban Design and Shading	A COLA is provided adjacent Building D. The provision of the COLA to Building D (Hall), covered servery to the canteen, weather protection to Support Outdoor Learning (adjacent Building A) are to the SINSW design standards which are applied for all new schools. These design standards have been developed through extensive consultation within the DoE. Noted that the design amendments to incorporate SDRP comments are supported.	N/A
Tree Management and Landscaping	Canopy cover has been maximised across the site wherever possible. Functionality of schools projects and minimum unencumbered areas per student require open spaces for fields/assembly areas without tree planting. As above no planting can be proposed within 3m from roof in accordance with ESFG.	CM-AI1 – CM- AI5
Parking Provision	Refer response to Design and Planning, on behalf of Futuro	As above
Kiss 'n Drop	Refer response to Design and Planning, on behalf of Futuro	As above
School Entrance Location	Refer response to Design and Planning, on behalf of Futuro	As above
Sydney Water		
Wastewater and wastewater servicing	It is noted that water and wastewater servicing should be available for the proposed development site. The proposed development site has frontage to an existing DN150 watermain in Digitaria Drive. There is an existing DN225 sewer connection. The Sydney Water Notice of Requirements will detail Sydney Water's servicing requirements.	N/A
Section 73 Compliance Certificate	Noted. Application in process.	N/A
Building Plan Approval (including Tree Planting Guidelines	A Building Plan Approval will be completed to enable the issue of a Construction Certificate.	N/A
Endeavour Energy		
Various conditions and requirements in relation to infrastructure planning and design	All matters raised by Endeavour Energy are noted and will be addressed as required in future stages, including detailed design.	N/A

Consideration Raised	Response	Mitigation Measure
Bradfield Development Authority		
Support for a new school in the South West Growth Area.	The support of the Bradfield Development Authority is noted.	N/A

6.2.2 Request to Consider Submissions

A Request to Consider Submissions letter was prepared and issued to the project team by the departments Assessment team, which outlines requirements for the Response to Submissions stage as follows:

- consider issues raised in the submissions received during the public exhibition period
- prepare an updated Review of Environmental Factors (REF) and revised mitigation measures and technical reports as necessary, that:
 - o summarises the submissions received and issues raised
 - sets out how these issues have been considered and addressed in the assessment of the proposed activity
 - includes a record of any further engagement and consultation undertaken in support of the updated REF
 - are consistent in structure and content with the Department's revised standard Mitigation Measures (Final 2.0)
 - considers the above guidelines and Stakeholder and Community Participation Plans.

The following reports have been updated in response to the submissions received:

- This REF
- Mitigation Measures (**Appendix 1**)
- Civil Engineering Design Report (Appendix 8)
- Flood Risk Assessment (**Appendix 21**)
- Building Code of Australia 2022 Assessment Report (Appendix 30)
- Access Report (**Appendix 31**)

Additionally, an addendum transport letter has been prepared and is included in **Appendix 33**.

Table 17 summarises the key issues raised by the assessment team and the responses provided.

Торіс	Comment	Response		
Traffic	 Consideration should be given to the following traffic issues: The north south right of way is expected to service the adjacent childcare centre, a future hotel and fast-food restaurant along with the staff car park. 	An addendum transport letter has been prepared and is attached at Appendix 33 . It addresses each of the points		
	• However, it may also be used by parents to access the drop-off and pick-up (DOPU) area along the northern frontage. A cumulative traffic assessment of the right of way is recommended to mitigate any traffic impacts along the right of way and at the accesses.	raised for consideration.		
	 Additional traffic calming devices should be considered along right of way to reduce speed and discourage use by parents getting to the DOPU. 			
	• Pedestrian safety for students crossing the right of way should be considered.			
	• The DOPU has 10 spaces however queuing at the DOPU has not been assessed which may impact the right of way access on Digitaria Dr.			
	• The widening of the footpath should be assessed in accordance with the Walking Space Guide, 2020.			
	Consideration of mitigation measures to guide students to safe crossing locations along Gregory Hills Drive.			
Mitigation Measures	Consider opportunities to adopt Standard Mitigation Measures recently issued by the department to ensure they are updated to reflect current requirements.	Numerous revisions to the proposed mitigation measures have been made, including the		
	In addition, consider and address the comments on mitigation measures in Table 1 relating to:	translation of some Standard Mitigation Measures and the		
	 Verification of some of the detail/s in various mitigation measures; 	introduction of new mitigation measures. An updated Mitigation Measures Matrix		
	 Identification of additional mitigation measures that have been discussed in the REF or technical reports but not included in Appendix 1; and 	has been included in Appendix 1 .		
	 Suggested consolidation or deletion of a number of mitigation measures where they are repeated or similar in detail / intent. 			
REF	Consider and address detailed comments included in separate table.	The REF and supporting documentation have been updated in accordance with the comments provided by the department assessment team. The changes relate principally to minor wording amendments and consistency updates to the revised mitigation measures included in Appendix 1 .		

7. Environmental Impact Assessment

7.1 Traffic, Access and Parking

The REF is accompanied by a Transport Access Impact Assessment that has been prepared by SCT Consulting (**Appendix 17**), which has assessed the proposal's impact on parking, site access, pedestrian movements and the local street network. The report also includes a Student Travel Plan and Construction Traffic Management Plan.

7.1.1 Methodology

The report evaluated transport conditions and impacts using the following approach:

- Strategic context review: Analysed relevant policies, including the TfNSW Active Transport Strategy and Camden Council Pedestrian Access & Mobility Plan, to assess enrolment boundaries and projected student travel demand.
- Existing transport conditions: Assessed road, pedestrian, cycling, and public transport networks, conducted traffic counts and queue length surveys, and benchmarked travel mode shares using Oran Park High School as a reference.
- Transport impact modelling and scenario testing: Developed base, moderate, and stretch scenarios for student travel, modelled future intersection performance using SIDRA, and analysed traffic generation impacts under different growth assumptions.
- Transport working group consultation: Key issues raised by Camden Council and TfNSW included pedestrian safety, bus stop locations, kiss & drop conflicts, intersection capacity, and construction traffic impacts. In response, the design was refined to include a raised pedestrian crossing on Digitaria Drive, adjusted bus stop locations, consolidated kiss & drop zones, confirmed intersection capacity through updated modelling, and required a Construction Traffic Management Plan to minimise disruptions.

7.1.2 Existing Environment

The Transport Access Impact Assessment evaluated the existing transport environment around the proposed Gledswood Hills High School, focusing on:

- Road network: The site fronts Gregory Hills Drive (a four-lane sub-arterial road) and Digitaria Drive (a local road with one lane in each direction). Key intersections include Gregory Hills Drive | Holborn Crescent and Gregory Hills Drive | The Hermitage Way, with existing delays ranging from 5 to 42 seconds.
- Public transport: Three bus routes (840, 841, and 850) serve the area, with two stops on Gregory Hills Drive providing access to the school (refer to **Figure 32**). However, bus stop coverage gaps exist in the north and east of the enrolment boundary, and most students are ineligible for subsidised transport under the School Student Transport Scheme.
- Pedestrian and cycling Infrastructure: Footpaths and shared paths connect to key residential areas, but there is no dedicated pedestrian crossing on Digitaria Drive (refer to Figure 32). Cycling infrastructure is limited, with shared paths along major roads but no dedicated cycling lanes within the enrolment boundary.

• Travel demand and mode share: A benchmark study from Oran Park High School found that 36% of students travel by car, 36% by bus, 22% walk, and 5% cycle. Staff rely heavily on private vehicles (95%), with minimal use of public or active transport.

The assessment identified gaps in pedestrian safety, bus accessibility, and cycling infrastructure, forming the basis for proposed improvements.





Source: SCT

7.1.3 Operational Transport Impacts

An assessment of intersection performance during the morning and afternoon peaks was carried out for the following intersections (refer to **Figure 33**):

- Gregory Hills Drive and Holborn Circuit
- Gregory Hills Drive and The Hermitage Way
- Digitaria Drive and the Hermitage Way
- Digitaria Drive and Holborn Circuit

Traffic impacts were modelled based on the moderate mode share target, assuming a mix of walking, cycling, bus use, and car travel, with SIDRA traffic modelling used to assess intersection performance, delays, and network capacity under projected school-generated traffic volumes. The predicted mode share for the base, moderate and stretch cases are included in **Figure 35**.



Figure 33 Key intersections

Source: SCT

Based on the traffic generation rates calculated for the moderate future mode share target, it is expected that the proposed activity will produce a total of 195 vehicles on the local road network during the AM and PM peak periods respectively (equivalent to 390 vehicle movements per hour).

Scenario	Metric	Walk	Bicycle/Scoot	Bus	Car
Base case	#	232	47	365	356
	%	23%	5%	37%	36%
Moderate case	#	262	47	365	326
	%	26%	5%	37%	33%
Stretch case	#	262	47	400	291
	%	26%	5%	40%	29%

Figure 34 Student mode share target for 1000 students

Source: SCT

The existing and predicted intersection performance is shown at **Figure 35** and **Figure 36** below. It shows that intersection performance generally decreases however the modelling shows that the four intersections have capacity to accommodate the additional traffic volumes and all intersections will operate with a level of service A - D, which means the intersection operates satisfactorily and spare capacity remains in the network. The modelling included background growth in traffic values. Therefore, no additional upgrades to the road network are required.

It is noted that, the level of service at the intersection of Gregory Hills Drive and Holborn Crescent improves due to the application of practical cycle times.

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Interpretion	Weekday AM peak			Weekday PM peak		
Intersection	DOS	Delay	LOS	DOS	Delay	LOS
Digitaria Drive Holborn Crescent	0.13	5.3s	Α	0.14	5.4s	Α
Gregory Hills Drive Holborn Crescent	0.61	33.9s	с	0.75	42.8s	D
Gregory Hills Drive The Hermitage Way	0.89	32. 7 s	с	0.81	31.4s	с
Digitaria Drive The Hermitage Way	0.51	11.2s	А	0.43	9.9s	А

Figure 35

AM and PM peak intersection base year performance

Source: SCT

Intersection	Weekday AM peak			Weekday PM peak		
Intersection	DOS	Delay	LOS	DOS	Delay	LOS
2027 scho	ol opening	(with scho	ol traffic)			
Digitaria Drive Holborn Crescent	0.31	14.1s	А	0.20	11.2s	Α
Gregory Hills Drive Holborn Crescent	0.81	49.1s	D	0.89	31.5s	С
Gregory Hills Drive The Hermitage Way	0.82	38.8s	С	0.86	32.4s	С
Digitaria Drive The Hermitage Way	0.65	15.8s	В	0.56	12.4s	Α
2037 – 10 years post opening (with school traffic)						
Digitaria Drive Holborn Crescent	0.39	15.8s	В	0.22	11.6s	Α
Gregory Hills Drive Holborn Crescent	0.87	52.6s	D	0.87	37.4	С
Gregory Hills Drive The Hermitage Way	0.93	55.3s	D	0.91	38.0	С
Digitaria Drive The Hermitage Way	0.72	20.6s	В	0.61	13.7	А

Figure 36 Future enrolment traffic volumes intersection performance

Source: SCT

Assessment Against Concept DA

The traffic assessment has considered the traffic generation of the Concept DA to that of the proposed high school, as reproduced in **Table 18**.

Table 18: Comparison of traffic generation of Concept DA land uses and new high school

Context	AM peak hour	PM peak hour
Concept DA	116 veh/h	344 veh/h
Gledswood Hills High School	388 veh/h	388 veh/h
Net increase	+272 veh/h	+44 veh/h

The precinct's infrastructure has been designed to accommodate the evening peak demand of 521 vehicles per hour, meaning this marginal increase of 272 and 44 vehicles per hour has minimal impact.

In the morning peak, the additional traffic utilises spare network capacity and ensuring no significant impact on precinct performance. Intersection performance assessments further validate that the road network operates, with any additional delays attributed to background traffic growth.

Additionally, the traffic consultant has confirmed that, based on the Concept DA consent, each lot is self-sufficient and not reliant on parking within other lots. Accordingly, the delivery of the school would not impact on the ability for other lots to achieve compliant car parking provision.

This analysis reinforces that the site and the existing traffic network is suitable for the proposed activity, and the impacts of the activity are not significant.

Operational Parking Impacts

As a new school, there is no existing travel mode share and the base case mode share was calibrated against Oran Park High School's 2024 travel survey results. Oran Park High School is a suitable benchmark as it is within the same Local Government Area, a short distance from the school and has similar context. In the adopted moderate scenario 33% of students and 95% of staff will travel to the high school via car. Additionally in the moderate case approximately 5% of students and 1% of staff are projected to cycle to the high school.

As described in **Section 3.4**, the proposal will deliver an eastern carpark which provides 78 car spaces including 2 accessible spaces. In line with department policy, no car parking will be provided for students or visitors to the site, despite an identified rate in the DCP.

The variation to the DCP parking rate is justified by the school's sustainable mode share targets, enhanced walking and cycling infrastructure, and public transport accessibility, and has been discussed and agreed with Camden Council. The school is well-supported by existing pedestrian pathways and public transport connections, with the relocation of the eastbound bus stop on Gregory Hills Drive adjacent to the school entrance also included within the scope of works to improve accessibility. Further, widened footpaths, a raised pedestrian crossing on Digitaria Drive, and dedicated bicycle parking encourage active transport, reducing reliance on private vehicles. The provision of a sufficient kiss & drop zone along the southern side of Digitaria Drive will further ease parking demand by ensuring efficient student drop-offs and pick-ups. These measures align with strategic transport policies promoting sustainable travel, and as a result, the variation is appropriate and will not result in unreasonable parking or traffic impacts.

DCP requirement	DCP requirement	Proposed
1 car parking space per full time equivalent staff member	78	78
1 car parking space per 100 students	10	0
1 car parking space per 5 students in Year 12 where appropriate	34	0
Total	132	78

Table 19: Camden Council DCP carpark requirements

Kiss & Drop

A kiss & drop zone is proposed along the southern side of Digitaria Drive and will provide for 10 spaces. The kiss & drop zone will be signposted with a No Parking zone (8.00 - 9.30 am and 2.30 - 4.00 pm) to enable appropriate operation. Additionally, the assessment has identified that there will be overflow demand that will need to be accommodated on the northern side of Digitaria Drive. While these additional four overflow spots were initially identified for inclusion as a formal kiss & drop zone, Camden Council requested that they remain unrestrained parking areas as to not unreasonably affect other road users. The traffic consultant concludes that the 14 spaces are sufficient to cater for the pick-up and drop-off needs from the moderate mode share case through to the stretch case of the school.

School Transport Plan

A draft School Transport Plan (**Appendix 17**) has been prepared with to support the delivery of infrastructure, policy, and programs to meet school travel demand in a way that enhances connectedness to the neighbourhood and community, increases the safety of the journey to school, maximises the use of active and public transport, and reduces car traffic and congestion on the road networks.

The implementation of a School Transport Plan and the provision of active and public transport infrastructure such as end-of-trip facilities for staff, will assist in shifting staff and student travel behaviour as the school population grows over time (such as reducing staff car driver mode split). This shift to a lower car driver mode split is consistent with the projects overall sustainable transport goals and is expected to coincide with gradual growth of the school population over time.

Overall, the transport provisions of this project across all travel modes have been selected and developed in order to provide a sustainable, safe, and efficient site. These provisions include physical infrastructure works on and off-site, along with management measures to be implemented during operation of the school.

With implementation of the proposed transport strategy, the operational transport impacts are considered to appropriately manage operational transport impacts and provide appropriate outcomes for the site.

Bicycle Parking

Based on surveyed rates from nearby Oran Park High School, it is expected that approximately 5% of students (or, approximately 50 students) would likely cycle to school. Bicycle parking is provided for 80 bicycles at the north-eastern and south-western side of the campus (40 at each). As the intention is to promote more sustainable travel to the school, this number of bicycle parking spaces is supports in excess of the expected demand. Bicycle parking at the site has been designed in compliance with the Australian Design Standards.

For staff, two showers and change rooms are provided as end of trip facilities. The school has change rooms that are able to be used by students as an end of trip facility.

Pedestrian Safety

To ensure a safer pedestrian environment, a new wombat crossing, changes to signage and line marking along Digitaria Drive are proposed. The new wombat crossing will provide a protected place to cross for students arriving from the north where none exists currently. Additionally, as a mitigation measure, footpath widening is proposed along Digitaria Drive to increase the comfortable capacity of the walkway for students, other pedestrians and the kiss & drop interface.

Relevant approvals under Section 138 of the Roads Act 1993 are to be obtained from Camden Council prior to the commencement of works.

Loading and Waste Collection

An on-site loading area is provided with access from Digitaria Drive. Retractable bollards will be installed at the access point, which will be raised outside of delivery hours. The loading area can accommodate up to an 8.8m medium rigid vehicle, which will enter and exit the site in a forward direction. Road widths are sufficient for a single vehicle using the service road at any one time. Deliveries vehicles will be infrequent and not coincide with one another.

Waste collection is from a designated location in the eastern carpark, with access from the shared Service Road. Swept paths indicate that a 10.5m Camden waste vehicle will need to reverse from the exit driveway. This may cause a potential vehicle conflict between a reversing waste vehicle and other car park users due to visibility issues. To mitigate the impacts of deliveries and waste collection on students, these must occur outside of school operating and peak hours to reduce disturbance to students (before 8am or after 4pm).

Swept path analysis for the loading dock and waste collection area is provided at Appendix 17.

7.1.4 Construction Transport Impacts

As the existing site is clear of development, disruption to the local community is anticipated to be minor. Notwithstanding, a preliminary Construction Traffic Management Plan has been prepared (**Appendix 17**) to assess the impacts during construction.

Construction Access and Routes

Construction vehicles will access the site via Gregory Hills Drive and Digitaria Drive, which connect to the local and regional road network (refer to **Figure 37**). These routes minimise community impacts by providing the shortest and most efficient access to the site, avoiding residential areas.

As oversized vehicles will be used to deliver building parts and modules, delivery will need to be organised outside of peak travel hours. This is to ensure little to no impact to the broader traffic network and to reduce the risk of damage to the parts.

It is assumed that heavy vehicles will use Gregory Hills Drive and the north-south driveway to enter and exit the site. Swept path assessment will be required for key turns prior to construction.





Construction haulage routes

Source: SCT

Construction Traffic Volumes

Traffic volumes for the construction phase have been forecast as follows:

- **Heavy Vehicles:** Estimated that approximately 10 heavy vehicles will access the site on a typical day during construction, spread across standard construction hours. Deliveries will be scheduled to occur outside peak commuter periods (e.g., AM and PM peaks), ensuring minimal disruption to traffic on the local network.
- Light Vehicles: The peak workforce is anticipated to include 50 full-time equivalent workers. Based on expected vehicle occupancy (average of 2.0 occupants per car), this equates to approximately 20 light vehicle movements per day generated by construction workers. Workers are expected to arrive and depart during off-peak hours (typically 6:30–7:00 AM and 6:00–6:30 PM), avoiding overlap with commuter traffic.

The local road network, particularly Gregory Hills Drive and Digitaria Drive, has been assessed to have adequate capacity to accommodate the anticipated construction traffic. Safety measures and detailed planning will ensure minimal disruptions to the community.

Construction Worker Parking

Approximately 20 light vehicles will park either on-site or on the surrounding road networks.

A Construction Worker Transport Strategy is proposed to encourage alternate transport modes, and reductions in car usage by construction workers. Given the nature of the locality, there is expected to be sufficient capacity on the local street network to accommodate the construction vehicle movements. Accordingly, the impact of construction traffic on local streets is expected to be adequately mitigated.

A Construction Environmental Management Plan will be required prior to construction commencing on the site. Additional mitigation measures are proposed to manage impacts on the existing network and are provided at **Appendix 1**.
7.1.5 Mitigation Measures

A complete set of mitigation measures relating to Traffic and Transport impacts is located at **Appendix 1**, with a number of key measures highlighted below.

Operation

- Standard regulatory speed signage indicating a speed limit of 20km/h must be installed at the entry locations and at 50m increments along the existing north-south Service Road.
- Widen the Digitaria Drive footpath to 2.0m on the southern side for the length of the frontage.
- School zone signage, speed management signage and associated pavement markings must be constructed and approved by TfNSW.
- If approved by Camden Council, change traffic signs along Digitaria Drive, southern side, along the frontage of the school to No Parking 8.00-930am and 2.30-4.00pm
- By Term 2 of the first year of operation appoint a school travel coordinator, establish a school transport committee, and prepare a travel access guide.
- Update the School Transport Plan annually for the first two years.
- Deliveries and waste collection must occur outside of school operating and peak hours (before 8am or after 4pm).

Construction

- Prior to the commencement of any construction work within the road reserve, approval under Section 138 of the Roads Act 1993 is to be obtained from the relevant road authority.
- Prior to commencement of construction, a detailed Construction Environmental Management Plan is to be prepared to manage construction traffic impacts.
- A Construction Worker Transport Strategy is required to encourage alternate transport modes, and reductions in car usage by construction workers.
- Swept path analysis for heavy vehicles is to be carried out prior to construction.

7.2 Noise and Vibration

An Acoustic Report has been prepared and is included at **Appendix 18**.

7.2.1 Methodology

The assessment identified the potential acoustic and vibration impacts of the proposal upon the closest receivers surrounding the site show in **Figure 38** below. This includes the Gregory Hills Health and Business Centre (1), Aquabliss Swimming School (2), Gregory Hills Hotel (3), Approved Hotel (3*), Raising Stars Gregory Hills Early Learning Centre (4), Futuro Gledswood Hills Childcare and Education (5) and Commercial Receivers (6), which include commercial, early childhood education and hotel developments. Residential receivers are located approximately 350 metres north of Digitaria Drive. The methodology employed by the acoustic consultant is summarised as follows:

• **Regulatory & Site Review:** Assessed NSW Noise Policy for Industry (NPfI) 2017, EPA Road Noise Policy (RNP) 2011, and Turner Road DCP. Identified sensitive receivers and noise sources.

- **Baseline Noise Monitoring:** Deployed noise loggers at key locations (Digitaria Drive and Gregory Hills Drive) for 10 days. Conducted short-term attended noise measurements and accounted for meteorological factors.
- Noise & Vibration Criteria: Established project-specific noise trigger levels (PNTL) for day, evening, and night periods. Assessed construction noise limits using NSW Interim Construction Noise Guideline (ICNG) 2009.
- **Operational & Construction Noise Assessment:** Analysed school activities, traffic, PA systems, and mechanical services for noise impacts. Assessed construction equipment and schedule for compliance with DIN 4150-3 (1999) vibration limits.
- Facade Acoustic Design: Recommended glazing and wall materials to meet internal noise limits for classrooms and halls.

The methodology ensured a comprehensive evaluation of noise and vibration impacts.

7.2.2 Existing Environment

The site is exposed to traffic noise from Gregory Hills Drive (south) and Digitaria Drive (north). No rail lines impact the site, and it is outside the ANEF noise zones of Camden and Western Sydney Airports. Background noise levels are dominated by road traffic and nearby commercial activities.

Two noise loggers were deployed from 27 August to 6 September at key locations:

- Logger 1 Digitaria Drive.
- Logger 2 Gregory Hills Drive.

Short-term attended noise measurements conducted on 6 September at both locations. Data were recorded at 15-minute intervals, capturing background noise (LA90) and equivalent continuous noise levels (LAeq). The recorded daytime levels are as follows:

- Digitaria Drive: 63 dBA
- Gregory Hills Drive: 71 dBA

The baseline noise data informed the assessment of operational and construction noise impacts.



Figure 38 Sensitive receiver locations

Source: NDY





7.2.3 Construction Noise

Construction Hours

The recommended standard hours for construction under the Interim Construction Noise Guideline (ICNG), are:

- Monday to Friday 7:00am to 6:00pm.
- Saturday 8:00am to 1:00pm.
- No work on Sundays and Public Holidays.

Construction Noise Impacts

Construction noise is may affect the childcare facilities during all stages of construction. Additionally, noise impacts on the hotel may occur during the structural phase. However, construction has not commenced on the hotel and as such impact on its operation is not expected. All other surrounding commercial and sensitive receiver levels are not expected to be exceeded.

Noise impacts is not unusual given the heavy plant and equipment that must be used, such as excavators and hammers, and the proximity to sensitive receivers. Construction works are temporary in nature and any potential noise impact on the community and the surrounding environment will not be permanent or continuous. The primary mitigation to these impacts will be a solid construction permitter hoarding in the locations identified in **Figure 40**.

Where the predicted noise levels are expected to exceed the relevant noise criteria, work practices and appropriate mitigation measures would be applied. Construction noise will be managed by shielding internal fitout works, minimising the need for time restrictions. Excavation and structural works near the childcare facilities will require trucks to be positioned away from sensitive receivers, with excavators, piling rigs, and concrete pumps limited to 50% operation. Direct liaison with childcare operators will ensure advance notice of noisy activities, and has been reflected in the mitigation measures. The large site allows staggered machinery use, reducing peak noise impacts.

The preparation of a detailed Construction Management Plan forms part of the mitigation measures (**Appendix 1**) which will ensure noise monitoring throughout construction, appropriate consultation with surrounding properties and an approval process for undertaking work outside standard construction hours. Impacts will be temporary, however with implementation of suitable mitigation measures, the impacts are considered acceptable.

Construction Vibration Impacts

For the proposed new school, activities likely to cause some vibration are piling, earthworks and reinstatement works. The following vibration levels are predicted during the construction phase of the activity:

- Percussive piling, piles at 10 m depth with cohesive soils. Critical receivers at 16.5 m: 0.12 mm/s
- Steady state for vibratory compaction. Include distance to critical receiver in Gregory Hills Dr. (20 m): 3.1 mm/s

These levels meet the construction vibration criteria as per DIN 4150 – 3 and are below the maximum recommended vibration levels criteria.





Perimeter hoarding locations

Source: NDY

7.2.4 Operational Noise Impacts

Noise emitted as a result of the proposed activity during operation will consist of medium to large waste collection vehicles during waste collection, PA systems and school bells, outdoor play spaces, kiss & drop locations, carpark and services. The operational noise impacts are summarised as follows:

- Waste collection The proposed waste collection strategy meets the required operational acoustic levels for daytime operation. Waste collection will occur out of peak school hours to minimise impacts on both school students and surrounding childcare centres. As an additional measure to protect the daycare from additional noise, it is recommended that the waste truck enter via Gregory Hills Drive instead of Digitaria Drive.
- **PA systems and school bells** PA systems and school bells are not expected to exceed acceptable acoustic levels. To mitigate any impact PA systems and school bells will be located as far as possible from neighbouring and oriented to the centre of the arrangement of school buildings.
- **Outdoor areas and play spaces** The sport field and multi-sport courts are not predicted to exceed the project acoustic levels.
- Kiss & drop locations The kiss & drop operating at full capacity complies with the project acoustic levels during the day, including both morning drop off and afternoon pick up. In the evening, there would be exceedances were the kiss & drop to operate at peak occupancy for in excess of an hour in any 24 hour period. However, activity at the school is expected to be limited after 6pm so it is not expected that the kiss & drop will reach 100% occupancy in the evening.
- **Carpark** At normal peak occupancy, the carpark noise meets the project acoustic levels for the daytime. The carpark slightly exceeds the evening acoustic levels when at peak occupancy. However, it is assumed that due to limited school operations in the evening that the carpark would not be at peak occupancy level, so would comply with the project acoustic levels.
- Services As is typical for this stage of the design development, final plant selections have not been made, and therefore a detailed assessment has not been carried out. Notwithstanding, an assessment will be undertaken once the detailed design of the plant has been completed. A preliminary review of the plant located on the ground level and roof of the school, finds that it is able to comply with relevant controls, with a number of design strategies incorporated to reduce acoustic impact where appropriate.

Assessment Against Concept DA

The Acoustic Report reviewed the Concept DA. Previous assessments for the Concept DA (bulky goods, cinema, and commercial uses) identified high traffic noise from Gregory Hills Drive and recommended loading dock restrictions and vehicle caps to mitigate impacts. The 2021 acoustic report prepared for the hotel site confirmed similar conditions, finding that traffic increases would not significantly worsen noise impacts.

The following conditions relating to noise and vibration were noted to apply to development subject to the Concept DA:

• General (23) all must be designed and operated to comply with the requirement of the "project criteria – 10 dB" to residential receivers.

- Prior to issue of a construction certificate (24) Car park noise control all carparks must have a coved finish with Slabseal 2000 SR sealant or equivalent applied to the concrete floor. The coved finish and sealant must be suitably maintained on the floor at all times to a standard that eliminates tyre squeal noise from being audible.
- During works (15) noise during work; Noise levels emitted during works shall be restricted to comply with the construction noise control guidelines set out in Chapter 171 of the NSW Environment Protection Authority's Environmental Noise Control Manual.
- During works (20) All work shall not give rise to offensive noise, dust, odour or vibration as defined in the Protection of the Environment Operations Act 1997 when measured at the property boundary.
- Ongoing use (9) The use and occupation of the premises including all plant and equipment shall not give rise to any offensive noise within the meaning of the Protection of the Environment Operations Act 1997 and shall comply with the NSW Industrial Noise Policy 2000 (as amended).

These conditions of consent formed a benchmark that was incorporated into the noise and vibration criteria for assessment of the proposed school. As per the assessments in the above sections, the proposed Gledswood Hills High School will comply with the acoustic requirements of the Concept DA.

7.2.5 Mitigation Measures

A complete set of mitigation measures relating to Noise and Vibration impacts for the activity is located at **Appendix 1**, with a number of key measures highlighted below:

Design and Operation

- Waste collection vehicles are required to enter the Service Road via Gregory Hills Drive.
- PA systems and school bells are required to be located as far as possible from neighbouring and oriented to the centre of the arrangement of school buildings.
- The carpark must have a coved finish with Slabseal 2000 SR sealant or equivalent applied to the concrete floor.
- Attenuators, louvres, screening or the like are to be applied to all mechanical systems including fans, outdoor units, smoke fans.
- Implement any required acoustic mitigations based on final fire pump selection during the detailed design and operations stages.
- Provide minimum façade constructions as per Table 18 and Table 19 of the Acoustic Report prepared by NDY (Revision 3.1).
- Prior to the commencement of operations, it must be demonstrated by a suitably qualified acoustic engineer that noise associated with the operation of mechanical plant or machinery installed does not exceed the relevant project noise trigger levels.

Construction

- Perimeter hoarding must be installed to shield the childcare centres either side of the site in accordance with the diagram at Figure 16 of the Acoustic Report prepared by NDY (Revision 3.1).
- Time restrictions are to be applied to construction noise activities as required to comply with the construction noise limits.

• Advance notice is to be provided to the adjoining childcare operators of planned high impact noise construction activities.

7.3 Hydrology, Flooding and Water Quality

An unnamed watercourse is located immediately east of the site, the watercourse is a tributary of South Creek/Wianamatta which forms part of the Upper South Creek Catchment. The proposed works do not alter existing drainage patterns.

7.3.1 Flooding

The REF is accompanied by a Flood Risk Assessment (**Appendix 21**). The site is located outside of all flood extents and the flood planning area.

While the site is not affected by flooding by the unnamed watercourse, it is located in an area classified as a high flood island/trapped perimeter during a PMF event, as shown in **Figure 41** and **Figure 42**. Gregory Hills Drive and Digitaria Drive are both affected by floodwater events including the 1% AEP event (**Figure 41**) and may be unsafe for small vehicles during the PMF.

As a result of these conditions, the flood assessment confirms:

- The proposed school will not increase flooding risk in the surrounding area.
- Evacuation of the site in events greater than the 1% AEP may not be possible due to high hazard flood water on the evacuation routes.
- The upstream flooding that would inhibit evacuation routes is modelled to last only for up to four hours.
- As a result, a shelter in place protocol is an appropriate response whereby students and staff remain on the site situated above the flood level until such time that the evacuation routes are no longer subject to flooding.





Source: Camden Council







Source: Camden Council

A Flood Emergency Response Plan including details of the shelter in place approach is included as part of the Flood Risk Assessment at Appendix 21. This approach was suggested and endorsed in consultation with the NSW SES (refer to Appendix 13).

School management is responsible for flood preparedness, response, and recovery, with the Head of Staff overseeing all actions and Flood Wardens monitoring weather alerts and implementing emergency procedures. All staff must ensure students follow shelter-in-place or evacuation directives (refer to Figure 40). Before a flood, the school conducts training and awareness sessions, installs flood risk signage, and tracks Bureau of Meteorology and SES warnings to ensure early response readiness.

During a flood, students and staff must shelter in place (SIP) within designated buildings, as Gregory Hills Drive and Digitaria Drive become unsafe. Access to external areas is restricted, and the school communicates updates to staff, students, and parents. After floodwaters recede, the Head of Staff assesses access roads before reopening the school. If necessary, the flood response plan is reviewed and updated to improve future preparedness.



Figure 43 Flood evacuation plan

Source: Siteplus

7.3.2 Stormwater

Civil Engineering Plans and a Civil Engineering Design Report have been prepared by the civil engineer at **Appendix 7** and **Appendix 8** respectively, and include a description and assessment of the proposed stormwater, drainage, and sediment/erosion control measures to be implemented in the proposal.

Stormwater design is summarised as follows:

- Roof stormwater
 - Under normal conditions, stormwater is collected via gutters and downpipes and directed to rainwater tanks for reuse in landscape irrigation.
 - Up to the 20% AEP storm event, rainwater tank overflow is directed to an in-ground pipe system for surface stormwater management.
 - Stormwater flows exceeding the 20% AEP and up to the 1% AEP event are directed via overland flow paths or in-ground stormwater systems to an on-site detention tank.
- Surface stormwater
 - Surface stormwater is collected through surface inlet pits and in-ground pipes.
 - For events beyond the 1% AEP or if pits become blocked, the finished slope of the site will enables overland flow to exit the site.

OSD is required with a capacity of 600m³, provided for by an in-ground tank in the southeast corner of the site. Stormwater discharge will be directed to the existing stormwater pit in within Gregory Hills Drive, with the exception of the carpark area, that will drain towards the existing Service Road, and the new northwestern driveway, that will drain to Digitaria Drive.

Water quality measures were also considered and detailed in the report, to mitigate and exceed stormwater borne pollutant targets. The treatment system includes ocean guard inlet pits, a rainwater tank for landscape irrigation and bioretention raingardens. The stormwater management plan has been designed to meet the requirements of Camden Council and is therefore considered adequate. Erosion and sediment control will be provided in accordance with industry best practice, as captured in the mitigation measures.

Assessment Against Concept DA

The Civil Engineering Design Report has reviewed the stormwater layout and treatment of the Concept DA. It is noted that discharge points have been revised when compared to the Concept DA on account of the school site now operating independently of surrounding lots and containing a greater permeable area.

Notwithstanding this, the proposed activity is designed within the same parameters as the Concept DA. Accordingly, there is sufficient capacity within the proposed stormwater scheme and the activity is not detrimental to the stormwater outcomes for adjacent lots or the wider precinct.

7.3.3 Groundwater

The Geotechnical Report (**Appendix 22**) identifies one registered bore within a radius of 500 metres of the site and the depth of groundwater is approximately 23 metres from the existing ground surface.

It is unlikely that the excavation works will encounter significant groundwater inflow. Minor groundwater inflow (if any) can be managed by conventional sump and pump methods.

7.3.4 Mitigation Measures

A complete set of mitigation measures for the activity is located at **Appendix 1**, with a number of key measures highlighted below:

Operation

- Flood awareness training is to be included in site induction process.
- Flood Risk Management Plan signs must be installed in appropriate locations around the site.
- Gledswood Hills High School should consider enforcing Shelter in Place protocols within the habitable floor areas if moderate flood warnings are announced.
- The Flood Risk Management Plan should be updated periodically.

Construction

• Erosion and sediment control measures must be implemented, including silt fence, sediment traps and sediment basins.

7.4 Aboriginal Heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared and is included at **Appendix 23**. One previously registered Aboriginal Heritage Information Management System (AHIMS) site (TR10, AHIMS ID# 52-2-3566) is located in or within 50 metres of the site. Test and salvage excavations which have been completed for the site during previous Aboriginal Cultural Heritage Assessments conclude that the site has been largely destroyed, the site has been impacted in its entirety since the Aboriginal Heritage Impact Permit (AHIP) was issues with no remaining archaeological potential in the Subject Area. It is assessed that the site would have limited aesthetic, historic, scientific or cultural significance.

No further archaeological assessment is deemed required for the site and due to the current state of the subject site an AHIP is not required.

7.4.1 Mitigation Measures

A complete set of mitigation measures for the activity is located at **Appendix 1**, with a number of key measures relating to unexpected finds highlighted below:

- Discovery of unanticipated Aboriginal objects in areas of low archaeological potential Should any Aboriginal objects be encountered during works associated with this assessment proposal, works must cease immediately, and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object, the archaeologist will provide further recommendations. These may include notifying the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and Registered Aboriginal Parties, details provided in Section 8.
- Discovery of Aboriginal Ancestral remains Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity, you must:
 - Immediately cease all work at that location, and no further movement or disturbance of the remains and with a buffer of at least 20 metres, to avoid further harm.
 - Notify the NSW Police and DCCEEW Environmental line on 131555, as soon as practicable and provide details of the remains and their location.
 - Not recommence work at that location unless authorised by Heritage NSW (DCCEEW).

7.5 Ecology

A Biodiversity Report is provided at **Appendix 24**. The purpose of the report is to assess any potential impacts associated with the proposed activity on biodiversity within the site, including threatened species, populations and ecological communities listed under the *Biodiversity Conservation Act 2016* and the EPBC Act.

The proposed activity occurs within the South West Growth Centre biodiversity certification conferred in November 2007. When land is biodiversity certified, an activity can occur without the need for site-by-site biodiversity assessment under the *Biodiversity Conservation Act 2016*. Accordingly, no Biodiversity Development Assessment Report or Species Impact Statement are required for the site.

A detailed vegetation and habitat assessment was conducted within the Study Area on 30 October 2024. Existing information on the flora and fauna of the Study Area and the locality, including relevant threatened biota, was obtained from regional vegetation mapping and previous records of threatened species, populations and ecological communities within a 5km radius.

The investigation identified that the vegetation on site does not include any listed Plant Community with no potential for threatened flora on site due to past and ongoing land management disturbance. Specifically, 85% of the ground layer was noted to be exotic or non-native pasture and forbs and provides very little contribution to native flora/fauna habitat in the locality. It is considered based on the history of maintenance on the site, that no direct impacts to biodiversity will result from the proposed activity as endemic flora and fauna do not exist.

It is noted that six street trees off site will require removal to establish driveway access on Digitaria Drive, each of which are either dead or have a low to medium retention value. The increase in tree canopy as a result of the proposed activity will offset the removal of these trees.

7.5.1 Mitigation Measures

A complete set of mitigation measures relating to ecology impacts from construction and operation for the activity is located at **Appendix 1**, with a number of key measures highlighted below:

Operation

• Where native landscaping is to be placed around the school, Cumberland Plain Woodland origin species should be considered, subject to any existing landscaping plans where this has already been determined. Landscaping beds should incorporate a reasonable proportion of understorey species also of Cumberland Plain Woodland origin where appropriate.

Construction

- The following measures will be implemented to manage the potential soil impacts:
 - o Minimise disturbance and compaction of existing soils where possible
 - o Replace any topsoil once works are completed
 - Recreate a natural landscape profile where excavation works have been completed
 - Stabilise any exposed soils
 - Revegetation any disturbed areas not required for maintenance purposes.
 - Sediment control fences installed.
 - Damping of soils in dry and windy conductions to prevent excess dust spreading over neighbouring properties.
 - Keep vehicle movements on site to tracks and limit movement through temporary construction fencing.
- Temporary stormwater management measures such as sandbags, sediment fences and berms are to be appropriately located to intercept surface water run-off during the construction phase and ensure that sediment laden runoff and other construction pollutants do not enter downstream aquatic systems.
- A Weed Eradication and Management Plan is required to be prepared and implemented. This is to form an appendix of the Construction Environmental Management Plan.

7.6 Land Use

7.6.1 Surrounding Land Uses

The site is not in proximity to oil and gas pipelines or unexploded ordinances that pose a risk to the site. The site is not part of a mine subsidence area. The site is not in proximity to any high voltage powerlines or telecommunications infrastructure that may have electromagnetic field considerations.

The proposed activity will not impact on flight paths of any airport, airfield, or helicopter landing sites.

As noted in **Section 2.4**, the surrounding development includes four childcare centres in close proximity to the site, establishing a conducive context for the delivery of a new school. More broadly, the site is suitable for the proposed high school as the surrounding commercial, food and drink and retail uses are compatible with the operations of the school and will not be unreasonably impacted upon by it.

7.6.2 Concept DA

In considering the potential impacts of the proposed school, it is appropriate to assess the impacts of the reallocation of the site from the uses envisioned under the approved Concept DA. While the loss of the approved bulky goods and cinema premises may have minor impacts on the locality and community, the proposal's broader benefits and its compatibility with the surrounding development substantially offsets these concerns, as outlined in the sections below.

Economic and Community Contributions

The proposed high school creates approximately 80 permanent jobs, comparable to the employment generated by bulky goods retail and cinemas. However, these education-sector roles typically offer higher wages, career stability, and long-term economic benefits. Further, education sector employment represents an important diversification to the kinds of employment offered in the area. Indirect economic benefits are also realised through local spending by staff and families, bolstering nearby businesses.

The proposed high school is considered more compatible with the surrounding land uses then the bulky goods centre. The site is bordered by employment uses, such as childcare centres, medical facilities, and retail services. The site adjoins two existing childcare centres, a third is located opposite Gregory Hills Drive, and a fourth is approved, but not yet developed, to the west of the site. The school's placement complements these uses by providing a centralised hub that strengthens community connectivity and adds value to nearby developments. The recently developed residential suburbs of Gledswood Hills and Gregory Hills lie just beyond the site, with the school providing an important piece of social infrastructure that will support recent residential growth in the precinct. The school supports the Turner Road DCP's focus on sustainable and community-oriented growth. Its shared-use facilities, including sports fields and a hall, offer local groups versatile spaces for events, fostering stronger social bonds and maximising public benefit.

Retail and recreation opportunities

A potential impact of the envisioned bulky goods and cinema uses not eventuating is the perceived loss of retail and entertainment options that could have provided leisure activities and consumer

convenience. However, the rest of the surrounding employment area continues to contain ample opportunity for these typologies which could be delivered as demand arises considering the substantial extent of remaining vacant or underutilised land proximate to the site. Further, the proposed school infrastructure will form a community asset for other entertainment/social activities, such as sport and outdoor recreation, offsetting the potential loss of indoor recreational opportunities. On balance, while the site's reallocation potentially reduces the diversity of commercial opportunities within the precinct, the high school replaces this with an equally important long-term community asset that serves the region's growing population, providing significant public value beyond that envisioned under the Concept DA.

Environmental Sustainability

The school incorporates environmentally sensitive design principles, including photovoltaic panels, water-sensitive urban design, and substantial tree planting, achieving a 28.54% tree canopy coverage at maturity. The school also features substantial open grassed areas, including the playing field. Together, these factors represent an improved outcome in terms of the urban heat island effect when compared to the development contemplated under the Concept DA, which saw an extensive share of the site allocated to surface car parking. These features of the proposed school align with the DCP's objectives for sustainability and environmental enhancement, in contrast to the retail and cinema uses, which would likely generate more impermeable surfaces and higher energy consumption.

Conclusion

Overall, the proposed Gledswood Hills High School is compatible with the surrounding land uses and will improve sustainable use of the site, while addressing community education needs. In the long term, the non-delivery of the outcomes anticipated by the Concept DA are not expected to have significant adverse impacts on the precinct or community. Since approval, the concept DA has been modified 13 times, with the precinct transitioning from a retail focus to an education, hotel and fast food premises focus. On balance, the proposal's long-term educational, economic, and environmental benefits outweigh any land use impacts, ensuring the school is a suitable facility that serves the growing Gledswood Hills community.

7.7 Other Issues

Issue	Consideration
Built Form	The 3-storey built form across the site provides an efficient use of the site which allows the ground plane to be used as play space. The perceived bulk and scale of the buildings throughout the site is reduced through the provision of generous landscaped setbacks and the separation of buildings with external circulation links. The design of the proposed Gledswood Hills High School has also been considered by the School Design Review Panel (SDRP) which has informed design development. Schedule 8 of the TI SEPP establishes seven design quality principles for schools which the proposed activity responds to, as detailed in the Architectural Design Report at Appendix 5 . The built form is therefore considered appropriate.
Visual Amenity and Privacy	An analysis of visual amenity and view impacts of the proposed activity has been undertaken by the architect and has been provided within the Architectural Design Report at Appendix 5 . The generous building setbacks and landscape design will reduce the impact of the scale of the building from surrounding streets. These setbacks also allow for privacy between the proposed school and surrounding land uses. The building articulation and materiality will also contribute to soften the bulk and scale of the proposal. Viewpoints indicate the proposed development will have
	limited visual impact on the surrounding visual catchment. The three storey height will not impact the overall consistency of the scale and proportions of surrounding development. The materiality, roof and building design is sympathetic to the surrounding area and character. The arrangement of the built form creates a sense of privacy for students, with the proposed buildings forming a perimeter that shields activity occurring in the school grounds from neighbouring properties. Combined with the generous setbacks and landscaping, no privacy impacts are expected.
Overshadowing	A shadow impact modelling study has been undertaken for the site and is provided in the Design report at Appendix 4 . The design of buildings ensure that there are no adverse impacts on adjoining properties as a result of overshadowing. The study undertaken indicates that central play areas including assembly area will have good direct solar access throughout the day and during summer and winter.
Contamination	 A PSI and DSI is provided at Appendix 19. The PSI and DSI investigate and assess the contamination history of the site and imported fill through desktop research and borehole testing. There were no high levels of contaminants detected through the investigations and the potential off-site impacts of contaminants on groundwater and waterbodies are low. Isolated instances of illegal dumping including disused diesel oil bottled, diesel fuel filters and truck brake pads were identified on site. These will be appropriately disposed of and inspected through the construction phase. The assessments confirm the site is suitable for an educational establishment and remediation is not required. The findings of the PSI and DSI have been confirmed by the site auditor in their statement at Appendix 20. A complete set of mitigation measures for the activity is located at Appendix 1, with a number of key measures highlighted below: Any materials resulting from illegal dumping (fly tips) must be removed from the site and disposed of appropriately as part of the site preparation works. Inspection of the footprints of the fly tips is to occur following complete removal. In the event of unexpected finds, a contamination assessment must be carried out. Where contamination is identified, a Remediation Action Plan must be prepared in consultation with Independent Site Auditor.
Hazardous Materials	The site is not located on records of school's asbestos register and is not listed on the NSW Environment Protection Authority Record of Notices for Contaminated

Issue	Consideration
	lands and Protection of Environment Operations Public register.
	The site does not contain the presence or storage of chemicals. The site is identified as containing moderate salinity potential across the site. Accordingly, earthworks for the proposed activity are to be undertaken in accordance with a Saline Soil Management Plan.
Bushfire	The activity is not on designated Bushfire Prone Land, therefore does not require approval from the RFS. For completeness, a Bushfire Assessment Report has been prepared at Appendix 25 . The site is low risk and is treated accordingly with no requirement for compliance with Planning for Bushfire Protection 2019, the National Construction Code for Specification 43 or the Australian Standard for Construction of Buildings in Bushfire Prone Areas 2018 (AS3959).
Soils and Geology	The site is located outside an acid sulphate soils area. Additional earthwork and site preparation for the construction of the school is likely to involve some excavation and fill operations. Groundwater is not expected to be encountered. Minor inflow or seepage, if encountered can be handled with a conventional sump and pump method. The site currently is almost levelled and has been assessed to have a very low risk of slope instability to property. The existing fill on the site has been confirmed to be controlled fill. A Geotechnical Report is provided at Appendix 22 .
Social Impact	A Social Impact Assessment (SIA) has been prepared (Appendix 26) as per the Guidelines for Division 5.1 assessments by the DPHI.
	The social impact assessment identified the following significant social benefits as a result of the proposed activity:
	 Improved access to education for the local community Provision of new community infrastructure and sense of place Co-location of school with other social infrastructure Economic opportunities during construction and operation
	 Key challenges which have been identified relating to the proposal: Health impacts for students from proximity to a fast-food restaurant Disruption associated with the construction of the new highway school facilities Increased wait times and impact on daily routines The extent of potential social impacts because of the development are considered to be low and will not have a significant impact on the locality, community and/or the environment. A set of mitigation measures relating to social impacts from construction and operation for the activity is located at Appendix 1.
Crime Prevention through Environmental Design	Crime Prevention through Environmental Design (CPTED) has been addressed in the Architectural Design Report at Appendix 5 . The school main entry on Digitaria Drive with be maintained with a secure entry with video intercom to the administration. Outside of this entry area the school site will be secured by a palisade fence around site perimeter with gated control for entry into the school. The alternative entry located on Gregory Hills Srive will be open during peak arrival and departure times. After school hours is provided via the main entrance in close proximity to the hall. Multiple access points are provided all with clear sightlines and safe lighting. Additional CPTED design principles around entries and circulation include: • Entry forecourt has good sightlines from Digitaria Road
	 The new reception is located with clear sightlines to the Main Entry allowing for passive surveillance Safe lighting will be provided along pathways and increased lighting at Main and after-hours entry points

Issue	Consideration
	 Circulation is rationalised with primary access along wide, open circulation spines that connect directly to vertical circulation nodes or external staircases Constrained, dead-end corridors are minimised Student amenities are located to maintain passive surveillance and allow safe
	 use by different age groups and genders All stairs are located externally, with good supervision of the stair wells and are used for both egress and general circulation
Waste	An Operational Waste Management Plan and Construction and Demolition Waste Management Plan have been provided by the waste consultant at Appendix 27 and Appendix 28 respectively.
	Construction Waste Management
	There will be minimal demolition as the site is already cleared, a demolition contractor will be engaged to ensure demolition activities are undertaken in accordance with waste minimisation policies.
	Waste generated during the construction stage of the development will be managed by the principal contractor and sub-contractors, with materials being reused and recycled wherever possible. Where neither reuse nor recycling are possible, waste will be disposed of as general waste at a licensed landfill site.
	The indicative location of a construction waste skip bin will be located at the southern boundary of the site along Gregory Hills Drive.
	Operational Waste Management
	Based on the estimated waste and recycling volumes generated by the school, two 4.5m ³ general waste and two 4.5m ³ recycling bins are required and provided for, with collection three times per week. The bin storage area is located on the ground floor level adjacent to the carpark and will contain up to four 4.5m ³ bins for the collection of general and recycling waste. The allocated area is sufficient in size to accommodate the forecast bin storage requirements. Access will only be provided to grounds keepers, waste collection staff and cleaners.
	In each room and across the campus grounds, appropriately labelled bins of around 20L capacity will be provided for waste and recycling. These bins will be placed in convenient locations. The groundskeeper and cleaners will monitor the capacity of the bins to prevent overflowing and transport waste to bulk bins located in the car park after hours.
	A private waste contractor will service general waste and recycling bins which is assumed to be three times a week for both recycling and general waste. The private waste contractor will collect waste via the staff carpark entrance accessed via Service Road. Any mitigation measures outlined are also included in Appendix 1 .
Air Quality	A Preliminary Construction Management Plan (Appendix 29) assesses air quality management and odour control. The site is surrounded by primarily commercial, childcare and future medical uses which will therefore not have a significant impact on the air quality of the school.
	The main contractor will be ensuring that air quality and dust are mitigated including implementing the following measures:
	Use of water sprays and dust suppressions during bulk excavation.
	 Stockpiles of excavated materials and building materials to be kept moist or covered.
	 Cease operation of activities such as sand blasting, spray painting, concrete cutting when wind speeds become excessive.
	 Ensure diesel equipment is in good condition and smoke emissions are minimised.

Issue	Consideration
	• Ensure haulage vehicles leaving site have loads covered, and where deemed necessary, wheels are cleaned to ensure materials are not spread onto surrounding public roads.
BCA Compliance	The proposed activity is capable of complying with the Building Code of Australia 2022 as outlined in the Building Code of Australia 2022 (BCA) Assessment Report at Appendix 30 .
Accessibility	The proposed activity is capable of complying with, the relevant requirements of the Building Code of Australia, Volume 1 2022 Part D4 E3 and F2, and the Premises Standards. Refer to the Access Report at Appendix 31 .

7.8 Cumulative Impact

As defined in the Part 5.1 Guidelines, 'Cumulative Impact' is defined as the following:

Impacts that are a result of incremental, sustained and combined effects of human action and natural variations over time, both positive and negative, or by the compounding effects of a single project or multiple projects in an area, and by the accumulation of effects from past, current and relevant future projects. Reer to definition for 'relevant future projects' to understand scope of projects to be included.

The term 'relevant future projects' is defined under the guidelines as comprising:

- other State significant development and State significant infrastructure projects
- projects classified as designated development and require an EIS
- projects that require assessment under Division 5.1 of the EP&A Act that are likely to significantly affect the environment and require an EIS
- projects that have been declared to be controlled actions under the EPBC Act
- any major greenfield and urban renewal developments that are scheduled for the area (e.g. new areas zoned for urban development). These types of projects are generally large in scale and could potentially contribute to or compound material impacts. They are also generally publicly notified and should therefore be known or reasonably foreseeable.

The Turner Road Precinct has been subject to a process of transformation from greenfield into residential and business uses to align with the precinct masterplan over recent years, which has seen the establishment of the road network and substantial residential and commercial development. The primary cumulative impacts are associated with construction works, as well as the potential impacts resulting from the operation of the new school.

The development of the broader precinct is now substantially complete, but several key sites concentrated in commercial areas are still vacant and subject to future development. Relevant development applications were reviewed in the surrounding area and vacant land was investigated. Major future development of note is listed below:

- Camden Medical Campus a 473-bed private hospital situated to the east of the site on the
 opposite side of the riparian corridor. The first stage of the hospital is complete and operational
 as the George Centre, but the majority of the site remains vacant. The concept was approved
 in 2017, with no indication that works will commence during the construction program of the
 high school.
- 1 Providence Drive Gledswood Hills an approved five storey mixed use development across nine buildings comprising retail and commercial uses, supermarket, cinema, gymnasium,

centre-based child care centre for 80 children, entertainment uses, food and drink premises and specialty retail with shop top housing for 331 residential apartments and two level basement car parking for 911 vehicles situated approximately 1km north of the site. Construction has not yet commenced.

The proposed construction works are temporary and expected to occur over a period of 12-18 months. This period may coincide with other construction in the area, though the period of overlap is unlikely to last longer than 12 months. The impacts associated with construction of the proposed high school will be mitigated through the measures described at **Appendix 1**, including a Construction Management Plan.

During its operation, Gledswood Hills High School will deliver an essential piece of social infrastructure for a growing residential community. Whilst it will increase the daytime population of the locality and introduce more activity to the area, this has been accounted for in the master planning and design of the precinct, so will not unreasonably impact upon the amenity of the precinct. Accordingly, the impacts have been anticipated and are acceptable.

7.9 Consideration of Environmental Factors

Section 171(1) of the EP&A Regulation notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the guidelines that apply to the activity.

Section 171A of the EP&A Regulation sets out additional matters to take into account when considering the likely impact of an activity on the environment in a regulated catchment. The proposed activity is located within the Hawkesbury-Nepean Catchment which is a regulated catchment.

The assessment provided in the sections above has been prepared to provide a detailed consideration of the factors that must be taken into account for an assessment under Division 5.1 of the EP&A Act. These factors are summarised at **Table 20** and where mitigation measures have been proposed in response to the factor, these have been identified.

Table 20: Environmental factors considered

	Division Factors for school developments		
Environmental Factor	<i>Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools</i>	Consideration	Mitigation Measure Reference
Any environmental impact on a community?	 (a1) Impact during construction – such as noise, vibration, traffic, construction vehicle routes, access and parking, pollution/dust, water and stormwater flow, sediment and runoff, waste removal, servicing arrangements, bushfire, flooding, contamination, other construction occurring in the area. (a2) impact post-construction (including from any development, activity, public-address systems and sirens, signage, events, hours of operation, or out of hours use of facilities, helicopter facilities, emergency facilities) which may include: (i) water flow/water quality, downstream impacts (ii) flooding impact, flood evacuation routes, changes to flood risk and patterns (iii) bushfire impact, bushfire evacuation routes, changes to bushfire risk and patterns (iv) impact, during a flood or bushfire event, on existing infrastructure such as roads, etc (v) impact on emergency response to existing Communities (vi) traffic and parking impacts, pedestrian and road safety (including pedestrian and cyclist conflict and safety), operation of the surrounding road network, impact on road capacity, including peak hour, intersection performance and any cumulative impact from surrounding approved developments, impacts of potential queuing in drop-off/pick- up zones and bus bays during peak periods, emergency drop-offs, servicing and loading/unloading areas, large vehicles and height clearances, parking arrangements and rates. Consider in the context of availability, frequency, location and convenience of public transport and consequences of parking overflowing into adjoining streets 	The proposed activity involves the development of a vacant parcel of land for a new high school. This will provide a new high school for the growing community in the area. The activity will not have a significant environmental impact on the community. There is likely to be an increase in vehicles and noise associated with the construction and operation of the new high school. Noise and increased vehicular movements during construction will be temporary and mitigated under the Preliminary Construction Management Plan. Increased traffic as a result of the high school's operation has been assessed has low. The new high school provides an integrated response to the surrounding built environment and has been designed to provide increased engagement with the community and public domain. The REF has considered the nominated environmental factors for health services facilities and schools to their fullest extent, and has concluded that the proposed activity is unlikely to have any significant impact on the Gledswood Hills community. Overall, the activity is considered to have a high to very high positive social impact.	Multiple Refer to Appendix 1

	Division Factors for school developments		Mitiantina
Environmental Factor	Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools	Consideration	Mitigation Measure Reference
	 (viii) existing utility infrastructure and service provider assets (a3) impact on flight paths of nearby airport, airfield, or helicopter landing sites (a4) other environmental impacts (social, economic or cultural) on the community not mentioned above (a5) cumulative impacts from the development and other surrounding approved developments 		
Any transformation of a locality?	 (b1) impact on the existing and future character of the neighbourhood, streetscape and local area (b2) impact on the operation of existing and future surrounding uses, including industrial or agricultural land uses (b3) visual impact from key viewpoints and views to key viewpoints (b4) cumulative impacts from the development, and other approved developments, on the locality 	The activity will result in positive changes to the land use and visual amenity of the site which is currently vacant. The development of the school provides a use for the site which will align with existing and proposed future development surrounding the site. The development of the site for a high school is compatible with the broader land uses and built form outcomes approved under the Concept DA for the site, and is considered an improved outcome compared to the originally approved bulky goods development. The proposed activity will have a positive transformational impact on the locality. Once operational, the educational establishment will provide a positive significant benefit to the wider community through providing necessary educational facilities for students and employment for staff.	Multiple Refer to Appendix 1
Any environmental impact on the ecosystems of the locality?	 (c1) impact on the existing and future ecosystem (flora, fauna, habitats, biodiversity, ecological integrity, biological diversity, connectivity/fragmentation, air, water including hydrology, soil) (c2) long- and short-term impact of: (i) loss or harm to trees or other vegetation (ii) removed canopy cover (iii) landscape setting in respect of the site and streetscape 	Environmental impacts associated with the activity are minor in scope and of temporary duration. The site contains no tree canopy. The activity will significantly increase the tree canopy present on the site, improving the landscaped setting of the site and reducing urban heat island impacts. An unnamed water course is located east of the site, the proposed activity will not disrupt or impact on the flows of this watercourse. The	Multiple Refer to Appendix 1

	Division Factors for school developments		
Environmental Factor	<i>Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools</i>	Consideration	Mitigation Measure Reference
	 (iv)impacts of the above on urban heat island effect and urban and internal comfort levels on and off-site (c3) impact from introducing new trees and vegetation species (c4) cumulative impacts on the ecosystem 	site itself does not contain any identified plant communities or threatened species. The activity will have a net positive environmental outcome for the site, improving stormwater quality, reintroducing vegetation and reducing urban heat island impacts.	
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?	 (d1) impacts onto adjoining properties and public spaces (particularly in residential areas) such as lighting impacts and light spill, acoustic, visual privacy, noise and vibration (including from helicopters and ambulances), visual amenity, solar access, view loss and view sharing, vistas, overshadowing, local character, streetscape, weather factors such as wind impacts (i) the above should be considered from any proposed development or activity on the development site, public- address system, ambulance siren, flashing signage, event, hours of operation, or out of hours use of school facility, helicopter facility, emergency facility, research centre where hazardous material is being used or stored and any potential incident, etc. (d2) impacts on connectivity, permeability and accessibility of public spaces and areas surrounding the development, this includes impacts on arterial and other thoroughfares and green corridors and wayfinding (d3) impacts on other aesthetic, recreational, scientific or other environmental quality or value of the locality not mentioned above or in (a) and the cumulative impacts 	The new high school is to be constructed on an existing cleared and unused vacant area. This under-utilised area will be lost, as the new high school enhances the locality with new and modern educational facilities with landscape and open spaces that improve the visual appearance of the locality, in alignment with the surrounding development context as part of the Turner Road Precinct. The activity has been designed to ensure impacts onto adjoining properties are either avoided or managed to be acceptable, particularly with reference to the approved Concept DA. There will be additional noise from students at key times during the day, however the impact of this is reasonable with the site a considerable distance from residential receivers. A line of street trees surrounding the site provide a pleasant vista, which is to be largely maintained and enhanced.	Multiple Refer to Appendix 1
Any effect on locality, place or building having aesthetic, anthropological,	 (e1) impacts on heritage items (local, state and commonwealth), conservation areas and Aboriginal heritage (including intangible cultural significance), draft and interim items. Both at / or near the site (e2) impacts on Aboriginal cultural heritage values on the land 	The activity will have little to no impact on Aboriginal Cultural Heritage and non-Aboriginal heritage values. An unexpected finds protocol will ensure that any impacts can be appropriately managed should they arise. Additionally, the design incorporates cultural narratives	Multiple Refer to Appendix 1

	Division Factors for school developments		
Environmental Factor	Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools	Consideration	Mitigation Measure Reference
archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?	and connection to Country (e3) direct or indirect impacts on the heritage significance of environmental heritage, impacts to archaeological resources (e4) impacts on aesthetic, anthropological, architectural, cultural, historical, community values and identity, scenic values, scientific or social significant items, or items of other special value for present or future generations	and principles from the Connecting with Country process, embedding cultural values and ecological elements into the school environment to honour and reflect its significance.	
Any impact on the habitat of protected animals, within the meaning of the <i>Biodiversity</i> <i>Conservation Act</i> 2016?	(f1) impacts on listed protected fauna at and in the vicinity of the site, and their habitat.	The activity site is within land that is cleared of any vegetation or habitat and only two living trees within the road reserve are proposed for removal, both to be replaced at a 1:1 ratio.	Multiple Refer to Appendix 1
Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?	(g1) potential endangering of any species or vegetation (g2) protected and threatened flora, terrestrial, fauna species, populations, ecological communities and their habitats	As above, the site is unlikely to include habitat utilised by any threatened species.	Multiple Refer to Appendix 1
Any long-term effects on the environment?	 (h1) Long-term effects on: (i) flood and bushfire behaviour, flooding and the flood plain, bushfire prone land (ii) natural environment, flora and fauna species and their habitats (iii) agricultural productivity (iv) industrial land supply (v) housing supply 	Overall, the activity will have a long-term positive effect on the local environment by providing the local community a modern educational facility to serve the local population into the future. Any negative impacts associated with the activity, primarily during construction, will be temporary and managed through the imposition of mitigation measures (e.g. noise, visual, air quality). The proposed development has no negative effects on bushfire or flooding risk, subject to the implementation of the	Multiple Refer to Appendix 1

	Division Factors for school developments		
Environmental Factor	<i>Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools</i>	Consideration	Mitigation Measure Reference
	 (vi) climate change (vii) cumulative impacts (h2) meet industry recognised building sustainability and environmental performance standards, integrate environmental design, minimise greenhouse gas emissions, minimise energy and water consumption (recycled water) and material resources, renewable energy generation and storage, fossil fuel-free, sustainable travel choices, manage, reuse, recycle and safely dispose of waste (h3) long term ecological, social and economic effects 	mitigation measures in Appendix 1 . These matters are discussed in further detail in Section 7 .	
Any degradation of the quality of the environment?	No specific factors – to be assessed by the determining authority if relevant	The proposal will not degrade the environment due to the cleared nature of the site. Significant tree planting will improve the quality of the environment, whilst stormwater infrastructure on the site will improve water quality Erosion control measures will be implemented on site to minimise soil erosion.	Multiple Refer to Appendix 1
Any risk to the safety of the environment?	 (j1) whether the development will have adverse environmental impacts (flood or stormwater runoff, storm surge, bushfire, ongoing maintenance of landscaping within the Asset Protection Zone, contamination leak, wind speeds, extreme heat, urban heat, climate change adaptation) on the surrounding area, particularly in sensitive environmental, cultural areas or residential neighbourhoods. (j2) impacts on soil resources and related infrastructure and riparian lands on and near the site, soil erosion, salinity and acid sulfate soils, surface water resources (quality and quantity), hydrology, dependent ecosystems, drainage lines, downstream assets and watercourses, groundwater resources. 	The site itself is above the PMF and is not at risk from flooding. A flood risk report provides details regarding the flood impact to the surrounding access network and a shelter-in-place protocol for the school is to be adopted in the event of a PMF. Similarly, a Bushfire Protection Assessment confirms the activity can comply with <i>Planning for Bushfire Protection</i> <i>(2019).</i> Mitigation measures will be implemented to minimise any potential impact or risk from contamination. The site is not located in a riparian corridor and is not expected to impact soil resources. A detailed construction management plan will be prepared by the contractor prior to commencement of construction.	Multiple Refer to Appendix 1

	Division Factors for school developments		
Environmental Factor	Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools	Consideration	Mitigation Measure Reference
Any reduction in the range of beneficial uses of the environment?	No specific factors – to be assessed by the determining authority if relevant	There will be no reduction of beneficial uses of the environment. Instead, the proposal will enhance the site by providing a much-needed educational facility.	Multiple Refer to Appendix 1
Any pollution of the environment?	 (I1) any pollution during construction and post construction e.g. air (including odours and greenhouse gases); water (including runoff patterns, flooding/tidal regimes, water quality health); soil (including contamination, erosion, instability risks); noise and vibration (including consideration of sensitive receptors); light pollution; waste, including hazardous waste (I2) impact of contamination spill, movement or disturbance during and post construction, and into the long term (I3) impact of a potential rainfall or flood event during construction (e.g. storage of fuel for construction vehicles, stock piles of soil, etc) (I4) dangerous goods and hazardous materials associated with the development (i.e. labs) 	Minor air, noise, and water quality impacts may be generated during construction. Mitigation measures are proposed to manage pollution to the environment.	Multiple Refer to Appendix 1
Any environmental problems associated with the disposal of waste?	(m1) environmental problems of waste during and after construction (left over construction materials, and personnel waste), transport and disposal of waste, ongoing use and eventual decommission of the development (m2) cumulative impacts from waste	No environmental problems are anticipated with the disposal of waste from the proposed works. The REF is accompanied by a Construction Waste Management Plan as well as an Operational Waste Management Plan that outline measures to appropriately classify and either reuse, recycle, process or dispose of waste. Waste will be transported to a facility that is licensed to process or dispose of waste to avoid adverse environmental impacts. Appropriate measures will be undertaken to manage and dispose of waste in accordance with legislative requirements and WH&S documents.	Multiple Refer to Appendix 1
Any increased	No specific factors – to be assessed by the determining	Materials salvaged will be sorted and identified for	Multiple

	Division Factors for school developments		
Environmental Factor	<i>Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools</i>	Consideration	Mitigation Measure Reference
demands on resources (natural or otherwise) that are, or are likely to become, in short supply?	authority if relevant	recycling. Impacts associated with the consumption of natural resources through the use of machinery would be minimal.	Refer to Appendix 1
Any cumulative environmental effects with other existing or likely future activities?	(o1) The cumulative effects of noise and impacts to the road network from surrounding existing and approved developments	The proposed works will not contribute to a cumulative environmental effect with existing or likely future activities.	Multiple Refer to Appendix 1
Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?	(p1) coastal processes and hazards (impacts arising from the proposed activity on coastal processes and hazards and impacts on the proposed activity from coastal processes and hazards), climate scenarios	The site is not in the Coastal Zone as identified in the <i>Coastal Management Act 2016</i> , owing to the site's inland location.	Multiple Refer to Appendix 1
Applicable local strategic planning statement, regional strategic plan or district strategic plan made under Division 3.1 of the Act?	 (q1) relevant issues, objectives, policies and actions identified in local, district and regional plans and compliance of the proposal, and policies that identify community priorities that may be impacted (q2) relevant legislation, environmental planning instruments (including drafts, policies and guidelines). (q3) requirements of any approvals applying to the site, including concept approval or recommendation from any Gateway determination 	 The proposed activity directly aligns with the strategic planning context as outlined below: NSW State Priorities through the provision of facilities that will allow for new and improved educational services. Camden Local Strategic Planning Statement as the activity proposes an investment in fit-for-purpose school infrastructure that is attractive, sustainable, well designed and efficient, co-located with housing and employment. Transport for NSW's Future Transport Strategy as it 	Multiple Refer to Appendix 1
		 Transport for NSW's Future Transport Strategy as it would support the delivery of a new educational facility 	

	Division Factors for school developments		
Environmental Factor	Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools	Consideration	Mitigation Measure Reference
		 well serviced by public and active transport, as well as generating additional new employment opportunities within an existing urban area. Infrastructure NSW's State Infrastructure Strategy 2018 – 2038 Building the Momentum as it proposes new infrastructure to support current and predicted growth in demand for secondary student enrolments within the school catchment. Relevant legislation is addressed substantively in Section 5. Further, the requirements of the applicable Concept DA are assessed throughout Section 7, and an assessment against the conditions of consent is included at Appendix 14. 	
Any other relevant environmental factors?	 (r1) health or safety risk to children, visitors, patients or staff of the development (r2) developments compatibility with neighbouring land uses, including proximity to: (i) restricted premises, injecting rooms, drug clinics, premises licensed for alcohol or gambling, sex services premises (for schools) (ii) hazardous land uses, waste transfer depots or landfill sites, service stations, air pollutant generating uses, noise or odour generating uses, extractive industries, industrial uses (iii) intensive agriculture, agricultural spraying activities and sources (iv) adjacent to or on land in a pipeline corridor (v) sites which, due to prevailing land use zoning, may in the future accommodate the above uses. (r3) noise/air pollution, vibration and safety impacts from the below on the proposed development: 	As identified in the sections below, there are no other environmental factors that will result in any unacceptable impact to the environment.	Multiple Refer to Appendix 1

	Division Factors for school developments		
Environmental Factor	Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools	Consideration	Mitigation Measure Reference
	 (i) roads with higher traffic volumes, higher operating speeds and more heavy vehicles, freight traffic or used to transport dangerous goods or hazardous materials (ii) rail lines 		

8. Justification and Conclusion

The proposed new Gledswood Hills High School at 9 Gregory Hills Drive, Gledswood Hills is subject to assessment under Division 5.1 of the EP&A Act. The REF has examined and taken into account to the fullest extent possible all matters affecting, or likely to affect, the environment by reason of the proposed activity.

As outlined in this REF, the proposed activity can be justified on the following grounds:

- It responds to an existing need within the community;
- It generally complies with, or is consistent with all relevant legislation, plans and policies;
- It has minimal environmental impacts; and
- Adequate mitigation measures have been proposed to address these impacts.

The activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats, and therefore it is not necessary for a Species Impact Statement and/or a Biodiversity Development Assessment Report to be prepared. The environmental impacts of the proposal are not likely to be significant.

Therefore, it is not necessary for an EIS to be prepared and approval to be sought for the proposal from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act. On this basis, it is recommended that the department determine the proposed activity in accordance with Division 5.1 of the EP&A Act subject to the implementation of mitigation measures identified within this report.