



Glenwood High School Upgrade

State Significant Development Assessment

SSD 23512960

August 2022



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Cover image: Perspective view of the new building from Glenwood Park Drive (Source: Applicant's EIS 2021)

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Glossary

Abbreviation	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
AEP	Annual Exceedance Probability
AHD	Australian Height Datum
AIA	Arboricultural Impact Assessment
Applicant	NSW Department of Education
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
BDCP	Blacktown Development Control Plan 2015
BLEP	Blacktown Local Environmental Plan 2015
BMP	Biodiversity Management Plan
CIV	Capital Investment Value
Council	Blacktown City Council
CTMP	Construction Traffic Management Plan
DCP	Development Control Plan
Department	Department of Planning and Environment
DOPU	Drop-off and pick-up
DSI	Detailed Site Investigation Report
Education SEPP	State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017
EHG	Environment and Heritage Group, Department of Planning and Environment
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>

EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
FEMP	Flood Emergency Management Plan
GANSW	Government Architect New South Wales
LEP	Local Environmental Plan
LGA	Local Government Area
LoS	Level of Service
Minister	Minister for Planning
NVIA	Noise and Vibration Impact Assessment
PCT	Plant Community Type
Planning Secretary	Secretary of the Department of Planning and Environment
PMF	Probable Maximum Flood
RtS	Response to Submissions
SEARs	Planning Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SES	NSW State Emergency Service
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State Significant Development
SRtS	Supplementary Response to Submissions
STP	School Transport Plan
TAIA	Transport and Accessibility Impact Assessment
TfNSW	Transport for NSW

Executive Summary

This report provides an assessment of a State significant development (SSD) application for the upgrade at Glenwood High School (SSD-23512960). The site is located at 85 Forman Avenue, Glenwood in Blacktown local government area. The application has been lodged by NSW Department of Education (the Applicant).

Assessment summary and conclusions

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

The key issues identified with the proposal include traffic, transport, and parking, and built form and urban design. The Department is satisfied that these issues have been adequately addressed in the Applicant's Environmental Impact Statement (EIS), Response to Submissions (RtS) and Supplementary RtS (SRtS). Minor outstanding issues can be addressed through recommended conditions of consent.

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

The proposal

The application seeks approval for upgrades to the existing high school, including replacement of 19 demountable buildings with a new three-story building providing 51 learning spaces, as well as a new single storey performing arts pavilion also containing multi-purpose rooms. Associated works include refurbishing existing buildings, landscaping, additional bicycle parking, car parking, and new pedestrian access. The proposal includes an increase in student capacity from 1,410 to 1,820 students.

The proposal has a Capital Investment Value (CIV) of \$51,353,529 and would generate approximately 27 new operational jobs and 211 construction jobs.

The site

The existing Glenwood High School (the site) is located in a primarily low scale residential area and adjoins public open space (Glenwood Reserve). The site is located approximately 30 kilometres (km) north-west of the Sydney Central Business District (CBD) and approximately 12km from Parramatta CBD. The site has an area of approximately 60,826 square metres and contains a range of buildings including demountable classrooms. The site has a primary road frontage to Foreman Avenue and secondary street frontage to Glenwood Park Drive.

Statutory context

The proposal is SSD under section 4.36 of the EP&A Act as the development has a CIV in excess of \$20 million and is for the purpose of alterations and additions to an existing school, in accordance with clause 15(5) of Schedule 1 State Environmental Planning Policy (State and Regional

Development) 2011, as was in force immediately prior to lodgement of the application. The Minister for Planning is the consent authority.

Engagement

The application was publicly exhibited between 19 November and 16 December 2021 (28 days). The Department received three submissions, including an objection from Blacktown City Council (Council), and comments from State Owned Corporations Sydney Water and Endeavour Energy. Advice was received from four Government agencies. The key issues raised in the submissions and agency advice included transport, urban design, trees and landscaping, biodiversity, stormwater and flooding.

On 18 February 2022, the Applicant submitted a RtS responding to comments, updating landscape plans, reports and addressing concerns raised by agencies and Council. Changes detailed in the RTS include retention of a tree which was previously proposed to be removed and improving footpath connectivity within the site. The RtS was referred to submitters, with two submissions and advice from four agencies was received in response.

On 21 April, 24 June, and 20 July 2022, the Applicant submitted SRtS which included a preliminary Flood Emergency Management Plan and a Biodiversity Management Plan for the management and regeneration for the Cumberland Plain Woodland on the site. The Applicant also provided a revised site plan seeking approval for an additional 25 car parking spaces and the consequential removal of 21 trees. The SRtS was referred to Council, Transport for NSW, NSW State Emergency Service and Environment and Heritage Group and advice was received from all in response. On 25 July 2022 Council formally withdrew its objection, subject to its recommended conditions of consent.

The Department incorporated Council's requirements into the recommended conditions of consent. The Department referred the recommended conditions to Council for comment. On 24 August 2022, Council advised it raised no concerns with the recommended conditions of consent.

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1 Introduction

This report provides an assessment of a state significant development (SSD) application for an upgrade of Glenwood High School at 85 Foreman Avenue, Glenwood (SSD-23512960).

The application was lodged by NSW Department of Education (the Applicant) and the site is located within Blacktown local government area (LGA). The proposal includes the construction of a new art pavilion, a new three storey building to replace 19 demountable classrooms, and refurbishments to existing buildings. The proposal would increase capacity of the school from 1,410 to 1,820 students with an associated increase in staff.

1.1 Site description

The site is located on the corner of Forman Avenue and Glenwood Park Drive in Glenwood. The site is legally described as Lot 5227 in Deposited Plan 868963. The site is approximately 30 kilometres (km) north west of the Sydney Central Business District (CBD) and 12km north west of the Parramatta CBD. The site is located approximately 560 metres (m) from Bella Vista Station. The site location is shown in its regional context in **Figure 1** and local context in **Figure 2**.

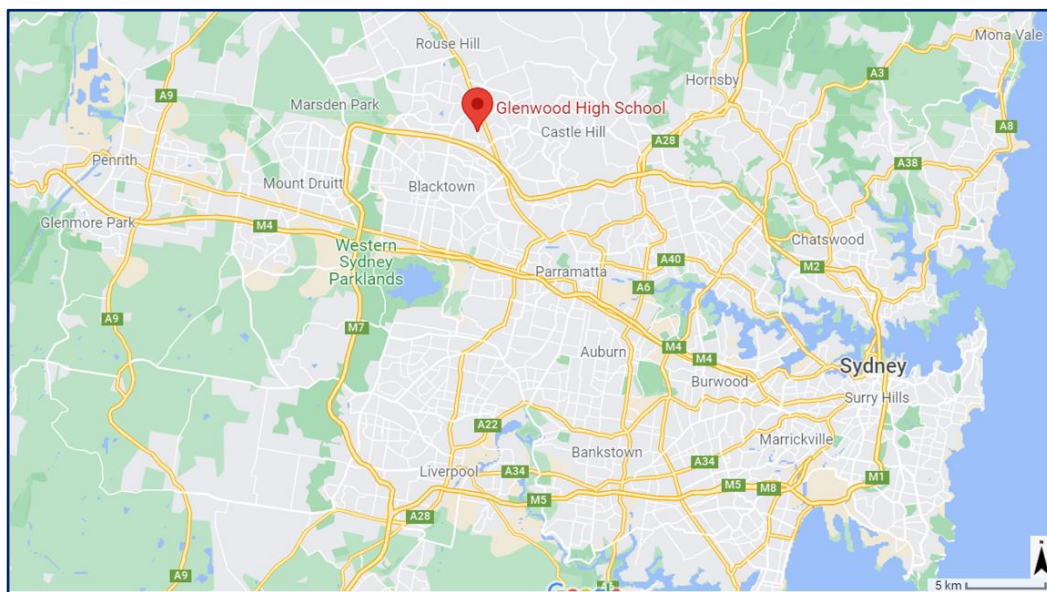


Figure 1| Regional context map (Base source: Google Maps, 2021)

The site is generally rectangular in shape and is approximately 60,826 square metres (sqm) in size. The main school entrance for staff parking, drop-off and pick-up (DOPU) zone, as well as pedestrian access is to the south, is located on Foreman Avenue forming the school's primary frontage. Glenwood Park Drive to the east forms the school's secondary frontage, with pedestrian access to the south east and to bus bays. To the north and west, the site is bounded by Glenwood Reserve with no direct access provided from the site.

The site contains a variety of mature trees interspersed among soft and hard stand play space (**Figure 3**). The site generally slopes down to the north-east with a fall of approximately 10m. The highest part of the site is the south-west corner with a reduced level (RL) of 70m Australian Height Datum (AHD), and the lowest is the north east corner at RL 59m AHD.



Figure 2| Local context map (Base source: Google Maps, 2021)

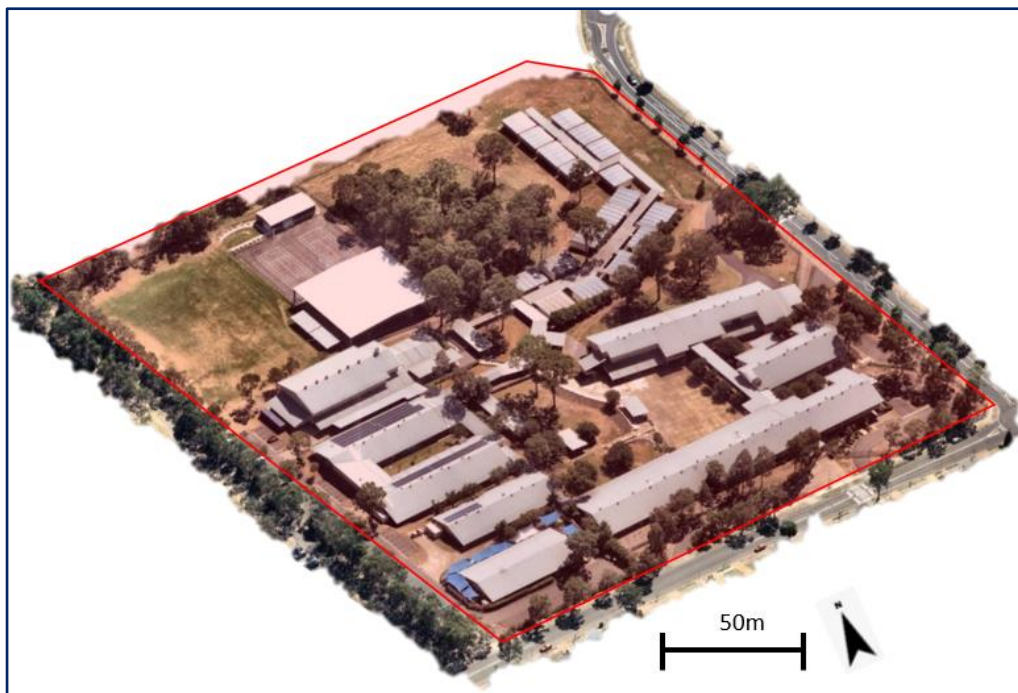


Figure 3 | Aerial axonometric view of the site (Base source: Nearmap, 2022)

1.2 Site history and existing development

The site is occupied by Glenwood High School. In 2004, the school was listed as part of the 'New Schools' Public Private Partnership (PPP) program, which included the financing, design, construction and commissioning of the school by a private consortium in return for monthly payments by the state of NSW during the operational phase of the school. The PPP includes private sector cleaning, maintenance, repair and other related school services for the school until 2032 (or any earlier termination of the project's contract). After this date, the school buildings would be handed over to the public sector; this proposal would amend the contractual arrangements under the PPP with the private consortium to include the provision of the proposed buildings.

The existing site layout consists of **(Figure 4)**:

- five double storey buildings (Buildings A, B, C, D and E)
- five single storey buildings (Buildings F, G, H, J and K)
- a single storey child care centre (Building L)
- 19 single storey demountables (Buildings N)
- retained significant trees and other landscaping including Cumberland Plain Woodland
- two car parks for 93 vehicles to the south-east and west of the site, accessed from Foreman Avenue
- a covered outdoor learning area, tennis court and playing field.



Figure 4 | Existing site plan (Base source: Nearmap, 2022)

1.3 Surrounding Development

The site is located centrally within Glenwood, characterised by low-density residential development. Immediately adjoining the site to the north and west is the Glenwood Reserve containing a drainage reserve, sports fields, and extensive grass areas. There is a mix of single and double storey dwellings south along Foreman Road and east along Glenwood Park Drive. An aerial image of the surrounding area is provided at **Figure 5**.



Figure 5 | Immediate surrounding area (Base source: Nearmap, 2021)

2 Project

Key components and features of the project (as refined in the Response to Submissions) are detailed in **Table 1**.

Table 1| Main components of the project

Aspect	Description
Project summary	<ul style="list-style-type: none"> Upgrade to Glenwood High School including construction of a new three storey building, a new single storey performing arts pavilion, refurbishment of existing buildings, landscaping and associated works.
Demolition	<ul style="list-style-type: none"> Demolition of 19 demountable classrooms (under separate approvals – see Section 2.4).
Built form	<ul style="list-style-type: none"> Construction of a new three storey building containing 51 learning spaces Construction of a single storey performing arts pavilion also containing multi-purpose rooms.
Gross floor area (GFA)	<ul style="list-style-type: none"> Proposed – 5,735 sqm Total - 15,258 sqm.
Site area	<ul style="list-style-type: none"> 60,790 sqm.
Maximum building height (RL)	<ul style="list-style-type: none"> RL 77.86 - 16.96m to the top of the architectural blade wall of the new three storey building RL 75.67 - 14.77m to the top of the main roof of the new of new three storey building.
Uses	<ul style="list-style-type: none"> Continued use as a high school for 1,820 students and out of hours school care.
Access	<ul style="list-style-type: none"> Vehicle access for both car parking and service vehicles to be maintained via Forman Avenue. Existing service vehicle access and a dedicated bus loop from Glenwood Park Drive are to be maintained.
Car parking (Staff)	<ul style="list-style-type: none"> Proposed – 25 spaces (including one accessible) Total – 118 spaces (including two accessible).
Bicycle parking and end-of-trip facilities	<ul style="list-style-type: none"> Proposed – 13 staff spaces and 15 student spaces Total – 84 bicycle spaces End-of-trip facilities – 2 female showers, 2 male showers and 18 lockers.
Tree removal and landscaping	<ul style="list-style-type: none"> Removal of 21 trees Planting of 92 trees (increase site's canopy coverage from 17.8% to 24.05%) Play space – reduction from 13sqm to 10.34sqm per student.
Construction hours	<ul style="list-style-type: none"> Monday to Friday: 7am to 6pm

	<ul style="list-style-type: none"> • Saturday: 8am to 1pm • Sunday and Public Holiday – no construction.
Hours of operation	<ul style="list-style-type: none"> • Existing hours of operation to remain: <ul style="list-style-type: none"> ○ 8:40am start time with staggered finishing time ranging from 2:10pm to 5:50pm Monday to Friday ○ Out of hours school care: 3pm to 6pm Monday to Friday.
Students and staff	<ul style="list-style-type: none"> • 1820 students (additional 410) and 133 staff (27 additional).
Jobs	<ul style="list-style-type: none"> • 211 construction jobs • 27 additional full-time equivalent (FTE) operational jobs.
Capital investment value (CIV)	<ul style="list-style-type: none"> • \$51,353,529 million.

2.1 Physical layout and design

The proposal provides upgraded and additional learning spaces achieved through removal of 19 existing demountable classrooms and replaced with more functional buildings with additional learning spaces. The proposed buildings are in the north-east corner of the site adjacent to Glenwood Park Drive.

The proposal also achieves better use of existing buildings by refurbishing the interior of buildings A, D, E and J, to provide additional and updated administrative and student facilities, increasing the school's ability to service the current and future enrolments.

The proposed site plan and layout is shown in **Figure 6** and **Figure 7**. Elevations and sections of the proposed buildings are shown in **Figure 8** to **Figure 9** and as perspectives in **Figure 12** to **Figure 14**.

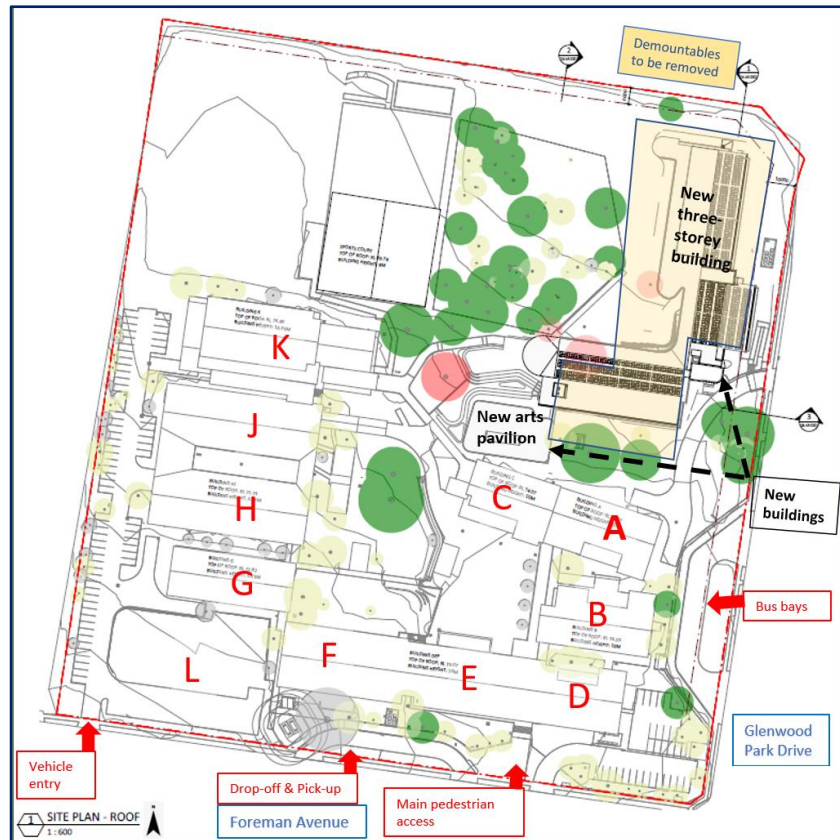


Figure 6 | Site layout (Base source: Applicant's EIS, 2021)

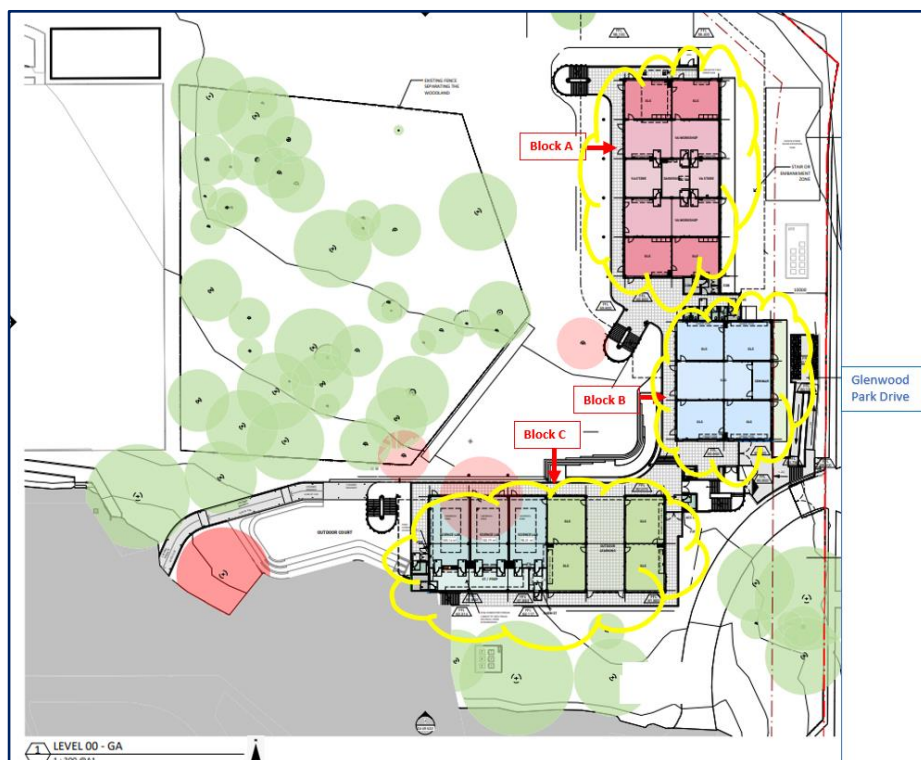


Figure 7 | Building layout – ground level (Base source: Applicant's EIS, 2021)

The new three-storey building contains three blocks with Block A setback 20m and Block B setback 10m from Glenwood Park Drive. Block C, and the single storey arts pavilion would be setback further the Glenwood Drive. Block A contains 18 general learning spaces, three shared learning spaces, two

workshop spaces, a dark room, and storerooms. Block B contains 12 general learning spaces, three shared learning spaces and toilets on each level. Block C contains 14 general learning spaces, five science labs, three shared learning spaces, and an area for staff. Across the three blocks, 51 individual teaching spaces are proposed.

A new universally accessible pedestrian entrance adjacent to Block B is provided, which leads to Blocks A, C, and the Cumberland Plain Woodland to the west of Block A and B, where 23 of the 92 new trees would be planted. The other existing entrances will remain.

The proposed three storey building facades would generally consist of brickwork for the lower levels with the upper levels cladded with white and black panels. Vertical elements include moveable and fixed aluminium louvres, panels of different colours, and a chimney kiln for Blocks A and B.



Figure 8 | Proposed three storey building and arts pavilion – east (Glenwood Park Drive) elevation (Source: Applicant’s EIS, 2021)



Figure 9 | Proposed three storey building and arts pavilion – south elevation (Source: Applicant’s EIS, 2021)



Figure 10 | Proposed three storey building and arts pavilion - west elevation (Source: Applicant’s EIS, 2021)



Figure 11 | Proposed three storey building and arts pavilion – north elevation (Source: Applicant's EIS, 2021)



Figure 12 | Perspective of proposed three storey building from the east (Glenwood Park Drive) (Source: Applicant's EIS, 2021)



Figure 13 | Perspective of proposed three storey building from the west (Glenwood Reserve)
(Source: Applicant's EIS, 2021)



Figure 14 | Perspective of proposed three storey building and arts pavilion (Source: Applicant's EIS, 2021)

2.2 Use and activities

The proposal continues use of the site as an educational establishment and seeks consent to increase student capacity by 410 students and 27 staff. There is no current use of the site by the community and this proposal does not seek approval to change this.

2.3 Timing

Construction of the proposed new buildings would occur in one stage lasting approximately 18 months. Refurbishment of existing Blocks A, E and D would occur on completion of the new buildings and be for a period of 3 months. Completion is scheduled in early 2024.

The staging of construction would allow the school to remain operational during construction work and allow students to remain in the temporary demountables until completion of the new buildings.

2.4 Related development

The Applicant advised that early works at the site are being carried out as 'development without consent' under Part 5 of the EP&A Act in accordance with the State Environmental Planning Policy (educational Establishments and Child Care Facilities) 2017 (Education SEPP) and under a separate Development Application.

The Applicant states that the Part 5 works include the following (**Figure 15**):

- relocation of portable demountables (except for footings) to the north west oval
- demolition of associated utility services
- relocation of the on-site sewerage pipeline
- removal of all demountables from the site following completion of the subject SSD works.



Figure 15 | Part 5 works (Source: Applicant's EIS, 2021)

The Applicant also lodged a Development Application (DA-21-02007) with Council which was approved on 27 May 2022 and includes approval for the following works:

- bulk earthworks (**Figure 16**)
- removal of demountable footings
- utility servicing upgrades and removal
- removal of three trees within the site.

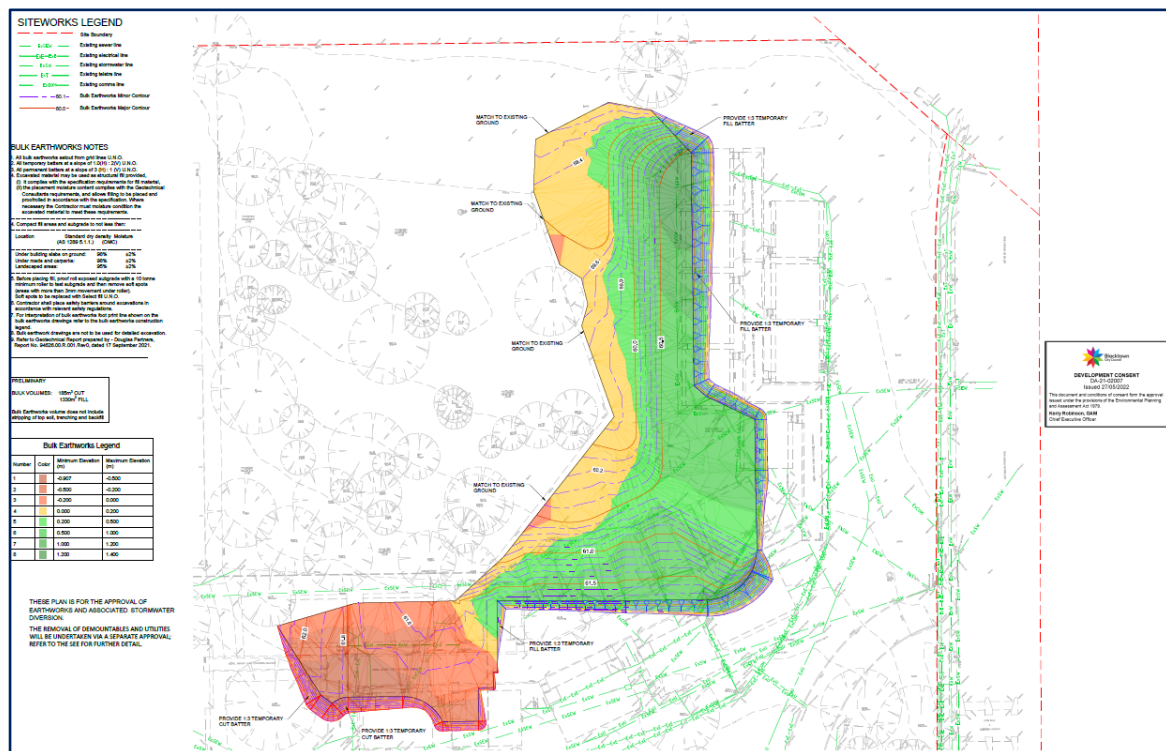


Figure 16 | Approved bulk earthworks plan under DA-21-02007 (Source: Council, 2022)

3 Strategic context

It is anticipated that there will be a 21 per cent growth in student numbers by 2031 across NSW compared to 2017. NSW schools need to accommodate an extra 269,000 students, with at least 164,000 of these students in the public system. The NSW Department of Education is investing in the delivery of new schools and upgrading existing schools in response to the need for additional public education infrastructure.

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

- NSW State Priorities, through the provision of new and improved teaching and education facilities
- Greater Cities Commission's (GCC) *Greater Sydney Region Plan: A Metropolis of Three Cities*, as it proposes upgraded school facilities to meet the growing needs of Sydney
- GCC's *Central City District Plan*, as it would provide school infrastructure and the design of the new buildings would provide future opportunities to co-share facilities with the local community
- Transport for NSW's *Future Transport Strategy 2056*, as it would provide an improved educational facility in an accessible location and provide access to additional new employment opportunities close to public transport
- NSW's State Infrastructure Strategy 2018 – 2038 *Building the Momentum*, as it proposes improved school facilities to support the growth in demand for student enrolments
- Transport for NSW's *Sydney's Cycling Future 2013*, as it would promote and cater for bicycle use through the provision of end-of-trip facilities.

The proposal would also provide direct investment in the region of approximately \$57 million which would support 211 construction jobs and 27 additional operational jobs.

4 Statutory Context

4.1 State significance

The proposal is SSD under section of the 4.36 *Environmental Planning and Assessment Act 1979* (EP&A Act) as the development has a CIV in excess of \$20 million and is for the purpose of alterations or additions to an existing school under clause 15 of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011 (SRDP SEPP), as was in force immediately prior to lodgement of the application.

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

- the application has not been made by a person who has disclosed a reportable political donation in connection with the application
- there are less than 15 public submissions in the nature of objection
- the local Council has not objected.

As detailed in **Section 5.5**, Council withdrew its original objection to the development.

4.2 Permissibility

The site is zoned for Infrastructure (SP2 Educational Establishment) under the Blacktown Local Environmental Plan 2015 (BLEP). The proposed redevelopment of an existing educational establishment is permissible with consent within the zone.

Therefore, the Minister or a delegate may determine the carrying out of the development in accordance with section 4.5 EP&A Act.

4.3 Other approvals

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

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

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

4.4 Mandatory matters for consideration

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

- provisions of environmental planning instrument (EPI), including draft EPIs, development consent plans, planning agreements and the Environmental Planning and Assessment Regulation 2000
- the environmental, social, and economic impacts of the development
- the suitability of the site
- any submissions
- the public interest, including the objects of the EP&A Act and the encouragement of ecologically sustainable development.

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

4.4.1 Environmental planning instruments

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

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

4.4.2 Objects of the EP&A Act

The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent / approval) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore, in making an assessment, the objects should be considered to the extent they are relevant, and a response is at **Table 2**.

Table 2 | Response to the objects of section 1.3 of the EP&A Act

Objects of the EP&A Act	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,	The proposal involves alterations and additions to an existing high school to cater for growth in NSW student numbers. The site is suitable for the use as an educational establishment and its development would not negatively impact the economic welfare of the community, or the natural environment.

(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal includes measures to deliver ecologically sustainable development (ESD) (Section 4.4).
(c) to promote the orderly and economic use and development of land,	The proposal is consistent with the site's historical use as an educational establishment and would provide improved educational facilities to support the demand in a growing area.
(d) to promote the delivery and maintenance of affordable housing,	Not applicable.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	The proposal would not affect any protected or threatened species or vegetation communities. The proposal involves landscaping and planting that would provide for new habitat opportunities.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	<p>The site does not include any buildings with European heritage values or significance. The built and cultural heritage of the site and adjoining properties has been considered as part of this EIS (Section 6.3).</p> <p>An Aboriginal Cultural Heritage Assessment Report (ACHAR) was included in the EIS which identified that no Aboriginal heritage sites would be harmed by the proposed development.</p>
(g) to promote good design and amenity of the built environment,	The proposal has been designed to minimise potential amenity impacts while maximising internal amenity and achieving good design (Section 6.2).
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The proposal would promote proper construction and maintenance of buildings subject to recommended conditions of consent.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department publicly exhibited the proposal (Section 5.1), consulted Council and other Government agencies, and considered their responses (Section 6).

(j) to provide increased opportunity for community participation in environmental planning and assessment.

The Department publicly exhibited the proposal as outlined in **Section 5.1**, which included notifying adjoining landowners and displaying the proposal on the Department's website during the exhibition period. Issues raised in the submissions have been considered in **Section 6**.

4.4.3 Ecologically sustainable development

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

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

The development proposes ESD initiatives and sustainability measures, including:

- efficient energy consumption, through a building design that reduces heat gain, maximises natural light and ventilation, and energy efficient light fittings and controls
- water conservation measures, including efficient fixtures and fittings, water reuse and low water-dependent landscaping
- installation of a photovoltaic solar system to provide on-site renewable energy
- resource management through the reuse and recycling demolition and building materials and using local sourced products.

The Department has considered the proposal in relation to the ESD principles. The precautionary and inter-generational equity principles have been applied in the decision-making process via a thorough assessment of the environmental impacts of the proposal.

The Applicant is targeting an equivalent 5-Star Green Star rating which is in accordance with the suggested rating in the Educational Facilities Standards and Guidelines (NSW Department of Education). To ensure that ESD is incorporated into the proposal, the Department has recommended a condition that requires the Applicant to register for a minimum 5-star Green Star rating with the Green Building Council Australia, or an alternative certificate process as agreed by the Planning Secretary, prior to the commencement of construction.

Subject to this condition, the proposal is consistent with ESD principles as described in Appendix U of the Applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation). Overall, the proposal is consistent with ESD principles and the Department is satisfied the proposed sustainability initiatives would encourage ESD, in accordance with the objects of the EP&A Act.

4.4.4 Environmental Planning and Assessment Regulation 2000

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

4.4.5 Planning Secretary's Environmental Assessment Requirements

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

4.4.6 Section 4.15(1) matters for consideration

Table 3 identifies the matters for consideration under section 4.15 of the EP&A Act that apply to SSD in accordance with section 4.40 of the EP&A Act. The table represents a summary for which additional information and consideration is provided for in relevant appendices or other sections of this report and EIS, referenced in the table.

Table 3 | Section 4.15(1) matters for consideration

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Satisfactorily complies. The Department's consideration of the relevant EPIs is provided in Appendix B .
(a)(ii) any proposed instrument	The Department's consideration of the relevant draft EPIs is provided in Appendix B .
(a)(iii) any development control plan (DCP)	Under clause 11 of the SRD SEPP, DCPs do not apply to SSD.
(a)(iiia) any planning agreement	Not applicable.
(a)(iv) the regulations Refer Division 8 of the EP&A Regulation	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications (Part 6 of the EP&A Regulation), public participation procedures for SSD and Schedule 2 of the EP&A Regulation relating to EIS.
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	The impacts of the proposed development have been appropriately mitigated or conditioned (Section 6).

(c) the suitability of the site for the development	The site is suitable for the development as discussed in Section 3, 4 and 6.
(d) any submissions	Consideration given to submissions received during the exhibition period is in Section 5 and 6.
(e) the public interest	Refer to Section 6 and 7.

4.5 Biodiversity Development Assessment Report

Under section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act), SSD applications are to be accompanied by a biodiversity development assessment report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposal is not likely to have any significant impact on biodiversity values.

A BDAR was provided with the EIS and revised under the RtS and SRtS. The impact of the proposal on biodiversity values has been assessed in the revised BDAR and considered in **Section 6.3.**

5 Engagement

5.1 Department's engagement

In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the application from 19 November to 16 December 2021 (28 days). The application was exhibited on the Department's website. The Department notified adjoining landholders and relevant state and local government authorities in writing. Department representatives visited the site on 18 February 2022 to provide an informed assessment of the proposal.

Following the exhibition of the EIS, the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised in the submissions. The Department has considered the Government agency comments and public submissions during assessment (**Section 5 and 6**) and by way of recommended conditions in the instrument of consent at **Appendix C**.

5.2 Summary of advice received from Government agencies

During the exhibition period, the Department received advice from three Government agencies. A summary is in **Table 4** and a link to the full copy of the advice is in **Appendix A**.

Table 4 | Summary of agency advice to the EIS exhibition

Environment and Heritage Group (EHG)
<p>EHG made the following comments:</p>
<p><u>Aboriginal Cultural Heritage Assessment Report (ACHAR)</u></p> <ul style="list-style-type: none">the ACHAR does not, but should, include methodology of the process where/if Aboriginal artefacts are identified during excavationsthe ACHAR has considered and addressed Aboriginal cultural heritage matters for the site and as such, EHG support the recommendations outlined within the ACHAR.
<p><u>Biodiversity Development Assessment Report (BDAR)</u></p> <ul style="list-style-type: none">must be certified as finalisedshould be revised to correct that native vegetation of the Cumberland Plain Woodland (CPW) plant communities is being removedproposes suitable avoidance and mitigation measures of which overall, the BDAR is supported subject to conditions.
<p><u>Trees and landscaping</u></p> <ul style="list-style-type: none">exact level of encroachment into the tree protection zones of trees 72 and 73 has not been assessedextent of batter and works within the tree protection zones of 118 and 120 should be assessed further
<p><u>Flooding</u></p> <ul style="list-style-type: none">overland flooding modelling undertaken by a flood consultant on behalf of Blacktown City Council shows flooding on-site during the 10 percent annual exceedance probability

- the Applicant should address the modelling by Blacktown City Council and its consultant.

Transport for NSW (TfNSW)

TfNSW made the following comments:

- prior to commencement of construction, a Construction Traffic Management Plan (CTMP) should be provided to TfNSW
- prior to occupation, authorisation from TfNSW for installation of new signage and pavement markings must be sought
- prior to occupation, an updated school travel plan (STP) should be provided to TfNSW:
 - further reduce private vehicle mode share in the short term and inclusion of a parking management strategy
 - inclusion of electric vehicle charging stations
 - further upgrades to the travel access guide
 - inclusion of an implementation strategy for all actions and tasks part of the STP.

Environmental Protection Authority (EPA)

EPA advised that the proposal will not require an environmental protection licence under the Protection of the *Environment Operations Act 1997*.

5.3 Summary of submissions

During the exhibition period, the Department received submissions from Council and two State Owned Companies, Endeavour Energy and Sydney Water. A summary of the submissions is provided in **Table 5**, and copies provided in **Appendix A**.

Table 5 | Summary of submissions

Blacktown City Council (Council)

Council advised it objected to the approval of the development as:

- further information is required for Council's assessment, relating to urban stormwater modelling and design compliance
- insufficient justification has been provided as to why the car parking provisions within the Blacktown Development Control Plan (BDCP) 2015 cannot be complied with.

Endeavour Energy

Endeavour Energy advised that the Building Services Infrastructure Report adequately addressed electricity services for the development. It also advises that the architectural plans adequately provide an additional substation/transformer.

Sydney Water

Sydney Water advised that the development can likely meet the servicing requirements and further assessment is undertaken once an application under Section 73 of the *Sydney Water Act 1994* is made to Sydney Water.

5.4 Response to Submissions

Following the exhibition of the EIS, the Department placed copies of all submissions received during exhibition on its website and requested the Applicant provide a response to the issues raised. The Department also requested the Applicant provide additional information addressing:

- provision of adequate play space during construction works
- comments raised by the State Design Review Panel in relation to tree canopy coverage and pedestrian connections
- mode share targets and sustainable transports measures
- adequacy of car parking
- operational noise exceedance
- tree removal.

On 18 February 2022, the Applicant provided a Response to Submissions (RtS) (**Appendix A**) on the issues raised during exhibition and the Department's request for additional information. The RtS included:

- amended landscape plans
- revised BDAR, Transport and Accessibility Impact Assessment (TAIA) and Arboricultural Impact Assessment (AIA)
- Noise and Vibration Impact Assessment (NVIA) addendum
- Flood Report addendum
- additional information addressing the provision of adequate play space during construction
- Architectural statement addressing State Design Review Panel comments.

The amended landscaping plans included an amended outdoor seating, designed in order to retain a tree (tree No. 73). The revised landscaping plans also re-instated the footpath connecting both ends of the new building.

The TAIA was revised to include short term and long-term forecast for sustainable modes of transport, increase the amount of private vehicle trips for students than initially forecast, and decrease private vehicle trips for staff.

The RtS was made publicly available on the Department's website and referred to relevant Government agencies, Council, Endeavour Energy and Sydney Water. The Department received three responses from Government agencies and two submissions from Council and Endeavour Energy. The issues raised are summarised in **Table 6**.

Table 6 | Summary of Government agency advice and submissions to the RtS

EHG

EHG made the following comments:

- no additional comments with respect to Aboriginal cultural heritage; comments provided in response to the EIS remain
- the revised and finalised BDAR is supported subject to:
 - conditions for mitigation and management measures being implemented
 - a strategy for the management and regeneration of the Cumberland Plain Woodland being prepared by an ecologist or bush regeneration specialist prior to the commencement of operation
- the amended landscaping plans and AIA are supported subject to conditions for tree protection measures being implemented
- the revised Flood Report is supported subject to a Flood Emergency Management Plan (FEMP) being prepared for the users of the site, if a flood were to occur.

TfNSW

TfNSW reiterates no objection to the proposal with the recommended conditions outlined in their initial response, however, made the following additional comments:

- the forecasted travel in the STP should strive for a greater bicycle share with reduced DOPU
- pedestrian infrastructure upgrades should occur prior to commencement of operations
- the STP should be monitored and revised every 12 months with a travel survey carried out after the first three months of occupancy
- additional end of trip lockers should be provided for staff
- the travel access guide should be tailored specifically for the school
- an implementation plan is supported but should be wholistic with all initiatives.

EPA

EPA advised that it has no additional comments to make and re-iterates the comments made in the EIS.

Council

Council advised that:

- its comments on parking is unchanged; the number of on-site parking spaces should comply with the BCDP
- revisions to stormwater containment modelling, assessment and drawings required
- revisions to overland flood modelling, assessment and drawings required.

Endeavour Energy

Endeavour Energy advised that it has no further comment to make.

5.5 Supplementary Response to Submissions

The Department reviewed the RtS and requested that the Applicant address concerns raised by TfNSW, EHG, and Council regarding flooding, stormwater, mode share targets, car parking and biodiversity management. The Applicant submitted a SRtS on 21 April 2022, 24 June and 20 July to respond to the concerns and included:

- a Flood Emergency Management Plan (FEMP)
- a Biodiversity Management Plan (BMP) which outlines procedures for the management and regeneration of the on-site Cumberland Plain Woodland
- provision of additional 25 car parking spaces with preliminary drawings identifying their location and associated removal of 21 trees
- revised BDAR and AIA for the assessment of the proposed tree removal
- TAIA addendum which:
 - amends the long term forecasted travel mode for students cycling to five per cent and students using DOPU to 31 per cent
 - recommends a minimum 13 dedicated staff bike parking spaces be sheltered and located next to the end of trip facilities
 - recommends the provision of lockers be reviewed during the annual STP review and confirms the 18 lockers is sufficient for the number of users expected in the short-term
 - outlines the requirements of the final STP to be approved.

The SRtS was made available on the Department's website and referred to the relevant government agencies including NSW State Emergency Service (SES) and Council. A summary of the government agency advice and Council submission to the SRtS is provided in **Table 7**.

Table 7 | Summary of Government agency advice to the SRtS

EHG
<p>EHG raised concern with the site's tree canopy during the interim period, as it may take some time for the new trees planted to establish. A 2:1 replacement ratio of the 21 trees proposed to be removed was recommended to mitigate the interim canopy loss and heat-island effect.</p> <p>EHG supported the proposed BMP subject to changes relating to the monitoring and implementation of the Cumberland Plain Woodland. EHG raised no concerns to the revised BDAR.</p>
TfNSW
<p>TfNSW reiterated it has no objection to the proposal with the recommended conditions outlined in its response to the EIS. TfNSW also reiterated comments made in its response to the RtS relating to the review, monitoring and implementation of the STP.</p>
SES
<p>SES advised that the FEMP is generally consistent with its expectations for a FEMP, however advised it does not endorse any private FEMP. SES stated that it advocates for land use planning and zoning to be the forefront of decision making. SES also advised it does not support conditions of consent requiring compliance with a FEMP as it considers FEMP's are forgotten throughout the life of the development.</p>
Council
<p>Council advised that:</p> <ul style="list-style-type: none">• with the additional 25 bays to be provided on-site, no further issues are raised with car parking• outstanding issues with stormwater and flood modelling can be addressed through recommended conditions <p>The proposal is supported subject to the recommended conditions. The Department incorporated Council's requirements into the recommended conditions of consent. The Department referred the recommended conditions to Council for comment. On 24 August 2022, Council advised it raised no concerns with the recommended conditions of consent.</p>

6 Assessment

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

- traffic, transport, and parking
- built form and urban design.

These issues are discussed in the following sections of the report. Other issues considered during the assessment are discussed at **Section 6.3**.

6.1 Traffic, transport and parking

The Applicant prepared a Traffic and Accessibility Impact Assessment (TAIA) with the EIS. The TAIA addresses existing conditions surrounding the site and transport impacts associated with the proposal including:

- existing traffic and parking conditions
- trip generation and distribution
- forecast intersection performance
- parking, pedestrian and bicycle requirements
- assessment of proposed access arrangements for the site
- general operational transport impacts
- cumulative impacts
- construction traffic impacts and mitigation.

6.1.1 Existing conditions

The site is bordered by two local roads:

- Foreman Avenue to the south, a one-lane each way unclassified (local) road aligned in an east-west direction
- Glenwood Park Drive to the east, a one-lane each way unclassified road aligned in a north-south direction.

The surrounding road network is shown in **Figure 17**. Glenwood Park Drive, being a loop road, provides a key thoroughfare to surrounding residential areas.



Figure 17 | Surrounding road network (Base source: Nearmap, 2021)

Glenwood High School is serviced by two public bus routes (730 and 745) which connect to Blacktown and St Marys to the south-west, and Norwest and Castle Hill to the east. There are 11 school bus routes that connect to The Ponds, Stanhope Gardens, Kellyville Ridge and Parklea, being all locations to the north-west of the school.

The site is serviced with footpaths along all roads surrounding the school, and a raised pedestrian crossing on each of the adjoining roads (**Figure 18**). This provides safe pedestrian movements to the site. There are also pedestrian refuges near the north-west and south-west corner of the site.

There are nearby cycleways connecting to a broader network of major cycling routes including a cycleway adjacent to the M7 motorway, Sunnyholt Road and Windsor Road. Proposed cycleways within the larger network will eventually provide links to Blacktown, Seven Hills and Quakers Hill train stations (**Figure 19**). Bella Vista train station is located approximately 560m from the site, however, the shortest walking route to the train station is over 1.2km in distance.



Figure 18 | Surrounding pedestrian infrastructure (Source: Applicant's EIS, 2021)

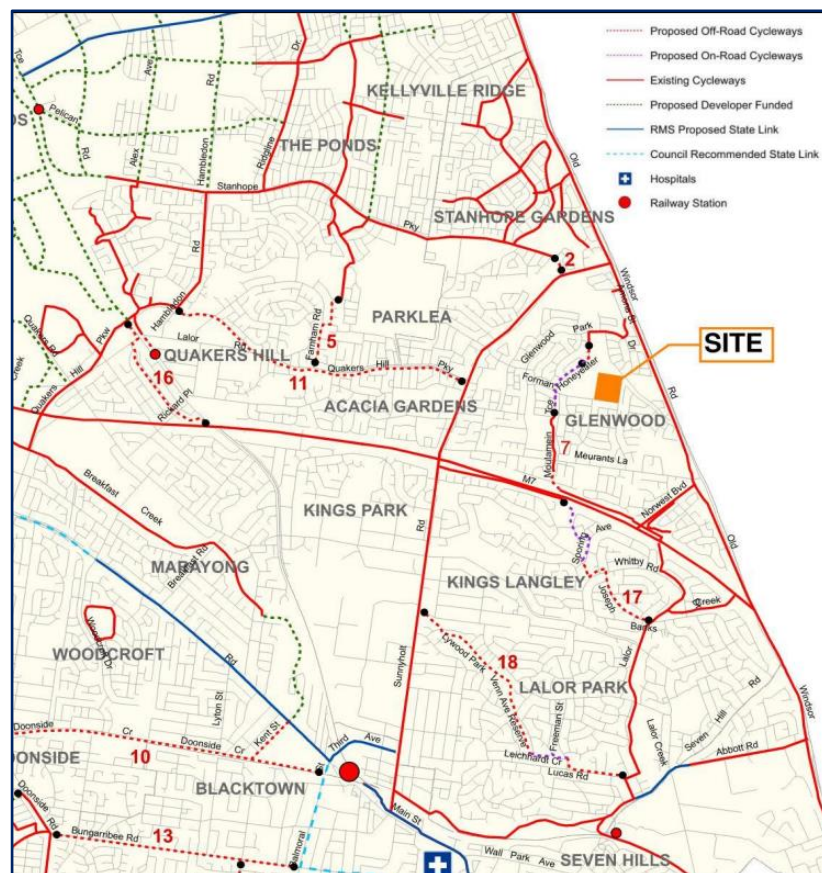


Figure 19 | Existing and future proposed cycling network (Source: Council's Bike Plan 2016)

6.1.2 Operational traffic

The TAIA included SIDRA traffic modelling to determine the potential impacts of the proposal on the performance of the following key nearby intersections (**Figure 20**):

- Foreman Avenue and Glenwood Park Drive (east)
- Foreman Avenue and Glenwood Park Drive (west).



Figure 20 | Surveyed intersections (Base source: NearMap, 2021)

The SIDRA modelling identified six Level of Service (LoS) ranges, with a LoS A equating to very low delays and very good operating conditions and LoS F meaning over saturation where arrival rates exceed capacity. The SIDRA modelling indicates both intersections were currently performing well with a performance LoS A, with the exception of the western intersection operating at LoS B (good with acceptable delays) in the PM. This is due to right hand turns onto Glenwood Park Drive from Foreman Avenue.

SIDRA analysis has been undertaken for the following future scenarios during school peak hours and includes traffic growth of 1.5%:

- 2026 – without development
- 2026 – with development
- 2031 – without development
- 2031 – with development.

To assess the potential increase in traffic from the proposal, forecast trip generation was established using the results of travel mode surveys of both students and staff (the current mode share). The results indicated that approximately 92 percent of staff access the site by car and 52 per cent of students travel to/from the site by car (DOPU and drive themselves).

Based on the current mode share, the TAIA indicated that the proposal would result in an additional 164 DOPU trips per peak period and 58 parked vehicles (33 students and 25 staff) per day. The TAIA estimates that the distribution of traffic would be split fairly evenly between north and south approaches to each intersection based on student's residential addresses.

The intersection modelling results indicate that at the commencement of operation (2026) and in 2031, both intersections would maintain a LoS A or reduce to LoS B (**Table 8**). The TAIA concluded that the proposal would result in minor and negligible increased traffic impacts.

Table 8 | Existing and proposed intersection modelling performance (Base source: Applicant's EIS, 2021)

Intersection (school peak period)	Existing	2026 (without development)	2026 (with development)	2031 (without development)	2031 (with development)
East (AM)	A	A	A	A	A
East (PM)	A	A	A	A	A
West (AM)	A	A	A	A	B
West (PM)	A	A	B	B	B

The Department has considered the findings of the TAIA and is satisfied that the Applicant has demonstrated that the local road network can accommodate additional traffic generated by the proposal. While there would be a reduction in LoS from A to B at the West intersection in the 2026 (PM) and 2031 (AM) scenarios, the intersection performance would still be good with acceptable minor delays. Neither Council or TfNSW raised concerns with the intersection performance. Overall, the proposal would result in minimal impacts to intersection performance. The Department is satisfied that the surrounding road network has capacity to accommodate the additional traffic generated by the proposal.

The Department notes that while a shift in travel mode (to reduce private vehicle trips) is supported (**Section 6.1.6 Sustainable transport**) through the implementation of a STP, the TAIA has assessed the traffic impacts of the proposal based on no change to the mode share. Therefore, the TAIA modelling and the Department's assessment of the operational traffic impacts is based on a worse-case scenario. Initiatives presented in the STP may reduce the assessed additional traffic activity and impact on the surrounding road network but the acceptability of intersection LoS is not dependant on this mode change.

6.1.3 Operational parking

There are currently 93 car parking spaces on-site for use by school staff (**Figure 21**).



Figure 21 | Existing on-site car parks (Source: Applicant's EIS, 2021)

The proposal redevelopment facilitates an increase in the number of staff from 106 to 133 (additional 27) and students from 1410 to 1820 students (additional 410). The proposal includes the construction of 25 additional car parking spaces for staff, which would provide a total of 118 spaces on-site for school use.

The Blacktown Development Control Plan 2015 (BDCP) requires a minimum car parking rate of one space per staff member, one space per 100 students, and one space per every five Year 12 students. This would equate to a total of approximately 181 car parking spaces being required for the total proposed school capacity under the BDCP.

The original proposal did not include the provision of any additional on-site car parking. In its submission to the EIS, Council acknowledged that the STP aimed to reduce staff car dependency, however, Council did not support the proposal as no increase to the on-site car parking resulted in the development:

- only providing enough parking for 70% of staff based on the mode share survey
- student and staff car parking shortfall equating to 88 car parking spaces when using the BDCP rates
- not complying with the requirements of the BDCP
- staff and visitor parking reliance on street parking likely to result in a consequential impact to car parking availability on surrounding streets.

Council requested the Applicant provide further justification on either, why the car parking rates prescribed in the BDCP 2015 cannot be achieved or that the Applicant should provide additional car parking.

In response to Council's request, the RtS included a statement that the Department of Education does not provide student parking at any of its schools. Therefore, under the BDCP rates, a total of 133 spaces would be required. This would mean a shortfall of 40 on-site car spaces rather than the 88 mentioned by Council, in relation to the BDCP rates. The Applicant in its RtS argued that even without a shift in mode share, the school site and surrounding streets are capable of accommodating additional car parking demand generated by the proposal. The RtS detailed that approximately 36 per cent of the 148 street parking spaces surrounding the site are vacant during school hours.

The Department did not support the Applicant's proposed reliance on a mode share shift and use of on street parking to entirely cater for the proposed increase in the car parking needs of the school. Consequently, the Department requested the Applicant provide additional car parking spaces on-site to cater for additional staff members driving to the school.

As part of the Applicant's SRtS, the Applicant proposed an additional 25 car parking spaces which results in an increase to the existing staff car parking from 93 to 118 car parking spaces. The proposed spaces are distributed across the site with 10 spaces proposed on the eastern side and the 15 spaces in the existing car park to the west of the site (**Figure 22**).

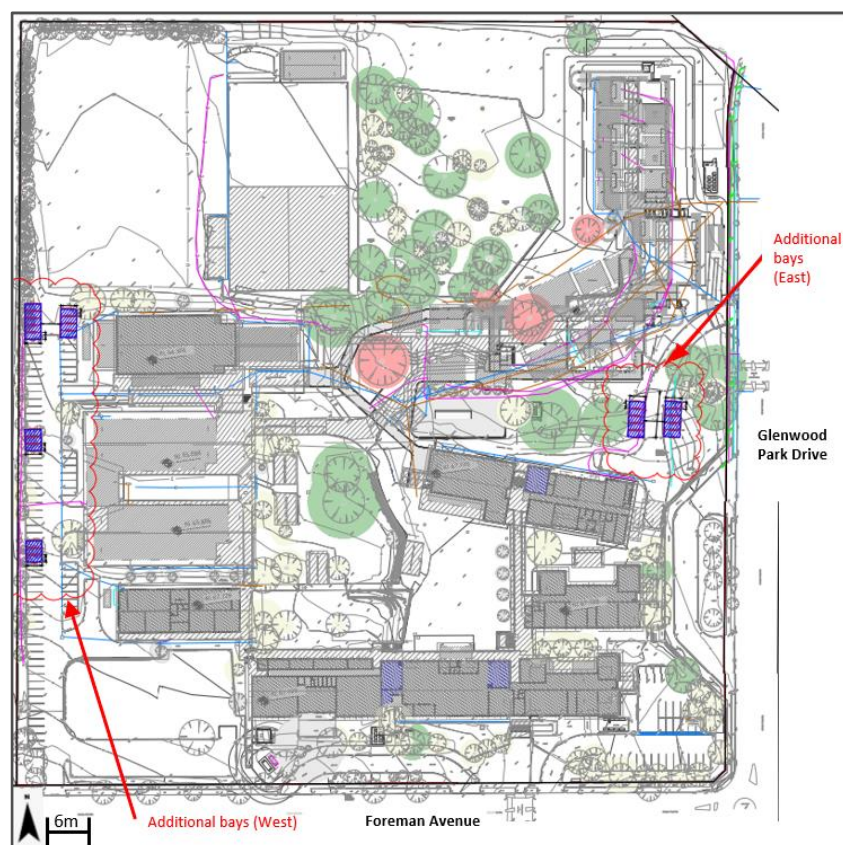


Figure 22 | Additional new car parking (Base Source: Applicant's SRtS, 2022)

The existing mode share survey indicates 92 per cent of staff drive to the site. **Table 9** shows a breakdown of the BDCP car parking requirements, car parking demand based on existing mode share, and existing and proposed car parking.

Table 9 | Staff car parking rates

	BDCP car parking rate	Car parking rate based on existing mode share	On-site car parking	Car parking shortfall: BDCP / existing mode share demand
Existing staff (106)	106	98	93	-13 / -5
Proposed total staff (133)	133	113	118	-15 / +5
Proposed additional staff (27)	27	25	25	-2 / No shortfall

The Department considers that the proposed car parking is sufficient as:

- while there is a historical shortfall of car parking on the site, based on the existing mode share, all staff parking directly associated with the proposal would be provided on-site (with no shortfall as shown in **Table 9**)
- any further additional parking on site would compromise available open play space and tree canopy coverage and on balance this open space loss was not acceptable
- the TAIA includes the Applicant's commitment to implement sustainable transport options through a STP for staff and students to reduce demand for car parking
- Council provided a revised comment confirming it supports the amount of parking proposed on-site.

Given the above, the Department considers the proposed staff car parking as revised is acceptable. In relation to student car parking, the Department acknowledges that Department of Education discourages students driving themselves to school by not providing on-site car parking and promoting sustainable transport modes. Notwithstanding, the Applicant's TAIA concludes that there is sufficient on-street car parking available on the surrounding streets. The Department considers that any additional car parking demand by students, as a result of the proposed increased in students would not significantly impact on surrounding residents due to there being sufficient on street capacity.

The Department has recommended conditions requiring that, prior to the commencement of operation, the 25 additional car spaces are constructed and made available for use, and the STP is prepared and implemented to reduce car parking demand.

6.1.4 Drop-off and pick-up (DOPU)

The site contains one existing indented DOPU zone accessed from Foreman Avenue. In addition, there are two no parking zones along Foreman Avenue which are also able to be used for DOPU (**Figure 23**).



Figure 23 | Drop-off and Pick-up areas (Source: Applicant's EIS, 2021)

The TAIA assessed the DOPU against the predicated additional 164 DOPU trips from the proposed increased in student capacity. The on-site DOPU zone is approximately 60 metres long, catering for 10 vehicles, and the two DOPU zones on Foreman Avenue (90m combined length), cater for 15 vehicles. Overall, the DOPU zones are 150m in length which can cater for up to 25 vehicles at any given time.

Assuming a 90 second turn over for each vehicle and space for 25 vehicles, a peak period of 30 minutes allows for 20 vehicle cycles to occur, meaning there is capacity for 500 vehicles to be accommodated within the DOPU within 30 minutes.

The TAIA acknowledges that:

- there is less demand for DOPU in the afternoon
- not all drop-off and pick-ups occur in the dedicated DOPU locations
- a 90 second turn over of vehicles is conservative for high school students
- demand for DOPU would reduce with ongoing implementation of the STP.

TfNSW advice on the RtS agreed with the conclusion that DOPU use should decrease from the current observations of 42 per cent of users to 31 per cent of users in the long-term.

The Department considers that the Applicant has demonstrated that the existing DOPU zones could sufficiently cater for demand associated with the redevelopment. A condition has been recommended to require the preparation and implementation of a final detailed STP that includes management arrangements for the DOPU zones.

6.1.5 Construction Traffic and Parking

The TAIA includes a preliminary CTMP, which details measures to manage traffic and access during construction to provide a safe road environment, minimise impact on the surrounding road network and maintain access for the local community.

The preliminary CTMP proposes construction vehicles access and egress using Meurants Lane and Glenwood Park Drive or Tarwin Avenue and Glenwood Park Drive, depending on the direction of travel (**Figure 24**).

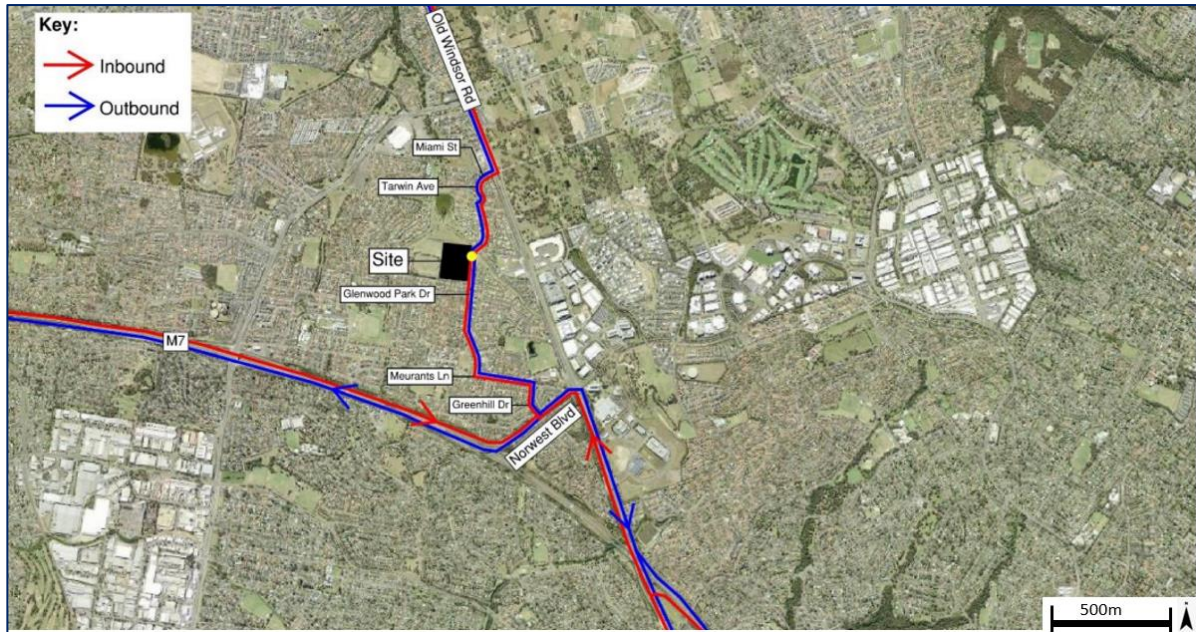


Figure 24 | Preliminary construction vehicle routes (Source: Applicant's EIS, 2021)

The maximum number of trucks accessing the site is estimated to be 2 vehicles per hour, up to 10 per day. Whilst the construction timeframe is 18 months, truck delivery is not frequent throughout, and is not considered a major impact to the surrounding area. There is no expected impact to bus bays, pedestrian paths, and surrounding road networks (**Figure 25**).



Figure 25 | Preliminary construction site layout (Source: Applicant's EIS, 2021)

The preliminary CTMP outlines three options for construction worker parking:

- On-street parking - Using surrounding on-street parking for construction workers and advising workers of the preference to use spaces not on residential frontages.
- On-site worker car park - Establishing a dedicated area adjacent to the new buildings for workers to park.
- Glenwood Reserve - Using vacant spaces at the adjoining Glenwood Reserve during the week, and using the schools on-site parking on Saturday. This option would require further consultation with Council.

The preliminary CTMP states that construction workers would be encouraged to carpool whenever possible to reduce demand. The Department considers there is scope to use a combination of the above options, which would depend on the demand for construction worker parking at each stage of the development. However, the Department recognises that there may be limited opportunity to provide car parking on-site for all construction workers due to the site constraints and the need to maintain operation of the school during construction.

The Department has recommended a condition that requires the Applicant prepare a Construction Worker Transportation Strategy to manage and minimise impacts from construction worker parking. Both the CTMP and construction worker transport strategy are required to be prepared in consultation with Council and TfNSW.

6.1.6 Sustainable transport

A preliminary STP submitted with the EIS included initiatives to reduce reliance on private car usage and increase sustainable methods of transport to and from the site. The preliminary STP focuses on increasing walking and cycling to and from the site given most students reside within a walkable or cyclable distance, as shown in the enrolment catchment (**Figure 26**).

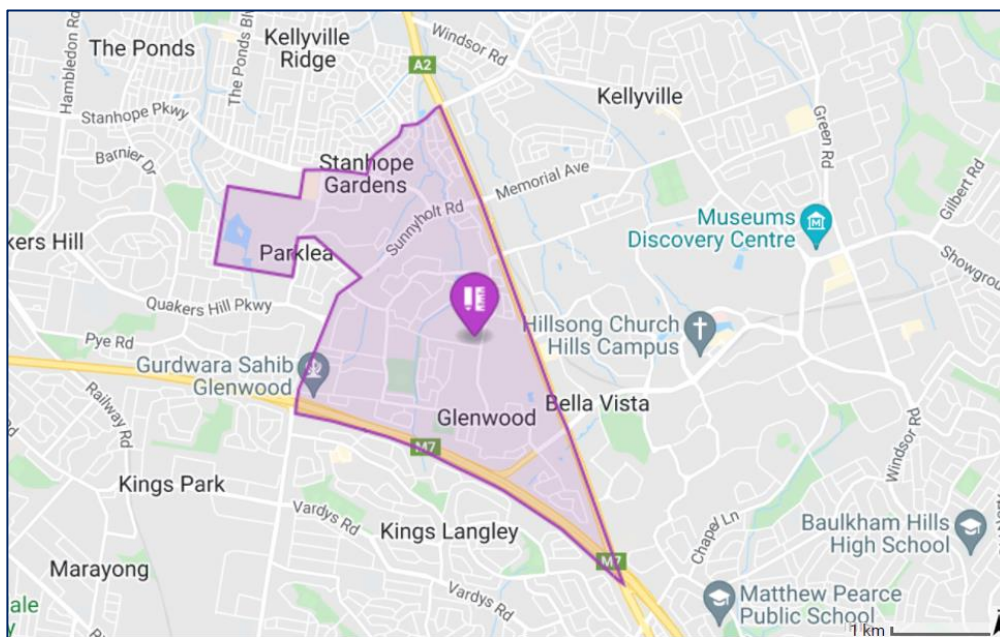


Figure 26 | School catchment area (Base source: Applicant's EIS, 2021)

TfNSW in its advice in relation to the EIS requested the Applicant reduce the amount of private vehicle trips to the site. The Applicant, as part of the RtS, revised and reduced forecast private vehicle trips for staff to more sustainable modes of transport in the short term and long-term in line with comments from TfNSW and conclusions of the TAIA. The revised mode share targets are identified in **Figure 27**.

<i>Values may not add to 100% due to rounding.</i>										
Travel Mode	Student					Staff				
	Existing Mode Split	Short Term Target	Long Term Target	Short Term Volume Change	Long Term Volume Change	Existing Mode Split	Short Term Target	Long Term Target	Short Term Volume Change	Long Term Volume Change
Walk	36%	40%	44%	+73	+146	2%	5%	8%	+5	+10
Bicycle / Scooter	<1%	<1%	<1%	-18	-18	3%	10%	17%	+12	+24
Bus / Train	12%	12%	12%	-	-	<2%	3%	5%	+3	+6
Drop-off & pick-up	42%	40%	38%	-27	-64	2%	2%	2%	-	-
Park & walk (passenger)	<2%	1%	<1%	-9	-27	0%	0%	0%	-	-
Car (driver)	8%	7%	6%	-18	-36	92%	80%	68%	-21	-42
Total	100%	100%	100%	-	-	100%	100%	100%	-	-

Figure 27 | Mode share target (Source: Applicant's RtS, 2021)

The preliminary STP proposes mode share targets of non-car based travel modes for staff to increase by 23 per cent overall. Given the substantial increase (15 per cent) forecast in staff cycling to the school, the Department requested the Applicant install dedicated and secure bicycle storage facilities for staff. TfNSW also advised:

- the mode share forecast for DOPU should reflect the TAIA, which shows a long term drop in the use of DOPU to 31 per cent down from the current 42 per cent
- students cycling should be increased from <1 per cent to 10 per cent in the long-term because 71 per cent of students could cycle to school within 10 minutes
- additional lockers should be provided, as currently only 18 are proposed for staff in the end-of-trip facilities.

The Applicant provided:

- a revised forecast goal of 5 per cent for students cycling to and from the site, rather than the 10 per cent requested by TfNSW
- a revised DOPU target of 31 per cent in the long term to align with the TAIA
- 13 additional dedicated sheltered and separated staff bike parking spaces, and 15 student bike parking spaces, totalling 84 bike parking spaces on-site
- 5 additional showers and 18 lockers for staff end-of-trip facilities, with space for more lockers should it be required upon review of the STP.

The final STP prepared in consultation with Council and TfNSW would include:

- a trip planning and a Travel Access Guide
- additional initiatives such as promotion of end of trip facilities and subsidised carry bags
- a wholistic implementation strategy with all transport initiatives and a School Travel Coordinator.

TfNSW support the additional information and requested the STP be reviewed annually and include a travel survey after three months of operation to identify new travel patterns, ensuring the mode share targets are achieved.

The Department notes that the preliminary STP was amended to increase the active mode share target for staff from 3 to 27 per cent and reduce on-site car parking demand from 98 to 72 per cent. The Department is supportive of the increase in bicycle parking and inclusion of end-of-trip facilities as well as implementation of other measures to encourage sustainable transport modes. However, the Department considers that this target is still ambitious, and consequently requested the Applicant provide additional parking on-site to ensure that parking impacts within the adjoining system would be acceptable (**Section 6.1.3 Operational parking**). Proposed travel mode share goals have not been relied upon in the Department's assessment of the proposal's traffic and parking impacts.

The Department has recommended conditions requiring the Applicant to finalise and implement a STP to incorporate the proposed sustainable transport measures in consultation with Council and TfNSW.

6.2 Built form and urban design

6.2.1 Building height, bulk and scale

The site does not contain a height of building or floor space ratio standard under the BLEP. A 9m height of building control applies to the surrounding residential area which is characterised by 1-2 storey detached brick dwellings. Dwellings surrounding the site are set back between 4m-6m from the street. The closest dwellings to the proposed three storey building are located between 40m-60m to the north along Glenwood Avenue and Shaun Street and to the east along Kidman Street (**Figure 28**). Drainage reserves containing existing vegetation provides some visual screening between the surrounding dwellings and the site.



Figure 28 | Location of new buildings and surrounding dwellings (Base source: NearMap, 2022)

The proposed three-storey building has a maximum height of 16.96m to the top of the architectural blade wall and the height of the main roof is 14.77m (**Figure 29** and **Figure 30**). The proposed three-storey building is located to north east of the site. The proposed building has a varied setback from Glenwood Park Drive of between 10m-20m and is set back approximately 14m from the northern side boundary. The proposed single storey building (performing arts pavilion) has a maximum building height of approximately 7.5m and is located near the middle of the site.



Figure 29 | East (Glenwood Park Drive) elevation (Base source: Applicant's EIS, 2021)

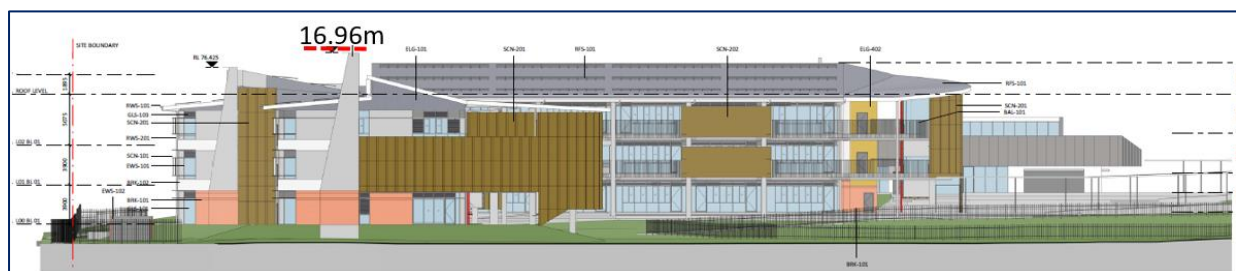


Figure 30 | North elevation (Base source: Applicant's EIS, 2021)

The Applicant states that:

- the design was informed by site analysis and urban design principles to ensure the design of the buildings responds to the local context
- the building has been designed to respond to the sloping topography
- design and spatial organisation of the new buildings as well as distance from neighbouring residences ensures that the development does not have adverse impact on the surrounding development and is visually compatible with its surrounds.

The Department considers that the proposed height, bulk and scale of three storey building to be acceptable as:

- a minimum setback of 10m is provided from Glenwood Park Drive which helps to reduce visual bulk and is generally consistent with front building setbacks in the streetscape
- it would not result in view loss, unacceptable visual privacy impacts or overshadowing of residential properties or public open space
- it includes breaks in the built form to allow visual permeability and façade articulation which provides relief to building mass
- the materiality consists of muted tones and natural colours, and this coupled with existing and proposed landscape would visually soften the appearance of the building
- it is appropriate for a key community facility at an existing school site.

Council did not raise any objection in relation to the proposed height, bulk and scale.

The Department concludes that the proposed height, bulk and scale of the proposal is contextually appropriate, would not result in amenity impacts and the new buildings would make a positive contribution to the character of the area.

6.2.2 Building design

The Applicant states that the:

- new building along Glenwood Park Drive offers potential to give the existing inward-looking campus a more considered identity
- design works to use the connecting circulation areas, such as the single storey performance pavilion, the main entry forecourt, and edges of the access areas for unstructured activities
- design maximises space for students informal and formal play areas and minimises tree removal
- terracotta coloured brick reflects the colour and texture of the existing brickwork on the campus, and that the east elevation facing Glenwood Park Drive uses different materials and textures to break up the building form and minimise bulk.

The street facades would exhibit a layered approach proceeding from 'rough' brickwork at the base to 'smooth' cladding at the top, and there are a range of other textures and features such as aluminium louvres and concrete panels to create articulation in the façade (**Figure 31** and **Figure 32**). The

buildings also create architectural statements in the façade to define the school amongst the suburb by including a chimney kiln for Blocks A and B of the new three storey building.

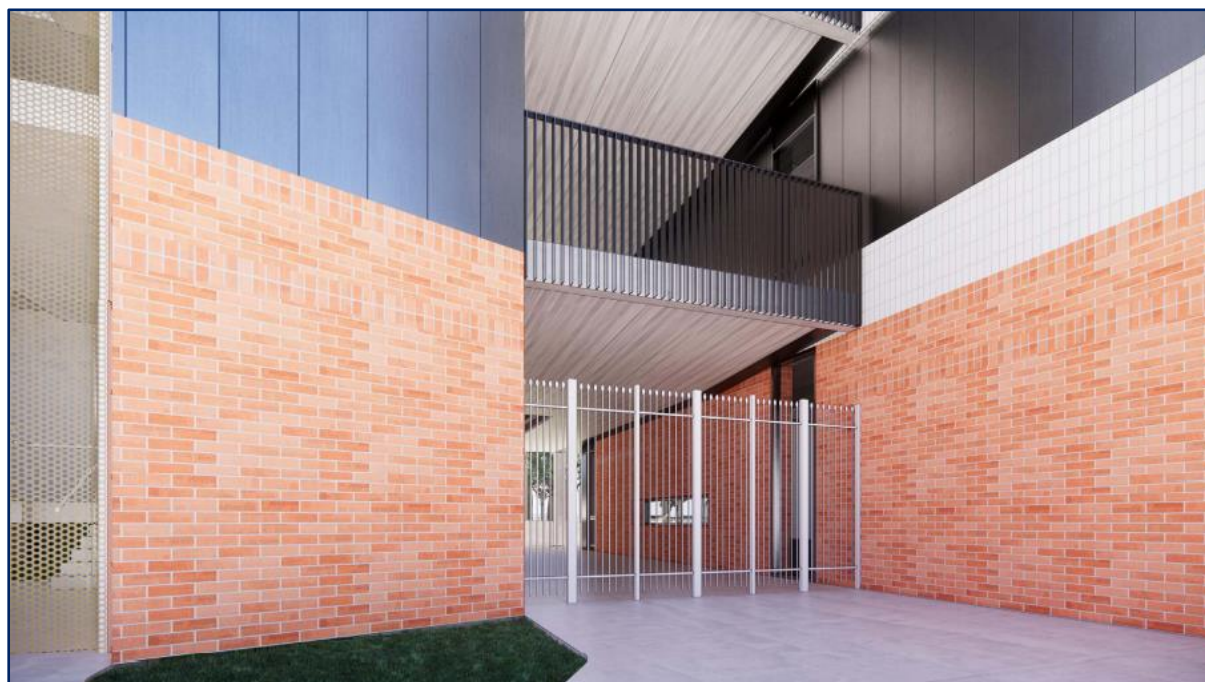


Figure 31 | Close-up perspective (Source: Applicant's EIS, 2021)



Figure 32 | Extract of materials and colours (Source: Applicant's EIS, 2021)

The design had been reviewed by the Government Architect NSW (GANSW) State Design Review Panel before the application was submitted to the Department for assessment. Advice was sought from the GANSW in relation to the plans submitted and GANSW advised that the:

- existing fence surrounding the Cumberland Plain Woodland does not allow students to freely use the woodland area and should be removed
- footpath should be reinstated forming a pedestrian connection between end points of the new 'L' shaped building.

To address these concerns, the Applicant redesigned the proposal through revisions under the RtS, by extending the footpath to form a pedestrian connection between the end points of the new 'L' shaped building. The Applicant explained the fence surrounding the Cumberland Plain Woodland does not prohibit access, but instead controls access, ensuring an adequate level of protection for the trees from disease, trampling and accidental mowing. This approach is supported by the Department.

The Department is satisfied that the proposed building design, external colours and finishes would provide a visually appealing and functional development which would positively contribute to the existing character of the locality.

6.2.3 Landscaping and tree removal

92 new trees are proposed to be planted on the site (**Figure 33**). The proposed landscaping includes predominantly native species including Cumberland Plain Woodland Community natives.

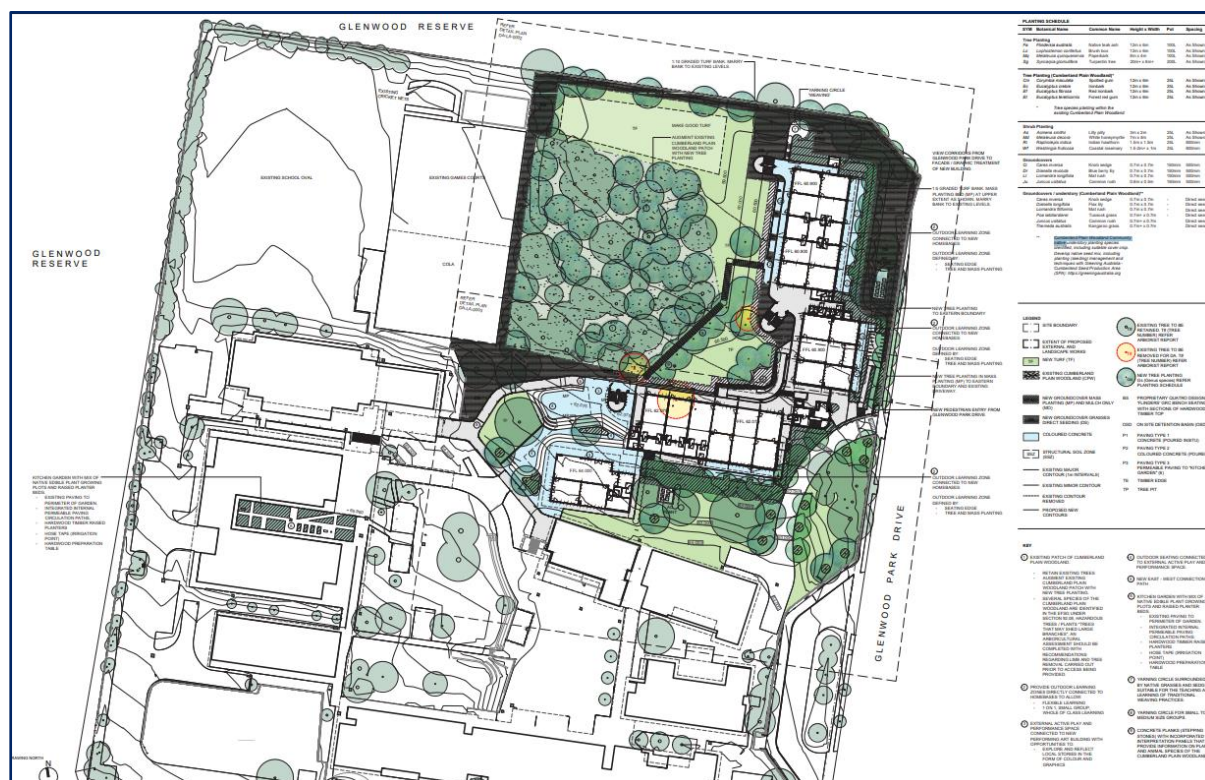


Figure 33 | Proposed and retained landscaping (Source: Applicant's RtS, 2022)

The EIS included an Arboricultural Impact Assessment (AIA) which surveyed and inspected 321 trees on the site. One tree (tree #73) was initially proposed to be removed to facilitate the proposal and has 'high' retention value. The AIA concluded that there was no feasible option to retain the tree with the extent of the proposed works impacting the tree (#73).

EHG's advice to the EIS stated that:

- further investigation was required on the ability to retain tree #73 through design modification
- further details are required on the measures to be used to retain trees #118, #120 and #72 which may be impacted.

The Department advised the Applicant to investigate design changes to accommodate tree #73, and the ability to increase the tree canopy further than the proposed 24 per cent. As part of the RtS, the Applicant provided a revised AIA and landscape plans which:

- alters the outdoor seating surrounding tree #73. This seating design modification reduces the impact on the tree's root zone, allowing the tree to be retained subject to tree protection measures recommended in the AIA

- provides detailed tree protection measures to ensure trees #118, #120 and #72 near the proposed building works and those which are impacted would be protected
- confirmed that due to hard surface areas such as car parking and the desire to maintain unobstructed open space play areas, there was limited opportunity to further increase the tree canopy on-site above 24 per cent.

EHG supported the design modifications made to retain the tree #73, along with the tree retention measures within the AIA. With regards to the trees #118, #120 and #72 where works encroach into the tree protection zone, EHG recommended:

- root mapping investigations be undertaken using air spading or hand excavation under the supervision of the project arborist, to determine if tree roots are present within the construction footprint
- the position of pier footings for pathway arrangement are to be strategically placed around existing tree roots (if found to be present in the root mapping exercise).

The SRtS proposed additional parking on-site (**Section 6.1.3 Operational parking**) which modified the proposal to remove 21 trees along the western side of the site. Trees proposed to be removed are shown in **Figure 34**.

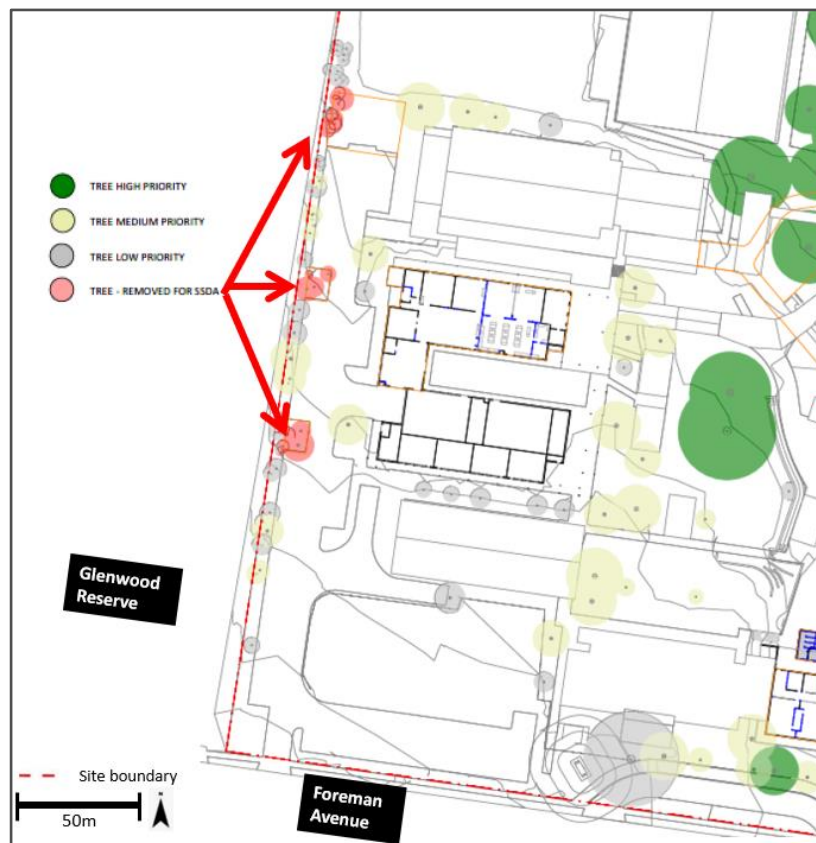


Figure 34 | Proposed tree removal (Base Source: Applicant's Revised AIA, 2022)

To support the removal of the trees, the Applicant provided a further revised AIA and BDAR as part of the SRtS which assessed the trees proposed to be removed and any impact on trees adjoining the development. The revised AIA concluded that no trees are of high significance and of the 21 trees proposed to be removed, 15 are low, and six are of medium significance.

The Department referred the revised AIA and BDAR to EHG for advice. EHG raised no concerns with the revised BDAR, however requested a 2:1 replacement ratio of the 21 trees removed (42 trees additional trees) to off-set the tree canopy coverage in the interim period while the new tree plantings are established. The Department considers that the site has limited ability to provide a 2:1 replacement ratio given it is an existing school site with established buildings and extensive vehicle parking and access areas. Accordingly, the Department considers 1:1 replacement ratio more attainable for the site and would provide a net gain of 92 trees. It is noted that a replacement ratio of 1:1 would maintain the originally proposed 24 per cent canopy coverage.

The Department has considered the information provided by the Applicant and advice from the EHG throughout the assessment. On balance the Department considers the provision of additional car parking in the location proposed, which removes predominantly trees of low significance and none of high significance, is acceptable, together with a proposed net gain of 92 trees across the site.

The Department has recommended conditions that require:

- compliance with the recommendations of the revised AIA including tree protection measures
- tree replacement on-site for each tree proposed to be removed as part of the SRTS using native species
- tree planting and landscaping to be implemented and maintained.

6.3 Other issues

The Department's consideration of other issues is provided at **Table 10**.

Table 10 | Department's assessment of other issues

Issue	Findings	Recommendations
Aboriginal heritage	<p>The site is located on Darug Country.</p> <p>An Aboriginal Cultural Heritage Assessment Report (ACHAR) was included with the EIS. The ACHAR considered whether works associated with the proposal could impact upon Aboriginal items of significance.</p> <p>The ACHAR concludes that on the basis of the results of the assessment process, that there are no Aboriginal cultural heritage constraints for the proposed development.</p> <p>Comments received from EHG advised that the ACHAR was considered adequate and, recommended:</p> <ul style="list-style-type: none"> • implementation of an unexpected finds (archaeological objects, sites or human remains) protocol • Continued consultation with the registered Aboriginal stakeholders. 	<p>The Department has considered the findings and recommendations of the ACHAR and the advice provided by EHG.</p> <p>The Department is satisfied the proposal would not result in adverse impacts to Aboriginal cultural heritage.</p> <p>In accordance with EHG's advice, the Department has recommended a condition that requires the preparation and implementation of an unexpected finds protocol.</p>

Flooding

The Flood Report, as revised in the RtS, found the:

- site is not impacted by the 1% Annual Exceedance Probability (AEP) flood level and the extent of the 1% AEP flood event is contained to the adjoining road reserve
- proposed finished floor levels of the new buildings are at least 250mm above the natural ground level as a precaution, should the 1% AEP flood level rise
- Probably Maximum Flood (PMF) would affect the north-east of the site, where a portion of the new three- storey building is located (**Figure 35**)
- finished floor levels of the proposed school buildings have been designed to be above the PMF level. The ground floor of the new building is RL60.90 and the PMF flood levels range between RL59.80 to RL60.60.
- surrounding streets including Glenwood Park Drive, the main access route to and from the school would be slightly flooded in a PMF event with approximately 200mm depth of water
- proposed development will not cause detrimental increases in the potential flood affectation of other neighbouring properties, assets, and infrastructure, as the floodwater remains contained within the roadway and drainage channel.

Council's final submission raised no concerns with flooding. EHG raised no concern with the Flood Report submitted with RtS. EHG also recommended a Flood Emergency Management Plan (FEMP) be prepared.

The Applicant's SRtS provided a preliminary FEMP with the following information and/or recommendations

- in case of a forecast of intense rainfall that could lead to precinct wide flooding where roads and transport services are impacted, it is recommended that the school is closed
- however, in the event of an unlikely flood emergency occurring while the school is operation (where there is no time for school closure), personnel and students on the site are to seek refuge within the school on higher ground
- once it is safe to do so, closure of the school should occur in conjunction with

The Department has considered the Applicant's revised Flood Report, preliminary FEMP and advice from EHG, Council and SES.

The Department notes that the site, including most main pedestrian and vehicle access routes to and from the site, would not be impacted by the 1% AEP flood event.

The Department is satisfied that the finished flood levels of the proposed buildings would be located above the flood planning level and PMF level.

The Department acknowledges that the Applicant's primary approach during the PMF event is early closure of the school which is supported by the Department and SES. If in the unlikely event the school is operational and peak PMF levels inundate the north-east portion of the site (up to 1m), refuge should be sought on higher flood free land within the school.

The Department does not object to the Applicant's proposed contingency strategy for refuge on site in this case as:

- only a small portion of the site is impacted by the PMF event (1m of water) with low velocity and the flood risk has been assessed as manageable
- due to the flood waters being overland flow (rather than riverine flooding) the flood waters will recede relatively fast enabling access to the school after rain stops meaning students and staff are not anticipated to need shelter on-site for extensive periods of time.

The Department has recommended conditions to require a final operational FEMP

- emergency services advice to ensure roads within the vicinity are safe to use
 - the time for flood waters to recede to a level which allows for the evacuation route/s roads to be safely used again depends on the downstream catchment. However, assuming the downstream catchment is not flood affected, a period of 1 – 2 hours would occur for water to recede from adjoining roads once rain in the catchment has stopped.
- be prepared in consultation with SES prior to the commencement of operation. The FEMP is required to address the specific nature of the catchment flooding, warning times, warning systems, refuge areas and safe evacuation routes to manage risk to student, carers and staff.

EHG raised no further concerns regarding flooding. The preliminary FEMP was referred to SES, who advised the preferred emergency strategy for the school is early closure prior to the commencement of flooding and before the start of the school day. As a contingency, at the first sign of flooding, people located in the north-east part of the school should relocate to the areas on site that are not at risk of any flooding. SES advised that the Applicant should consult with SES when preparing the final FEMP.



Figure 35 | PMF Event (Source: Applicant's SRtS Flood Study, 2022)

Stormwater and drainage	<p>The EIS included a Civil Engineering Design Report and Stormwater Management Plan including the conceptual design of the proposed stormwater drainage system. The report states the proposed stormwater drainage system would be implemented in accordance with Council's requirements and detailed proposed on-site detention system, water quality treatment devices and the reuse of water on-site for water sensitive urban design.</p> <p>An additional on-site detention basin would be provided for the detention of water in the development area, with a minimum of 85 per cent of water captured prior to discharge. The basin would have an appropriately sized outlet overflow pipe to facilitate discharge during all storm events up to and including the 1% annual AEP storm event to Council's stormwater drainage system.</p> <p>As detailed in Section 5, Council's EIS and RtS submissions raised concerns with the level of detail provided for the proposed stormwater management system and issues with the stormwater drainage modelling. The SRtS included updated stormwater modelling and additional detail on the proposed stormwater management system.</p> <p>Council's submission on the SRtS raised no concerns with the proposed stormwater and drainage works, subject to its recommended conditions. Council's recommended conditions require the detailed stormwater management system to be prepared in accordance with Council's stormwater and on-site detention guidelines and Part J 'Water Sensitive Urban Design and Integrated Water of BDCP including ongoing maintenance requirements of the on-site detention basin.</p>	<p>The Department is satisfied that the Applicant has demonstrated the site could accommodate the required stormwater and drainage management systems to manage the quantity and quality of stormwater from the site, in accordance with Council's requirements, subject to conditions.</p> <p>The Department has recommended conditions requiring the:</p> <ul style="list-style-type: none"> • detailed design and implementation of a stormwater management system for the site in accordance with Council's requirements, relevant standards and guidelines • ongoing maintenance requirements of the on-site detention basin. <p>The Department referred the recommended conditions to Council for review. On 24 August, Council advised it had no concerns with the recommended conditions of consent.</p>
Biodiversity Diversity Assessment Report	<p>A BDAR was provided with the EIS, and updated in the RtS and the SRtS, which provides an assessment of the biodiversity on the site in accordance with the BC Act.</p> <p>One native plant community type (PCT) was recorded with 1.24ha mapped across the site, PCT 849 – <i>'Grey Box – Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion'</i>. This vegetation is listed as a 'critically endangered ecological community' under the BC Act. This PCT was identified and classified into three zones cross the site as follows:</p>	<p>The Department considered EHG's advice and the information contained with the Applicant's EIS, RtS and SRtS.</p> <p>The Department is satisfied that the proposal has minimised any potential impacts on biodiversity and has recommended conditions requiring the mitigation and avoidance measures contained in the updated BDAR to be complied with.</p>

PCT 849 - Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion	Area
Zone 1 - Moderate Condition	0.34ha
Zone 2 - Low Condition	0.49ha
Zone 3 - Planted	0.41ha
Total:	1.24ha

The Department has recommended a condition for the BMP to be finalised in consultation with EHG. The BMP is required to be implemented throughout the operation of the development for the management and regeneration of the Cumberland Plain Woodland.

The remaining parts of the site comprise developed land, planted natives and exotic vegetation. The BDAR also states that the proposal would require the removal of 0.03ha of PCT 849, from zone 2.

EHG provided the following comments on the BDAR:

- credit reports (Appendix F) had not been finalised and certified
- it is inaccurate as it states no native vegetation is proposed to be removed, yet one tree (#73) from the plant community type (PCT 849) was proposed to be removed and another three trees from other approval pathways
- BDAR proposes suitable avoidance and mitigation measures.

EHG also commented that a strategy, prepared by a qualified ecologist or bush regeneration specialist, for the management and regeneration of the Cumberland Plain Woodland should be prepared prior to the commencement of operation.

As part of the RtS and SRtS, the Applicant provided a revised BDAR and Biodiversity Management Plan (BMP) for the management and regeneration of the Cumberland Plain Woodland. The revised BDAR:

- finalised and certified the credit reports within Appendix F with no offset credits required
- updated the removal of PCT 849 to 0.044ha including the retention of tree #73 and removal of the 21 trees to the west of the site for the proposed car parking spaces
- detailed the impact on PCT 849 from the removal of three trees as part of other approvals pathway outside of the SSD

- concludes that the proposal would be unlikely to have a significant impact on any Matters of National Environmental Significance listed under the EPBC Act
- concludes in accordance with the Biodiversity Assessment Method, there are no offset requirements for PCT 849.

EHG confirmed that the revised BDAR is acceptable. EHG advised that it supports the preliminary BMP subject to minor modifications.

Construction noise

The EIS included a Noise and Vibration Impact Assessment (NVIA) which assessed the potential construction and operational noise and vibration impacts on the nearest sensitive receivers.

The NVIA used the Interim Construction Noise Guideline (DECCW, 2009) (ICNG) which outlines the process for establishing “noise affected” and “highly noise affected” noise management levels (NML) to minimise construction noise impacts on sensitive receivers. The “noise affected” level is the point above which there may be community reaction to noise. The highly noise affected level represents the point above which there may be strong community reaction to noise.

The NVIA concluded that construction noise emissions would exceed NML’s at each phase of construction, however, no surrounding residential property would be highly noise affected. In contrast, the existing school buildings (A to K) would be highly noise affected. The Department queried the ability of the school to use the highly noise affected buildings during construction. In the RtS the Applicant outlined that the NVIA assumes all equipment on at the same time and near the buildings, when in practice this does not occur. The Applicant also stated that a construction noise and vibration management plan would be implemented to mitigate noise.

The Department is satisfied that construction activities could be managed to minimise noise or vibration impacts on nearby sensitive receivers including the childcare centre and high school students and staff.

The Department has recommended conditions that require:

- compliance with standard construction hours as per the ICNG
- intra-day respite periods from high noise generating construction activities be provided where necessary
- a Construction Noise and Vibration Management Plan be prepared that includes management strategies to reduce noise impacts to sensitive receivers in accordance with the ICNG.

Operational noise

The NVIA assessed operational noise sources on nearby sensitive receivers against the Noise Policy for Industry 2017 (NPI). The main sources are from outdoor play, public address systems, and mechanical plant and equipment.

The NVIA concluded that based on the existing background noise conditions and external noise such as traffic noise, the noise

The Department has considered the findings of the NVIA and information provided by the Applicant, and concludes that the proposal would not unreasonably impact on the amenity of surrounding occupants.

	<p>levels from the operation of the school would be acceptable.</p> <p>The NVIA details that only one receiver (R1), the closest residence to the new buildings, would exceed the NPI noise levels. The exceedance is by two decibels and the NVIA outlines that two decibels is unnoticeable to the human ear and therefore acceptable. The report also demonstrates that all other receivers including the child care centre located on site would be compliant.</p> <p>The Department queried what would be required for the noise at receiver R1 to be compliant with the NPI. The Applicant in its RtS stated that the noise barrier, east of the new buildings, would need to be increased from 2.5m to 3m in height. The Applicant stated that the built form and streetscape impacts of a wall 3m high is not necessary, given the inaudibility of two decibels.</p>	<p>The Department has recommended conditions that require:</p> <ul style="list-style-type: none"> • a detailed assessment be undertaken of plant and equipment demonstrating compliance with the identified noise criteria prior to its installation • the development be undertaken in accordance with the recommendations of the NVIA and not exceed the identified noise criteria • the Applicant undertake short term noise monitoring following commencement of use and address any exceedances of the noise criteria.
Play space	<p>The proposal results in a reduction of play space from 19,056sqm (13.5sqm per student) to 18,970sqm (10.4sqm).</p> <p>The Applicant proposes to move existing demountables to the school oval while construction of the new buildings occurs, a period which is estimated to be 18 months. The site would have 10.1sqm of active play space during construction.</p>	<p>While the proposal would result in a reduction of play space, the quality of play space would be improved and meets the minimum play space requirement per student (10sqm) under the Educational Facilities Standards and Guidelines.</p> <p>The Department is satisfied that the provision of 10.1sqm play space during construction works is acceptable as it complies the minimum requirements under the Educational Facilities Standards and Guidelines and would be a temporary reduction in play space.</p>
Social impacts	<p>The EIS included a Social Impact Assessment that considered the existing operation of the school and the proposed social impacts from the proposal. The Social Impact Assessment includes mitigation measures to the identified impacts, including finalising and implementing management plans for traffic and noise.</p>	<p>The Department has reviewed the Social Impact Assessment and considered the merits of the proposal. The Department is satisfied that the proposal would have positive social impacts as it would provide improved senior school facilities and increase student capacity to meet the educational needs of this catchment.</p>

		Short term negative impacts arising from the construction phase would be mitigated through construction management plans required by the recommended conditions.
Contamination	<p>A Detailed Site Investigation (DSI) was provided with the EIS. The DSI states that through 21 intrusive sampling points across the development area, the site contains a very low possibility of contamination. Only two samples registered a minor exceedance to the relevant standards, with one being zinc and the other being hydrocarbon, both of which were deemed to be insignificant levels and pose no risk to human and ecological health.</p> <p>The DSI concluded that the site is suitable for the continued use as a school and recommended that the soil be tested upon removal of the demountables to account for any concealed materials. The DSI recommended an unexpected finds procedure be prepared and implemented to manage any unexpected contamination finds.</p> <p>The Applicant advised that the demountables including footings have already been removed and bulk earthworks commenced under the Part 5 works and Development Application No. DA-21-02007 (Section 2.4). The conditions of consent for DA-21-02007 require construction works to be carried out in accordance with the DSI.</p>	<p>The Department has reviewed the information provided by the Applicant. The Department is satisfied that the Applicant has adequately demonstrated the site remains suitable for the continued use as a school in accordance with State Environmental Planning Policy No 55 – Remediation of Land, subject to conditions.</p> <p>The Department has recommended the following conditions:</p> <ul style="list-style-type: none"> the recommendations of the DSI must be complied with an unexpected finds procedure must be implemented throughout construction works if any unexpected contamination is found, the Applicant must engage an EPA accredited Site Auditor and a Site Audit Statement must be obtained prior to operation.
Erosion, sediment and dust control	<p>The EIS included a Civil Engineering Report and a preliminary Construction Management Plan which includes management measures for erosion, dust and sediment control/removal.</p> <p>Proposed measures would redirect overland water flow to prevent erosion and remove any sediment to protect the neighbouring properties and the public domain during construction works.</p> <p>Measures are proposed to control dust, including watering down roads and stockpiles and vehicles exiting the site, and covering haulage trucks with tarpaulins.</p>	<p>The Department considers that appropriate measures have been proposed to prevent erosion and control and/or remove sediment as part of construction works.</p> <p>The Department has recommended conditions requiring the preparation of a final detailed Construction Environmental Management Plan prior to the commencement of construction works.</p>
Waste and recycling	<p>The EIS included a Construction Waste Management Plan and an Operational Waste Management Plan.</p>	<p>The Department has reviewed information provided and is satisfied that appropriate</p>

	<p>The Construction Waste Management Plan includes the proposed methods for identification, temporary retention and disposal of hazardous demolition and/or construction waste.</p> <p>The Operational Waste Management Plan includes expected operational waste volumes for the entire site and waste management measures to be upgraded where required. The Operational Waste Management Plan stated that the:</p> <ul style="list-style-type: none"> • estimated waste collection frequency would continue to be once a week • a small increase in area (50sqm) of the existing waste storage area is required to meet the expected additional waste generation • waste collection trucks can access and leave the site in a forward direction • waste collection is by a private contractor outside of school peak time hours (8am to 9.30am and 2.30 to 4pm). 	<p>arrangements could be put in place to manage and store waste and to maximise opportunities to re-use and recycle materials.</p> <p>The Department has recommended conditions to ensure that appropriate waste handling and management arrangements are implemented during construction and operation.</p>
Utilities	<p>The EIS included a Building Services Infrastructure Report to assess the existing capacity of utility services on-site and ability to accommodate proposed works and intensification of use.</p> <p>The Building Services Infrastructure Report concluded the existing gas network, water services, sewerage, drainage and electrical services would need to be upgraded to meet the needs of the school.</p>	<p>The Department is satisfied that required utilities are available to the site. The Department has recommended conditions to ensure the Applicant lodges the appropriate requests for the supply of these upgraded utilities and that the utilities are available prior to operation.</p>

7 Evaluation

The Department has reviewed the EIS, RtS, SRtS and assessed the merits of the proposal, taking into consideration advice from Government agencies and Council. The key issues identified with the proposal include traffic, transport and parking, built form and urban design. Issues raised have been considered and all environmental issues associated with the proposal have been addressed in the Applicant's EIS, RtS and SRtS.

While the proposal increases capacity by 410 students, the Department is satisfied the proposal would result in minimal additional impacts to the surrounding road network and local streets. There is sufficient capacity at key intersections for operational traffic. The additional on-site parking will accommodate increased staff parking demand and additional student car parking on surrounding streets would not result in substantial impacts on car parking availability for surrounding residents/visitors.

The proposed built form is appropriate in the context of the site and would make a positive contribution to the neighbourhood. The proposed landscaping strategy involves a net gain of 92 trees across the site to provide additional tree canopy coverage to the site. The proposal would not result in adverse amenity impacts on surrounding residents through noise, overshadowing and visual privacy.

The Applicant has demonstrated that the proposal will not cause detrimental increases in the potential flood affectation of other neighbouring properties and infrastructure and risks from flooding would be appropriately addressed through the implementation of a final FEMP. The Department is satisfied the Applicant has demonstrated the site can accommodate the required drainage system including water sensitive urban design measures to appropriately manage the quantity and quality of stormwater run-off in accordance with Council's requirements, subject to conditions.

The Department has recommended conditions to manage the construction and operational impacts on the surrounding land uses and require mitigation measures to be implemented.

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

- increased educational facilities to cater for growth in the Blacktown LGA
- provision of new educational facilities in an accessible area
- investment \$51,353,529 to deliver 211 construction jobs and 27 operational jobs.

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

8 Recommendation

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

- **considers** the findings and recommendations of this report
- **accepts and adopts** the findings and recommendations in this report as the reasons for making the decision to grant consent to the application
- **agrees** with the key reasons for approval listed in the notice of decision
- **grants consent** for the application in respect of Glenwood High School upgrade (SSD-23512960) subject to the conditions in the attached development consent
- **signs** the attached development consent and recommended conditions of consent (see **Attachment C**).

Prepared by:

Patrick Andrade

Planning Officer

Social and Infrastructure Assessments

Recommended by:



Tahlia Alexander

Team Leader

School Infrastructure Assessments

9 Determination

The recommendation is **Adopted** by:

A handwritten signature in black ink, appearing to read 'KH', with a stylized flourish extending to the right.

Karen Harragon

Director

Social and Infrastructure Assessments

Appendices

Appendix A – Relevant Supporting Information

The following supporting documents and supporting information to this assessment report can be found on the Department's website as follows:

1. Environmental Impact Statement

<https://www.planningportal.nsw.gov.au/major-projects/project/42281>

2. Submissions & Government Agency Advice

<https://www.planningportal.nsw.gov.au/major-projects/project/42281>

3. Response to Submissions and Supplementary Response to Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/42281>

Appendix B – Statutory Considerations

Environmental Planning Instruments (EPIs)

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

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

- State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy (Biodiversity and Conservation) 2021
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP)
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)
- Draft State Environmental Planning Policy (Remediation of Land) (Draft Remediation SEPP)
- Draft State Environmental Planning Policy (Environment) (Draft Environment SEPP)
- Blacktown Local Environmental Plan (BLEP) 2015.

Compliance with Controls

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

The aims of the SRD SEPP are to identify State significant development (SSD), State significant infrastructure (SSI), critical SSI, and confer functions on regional planning panels to determine development applications. An assessment of the proposal against the relevant considerations of the SRD SEPP is provided in **Table B1**.

Table B1 | SRD SEPP compliance table

Relevant sections	Consideration and comments	Complies
3 Aims of Policy The aims of this Policy are as follows: (a) to identify development that is State significant development	The proposed development is identified as SSD.	Yes
8 Declaration of State significant development: section 4.36 (1) Development is declared to be State significant development for the purposes of the Act if: a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and b) the development is specified in Schedule 1 or 2.	The proposed development is permissible with development consent. The proposal has a capital investment value of more than \$20 million for the purpose of alterations or additions to an existing school under clause 15 (2) of Schedule 1 SRD SEPP that was in force at the time the application was made on 16 November 2021.	Yes

State Environmental Planning Policy (Infrastructure) 2007

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

The proposal includes the provision of a new substation and includes works in the vicinity of an electricity or distribution network. In accordance with clause 45 Infrastructure SEPP, the development must be referred to the relevant electricity supply authority (Endeavour Energy) for comment. The application was referred to Endeavour Energy, which provided requirements for the construction of the substation (**Section 5**).

The Department has included suitable conditions in the recommended conditions of consent (**Appendix C**).

State Environmental Planning Policy (Biodiversity and Conservation) 2021

The Biodiversity and Conservation SEPP aims to manage biodiversity, natural resources and flora and fauna across the state.

Chapter 6 - Bushland in Urban Areas

Chapter 6 aims to protect and preserve specified bushland within the urban areas because of its value to the community as part of natural heritage its aesthetic, recreational, educational and scientific resource value. Section 6.8 applies to the proposal as the site adjoins bushland zoned for public open space purposes (Glenwood Reserve is zoned RE1 under BLEP). The proposal will impact a total of 0.02 ha of planted native/exotic vegetation and 0.16 ha of exotic grassland (managed) which are proposed to be removed from the site. No vegetation in the adjoining Glenwood Reserve will be impacted because of the proposal. Subject to conditions, the Department considers Section 6.8 is satisfied as:

- the proposal would not impact the land reserved for public open space purposes and in particular, the erosion of soils, the siltation of streams and waterways will be managed through the implementation of an Erosion and Sediment Control Plan
- the spread of weeds and exotic plants within the RE1 zoned land will be mitigated through the implementation of measures outlined in the revised BDAR and preparation of a Biodiversity Management Plan (**Section 6.3**).

Chapter 9 – Hawkesbury-Nepean River

Chapter 9 aims to coordinate land uses in a regional context by ensuring that land, spanning various Local Governments, protects the environment of the Hawkesbury-Nepean River system. The Applicant's EIS has addressed land uses and concluded that the site is suitable for the continued use as an educational establishment. The Department has considered the EIS, and advice provided by EPA, EHG and Council, and is satisfied that the site is suitable for the continued use as a school. The

proposal is consistent with Part 9.2 – General planning considerations, specific planning policies and Part 9.3 – Development Controls.

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

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

The Education SEPP was amended on 17 December 2021. In accordance with applicable “saving and transitional provisions”, the proposal has been assessed against the relevant provisions of the Education SEPP that were in force at the time the SSD application was made on 16 November 2021.

Clause 42 of the Education SEPP states that development consent may be granted for development for the purpose of a school that is SSD, even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted.

Clause 57 of the Education SEPP requires traffic generating development that involves addition of 50 or more students to be referred to TfNSW. The application was referred to TfNSW in accordance with this clause.

Clause 35(6)(a) requires that the design quality of the development should be evaluated in accordance with the design quality principles set out in Schedule 4. An assessment of the development against the design principles is provided in **Table B2**.

Table B2 | Consideration of the design quality principles

Design principles	Response
Principle 1 - Context, built form and landscape	The proposal has been designed to be sympathetic to the area, with the three storey building sited away from surrounding residential properties. The setback and siting mitigate any perceived bulk of the development when viewed from the street and public park (Section 6.2).
Principle 2 - Sustainable, efficient and durable	The proposal includes ESD measures (Section 4.4). The materials chosen are durable and require low maintenance. Bicycle parking and storage is provided within the school site and sustainable travel modes encouraged.
Principle 3 - Accessible and inclusive	The proposal has been designed to be accessible and inclusive through the provision of accessible paths of travel around the school buildings. The Department has recommended conditions requiring wayfinding signage, to identify key areas within the school and assist visitors to navigate the site.
Principle 4 - Health and safety	The design of the school buildings provides a safe and secure school environment. The proposal has considered Crime Prevention Through Environmental Design principles. All external environments are open and visually connected, promoting good surveillance. A fence would surround the campus to provide security and limit access. The proposal would clearly delineate pedestrian entrances into the school to allow the management of visitors to the site.

	Environmental constraints have been considered and addressed, including internal acoustic comfort, air quality and site contamination.
Principle 5 - Amenity	<p>The proposal provides a variety of internal and external learning places for both formal and informal educational opportunities.</p> <p>The design of the proposed buildings maximises natural light and ventilation indoors, while the landscaping and covered outdoor areas provide ample shaded areas for students and staff.</p> <p>The design of the proposal would allow for community use in the future.</p>
Principle 6 - Whole of life, flexible, adaptable	The proposed learning areas are flexible and provide adaptable learning spaces throughout the buildings.
Principle 7 - Aesthetics	The proposed built form would incorporate front setbacks, high quality external finishes, and landscaping to contribute to the aesthetics of the neighbourhood. The proposal offers an articulated and dynamic built form.

State Environmental Planning Policy No. 55 - Remediation of Land

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application. The Applicant's EIS have addressed contamination on-site and concluded that the site is suitable for the continued use as an educational establishment. The Department has considered the EIS, and advice provided by the EPA, and is satisfied that the site is suitable for the continued use as a school as required by SEPP 55 (**Section 5.2**).

Draft State Environmental Planning Policy (Remediation of Land)

The Draft Remediation SEPP will retain the overarching objective of SEPP 55 promoting the remediation of contaminated land to reduce the risk of potential harm to human health or the environment.

Additionally, the provisions of the Draft Remediation SEPP will require all remediation work that is to be carried out without development consent, to be reviewed and certified by a certified contaminated land consultant, categorise remediation work based on the scale, risk and complexity of the work and require environmental management plans relating to post-remediation management of sites or ongoing operation, maintenance and management of on-site remediation measures (such as a containment cell) to be provided to council.

The Department is satisfied that the proposal would be consistent with the objectives of the Draft Remediation SEPP.

Draft State Environmental Planning Policy (Environment) (Draft Environment SEPP)

The Draft Environment SEPP is a consolidated SEPP which proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property. The proposed SEPP will provide a consistent level of environmental protection to that which is currently delivered under the existing SEPPs. Where existing provisions are outdated, no longer relevant or duplicated by other parts of the planning system, they will be repealed.

Given that the proposal is consistent with the provisions of the existing SEPPs that are applicable, the Department concludes that the proposed development would generally be consistent with the provisions of the Draft Environment SEPP.

Blacktown Local Environmental Plan 2015 (BLEP)

The BLEP aims to encourage the development of housing, employment, infrastructure, and community services to meet the needs of the existing and future residents of the Blacktown LGA. It also aims to conserve and protect natural resources and foster economic, environmental, and social well-being.

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the BLEP and those matters raised by Council in its assessment of the development (**Section 5**). The Department concludes the development is consistent with the relevant provisions of the BLEP. Consideration of the relevant clauses of the BLEP is provided in **Table B3**.

Table B3 | Consideration of the Blacktown LEP 2015 (BLEP)

BLEP	Department Comment/Assessment
Clause 2.3 Zone Objectives and Land Use Table	The site is zoned SP2 – Educational Establishment. Educational establishments are permissible with consent within the zone. The proposal is consistent with the objectives of the zone as it provides educational infrastructure to meet the needs of the community.
Clause 2.7 Demolition requires development consent	No demolition of buildings form part of this SSD.
Clause 4.3 Height of Buildings	No height control applies to the site under the BLEP.
Clause 4.4 Floor Space Ratio (FSR)	No maximum Floor Space Ratio applies to the site.
Clause 5.10 Heritage Conservation	The site is not mapped or described as an item of heritage significance under the BLEP. The site is not located within or near any heritage conservation areas.
Clause 5.21 Flood Planning	The site is not subject to flood related development controls under Clause 5.21 of BLEP. Notwithstanding, the Department is satisfied that the proposal is compatible with the assessed flood hazard of the land and is not likely to result in adverse flood behaviour (Section 6.3).
Clause 7.2 Terrestrial Biodiversity	Biodiversity is mapped under the BLEP within the north-west of the site. This mapped area of biodiversity is located approximately 100m from the proposed development. This mapped Biodiversity does not apply to Vegetation Zone 1 as identified in the BDAR (Section 6.3).
Clause 7.5 Essential Services	The site is currently serviced by water, gas, telecommunications, electricity, sewage disposal and stormwater drainage. An Infrastructure Management Plan was provided with the EIS, which outlines the existing infrastructure, the proposed upgrades to the infrastructure and how connections to utilities would be maintained to the school during the development of the proposal (Section 6.3).

Other policies

In accordance with clause 11 of the SRD SEPP, Development Control Plans do not apply to SSD. However, the objectives of relevant controls under the Blacktown Development Control Plan 2015, where relevant, have been considered in the Department's assessment.

Appendix C – Recommended Instrument of Consent

<https://www.planningportal.nsw.gov.au/major-projects/project/42281>