

Hawkesbury Centre of Excellence

State Significant Development Assessment (SSD-15001460)

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Glossary

Abbreviation	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
AIA	Arboricultural Impact Assessment
AEP	Annual Exceedance Probability
AHD	Australian Height Datum
BC Act	Biodiversity Conservation Act 2016
BDAR	Biodiversity Development Assessment Report
BOAMS	Biodiversity Offset and Agreement Management System
CASA	Civil Aviation Safety Authority
CBD	Central Business District
CIV	Capital Investment Value
Council	Hawkesbury City Council
СТРМР	Construction Traffic and Pedestrian Management Plan
Department	Department of Planning and Environment
DOPU	Drop-off/pick-up
Education SEPP	State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017
EESG	Environment, Energy and Science Group
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development

FEMR	Flood Emergency Management Report
FIA	Flood Impact Assessment
GANSW	Government Architect NSW
Heritage NSW	Heritage NSW, Department of Premier and Cabinet
HLEP	Hawkesbury Local Environmental Plan 2012
HDCP	Hawkesbury Development Control Plan 2002
LoS	Level of Service
Minister	Minister for Planning
NVA	Noise and Vibration Assessment
OLS	Obstacle Limitations Surfaces
PCT	Plant Community Type
Planning Secretary	Secretary of the Department of Planning and Environment
PMF	Probably Maximum Flood
RAAF	Royal Australian Air Force
RAAF	Royal Australian Air Force Remediation Action Plan
RAP	Remediation Action Plan
RAP	Remediation Action Plan Response to Submissions
RAP RtS SEPP	Remediation Action Plan Response to Submissions State Environmental Planning Policy
RAP RtS SEPP SES	Remediation Action Plan Response to Submissions State Environmental Planning Policy NSW State Emergency Service
RAP RtS SEPP SES SRD SEPP	Remediation Action Plan Response to Submissions State Environmental Planning Policy NSW State Emergency Service State Environmental Planning Policy (State and Regional Development) 2011
RAP RtS SEPP SES SRD SEPP SSD	Remediation Action Plan Response to Submissions State Environmental Planning Policy NSW State Emergency Service State Environmental Planning Policy (State and Regional Development) 2011 State Significant Development
RAP RtS SEPP SES SRD SEPP SSD STEM	Remediation Action Plan Response to Submissions State Environmental Planning Policy NSW State Emergency Service State Environmental Planning Policy (State and Regional Development) 2011 State Significant Development Science, Technology, Engineering and Maths
RAP RtS SEPP SES SRD SEPP SSD STEM STP	Remediation Action Plan Response to Submissions State Environmental Planning Policy NSW State Emergency Service State Environmental Planning Policy (State and Regional Development) 2011 State Significant Development Science, Technology, Engineering and Maths School Transport Plan
RAP RtS SEPP SES SRD SEPP SSD STEM STP SRtS	Remediation Action Plan Response to Submissions State Environmental Planning Policy NSW State Emergency Service State Environmental Planning Policy (State and Regional Development) 2011 State Significant Development Science, Technology, Engineering and Maths School Transport Plan Supplementary Response to Submissions

Executive Summary

This report provides an assessment of a State significant development (SSD) application for the new Hawkesbury Centre of Excellence, located at 2 College Street, Richmond, within the Western Sydney University Hawkesbury Campus (fronting Vines Drive). The application has been lodged by the NSW Department of Education (the Applicant) and the site is located within the City of Hawkesbury local government area.

Assessment summary and conclusions

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

The key issues identified with the proposal include traffic and transport, built form and urban design, biodiversity and tree removal and flooding. 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 the Department's recommended conditions of consent.

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

The proposal

The proposal seeks approval for the construction and operation of a new agricultural and science, technology, engineering and maths (STEM) secondary school, to accommodate students from Richmond High School and a non-catchment area that caters for students across NSW. The school would cater for 325 students, 25 teachers and up to 100 visitors. The 100 visitors could be part of the 325 students for the day, teaching professionals or other program visitors. Of the 100 visitors, 62 would be able to utilise the short-term accommodation. The development would also include facilities for teacher training and conferences related to agricultural and STEM education, general and specialist learning spaces, staff administration and amenity facilities, hall/dining facilities, storage, farm buildings, agricultural workshops and covered outdoor learning areas.

Associated works include tree removal, landscaping works, (including orchards, agricultural/animal plots), outdoor play areas, signage, fencing, car and bicycle parking. Associated infrastructure upgrades include road widening, drop-off/pick-up facilities, pedestrian upgrades and drainage and irrigation works.

The proposal has a capital investment value of \$44,116,124 and would generate approximately 25 operational jobs and 187 construction jobs.

The site

The site is located at 2 College Street Richmond within the Western Sydney University Hawkesbury Campus (fronting Vines Drive) and is approximately 1.9 kilometres south of Richmond town centre

and train station. The site has an area of approximately 11.37 hectares and is irregular in shape with frontages to Vines Drive and Maintenance Lane.

The site was formerly used for agricultural grazing and is currently vacant. The site contains natural grassland and perimeter trees. Three swale drains traverse the site in a north-east to south-west direction.

Statutory context

The proposal is SSD under section 4.36 (development declared SSD) EP&A Act as it is for the purpose of a new school under clause 15 Schedule 1 State Environmental Planning Policy (State and Regional Development) 2011, as was in force prior to the lodgement of the application. Therefore, the Minister for Planning is the consent authority.

Engagement

The EIS was publicly exhibited between 18 August 2021 and 14 September 2021. The Department received three submissions, one from Hawkesbury City Council (Council), one from Penrith City Council and one from the public in support of the application. The Department also received advice from eight Government Agencies.

The key issues raised in the submissions and Government Agency advice included traffic, transport, road upgrade works, biodiversity, remediation, flooding, bushfire risk management and utilities/infrastructure provision.

On 10 November 2021, the Applicant submitted a RtS which included amended architectural drawings, landscape plans and updated reports. The RtS was made publicly available on the Department's website and referred to Government Agencies, Council and Penrith City Council. In response to the RtS, advice was received from four Government Agencies and from Penrith City Council.

On 19 December 2021, the Applicant submitted a SRtS to address outstanding comments raised in the Government Agency advice. The SRtS was made publicly available on the Department's website and advice from one Government Agency was received.

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1 Introduction

This report provides an assessment of a State significant development (SSD) application for the new Hawkesbury Centre of Excellence located at Vines Drive, 2 College Street, Richmond, within the Western Sydney University (WSU) Hawkesbury Campus.

The proposal seeks approval for a new agricultural and science, technology, engineering and maths (STEM) teaching school to accommodate up to 325 students and short-term accommodation for up to 62 visiting students and teaching professionals. The application has been lodged by the NSW Department of Education (the Applicant) and the site is located within the City of Hawkesbury local government area.

1.1 Site description

The site is located at 2 College Street, Richmond within the south-western portion of the WSU campus and has a primary street frontage to Vines Drive. The site is approximately 1.9 kilometres (km) south of Richmond town centre and train station, 1.7km south of Richmond High School and 32km north-west of the Parramatta Central Business District (CBD). The site's location in the regional and local context is shown in **Figure 1** and **Figure 2**.

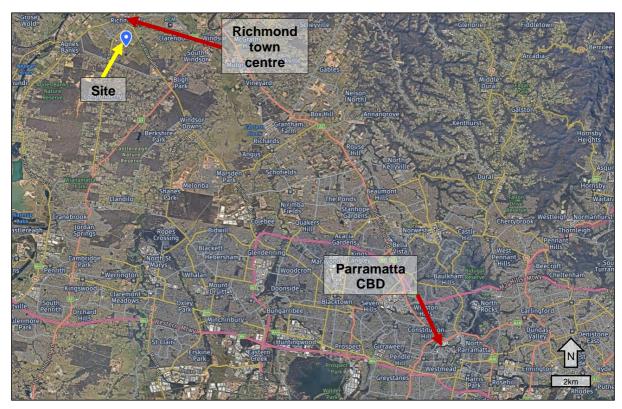


Figure 1 | Regional context map (Base source: Nearmap 2022)

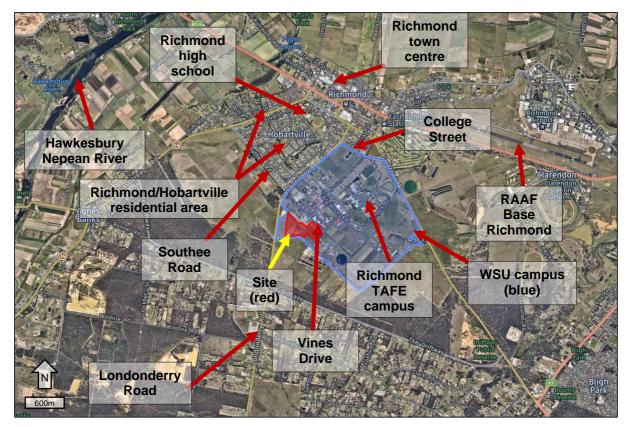


Figure 2 | Local context map (Base source: Nearmap 2022)

The site is legally described as part of Lot 2 in DP1051798, has an area of approximately 11.37 hectares (ha) and is irregular in shape with frontages to two streets that are private WSU campus roads (**Figure 2**):

- Vines Drive to the north with a length of approximately 90 metres (m)
- Maintenance Lane to the east with a length of approximately 180m.

Vines Drives continues as Clydesdale Lane, beyond its intersection with Maintenance Lane, to the east of the site. Similarly, Maintenance Lane, continues as Resources Road to the north of this intersection.

Londonderry Road is a State classified road that runs in a north south alignment and provides the most direct route to Vines Drive. Currently there is no formalised vehicular access to the site. However, pedestrian access is available from each street frontage.

The site has historically been used for agricultural grazing purposes and is predominantly flat with a gentle slope that falls towards the southern boundary. The site contains no buildings or structures, with the only man-made features being a dam in its western section and three drainage swales that traverse the site in a north-east to south-west direction.

Vegetation within the site comprises natural grassland and perimeter trees along the southern portion. There are three identified Plant Community Types (PCT) on the site:

- PCT 835 Forest Red Gum Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion
- PCT 849 Grey Box Forest Red Gum grassy woodland on flats of the Cumberland Plain,
 Sydney Basin Bioregion

PCT 1800 Swamp Oak open forest on river flats of the Cumberland Plain and Hunter valley.

The existing site condition is shown in **Figure 3**.

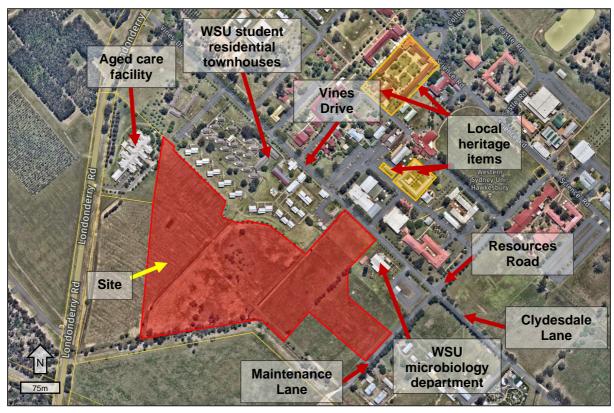


Figure 3 | Aerial view of the existing site (Base source: Nearmap 2022)

1.2 Surrounding development

1.2.1 Surrounding built form and land use

The site is located within a single to two storey educational precinct with ancillary land uses and building types adjoining the site (**Figure 2** and **Figure 3**).

Adjoining the site to the north are the single to two storey WSU student residential townhouses. To the north and east of the site are WSU buildings of varying sizes and age and the microbiology department.

Undeveloped rural land uses adjoin the majority of the remaining site boundaries and a single storey aged care facility, partially adjoins the site's western boundary. The closest suburban land uses and typologies are located to the north-west across Londonderry Road, characterised by single to two storey dwellings. The Richmond Royal Australian Air Force (RAAF) military air base is located to the north-east of the WSU campus.

Four buildings on the WSU campus (Lot 2 DP 1051798) are grouped as two local heritage items (**Figure 3**) in the Hawkesbury Local Environmental Plan 2012 (HLEP):

- item I9 Administrative Block, Blacksmith Shop and Stable Square Building
- item I10 Grandstand.

These heritage items are not located on the site.

2 Proposal

The key components and features of the proposal as detailed in the Environmental Impact Statement (EIS) and amended in the Response to Submissions (RtS) and Supplementary Response to Submissions (SRtS) are provided in **Table 1**.

Table 1 | Main components of the proposal

Aspect	Description
Project summary	 Construction and operation of a new agricultural and STEM secondary school for 325 students, short-term accommodation and facilities for up to 62 visiting students and teaching professionals, general and specialist learning spaces, administration/amenity facilities, hall/dining facilities, covered outdoor learning areas, agricultural buildings and structures, tree removal, landscaping works, outdoor play areas, signage, fencing, car and bicycle parking. Associated infrastructure upgrades including road widening, drop-off/pick-up (DOPU) facilities, pedestrian upgrades and drainage and irrigation works.
Site preparation	Bulk earthworks and remediation of the site in accordance with the Remediation Action Plan.
Built form	 Construction of: six single storey buildings (Blocks A to F) containing administration spaces, general learning areas, practical and food technology spaces, seminar spaces, laboratories, dining /conference hall, canteen and short-term accommodation facilities two single storey farm buildings (Blocks G and H).
Site area	• 11.37ha.
Gross floor area	6378 square metres (sqm).
Uses	Education establishment (agricultural/STEM teaching school) with ancillary short-term accommodation facilities.
Access, parking and DOPU	 Primary pedestrian and vehicle access from Vines Drive via a horseshoe style internal driveway with five car spaces. kerbside DOPU area within the driveway for up to seven cars. Bus DOPU zone facilitating up to four buses adjoining the Vines Drive frontage (in front of WSU residential townhouses). 34 space on-site car park, service vehicle access, one service vehicle parking space and three minibus spaces accessed from Maintenance Lane (secondary vehicle access).

Aspect Description Four farm/site maintenance vehicle parking spaces adjacent to Block G. 20 bicycle racks. Widening and upgrades to Vines Drive, Maintenance Lane, Clydesdale Infrastructure changes Lane and Resources Road including: new footpath and crossing facilities 0 bus DOPU zone landscaping \circ upgrades to stormwater and drainage 0 upgrade of roundabout at the Vines Drive/Maintenance Lane/Resources Road/Clydesdale Lane intersection. Three on-site detention basins, stormwater and drainage works. Removal of seven trees on site and four trees along Vines Drive. Tree removal and landscaping Transplanting of five trees from the site and five trees from Vines Drive. Site landscaping including planting of 225 new trees, various groundcovers and establishment of educational agricultural/animal plots. Hours of Educational use/school operation: operation local student core hours (including on-site day trips) from 8.25am to 2.45pm extended days for senior students from 7.45am to 4.30pm. Short-term accommodation (seven days a week excluding school holidays): check in between 9am - 6pm Use of dining/conference halls for weekend short courses and teacher training outside of school hours between 8am to 11pm. 325 students and 25 staff (350 persons core daily capacity) Students and staff capacity In addition to core capacity, up to 100 visiting students or teaching professionals, (62 of which would be able to use the short-term accommodation). Maximum number on site at any one time is up to 450 persons. School identification and wayfinding signage as follows: Signage a school identification sign and totem wayfinding sign on Vines Drive 0 a school identification sign and totem wayfinding sign at the Maintenance Lane car park entry. 187 construction jobs and 25 operational jobs. Jobs

Aspect	Description
CIV	• \$44,116,124.

2.1 Physical layout and design

The proposal seeks approval for eight single storey buildings. Blocks A to F are arranged to form a spine from the Vines Drive frontage of the site and curves south towards the eastern edge of the site, where it meets the on-site car park at Maintenance Lane. The key active educational and administrative spaces that form Blocks A to D, are located in the northern section of the spine, whereas the more passive uses of Blocks E to F are located at the western end. The two single storey farm buildings (Blocks G and H) are located separate to the spine and act as intermediary buildings between the key school built-form in the north/east and agricultural uses to the south/west. Buildings A to F are joined by a series of interconnected covered walkways that also delineate access to outdoor learning and play areas. Low scale animal shelters are located in the vicinity of the farm buildings.

The overall landscape design responds to the nature of the agricultural/STEM curriculum by providing a variety of active play areas, agricultural/animal plots and outdoor education spaces. Active and educational spaces are located closer to the central building spine and more passive and functional uses are located towards the boundaries of the site.

The proposed site plan, landscape plan and short-term accommodation floor plan are shown in **Figure 4** to **Figure 6** below.

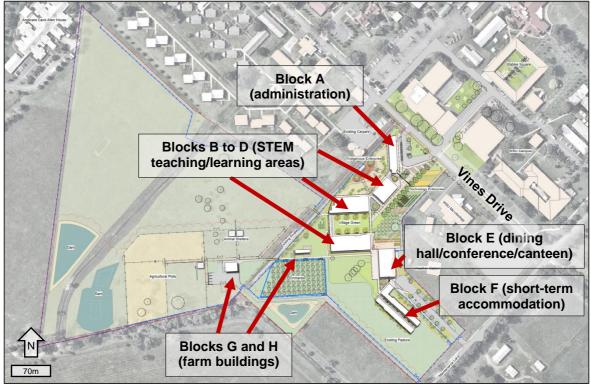


Figure 4 | Site Plan (Source: Applicant's RtS 2021)

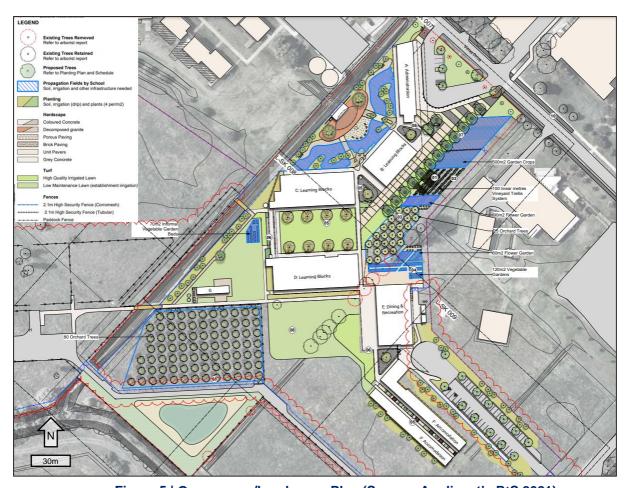


Figure 5 | Open space/Landscape Plan (Source: Applicant's RtS 2021)



Figure 6 | Short-term accommodation floor plan (Source: Applicant's RtS 2021)

Selected elevations and photomontages of the proposed buildings are shown in **Figure 7** to **Figure 14**.

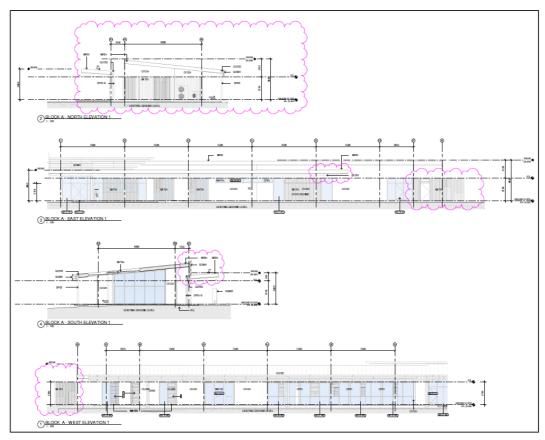


Figure 7 | Block A elevations (Source: Applicant's RtS 2021)



Figure 8 | Block B elevations (Source: Applicant's RtS 2021)



Figure 9 | Block C elevations (Source: Applicant's RtS 2021)

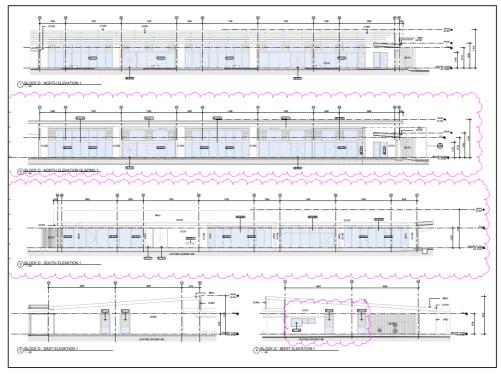


Figure 10 | Block D elevations (Source: Applicant's RtS 2021)

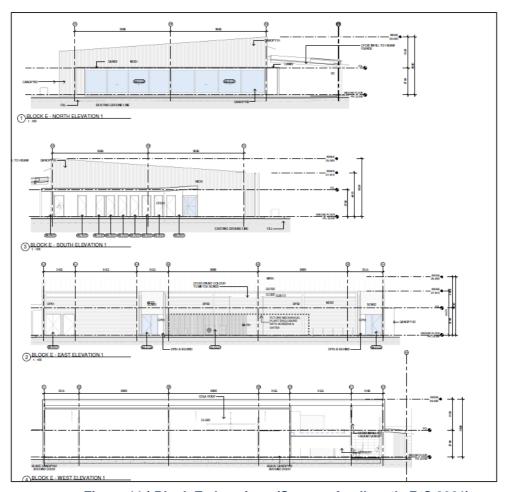


Figure 11 | Block E elevations (Source: Applicant's RtS 2021)

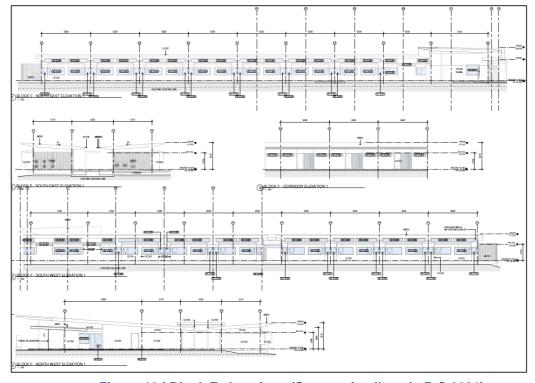


Figure 12 | Block F elevations (Source: Applicant's RtS 2021)

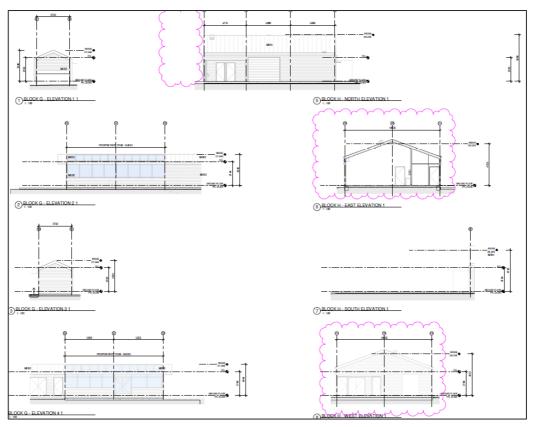


Figure 13 | Block G and H elevations (Source: Applicant's RtS 2021)



Figure 14 | Built form perspectives (Source: Applicant's RtS 2021)

2.2 Uses and activities

The development is for the purpose of an agricultural STEM secondary school with a capacity as follows:

- 325 students and 25 staff (350 persons core daily capacity)
- in addition to core capacity, up to 100 visiting students or teaching professionals, (62 of which would be able to use the short-term accommodation)
- maximum number on site at any one time is up to 450 persons.

Students would enrol in the agricultural and STEM specific educational streams through Richmond High School and would attend these programs on a tailored basis through their course of study. Students from other schools across NSW would access the proposed school through their school initiating engagement in an agricultural program or project based learning opportunity.

The Applicant advises that the conference hall could be potentially used in the future for community use in addition to proposed weekend short course seminars, training and conferences. The exact details of the potential community use would be subject to consultation with Hawkesbury City Council (Council) and the community.

As agricultural/animal plots and orchards would be maintained on a continual basis, ancillary farm management outside of the core student hours would also occur.

2.3 Timing

The Applicant advises that the development would be constructed in one stage, with construction expected to take approximately 15 months.

2.4 Related Development

In February 2018, the Applicant lodged an EIS for SSD for new Hurlstone Agricultural School (SSD-8614). This application sought approval for a new agricultural/STEM high school to cater for up to 1500 students with ancillary boarding facilities. The EIS was exhibited and an RtS had also been provided in August 2018.

On 18 May 2021, the Applicant withdrew the application due to a change for the overall intended use of the site.

3 Strategic context

A 21% growth in student numbers in NSW is anticipated by 2031 compared to 2017. NSW schools need to accommodate an extra 269,000 students, with 164,000 of these students being part of the public system. In response to the need for additional public education infrastructure, the NSW Department of Education is investing in the delivery of new schools and upgrade of existing schools.

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

- NSW State Priorities, through the provision of new teaching and education facilities
- Greater Sydney Commission's (GSC) *Greater Sydney Region Plan: A Metropolis of Three Cities*, as it proposes school facilities to meet the growing needs of Sydney
- GSC's Western Sydney District Plan, as it would provide much needed school infrastructure, responding to growth and changing demand in innovative ways such as an agricultural/STEM secondary school, efficient use of land and opportunities to co-share facilities with the local community
- Transport for NSW's Future Transport Strategy 2056, as it would provide an educational
 facility and student capacity, generate additional employment opportunities, active transport
 modes to and from the site and improvements to pedestrian connectivity to the site
- Infrastructure NSW's State Infrastructure Strategy 2018 2038 Building the Momentum as it would provide:
 - o facilities to support the growth in demand for agricultural and STEM courses for students across the state
 - o a school design to accommodate infrastructure and facilities sharing with communities
- Council's Local Strategic Planning Statement 2040, as it would increase the number of school
 places provided in the local government area, is a key piece of infrastructure responding to
 the evolving needs and opportunities for the community and encourages sustainable
 transport modes.

The proposal would also provide direct investment in the region of approximately \$44,116,124 and support approximately 187 construction jobs and 25 operational jobs.

4 Statutory context

4.1 State significance

The proposal is SSD under section 4.36 (development declared SSD) of the *Environmental Planning* and Assessment Act 1979 (EP&A Act) as it is development for the purpose of a new school under clause 15(1) of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011, as was in force prior to the lodgement of the application.

The Minister for Planning (the Minister) is the consent authority under section 4.5 of the EP&A Act. In accordance with the Minister's delegation to determine SSD applications, signed on 26 April 2021, the Director, Social and Infrastructure Assessments may determine this application as:

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

4.2 Permissibility

The site is identified as being located within the SP1 Special Activities zone (Education, Agriculture and Research Station) under HLEP. 'Educational establishment' is permissible with consent within the SP1 zone and includes "any development that is ordinarily incidental or ancillary to development for that purpose" in accordance with the Land Use Table of HLEP. The proposal includes short-term accommodation and the potential shared use of some facilities for the community which would be ancillary to the use as an education establishment and therefore, is also permissible with consent under HLEP.

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

4.3 Other approvals

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

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

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

4.4 Mandatory matters for consideration

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 environmental planning instrument (EPI) that is of relevance to the development the subject of the

development application. Therefore, the assessment report must include a copy of, or reference to, the provisions of any EPIs that substantially govern the project and that have been considered in the assessment of the project.

The Department has undertaken a detailed assessment of these EPIs 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. A response to the objects of the EP&A Act is provided 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, 	Given the site's location is within an existing education precinct, the site is suitable for use as an educational establishment. The development would not have an unreasonable negative 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 4.4.3).
(c) to promote the orderly and economic use and development of land,	The proposal is consistent with the historic site use as part of an agricultural educational precinct and would provide additional educational facilities to support local and state-wide demand.
(d) to promote the delivery and maintenance of affordable housing,	Not applicable.
 (e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats, 	The proposal involves landscaping and planting to provide new habitat opportunities. Impacts of tree removal have been appropriately mitigated or are addressed through the recommended conditions of consent (Sections 6.2.1 and 6.3).
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	An Aboriginal Cultural Heritage Assessment Report (ACHAR) was included in the EIS which identified an absence of Aboriginal objects and/or deposits or features of cultural and archaeological significance on the site.

Objects of the EP&A Act	Consideration
	Given the proximity to local heritage items, a Historical Archaeological Assessment was included in the EIS indicating that the site was used for grazing and agricultural purposes and that buildings were not constructed historically. The assessment concluded that the study area does not contain any significant historical archaeological features or relics.
(g) to promote good design and amenity of the built environment,	The proposal would promote good design and amenity of the built environment (Section 6.2).
 (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), which included consultation with Council and other Government Agencies and consideration of their responses (Sections 5 and 6).
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the proposal as outlined in Section 5 , which included notifying adjoining landowners and displaying the proposal on the Department's website.

4.4.3 Ecologically sustainable development (ESD)

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 proposed ESD initiatives and sustainability measures, including:

- maximum use of natural light
- natural ventilation of circulation spaces
- high performance thermal glazing and external shading devices
- water efficient fixtures and fittings
- installation of a 99-kilowatt photovoltaic system

- rainwater reuse through installation of rainwater tanks and use of on-site detention basins and dams to service agricultural practices
- measures to minimise waste during construction
- low impact building materials to reduce construction carbon footprint
- · ongoing management and education of the above measures
- increase in sustainable transport use.

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

The Applicant is targeting a 4-Star Green Star (Australian Best Practice) rating which meets the suggested 4-Star Green Star rating in the Educational Facilities Standards and Guidelines. To ensure that ESD is incorporated into the proposed development, the Department has recommended a condition that requires the Applicant to register for a minimum 4-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 proposed development is consistent with ESD principles as described in Section 4.4.8 and Appendix J 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), as was in force prior to the lodgement of the application. 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 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 in **Section 6** and 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 .

Section 4.15(1) Evaluation	Consideration
(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. Despite this, consideration has been given to relevant DCPs.
(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 (as was in force prior to the lodgement of the application), 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 proposal 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 Sections 3, 4 and 6 .
(d) any submissions	Consideration has been given to the submissions received during the exhibition period. See Sections 5 and 6 .
(e) the public interest	Refer to Section 6.

4.5 Biodiversity Conservation Act 2016

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

A BDAR was provided with the EIS and further revised in the RtS and SRtS. The impact of the proposal on biodiversity values has been assessed in the BDAR and assessed in detail 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 18 August 2021 until 14 September 2021 (28 days). The application was published on the Department's website.

The Department notified adjoining landholders and relevant State and local government authorities in writing. Department representatives visited the site to provide an informed assessment of the proposal.

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

5.2 Summary of submissions

The Department received a total of three submissions, one submission from the public in support, a submission from Council and Penrith City Council. Advice was received from eight Government Agencies. Copies of the submissions and Government Agency advice may be viewed at **Appendix A**. A summary of the Council and Penrith City Council submissions, and of the Government Agency advice is provided at **Table 4** below.

Table 4 | Summary of Council submissions and Government Agency advice to the EIS exhibition

Council

Council advised that it did not object to the proposal, but had concerns in relation to the following matters:

- traffic and active transport:
 - advice prior to EIS lodgement identified that the "T" intersection of Londonderry Road/Southee Road and Londonderry Road/Vines Drive needed to be upgraded to create an aligned crossroad. In the time since, Transport for NSW (TfNSW) has provided Council further details of the Richmond Bridge Duplication Project (Section 6.1.2), which would guide the long term design at this location and negate the need for alignment for the proposal.
 - any works to facilitate the school on Londonderry Road/Vines Drive intersection should be temporary in nature.
 - TfNSW should be consulted to ensure that any works on Londonderry Road would not impact upon the delivery of the Richmond Bridge Duplication Project.
 - works within the road reserve require an approval under the Roads Act 1993 and a
 performance, damage and defects bond would be required to cover any restoration
 required to roads.
 - given that some students would be local and there would be a link between the proposal and Richmond High School, safe pedestrian and cyclist connectivity between the schools,

- public transport network and local residential areas is important. The Transport and Accessibility Impact Assessment (TAIA) does not make any recommendations to facilitate this.
- the pedestrian network between the site and Richmond High School should be detailed and the need for any infrastructure upgrades examined. Consideration should be given to the feasibility of a shared path or cycleway along the length of Londonderry Road adjoining the WSU campus.

parking:

- the TAIA does not address maximum potential student numbers within the WSU campus
- inadequate justification is provided for the shortfall in on-site parking.

private bus service:

- a bus service would be required to provide transportation between the proposal, Richmond
 High School and Richmond/East Richmond train stations
- o a bus parking and manoeuvring area should be accommodated within the site.

contamination:

- the submitted Remediation Action Plan recommends the use of containment cells to store and contain asbestos on site. The containment of asbestos on site would be contrary to Council's Asbestos Policy which outlines that any asbestos containing materials should be safely removed and disposed of prior to any works commencing.
- should the recommendations of the Remediation Action Plan be implemented, a Site Auditor should be engaged to review the remediation strategy and issue a Site Audit Statement.
- the Environmental Management Plan for the containment cell would need to be registered
 on the title of the property and the Site Audit Statement be provided to Council.

Additionally, Council indicated the following:

- the proposal is exempt from the payment of Section 7.12 Contributions
- the conference hall maximum operating hours should be specified
- a Farm Management Plan should be provided for the operational component of agricultural activities to be undertaken on site.

Transport for NSW (TfNSW)

TfNSW provided comments:

- proposed signalised pedestrian crossing:
 - TfNSW is unable to grant concurrence under the Roads Act 1993 to the proposed signalised pedestrian crossing and bus bays along Londonderry Road.
 - as the traffic signal warrant is not met, the proposed signalised pedestrian crossing on Londonderry Road is not supported. The proposal should be modified with an alternative pedestrian crossing facility at this location.
 - the demand of 300 pedestrian crossing movements at Londonderry Road seems overestimated given the proximity of the WSU shuttle bus service to Vines Drive.

 a pedestrian refuge island on Londonderry Road could be considered subject to further review of traffic and road safety information.

• future Bus Facility:

- the estimated demand for bus movements, including bus connections to and from
 Richmond and Penrith train stations, is approximately 300 students and would result in the
 demand of approximately six additional bus services during each peak period
- the current public bus operation is unable to cater for the proposed patronage demand and the TAIA does not provide mitigation measures to address this bus service shortfall
- a bus turnaround facility should be provided on Vines Drive because of the need for additional short route bus services.

construction vehicle access:

- discrepancies with the construction vehicle haulage route information must be clarified
- where access from Londonderry Road is proposed for construction vehicles, concurrence is required from TfNSW under section 138 of the *Roads Act 1993* and concept design plans of the proposed temporary Londonderry Road access must be submitted to TfNSW for approval
- following completion of construction, the redundant access must be removed and replaced to match existing and a sight distance assessment undertaken and submitted to TfNSW for review.
- TfNSW also made recommendations for the improvement of the efficiency and effectiveness of the School Transport Plan (STP) to reduce single occupant vehicle trips to the site and promote active transport options.

Environment Protection Authority (EPA)

EPA commented that the proposed works do not appear to require an environment protection licence under the *Protection of the Environment Administration Act 1991* and Council should be consulted as the appropriate regulatory authority.

Environment, Energy and Science Group, Department of Planning and Environment (EESG)

EESG provided the following comments:

- biodiversity:
 - unless losses to PCT can be adequately justified, all efforts should be made to avoid impacting endangered communities and threatened species habitats.
 - clarification is required whether the proposed agricultural plots and dam/on site detention basins can be relocated or reconfigured to avoid detrimental impacts to PCT 835 - Forest Red Gum (remnant canopy and the hollow bearing trees).
 - the Arboricultural Impact Assessment and BDAR contain discrepancies relating to the classification and removal of native and exotic trees.
 - while vegetation on site is very degraded, making the appropriate PCT difficult to select, further justification is required to demonstrate why it does not accord with PCT 849 – Grey Box.

- o 15 threatened species have been assumed present because surveys could not be carried out at the appropriate time of year. The BDAR states that further surveys are to be undertaken during the appropriate survey period and if appropriate surveys cannot be conducted, offsets are to be purchased for these species. While this approach is permissible under the Biodiversity Assessment Method, it is not ideal.
- should consent be granted, it must be conditional on additional surveys being undertaken and no clearing or ground works can take place until this has occurred.
- EESG has undertaken the review of the BDAR without access to the assessment in Biodiversity Offset and Agreement Management System (BOAMs) and to the spatial data.
 This must be provided and/or confirmation provided whether this has been submitted.
- o an accurate date must be provided for the BDAR, to confirm that the credit report is in accordance with the BC Act..

flooding:

- the site would be isolated during the Hawkesbury Nepean Probable Maximum Flood (PMF) riverine flood event but is not impacted by the riverine flooding 1% Annual Exceedance Probability (AEP) event.
- o the site would be impacted by the 1% AEP local overland flood event.
- the proposal should address the evacuation capacity of the site and whether it may impact on the evacuation of other sub-sectors of the Hawkesbury Nepean Valley.
- o consultation should occur with the Hawkesbury Nepean Floodplain Risk Management Directorate.
- EESG recommended conditions of consent relating to biodiversity values (discussed in Section 6.2).

Heritage NSW, Department of Premier and Cabinet (Heritage NSW)

Heritage NSW provided the following comments:

- Aboriginal objects or sites were not identified during the surface or subsurface assessment
- test excavations were undertaken in 2017 as part of the investigation process for the previous SSD application on the site (**Section 2.4**). Although the project was subsequently withdrawn, the excavations occurred within the same land and were for a similar project type.
- Aboriginal consultation has been conducted in line with legislative requirements and two of the Registered Aboriginal Parties support the (ACHAR) recommendations.

NSW Rural Fire Service (NSW RFS)

NSW RFS provided recommended conditions relating to:

- the implementation and management of Asset Protection Zones to Inner Protection Area standards on the site
- construction standards for ember protection and non-combustible materials
- vehicle access, water/utility services and landscaping constructed in accordance with Planning for Bushfire Protection 2019
- preparation of a bush fire emergency management and evacuation plan.

Penrith City Council

Penrith City Council provided the following comments:

- additional consideration should be given to planning of appropriate and readily available transport services for students, professionals and visitors accessing the facility, notably those from Richmond High School
- the proposal should provide wayfinding signage for walking and cycling to transport stops, clear crossing points, adequate lighting and suitable surveillance
- consideration should be given to promoting opportunities for people to cycle and walk to the site and encourage healthy lifestyle principles.

Endeavour Energy

Endeavour Energy commented that:

- WSU has previously advised that campus supply is at capacity and there is insufficient spare power available to supply the new development
- for the proposed Endeavour Energy padmount substation located adjacent to the site, a high voltage easement would be required from Londonderry Road to the new transformer location.

Sydney Water

Sydney Water commented:

- there is sufficient capacity in the local water network to adequately service the proposal
- the main in Londonderry Road must have a separate connection and service meter
- the development can continue to discharge to the manhole located within the property to Smith Avenue

Civil Aviation Safety Authority (CASA)

CASA stated that they had no objections to the proposal and that since the site is located near the RAAF Base Richmond, obstacle assessments, approvals for the construction cranes and any aviation related planning issues are a matter for RAAF Base Richmond.

5.3 Public submissions

One public submission in support was received and made the following comments:

- greater footpath infrastructure is required as there currently is a high volume of pedestrian
 traffic from university students and residents who use Londonderry Road as a pedestrian
 route into Richmond town centre. The current situation is unsafe as students often walk on
 the road and without a footpath. Younger school students would be at greater risk from traffic.
- the Hobartville/Richmond section of Londonderry Road has drainage issues and following heavy rain, localised flooding occurs on either side of the road.
- improvements to the Hobartville/Richmond section of Londonderry Road should include the installation of kerb and gutter, footpaths and drainage.

5.4 Response to submissions (RtS)

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

On 10 November 2021, the Applicant provided a RtS (**Appendix A**) that included the following amendments to the proposal:

- revisions to the upgrades to Vines Drive including a 7m wide carriageway (up to the Londonderry Road intersection), 15m radius roundabout at the Clydesdale Lane intersection, a bus bay, west of the Vines Drive site frontage, raised pedestrian crossings and associated infrastructure improvements
- road widening (approximately 1.5m) of Maintenance Lane for a distance of 70m from the entrance of the proposed staff car park access point
- revisions to the proposed built form including:
 - roof form adjustments to all buildings Blocks A to F
 - o reconfiguration of glazing in Buildings B, C and D
 - o internal design changes and creation of an additional egress within Building E
 - o main switchboard relocation
 - minor building footprint reduction of Building C and D
 - minor increase in building height for Block E from 29.32m Australian Height Datum (AHD) to 29.35m AHD.

5.5 Government Agency Advice and submissions to RtS

The RtS was made publicly available on the Department's website and was referred to the relevant Government Agencies. Additional advice was received from four Government Agencies and one submission from Penrith City Council. A summary of the issues raised in the Government Agency advice and the submission is provided at **Table 5**.

Table 5 | Summary of Government Agency advice to the RtS

TfNSW

TfNSW reviewed the RtS under its requirements in the *Roads Act 1993* and subject to conditions provided concurrence to the road widening and line marking works on Londonderry Road. TfNSW recommended conditions of consent in relation to the following:

- detailed design and approval requirements for the Londonderry Road and Vines Drive intersection
- submission of detailed design plans and hydraulic calculations of any changes to stormwater infrastructure
- preparation and implementation of a Construction Traffic and Pedestrian Management Plan (CTPMP), containment of construction worker vehicles on site and road occupancy license requirements
- the requirement for the Applicant to undertake any works in relation to amendment or relocation of utilities.

TfNSW also made recommendations for the improvement of the efficiency and effectiveness of the School Transport Plan (STP) to reduce single occupant vehicle trips to the site and promote active transport options.

EESG

EESG reiterated previous comments related to biodiversity, clarifying the extent of impacts to PCT and native trees on the site, surveys for threatened species on site and the submission of BOAMS and spatial data. Furthermore, EESG provided the following comments:

• the proposed widening of Londonderry Road, Vines Drive and Clydesdale Lane has not been supported by an assessment of potential biodiversity impacts. The BDAR indicates that further assessments are to be undertaken and this must be completed.

EESG also provided updated recommended conditions of consent (discussed in Section 6.2).

EESG raised no further concerns regarding flooding.

Heritage NSW

Heritage NSW confirmed that the ACHAR has satisfied all the relevant requirements relating to Aboriginal cultural heritage on site.

Penrith City Council

Penrith City Council noted that the RtS has addressed previous comments and that active transportation should continue to be promoted.

NSW RFS

NSW RFS provided updated recommended conditions relating to:

- the implementation and management of asset protection zones on the site
- construction standards for ember protection and non-combustible materials
- vehicle access, water/utility services and landscaping constructed in accordance with Planning for Bushfire Protection 2019
- preparation of a bush fire emergency management and evacuation plan.

5.6 Supplementary Response to Submissions (SRtS)

In response to Department and EESG comments, on 17 December 2021, the Applicant provided a SRtS that included an updated BDAR and Arboricultural impact Assessment Report (AIA) to include an assessment on biodiversity impacts for the widening and upgrade works on Londonderry Road, Vines Drive, Clydesdale Lane and Maintenance Lane and respond to EESG comments regarding threatened species surveys/PCT classification. The SRtS did not involve any further amendments to the proposal (as refined by the RtS).

The SRtS was referred to EESG and it advised that:

- clarification has still not been provided on whether remnant canopy and hollow bearing trees would be affected by the northern-most agricultural/animal plots
- clarification has not been provided as to how many remnant endemic trees would require trimming of their limbs along Vines Drive
- no confirmation has been provided that the BOAMS has been submitted within the BC Act statutory period
- conditions as recommended in response to the RtS should be included in any consent.

Subsequently, the Department requested the Applicant provide further clarification to the EESG comments above. On 21 January 2022 the Applicant advised:

- no areas of remnant canopy and hollow bearing trees would be impacted by the northernmost agricultural/animal plots
- other than those already identified in the SRtS, no further endemic trees along Vines Drive would require trimming of limbs
- BOAMS information supporting the updated BDAR was submitted to the consent authority for consideration in accordance with the statutory timeframes.

6 Assessment

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

- traffic and transport
- built form and urban design
- · biodiversity and tree removal
- flooding.

These issues are discussed in the following sections of this report. Other issues considered during the assessment are discussed at **Section 6.5**.

6.1 Traffic and transport

A Transport and Accessibility Impact Assessment (TAIA) was submitted with the EIS. The TAIA was revised in the RtS to address TfNSW, Council and the public submission comments relating to road upgrade works, DOPU operation, bus services, active transport and parking.

The TAIA assessed existing conditions around the site and transport impacts associated with the proposal including:

- · existing traffic, parking conditions and Richmond High School travel patterns
- traffic generation and distribution
- future intersection and road infrastructure upgrades
- forecast intersection and network performance
- pedestrian safety requirements
- assessment of car parking on site and within the greater WSU campus
- widening and upgrades to the surrounding road network
- · service vehicle requirements
- · construction access and traffic management
- traffic generation and mitigation measures.

6.1.1 Existing conditions

The surrounding road network is shown in **Figure 15**. The site has frontages to two streets:

- Vines Drive on the northern frontage a two-way internal campus road which runs east west and intersects with Maintenance Lane, Resources Road and Clydesdale Lane
- Maintenance Lane on the eastern frontage a two-way internal campus road which runs north south and intersects with Vines Drive, Resources Road and Clydesdale Lane.

All of the abovementioned roads/lanes are internal campus roads are owned by WSU.

Londonderry Road to the west is a State classified road and runs in a north south alignment, providing direct access to the Richmond Town Centre. It also intersects with another State classified road, Blacktown Road, which borders the north-eastern edge of the WSU campus and runs in an east west alignment. To the south of the site, The Driftway provides another east to west connection between Londonderry and Blacktown Road.

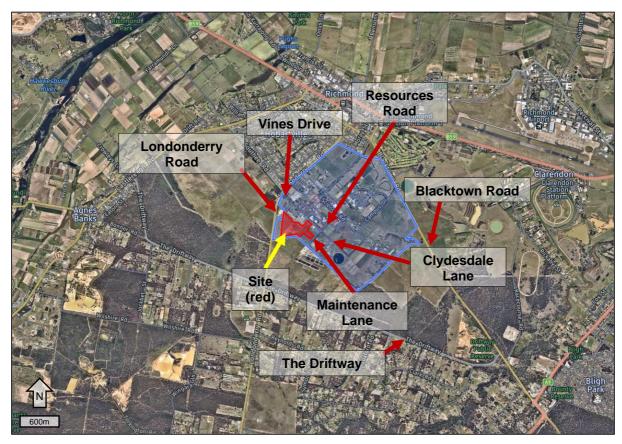


Figure 15 | Surrounding road network (Source: Applicant's RtS 2021)

Public bus services operate along Londonderry Road and Blacktown Road. Bus route 677 services Londonderry Road at a bus stop approximately 600m from the site and route 675 services College Street approximately 1.4km from the site. The nearest train stations to the site are East Richmond (2km) and Richmond (2.5km). Route 677 connects Richmond Station to Londonderry Road. WSU campus shuttle buses travel to and from WSU via Richmond and East Richmond railway station and have an average frequency of 30 minutes.

Parking on the WSU campus requires a valid parking permit, with a number of different permits available for staff and students. The P47 car park (147 spaces) is to the west of the site and is proposed to be used in occasional high-occupancy usage events where the proposed on-site parking provisions may have a shortfall. The closest public street parking (outside the WSU campus) is approximately 600m from the site along Southee Road and Londonderry Road.

Within walking distance of the site there are footpaths along Vines Drive and the surrounding street network that form part of the greater WSU campus footpath network. However, there are sections along Vines Drive on the southern side that have incomplete sections. Raised and at grade pedestrian crossing facilities are provided at various locations on the internal WSU campus roads. Within the broader road network between routes from the site and Richmond High School, there are many sections of the road network with incomplete footpath infrastructure.

There are no formal/separated bicycles lanes near the site. The TAIA notes that under NSW road rules, children under 16 years old are permitted to ride on a footpath and adult riders supervising a cyclist under 16 may also use a footpath.

6.1.2 Infrastructure upgrades

TfNSW proposes to build a bridge over the Hawkesbury Nepean River between Richmond and North Richmond and upgrade major intersections to increase vehicle capacity over the Hawkesbury Nepean River, reduce congestion between centres, improve travel times and improve connectivity for public and active transport. These works are referred to as the Richmond Bridge Duplication Project.

The preferred option for the Richmond Bridge Duplication Project includes an upgrade of Londonderry Road/Vines Drive/Southee Road intersection to create a signalised intersection with a new road parallel to Southee Road (between Castlereagh Road and Londonderry Road) to separate local and through traffic (**Figure 16**). The intersection upgrade is included in Stage 2 of the project which is expected to be completed in 2026/2027.

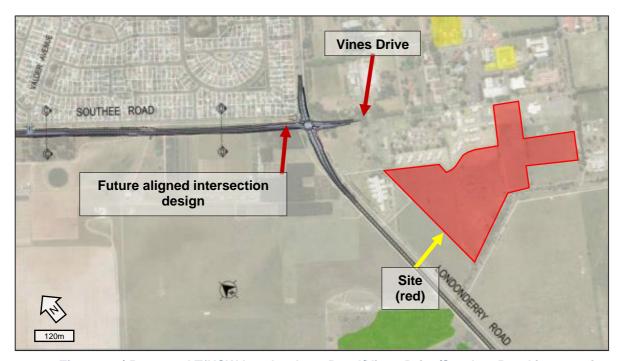


Figure 16 | Proposed TfNSW Londonderry Road/Vines Drive/Southee Road intersection upgrade (Source: Applicant's RtS 2021)

As part of the EIS, the Applicant proposed intersection upgrade works at this intersection including a signalised pedestrian crossing on Londonderry Road and new bus stops (to service the school) on Londonderry Road (south of Vines Drive). In response to the EIS, Council identified that TfNSW would need to be consulted to ensure that the proposed design does not conflict with the Richmond Bridge Duplication Project. TfNSW did not support the design proposed in the EIS, as the expected traffic volumes did not meet the warrant for signalised intersections. Both Council and TfNSW identified that bus manoeuvring capability should be provided on site via Vines Drive.

The public submission identified that upgrades to the Hobartville/Richmond section of Londonderry Road should include the installation of kerb, gutter, footpaths and drainage and that increased pedestrian traffic would result in increased student and vehicle safety issues.

In consultation with WSU as the owner of the private roads on campus, the Applicant's RtS proposed a new design (**Figure 17**) for the intersection which responded to TfNSW and Council comments to accommodate buses into Vines Drive (via widening commencing at Londonderry Road). This

removed the need for a signalisation intersection at Londonderry Road. TfNSW supported this updated design subject to recommended conditions. Council made no comments to the RtS.

The RtS and TAIA confirmed that the relocation of bus bays from Londonderry Road to Vines Drive would help mitigate risk to pedestrian safety as a significant proportion of students would not be entering and exiting buses on Londonderry Road. The RtS was supported by a Road Safety Audit that identified safety hazards and recommended mitigation measures along the key pedestrian/vehicle routes to and from the site.

In addition to the revised intersection at Londonderry Road and Vines Drive, the RtS included widening and upgrades to Vines Drive to facilitate bus movements from Londonderry Road, a bus DOPU zone along Vines Drive and upgrading the Vines Drive/Maintenance Lane/Resources Road/Clydesdale Lane intersection to a roundabout to allow vehicles to efficiently exit via Vines Drive to Londonderry Road.

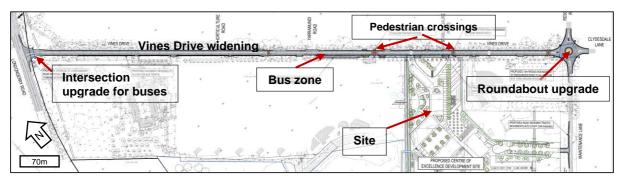


Figure 17 | Proposed road widening and upgrades (Source: Applicant's RtS 2021)

The Department supports the proposed road upgrade works as it would ensure safe and efficient access is provided to and from the site, sufficient capacity for bus movements are provided and the potential vehicle and pedestrian conflicts on Londonderry Road are removed. Additionally, the widening of campus roads would provide broader safer movement of vehicles, pedestrians and cyclists.

The Department notes that upgrades related to kerb, drainage, footpaths and stormwater along the Hobartville/Richmond section of Londonderry Road would be undertaken as part of the future upgrade works facilitating the Richmond Bridge Duplication Project.

The Department has recommended conditions requiring:

- the implementation of the mitigation measures identified by the Road Safety Audit prior to the commencement of operation
- the road upgrade works to be completed prior to occupation to the satisfaction of the relevant roads authority/land owner.

6.1.3 Operational traffic and transport

The TAIA considered the operational impacts of the proposal at the following nearby intersections (**Figure 18**):

- Londonderry Road/Vines Drive
- Londonderry Road/Southee Road
- Lennox Street/Paget Street

- Blacktown Road/Bourke Street
- Campus Drive/Blacktown Road.

Mid-block traffic counts were also completed at Vines Drive and Londonderry Road. To forecast expected vehicle trips generated by the proposal, the TAIA considered:

- surveys undertaken at Richmond High School, due to its proximity to the site, the fact that the
 proposal would be capturing students already attending the school and that it was generally
 indicative of how local students would attend the site
- TfNSW's Journey to Work date 2016
- data from the Roads and Maritime Services Trip Generation Surveys, Schools Analysis Report which examined trip generation rates in 22 schools in NSW
- anticipated travel mode share (Figure 19).

Based on this data, the TAIA adopted a trip generation rate of 0.47 trips per student in the AM peak and 0.44 vehicles per student in the PM peak.

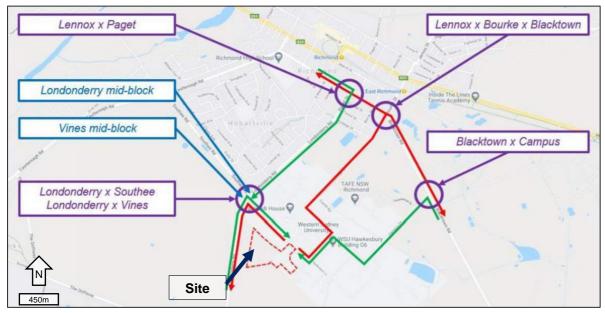


Figure 18 | Intersections modelled (Source: Applicant's RtS 2021)

The second secon				
Travel Mode	Richmond Ag College Staff	Richmond Ag College Students	Program Visitors	Occasional school- related events visitors
Train	5%	60%	25%	10%
Connecting Bus	5%	60%	25%	10%
Bus (public)			75%	10%
Bus (private)	5%	30%	-	-
Car driver Inc. truck and motorbike	80%	4%	0%	80%
Car Passenger	8%	4%	0%	0%
Bicycle	0%	0%	0%	0%
Walk only	0%	0%	0%	0%
Total	100%	100%	100%	100%

Figure 19 | Travel mode share expectations (%) (Source: Applicant's RtS 2021)

Modelling to inform the TAIA to determine intersection performance was undertaken from 2021, and future performance 10 years after in 2031, with and without the proposed development, with factored in 1% compounded annual background traffic growth.

The TAIA found that the assessed intersections currently operate at a Level of Service (LoS) of A, B or C. In the future 2033 without development scenario, the intersection at Campus Drive and Blacktown Road would have a degradation from LoS C to LoS D (**Figure 20**). 2021 and 2033 modelling for the scenarios with the proposed development resulted in the same LoS results, subject to minor increases to average delay, degree of saturation (DoS) and que lengths for the Campus Drive and Blacktown Road intersection (**Figure 21**).

	2021 - Existing Operation Without Development				
Intersection / Peak	Average Delay (sec)	DoS	95% Queue Length (m)	LOS	
Londonderry Rd / Vines Dr (AM)	11.8	0.071	1.8	Α	
Londonderry Rd / Vines Dr (PM)	10.7	0.161	4.1	Α	
Londonderry Rd / Southee Rd (AM)	9.2	0.301	8.8	Α	
Londonderry Rd / Southee Rd (PM)	10	0.179	4.4	Α	
Lennox St / Paget St (AM)	11	0.604	33.2	Α	
Lennox St / Paget St (PM)	11.9	0.709	44.8	Α	
Blacktown Rd / Bourke St (AM)	18	0.443	74.3	В	
Blacktown Rd / Bourke St (PM)	21.2	0.594	103.9	В	
Campus Dr / Blacktown Rd (AM)	34.5	0.119	2.6	С	
Campus Dr / Blacktown Rd (PM)	33.1	0.359	9.7	С	
	2031 - Existing Operation Without Development				
Intersection / Peak	Average Delay (sec)	DoS	95% Queue Length	LOS	
	Delay (Sec)		(m)		
Londonderry Rd / Vines Dr (AM)	13.3	0.091	2.3	Α	
Londonderry Rd / Vines Dr (PM)	11.8	0.197	5	Α	
Londonderry Rd / Southee Rd (AM)	10.2	0.357	11.3	A	
Londonderry Rd / Southee Rd (PM)	10.9	0.216	5.3	Α	
	10.0	0.210			
Lennox St / Paget St (AM)	11.4	0.677	39.3	Α	
Lennox St / Paget St (AM) Lennox St / Paget St (PM)			39.3 56.7	A	
	11.4	0.677			
Lennox St / Paget St (PM)	11.4 13.2	0.677 0.795	56.7	Α	
Lennox St / Paget St (PM) Blacktown Rd / Bourke St (AM)	11.4 13.2 18.2	0.677 0.795 0.507	56.7 87.1	A B	

Figure 20 | Without development intersection performance 2021 and 2031 (Source: Applicant's RtS 2021)

	2021 - Existing Operation With Development			
Intersection / Peak	Average Delay (sec)	DoS	95% Queue Length (m)	LOS
Londonderry Rd / Vines Dr (AM)	10.4	0.07	1.6	Α
Londonderry Rd / Vines Dr (PM)	10.2	0.174	4.3	Α
Londonderry Rd / Southee Rd (AM)	9.3	0.303	8.9	Α
Londonderry Rd / Southee Rd (PM)	10	0.18	4.4	Α
Lennox St / Paget St (AM)	11	0.604	33.2	Α
Lennox St / Paget St (PM)	11.9	0.709	44.8	Α
Blacktown Rd / Bourke St (AM)	18	0.443	74.3	В
Blacktown Rd / Bourke St (PM)	21.1	0.58	103.9	В
Campus Dr / Blacktown Rd (AM)	34.5	0.119	2.6	С
Campus Dr / Blacktown Rd (PM)	34.1	0.368	10	С
	2031 - Existing Operation With Development			
Intersection / Peak	Average Delay (sec)	DoS	95% Queue Length (m)	LOS
Londonderry Rd / Vines Dr (AM)	13.5	0.102	2.5	Α
• ` '		0=		
Londonderry Rd / Vines Dr (PM)	12	0.22	5.7	Α
Londonderry Rd / Vines Dr (PM) Londonderry Rd / Southee Rd (AM)	12 10.3	0.22 0.359	5.7 11.4	A
Londonderry Rd / Vines Dr (PM) Londonderry Rd / Southee Rd (AM) Londonderry Rd / Southee Rd (PM)				
Londonderry Rd / Southee Rd (AM)	10.3	0.359	11.4	Α
Londonderry Rd / Southee Rd (AM) Londonderry Rd / Southee Rd (PM)	10.3	0.359 0.218	11.4 5.4	A A
Londonderry Rd / Southee Rd (AM) Londonderry Rd / Southee Rd (PM) Lennox St / Paget St (AM)	10.3 11 11.4	0.359 0.218 0.678	11.4 5.4 39.3	A A A
Londonderry Rd / Southee Rd (AM) Londonderry Rd / Southee Rd (PM) Lennox St / Paget St (AM) Lennox St / Paget St (PM)	10.3 11 11.4 13.2	0.359 0.218 0.678 0.796	11.4 5.4 39.3 56.7	A A A
Londonderry Rd / Southee Rd (AM) Londonderry Rd / Southee Rd (PM) Lennox St / Paget St (AM) Lennox St / Paget St (PM) Blacktown Rd / Bourke St (AM)	10.3 11 11.4 13.2 18.9	0.359 0.218 0.678 0.796 0.51	11.4 5.4 39.3 56.7 89.7	A A A B

Figure 21 | With development intersection performance – 2021 and 2031 (Source: Applicant's RtS 2021)

The TAIA also modelled the Londonderry Road/Vines Drive intersection during weekend periods being the key intersection to and from the site. As with weekday periods, modelling to inform the TAIA to determine intersection performance was undertaken from 2021, and future performance 10 years after in 2031, with consideration for the expected worst case scenario of 100 vehicle trips for school events that may occur on weekends. The modelling found that the intersection would continue to operate at LoS A during weekend periods, indicating that it would be operating within capacity.

The TAIA also included a STP that seeks over time to promote active modes of transport and reduce reliance on single vehicle car trips to and from the site. The Applicant's RtS states that implementation of the STP would further reduce any operational traffic impacts on the surrounding road network.

Council, TfNSW or the public did not raise concerns regarding operational traffic impacts. TfNSW recommended a STP be implemented and reviewed to promote further mode share shift towards active transport modes and reduce single vehicle trips.

The Department also notes that the proposed school operation is not catchment based and that only a proportion of the overall students would be from the locality. Unless they are of legal driving age, students from outside the locality would likely be utilising public transport to access the site. The Department has considered the comments made in submissions, Government Agency advice and the

Applicant's RtS and is satisfied that the Applicant has demonstrated that the local road network can accommodate additional traffic generated by the proposal and the implementation of a robust STP that includes measures to encourage sustainable travel would further reduce traffic impacts.

The Department has recommended a condition requiring an annual review of the STP which must consider traffic generation issues and identify actions required to address impacts in consultation with Council and TfNSW.

6.1.4 Private vehicle and bus DOPU provisions

Private vehicles

An on-site private vehicle DOPU area (**Figure 22**) is provided from Vines Drive. The DOPU area can also facilitate private bus or coach use (outside of peak DOPU hours) when required to service the school program. The TAIA states that due to the non-catchment nature of the school, private vehicle DOPU is not expected to be a desirable mode of transport. Notwithstanding this, sufficient capacity has been considered and provided.

The proposed DOPU area provides 45m or seven vehicle lengths of kerbside space. The DOPU area has been designed with sufficient width for a stopping lane to allow for cars to pull in and out while allowing other vehicles to continue to pass. This decreases vehicle queuing as cars would not need to operate in single file or have to wait for all cars ahead to exit prior to entering a DOPU space.

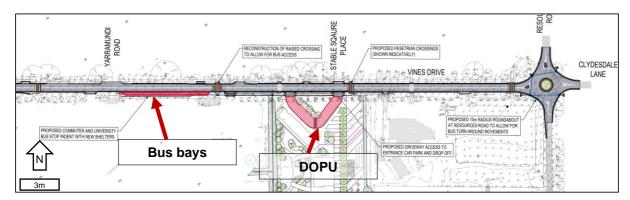


Figure 22 | DOPU area and bus bays (Source: Applicant's RtS 2021)

No comments were received from Council or TfNSW regarding private vehicle DOPU activities.

The RtS included a concept Road Safety Audit and a swept path analysis that confirm that vehicles and/or buses could safely and efficiently manoeuvre and pass each other. The Road Safety Audit identifies a number of potential safety management risks within the internal DOPU area and Vines Drive interface, and recommends mitigation and management measures. These include operational and vehicle management strategies such as traffic supervision, targeted signage and fencing.

To assess the functional capacity of the DOPU, the TAIA identified that the PM period would be most demanding as activities would occur within a 15 to 20-minute timeframe. The AM peak period would be longer over a 45 to 60-minute timeframe. The TAIA identified that the following key operational components of the DOPU zone:

- total capacity seven vehicles
- peak period 15-minute window during the PM pick-up
- vehicle turnover time 90 seconds
- vehicle cycles 10 per peak period

vehicle flow capacity – 70 vehicles per peak period.

Based on the above forecast levels, the TAIA concluded that sufficient capacity would be provided and would be managed so that queuing would not occur outside of the DOPU area.

The Department is satisfied that the Applicant has adequately demonstrated that sufficient DOPU facilities are proposed to cater for the demand generated by the proposal. The Department has recommended a condition requiring the provisions of the DOPU spaces be provided prior to the commencement of operation. Furthermore, the Department is satisfied that the Road Safety Audit has made appropriate recommendations to mitigate the identified risks associated with the DOPU zone. The Department has recommended conditions requiring the findings be implemented prior to the commencement of operation.

The Department has also recommended a condition that requires the Applicant to prepare a STP to manage access arrangements including the monitoring of the performance of the DOPU zone and implementation of measures to address any issues that arise.

Buses

The proposal includes widening of Vines Drive to facilitate bus movements, provide bus bays to the west of site frontage and a roundabout at the Vines Drive/Resources Road/Clydesdale Lane/Maintenance Lane intersection (**Section 6.1.2**). This would facilitate the necessary private and public bus services between Richmond and Penrith train stations as it would allow buses to enter and exit Vines Drive via Londonderry Road to service the development.

The Vines Drive bus bay would operate as the key bus DOPU zone for the proposal and would have capacity for up to four buses at one time (**Figure 22**). The RtS confirmed that the overall demand for bus movements related to the proposal is approximately 300 persons or six buses. The Vine Drive bus bays would have sufficient capacity to service these buses within two cycles of DOPU movements.

The Road Safety Audit included in the RtS assesses the proposed bus bays and identifies a number of potential safety management risks within bus bays and campus road network and recommends mitigation and management measures.

The Department is satisfied that the bus bay provisions would sufficiently cater for the proposal's expected frequency of bus trips. The Department has recommended a condition that requires the Applicant to prepare a STP to manage access arrangements including the monitoring of the performance of the bus DOPU activities and implementation of measures to address any issues that arise. To appropriately manage potential safety concerns, the Department has also recommended a condition for the findings to be implemented prior to the commencement of operation.

6.1.5 Operational car parking

The proposal includes the provision of 39 on site car parking spaces:

- 34 spaces within the on-site car park, accessed from Maintenance Lane
- five visitor parking spaces at site frontage within the Vines Drive driveway
- four site maintenance and/or service vehicle parking spaces adjacent to Block G.

Based on the expected mode share and the non-catchment based nature of the school, the TAIA estimates that during standard school hours 20 staff and up to 15 students would drive to the site. The

TAIA states that the proposed number of on-site car parking spaces would cater for the expected on site car parking demand.

The Hawkesbury Development Control Plan 2002 (HDCP) includes specific car parking rates for educational establishments and ancillary uses. Based on the HDCP, the car parking rate for the proposal would be 73 on-site car parking spaces. Council raised concern that inadequate justification is provided for the shortfall of on-site parking in the EIS as it does not address maximum student numbers within the WSU campus and the resultant impacts this would have on WSU parking availability.

The car parking capacity on the WSU campus is 1516 spaces provided in formalised at grade car parks and spaces on the campus road network. Car park P47 (**Figure 22**) is nearest to the proposal and has capacity for 147 spaces. The TAIA identifies that in instances where out of hours school activities or events require provisions above what is provided on site, usage of car park P47 (and where necessary other car parks) would be utilised subject to arrangements with WSU. These high occupancy activities would occur in off peak times for the university (such as weekends or evenings).



Figure 23 | P47 car park location (Base source: Nearmap 2022)

The Applicant's RtS outlines that the car parking solution has been undertaken as part of a Transport Working Group that included Council and TfNSW. The RtS states that the during school hours, the dining/conference hall would be used by students and staff already on site (creating no additional demand) and any outside of school hours use would be able to utilise WSU campus car parks.

The Applicant's RtS also included an analysis of occupancy rates of the P47 car park based on satellite imagery. The analysis spanned from 17 June 2014 to 25 March 2021. This was also supported by site observations that identified that utilisation of the car park was primarily from adjacent WSU buildings. Across the data, average weekday use of the car park was 27 vehicles, with an availability of 115 spaces.

Council did not provide any further comment to the RtS.

The Department considers that the provided car parking is sufficient in this instance as:

- the TAIA has considered car parking the lowest priority mode for daily operations and seeks
 to utilise the STP and restricted number of car parking spaces to promote public and active
 modes of transport
- the TAIA has demonstrated the proposed number of on-site car parking spaces (39) is sufficient to accommodate the number of staff and visitors expected to park on the site
- the use of WSU university car parks, in particular car park P47, have sufficient capacity to cater for the on-site shortfall during standard school hours and out of school hours events
- the provision of additional parking on site would constrain the available open space areas surrounding the built form or the usable agricultural land required for the proposal.

Given the above comments, the Department considers on balance, that the proposed car parking provision during and after school hours is acceptable. The Department notes the Applicant's commitment to implement sustainable transport options for staff and students. The Department has recommended conditions requiring the preparation and implementation of the STP prior to the commencement of operation.

The Department has also recommended conditions that prior to operation, 39 on-site car parking spaces must be provided and that arrangements with WSU to utilise university car parks during events be included in an Out of Hours Event Management Plan (**Section 6.5**).

6.1.6 Active Transport

The TAIA included a preliminary STP to promote active transport use. The STP outlines initiatives and programs to promote walking, cycling and public transport as the most attractive travel modes to and from the school.

The TAIA identifies that while there is limited formal cycling infrastructure surrounding the site, students are allowed to cycle on footpaths under NSW road rules. A fully weather-proof secured 20 rack bicycle parking facility is located on site between Vines Drive and Maintenance Lane.

The Applicant has committed to funding the construction of new footpaths and crossing facilities along the internal campus as part of road upgrade works on Vines Drive, Maintenance Lane, Resources Road and Clydesdale Lane. The Applicant states that planned footpath upgrades and on-site bicycle parking (20 spaces) would help promote active transport through improved connections to the northern section of the WSU campus and towards Richmond High School.

In comments to the EIS, Council raised that further detail of pedestrian and cycle upgrades should be provided between the site and Richmond High School. Penrith City Council also raised that active transport modes should be promoted and encouraged. The one public submission identified that the Hobartville/Richmond section of Londonderry Road should have footpath upgrades.

TfNSW advised that current public bus operations would be unable to service the demand of six buses during each peak period and that mitigation measures such as short-route services should be proposed for any shortfall. TfNSW also made recommendations for the improvement of the efficiency and effectiveness of the STP.

The Applicant's RtS stated that the demand for pedestrian movement between the site and Richmond High School is expected to be low and students from Richmond High School would be timetabled for attendance at either school on specific days. Where required, minibus services would also be operated by the school for shorter trips. The RtS also argued that a shared path or cycleway would not be consistent with the scale of the proposal or the expected pedestrian and cyclist demand. This was further supported by data from Richmond High School where cycling and pedestrian mode share trips were minimal. Notwithstanding this, the Applicant reiterated the STP would be utilised to further promote active transport methods, particularly reducing the reliance of private vehicle trips to the site. The Applicant's RtS also confirmed that consultation had occurred with TfNSW to facilitate additional public bus services for the proposal.

TfNSW commented on the RtS with recommended improvements to the STP and Penrith City Council who reiterated the importance of promoting active transport modes. No further comments were received from Council.

The Department considers that sufficient safe pedestrian and cycling routes and associated upgrades are provided to the site through the WSU campus. The Department also notes that overall pedestrian and cycling mode shares are expected to be low. Despite this, measures to promote cycling are been included by the proposal through the provision of secure bicycle parking racks and preliminary STP. On Londonderry Road, any future upgrades to footpaths or considerations of a cycleway would form part of the Richmond Bridge Duplication Project. Any works outside this would be in conflict with the overall design and scope that is part of the Richmond Bridge Duplication Project.

The Department has recommended conditions requiring the Applicant to prepare (in consultation with Council and TfNSW), implement and review a STP which would ensure that active transport methods are promoted and reliance on vehicle trips is reduced. Overall bus service capacity would be a consideration in the annual STP review and where shortfalls are identified, they would be addressed in consultation with bus providers.

6.1.7 Construction traffic

A preliminary Construction Traffic and Pedestrian Management Plan (CTPMP) was included in the EIS which details construction vehicle movements, truck and crane unloading details, routes of travel, parking and access arrangements, pedestrian management provisions, and measures to address potential impacts.

The Applicant states that the proposal involves a design and construction process that combines the manufacture of building components, such as wall systems and facades, in a factory off site, with onsite assembly. Delivery of these parts typically occurs on oversized vehicles, then lifted on site by a crane and assembled on site. This construction method generally reduces the overall construction period, and reduces traffic movements during construction, but requires significant traffic management or road closures when moving parts on site for assembly. Road closures require approval from the relevant roads authority or land owner.

In response to comments made by TfNSW seeking clarification of haulage routes and whether access was to be provided from Londonderry Road, the CTPMP was revised as part of the RtS. The CTPMP confirmed the vehicle haulage routes (**Figure 24**) and that access was only to be provided from Vines Drive. Given the space available within the construction site, all vehicles would be able to manoeuvre on site, entering and exiting in a forward direction and returning along the approach route.

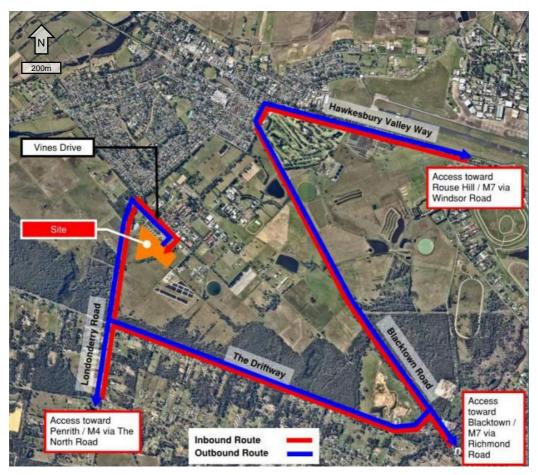


Figure 24 | Construction vehicle access routes (Source: Applicant's RtS 2021)

Figure 25 below identifies the maximum truck movements per day during, outlining that with the exception of a two month period, where 30 heavy rigid truck movements a day are expected, for the majority of the construction phasing no more than eight truck movements a day are expected. The largest construction vehicle expected to access the site would be semi-trailers, approximately 25m long.

Stage	Estimated Duration	Largest Vehicle	Vehicles per Day
Site Establishment	1 month		-
Substructure	2 months	Heavy Rigid Vehicle	8
Structure	2 months	Heavy Rigid Vehicle Semi-trailer	30 2
Roofing & Façade	4 months	Heavy Rigid Vehicle	2
Finishes & Services	7 months	Heavy Rigid Vehicle	2
Landscaping & Completion	4 months	Heavy Rigid Vehicle	2
Works Complete	2 months		-

Figure 25 | Indicative daily construction vehicle trips (Source: Applicant's RtS 2021)

The CTPMP states that, where necessary, footpaths on the immediate surrounding road network would be managed by controllers during construction periods as required. The CTPMP advises construction vehicles would operate outside of peak periods to minimise impacts on local roads.

On-site parking for construction workers would be available due to the large site area. The CTPMP states that parking can be repositioned depending on the construction activities during any given phase and a parking zone would be placed so that there is no disruption to construction vehicle movements or construction activities. The use of the WSU campus P47 car park for workers could be utilised where required and would be subject to WSU consultation and approval.

The Department accepts the Applicant's assessment of construction traffic, and notes the surrounding road network can accommodate the expected heavy vehicle movements. Road closures would be subject to appropriate approvals and impacted residents would be consulted. Based on the above, the Department has recommended conditions requiring the preparation and implementation of a final CTPMP. A further condition requires the Applicant to prepare sufficient construction worker parking on site. Subject to these conditions, the Department considers that construction traffic and parking impacts can be appropriately managed.

6.2 Built form and urban design

The EIS included an Architectural Design Statement that sets out the rationale behind the proposal and establishes the guiding principles that provide site planning and building design guidance on connecting with country, bulk, scale, setbacks, views/overlooking, streetscape, façade presentation and materials.

The Architectural Design Statement sets out that the proposal is guided by the following principles:

- establishment of a low scale rural typology with a strong axial presence and connection to the WSU campus
- establishment of a village green that transitions between the school and agricultural use
- site buildings to maximise solar access and sustainability and maximise the connection between internal and external spaces
- site buildings at the centre of the site to provide a variation of active and learning passive spaces
- provision of circulation spaces and building forms that are inspired by the Hawkesbury
 Nepean River, the flood plains, the weaving pattens found in food bowls and fish traps
- a design informed by consultation with Aboriginal stakeholders, integrates with site wayfinding and the local landscape.

The Applicant's RtS included minor design changes as part of refining the overall built form and internal spaces. As a result of the design refinements, only Block A increased in height by 130mm.

The site planning and layout (**Figure 26**) is described in further detail at **Section 2.1**. Proposed materials (**Figure 27**) are low maintenance and include concrete columns and formwork, perforated metal mesh, Colourbond roofing, metal and timber cladding and prefinished powder coated compressed fibre cement on façade elements. Colours are predominately soft and natural tones to ensure that the proposed built form is recessive when viewed from site frontages and the block style typology with skillion roof built form maintains continuity with the existing character established on the WSU campus.

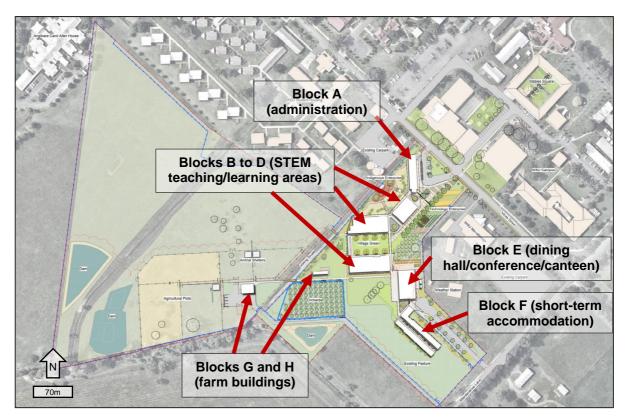


Figure 26 | Site Plan (Source: Applicant's RtS 2021)



Figure 27 | Materials/photomontage of learning blocks (Source: Applicant's RtS 2021)

Following exhibition of the EIS, the Government Architect NSW (GANSW) queried how urban design and master planning appropriately addressed the comments made through the State Design Review Panel process and how it addressed the site's context, specifically:

connection with country and demonstrating holistically, how Aboriginal culture and heritage
has been integrated in the architectural and landscape design

- demonstrating a clear and legible connection from the site to public transport
- locating bicycle parking in a more prominent and visible location from the public domain
- further clarification as to why commercial kitchen in Block C and the Dining Hall in Block E could not be co-located.

The Applicant's RtS identified how elements of the revised scheme responded to the State Design Review Panel process, GANSW comments to the EIS and why certain design decisions were taken, in the context of comments and responding to site constraints.

The Department has considered the advice provided by GANSW and the responses provided by the Applicant's RtS. Based on the Applicant's RTS, the Department considers the site layout to be satisfactory, responding to the needs and the proposed curriculum of the school. The site and the WSU campus are not subject to a building height or floor space ratio control under the HLEP. Built form on the WSU campus and surrounding residential areas are predominantly characterised by single to two storey buildings. The residential land uses are subject to a 10m 'Height of Building' control under HLEP. All buildings proposed on the site are single storey, with the Block A having the greatest height at 5.95m.

The Department concludes that the proposed building height, bulk and scale of the proposed buildings is appropriate in the context of the site and surrounding built form as:

- sufficient setbacks are provided to neighbouring properties to reduce the overall bulk and scale impact and maintain the semi-rural character of the WSU campus
- existing and proposed perimeter planting would provide further screening to adjoining properties
- the proposed height is in keeping with the surrounding context and would provide a transition between the developed and undeveloped parts of the broader WSU campus
- the proposal would not have detrimental amenity impacts of overshadowing or privacy to adjoining properties
- proposed external colours and finishes would positively contribute to the existing and future character of the WSU campus streetscape and locality.

6.2.1 Landscaping

The landscape design (**Figure 28**) responds to the nature of the agricultural/STEM curriculum by providing a variety of active play areas, agricultural/animal plots and outdoor education spaces. Active and educational spaces are located closer to the central building spine and more passive and functional uses are located towards the site boundaries.

The built form landscaping elements focused around proposed buildings include:

- main entrance, indigenous enterprise (opportunities for connecting with Country and Aboriginal culture), technology enterprise (opportunities to showcase agriculture), village green and retention of existing pasture
- covered outdoor learning areas
- seating and study areas in outdoor play areas and under covered walkways
- buffer planting between the short-term accommodation (Block F) and on-site car park
- planting of 120 new trees amongst sections with timber, concrete and natural sandstone seating
- use of tactile plants and surface materials.

The landscaping elements for the remainder of the site are characterised by open grazing/grassland areas, on-site detention basins, agricultural/animal plots for orchard type planting (up to 105 trees) and areas for livestock to roam and shelter.



Figure 28 | Overall landscape design (Source: Applicant's RtS 2021)

The Department considers the landscape design responds to the unique nature of proposed agricultural/STEM use of the site by:

- providing varied landscaped areas adjacent to the proposed teaching and learning spaces
- providing sufficient open space provisions per student
- providing protected outdoor play areas that incorporate soft and porous surfaces as well as more functional working landscape features that support the learning curriculum.

The proposal seeks to retain as many trees as possible and incorporates the existing trees and proposed tree, shrub and ground cover planting into the student environment. Furthermore, the proposed landscaping also provides sufficient open space and access to those utilising the short-term accommodation and ensures that reasonable amenity is provided. Overall, it is considered that the proposed landscape scheme provides sufficient outdoor play facilities for students and ongoing management of the natural landscaped areas of the site.

6.3 Biodiversity and tree removal

6.3.1 Biodiversity

A BDAR assessing the impacts of the proposal on the surrounding biodiversity was included in the EIS. This assessed biodiversity values on the site and impacts of the proposal in accordance with the BC Act. In response to EESG comments to the EIS and advice provided to the RtS, the BDAR was amended to broaden the assessment scope of impacts on biodiversity values on site, consider road upgrade works and correct inaccuracies. The amended BDAR concluded that the proposed development is expected to result in impacts to the following PCT:

 Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion which is listed as an endangered ecological community under the BC Act.

The BDAR found that within this PCT, 0.16ha of grassland would be impacted and 0.23ha of remnant canopy would be impacted. Based on this, the BDAR identified that three ecosystem credits would be required to offset the proposed development. The BDAR also included a habitat assessment for threatened flora and fauna species and their likelihood to occur on the development site. The assessment concluded there were no suitable hollow bearing trees on site and thus no offsets required.

EESG reviewed the amended BDAR and stated it appropriately considered the impacts subject to clarification (as discussed in **Section 5.6**) and recommended conditions of consent relating to:

- conducting pre-clearance surveys prior to vegetation removal, to confirm the absence of threatened flora and fauna species,
- seed collection and transplanting of plants
- engagement of suitably qualified project ecologist consultant and bush regenerator
- replacement nest boxes, tree hollows, habitat improvement and reuse of native trees
- implementation of BDAR mitigation measures
- preparation of a detailed landscape plan to include detail about the maintenance, size and location of replacement trees including the use of native species indicative of the local communities once present on the site and surrounding locality.

The Department considered the information provided by the Applicant and comments by EESG. Department considers that the amended BDAR undertook an appropriate assessment of the impacts on biodiversity values, and identified appropriate management and measures to mitigate impacts. To ensure that no detrimental impacts occur to biodiversity values as a result of the proposal and that biodiversity lost on site is appropriately considered and offset, the Department has recommended conditions of consent as recommended by EESG above and for the implementation of the recommendations outlined in the amended BDAR.

6.3.2 Tree removal

The EIS included an Arboricultural Impact Assessment (AIA) which surveyed all trees on site. The AIA was updated in the RtS and SRtS to address EESG comments, correct inaccuracies and reflect the revised design/road upgrade works.

The AIA identified that on the site and on surrounding streets (WSU campus internal roads), 74 trees (28 on site and 46 street) are potentially impacted by the proposal. Of the 28 trees on site, 11 are endemic species and 17 are exotic. Of the 48 street trees, 20 are native species and 26 are exotic. The AIA notes that for street trees, despite not all being subject to Council preservation policies, these have a high significance value to the WSU campus due to the location on a major entry to the campus. **Figure 29** and **Figure 30** below shows the trees identified for removal and transplanting.

Of the trees identified on and outside the site (but within the WSU campus), 11 are identified for removal, 10 are to be transplanted to suitable locations outside of the footprint and the remaining are to be retained and protected. 225 trees are proposed to be planted on site as part of the overall landscape scheme. Transplanting of trees is proposed due to the identified trees being of suitable health and age to make survival rates feasible.

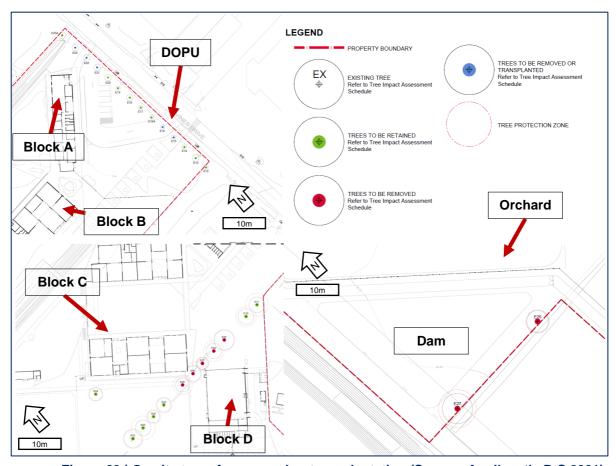


Figure 29 | On site trees for removal or transplantation (Source: Applicant's RtS 2021)

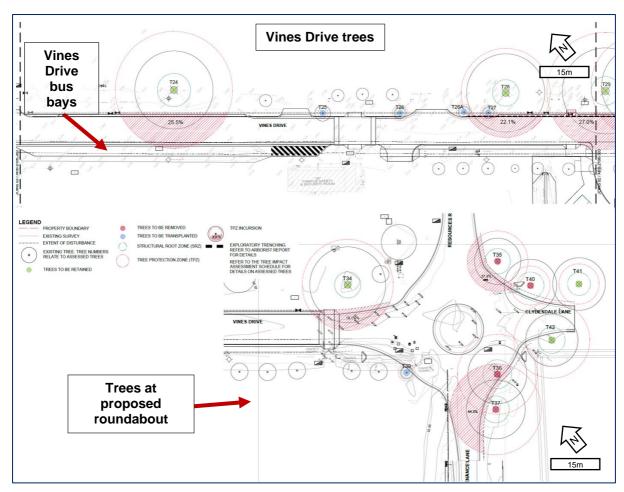


Figure 30 | WSU campus street trees removal or transplantation (Source: Applicant's RtS 2021)

As discussed in **Section 6.3.1**, EESG recommended conditions of consent to ensure that any losses to trees are offset, hollows from removed trees are salvaged and trees that are retained and/or transplanted are appropriately maintained as part of a landscape plan. EESG also raised that tree replacement should occur at a ratio greater than 2:1. Council did not comment on matters relating to tree removal.

The RtS and SRtS confirmed that the proposal provides planting at a ratio above 2:1 as the landscape design provides for 120 trees on site, in addition to 105 orchard trees as part of the agricultural plots.

The Department notes that even by discounting the exotic orchard tree species, the 120 trees provided by the landscape design would result in a replacement ratio of 7.5:1. The Department considers that reasonable efforts have been undertaken to minimise tree loss on the site and on street trees, and where losses have occurred that it is appropriately offset through proposed planting. The Department has recommended a condition of consent requiring preparation of a revised landscape plan that includes a greater selection (outside of orchard planting) of native/indigenous trees, shrubs and groundcover planting.

The Department also notes that 10 trees from the site and on the surrounding streets have been identified to be transplanted. The Department has recommended conditions of consent for these to be:

- appropriately located on the subject site or with relevant owners' consent, on other locations on the WSU campus
- transplanted in accordance with the requirements of the AIA
- undertaken with the supervision of a qualified bush regenerator or arborist to ensure that the highest possible survival rate is facilitated.

The Department has also recommended conditions relating to planting, tree retention, tree hollow salvage, seed collection and implementation of protection measures in the AIA for the site and street trees.

6.4 Flooding

A Flood Impact Assessment (FIA) was submitted with the EIS. The FIA includes flood modelling and provides an assessment of overland and riverine flooding risks to the site and the impacts of the proposal on flood behaviour. The FIA takes into account the effects of climate change for the full range of flood events including the PMF. The key findings of the FIA are:

- levels on the site vary from 22.5m AHD to 23.5m AHD
- the site is affected by two sources of flooding riverine and local overland flooding
- the whole site is impacted by the PMF (26.4m AHD) for riverine flooding (Figure 31)
- parts of the site are affected by the PMF (23.2m AHD) for overland flooding (Figure 32)
- the site is not impacted by the 1% AEP (17.5m AHD) for riverine flooding
- parts of the site are impacted by the 1% AEP (22.9m AHD) for overland flooding (Figure 33)
- in accordance with Council's requirements, finished floor levels must be located 500mm above the highest 1% AEP flood level (the Flooding Planning Level)
- the required Flood Planning Level for the proposal is 23.5m AHD.

In relation to the 1% AEP for overland flooding, the FIA found that minimal ponding occurs on the eastern section of the future on-site car park and generally the majority of the site displays low flood risk hazards. A new drainage culvert is proposed adjacent to the on-site car park to aid in the removal of any ponding. The exception to the low risk hazard, is the western-most drainage swale (on the future undeveloped sections of the site) and contains localised areas that are unsafe for vehicles, children and the elderly.

To manage flood risk in accordance with Council's Floodplain and Risk Management study 2012, finished floor levels must be located 500mm above the highest 1% AEP flood level. This would need to be above overland flood flow levels as it is higher than riverine flood levels. The FIA concluded that this provides sufficient protection for occupant safety against overland flow flooding from the 1% AEP event. Subsequently, the minimum finished floor levels for the proposal have been designed to a Flood Planning Level of 23.5m AHD (**Figure 34**).

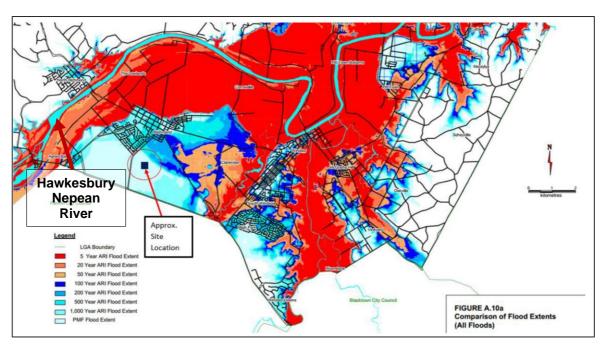


Figure 31 | Riverine flood mapping (Source: Applicant's RtS 2021)

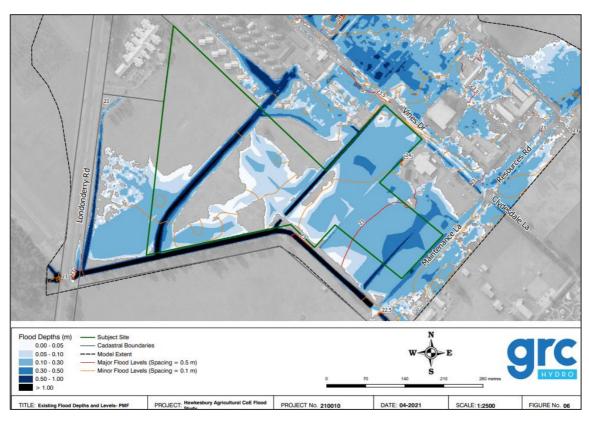


Figure 32 | Overland PMF flood mapping (Source: Applicant's EIS 2021)

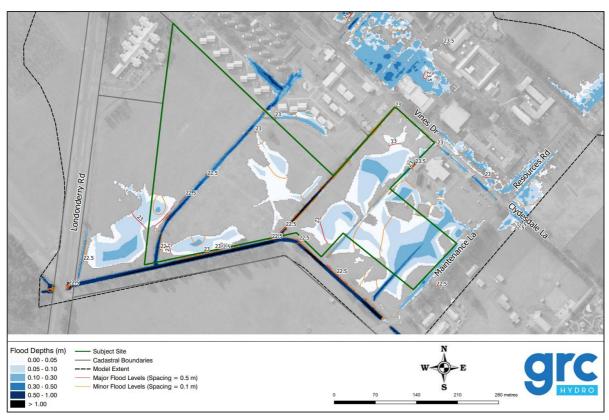


Figure 33 | Overland 1% AEP flood mapping (Source: Applicant's EIS 2021)

Table 1 - Minimum Floor Level Information			
Flood Type	Riverine Flooding	Overland Flow Flooding	
Design flood level (1% AEP)	17.5m AHD	23.0m to 22.9m AHD	
Freeboard	0.5m	0.5m	
Flood Planning Level (FPL)	18.00m AHD (1% AEP + 0.5m Freeboard)	23.5m AHD (1% AEP + 0.5m Freeboard)	
Probable Maximum Flood (PMF)	26.4m AHD	23.2 to 23.0m AHD	

Figure 34 | Flood Planning Level (Source: Applicant's EIS 2021)

The FIA found that due to the extent of the riverine PMF event, shelter in place is not a viable option as no locations on site are above the PMF level of 26.4m AHD. In response to comments from EESG outlining that the proposal would need to address the evacuation capacity of the site and surrounds in consultation with the Hawkesbury Nepean Floodplain Risk Management Directorate, a Flood Emergency Management Report (FEMR) was submitted with the RtS. The FEMR includes a Flood Evacuation Strategy. The FEMR advises that NSW State Emergency Service (SES) is the appropriate representative for liaising with for the preparation of the Flood Evacuation Strategy. The FEMR was prepared in consultation with the Principal Advisor of the SES Hawkesbury Nepean Taskforce and SES Community Capability Officer of the SES Hawkesbury-Nepean Project.

The FEMR states that during a flood event from the Hawkesbury Nepean River, it takes approximately 1.5 to 3 days for flood waters to reach a depth that warrants evacuation. These flood

waters would typically rise at 0.5m per hour, up to a maximum of 0.8m per hour. When the riverine PMF event occurs, the FEMR recommended appropriate management and mitigation measures in conjunction with existing WSU procedures to ensure that alerts, evacuation strategies and routes ensure safety of all school occupants and that the evacuation is coordinated with the greater evacuation strategy of the WSU campus and/or region.

The FEMR also included site specific management and mitigation measures (including but not limited to education, signage and restricted access) to ensure that no harm occurs to occupants from the overland flow flooding. This also applies to the undeveloped western section of the site where two of the three proposed on-site detention basins/dams (and one existing dam) are in the vicinity of the drainage swale containing most risk.

The Department considered the information provided by the Applicant and comments made by EESG. Department considers that the Applicant's FIA and FEMR undertook an appropriate assessment of the potential riverine and overland flow flooding impacts, and identified appropriate design, management and measures to mitigate impacts and risk to site occupants. The Department notes that the FEMR stipulates it takes approximately 1.5 to 3 days for flood waters to reach a depth that warrants evacuation, providing sufficient warning time for occupants to evacuate the site in accordance with the FEMR.

The Department has recommended the following conditions of consent:

- an operational flood emergency management plan must be prepared in accordance with the recommendations of the FEMR and in and in consultation with SES, Council and WSU
- all floor levels must be no lower than the 1% AEP overland flood event, plus 500mm of freeboard (FPL) in accordance with the recommendations of the FIA
- any structure located below the FPL must comprise flood compatible materials.

6.5 Other issues

The Department's consideration of other issues is provided at **Table 6**.

Table 6 | Department's assessment of other issues

Issue	Findings	Department's consideration and recommended conditions
Construction noise and vibration	The EIS included a Noise and Vibration Assessment (NVA) which assessed the potential construction noise and vibration impacts on nearest sensitive receivers.	The Department considers construction noise impacts can be adequately managed in accordance with the Interim Construction Noise Guideline, through the adoption of mitigation measures and
	The assessment established construction noise management levels for the site as perceived at noise sensitive receivers in accordance with EPA's Interim Construction Noise Guideline (2009).	adherence to the specified noise limits. To ensure that potential construction impacts are appropriately managed, the Department has recommended conditions of consent requiring:
	The NVA found that the highest construction noise levels were predicted during site preparation, bulk earthworks and construction.	 construction hours are accordance with the standard Interim Construction Noise Guideline construction hours a Construction Noise and Vibration Management Plan is prepared that
	These would exceed Noise Management Levels at the closest noise sensitive receivers to the east and west of the site during the noisiest construction activities. However, the NVA identified that no noise sensitive receivers are considered to be within the highly affected noise category, and that exceedances identified are not unusual for construction works in a quiet residential/educational campus context that typifies the nearby sensitive receivers.	 incorporates the recommendations of the NVA intra-day respite periods from high noise generating construction activities be provided where necessary.
	To manage impacts on noise sensitive receivers, the NVA recommended best practice noise mitigation measures be implemented, including project and plant machinery specific measures.	
	With regard to construction vibration impacts, the NVA found that due to the close proximity of neighbouring sensitive uses, alternative plant items to 18-34 tonne extractor with hydraulic hammer and 12 tonne vibratory roller would need to be used to ensure that no detrimental construction vibration impacts occur.	

The NVA also recommended ongoing vibration monitoring to ensure that minimum working distances are maintained and where vibration generating works are within the safe working distance, alternative tools and methods must be utilised.

No comments were received from Council, EPA or the public in regard to construction noise or vibration impacts.

Operational noise

The NVA assessed the potential operational impacts of the proposal on the nearest sensitive receivers, in accordance with the EPA's Noise Policy for Industry 2017.

The NVA considered operational noise, including from indoor and outdoor student activities, school bell, music from school events, dining hall and presentation space use, short-term accommodation, agricultural equipment and vehicle use.

The NVA generally concluded that noise levels from the operational use of the school meet applicable environmental noise criteria.

The NVA identified that mechanical plant and equipment would be subject to detailed acoustic assessment prior to construction. Barriers, noise attenuation, vibration isolation and selection of low noise equipment would ensure compliance with noise intrusiveness criteria.

The NVA identified that that the primary sources of noise intrusion into the school would be from the surrounding road network and adjoining uses within the WSU campus. The internal learning areas would meet the noise criteria subject to façade and glazing treatments.

No objections or comments were received from the public or Government Agencies in regard to any operational noise impacts. Council sought further clarification for the conference hall operating hours. The Applicant's RtS confirmed that the conference hall

The Department notes that within the NVA, the assessment of operational noise of the dining/conference hall use was from 7am to 10pm, with no assessment of noise impacts of use beyond 10pm. The NVA concluded that the proposed acoustic performance would comply with the applicable noise criteria within timeframes.

Consequently, the Department considers that the operation of the space should not extend past 10pm to ensure that the amenity of neighbouring sensitive receivers is not detrimentally impacted on.

The Department has recommended conditions that require:

- a detailed assessment be undertaken of plant and equipment demonstrating compliance with the identified noise criteria
- the development be undertaken in accordance with the recommendations of the NVA and not exceed the identified noise criteria
- the Applicant conduct short term noise monitoring following commencement of operation
- an Out of Hours Event Management Plan be prepared for school events involving over 100 patrons
- operation of the dining/conference hall does not extend past 10pm.

Subject to these recommended conditions, the Department is satisfied that the proposal would not result in unacceptable operational noise impacts on the nearby sensitive receivers.

hours are proposed from 8am to 11pm on all days.

An Aeronautical Impact Assessment was included in the EIS and further revised in the RtS to assess impacts of aircraft noise given the site's proximity to the RAAF Base Richmond.

The assessment confirmed that the site is located outside the Australian Noise Exposure Forecast 20 contour for the airport. The assessment concluded that the site is not at risk to being exposed to aircraft noise and would not require further assessment or mitigation.

Aviation

An Aeronautical Impact Assessment was included in the EIS and revised in the RtS to assess impacts of aircraft noise given the site location approximately 3km southwest of the RAAF Base Richmond.

The assessment studied the potential impacts from the proposed built form and use of four mobile cranes during construction. The assessment concluded that the proposed built form and one of the mobile cranes do not penetrate Obstacle Limitations Surfaces (OLS).

However, the other three mobile crane would penetrate the OLS. As per the requirements of the *Airports Act 1996*, any activity that infringes an airport's protected airspace is a controlled activity and would require approval before it can be carried out. As such, the assessment recommended that during construction, use of these cranes would require a referral to RAAF Base Richmond for approval.

CASA advised it did not object to the proposal and that the obstacle assessments, approvals for the construction cranes and any aviation related planning issues are a matter for RAAF Base Richmond.

The Department has recommended a condition requiring the any construction cranes that penetrate the OLS must be referred to RAAF Base Richmond for approval prior to use and are to be appropriately marked, only operated during daylight hours and be notified to pilots via a notice to airmen.

The Department is satisfied that the proposal would not affect aviation operations, subject to implementation of the recommended conditions.

Site contamination

A Detailed Site Investigation and Remediation Action Plan (RAP) were provided with the EIS. State Environmental Planning Policy 55 - Remediation of Land (SEPP 55) requires the Department to be satisfied that the site is suitable or would be

The Detailed Site Investigation identified that the site contains metals (lead and zinc), bonded asbestos containing materials and benzo(a)pyrene at several locations, which may potentially pose unacceptable risks to human and ecological health.

The RAP proposes the following remediation works and management measures:

- excavating and disposing of contaminated soil and fill material to a licensed receiving facility
- placing the contaminated material into a containment cell on site
- a survey for the base and top of the containment cell, where a containment cell is to be utilised, to confirm the construction of the cell as built and inclusions of the survey of the containment cell as part of the Validation Report
- preparation of a Long-term Environmental Management Plan, outlining the ongoing management requirements for the containment cell and establishing a monitoring program
- implementation of an unexpected finds procedure.

EPA advised that they had no comments and that Council was the relevant regulatory authority under the *Protection of the Environment*Administration Act 1991.

Council stated that utilising a containment cell was contrary to Council's asbestos policy. However, should the RAP be implemented with the containment cell:

- a Site Auditor should be engaged to review the remediation strategy and issue a Site Audit Statement
- the Long Term Environmental Management Plan for the containment cell would need to be registered on the title of the property and the Site Audit Statement provided to Council.

made suitable through remediation for the intended use.

The Department is satisfied that site contamination issues have been appropriately addressed and can be managed by recommended conditions. On this basis, the Department is satisfied that the site can be made suitable for the proposed use.

The Department has recommended the following conditions:

- the Applicant must engage an EPAaccredited Site Auditor
- an unexpected finds procedure must be implemented throughout construction works
- any variations to the approved RAP be approved by the Site Auditor
- if work is to be completed in stages, satisfactory completion of each stage be confirmed by the issue of Interim Audit Advice/s
- a Site Audit Statement be obtained prior to operation

The Department notes that the RAP requires that if a containment cell is utilised it would need to be surveyed and included in the Environment Management Plan. The Environmental Management Plan is required to be recorded on the property title and on the Planning Certificate for the site. The Department's conditions include requiring the Applicant to prepare the Environmental Management Plan in accordance with the RAP and provide a copy of the Environmental Management Plan to Council.

Short-term accommodation

The proposed accommodation would be limited for short-term use for visiting students and teaching professionals

The Department is satisfied that the short-term accommodation has been sited and designed to minimise potential

who would be attending the school for classes or agricultural/STEM related conferences held by the school. The accommodation would also be used by staff management for when the accommodation is in use.

The Applicant advises that the shortterm accommodation is a key component of the proposal as it would facilitate students and teachers from outside of the region and across the State to attend the site for agricultural/STEM education.

The proposed length of stay would be from overnight to a maximum of three consecutive nights.

The proposed short-term accommodation includes the provision for up to 62 visiting students and teaching professionals, comprising:

- 28 twin rooms (507sqm)
- three twin accessible rooms (94sqm).

Each room has provisions for showering and toilet facilities as well as access to communal amenities on the western edge of the block. The cleaners store, comms room, treatment rooms and interview/isolation rooms are also located in this section. The dining hall in Block E is to be utilised for dining and additional amenity requirements.

Access is provided to the gardens and landscaped area surrounding Block F. The central covered walkway that bisects the two rows of accommodation has landscaped features with seating areas. The Applicant has advised that there would be no detrimental impacts from the use of the short-term accommodation as:

- the accommodation would be used for a short-term only
- the WSU campus has similar student accommodation neighbouring the site
- the NVA concludes that operational noise impacts would be minimal.

amenity impacts on neighbouring residential uses. In particular:

- Block F itself and communal outdoor spaces are located away from nearby residential uses on the WSU campus
- the building includes internal features such as the interview and isolation rules to provide appropriate management and security
- the use of the accommodation is only for short-term, facilitating those who live out of reasonable distance to the site.

To ensure that the operation of the short-term accommodation does not have detrimental impacts on the amenity of surrounding residential or WSU building uses, the Department has recommended a condition requiring:

- the preparation and implementation of an Accommodation Operational Management Plan
- the Accommodation Operational Management Plan must include measures relating to management, student code of conduct, complaints handling, induction, emergency evacuation and signage.

The proposed self-contained rooms have adequate access to natural ventilation and daylight, communal indoor and outdoor areas and contain adequate storage for a short stay. The Department concludes the development would provide for a satisfactory level of amenity for visiting students and teaching professionals utilising the short-term accommodation.

Bushfire

The EIS included a Bushfire Assessment Report. The report confirmed that buildings defined by the NSW RFS as Special Fire Protection Purpose are not located on designated bushfire prone land. The report concluded that the site was exposed to low bushfire threat.

Based on the findings, bushfire protection measures were recommended to achieve an acceptable level of risk including Asset Protection Zones. A minimum of 50m is to be provided surrounding the curtilage of Buildings A, B, C, D and F and is to be managed as an Inner Protection Area in perpetuity.

NSW RFS provided comments to the EIS relating to preparation of plans, implementation of Asset Protection Zones, construction standards, vehicle access and water/utility services.

The Applicant's RtS included a bushfire review letter and vehicle manoeuvring plan. The RtS identified that an alternate solution could be provided to the NSW RFS recommendations for vehicle access as the internal WSU campus roads provide sufficient and unimpeded access and would be considered an appropriate alternate solution under Planning for Bushfire Protection 2019.

NSW RFS reviewed the RtS and provided updated conditions of consent.

The Department has considered the information provided by the Applicant and considers that potential impacts on the proposal from bushfire risk have been appropriately considered and addressed.

The Department has recommended the conditions relating to:

- preparation of a Bushfire Emergency Management and Evacuation Plan consistent with the RFS guidelines
- the implementation and management of Asset Protection Zones on the site
- construction standards for ember protection and non-combustible materials
- vehicle access, water/utility services and landscaping undertaken in accordance with Planning for Bushfire Protection 2019.

Aboriginal cultural heritage

The EIS included an ACHAR, which considered the impact of the proposal on Aboriginal cultural heritage, including the site's potential to contain archaeological remains.

The traditional custodians of the land in which the site is located are the Darug and Gangangara peoples. The ACHAR notes that given the site's location the precise location of language and clan boundaries is not known.

The ACHAR found that it is highly unlikely that any Aboriginal objects or evidence of Aboriginal occupation

The Department reviewed the ACHAR and Heritage NSW comments, and considers that potential impacts on Aboriginal cultural heritage have been appropriately addressed.

Although the ACHAR indicates the potential for archaeological finds is low, to ensure no detrimental impacts occur to matters of Aboriginal cultural heritage, the Department recommends conditions requiring:

 compliance with the recommendations in the ACHAR exists within the development site and advised that the proposal would not impact Aboriginal cultural heritage.

To ensure Aboriginal cultural heritage values are appropriately considered and protected, the ACHAR includes recommendations to relating to consultation, site inductions and unexpected finds protocols.

Heritage NSW reviewed the ACHAR and was satisfied the proposal had appropriately considered and addressed Aboriginal cultural heritage impacts.

- implementation of an unexpected archaeological finds protocol
- where possible, any Aboriginal cultural heritage inductions should involve Aboriginal community representatives.

Heritage

Four buildings on Lot 2 DP 1051798 (the WSU campus) are grouped as two local heritage items in the HLEP, as follows:

- Item I9 Administrative Block, Blacksmith Shop and Stable Square Building
- Item I10 Grandstand.

These items are not located on the site of the proposed development and are approximately 100m from the closest boundary.

A Heritage Impact Statement and Heritage Archaeological Assessment was submitted with the EIS, which confirm that the proposed development would not have detrimental impacts on these heritage items or to the overall heritage significance of the WSU campus. The assessments recommend that an archaeologist should be engaged to be on call in the event of an unexpected find and in the event of an unexpected find such as a feature or possible relic, all work should cease in the vicinity of the unexpected find and the area secured.

Council did not raise concerns or make comments to matters relating to heritage on site or on the WSU campus.

The Department has reviewed the Heritage Impact Statement and Heritage Archaeological Assessment and does not consider the proposal would have unacceptable impacts on any matters of heritage value on the site.

The Department has recommended a condition for the implementation of an unexpected finds protocol in the instance matters of heritage significance are identified on site.

Stormwater and drainage

The EIS included a Stormwater Management Plan that states that stormwater drainage works would be implemented in accordance with The Department is satisfied that the Applicant has demonstrated that the site

Council's requirements. This included details on the proposed on-site detention systems, water quality treatment devices and rainwater tanks to retard off-site flow and reuse water on site.

Three on-site detention basins would be provided on the site and would have an appropriately sized outlet pipe to maintain a maximum discharge equivalent to the predevelopment discharge rate during all storm events up to and including the 1% Annual AEP storm event.

Council did not raise concerns or make comments to matters relating to stormwater or drainage.

can accommodate required stormwater and drainage management systems.

The Department has recommended conditions requiring the design and implementation of a stormwater management system for the site in accordance with relevant standards and guidelines.

Social impact

The EIS included a Social Impact Assessment (SIA) that addressed key demographic characteristics of the area.

The SIA detailed stakeholder engagement associated with the proposal and noted impacts were raised relating to:

- local and site amenity
- transport access
- heritage
- social inclusion
- social infrastructure
- health and safety
- construction periods
- traffic congestion
- economy and environment.

The SIA found that the proposal would likely result in:

- short term negative impacts from construction activities
- improved and unique tertiary learning pathways and facilities available for community use
- significant overall benefits through improved school capacity and facilities to cater for students.

The Department has reviewed the SIA and is satisfied that the proposal would have positive social impacts as it would meet the educational needs of the area.

Short term impacts arising from the construction phase would be mitigated through recommended conditions requiring construction management plans.

Utilities

The EIS included an Infrastructure Management Plan to assess the existing capacity of utility services to service the site and the proposed works. The plan identified that a new Endeavour Energy padmount

The Department is satisfied that the required utilities would be available to the site.

The Department has recommended conditions to ensure the Applicant

substation would be required to facilitate the proposal.

Sydney Water provided advice regarding water servicing, wastewater servicing and trade wastewater requirements.

Endeavour Energy confirmed that WSU had previously advised that campus supply is at capacity and there is insufficient spare power. For the padmount substation, a high voltage easement would be required from Londonderry Road to the new transformer location.

Through further consultation with WSU, the Applicant's RtS confirmed that a separate substation was no longer required and that the existing substation located on Vines Drive had capacity and could be utilised by the school. Relocation the school's switchboard from its proposed location, would facilitate this.

Endeavour Energy provided no further comments to the RtS.

lodges the appropriate requests for the supply of these services and that all utilities are available prior operation.

Community use

As discussed in **Section 2**, the Applicant advises the school facilities may be made available for use by the community. The exact details of proposed community use would be subject to consultation with Council and the community.

Given the specific detail on community use proposed is unknown at this stage, the Department considers it appropriate that community use of the site outside school hours involving more than 100 attendees must be supported by an Out of Hours Event Management Plan that details (but not limited to):

- activities should not extend before 8am or beyond 10pm
- not include the use of amplified music unless inside a building with doors and windows closed
- have an agreement with WSU to utilise campus car parking where shortfalls are identified within the on -site car park.

Subject to these limits, the Department is satisfied that community use would not result in significant impacts beyond those considered in other sections of this report, including operational traffic, parking and operational noise.

Farm management

As the proposal includes the maintenance and upkeep of agricultural/animal plots and livestock, in response to the EIS, Council requested that a Farm Management Plan be prepared to consider the operational components of these activities.

The Applicant's RtS confirmed that a Farm Management Plan could be prepared in accordance with the Department's best practice guidelines titled Intensive Livestock Development 2019. The Applicant's RtS argued that relevant details to be covered in the plan would only become apparent once the school becomes operational and that a final plan can be prepared and finalised within 12 months of commencement of operation.

Council provided no further comments to the RtS.

The Department has reviewed Council's comments and the Applicant's arguments in the RtS and considers that sufficient information is present for a preliminary Farm Management Plan to be prepared (in accordance with the best practice guidelines) prior to the commencement of operation.

The Department has recommended conditions for the preliminary plan to be prepared prior to the commencement of operation and for this plan to be subject of further review and consideration during operation and be finalised within 12 months from the commencement of school operation.

Sediment, erosion and dust control

A preliminary Construction Management Plan was included with the EIS and included management initiatives for sediment, erosion and dust control.

Proposed measures would contain sediment within the site and prevent erosion into neighbouring properties and the public domain during construction works. The Department considers that appropriate measures have been proposed to prevent erosion and control dust as part of construction works.

The Department has recommended conditions requiring the preparation of a final detailed Construction Environmental Management Plan prior to the commencement of construction works.

Waste and recycling

The EIS included a Construction Waste Management Plan and an Operational Waste Management Plan.

The Construction Waste Management Plan includes the proposed methods for identification, temporary retention and disposal of hazardous demolition and/or construction waste.

The Operational Waste Management Plan includes expected operational waste volumes and waste management measures to be adopted.

The proposal includes an on-site waste storage and collection area. Waste collection is proposed by a private contractor outside of school core hours

The Department has reviewed the information provided and is satisfied that appropriate arrangements can be made to manage waste so that the proposal would not result in adverse impacts on the local environment, and to maximise opportunities to reuse and recycle materials.

The Department has recommended conditions to ensure that appropriate waste handling and management arrangements are implemented during construction and operation.

(before 8am or after 4pm) approximately once a week.

7 Evaluation

The Department has reviewed the EIS, RtS, SRtS and supplementary information and assessed the merits of the proposal, taking into consideration advice from the Government Agencies, including Council, Penrith City Council and comments in the public submission. Consequently, the Department considers the development is in the public interest and should be approved, subject to conditions.

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

The surrounding road network and local streets could accommodate construction and operational traffic and parking demands generated by the proposal. The proposed built form is appropriate in the context of the site and would make a positive contribution to the locality. The proposed development would not negatively impact on the biodiversity values of the locality, subject to implementation of recommended conditions regarding ecosystem credits and biodiversity management measures.

The Applicant has demonstrated that the risks from flooding would be appropriately addressed through the design of the buildings and implementation a flood emergency management plan prepared in accordance with the Flood Emergency Management Report. The Department has recommended conditions to manage the construction and operational impacts on the surrounding land uses and requires mitigation measures to be implemented.

The development is consistent with the objects of the *Environmental Planning and Assessment Act* 1979 and with the State's strategic objectives to improve education results through the provision of a new agricultural/STEM education facility that services local and state-wide demands.

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

- provision of new educational facilities to meet the needs of the existing school population as
 well as future increases in student enrolments to cater for population growth and demands for
 agricultural/STEM education
- the provision of new educational facilities in an accessible area for visitors and students
- investment of \$44.12 million and would generate and 187 construction and 25 future operational jobs.

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 all of the findings and recommendations in this report as the reasons for making the decision to grant approval to the application
- agrees with the key reasons for approval listed in the notice of decision
- grants consent for the application in respect of Hawkesbury Centre of Excellence (SSD-15001460), subject to the conditions
- **signs** the attached development consent.

Prepared by:

Recommended by:

Navdeep Shergill

Senior Planning Officer

School Infrastructure Assessments

Tahlia Alexander

T. Alexander.

A/Team Leader

School Infrastructure Assessments

9 Determination

The recommendation is **Adopted** by:

14 March 2022

Aditi Coomar

Acting Director

Social and Infrastructure Assessments

Appendices

Appendix A – List of referenced documents

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

- 1. Environmental Impact Statement
 - https://www.planningportal.nsw.gov.au/major-projects/project/10921
- 2. Submissions
 - https://www.planningportal.nsw.gov.au/major-projects/project/10921
- 3. Applicant's Response to Submissions
 - https://www.planningportal.nsw.gov.au/major-projects/project/10921
- 4. Applicant's Supplementary Response to Submissions
 - https://www.planningportal.nsw.gov.au/major-projects/project/10921

Appendix B – Statutory Considerations

ENVIRONMENTAL PLANNING INSTRUMENTS (EPIS)

To satisfy the requirements of section 4.15(a)(i) of the *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 (Infrastructure SEPP)
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities)
 2017 (Education SEPP)
- State Environmental Planning Policy No. 55 Remediation of Land (SEPP 55)
- State Environmental Planning Policy No. 64 Advertising Structures and Signage (SEPP 64)
- Draft State Environmental Planning Policy (Remediation of Land) (Draft Remediation SEPP)
- Draft State Environmental Planning Policy (Environment) (Draft Environment SEPP)
- Draft State Environmental Planning Policy (SEPP) for Strategic Conservation Planning (Draft SCP SEPP)
- Hawkesbury Local Environmental Plan (HLEP) 2012.

COMPLIANCE WITH CONTROLS

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

The aims of this SEPP are to identify State significant development (SSD) and State significant infrastructure and confer the necessary functions to joint regional planning panels to determine development applications.

An assessment of the development 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 proposed development is	Yes
The aims of this Policy are as follows:	identified as SSD.	
(a) to identify development that is State significant development		
8 Declaration of State significant development: section 4.36	The proposed development is permissible with development	Yes
(1) Development is declared to be State	consent.	
significant development for the purposes of the Act if:	The proposal is for the purpose of a new school (with ancillary short-	
the development on the land concerned is, by the operation of an	term accommodation), under clause 15(1) of Schedule 1 of the	

Releva	ant Sections	Consideration and Comments	Complies
	environmental planning instrument, not permissible without development consent under Part 4 of the Act, and	SRD SEPP, as was in force immediately prior to the lodgement of the application.	
b)	the development is specified in Schedule 1 or 2.		

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 particular types of infrastructure development, and providing for consultation with relevant Government Agencies about certain development during the assessment process.

Educational establishments are no longer covered under the traffic generating development provisions of the Infrastructure SEPP as they are considered under the Education SEPP. However, the application was referred to Transport for NSW (TfNSW) for review and comment.

The site is located within the vicinity of an electricity transmission or distribution network. In accordance with Clauses 44 and 45 of the Infrastructure SEPP, the application was referred to Endeavour Energy. Comments were received and no objections were raised.

The Department is satisfied that the proposed development meets the requirements of the Infrastructure SEPP.

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 the "Saving and Transitional Provisions" that apply, the application has been assessed against the relevant provisions of the Education SEPP that were in force at the time the SSD application was made on 15 June 2021.

Clause 42 of the Education SEPP states that development consent may be granted for development for the purpose of a school that is State significant development even though the proposal 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 involve addition of 50 or more students to be referred to the Road and Maritime Services. The Application was referred to TfNSW (incorporating Road and Maritime Services) in accordance with this clause (**Section 5**).

Clause 35(6)(a) requires that the design quality of the proposal should evaluated in accordance with the design quality principles set out in Schedule 4. An assessment of the proposal 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 site planning provides good aspect for the learning areas and for maximising light to play areas. As revised by the Response to Submissions (RtS), the built form has been designed to fit into the surrounding context. Existing and proposed landscaping and agricultural uses surrounding the buildings, coupled with generous building setbacks, would soften the appearance of the buildings. The proposed new buildings would have acceptable impacts on the streetscape, Western Sydney University (WSU) campus or on adjoining properties (Section 6.2).
Principle 2 - Sustainable, efficient and durable	The proposal includes ecologically sustainable development measures (Section 4.4.3). The materials chosen are durable and require low maintenance.
	Bicycle parking is provided within the site and the preliminary School Transport Plan encourages sustainable travel modes.
Principle 3 - Accessible and inclusive	The proposal has been designed to be accessible and inclusive, accessible paths of travel from the site boundaries up to and around the school buildings.
	The proposal incorporates wayfinding signage identifying key areas within the school assisting visitors to navigate the site.
	The accessible location of the dining/conference hall is proposed to be used for school related and community activities after school and during the weekends. Community use would be subject to further consultation with Council.
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. The proposal identifies the pedestrian entrances into the school to allow the management of visitors to the site.
Principle 5 - Amenity	As revised by the RtS, the proposal provides a variety of internal and external learning places for both formal and informal educational opportunities.
	The design of buildings and orientation of building envelopes maximises natural light and ventilation to the indoor areas of the school, while the landscaping and covered outdoor areas provide ample shaded areas for students and staff use.
Principle 6 - Whole of life, flexible, adaptable	The proposal allows for long term flexibility through the provision of flexible formal and informal learning areas to adapt to future learning requirements.

Design Principles	Response
Principle 7 - Aesthetics	Subject to conditions, the proposal would achieve a high standard architectural design and would be compatible with the character of the area. The proposed new entrance to Vines Drive would provide a sense of arrival and unique character to the school.

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. As detailed at **Section 6.5**, the Department is satisfied that the Applicant has adequately demonstrated that the site is suitable, subject to remediation, for the ongoing use as an educational establishment as required by SEPP 55.

The Department has recommended a condition relating to preparing an unexpected finds protocol to ensure measures are in place should any unanticipated contamination be found during construction works and for works to be undertaken in accordance with the Remediation Action Plan.

State Environmental Planning Policy No. 64 - Advertising and Signage

SEPP 64 applies to all signage that under an EPI can be displayed with or without development consent and is visible from any public place or public reserve.

The proposal includes the installation of the following signage (Figure and Figure):

- a school identification sign 1.53m (w) x 4.37m (h) and totem wayfinding sign (0.7m (w) x 1.75m (h) on Vines Drive
- a school identification sign 1.53m (w) x 4.37m (h) and totem wayfinding sign (0.7m (w) x 1.75m (h) at the Maintenance Lane car park entry.

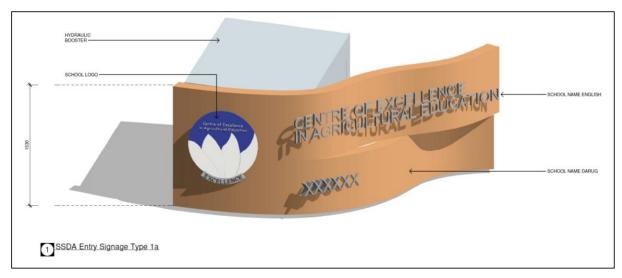


Figure B1 | School identification sign (Source: Applicant's RtS 2021)

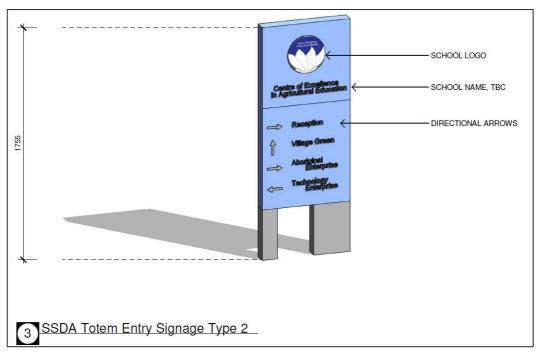


Figure B2 | Totem wayfinding signage (Source: Applicant's RtS 2021)

The Environmental Impact Statement (EIS) included an assessment of the proposed sign against the provisions of Schedule 1 of SEPP 64. The Department's assessments of the proposed sign against Schedule 1 of SEPP 64 is provided in **Table B3**.

Table B3 | SEPP 64 compliance table

Assessment Criteria	Comments	Compliance
1 Character of the area		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located? Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	The proposed signage would be compatible with the character of the streetscape. The signage is consistent in style, size and location to existing signs located on the WSU campus.	Yes
2 Special areas		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposed signage would not detract from the visual amenity of the surrounding area. The sign is sympathetic to the streetscape and surrounds.	Yes
3 Views and vistas		

Assessment Criteria	Comments	Compliance
Does the proposal obscure or compromise important views? Does the proposal dominate the skyline and reduce the quality of vistas?	The proposed signage would not impact on view, vistas, the skyline or viewing rights.	Yes
Does the proposal respect the viewing rights of other advertisers?		
4 Streetscape, setting or landscape		
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The proposed signage is in proportion to the adjoining streetscape and the school identification signage would complement the new main entrance.	Yes
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposed scale and design of the signage is appropriate for the streetscape and setting within which it is proposed.	Yes
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	The signage is simple in design and would not result in visual clutter.	N/A
Does the proposal screen unsightliness?	Not applicable.	N/A
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The signage would sit well below the height of proposed and adjoining buildings.	Yes
Does the proposal require ongoing vegetation management?	No vegetation management is required.	Yes
5 Site and building		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The signage is of appropriate scale and proportion and is considered relatively understated in the context of the site.	Yes
Does the proposal respect important features of the site or building, or both?	The signage is appropriately located throughout the site and would not impact on any other important features of the site.	Yes

Assessment Criteria	Comments	Compliance	
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The purpose of the signage is to denote the main entrance of the school and provide wayfinding and would achieve this purpose.	Yes	
6 Associated devices and logos with advertisements and advertising structures			
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	Safety devices are not necessary for the proposed design of the signage.	N/A	
7 Illumination			
Would illumination result in unacceptable glare?	Illumination of the signage is not proposed.	N/A	
Would illumination affect safety for pedestrians, vehicles or aircraft?			
Would illumination detract from the amenity of any residence or other form of accommodation?			
Can the intensity of the illumination be adjusted, if necessary?			
Is the illumination subject to a curfew?			
8 Safety			
Would the proposal reduce safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The signage would not reduce any sightlines for pedestrians or from vehicles.	Yes	
Would the proposal reduce safety for any public road?			

Draft State Environmental Planning Policy (Remediation of Land))

The Draft Remediation SEPP would 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 require all remediation work carried out without development consent to be reviewed and certified by a certified contaminated land consultant. Remediation work it to be categorised based on the scale, risk and complexity of the work. An Environmental Management Plan, relating to post-remediation management of sites, including the ongoing operation, maintenance and management of on-site remediation measures (such as a containment cell) is 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)

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. Once adopted, the Draft Environment SEPP would replace seven existing SEPPs. The proposed SEPP would 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 would 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.

Draft State Environmental Planning Policy for Strategic Conservation Planning (Draft SCP SEPP)

The Draft SCP SEPP incorporates the Cumberland Plain Conservation Plan for Western Sydney to help meet the future needs of the community, while protecting threatened plants and animals in the long term. Once adopted, the Cumberland Plain Conservation Plan would be one of the largest strategic conservation plans to be undertaken in Australia and the first strategic biodiversity certification to be undertaken under the *Biodiversity Conservation Act 2016*.

The Explanation of Intended Effects proposed to improve ecological resilience and function, and offset biodiversity impacts from housing and infrastructure development and take a landscape-scale approach to conservation and assessment.

The Department is satisfied that the proposal is generally consistent with the objectives of the Draft SCP SEPP and would be in accordance with the Explanation of Intended Effects.

Hawkesbury Local Environmental Plan 2012 (HLEP)

The HLEP aims to encourage the development of economic, agricultural, housing, arts and culture, tourism and community services to meet the needs of the existing and future residents of the Hawkesbury local government area. The HLEP also aims to conserve and protect natural resources.

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the HLEP and those matters raised by Council in its assessment of the development (see **Section 5**). The Department concludes the development is consistent with the relevant provisions of the HLEP. Consideration of the relevant clauses of the HLEP is provided in **Table B4**.

Table B4 | Consideration of the HLEP

HLEP	Department Comment/Assessment	
Land Use Table – Zone SP1 Special Activities	Educational establishments including ancillary development are permissible with consent in the SP1 Special Activities zone (Education, Agriculture and Research Station) zone (Section 4.2).	

The proposal is considered to meet the objectives of the zone as it provides educational infrastructure to meet the needs of the community.

Clause 4.3 Height of Buildings (HOB)

Clause 4.4 Floor Space Ratio (FSR)

The site is not subject to HOB or FSR development standards. Despite this, the proposed building heights are consistent with the objectives of building height development standard in that the site planning, bulk and scale is commensurate with the development of a school and facilities required to accommodate a growing school population.

The proposed bulk and scale of the buildings would not detract from the character of the streetscape or result in unreasonable amenity impacts on surrounding properties.

Clause 5.10 Heritage conservation

An Aboriginal Cultural Heritage Assessment Report (ACHAR) was included in the EIS which identified an absence of Aboriginal objects and/or deposits or features of cultural and archaeological significance on the site.

The WSU campus (Lot 2 DP 1051798) contains two heritage items made up of four buildings. The site itself does not contain heritage items and is not mapped as a heritage conservation area. A Historical Archaeological Assessment was included in the EIS indicating that the site was used for grazing and agricultural purposes and that buildings were not constructed.

The assessment confirmed that the site does not contain any significant historical archaeological features or relics (**Section 6.5**).

Clause 5.21 Flood planning

The Department has assessed the proposal against the matters for consideration contained in clause 5.21. Subject to conditions, the proposed development:

- would not adversely affect flood behaviour on the site or neighbouring properties
- would not adversely affect the save and efficient evacuation of occupants on site, the WSU campus or the Hawkesbury Nepean region
- would not adversely affect the environment through increase stormwater runoff or flow rates
- included a Flood Impact Assessment that identified appropriate mitigation measures to manage flood risks on site and to the surrounds.

The Department has recommended conditions of consent to address flood planning including the preparation of a flood emergency management plan, mitigation measures and for finished floor levels to be above the freeboard (**Section 6.4**).

Clause 6.1 Acid sulfate soils

The site has been identified as wholly within an acid sulfate soils Class 5 zone. The site is located in excess of 500m from the nearest Class 1, 2, 3 or 4 zone and is not likely to lower the water table. Therefore, the proposal complies with clause 6.1.

Clause 6.2 Earthworks

The Department has assessed the proposal against the matters for consideration contained in clause 6.2. Subject to conditions, the proposed development would not detrimentally impact on:

- drainage patterns or soil stability in the locality of the development
- amenity and redevelopment opportunities of adjoining properties
- existing significant trees that have been identified for retention on site.

The Department has recommended conditions of consent to address the management of soil, stormwater and unexpected finds during construction.

Clause 6.3 Terrestrial Biodiversity

A Biodiversity Development Assessment Report (BDAR) was provided as part EIS and further revised by the Response to Submissions (RtS) and Supplementary RtS. As a result of the proposed development, three ecosystem credits are required to be offset in order to mitigate the impacts upon biodiversity. The BDAR also included management and mitigation measures to ensure that no further impacts occur to biodiversity on site

The Department is satisfied that the proposal would be appropriately offset and has recommended conditions requiring the offsets to be retired prior to commencement of construction and for the management and mitigation measures contained in the BDAR to be implemented.

Other policies

In accordance with clause 11 of the SRD SEPP, Development Control Plans do not apply to state significant development. However, the objectives of relevant controls under the Hawkesbury Development Control Plan 2002, where relevant, have been considered.

Appendix C – Recommended In	nstrument of Consent
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