Northern Rivers Flood Recovery – Richmond River High Campus Redevelopment

Waste Management Plan

NSW Department of Education

09 July 2025

→ The Power of Commitment

Project name		Richmond River High Campus Redevelopment					
Document title		Northern Rivers Flood Recovery – Richmond River High Campus Redevelopment | Waste Management Plan					
Project number		12640941					
File name		12640941-REP_Richmond River HS - Waste Management Plan.docx					
Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S4	0	L Yum	A Montgomery		A Montgomery		09/07/25

GHD Pty Ltd | ABN 39 008 488 373
133 Castlereagh Street, Level 15
Sydney, New South Wales 2000, Australia
T +61 2 9239 7100 | **F** +61 2 9239 7199 | **E** sydmail@ghd.com | **ghd.com**

Contents

Table index

Figure index

1. Introduction

This Waste Management Plan has been prepared to support a Review of Environmental Factors (REF) for the rebuild of Richmond River High Campus (the activity) (RRHC). The REF has been prepared to support an approval for the RRHC development under Section 68 of the NSW Reconstruction Authority Act 2022 (RA Act).

The Department of Education (the Department) is the landowner, and proponent pursuant to Section 5.1 of the *Environmental Planning and Assessment Act 1979* (the Act). The activity will be determined by the Reconstruction Authority (RA) under the Ministerial powers in Section 68 of the RA Act.

1.1 Purpose of this report

The purpose of this report is to assess demolition, construction and operational waste management associated with the proposed activity.

1.2 Scope and limitations

This report: has been prepared by GHD for NSW Department of Education and may only be used and relied on by NSW Department of Education for the purpose agreed between GHD and NSW Department of Education as set out in Section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than NSW Department of Education arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer Section 1.3 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by NSW Department of Education and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

Accessibility of documents

If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.

1.3 Assumptions

This report was developed with the following assumptions:

– All information provided in the REF plans (EJE, 2025) are appropriate for the development of this waste management plan.
– The school has been designed to cater for up to 660 Year 7 to 12 students with provision for future upgrade to 980 students. The waste generation estimates are based on 660 students.
– The proposed waste management strategy will be generally consistent with the waste servicing arrangement for the temporary school location and previous Lake Street site.
– The proposed waste management approach for the agricultural areas is based on advice provided by the Department informed by their existing practices.

2. Proposed activity description

The proposed activity comprises the relocation and rebuild of the Richmond River High Campus from its existing temporary location alongside The Rivers Secondary College Lismore High Campus at East Lismore to the proposed site at 163 and 170 Alexandra Parade, North Lismore.

The school will be delivered in one stage. A detailed description of the proposal is as follows:

1. Demolition of existing features including existing buildings, cattle drinking well, cattle sheds, and wire fencing, and removal of trees to accommodate school development.
2. Construction of new 3 storey buildings on the southeastern portion of the site for the proposed public secondary school including:
    a. General and Specialist Learning Spaces and Workshops
    b. Administration and Staff facilities,
    c. Library, Hall and Movement Studio
    d. Construction, Hospitality and Agricultural Learning Facilities
    e. Amenity, Plant, Circulation and Storage areas
    f. Outdoor Learning Spaces and play spaces
3. Landscaping including tree planting.
4. Public domain works comprising:
    a. Access road off Dunoon Road, comprising a separate shared bicycle/pedestrian pathway, and internal access roundabout.
    b. Kiss and ride drop-off and pick up zones.
    c. Bus transport arrangements with a separate bus zone.
5. Outdoor spaces including assembly zones, agricultural spaces, sports fields, games courts, dancing circles, yarning and dancing circles, seating and shade structures.
6. On-site carparking, including accessible spaces and provision for EV charging spaces.

Figure 2.1 below shows the scope of works.

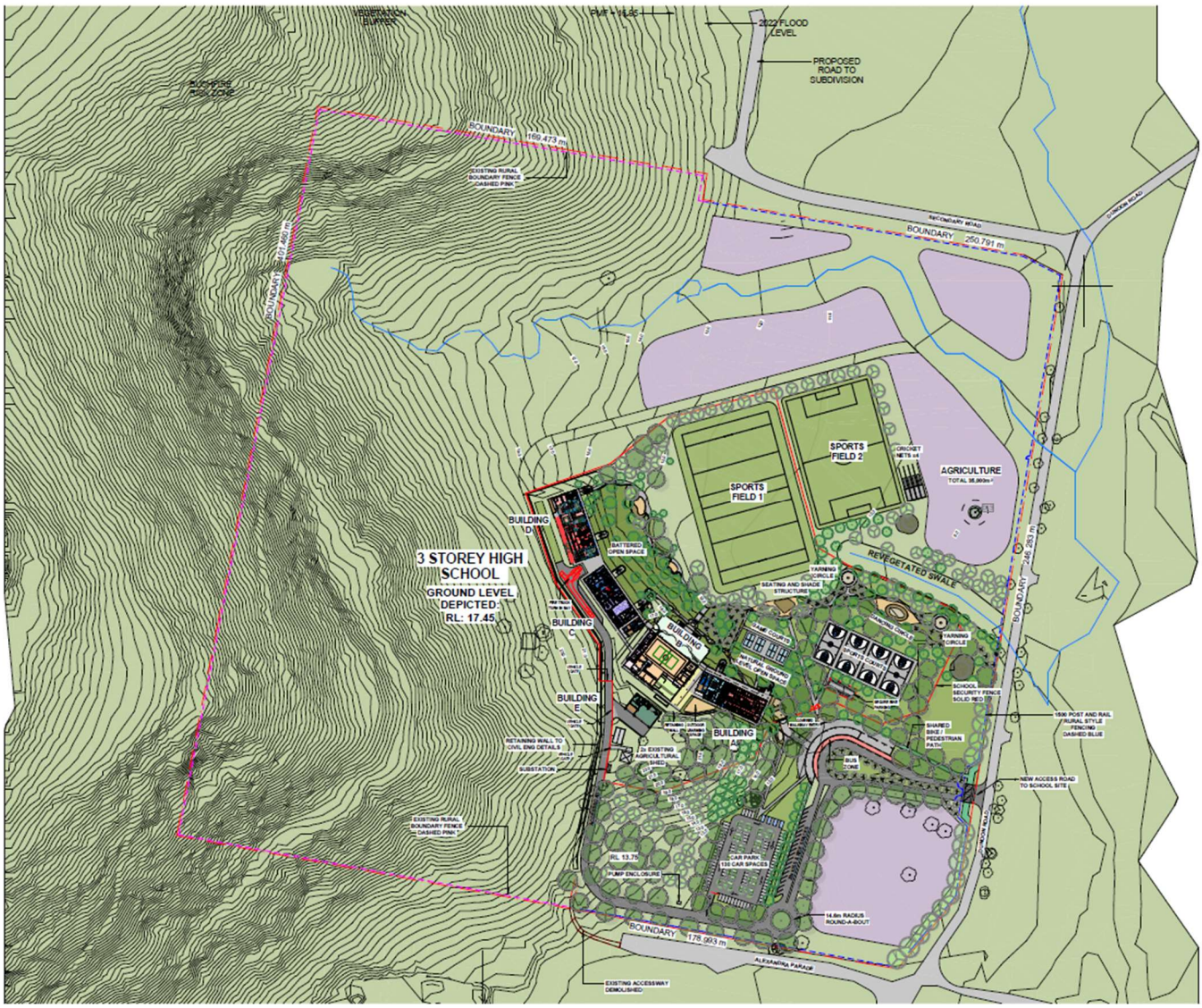

Figure 2.1 Overall Site Context Plan (EJE, 2025)

3. Site description

The site is located at Dunoon Road, North Lismore, also known as 163 and 170 Alexandra Parade, North Lismore. The site comprises of three separate lots, located to the north of Alexandra Parade, with Dunoon Road running parallel to the eastern boundary of the site.

The site is legally described as:

– Lot 1 DP 539012
– Lot 2 DP 539012
– Lot 1 DP 376007

The site area is approximately 33.53 hectares. The proposed activity will be undertaken mainly within the southeastern portion of the site. The site is outlined in Figure 3.1.

Figure 3.1 Aerial image of site (Source: Nearmap)

4. Legislative requirements and guidelines

The NSW Environment Protection Authority (EPA) is the primary regulator of waste and pollution in NSW. The EPA regulates the transport and disposal of hazardous waste, and works with industry to find sustainable solutions to minimise the amount of waste going to landfill. In NSW, acts and regulations govern waste management. Anyone who handles, stores, transports, processes, recycles or disposes of waste must follow these rules to minimise harm to human health and the environment.

The plans, policies and guidelines for waste management that are relevant to the proposed activity include:

- *Environmental Planning and Assessment Act 1979* (EP&A Act)
- *Waste Avoidance and Resource Recovery Act 2001* (WARR Act)
- *Protection of the Environment Operations Act 1997* (POEO Act)
- *Work Health and Safety (WHS) Act 2011.*
- Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation)
- The Work Health and Safety Regulation 2017.
- Lismore City Council Development Control Plan (Lismore City Council, 2023).
- *NSW Waste and Sustainable Materials Strategy 2041 Stage 1: 2021-2027* (DPIE, 2021).
- *NSW Circular Economy Policy Statement: Too Good to Waste* (NSW EPA, 2019).
- *Waste Classification Guidelines: Part 1 Classifying* (NSW EPA, 2014) and Addendum (NSW EPA, 2016).
- *Food and Garden Organics (FOGO) mandates proposal paper* (NSW EPA, 2024)
- *Educational Facilities – Standards and Guidelines EFSG 2.0* (NSW Department of Education - School Infrastructure NSW, 2023).
- *Green Star Buildings Submission Guidelines* (Green Building Council of Australia, 2021).

4.1 Relevant legislation and regulations

4.1.1 Environmental Planning and Assessment Act 1979

The EP&A Act and Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) establish the planning and approvals process in NSW. It provides for the making of Environmental Planning Instruments (EPIs) including Local Environmental Plans (LEPs) and State Environmental Planning Policies (SEPPs), which set out requirements for particular localities and/or particular types of development. The applicable EPIs and the EP&A Regulations determine the relevant planning approval pathway and the associated environmental assessment requirements for proposed development activities. It includes provisions related to the management, storage, and disposal of waste and chemicals to prevent environmental harm.

The department is the landowner, and proponent pursuant to Section 5.1 of the *Environmental Planning and Assessment Act 1979* (the Act)

4.1.2 Waste Avoidance and Resource Recovery Act 2001

The WARR Act is the overarching waste management legislation in NSW. The objectives of the WARR Act include encouraging the most efficient use of resources, reducing environmental harm and ensuring resource management decisions are made against a hierarchy that gives preference to waste avoidance and resource recovery. The main provisions of the WARR Act relate to the preparation of waste strategies and extended producer responsibility schemes.

The WARR Act commits the NSW Government to refreshing and updating its waste strategy every five years – to review and continually improve the state's policies and targets for waste reduction and landfill diversion. The current statutory waste strategy is the NSW Waste and Sustainable Materials Strategy 2041 (DPIE, 2021).

Extended producer responsibility schemes may also be made under the WARR Act. Schemes for waste packaging, mobile phones, agricultural chemicals and containers, polyvinyl chloride, oils and lubricants and tyres are identified schemes in place in NSW.

This plan aligns with the waste management principles as outlined in the WARR Act.

4.1.3 Protection of the Environment Operations Act 1997

The POEO Act is the principle environmental protection legislation in NSW that addresses waste. It sets out the waste classifications, licensing requirements and other regulatory controls that would be applicable to waste generated by the project. It provides a range of controls about waste management requirements including the means of processing, handling, moving, storage and disposal of materials. The POEO Act defines and classifies offences relating to waste (Tier 1-3) and sets penalties, with prescribed penalty notice amounts provided in the POEO (General) Regulations.

The POEO Act also regulates chemical pollution and waste management, and specifies licensing requirements for activities including hazardous waste generation, storage and transport.

The activity is not defined as a scheduled activity in accordance with schedule 1 of the POEO Act and therefore would not require an environmental protection licence (EPL) for construction or ongoing operation.

4.1.4 Protection of the Environment Operations (Waste) Regulation 2014

The Waste Regulation sets out obligations that apply to waste managers, consigners, transporters and receivers dealing with waste generated by the project.

The main provisions of the Regulation relate to the payment of a waste levy by licensed waste receivers, the requirements to track the transportation and disposal of certain types of waste, and specific requirements regarding the transportation and management of asbestos waste.

Schedule 1 of the Regulation lists the types of waste that must be tracked during transport and disposal. Obligations to track these wastes apply to consigners, transporters and receivers. The responsibilities of consigners generally relate to ensuring that transporters and receivers of their waste hold the relevant licences to deal with the waste. Part 7 of the Regulation contains provisions for the transportation and management of asbestos waste, including requirements for its containment during transport, reporting requirements for transporters and receivers of asbestos waste, the manner in which asbestos is disposed, and a prohibition on the reuse or recycling of asbestos waste.

Hazardous waste generated during demolition activities and hazardous chemical waste during operation will be managed in accordance with the requirements of the Waste Regulation.

4.1.5 Work Health and Safety (WHS) Act 2011

The WHS Act 2011 provides a framework to protect the health, safety and welfare of all workers (including employees, contractors, subcontractors, outworkers, apprentices and trainees, work experience students, volunteers, employers who perform work) at work. It also protects the health and safety of all other people including the general public who might be affected by the work. The WHS Act sets out the requirements for the following:

– Incident notification
– Consultation with workers
– Issue resolution
– Inspector powers and functions
– Offences and penalties

This plan considers responsibilities under the *WHS Act 2011* and risks associated with waste collection and transport.

4.1.6 The Work Health and Safety Regulation 2017

The WHS Regulation 2017 provides detailed requirements and duties for work health and safety related to the management of hazardous chemicals in the workplace. This includes requirements for labelling, safety data sheets (SDS), risk assessments, and control measures. It is developed to protect the health, safety, and welfare of all workers and the health and safety of other people who may be affected by the work.

All hazardous materials would be managed in accordance with the WHS Regulation 2017.

4.1.7 Lismore City Council Development Control Plan

Chapter 15 of the Lismore City Council Development Control Plan (DCP) outlines the requirements for submission of a Site Waste Minimisation and Management Plan (SWMMP) for all new Development other than Exempt and Complying Development. The plan is required to outline measures to minimise and manage waste generated during demolition, construction and ongoing use of the proposed activity. While the proposal does not constitute a development application, reference has been made to the requirements of the DCP, as outlined in Table 4.1, to ensure Council's requirements have been considered and addressed.

Table 4.1 SWMMP requirements

Requirement	Where addressed
Volume and type of waste and recyclables to be generated	Section 5
Proposed measures for storage and treatment of waste and recyclables onsite	Section 7
Proposed measures for disposal of residual waste and recyclables	Section 7
Proposed operational procedures for ongoing waste management once the development is complete	Section 7.3
Proposed means of access and manoeuvring for recycling/ waste management bins and vehicles	Section 7.3.4

Sections 5 and 7 below have been prepared based on relevant sections of Chapter 15 of the DCP (Lismore City Council, 2023).

4.2 Relevant guidelines and policy

4.2.1 NSW Waste and Sustainable Materials Strategy 2041 Stage 1: 2021-2027

The NSW Waste and Sustainable Materials Strategy 2041 (DPIE, 2021) has been released for stage 1, covering the period 2021 to 2027. The strategy sets out the long-term vision for managing waste, planning for infrastructure, reducing carbon emissions, creating jobs, and refocusing the way NSW produces, consumes and recycles products and materials.

The NSW Waste and Sustainable Materials Strategy 2041 updates NSW's priorities for waste and resource recovery to reflect the NSW Circular Economy Policy Statement (described below), the Net Zero Plan Stage 1:2020–2030 and the National Waste Policy Action Plan.

The strategy recognises that NSW is committed to making the transition to a circular economy over the next 20 years. Transitioning to a circular economy means that we use our resources efficiently and make them as productive as possible.

The strategy identifies the following key challenges to the management of waste in NSW:

– NSW is running out of space to deal with residual waste
– Recycling is under pressure
– Waste and materials usage significantly contribute to carbon emissions
– Waste can damage our environment

The strategy provides a 10-year target for 80 per cent average recovery rate from all waste streams by 2030 and a target to triple the plastics recycling rate by 2030.

The waste management strategy proposed for construction and operational waste streams aims to minimise waste disposal to landfill through separation and recovery of recyclable materials.

4.2.2 NSW Circular Economy Policy Statement: Too Good to Waste

The *NSW Circular Economy Policy Statement: Too Good to Waste* (NSW EPA, 2019) (the NSW Circular Economy Policy) provides a framework for implementing initiatives throughout the product life cycle, from design, manufacturing, and retail to end-of-life-disposal. These initiatives would promote long-lasting design, maintenance, repair, re-use, sharing, transforming products into services, remanufacturing, and recycling.

The NSW Government released the NSW Circular Economy Policy to help guide decision making during the transition to a circular economy. A circular economy changes the typical cycle of production, use and disposal, to further integrate resource reduction, re-use and recycling. This aims to keep products in use for as long as possible, increasing the economic, social and environmental benefits for NSW.

The NSW Circular Economy Policy forms the basis for the NSW Waste and Sustainable Materials Strategy 2041. The circular economy principles provided in the policy capture the intent of the National Waste Policy principles and go beyond waste management.

The policy statement provides a framework for implementing initiatives throughout a product's life cycle, based on seven key principles:

1. Sustainable management of all resources
2. Valuing resource productivity
3. Design out waste and pollution
4. Maintain the value of products and materials
5. Innovate new solutions for resource efficiency
6. Create new circular economy jobs
7. Foster behaviour change through education and engagement

Potential reuse opportunity for construction waste streams is discussed in section 7.2.2.

4.2.3 North Coast Regional Plan 2041

Objective 6 of the *North Coast Regional Plan 2041* (NSW DPE, 2022) outlines the strategy to create a circular economy. The plan specifically identifies that waste from natural disasters is an emerging issue and is both a challenge and opportunity for waste management.

The construction waste management strategy for the activity considers opportunities for better waste capture and processing in line with the objective 6 of the plan.

4.2.4 Waste Classification Guidelines

The Waste Classification Guidelines (NSW EPA, 2014) expand on the classifications of waste in Schedule 1 of the POEO Act and Schedule 1 of the Waste Regulation. The classification of waste under the POEO Act and supporting guidelines is summarised in Table 4.2.

All wastes generated by the activity will be classified in accordance with the *Waste Classification Guidelines* (NSW EPA, 2014).

Table 4.2 Summary of waste classification in NSW

Waste type	Definition
Restricted solid waste	A substance meeting the specific contaminant concentrations and/or toxicity characteristics defined in the Waste Classification Guidelines (NSW EPA, 2014).
Liquid waste	A substance that shows flowing characteristics at an angle of less than 5 degrees above horizontal, and becomes free flowing at or below 60 degrees Celsius or when it is transported.
Special waste	Clinical and related waste, asbestos waste and waste tyres.
Hazardous waste	Substances that are Class 1 (explosives), Class 2 (gases), Class 5 (oxidising substances and organic peroxides) or Class 8 (corrosives) under the Transport of Dangerous Goods Code. Substances under Division 4.1 (flammable solids), Division 4.2 (substances liable to spontaneous combustion), Division 4.3 (substances which emit flammable gas on contact with water) or Division 6.1 (toxic substances) of the Transport of Dangerous Goods Code. Containers having previously contained Class 1, 3, 4, 5, 6.1 or 8 dangerous goods under the Transport of Dangerous Goods Code. Other materials generated or collected under certain circumstances including coal tar or coal tar pitch waste, lead-acid or nickel-cadmium batteries, lead paint, or otherwise classified as hazardous waste by the NSW Environment Protection Authority and a mixture of any of the above.
General solid waste (non-putrescible)	Numerous wastes other than those listed above. Examples include glass, plastic, concrete, metal, wood, asphalt and non-contaminated excavated material such as soil or gravel.
General solid waste (putrescible)	Numerous wastes other than those listed above. Examples include manure and nightsoil, food waste and domestic waste with putrescible organics.
Trackable waste	Substances listed in Schedule 1 of the Protection of the Environment Operations (Waste) Regulation 2014. Asbestos has separate tracking requirements under Part 7 of the Regulation.

4.2.5 Food and Garden Organics mandates Proposal paper

A food and garden organics (FOGO) mandates proposal paper was developed by the NSW EPA in May 2024. The NSW Government is proposing to mandate source separated FOGO collection services through legislation. The mandates will apply to institutions including educational establishments. The proposed start date for premises with greater than 660 litres and less than 1,900 litres of residual waste bin capacity is 1 July 2029.

The paper sets out the obligations and responsibilities for stakeholders under the proposed mandates. Educational establishments will be required to provide sufficient organics collection bins for the collection of food waste and ensure that organic and non-organic waste is not mixed during transportation. The legislation will set out offences for non-compliance and penalties.

The assessment of waste storage spatial requirements and collection considers the future requirement for source separation of FOGO.

4.2.6 Educational Facilities – Standards and Guidelines EFSG 2.0

The Educational Facilities – Standards and Guidelines (EFSG 2.0) were developed by the NSW Department of Education – School Infrastructure NSW and most recently updated in March 2023. The guidelines set out sustainability priorities including to consume responsibly (operate efficiently, design out waste and uphold high labour and environmental standards in our supply chain). The Department identifies a goal to eliminate resource waste by 2030.

During design development, consideration was given to sustainability such as adequate provision for sustainability initiatives such as waste processing rooms. Project specific construction and operational waste management plans are required to be developed at delivery, commissioning and handover phase.

The following requirements for waste management are considered relevant for the activity:

Table 4.3 EFSG2.0 requirements

Requirement	Where addressed
Development of project specific construction and operational waste management plans	This plan
Waste pad located in close proximity to the carpark for easy access within the Services Zone Outdoor bulk waste pad size to be determined by waste management consultant	Section 7.3.3
Minimise waste through the following strategies: – Reducing waste – Reusing – Increased recycling Use strategies to reduce consumption of resources that have potential to become waste	Section 7.2 and 7.3

4.2.7 Green Star Guidelines

As a regional government project, the activity is required to meet the criteria for a 4 star Green Star rating. Table 4.4 identifies the relevant outcomes and minimum expectations.

Table 4.4 Green Star building requirements

Outcome	Minimum expectation	Where addressed
The builder's construction practices reduce impacts and promote opportunities for improved environmental and social outcomes	– The builder or head contractor has an environmental management system in place to manage its environmental impacts on site. – The builder or head contractor has an environmental management plan to cover the scope of construction activities. – The builder diverts at least 90% of construction and demolition waste from landfill. – The head contractor provides training on the sustainability targets of the building.	Section 7.2
Operational waste and resources can be separated and recovered in a safe and efficient manner	– The building is designed for the collection of separate waste and resource streams – The building provides a dedicated and adequately sized waste and resource storage area. – The building ensures safe and efficient access to waste and resource storage areas for both occupants and waste and resource collection contractors.	Section 7.3

5. Local waste infrastructure

This section outlines waste facilities local to the site and the waste types they permit. Section 7.3.4 lists which of these facilities are proposed for collection of specific waste types generated from the site.

5.1 Lismore Recycling and Recovery Centre

The Lismore Recycling and Recovery Centre is located at 313 Wyrallah Road, East Lismore, approximately 5.3 km south east from the proposed activity. The Centre operates under Environment Protection Licence 13128 (version date 27 November 2023) which permits the following scheduled activities with a maximum total limit of all waste that can be received at the site of 65,000 tonnes per year:

- Waste storage:
  - General solid waste (putrescible) temporarily stored for transportation to other waste facilities
  - Restricted solid waste associated with the Community Recycling Centre
  - Liquid waste associated with the community recycling centre
  - Household hazardous waste resulting from NSW Community Recycling Centres programme
- Composting (5,000 to 50,000 tonnes per year):
  - General solid waste (putrescible)
  - Garden waste
- Waste processing (non-thermal treatment)
  - Concrete, brick and asphalt
  - Certain liquid wastes from Vacuum excavation activities
- Waste tyres
- Resource recovery
  - General solid waste (non-putrescible)

5.2 Wyrallah Road Waste Facility

The Wyrallah Road Waste Facility is located immediately to the west of the Lismore Recycling and Recovery Centre. The facility operates under Environment Protection Licence 5880 (version date 27 March 2024) and accepts up to 40,000 tonnes per annum (in total) of the following waste types:

- General solid waste (non-putrescible)
- General solid waste (putrescible)
- Asbestos waste
- Waste tyres

5.3 Ballina Waste Management Centre

The Ballina Waste Management Centre is located at 167 Southern Cross Drive, Ballina approximately 28 km east of the proposed activity site. The Centre operates under Environment Protection Licence 6350 (version date 11 July 2024) which permits disposal of the following waste types:

- Asbestos waste
- General solid waste (putrescible)
- General solid waste (non-putrescible) Elizabeth Drive Landfill

5.4 Lismore Metal Recyclers

Lismore Metal Recyclers is located at 15 Snow Street Lismore approximately 2.7 kilometre south of the proposed activity. The facility accepts scrap metal including:

– Copper wiring
– Batteries and
– General scrap steel.

5.5 Med-X Healthcare Solutions

Med-X Healthcare Solutions is located at 2/24 Habib Drive, South Lismore approximately 3.3 km south of the proposed activity. The company provides medical and clinical waste disposal services including:

– Collection and disposal of sharps
– Collection and disposal of feminine hygiene and sanitary waste products
– Provision and collection of clinical waste disposal containers

Med-X Pty Ltd is a licenced waste transporter and waste processor.

5.6 Elizabeth Drive Landfill

Elizabeth Drive Landfill is located in Kemps Creek approximately 615 km south of the proposed activity and is the only restricted waste landfill in NSW. The landfill is operated by Cleanaway under Environment Protection Licence 4068 (version date 15 December 2023) and is licenced to accept the following waste types for disposal:

– General solid waste (non-putrescible)
– Asbestos waste
– Waste tyres
– Restricted solid waste

6. Waste generation

6.1 Demolition

The waste generating activities likely to occur at the demolition stage include:

– Removal and clearance of hazardous materials including asbestos
– Demolition and removal of existing buildings and structures on site, which include
  - Farmhouse 1 and carport
  - Farmhouse 2
  - Pool
  - 2 cattle sheds
  - Cattle drinking well
  - Hard surfaces
  - Boundary wire fence
– Removal of 20 trees
– Minimal excess spoil generated from demolition activities.

There are no specific demolition waste estimation factors available for educational facilities in Lismore City Council guidance or policy. In lieu of this, guidance in the Hills Shire Council DCP 2012 Appendix A (Hills Shire Council, 2012) on typical quantities of demolition wastes for a range of building types, broken down by material types, has been adopted.

Additional waste types expected to be generated by the demolition works include:

– General waste, such as packaging and recyclables, from demolition site staff.
– Concrete waste from demolition of hard surfaces
– Trees identified for removal
– Pool water
– Hazardous materials from clearance works

The estimated volume of green waste generated by the removal of trees was estimated based on the Preliminary Tree Assessment (GHD, 2024) using the guidelines published by the UK Government for calculating timber volumes (UK Government, Unknown).

A Hazardous Building Materials Assessment was prepared by GHD (2025), which included intrusive inspection of potential hazardous materials undertaken on 27 August 2024. The inspection results confirm the presence or potential presence of asbestos containing materials (ACM) and asbestos containing debris, lead based paint and synthetic mineral fibres within the existing buildings proposed to be demolished. The findings from the survey have been included in Table 6.1.

Table 6.1 provides details of waste estimates and likely classifications for the demolition phase, based on the floor area of structures to be demolished as identified in the Site Demolition Plan (EJE, 2025) (see Figure 6.1), and estimation factors available in the Hills Shire DCP (Hills Shire Council, 2012).

Table 6.1 Demolition waste streams and estimated volume

Type of waste generated	Source	Estimated quantity	Likely waste classification (NSW EPA 2014)
Concrete	Existing building structures Pavement	60 t	General solid waste (non-putrescible)
Bricks	Existing building structures	25 t	General solid waste (non-putrescible)
Timber/gyprock	Existing building structures	50 t	General solid waste (non-putrescible)

Type of waste generated	Source	Estimated quantity	Likely waste classification (NSW EPA 2014)
Steel	Existing building structures Boundary wire fence	3 t 2100 m	General solid waste (non-putrescible)
Garden waste	Trees to be removed	10 m^3	General solid waste (non-putrescible)
Waste water	Pool water	40 kL	Liquid waste
Asbestos	Low risk asbestos found in electrical box of farmhouse 1 and 2, flat cement product and floor sheeting in Farmhouse 2	533 m^2 5 linear metres moulded cement pipe	Asbestos / Asbestos waste
Lead	Lead paint on cattle sheds wall	60 m^2	Hazardous waste
Synthetic mineral fibre	Thermal insulation in roof space in Farmhouse 1 Thermal insulation in air conditioning unit and hot water system in Farmhouse 2	250 m^2 2 units	General solid waste (non-putrescible)

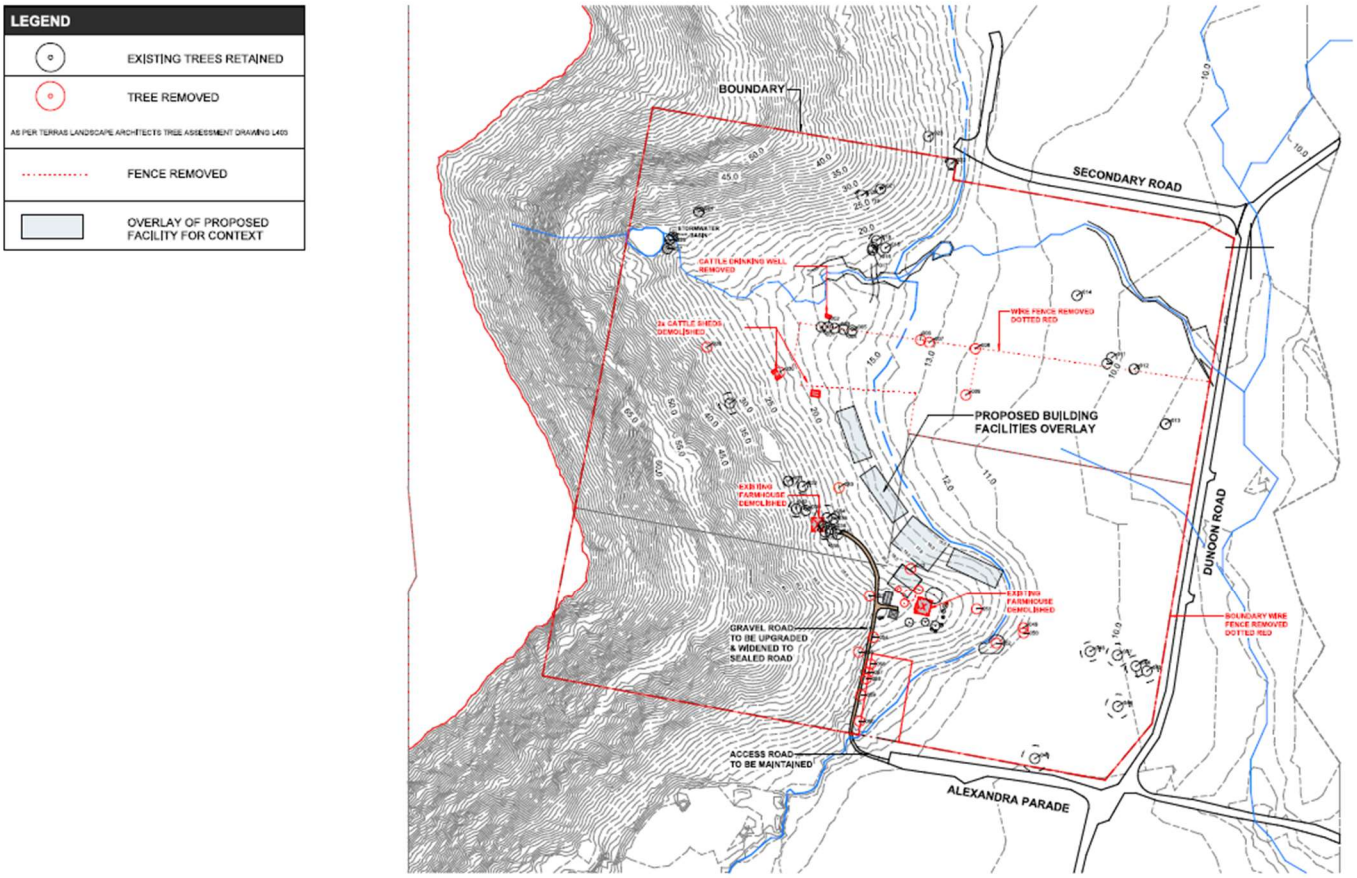

Figure 6.1 Site demolition plan (EJE, 2025;)

6.2 Construction

The construction phase of the proposed activity will include the following key activities:

– Groundworks including bulk earthworks, construction of building footings and stormwater drainage

– Construction of a new 3 storey building and ancillary structures including
  - Agricultural shed with waste room
  - Substation
  - Stormwater basin
– Construction of new carpark, pedestrian and cyclist pathways and roadways
– Landscaping works including replanting of trees
– Construction of sports fields, game courts and agriculture areas
– Installation of fencing

Approximately 11,000 m^3 of soil would be excavated during construction and reused as fill material within the site.

Small quantities of waste would also be generated by construction and demolition staff.

Similar to the assessment of demolition waste generation, the Hills Shire Council DCP guidance (Hills Shire Council, 2012) was used to estimate construction waste generation rates. The office building type waste generation rates were applied to Buildings A, C, D, and E and the factory waste generation rates applied to the Buildings B and F (refer Table 6.2 below).

Table 6.2 Estimation factors for construction wastes (Hills Shire Council, 2012)

Building Type	Timber	Concrete	Bricks	Gyprock	Sand/soil	Metal	Other
Factory (per 1000 m^2)	0.25	2.10	1.65	0.45	4.80	0.60	0.50
Office Block (per 1000 m^2)	5.10	18.8	8.50	8.60	8.80	2.75	5.0

Table 6.5 provides details of the construction waste quantity estimates and likely waste classification based on the floor area provided in the REF plans (EJE, 2025).

Table 6.3 Construction waste streams and estimated volume

Type of waste generated	Source	Estimated quantity (tonnes)	Likely waste classification
Timber	Framework	50 t	General solid waste (non-putrescible)
Concrete	Framework	180 t	General solid waste (non-putrescible)
Bricks	Walls	80 t	General solid waste (non-putrescible)
Gyprock	Framework	80 t	General solid waste (non-putrescible)
Sand/soil	Footings, excess spoil	90 t	General solid waste (non-putrescible)
Metal	Cladding, roof sheeting, wall panels	30 t	General solid waste (non-putrescible)
Other	Food waste, recyclable material, packaging	50 t	General solid waste (non-putrescible)

6.3 Operation

The key sources for waste generation during operation include:

– Up to 660 school students
– Admin and staff hub
– Communal areas including hall and canteen

There are no specific operational waste estimation factors available for educational facilities, offices or childcare in Lismore City Council guidance or policy. The City of Melbourne has published waste estimation factors for commercial spaces similar to those planned to be built on site. The City of Melbourne (2021) reference offers reasonable comparative guidance to estimate operational waste generation for the proposed activity within Lismore City LGA and is considered appropriate for use in this assessment.

The operational waste generation factors adopted for the assessment are e summarised in Table 6.4.

Table 6.4 Estimation factors for operational wastes (City of Melbourne, 2021)

Type of premises	General waste generation	Recycling generation
Education or training (teaching space)	0.5 L per student per week	0.5 L per student per week
Offices	10 L per 100 m^2 of floor area per day	10 L per 100 m^2 of floor area per day
Gym	10 L per 100 m^2 of floor area per day	10 L per 100 m^2 of floor area per day
Takeaway	150 L per 100 m^2 of floor area per day	150 L per 100 m^2 of floor area per day

The proposed activity is generally consistent with the existing school. Therefore, the waste generation rate for the proposed activity is expected to be generally consistent with the existing school which generates up to 4,800 L/ week of general waste and up to 3,700 L/week of mixed recyclable waste.

Waste generating activities within the agricultural area include use of open paddocks for agriculture and maintenance and breeding of livestock including cattle (5-12), steers (up to 8), goats (2), sheep (typically 6) and chickens. The number of livestock and volume of agricultural waste will vary based on the season and teaching programs.

Other waste streams expected to be generated by the activity are summarised in Table 6.5.

Table 6.5 Operational waste streams

Key waste stream	Source	Estimated quantity (litres/week)	Likely waste classification
General waste (food organics, soft plastics)	Canteen, open space, food and textile	1,320 – 4,800	General solid waste (putrescible)
Recyclable material (packaging, paper, cardboard, containers)	Learning spaces, offices, and admin hub	1,320 – 3,700	General solid waste (non-putrescible)
Garden organics	Maintenance of open space, landscaping, sports fields and agriculture areas	Variable depending on agricultural area seasons and teaching program	General solid waste (non-putrescible)
Chemical waste	Hazardous chemical waste from the science hub, wood and metal workshop, art hub, vet – hospitality and construction workshop, agriculture hub (e.g. acids, alkalis, or toxic laboratory chemicals, photographic chemicals, petroleum and degreasing based solvent, oil based paints, paint thinners, glues and adhesives)	Minimal	Hazardous waste
Sanitary waste	Amenities	Minimal	General solid waste (putrescible)
Clinical and related including sharps	First aid room and clinics	Minimal	Special waste
Electronic waste	Learning spaces, admin hub	Minimal	General solid waste (non-putrescible)
Chemical drums	Agricultural products	Variable	Dependent on drum use
Cattle waste	Livestock breeding	Variable	General solid waste (putrescible)
Animal carcases	Livestock breeding	Variable	General solid waste (putrescible)
Chicken waste bedding	Chicken showing and breeding	Variable	General solid waste (putrescible)

7. Waste management

7.1 Waste minimisation and resource recovery

All waste will be managed in accordance with the waste management hierarchy (Figure 7.1). The waste hierarchy prioritises waste avoidance and minimisation and recycling above disposal. Should waste be found to be unsuitable for reuse or recycling, disposal methods would be selected based on the classification of the waste material in accordance with the *Waste Classification Guidelines* (NSW EPA, 2014).

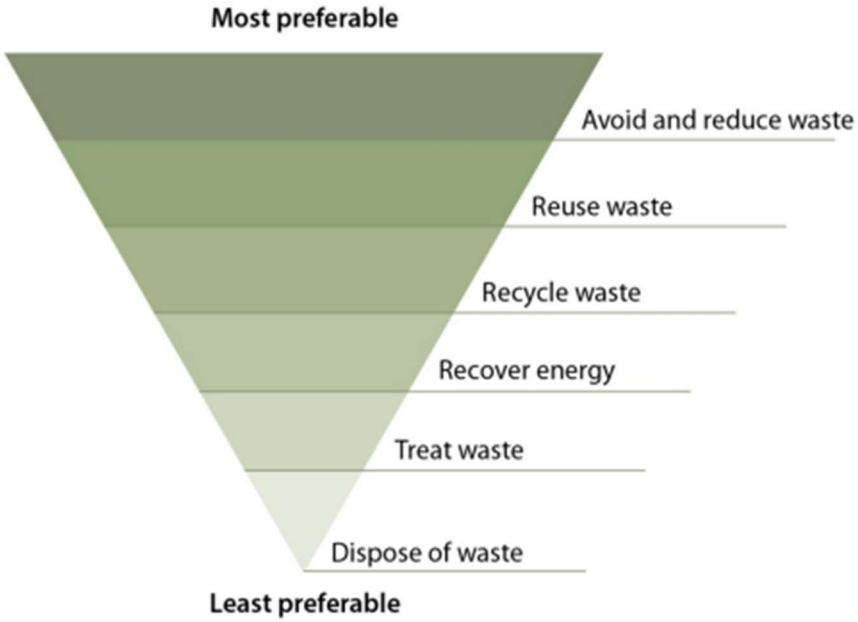

Figure 7.1 Waste management hierarchy (NSW EPA, 2014)

Waste minimisation and resource recovery strategies would be investigated and considered during demolition, construction and operation of the activity.

7.2 Demolition and construction

7.2.1 Potential demolition and construction waste impacts

The potential impacts associated with aspects of waste generation and management during demolition and construction are summarised in Table 7.1.

Table 7.1 Potential impacts associated with demolition and construction waste generation and management

Aspect of waste management	Potential impacts
Generation of waste, including demolition waste and excess construction materials	– Dust from demolition, excavation, handling and movement of waste – Erosion and sedimentation due to runoff from exposed surfaces – Sediment laden runoff entering stormwater collection system or onsite waterways – Noise from plant and equipment movement – Human health risks due to handling of hazardous materials including asbestos and lead paint
Storage and segregation of waste on site	– Odours and dust from stockpiling/storage of wastes – Human health risks due to improper storage of hazardous materials – Sediment laden runoff, which could impact stormwater quality – Waste build up from irregular or disrupted collections

Aspect of waste management	Potential impacts
	– Cross contamination of wastes due to improper segregation and storage – Attracting pests and disease vectors.
Waste transportation	– Dust from loading waste onto vehicles and movement of waste on haul roads – Road traffic noise from waste collection vehicles and movement of construction and demolition waste – Traffic generated by haulage of waste to reuse/disposal facilities – Odours from loading waste onto vehicles and movement of waste collection vehicles to disposal or recycling facilities – Mud tracking on road from waste collection vehicles – Unlawful transport and disposal
Non-classified or incorrectly classified waste transport and disposal	– Regulatory non-compliance – Contamination of recycling and disposal facilities – Contamination of soils, groundwater and surface water – Unlicensed waste contractors transporting waste
Offsite waste recycling and disposal	– insufficient capacity at local waste management facilities – cross contamination of waste materials at the facilities
Unlicensed waste contractors transporting waste	– Regulatory non-compliance – Potential illegal dumping of waste – Potential for disposal at unlawful unlicensed receival sites.

Demolition and construction waste management activities are not expected to have a significant impact on the environment or human health, assuming the mitigation and management measures identified in Section 8 are implemented.

7.2.2 Management approach

The proposed approach to managing construction and demolition waste to facilitate segregation and prevent cross contamination is summarised in Table 7.2.

Table 7.2 Management approach for construction and demolition waste types

Waste type	Management
General demolition and construction waste (concrete, gyprock, asphalt, timber, bricks, scrap metals, etc)	General demolition and construction waste would be classified in accordance with the *Waste Classification Guidelines* (NSW EPA, 2014) and the waste hierarchy. Collected waste would be directed to a waste management facility that is lawfully permitted to accept that type of waste. Where space constraints permit, waste would be segregated and stockpiled on site, with materials such concrete, metals and asphalt separated and sent to a recycling facility. Other recyclable materials would be sent for recycling as a mixed waste stream.
Hazardous waste	Clearance works will be completed prior to commencing demolition of buildings in accordance with the recommendations of the Hazardous Building Materials Assessment (GHD, 2025). Hazardous waste will be classified in accordance with the requirements of the Waste Classification Guidelines (NSW EPA, 2014) prior to transfer offsite to a licenced disposal facility. Asbestos storage, removal, transport and handling would be undertaken by a licensed asbestos removalist in accordance with the Waste Regulation and WHS Regulation 2017.
Garden waste	As far as practicable, cleared vegetation material would be chipped, mulched, and stockpiled for reuse on-site as part of rehabilitation and landscaping works. If unable to be reused on site, the material would be removed off-site for reuse or sent to a suitably licensed facility.

Waste type	Management
Excess spoil	The works will generally adhere to the natural ground profile, where practicable, in order to reduce earthworks and minimise surplus spoil generation. Any excess spoil will be reused on site for construction of laydown areas and for roadworks.
General waste from construction and demolition staff	Labelled and colour coded receptacles would be provided at the construction site offices for general waste from personnel to ensure source separation of recyclable materials and residual landfill waste. These wastes would be collected on a regular basis by authorised and appropriately licensed waste collection contractors for offsite recycling or disposal.
Waste from vehicle/plant equipment maintenance (such as adhesives, lubricants, waste fuels and oils, chemicals, engine coolant, batteries, tyres etc)	Waste from construction vehicle and plant maintenance activities would be collected and stored in designated waste storage areas for collection by an authorised contractor for disposal off site. Any potentially hazardous waste would be stored separately in clearly labelled receptacles and disposed of in accordance with its controlled waste regulations.
Litter	Daily site inspections would be undertaken to identify and collect litter and investigate the cause to reduce the potential for the issue to occur in the future. Litter prevention strategies would include: – Ensuring sufficient number of bins and waste receptacles are available to avoid littering outside bins. – Covering all bins to ensure that wastes cannot be blown out during windy conditions. This would also apply to relevant stocks of materials to be used during demolition and construction. Litter management personnel would be nominated, undertaking regular inspections of sites and surrounds and litter collection.
Dust	Dust from waste storage, transport and collection would be controlled within the subject site by applying management measures such as using dust suppression sprays to minimise the impacts on the environment.
Pool water	The pool water would be diluted/dechlorinated prior to use onsite for irrigation and dust suppression.

7.2.3 Waste handling, storage and collection

Waste storage and laydown areas will be established along the access road into the site as shown in Figure 7.2. The indicative area in the southern portion of the site is located near to the Farmhouses and provides sufficient space for collection vehicles, and allows vehicles to enter and exit the site in a forward direction during the demolition phase. Additional potential waste storage areas have been identified in the central and northern portion of the site near Secondary Road that would provide a storage area during construction outside of the building footprint. The location and extent of waste storage areas would be refined by the Contractor during detailed design.

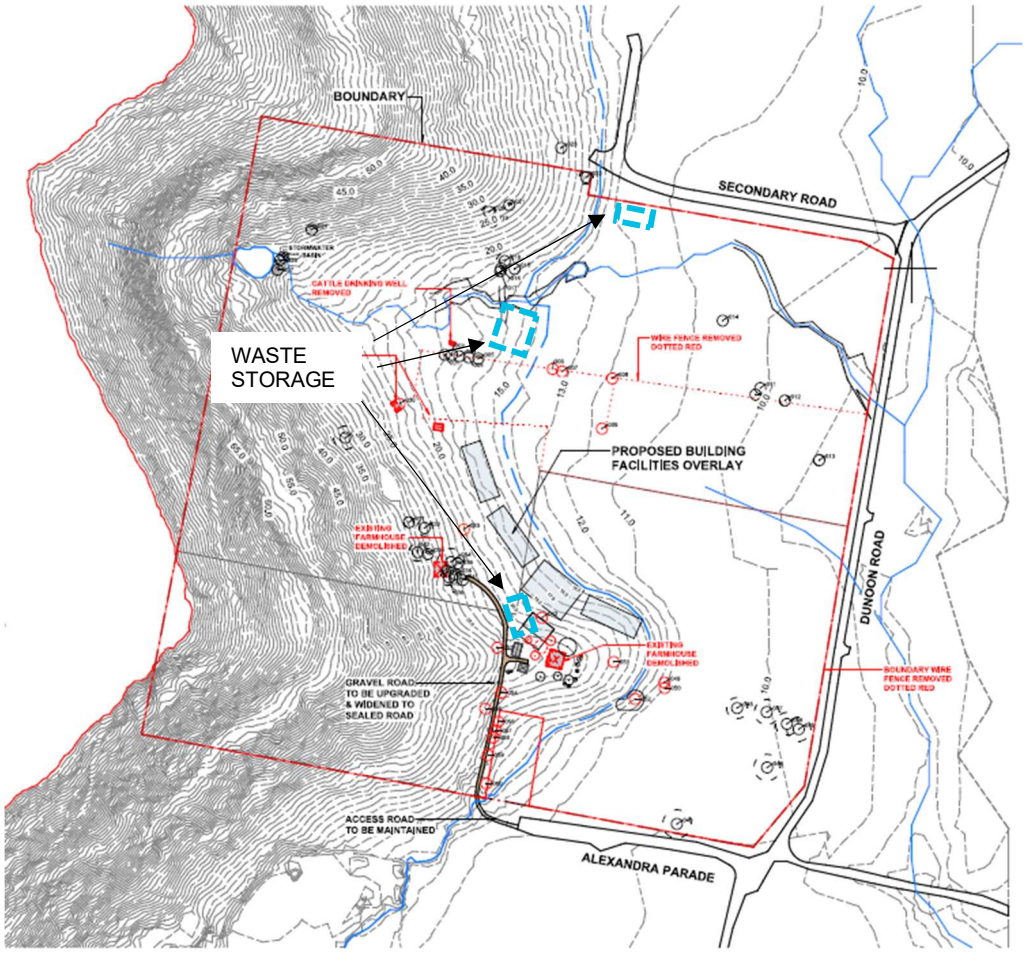

Figure 7.2 Potential waste storage areas (indicative)

The recommended storage and management approach for each waste type identified in Section 6.1 and 6.2 is summarised in Table 7.3. The destination for each waste type will be confirmed during detailed construction and demolition planning. General construction and demolition waste will be stored in skip bins or stockpiled prior to removal off site.

Table 7.3 Construction and demolition waste storage and destination

Waste	Management	Storage	Potential destinations
Concrete	Recycle	Skip bin or stockpile	Lismore Recycling and Recovery Centre
Bricks	Recycle	Skip bin or stockpile	Lismore Recycling and Recovery Centre
Timber/gyprock	Recycle	Skip bin or stockpile	Lismore Recycling and Recovery Centre
Metal	Recycle	Temporary stockpile	Lismore Recycling and Recovery Centre / Lismore Metal Recyclers
Garden waste	Recycle	Stockpile	Lismore Recycling and Recovery Centre
Asbestos waste	Dispose	Stored in a sealed container	Wyrallah Road Waste Facility / Ballina Waste Management Centre
Lead paint	Dispose	Stored in a sealed container	Elizabeth Drive Landfill

Waste	Management	Storage	Potential destinations
Synthetic mineral fibre	Dispose	Stored in a sealed container	Wyrallah Road Waste Facility / Ballina Waste Management Centre
General waste	Dispose	240 L mobile waste bins located at the site office	Wyrallah Road Waste Facility / Ballina Waste Management Centre
Excess spoil, sand, soil	Reuse	Stockpile	On site
Pool water	Reuse	In situ	On site

7.2.4 Waste planning

Waste planning activities will include:

– Implementing weather protection for stored materials on site, to maximise their fitness for use
– Encouraging bulk handling and use of reusable and returnable containers
– Careful ordering of construction materials to match the bill of quantities to minimise surplus construction material waste
– At the time of tendering, advise contractors and sub-contractors and suppliers of the requirements to minimise waste on site
– Include provision in the tender documentation for the client to monitor the use of waste and recycling bins on site.

7.2.5 Onsite controls

The onsite controls for appropriate management of construction and demolition wastes will include:

– Segregating wastes generated on site, using different skip bins for recycling and waste, with separate bins or stockpiles for different recyclable materials
– Discuss the site's waste management and recycling policies and practices with employees and subcontractors during site inductions and toolbox talks
– Ensuring all waste disposal bins are clearly marked
– Waste tracking, record keeping and reporting requirements including keeping records of quantities of waste and recycled materials disposed of, and the destinations of these materials
– Ensuring that wastes are only disposed to licenced facilities lawfully able to accept the waste type.

7.2.6 Reporting

A waste management register will be maintained which identifies all waste generated on-site and subsequent management during demolition and construction. The register will document the following:

– The type and quantity of waste (including its classification)
– Whether the waste is to be reused, recycled (on or off-site) or sent for disposal
– Contact details of waste collection contractor
– Waste carrier vehicle registration
– Tracking information (where applicable)
– Upon removal from site: date and time of removal, transport contractor information including waste carrier vehicle registration and final destination address

All relevant documentation such as dockets, receipts and waste classification records will be retained with the waste management register.

7.3 Operation

7.3.1 Potential operational impacts

The potential impacts associated with aspects of waste generation and management during operation are summarised in Table 7.4. All impacts can be appropriately managed through design development and implementation of appropriate waste management practices during operation.

Table 7.4 Potential impacts associated with operation waste generation and management

Aspect of waste management	Potential impacts
Storage and segregation of waste	– Odours from storage of wastes including composting management areas. – Waste build up from irregular or disrupted collections. – Cross contamination of waste due to improper segregation and storage. – Attracting pests and disease vectors.
Waste transportation	– Road traffic noise from waste collection vehicles. – Traffic generated by haulage of waste to reuse/disposal facilities. – Odours from loading waste onto vehicles and movement of waste collection vehicles to disposal or recycling facilities. – Unlawful transport and disposal. – Incorrect classification of waste materials.
Non-classified or incorrectly classified waste transport and disposal	– Regulatory non-compliance. – Contamination of receiving facility. – Contamination of soils, groundwater and/or surface water. – Unlicensed waste contractors transporting waste.
Unlicensed waste contractors transporting waste	– Regulatory non-compliance. – Potential illegal dumping of waste. – Potential for disposal at unlawful unlicensed receival sites.

7.3.2 Management approach

The proposed approach to managing operational waste is provided in Table 7.5.

Table 7.5 Management approach for operational waste

Waste type	Management
General waste (food organics, soft plastics)	Small garbage and mixed recycling receptacles will be placed in all learning spaces, admin hub, library hub, and workshops.
Recyclable material (packaging, paper, cardboard, containers)	Small garbage and comingled recycling receptacles will be placed in common areas such as playing areas (including outdoor open space and game courts), hall/gym, canteen/kitchenettes, agriculture shed and staff hub to minimise the likelihood of littering and to encourage recycling of recyclable containers. Appropriate signage will be displayed on or near each bin (see Section 7.3.6). All small garbage receptacles will be plastic-lined and garbage will be bagged. Bagging of recyclables will not be permitted. Large cardboard pieces will be flattened. On completion of each day or as required (outside of school operating hours), contract cleaners will transport the waste to the waste/bin room. At the waste/bin room, segregated waste and recyclables will be decanted/placed into appropriately labelled/marked mobile garbage bins for temporary storage prior to collection by authorised waste collection contractor(s).
Food and garden organics	Initially, garden organic waste generated from maintenance of landscaped areas will be removed by the designated maintenance contractor. Small quantities may be disposed of initially via the general garbage stream or composted on site.

Waste type	Management
	Source separation of food organics is not proposed until the NSW Government FOGO mandate comes into effect for educational institutions/establishments. Changes to waste management will be investigated and implemented to meet the mandated obligations and responsibilities.
Chemical waste	Hazardous chemical waste will be managed and disposed in accordance with the Waste Regulation. A suitable chemical storage area will be provided within the science hub chemical store room that is effectively bunded/provides spill retention to allow for segregation of chemical wastes. A school wide hazardous chemical collection by a licenced waste contractor will be arranged at least once per year or as needed.
Sanitary waste	Sanitary bins will be placed in relevant toilet amenities. A licensed contractor will be appointed to remove and disposal of sanitary waste.
Clinical and related including sharps	Clinical waste will be managed in accordance with the requirements of Part 11 of the Waste Regulation. Sharps including scissors, tweezers and needles that have become contaminated with blood or body substances will be disposed of in a rigid-walled secure sharps container by the person utilising them. All sharps containers will meet the Australian and New Zealand Standards *AS 4031:1992* and *AS/NZS 4261:1994*.
Electronic waste	Electrical and electronic waste including batteries and computers must not be placed in the standard garbage and recycling bins. Electrical and electronic waste will be collected by an appropriately licensed electronic waste recycling company, to be arranged at least once per year or as needed.
Chemical drums	Chemical drums will be reused on site, or temporarily stored in the agricultural shed prior to transfer off site to the Lismore Recycling and Recovery Centre. The drums will be triple rinsed with lids removed prior to removal off site.
Cattle waste	Cattle waste would be collected and transferred to management areas for composting on site by wheel barrow. Each composting area would be approximately 3 m^2 with two decomposition areas with 1 m high timber walls. New composting management areas will be introduced at appropriate locations as required. The composted material will be applied to horticultural systems. Soil testing will be undertaken to confirm waste compost application rates.
Animal carcases	Animal carcases are buried on site with adequate clearance from onsite waterways.
Chicken waste bedding	Chicken waste bedding will be collected and transferred off site for use as garden fertiliser.

7.3.3 Storage

Waste will be stored in the waste / bin room located within the agricultural shed as shown in Figure 7.3. Key design features of the storage area are summarised as follows:

– Area of 40 m^2
– Enclosed ventilated shed with roller door access
– Sealed and graded floor to facilitate clean out

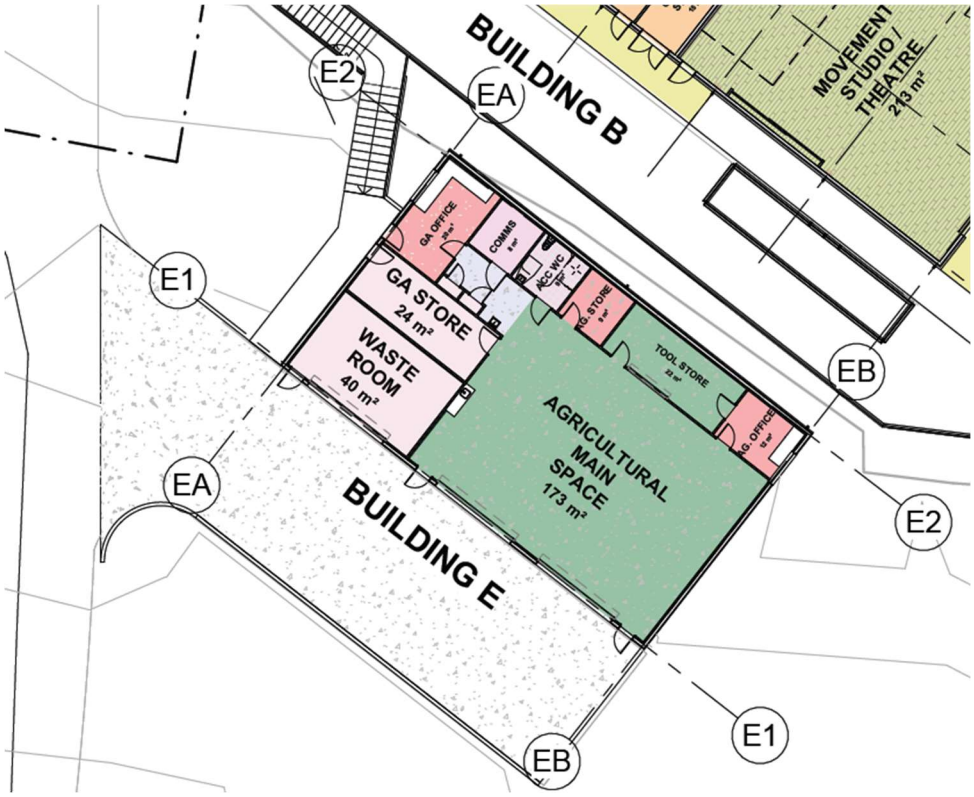

Figure 7.3 Location of Waste Room (EJE Architecture, 2025)

A bin configuration that is consistent with the existing waste storage capacity is proposed as identified in Table 7.6.

A waste storage assessment was conducted to confirm that the storage area is sufficient for the proposed number of bins. The number and size of bins will be confirmed during detailed design in consultation with the waste contractor. A larger number of smaller bins of equivalent storage capacity may be used. Alternatively, there is also sufficient area allowance for larger 1.5 m^3 or 1,100 L bins per the current arrangement.

Table 7.6 provides the results of the waste storage assessment. There is an additional area of 9.7 m^2 within the waste room that may be used for temporary storage of bulky waste or other waste that does not require frequent collection (such as electronic waste or chemical drums).

Table 7.6 Waste storage assessment – general waste and recycling bins and manoeuvring (Current)

Bin	Number and size	Collection frequency	Area (including manoeuvring)
General waste	7 x 660 L mobile garbage bins	Once per week	16.3 m^2
Mixed recycling	6 x 660 L mobile garbage bins	One to two times per fortnight	14.0 m^2
Total area required			**30.3 m^2**
Total area provided			**40 m^2**

As outlined in Section 4.2.5, a FOGO mandate is anticipated to be introduced in July 2029 that will require source separation, storage and collection of FOGO. While the overall waste generation rates are not expected to increase, the number and configuration of bins would need to be revised to accommodate FOGO collection. Table 7.7 shows that there is sufficient storage area for a potential revised bin configuration that includes separation of FOGO.

Table 7.7 Waste storage assessment – general waste and recycling bins and manoeuvring (including FOGO)

Bin	Number and size	Collection frequency	Area (including manoeuvring)
General waste	4 x 660 L mobile garbage bins	Once per week	9.3 m^2
Mixed recycling	6 x 660 L mobile garbage bins	One to two times per fortnight	14.0 m^2
FOGO	8 x 240 L mobile garbage bins	Once per week	6.8 m^2
Total area required			**30.1 m^2**
Total area provided			**40 m^2**

7.3.4 Collection

The collection frequency and potential destination for the operational waste streams are identified in Table 7.8. The collection frequency will be adapted based on any changes to waste volumes or types as identified by ongoing monitoring or changes to collected waste streams such as the introduction of FOGO collection.

Table 7.8 Proposed collection frequency

Waste type	Collection frequency	Potential destinations
General waste (food organics, soft plastics)	Weekly (Friday)	Wyrallah Road Waste Facility / Ballina Waste Management Centre
Recyclable material (packaging, paper, cardboard, containers)	Weekly (Friday)	Lismore Recycling and Recovery Centre
Garden organics	Per maintenance schedule	Lismore Recycling and Recovery Centre
Chemical waste	Yearly (minimum) or more frequently as required	Summerland Environmental
Sanitary waste	Four weekly (minimum) or more frequently as required	Med-X Healthcare Solutions /Wyrallah Road Waste Facility / Ballina Waste Management Centre
Clinical and related including sharps	As required	Med-X Healthcare Solutions
Electronic waste	As required	Lismore Recycling and Recovery Centre
Chemical drums	As required	Lismore Recycling and Recovery Centre
Chicken waste bedding	As required	Gardens, horticulture

Waste collection vehicles will enter the site in a forward direction from the new site access on Dunoon Road. The bins will be manually removed from the waste room for collection within the loading zone. If larger bins are proposed, a bin towing device such as a bin tug would likely be needed to move the bins for work health and safety reasons. The vehicles would reverse out of the waste collection area and exit the site in a forward direction onto Dunoon Road. The swept path analysis is provided in Figure 7.4 and Figure 7.5.

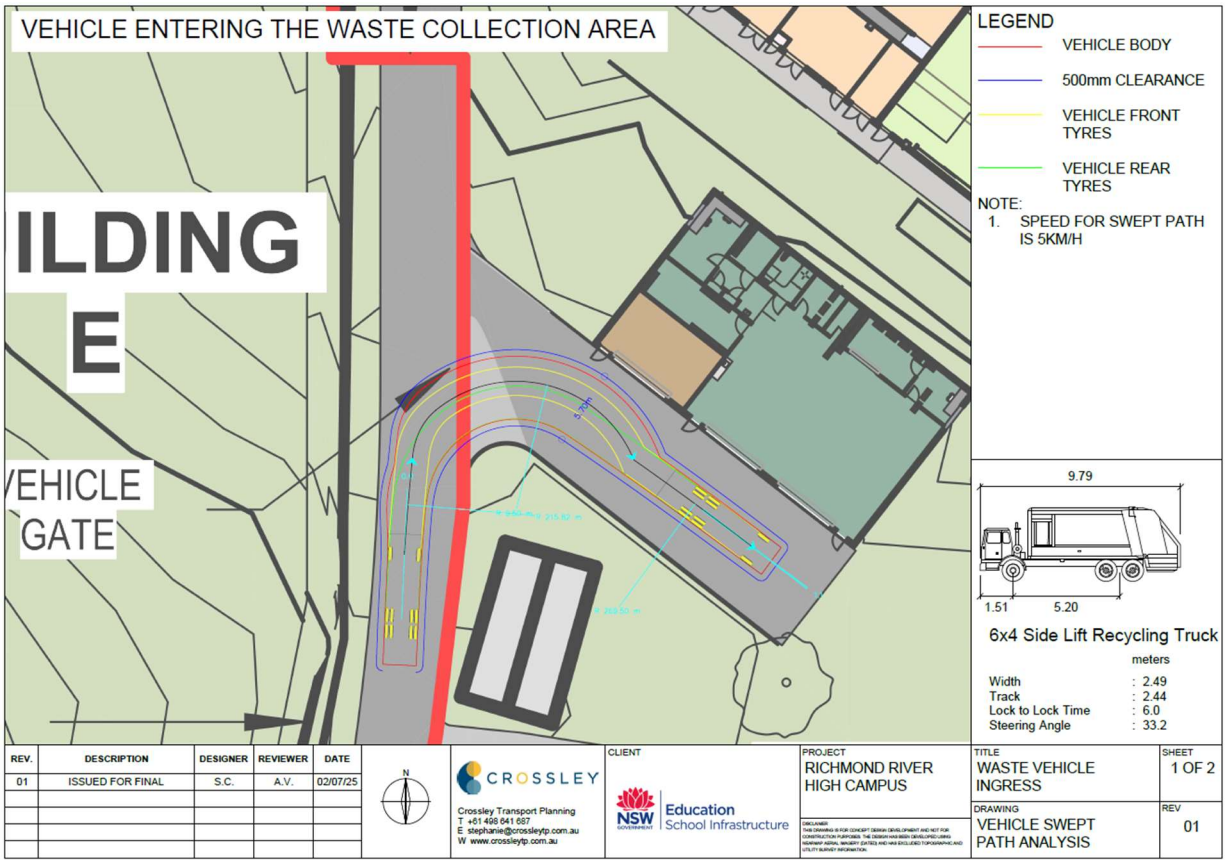

Figure 7.4 Swept path analysis – Sheet 1 (Crossley Transport Planning, 2025)

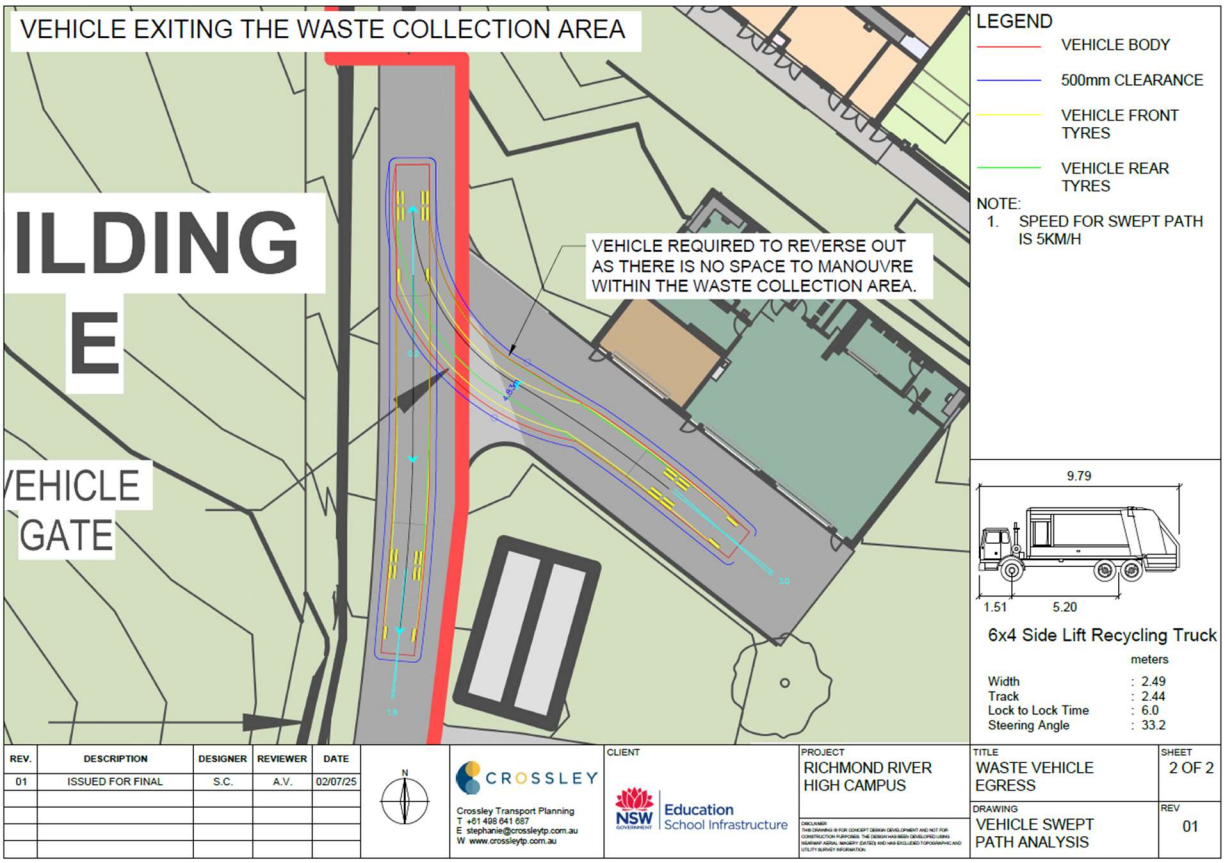

Figure 7.5 Swept path analysis – Sheet 2 (Crossley Transport Planning, 2025)

7.3.5 Responsibilities

The cleaning contractor would be responsible for:

– General maintenance of waste bins and storage areas
– General litter control
– Collection of waste and transfer to the waste / bin room

The farm manager would be responsible for:

– Maintenance of composting areas
– Burial of animal carcases
– Classification of animal bedding waste prior to removal off site
– Soil testing to inform compost waste application rate
– Clean out of chemical drums prior to removal off site

The existing and preferred waste collection contractor for ongoing operations is Richmond Waste Lismore. The waste contractor would be responsible for:

– The transfer of bins to and from the waste / bin room to the collection point
– Transport of the waste off site for disposal or further processing
– Waste monitoring, reporting and audits

The staff at Richmond River High Campus would be responsible for regulating student use of bins.

7.3.6 Signage

Clear and easy to read standard signage on how to use the waste management system and what materials are acceptable in the recycling and future organics bins would be posted in the waste room, kitchens, canteen and at recycling stations.

Adequate signage identifying the waste/bin room and bulky waste storage area to be prominently displayed. All waste receptacles are to be clearly and correctly labelled to identify which materials are to be placed in which bin and colour-coded in accordance with the Australian Standard *AS 4123: Mobile Garbage Containers*. Appendix A shows examples of waste signage that could be implemented.

7.3.7 Reporting

The waste contractor would be required to submit reports on waste collection volumes. Regular review of waste collection data will assist to optimise waste collection frequency and timing.

7.4 Evaluation of environmental impacts

The proposed activity will not have a significant affect on the environment subject to implementation of the mitigation measures as outlined in Table 8.1.

8. Mitigation measures

The proposed mitigation measures are provided in Table 8.1.

Table 8.1 Mitigation measures

Mitigation Number and name	Stage of implementation	Mitigation measure	Reason for mitigation measure
WM1 Waste management hierarchy	During construction and operation	Waste generated during all stages of the proposed activity (demolition, construction and operation) will be managed in accordance with the waste management hierarchy. Waste avoidance, minimisation and recycling will be prioritised above disposal.	Prioritisation of waste minimisation and recovery over disposal
WM2 Storage and segregation of waste	During construction and operation	Waste storage, processing, and reuse will comply with the POEO Act and the Waste Regulation during all stages of the proposed activity (demolition, construction and operation).	Compliance with relevant legislation for storage and segregation of waste on site
WM3 Unlicensed waste contractors transporting waste	During construction and operation	During all stages of the proposed activity (demolition, construction and operation), waste will only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or to any other place that can lawfully accept such waste.	Compliance with relevant legislation for transfer of waste off site
WM4 Non-classified or incorrectly classified waste transport and disposal	During construction and operation	During all stages of the proposed activity (demolition, construction and operation), all waste that is removed from site will be classified in accordance with the EPA's Waste Classification Guidelines (NSW EPA, 2014), with appropriate records and disposal dockets retained for audit purposes.	Compliance with relevant legislation for waste classification and reporting
WM5 Waste Management Plan	Prior to demolition and construction	Prior to commencing demolition, an updated Waste Management Plan will be prepared. This plan will detail: – The anticipated quantity and type of the waste to be generated and their intended fate; – Details of how waste will be segregated, handled, stored, managed and then collected and transported for treatment and/or disposal; – Waste storage locations; – Any testing or monitoring procedures; – How materials segregation will be achieved, particularly the segregation of hazardous demolition waste, resource recovery materials and waste generated from the construction and demolition staff; and – The capability of the waste management facilities in Councils LGAs to accept the volumes of waste – Waste tracking and reporting requirements	Implementation of waste management measures

Mitigation Number and name	Stage of implementation	Mitigation measure	Reason for mitigation measure
WM6 FOGO mandate	During operation	If and when the anticipated NSW Government FOGO mandate comes into effect for educational institutions/establishments, changes to waste management will be investigated and implemented to meet the mandated obligations and responsibilities.	Alignment of waste management in line with future FOGO mandate
WM7 Ongoing waste reporting	During operation	During operation of Richmond River High Campus the waste contractor will submit reports on waste collection volumes.	Regular reviews of waste collection data will assist to optimise waste collection frequency and timing.

9. References

City of Melbourne. (2021). *Waste generation rates.* Melbourne: City of Melbourne.

Crossley Transport Planning. (2025). *Richmond River High Campus Waste Vehicle Egress - Vehicle Swept Path Analysis - Rev 01.*

DPIE. (2021). *NSW Waste and Sustainable Materials Strategy 2041 Stage 1: 2021-2027.* DPIE.

EJE. (2025, June 19). Richmond RIver High Campus Architectural Drawings - Overall Site Context Plan - REV F - Issue for REF.

EJE Architecture. (2025, June 23). Richmond River High Campus - Ground Floor- Zone A - REV F - Issue for REF.

EJE Architecture. (2025, July 4). Richmond River High Campus Site Demolition Plan - REV J - Issue for REF.

GHD. (2024). *Preliminary Tree Assessment Richmond River High Campus - Flood Recovery Rebuild.* GHD Pty Ltd.

GHD. (2025). *Hazardous Building Materials Assessment Northern Rivers Flood Recovery - Richmond River High Campus Redevelopment.* GHD Pty Ltd.

Green Building Council of Australia. (2021). *Green Star Buildings Submission Guidelines.* Green Building Council of Australia.

Hills Shire Council. (2012). *Part D – Site Specific Appendix A Waste.* Retrieved from The Hills Development Control Plan: https://www.thehills.nsw.gov.au/Business-Building/Planning-Guidelines/The-Hills-Development-Control-Plan

Lismore City Council. (2023). *Lismore Development Control Plan.* Lismore City Council.

NSW Department of Education - School Infrastructure NSW. (2023). *Education Facilities Standards and Guidelines (EFSG 2.0).* NSW Department of Education - School Infrastructure NSW.

NSW DPE. (2022). *North Coast Regional Plan 2041.* NSW Department of Planning and Environment.

NSW EPA. (2014). *NSW Waste Avoidance and Resource Recovery Strategy 2014-21.*

NSW EPA. (2014). *Waste Classification Guidelines .* Sydney: NSW EPA.

NSW EPA. (2016). *Addendum to the Waste Classification Guidelines Part 1: Classifying Waste.*

NSW EPA. (2019). *Better practice guide for resource recovery in residential developments.* NSW EPA.

NSW EPA. (2019). *NSW Circular Economy Policy Statement: Too Good to Waste .* NSW EPA.

NSW EPA. (2024). *Food and Garden Organics mandates Proposal paper.* Parramatta: NSW EPA.

UK Government. (Unknown). *Rough guide to calculating timber volumes.* Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/826786/TimberVolumeCalculator.pdf

Appendices

Appendix A

Example waste signage

Recycling

Garden organics and food waste

Garbage

Instructional

Public place

General recycling

Example waste signage (NSW EPA, 2019)

ghd.com

→ The Power of Commitment