

Eileen O'Connor Catholic School – Waste Management Plan

A Submission to Catholic Schools Broken Bay

30th June 2025





Planning Secretary’s Environmental Assessment Requirements

Development Details

Application No: SSD-67173718
 Project Name: New Eileen O'Connor Catholic School
 Location: 84 Gavenlock Road, Mardi NSW 2259
 Lot 9 Section 4 DP3368 within Central Coast
 Applicant: Catholic Schools Broken Bay

The following documentation has been prepared to support the State Significant Development Application for the above project and in accordance with the Planning Secretary’s Environmental Assessment Requirements (SEARS) dated 19th February 2024 as follows:

Issue and Assessment Requirements	Relevant Section of this Report
17. Waste Management:	
Identify, quantify and classify the likely waste streams to be generated during construction and operation.	Section 3.1, 3.2 and 4.2
Provide the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.	Sections 3 and 4
Identify appropriate servicing arrangements for the site.	Section 5
If buildings are proposed to be demolished or altered, provide a hazardous materials survey.	Section 3.1

Eileen O'Connor Catholic School – Waste Management Plan

A Submission to Catholic Schools Broken Bay (ABN 19 542 675 092)

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Disclaimer

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In the spirit of reconciliation MRA Consulting Group acknowledges the Traditional Custodians of Country throughout Australia and their connection to land, sea and community. We pay our respects to Aboriginal and Torres Strait Islander peoples and to Elders past, present and emerging.

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Glossary

Terminology	Definition
C&D	Construction and Demolition
C&I	Commercial and Industrial
CCC	Central Coast Council
CCDCP	Central Coast Development Control Plan 2022
CCLEP	Central Coast Local Environmental Plan 2022
CDS	Container Deposit Scheme
COLA	Covered Outdoor Learning Area
CSBB	Catholic Schools Broken Bay
EFSG	Education Facilities Standards and Guidelines
ENM	Excavated Natural Material
LGA	Local Government Area
MGB	Mobile Garbage Bin
MRA	MRA Consulting Group
SEARs	Secretary's Environmental Assessment Requirements
SSDA	State Significant Development Application
VENM	Virgin Excavated Natural Material
WMP	Waste Management Plan
WSP	Waste Service Provider

1 Introduction

MRA Consulting Group (MRA) was engaged to prepare a Waste Management Plan (WMP) in relation to the proposed development of a new Eileen O'Connor Catholic School located at 84 Gavenlock Road in Mardi, NSW. The site is located within the Central Coast Council (CCC) Local Government Area (LGA).

This WMP addresses the requirements of the Consent Authority (Council) and conforms to the following reference documents:

- Central Coast Local Environmental Plan 2022 (CCLEP 2022)
- Central Coast Development Control Plan 2022 (CCDCP 2022)
- Central Coast Council *Waste Control Guidelines* (2022)

Consideration has also been given to the following supplementary documents in the preparation of this WMP:

- *Better Practice Guide for Resource Recovery in Residential Developments (NSW EPA, 2019)*
- *Better Practice Guidelines for Waste Management and Recycling in Commercial and Residential Facilities (NSW EPA 2012).*

This WMP has been prepared in accordance with best practice local and state waste and recycling policy documents and has been prepared with reference to the Council's waste objectives. This WMP seeks to address relevant requirements of the Secretary's Environmental Assessment Requirements (SEARs) for the project (SSD-67173718):

Table 1: SEARs requirements for waste management

17. Waste Management	Where addressed in this report
Identify, quantify and classify the likely waste streams to be generated during construction and operation.	Section 3.1, 3.2 and 4.2
Provide the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.	Sections 3 and 4
Identify appropriate servicing arrangements for the site.	Section 5
If buildings are proposed to be demolished or altered, provide a hazardous materials survey.	Section 3.1

Further, the WMP will be developed with regard to the CCDCP 2022 (Section 2.14.1) Waste Management Objectives, which include:

- *To identify Council's expectations and requirements for the management of waste (not including sewage) on individual sites including information required in development applications.*
- *To identify approaches and techniques which promote waste minimisation in the CCC LGA.*
- *To provide Council's requirements for the management of waste including storage, handling and disposal of waste and recyclable materials on individual sites.*
- *To promote best practice in waste management and quality environmental outcomes.*

This WMP is used to inform the building design to best practice waste management and promote sustainable outcomes at the demolition, construction and operational phases of the development. The WMP addresses waste generation and storage associated with the construction works throughout the develop, and ongoing occupation of the proposed use.

2 Background

2.1 Project Statement

Catholic Schools Broken Bay (CSBB) provide excellence in Catholic education for the Northern Sydney Metropolitan Area, Northern Beaches and Central Coast of NSW. Due to their work with students with diverse learning needs in their existing schools they have identified the need for a purpose built school to provide access to inclusive, quality education for students with disability and highly individualised learning needs. A school where educators and allied health professionals work collaboratively to provide resources and services that will help students with disability flourish.

After a review of demographic needs and their existing land assets, CSBB have developed this proposal to develop the Eileen O'Connor Catholic School in Mardi NSW fronting Keefers Glen, on land that was formerly part of St Peter's Catholic College, 84 Gavenlock Road, Mardi.

2.2 Description of Proposed Development

Catholic Schools Broken Bay (CSBB) is proposing construction of a new school for students with a disability at the purpose-built K-12 Eileen O'Connor Catholic School using land located in the north-western corner of St Peter's Catholic School at 84 Gavenlock Road, Mardi. The school will have capacity for 200 students and will provide education and allied health facilities.

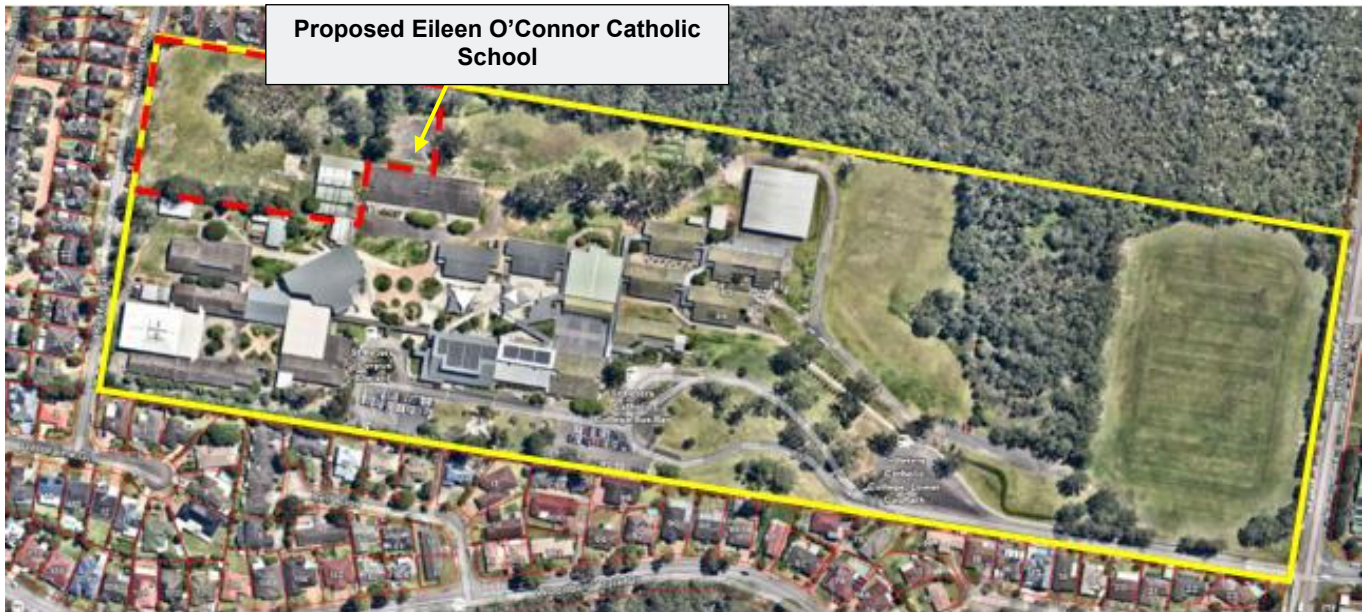
The proposed development involves:

- Tree removal and infill of existing dam
- Site establishment and benching
- Construction of a part-two, part-three storey school campus comprising 20 General Learning Areas (GLA), flexible specialist learning areas, library, multipurpose hall, administration, staff facilities, storage, landscaping and playspaces
- Construction of two (2) new vehicle accessways from Keefers Glen and at-grade carpark (including bus parking) and covered drop off/pick up area
- Subdivision of land to create a new allotment for the school
- Widening of a portion of Keefers Glen

2.3 Location

The proposed site is within the north-western corner of the existing St Peters Catholic School site at 84 Gavenlock Road, Mardi (Lot 9, Section 4 in Deposited Plan (DP) 3368). The proposed Eileen O'Connor Catholic School site (identified in red) will have an area of 1.284 hectares, with frontage to Keefers Glen. Figure 1 depicts the site location and local surroundings.

Figure 1: Site and surrounding area



Source: SIX Maps, 2024.

2.4 Zoning and Land Use

The site is primarily zoned **R2 – Low Density Residential** with the north eastern border zoned as **C3 – Environmental Management** in the CCLEP 2022 (see Figure 2).

Objectives of the R2 zone are:

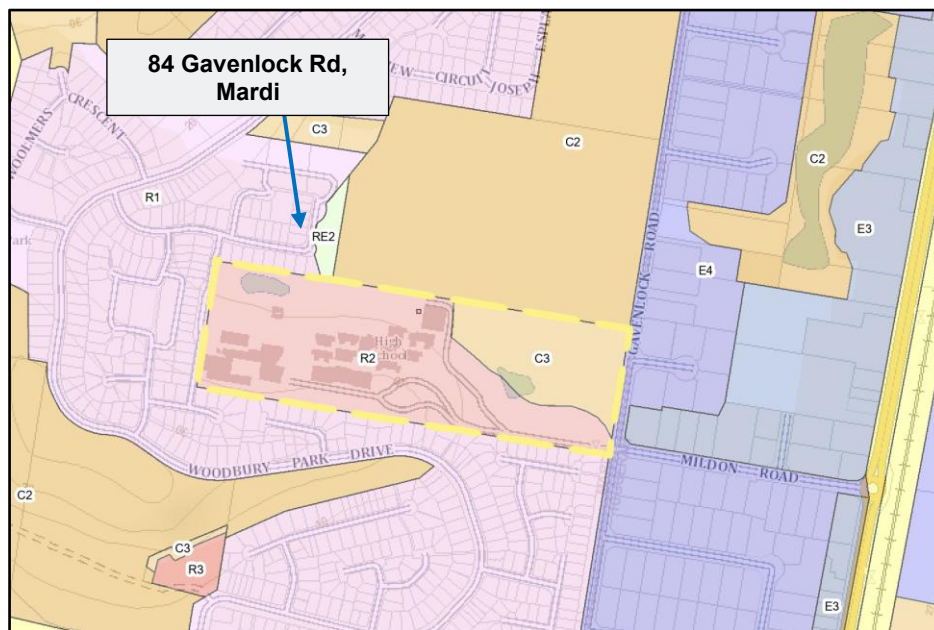
- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To encourage best practice in the desk of low density residential development.
- To ensure that non-residential uses do not adversely affect residential amenity or place unreasonable demands on services.
- To maintain and enhance the residential amenity and character of the surrounding area.

Objectives of the C3 zone are:

- To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
- To provide for a limited range of development that does not have an adverse effect on those values.
- To provide a buffer to land of high ecological value or land that has environmental constraints or hazards.

Zones directly bordering the site include R1, RE2, C2 and E4, however it is noted that the construction of Eileen O'Connor Catholic School will be located in the north western border of the site where the bordering zones will be R1 (General Residential Zone) and RE2 (Private Recreation).

Figure 2: Zoning and Land Use



Source: NSW ePlanning Spatial Viewer, 2024.

2.5 Strategies

Waste management for the site considers better practice, necessary equipment, and integration with other guidance documents including the NSW Waste and Sustainable Materials Strategy (NSW EPA, 2021), and National Waste Policy: Less Waste, More Resources (DAWE, 2018). The key policy aims that are considered are:

- Avoidance (to prevent the generation of waste);
- Reduce the amount of waste (including hazardous waste) for disposal;
- Manage waste as a resource; and
- Ensure that waste treatment, disposal, recovery and re-use are undertaken in a safe, scientific and environmentally sound manner.

2.6 Assumptions

This report is a Waste Management Plan (WMP), forming part of the development documentation and assumes:

- Drawings and information that have been used in waste management planning for this WMP are the final reference/indicative development plan from the project architect, Stanton Dahl Architects, dated 04/04/2025;
- The NSW EPA's *Better Practice Guide for Resource Recovery in Residential Developments* (2019) outlines waste generation rates and services available for new developments which have been considered in the preparation of this report; and
- This WMP is a living document and therefore, waste management equipment and systems described in this report are subject to change based on future operations and available technologies.

3 Demolition and Construction Waste

Demolition and construction activities at the site will generate a range of construction and demolition (C&D) wastes. Throughout the development process, all materials will be reused and recycled where possible, minimising the disposal (landfilling) of materials other than those that are contaminated or unsuitable for reuse or recycling processes.

Waste storage during construction operations will involve some stockpiling and separation of reusable material, as well as placement of skip bins for the separation of construction materials for recycling. A skip bin for residual waste or contaminated material will also be made available at the site for disposal where necessary. Skip bins may require alternative placement across construction operations to facilitate the safe and efficient storage of materials and will be retained within property boundaries to avoid illegal dumping.

A waste storage area shall be designated by the demolition and construction contractor and shall be sufficient to store the various waste streams expected during operations. Waste storage areas will be kept clear to maintain vehicular access and shall also be kept tidy to encourage separation of waste material and for WHS reasons.

Waste management principles, management measures and facilities in use on the site shall be included as part of the site induction for all personell working on the site.

3.1 Demolition

This section details the demolition waste materials expected for the proposed development, including their quantities and management options, and was designed with consideration of the requirements in the CCDCP 2022. The information below presents options for materials reuse, recycling, and disposal where applicable. All materials are intended to be sent to a suitable, licenced landfill or resource recovery facility.

Table 2 below describes the expected demolition material quantities and appropriate management methods for the proposed development. Demolition works will include the removal of existing shed, removal of existing netball court, removal of multiple concrete paths, wire mesh fence as well as the removal of trees and vegetation. A demolition plan is available in Appendix A.

Table 2: Demolition waste material by volume

Type of waste generated	Quantity	Reuse	Recycling	Disposal	Methods for reuse, recycling and disposal
Concrete	300-500m ³	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. C&D processor: crushing and recycling for recovered products (aggregates).
Bricks/Pavers	Minor	✓	✓	-	On site: cleaned and separated wherever possible for reuse or to enhance resource recovery. C&D processor: recovery for reuse where possible, crushing and recycling for recovered aggregate products.
Tiles (Roof)	Minor	✓	✓	-	On site: cleaned and separated wherever possible for reuse or to enhance resource recovery. C&D processor: recovery for reuse where possible, crushing and recycling for recovered aggregate products.
Tiles (Interior)	<10m ³	✓	✓	-	
Timber (Engineered/Treated)	<10m ³	-	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse. C&D processor: recovery and recycling for recovered product (e.g. mulch) or organics processing.
Metals (Ferrous and non-ferrous)	<20m ³	-	✓	-	Onsite: to be separated wherever possible to enhance resource recovery. C&D processor: metals recovery and recycling.
Plasterboard	10-20m ³	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse.

Type of waste generated	Quantity	Reuse	Recycling	Disposal	Methods for reuse, recycling and disposal
Glass	<10m ³	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. Glass recycler: recovery and recycling.
Fixtures and fittings	<5m ³	✓	✓	-	On site: reuse wherever possible or return to manufacturer. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. C&D processor: recovery and recycling.
Floor coverings	<10m ³	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. C&D processor: recovery and recycling.
Garden organics and vegetation	<30m ³	✓	✓	-	Garden organic waste from landscaping and tree removal. Organics processor: storage on-site (from minor excavations) processing for recovered product (e.g. mulch or other blended recovered fines) or organics treatment.
Residual waste (General refuse)	<10m ³	-	-	✓	Separate recyclables where possible and disposal at principal licensed waste facility.
Hazardous/special waste (e.g. spills and contaminated wastes)	Unknown	-	-	✓	Management by a licensed asbestos and site hygienist should hazardous or special waste be found at the site.

3.2 Construction

The development includes the removal of existing school structures and the construction of a new school building including:

- Classrooms
- CAPA/ Movement Studio/Assembly room
- Library
- Stem/Tas/Visual Arts space
- Office, Staffrooms and administration areas
- Landscaping and fencing, and
- Service connections.

Table 3: Building waste material by percentage and conversion factor for volume and weight

Building waste material	Tonnes per m ³	Waste as % of the total material ordered
Soil/Aggregate	1.4 – 1.6	-
Bricks	1.2	5-10%
Concrete	1.5	3-5%
Tiles/Ceramics	0.5 – 1	2-5%
Timber	0.3	5-7%
Plasterboard	0.2	5-20%
Metals	0.15 – 0.9	-

Source: *Green Building Code of Australia C&D Waste Criteria*.

Table 3 outlines the expected construction waste quantities for materials through construction of the proposed new development in addition to the appropriate management methods for each material type.

The information below presents multiple options for materials reuse, recycling and disposal where applicable (e.g. return to manufacturer, recycled at construction and demolition (C&D) processor, or disposed to landfill if contaminated).

Table 4: Construction waste material by volume

Type of waste generated	Quantity	Reuse	Recycling	Disposal	Methods for reuse, recycling and disposal
Excavation material	10,000 – 20,000m ³	✓	✓	-	<p>On site: testing (if necessary) for contamination and stockpiling of material for reuse as fill material.</p> <p>Reuse onsite for backfilling or landscaping. For this project the intention is to re-use any fill for required battering around the new undercroft area.</p> <p>C&D processor: reuse/ recycling of VENM and ENM Landfill if contaminated.</p>
Concrete	<30m ³	✓	✓	-	<p>On site: to be separated wherever possible to enhance resource recovery.</p> <p>C&D processor: crushing and recycling for recovered products (aggregates).</p>
Bricks/pavers	<20m ³	✓	✓	-	<p>On site: cleaned and separated wherever possible for reuse or to enhance resource recovery.</p> <p>C&D processor: recovery for reuse where possible, crushing and recycling for recovered aggregate products.</p>
Tiles (Interior)	<15m ³	✓	✓	-	<p>On site: cleaned and separated wherever possible for reuse or to enhance resource recovery.</p> <p>C&D processor: recovery for reuse where possible, crushing and recycling for recovered aggregate products.</p>
Timber (engineered/ treated)	<20m ³	-	✓	-	<p>On site: to be separated wherever possible to enhance resource recovery.</p>

Type of waste generated	Quantity	Reuse	Recycling	Disposal	Methods for reuse, recycling and disposal
					Reuse: surplus and offcut material returned to manufacturer for reuse. C&D processor: recovery and recycling for recovered product (e.g. mulch) or organics processing.
Metals (ferrous and non-ferrous)	5 - 10 m ³	-	✓	-	Onsite: to be separated wherever possible to enhance resource recovery. C&D processor: metals recovery and recycling.
Plasterboard	Minor	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse.
Glass	Minor	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. Glass recycler: recovery and recycling.
Fixtures and fittings	Minor	✓	✓	-	On site: reuse wherever possible or return to manufacturer. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. C&D processor: recovery and recycling.
Floor coverings	<5m ³	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery.

Type of waste generated	Quantity	Reuse	Recycling	Disposal	Methods for reuse, recycling and disposal
					Reuse: surplus and offcut material returned to manufacturer for reuse where possible. C&D processor: recovery and recycling.
Garden organics (Vegetation)	Minor	✓	✓	-	Garden organic waste from landscaping. Organics processor: storage on-site (from minor excavations) processing for recovered product (e.g. mulch or other blended recovered fines) or organics treatment.
Containers (cans, plastic, glass)	Minor	-	✓	-	Commercial contractor: recycling.
Paper/ cardboard	<5m ³	-	✓	-	Commercial contractor: segregation of paper, cardboard or other streams.
Residual waste (general refuse)	<5m ³	-	-	✓	Separate recyclables where possible and disposal at principal licensed waste facility.
Hazardous/ special waste (e.g. spills and contaminated wastes)	Unknown	-	-	✓	Management by a licensed asbestos and site hygienist should hazardous or special waste be found at the site.

3.3 Waste Contractors and Facilities

To ensure best practice waste management, appropriate contractors and facilities have been proposed based on their location and service offerings (Table 5).

Table 5: Waste service contractors and facilities

Role	Details
Recommended Waste Collection Contractor	<p>The following are local skip bin operators for consideration in the management of excavation and construction waste for the site:</p> <ul style="list-style-type: none"> • Gosford Skip Bin Hire • Binns Bins Skips Bins • Skip Bins Central Coast <p>Or another supplier as elected by the building contractor.</p>
Principal Off-Site Recycler	<p>The following are local C&D processing facilities for consideration in the management of C&D waste generated at the site:</p> <ul style="list-style-type: none"> • Woy Woy Waste Management Facility • Buttonderry Waste Management Facility <p>Or another appropriate facility as elected by the waste management contractor.</p>
Principal Licensed Landfill Site	<ul style="list-style-type: none"> • Woy Woy Waste Management Facility • Buttonderry Waste Management Facility <p>Or other appropriate facility as elected by the waste management contractor.</p>

3.4 Site Documentation

This WMP will be retained on-site during the excavation and construction phases of the development, along with other waste management documentation (e.g., contracts with waste service providers).

Responsibility for the WMP, waste documentation and processes during the excavation and construction phases will be with the site manager or builder.

A logbook that records waste management and collection will be maintained on site, with entries including:

- Time and date of collections;
- Description of waste and quantity;
- Waste/processing facility that will receive the waste; and
- Vehicle registration and company name.

Waste management documentation, the logbook and associated dockets and receipts must be made available for inspection by an authorised Council Officer at any time during site works.

4 Use and Ongoing Waste Management

Waste generation for the operational phase of the development will be addressed in applying waste generation rates outlined in Section 4.2.

Waste storage and recycling areas were determined with reference to waste generation rates and have been addressed in Table 7.

Bin requirements and waste storage areas were defined with reference to waste generation rates and have been addressed in Section 4.3. Site waste management responsibilities have been outlined in Section 5.3.

4.1 Overview

Waste and recycling materials are expected to be generated from the new school with a capacity of 200 students total (140 primary and 60 secondary). This section of the WMP outlines the waste strategies for ongoing waste management.

The proposed waste management system will utilise mobile garbage bins (MGBs) for the consolidation of waste. Table 6 below outlines the dimensions of typical MGBs which have been used to form assumptions on the storage requirements for the site.

Table 6: Mobile Garbage Bin (MGB) capacity and footprint

Bin Capacity (L)	Height (mm)	Depth (mm)	Width (mm)	Footprint (Approx. m ²)
120	940	560	485	0.30 – 0.33
240	1,100	735	580	0.41– 0.43
660	1,250	850	1,370	0.86 – 1.16
1,100	1,470	1,245	1,370	1.33 – 1.74

Source: NSW EPA's *Better Practice guide for resource recovery in residential developments (2019)*.

4.2 Ongoing Waste Generation

The proposed student capacity at Eileen O'Connor Catholic School will be 140 primary students and 60 secondary students. The NSW EPA's *Better Practice Guide for Resource Recovery in Residential Developments (2019)* provides waste generation estimates for primary and secondary schools, which have been adopted in this instance.

Table 7: Weekly Waste Generation Volumes*

Student Population	Waste Stream	Generation rate	Weekly Volumes (L)
Primary (140 students)	General waste	15L/student/day	10,500L
	Recycling	20L/student/day	14,000L
Secondary (60 students)	General waste	20L/student/day	6,000L
	Recycling	15L/student/day	4,500L
Total		General Waste	16,500L
		Recycling	18,500L

*Based on a usual 5-day school week.

Where possible, consideration will be given to accommodate additional waste volumes by building in flexibility to the waste collection strategy, with additional collections should the school require them.

4.3 Waste Storage Requirements

Temporary waste storage will be provided in circulation areas, classrooms, canteen areas and in the playground, as required. Smaller split receptacles within secured enclosures will be utilised to encourage source separation by students and staff, to promote recycling behaviours. Modular and adaptable units of different sizes are available (see Appendix B, Figure 3 and Figure 4) to suit waste stream collections. Cleaners will consolidate waste as part of daily cleaning operations, collecting waste in a janitorial trolley or similar, and depositing into larger MGBs within the centralised waste storage area prior to collection.

Based on the waste volume calculations above and the footprint required from Table 6, the following MGB storage requirement in Table 8 is expected at the site. Options for a three times per week collection is provided.

Table 8: Waste Storage Requirement

Waste Stream	Collection Frequency Option	Bins required	*Space requirement
General Waste	Up to three times weekly	5 x 1,100L bins	12m ²
Recycling	Up to three times weekly	6 x 1,100L bins	14m ²

*Note: Space requirements have been multiplied by 1.5 for manoeuvrability within the waste storage room.

The waste management areas have adequate space to facilitate changes to that waste management arrangement that may occur in the future. The centralised waste storage area located on the lower ground level of the proposed site fulfils waste management requirements detailed in Table 8. The centralised waste storage area successfully facilitates safe access and manoeuvring of all bins and equipment required for the proposed development.

Waste management areas will be screened from general view and bins will be sealed to maintain site amenity while also reducing the risk of windblown litter, vandalism, and illegal dumping.

It is acknowledged that the waste generation estimated in this report may be higher or lower than the actual amount, thus site management will be required to monitor bin fullness and adjust collections or bin allocation as necessary.

The waste management areas provide enough flexibility to cater to the needs of the development should they deviate from the recommendations within this report.

4.3.1 Waste Streams

The following waste streams are proposed and will be managed by Eileen O'Connor Catholic School:

4.3.1.1 General Waste

Most of the general waste will be produced by students during recess and lunch periods. Smaller 60L or 240L MGBs for general waste will be placed in the playground, passive activity, and canteen areas. General waste bins will also be placed in various other locations such as on pathways, the library, and office spaces. Some general waste will be produced by the students during classroom activities other than the waste from the consumable food and beverage products. In each classroom, there will be small bins for the collection of general waste. This waste will be collected by the cleaner daily and will be deposited in the bulky waste bin stored in the waste storage area.

General waste bins placed in outdoor areas will be secured within enclosures to reduce the risk of students accessing and tampering with rubbish (Figure 3). General waste bins placed within indoor environments will be monitored by staff to reduce student access and tampering. Smaller bin enclosures are also available for indoor environments (Figure 4).

Figure 3: Outdoor Secured Bin Enclosure Example



Source: Felton Industries, 2025

Figure 4: Indoor Secured Bin Enclosure Example



Source: Astra Street Furniture, 2025

4.3.1.2 Comingled Recycling

All classrooms and offices will have small recycling bins for plastics, cardboard and paper materials. These bins will be emptied daily into the recycling bulk bin by cleaners in preparation for collection. Comingled recycling bins will be coupled with general waste bins within secured enclosures throughout outdoor and indoor spaces that are expected to generate the most waste.

4.3.1.3 Garden Waste

Garden areas will be managed and maintained by the contracted landscape gardener and garden waste material taken offsite as required. Composting and reuse initiatives will be employed where possible throughout the school.

4.3.1.4 Bulky Waste

Bulky waste items will not be generated in large quantities at the site. All bulky waste generated at the site, including broken/damaged furniture, and other materials will be temporarily stored in storage rooms. Bulky waste is proposed to be managed and disposed of via a bulk skip pick up periodically, such as at the end of term by the commercial waste contractor. Management and access of the bulky storage area will be the responsibility of school management and cleaning personnel.

4.3.1.5 Sanitary, Nappy Bin Service and Disposable Gloves Recycling

WHS regulations require that sanitary waste disposal be provided in workplaces, and various private waste services are available for the servicing of these wastes using smaller service vehicles. The school may also produce a certain volume of nappy waste, change pads and gloves. Dedicated nappy bins (20-80L) will be made available in suitable areas around the school near bathrooms and separate to food prep or childrens play areas. Staff and cleaners will perform a regular cleaning schedule for the daily removal of nappy waste, to be secured tightly in garbage bins. Designated nappy bins will be collected by Enviro LCS as the nominated contracted disposal service provider.

4.4 Alternative Waste Management Strategies for Consideration

The following strategies are proposed for consideration by Eileen O'Connor Catholic School in future. To improve the management of waste at the school by reducing waste disposed to landfill and increased resource recovery.

4.4.1 Additional Waste Streams

The NSW Department of Education has released an Education Facilities Standards and Guidelines (EFSG) which provide assistance to those planning, managing, designing, constructing, and maintain new and refurbished school facilities. The EFSG provides a best-practice standard for waste management and guides the preparation and implementation of this Waste Management Plan.

The EFSG provides a minimum for waste streams for onsite source separation.

Waste streams to be serviced include:

- General Waste (red lid);
- Commingled Containers (yellow lid);
- Food and Garden Organics (FOGO) (lime green lid);
- Paper and Cardboard (blue lid);
- Container Deposit Scheme (CDS) materials (white lid); and
- Soft Plastics (any colour lid not listed above).

It is noted that the EFSG is a best-practice guideline and not a requirement for schools in NSW. Eileen O'Connor Catholic School can initially opt for a two-bin system (being general waste and commingled recycling) and over time introduce greater separation of waste streams (paper and cardboard, FOGO, soft plastics and CDS-eligible containers).

4.4.2 Food Waste

Food waste will be generated around kitchen and canteen areas, as well as by students and staff. Food waste can be managed with a separate food bin and collection service provided by the contracted waste service provider (WSP). Food waste is optimally collected in 240L bins for manual handling purposes. Up to 30-50% of the general waste stream could be estimated as food waste from kitchen and canteen areas.

Alternatively, compost bins can be retained in garden areas filled with suitable food scraps and soft garden debris and applied to vegetable gardens when mature. Food waste, when not separated from the general (residual) waste stream, represents between 30-40% of waste produced, most of which can be diverted from landfill. Therefore reducing disposal costs.

Compost produced onsite presents a free alternative to expensive fertilisers and assist in the retention of water and nutrients in the soil. It is also an excellent opportunity for student education. Table 9 below outlines a list of compostable materials that may be generated through regular operations at the school.

Table 9: Compostable and Non-Compostable Materials List

Compostable	Not Compostable
✓ Vegetable and food scraps	✗ Meat and dairy products
✓ Fallen leaves (in layers)	✗ Diseased plant material
✓ Tea leaves and tea bags	✗ Metals, plastic, glass
✓ Coffee grounds	✗ Animal manures (especially the droppings of cats and dogs)
✓ Vacuum cleaner dust	✗ Fat
✓ Soft stems	✗ Magazines
✓ Dead flowers	✗ Large branches
✓ Old potting mix	✗ Weeds that have seeds or underground stems
✓ Used vegetable cooking oil	

Compostable	Not Compostable
<ul style="list-style-type: none"> ✓ Egg shells ✓ Old newspapers (wet) ✓ Grass cuttings in layers ✓ Weeds ✓ Sawdust (from non-treated timber) ✓ Wood ash ✓ Human and animal hair 	<ul style="list-style-type: none"> ✗ Bread or cake (may attract mice) ✗ Bones ✗ Sawdust from treated timber

4.4.3 Sustainable ordering of food and materials

A significant amount of waste is produced through unsustainable ordering of food and other school related supplies. It may be possible to reduce waste generation footprint of the school or prevent large increases to waste generation because of the proposed student capacity increase, through the sustainable procurement of food at the canteen, use of recyclable and recycled material products, and reduction in the use of physical mediums of teaching (test papers, worksheets, etc).

4.4.4 Problem Waste Management

Eileen O'Connor Catholic School will engage with problem waste management contractors where possible to recover wastes such as E-waste, printer cartridges, batteries, etc.

The following management practices could be incorporated for a range of different waste materials:

- **Batteries and Printer Cartridges** – A company called “Close the Loop” (among others) provides bins and collection for batteries and printer cartridges. Bins are collected on an as needed basis, at the request of the user, when the provided bins become full. Bins for this purpose can be retained in the main photocopy room, administrative office or computer labs;
- **E-waste** – Eileen O'Connor Catholic School will separate and dispose of e-waste via the Catholic Schools Broken Bay e-waste arrangement; and
- **Light Globes and Fluorescent Tubes** – Light globes and fluorescent tubes are typically managed by the electrical contractor, with old and damaged units being taken upon their replacement.

4.4.5 CDS containers and soft plastics

It is difficult to predict the generation of soft plastics and CDS-eligible containers, but a bin may be provided for each stream to be managed on an as needs basis. Site management will be responsible for transfer of CDS materials to a Reurn and Earn depot.

Eileen O'Connor Catholic School may like to install a Reverse Vending Machine (RVM) to allow students to directly deposit eligible containers. The school can decide whether students directly receive the refund vouchers or can choose to have the refund amount donated to the school for fundraising or an elected charity.

Investigations into alternative collections for soft plastics may be explored following the suspension of the RedCycle program. Council supports a household soft plastics recycling program run by iQ Renew and CurbCycle.

4.4.6 Waste Avoidance

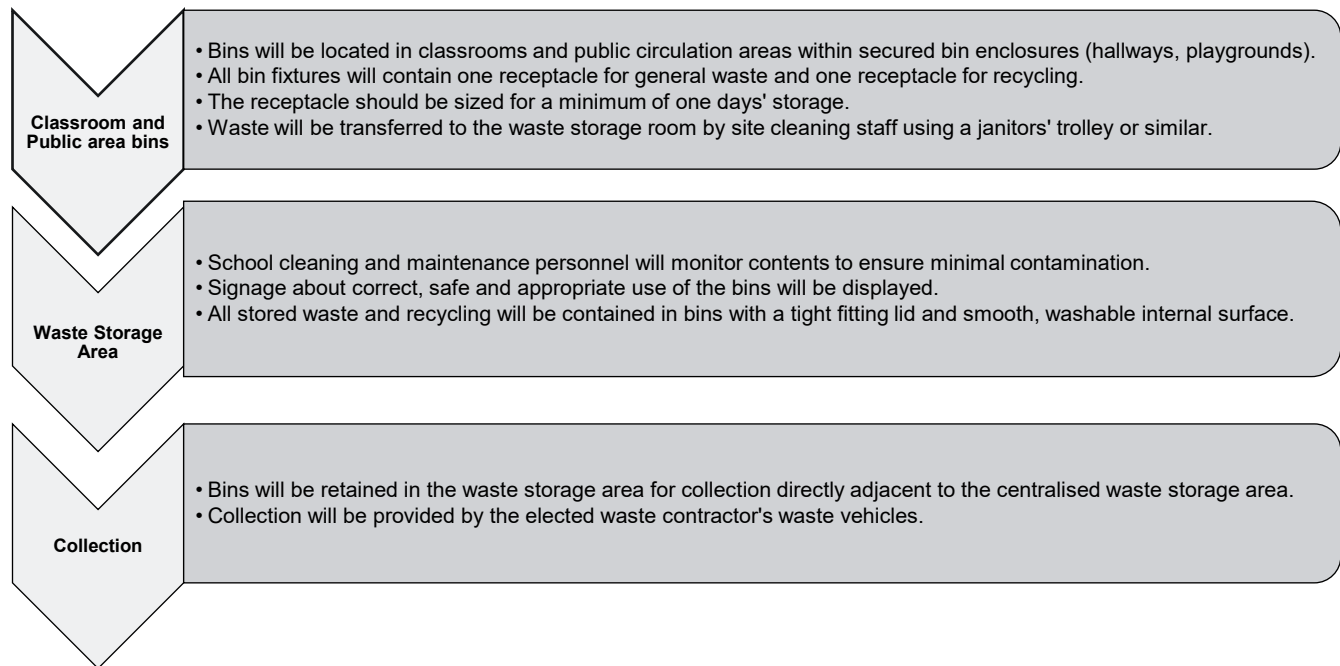
Employing purchasing strategies to avoid the generation of waste: purchasing products with recyclable, compostable, minimal, or no packaging.

5 Waste Management Systems

5.1 Waste Disposal and Recycling Method

The flow of waste goes from generation to collection through several steps (Figure 5).

Figure 5: Waste Flow



5.2 Collection Method and Loading Areas

Collection points for the waste service provider (WSP) and areas for handling and loading are as follows:

- MGBs are to be wheeled out on collection days by the WSP and collected by the rear lift waste vehicle within the designated waste collection zone (see Appendix A).
- The collection zone is open to the sky and will not be impacted by any overhead obstructions for the purpose of waste collection (see Appendix A).
- Collection and loading from the waste storage area must provide convenient access for the collection of waste.
- Waste collections will be scheduled to occur outside of peak drop off and pick up periods, such as midday, to avoid times of high pedestrian and vehicle traffic.
- Clear, safe, accessible, and convenient space is provided for handling of bins and loading of collection vehicles.
- Identifiable areas where visitors and workers can recognise and avoid any risk associated with moving vehicles, and bin moving and handling.

Bulk bins require collection by a front lift collection vehicle (Table 10).

Table 10: Collection vehicle dimensions – Front lift vehicles

Length	Width	Travel Height	Height in Operation	Turning Circle
11.8m	2.5m	4.8m	6.5m	25m

Table 11 below outlines relevant requirements and specifications related to the use of collection points and loading areas.

Table 11: Collection points and loading areas requirements and specifications

Component	Requirements	Specification
Collection point	Collection points are to be located so that:	<ul style="list-style-type: none"> - Collection operations should be carried out on a level surface away from gradients and vehicle ramps. - Oncoming traffic can be seen clearly as the vehicle leaves the property.
Vehicle manoeuvring and loading space	Truck space for adequate lift clearance, manoeuvring and operation for a contractor collection vehicle	<ul style="list-style-type: none"> - Collection from each site use loading area by a rear lift collection vehicle; - Adequate loading bay dimensions to not impede lift clearance; - Operational clearance for truck manoeuvring in a forward direction; and - The provision of space clear of vehicle parking spaces (level and free of obstructions).
Operating times	Appropriate collection times to limit noise and traffic disturbance	<ul style="list-style-type: none"> - Collection times will be arranged to ensure minimal disturbance to students, staff, pedestrians and visitors.

5.3 Waste Management System and Responsibilities

Site management will engage site cleaning staff to enact and monitor day to day waste management operations. Should there be any issues that impact on the operational efficiency, safety and suitability of waste management, the site cleaning staff will inform management. Operation of the waste management system is the responsibility of building management and site cleaning staff.

Site management is responsible for:

- Use of this waste management plan to inform waste management operations, design and infrastructure;
- The provision of educational materials and information to visitors and staff on sorting methods for recycled waste, awareness of waste management procedures for minimisation and recovery;
- The provision of information to visitors and workers about waste management procedures;
- Maintaining appropriate signage in waste service areas and all waste management areas;
- Use of contracts to define the allocation of responsibilities with cleaners and building;
- Holding a valid and current contract with licensed collector(s) for waste and recycling collection and disposal;
- Encouraging waste avoidance and achievement of resource recovery targets;
- Providing operational management for delivery of waste objectives;
- Ensuring regular reinforcement of source separation and effective use of waste facilities; and
- Organising waste, recycling and bulky pick-ups by elected contractor for the site/building.

Site cleaning staff duties include:

- Organising, maintaining and cleaning the waste storage areas;
- Arranging access to bins on collection days to liaise with the WSP for operational issues;
- Cleaning and exchanging all bins; and
- Monitoring any vermin and pest issues and arranging appropriate controls (traps or fumigating) and maintenance of doors or other points of potential entry.

The building management and site cleaning staff are also responsible for ensuring that workplace safety requirements according to WorkCover NSW Occupational Health and Safety are upheld.

5.4 Waste Storage Area Specifications

The secured bin enclosures (Figure 3 and Figure 4) will provide centralised storage that has adequate capacity to receive and store the maximum likely generation of waste and recycling between collection times. The proposed centralised waste storage area (Appendix A) will be an enclosed space with suitable access for disposal and collection purposes, and storage space to accommodate the bins required to service the site. The waste storage area will be developed with the following considerations:

- Enclosed room with suitable ventilation;
- Signage for safety and waste bin identification;
- Safety precautions, staff training and signage for plant;
- Floor made of concrete or other approved solid, impervious material that can be cleaned easily;
- Grading and draining to an approved drainage fitting located in the room to facilitate bin washing;
- Adequate supply of water with hose cock as close as practicable; and
- Suitable construction including limited entry to prevent vermin and vandalism.

5.5 Signage and Education

Signage that promotes resource recovery, waste minimisation, safety and amenity follows that Australian Standard for safety signs for the occupational environment (Standards Australia, 1994).

Signage will be designed to consider language and non-English speaking backgrounds, vision impairment and accessibility. Illustrative graphics must form a minimum 50% of the area of the signage. Signage is to be prominently posted in the waste room indicating:

- Details regarding acceptable recyclables;
- Recyclables are to be decanted loose (not bagged)
- *No standing* and *danger* warnings apply to the area surrounding the waste storage area;
- Contact details for arranging the disposal of bulky items;
- The area is to be kept tidy.

Standard signage requirements and guidance for application apply (see Appendix C).

5.6 Prevention of Pollution and Litter Reduction

To minimise dispersion of litter and prevent pollution (to water and land via contamination of runoff, dust and hazardous materials), building management and the site cleaning staff will also be responsible for:

- Maintenance of open and common site areas;
- Ensuring waste room is well maintained and kept clean;
- Securing the waste storage area from vandalism and the escape of litter;
- Identification and appropriate disposal of goods with hazardous material content (paints, e-waste, fluorescent tubes);
- Taking action to prevent dumping and unauthorised use of waste areas; and

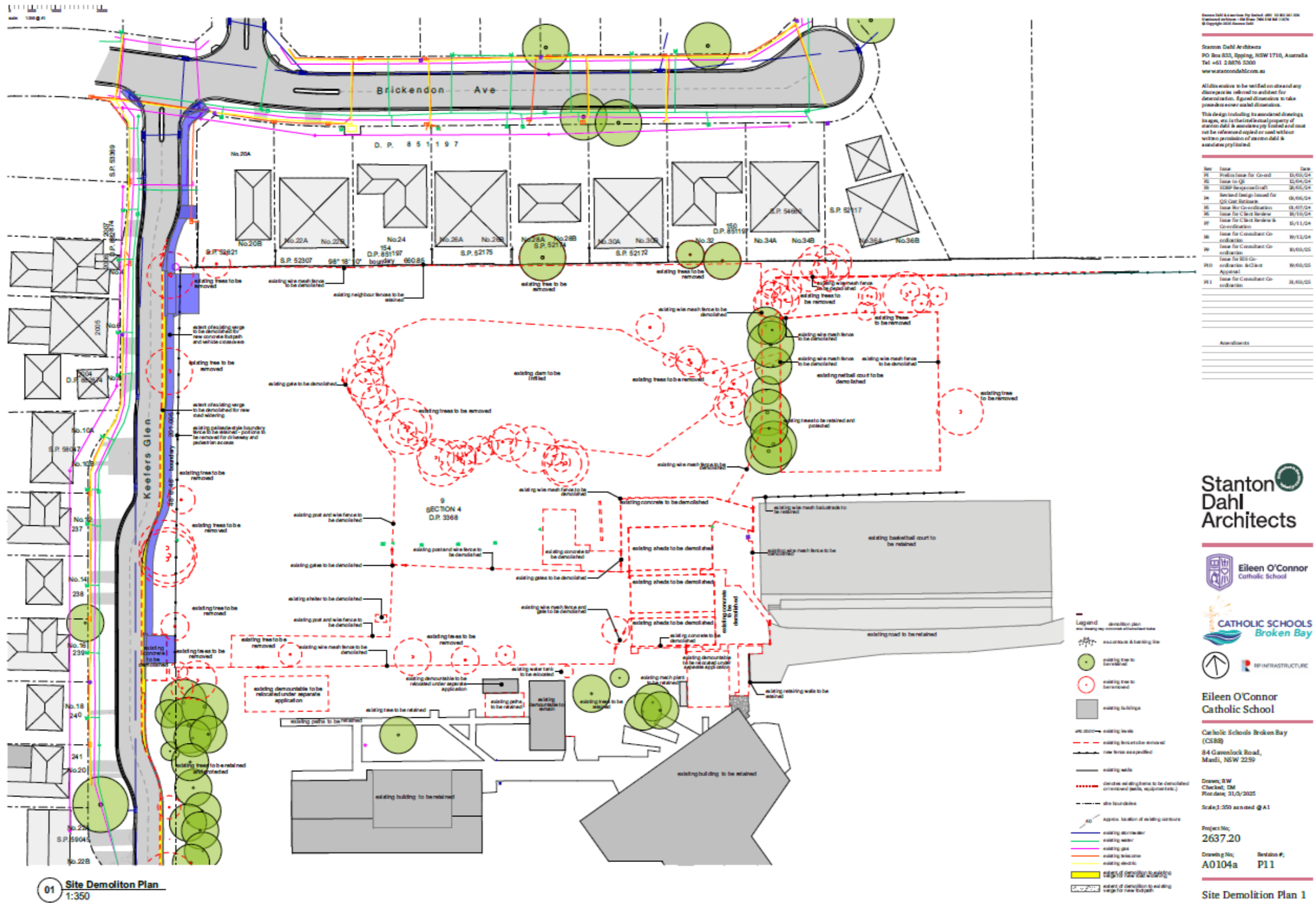
- Requiring contractors to clean up any spillage that may occur during waste servicing or other work.

6 References

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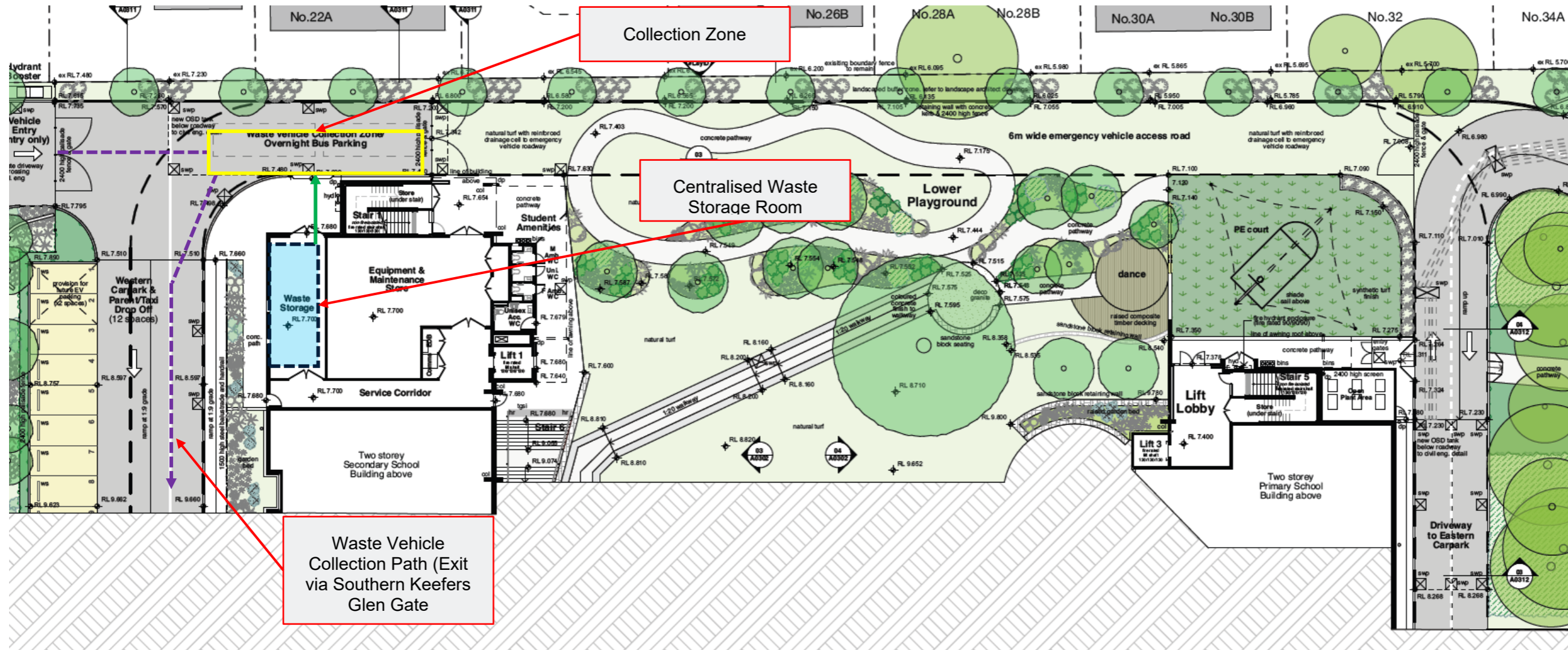
Appendix A Proposed Site Plans

Figure 6: Demolition Plan 1



Source: Stanton Dahl Architects, 2025

Figure 8: Waste Storage Area and Collection Zone Location (lower ground floor)



Source: Stanton Dahl Architects, 2024.

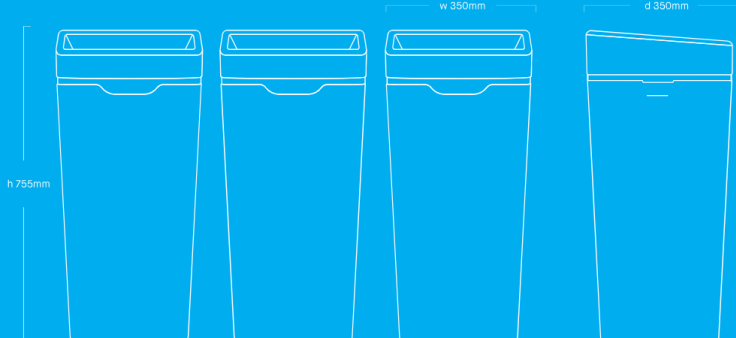
Appendix B Split Receptacles

A flexible recycling system

Adaptable recycling stations spaces that move or grow as your needs change. Reimagined waste stream colours that complement your aesthetic, while meeting New Zealand industry requirements.




DIMENSIONS



Specifications:

- 60L capacity per bin
- Designed + made in New Zealand
- Made from Polypropylene - fully recyclable
- Including 50% Post Consumer Recycled Materials



Specs

350 × 350 × 755mm
 Dimensions (w x d x h)

60L
 Volume

Made from 50% recycled materials
 Made from polypropylene which is fully recyclable (including 50% recycled materials)

Source: Method Recycling, 2023.

Appendix C Standard Signage

Waste Signage

Signs for garbage, recycling and organics bins should comply with the standard signs promoted by the NSW Office of Environment and Heritage (NSW OEH 2008b).

Standard symbols for use in signage, bin facade and educational materials are promoted through the NSW Environment Protection Authority. They are available for download from the NSW EPA website (NSW EPA 2016b), in black and white and colour versions. The Australian Standard series AS 4123 (Part 7) details colours for mobile waste containers (Standards Australia 2008).

Figure 9: Examples of standard signage for bin uses



Safety Signs

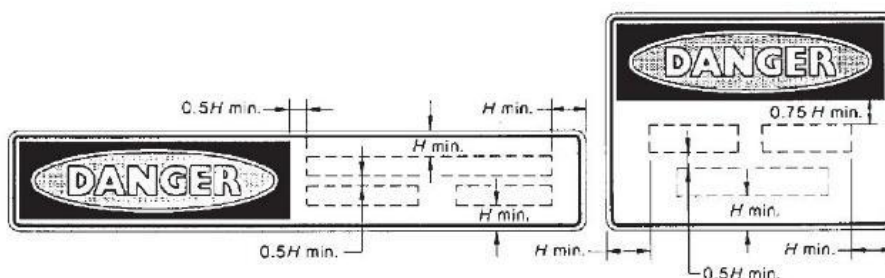
The design and use of safety signs for waste and recycling rooms and enclosures should comply with AS 1319 (Standards Australia 1994). Safety signs should be used to regulate, and control safety related to behaviour, warn of hazards and provide emergency information, including fire protection information. Below are some examples. Clear and easy to read 'NO STANDING' and 'DANGER' warning signs must be fixed to the external face of each waste and recycling room where appropriate.

Figure 10: Example and layout of safety signage



(d) Horizontal

FIGURE D5 TYPICAL ARRANGEMENTS OF DANGER SIGNS



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