

PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2025/1637

Date: 11 August 2025



Tenant - Operational Waste Management Plan

v1.2 – 29 May 2025

1. Introduction

This Waste Management Plan has been prepared on behalf of CH Hydrangea Pty Ltd (Applicant) in support of a development application over part of the land at 4499-4651 Mount Lindesay Highway, North Maclean QLD 4280 and described as part of Lot 39 on SP338781 (site). This PDA Development Application seeks approval for a Development Permit for a Material Change of Use for a Warehouse (Distribution Centre) and Low Impact Industry.

The proposed development will function as distribution centre for the tenant, for the receipt, warehousing, storing and distribution of products, and will include a facility that enables material to be printed for distribution. The proposed development will operate 24 hours a day, 7 days a week and will be located within Stage 2 of the overarching PDA Development Approval for the Flagstone Logistics Estate (EDQ Reference: DEV2018/961/18).

The purpose of this OWMP is to determine the practical arrangements for how waste management and recycling will occur, and to set in place measures for persons working in this facility to reduce the generation of waste and to achieve improved sustainable outcomes from a waste perspective.

1.1. Site Description

The Tenants site will be located on Estate Lot 14 of the Flagstone Logistics Estate, which is a new 100-hectare master planned approved industrial park located in North Maclean, approximately 37 road kilometres south of the Brisbane CBD. Flagstone is connected to the broader region via the Mt Lindesay Highway (Highway 13) which connects to the major arterial Logan and Gateway Motorways for travel points to the greater Brisbane metropolitan area and beyond. The proposed industrial development on this site comprises of warehouse and office facilities with a total building area of 156,539 m² (across 4 levels). The development includes onsite carparking for 645 cars.



Figure 1: Flagstone Estate BNE4 Site Plan

1.2 Development Summary

Set out in Table 1 below is a development summary for this project

Table 1: Development Summary

Development Information	
Total Site Area	99,592 m2
Carparking and Bikes	644 Car Parking (including accessible & ute) 18 Motorbike Parking 30 Bicycle Parking
Total Gross Floor Area	141,569 m ²

1.3 Types of Waste Generated

The following types of waste are most commonly expected to be generated within a development such as this:

- General landfill garbage;
- Recyclables such as glass, paper, cardboard, cartons, plastics with ID Codes 1 to 7, steel & aluminium cans;
- Organic food waste;
- Timber waste;
- Sundry items such as broken furniture and large objects, collectively referred to as hard waste;
- Electronic waste (e-waste) being all waste items with a plug, battery or power cord.

2. Waste Generation

Listed in Table 2 below, are the estimated daily waste generation rates for this project¹

Table 2: Daily waste generation rates

Outlet type	General Waste Generation Rate	Recycling Generation Rate
Office	98 kg	140 kg
Warehouse	500 kg	5,975 kg

To meet Tenant's requirements to achieve more sustainable waste management outcomes within this project, the garbage and recycling are proposed to be divided into additional waste streams, as set out in Table 3 below:

Table 3: Revised daily waste generation rates to achieve more sustainable outcomes

Outlet type	General Waste Generation Rate		Recycling Generation Rate				
	Garbage (70%)	Food Organics (30%)	Paper & Cardboard (%)	Soft Plastics	Comingled recycling	Timber	Book trimmings
Office	98 Kg	42 Kg	-	-	140 Kg	0	0
Warehouse	500 Kg	-	4,776 Kg	48Kg	-	250 Kg	900Kg

3. Bin Types, Collection Method & Frequency

¹ These rates are based on the waste generation from a similar site.

3.1. General Waste and Recycling Collection Method & Frequency

It is proposed that a private waste contractor will conduct collections of all waste streams, with collections and the provision of bins to be as set out in the following sections.

3.2. Garbage

As outlined in Table 3 above, the total Garbage estimated to be generated within this project is 598Kg per day and with collections for Garbage proposed to be undertaken 6 days a week (Monday to Saturday) for compacted waste. This will require Garbage compactors and bins of an adequate size to accommodate for a maximum of 1 day and 7 days respectively of Garbage waste for this facility. This requires 1 Garbage compactor and 30 x 1,100L bins as listed in Table 5 below

3.3. Cardboard

As outlined in Table 3 above, the total Cardboard estimated to be generated within this project is 4,776kg per day and with collections for Cardboard proposed to be undertaken twice a week for compacted waste and weekly for non-compacted Cardboard. This will require cardboard compactors and bins of an adequate size to accommodate for a maximum of 7 days of Cardboard waste for this facility. This requires 2 Cardboard compactors and 30 x 1,100L bins as listed in Table 5 below.

3.4. Soft Plastics

As outlined in Table 3 above, the total Soft Plastics estimated to be generated within this project is 48Kg per day and with collections for Soft Plastics proposed to be undertaken fortnightly, this will require bins of an adequate size to accommodate a maximum of 15 days of Soft Plastics for this facility. This requires bins for Soft Plastics of a size to accommodate 720Kg which will be adequately covered with 88 x 1,100L bin as listed in Table 5 below.

3.5. Commingled Recyclables

As outlined in Table 3 above, the total Commingled Recyclables estimated to be generated within this project is 140kg per day and with collections for Commingled Recyclables proposed to be undertaken weekly, this will require bins of an adequate size to accommodate a maximum of 7 days of Commingled Recyclables for this facility. This requires bins for Commingled Recyclables of a size to accommodate 224Kg which will be adequately covered with 32x 240L bins as listed in Table 5 below.

3.6. Timber (broken pallet)

As outlined in Table 3 above, the total Timber estimated to be generated within this project is 250kg per day and with collections for Timber (broken pallets) proposed to be undertaken monthly, this will require bins of an adequate size to accommodate a maximum of 30 days of Timber for this facility. This requires bins for Timber of a size to accommodate 7.5 tonnes which will be adequately covered with 1x 30m3 bulk bin and 16x 240L bins as listed in Table 5 below. The 16 wood bins are to be located inside the warehouse and be emptied in the bulk bin when required. They do not need to be stored outside in the bin yard.

3.7 Book trimmings (Print on Demand)

As outlined in Table 3 above, the total Book trimmings estimated to be generated within this project is 900kg per day and with collections for Book trimmings proposed to be undertaken every other day (4 times a week), this will require bins of an adequate size to accommodate a maximum of 3 days of Book trimmings for this facility. This requires bins for Book trimmings of a size to accommodate 2,700Kg which will be adequately covered with 27 x 1,100L bin as listed in Table 5 below

Table 5: Quantity and typical dimensions of bins for this project and collection frequency:

Bin type	Capacity	Quantity	Dimensions	Collection Frequency
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Garbage	Compactor	1		6 days a week (Monday to Saturday)
Garbage (blue body, red lid)	1,100L	30	Width 1.2m Depth 1.1m Height 1.3m	Weekly
Cardboard	Compactor	2		Twice a week
Cardboard (blue body, yellow lid)	1,100L	30	Width 1.2m Depth 1.1m Height 1.3m	Weekly
Soft Plastics (white body, white lid)	1,100L	88	Width 1.2m Depth 1.1m Height 1.3m	Fortnightly
Comingled Recyclables (blue body, yellow lid)	240L	32	Width 0.58m Depth 0.74m Height 1.07m	Weekly
Timber (broken pallet) recycling (green body, green lid)	Bulk bin	1	Width 1.30m Depth 4.36m Height 2.46m	Monthly
	240L	16	Width 0.58m Depth 0.74m Height 1.07m	
Book trimmings (Print on Demand)	1,100L	27	Width 1.2m Depth 1.1m Height 1.3m	Every other day (4 times a week)

The bins shown in Table 5 above are indicative only. Actual bins to be provided will be as supplied by the private waste contractor with a commitment that bins will be easily distinguishable, including different coloured lids and/or bodies, and will have appropriate signage on each bin to assist in distinguishing the purpose of each bin for either garbage, comingled recycling, soft plastics or clean paper & cardboard.

4. Bin Storage & Collection

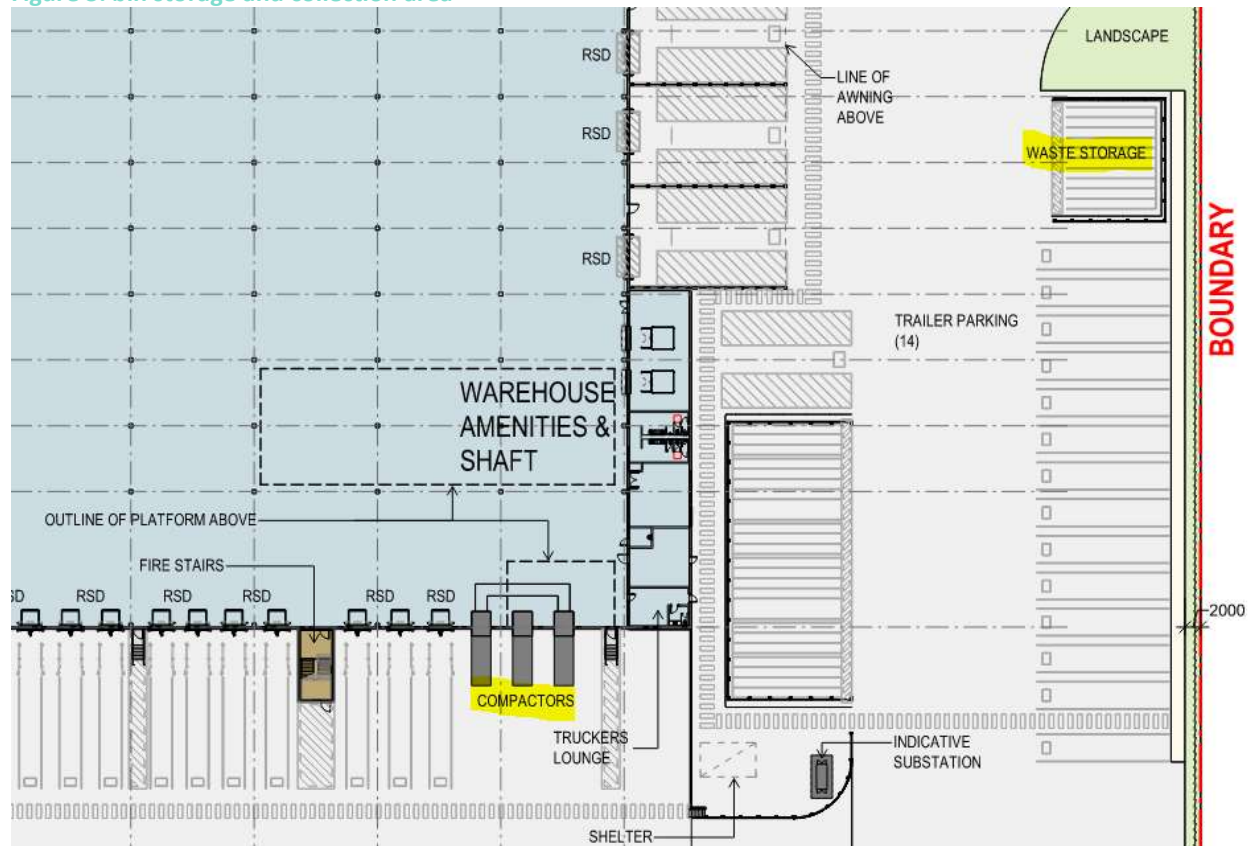
4.1. Collection Bin Storage Area & Collection Point

As shown on the architectural drawings and below in Figure 3, the waste collection bins for this project are proposed to be stored on the hardstand area, in the open, in a location with direct access for waste collection vehicles to collect or empty the bins (with the exception of the timber recycling bins which will be located in the warehouse and emptied into the bulk bin located within the bin storage area)

This bin location has been determined to be an accessible location to the main warehouse functions, which generate the majority of the waste, as well as accessible to the office and lunchroom areas. There is also room in this location for additional bins, should this be determined to be necessary for either additional waste streams or if more waste is generated to that estimated based on industry generation rates.

Maintenance staff will ensure that the bin storage area remains clean and clear. Also, the proposed bin collection is in a location where waste vehicles are able to enter in a forward direction and where they have the required area needed to manoeuvre and turn, so that they then exit the property in a forward direction.

Figure 3: bin storage and collection area



4.2. Waste Collection

Waste collection will be undertaken on site by private waste contractors as set out above.

The collection of Garbage, Cardboard, Commingled Recyclables, Timber and Soft Plastic waste will require 7 separate trucks, one each for the compacted Garbage and Cardboard, as well as one for each waste stream. Collection times for each waste stream will be coordinated so trucks do not arrive at the same time.

Waste collections will occur outside of peak traffic hours to reduce impacts on local traffic in the area, as well as to minimise any disturbance to neighbouring properties. Waste collections will also not occur outside of the hours of 7am and 8pm Monday to Saturday and 9am and 8pm Sunday and Public Holidays.

4.3. Regular Maintenance

Maintenance staff will be responsible for the upkeep, cleaning and maintenance of the bin storage and collection area, including installing and maintaining vermin traps. Private contractors will be engaged to undertake the cleaning of bins, as and when required, or to do a bin swap, with a clean bin delivered and the used been bin taken away for cleaning off site. These private contractors will also undertake maintenance and repairs of the bins as and when necessary.

5. Internal Bin Strategy

To achieve more sustainable waste management outcomes within this project, including to minimise general waste and to maximise recovery and separation of recyclables materials from general waste in order to minimise what waste ends up in landfill, an internal bin strategy will be adopted to support this objective, which will enable convenient and equitable disposal of each waste stream.

Within this facility, a variety of internal bin systems will be required and adopted, to meet the clear objectives set out in this OWMP. This will include looking at all processes undertaken within this facility and determining a specific bin strategy for each location, where different waste streams are generated to ensure the separation and collection of each waste stream and to minimise general waste.

Bins will also be required to be conveniently located within the entire facility, as well as bins specific to the waste identified to be generated within the different areas of this facility.

Within the office areas, there are to be no under desk single bins provided. Instead, bin stations are to be created in convenient locations, similar to that shown in Figure 4 below, which enable the separation and collection of each waste stream being:

- Garbage;
- Food organics;
- Commingled recyclables;
- Glass; and
- Clean paper and cardboard

Within breakout areas and lunchrooms, again bin stations as per the above are to be provided, as well as a benchtop kitchen caddy or the like provided in kitchens or kitchenettes in order to assist to maximise the collection of food organics.



Figure 4: Examples of office bin stations

Within printing and utility areas, recycling centres are to be created to maximise collection of clean paper and cardboard and in addition to this, there are to be specialist collection bins for printer ink cartridges as well as e-waste, batteries or other recycling items regularly needing to be disposed of.

A variety of other measures will also need to be adopted as part of the internal bin strategy to assist all staff to achieve the objectives set in this report. This will include appropriate signage on bins and at bin stations and guides and/or communication strategies including induction procedures, as well as the assignment of roles and responsibilities for management, staff, cleaners and the private waste contractors.

As part of this, the need for the monitoring of bins, and the identification and reporting of incorrect bin use, will need to be assigned. Possible reporting on improved waste outcomes could also be included as part of the general waste reporting provided by private waste contractors.

6. Internal Waste Transfer to Bin Collection Point

The successful implementation of the waste objectives set out in this report, will heavily rely on convenient access from internal bins and bin stations to the bin collection point.

As part of the preparation of a specific bin strategy for each location where different waste streams are generated within this facility, consideration will also be given to the transfer of the waste from internal bins to the designated bins at the waste bin collection point.

Consideration will also need to be given to methods and equipment needed for internal waste transfers. The interior layout of this facility will also need to provide appropriate and convenient access routes to enable internal waste transfers to the bin collection point.

7. Signage

Appropriate signage will be placed where the collection bins are stored and where internal bins are distributed throughout this project. Visual prompts stuck to the collection bins and posters such those in Figure 5 below, will assist in the proper disposal of the different types of waste.

Figure 5: Examples of posters



8. Additional Waste Streams

8.1. Hard Waste and e-Waste

Within the Warehouse, space will also be provided for hard waste items such as broken furniture and equipment as well as e-waste. Also, within the office printing and utility areas, recycling centres will be created which will include specialist collection bins for printer ink cartridges as well as e-waste and batteries etc.

Onsite Procurement Manager will be responsible for monitoring the level of hard waste and e-waste and for arranging collection and disposal at an appropriate facility by a private contractor, as required.

8.2. Timber Waste

Although a significant portion of products arrive on rented timber pallets which are collected and reused, there is a proportion of deliveries which arrive on non-returnable or re-usable timber pallets. These non-reusable timber pallets are stored/stockpiled within the warehouse and then collected as and when required and taken away to be recycled.

9. Implementation Plan

The successful implementation of the waste objectives set out in this report, will rely on the correct actions of management, staff, cleaners and the private waste contractors and will require:

- an internal bin strategy;
- guides and/or communication strategies including information to support correct waste separation and
- ways to encourage waste avoidance and reduction;
- assignment of roles and responsibilities for management, staff, cleaners and the private waste
- contractors as well as appropriate reporting;
- induction procedures; and
- monitoring of bins and identification and reporting of incorrect bin use;

After 3 months of occupation of this facility, and again after 12 months, a review is to be undertaken of the onsite waste operations and this OWMP, including a review of all waste volumes that have been generated. The purpose of this review is to assess the success of this OWMP and to determine whether improvements can be initiated, based on operational experience.

Appendix 1 – Architectural Site Plan

