

1.Introduction

This Waste Management Plan (WMP) has been prepared on behalf of Penrith city Council to accompany a Construction certificate for the adaptive re-use of the Police cottage. This Plan has been developed with consideration of Council's waste management guidelines.

The following has been based on the information provided and is intended to inform the design of the waste services by identifying the estimated waste profile for the development and providing the total area required by the recommended equipment/systems.

The project includes the construction of a café /restaurant premises. In relation to this waste management plan, the key components of the new development are:

- Kitchens and other food service areas; and
- Bar and dining areas

Waste audit and management strategies are recommended for new developments to provide support for the building design and promote strong sustainability outcomes for the building. All recommended waste management plans will comply with council codes and any statutory requirements. The waste management plan has three key objectives:

- i. *Ensure waste is managed to reduce the amount of waste and recyclables to land fill by assisting the building occupants to segregate appropriate materials that can be recycled, displaying signage to remind and encourage recycling practices and through placement of recycling and waste bins in appropriate locations to reinforce these messages.*
- ii. *Recover, reuse, and recycle generated waste wherever possible.*
- iii. *Compliance with all relevant codes and policies.*

To assist in providing clean and well-segregated waste material, it is essential that this waste management plan is integral to the overall management of the building and clearly communicated to all staff (and patrons) of the Police Cottage.

2. Waste Generation

2.1 Waste Streams

Based on the development profile, the following waste streams would be expected:

- Comingled recycling;
- General waste.

Other wastes may be generated, but these would be in small volumes and irregular in terms of when generated.

2.2 Waste Generation Estimates

Based on table 3 of council waste guidelines and the development having a effective area of 177m2 it will generate somewhere between the following daily liters of general and recycling waste:

| Usage Type | M2 | General Waste/Day | Recycling/Day |
|-------------------------|-------|-------------------|---------------|
| 50% Café/ 50%restaurant | 177m2 | 1168m2 | 354m2 |

3. Waste Management Systems and Spatial Requirements

3.1 Waste Systems and Bin Requirements

We propose to use two 1100 liter mobile garbage bins and a 660L bin for recycling.

Based on the estimates of waste generation and a pickup every 2 days we estimate we will need two 1100L bins for general waste and one 660L bin for recycling. If required waste & recycling will be collected daily on an as needs basis, providing a volume of 2200 liters a day for waste and 660 liters per day for recycling.

The waste storage facility should be approximately **4.5 m²**. Bins will be stored in the compound and waste transported from the main building to the storage compound as needed. The compound doors will be opened, and bins pulled out and waste deposited prior to bins being pushed back in and locked up again.

3.2 Waste Storage

Council guidelines recommend that waste storage rooms form part of the development. Due to the adaptive re-use of a heritage building it is not feasible to construct a bin storage room within the main building. It is proposed to construct a fully sealed low height storage compound to contain the required bins. The following diagram illustrates the location of the waste storage area that is located on site.

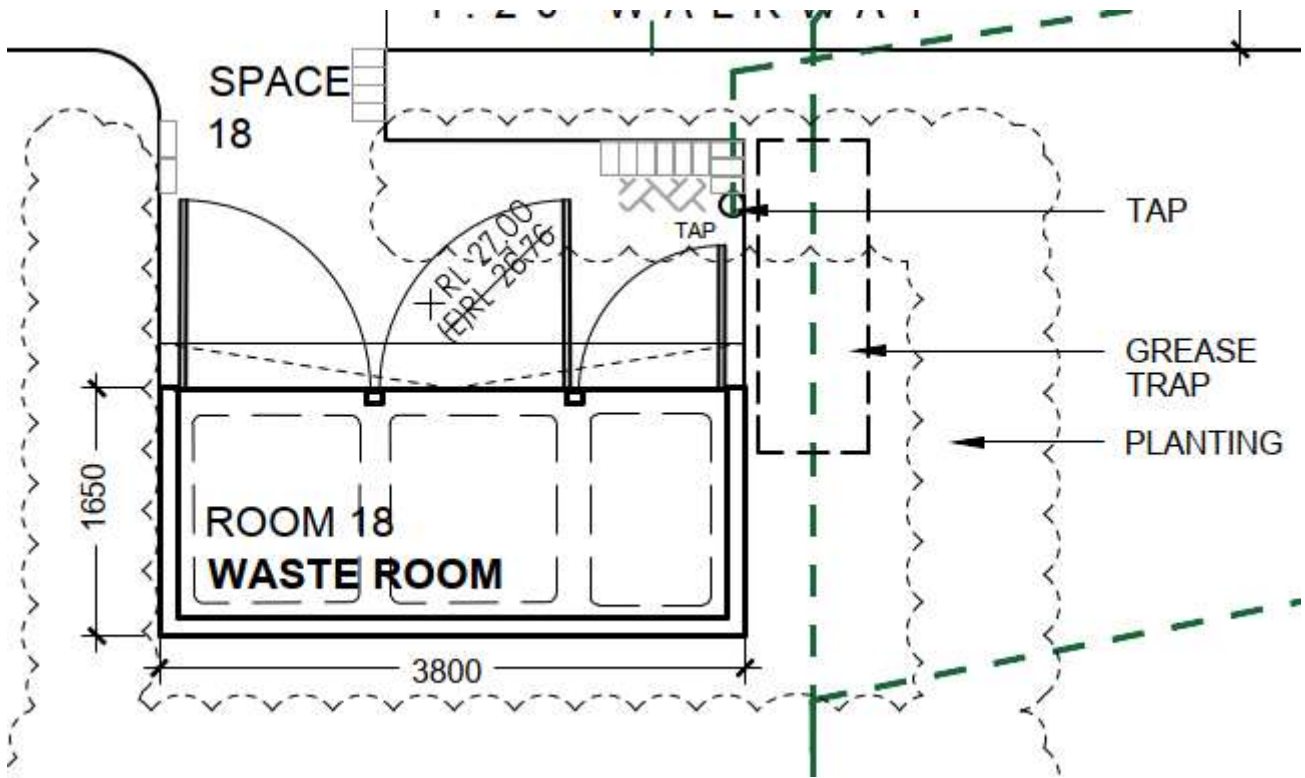


Figure 1 - Waste Floor Plan

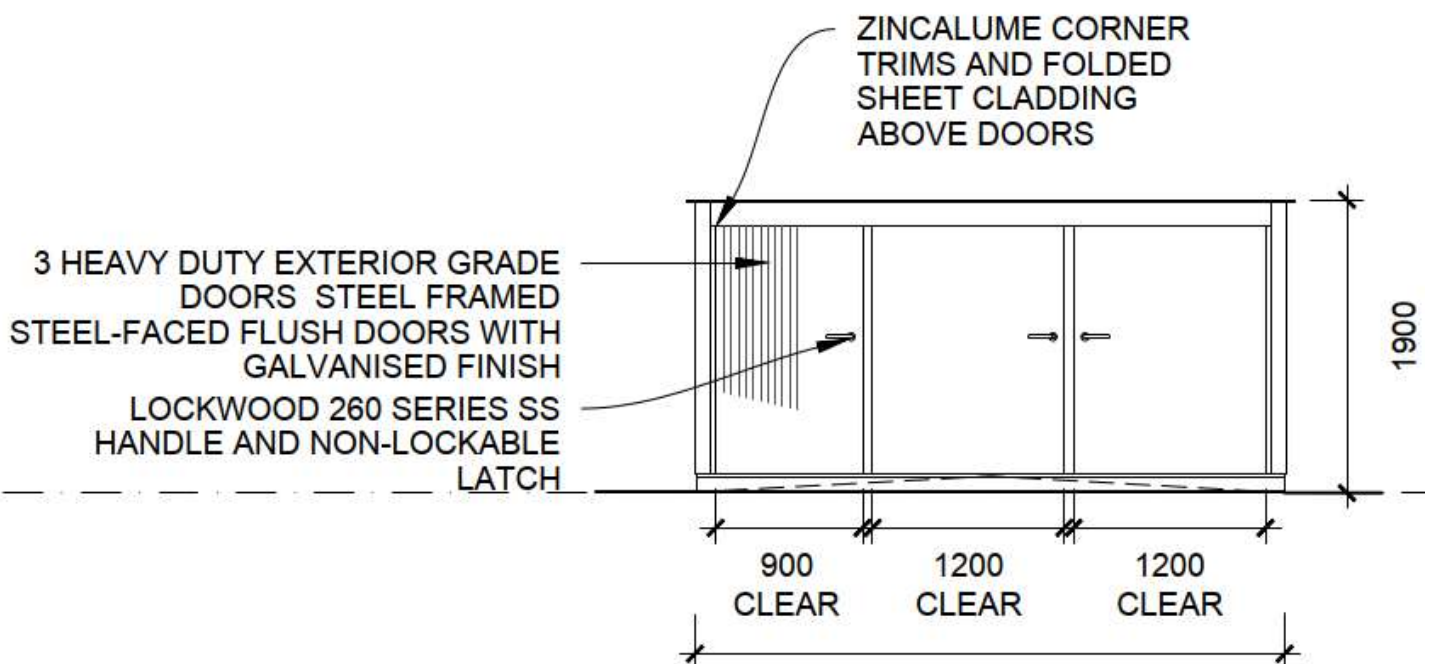


Figure 2- Waste Front elevation

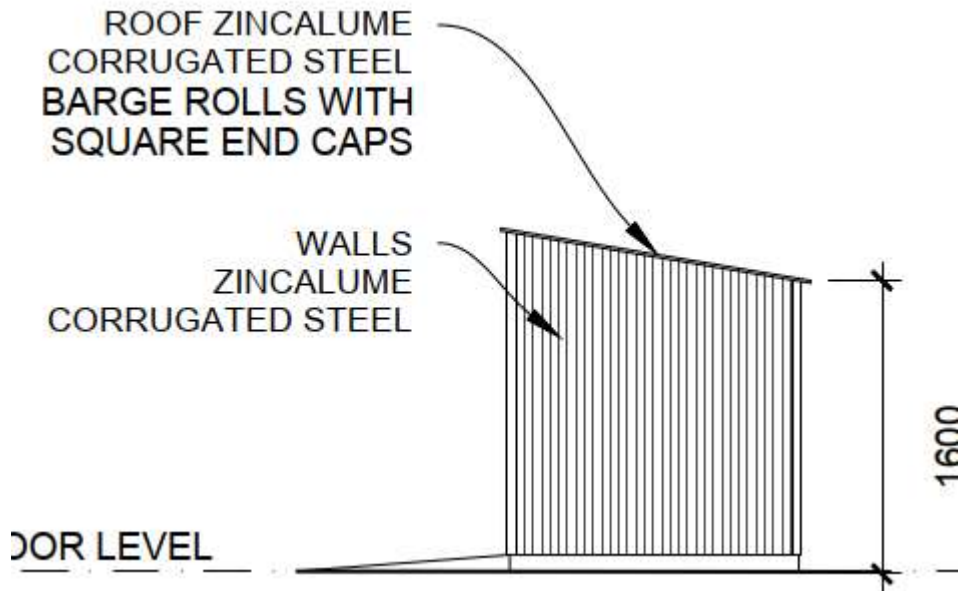


Figure 3 - Waste Side elevation

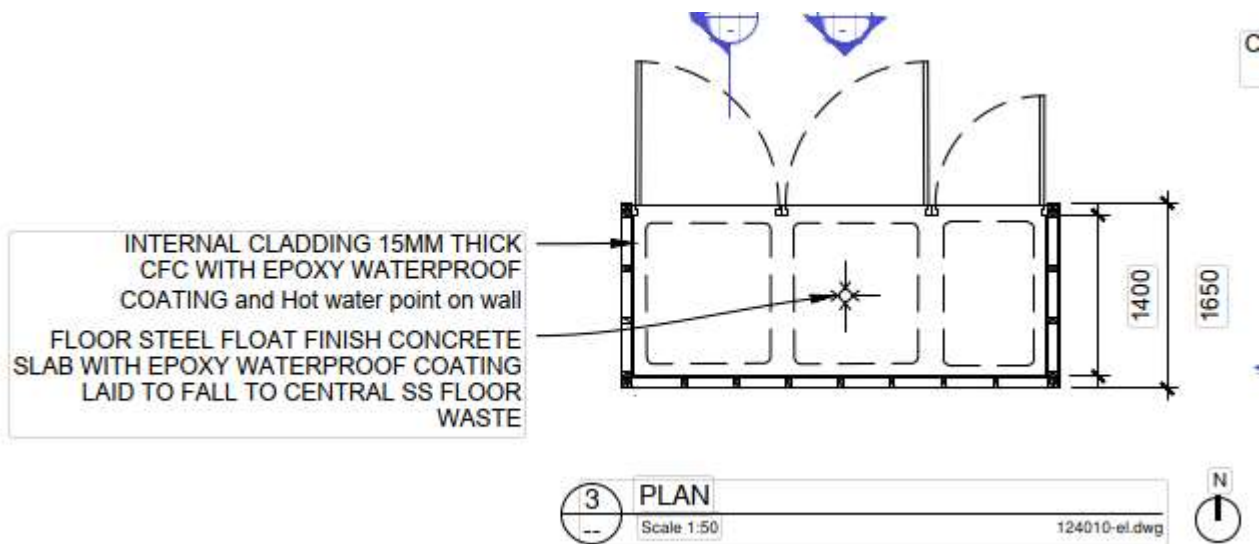


Figure 2 - Waste Room Internal details

4. Waste Management Systems

4.1 Systems

The following summarizes the recommended waste and recycling systems that will be implemented. These recommendations are based on Council requirements and systems implemented for similar developments.

All staff (and contractors) will be briefed on the proper use of waste management system and the recycling streams will be monitored and reported by cleaners/building management as it is imperative that the recycling stream remain free of contamination to ensure compliance with Council and the appointed waste service contractor collection protocols. Staff will be encouraged to maximize the separation of general waste and mixed recyclables to aid the proper disposal of all materials.

Waste and recycling collection services will be provided by an appointed contractor. Utilizing an appointed contractor affords the tenant greater flexibility regarding collection schedules and the appropriate collection frequencies will be determined in consultation with the waste contractor once appointed – however once operational, collection schedules may need to be adjusted accordingly depending on actual waste generation.

4.2 Storage

The waste and recycling bins will be color coded and clearly signed. Each stream will be located in a designated area. This will assist in easy identification of correct bins by cleaners.

The garbage storage area will contain the following to minimize odors, deter vermin, protect surrounding areas, and make it a user-friendly and safe area:

- floor to be sealed with a two pack epoxy.
- walls and floor surface is flat and even;
- all corners coved and sealed 100mm up, this is to eliminate build-up of dirt;
- a water facility with hose cock must be provided for washing the bins;
- any waste water discharge from bin washing must be drained to sewer in accordance with the relevant water board;
- tap height of 1.2m;
- storm water access preventatives (grate);
- all walls painted with light colour and washable paint;
- well lit with internal sensor lighting
- all doors are hinged and self-closing;
- waste collection area must hold all bins – bin movements should be with ease of access;
- conform to the Building Code of Australia, Australian Standards, and local laws; and

Occupational Health and Safety issues such as slippery floors in waste rooms and the weight of the waste and recycling receptacles will need to be monitored. Cleaners will monitor the bin storage area and all spills will be attended to immediately by cleaners.

A – Waste Management Equipment

The following diagrams illustrate colours and sizes of different bins that could be used within the development.

Figure 1 – Indicative size of MGB

| Size | Height (mm) | Depth (mm) | Width (mm) |
|-----------|-------------|------------|------------|
| 240L Bin | 1100 | 740 | 600 |
| 660L Bin | 1400 | 1260 | 800 |
| 1100L Bin | 1330 | 1240 | 1090 |

Table 1: Standard Bin Size and Dimensions (Note: sizes may vary with manufacturers)



Figure 1: Image of typical 240L, 660L and 1100L waste collection bins

