

RESOURCE WASTE MANAGEMENT PLAN (RWMP)

Project: Hungry Jacks Food and Drinks Premises.

A Waste Management Plan is to accompany the construction certificate applications for demolition, construction and operational works proposed for the development.

Project Details	
Development Proposal	Hungry Jacks Food & Drink Premises
Address of development	Lot 4 DP 38230, Lot 5A DP 38704 & Lot 52 DP 517948 254-256 Goonoo Goonoo Road TAMWORTH NSW 2340
Existing buildings and other structures currently on the site	The site consists of three allotments. Lots 5A (DP38704) and 52 (DP517948) are currently vacant land and Lot 4 (DP38280) contains an existing dwelling consisting of clad building with a galvanised iron roof and a shed of similar construction.
Description of proposed development	Development consent is sought for the construction and use of a food and drink premises in the form of a Hungry Jacks Restaurant. The works will require the demolition of the residential building in Lot 4.

Waste Management - Development Objectives

The goal of waste management is to reduce the quantity of waste and encourage the recycling of waste generated by demolition and construction works. Developments should seek to demonstrate project management which seeks to:

1. Re-use excavated material on-site and disposal of any excess to an approved site
2. Green waste mulched and re-used on-site as appropriate, or recycled off-site
3. Bricks, tiles and concrete re-used on-site as appropriate, or recycled off-site
4. Plasterboard waste returned to supplier for recycling
5. Framing timber re-used on site or recycled off-site
6. Windows, doors and joinery recycled off-site
7. All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with WorkCover Authority and EPA requirements
8. Plumbing, fittings and metal elements recycled off site
9. Ordering the right quantities of materials and prefabrication of materials where possible

10. Re-using formwork

11. Careful source separation of off-cuts to facilitate re-use, resale or recycling

The management of waste is addressed in this WMP in the following (3) sections, according to the stages of the development: demolition; construction and ongoing operation.

How to Estimate Quantities of Waste

There are many simple techniques to estimate volumes of construction and demolition waste. The information below can be used as a guide by builders, developers & homeowners when completing a waste management plan:

To estimate Your Waste:

1. Quantify materials for the project
2. Use margin normally allowed in ordering
3. Copy these amounts of waste into your waste management plan

When estimating waste, the following percentages are building “rule of thumb” and relate to renovations and small home building:

Material	Waste as a Percent of the Total Material Ordered
Timber	5-7%
Plasterboard	5-20%
Concrete	3-5%
Bricks	5-10%
Tiles	2-5%

Converting Volume into Tonnes: A Guide for Conversion

Timber = 0.5 tonnes per m³

Concrete = 2.4 tonne per m³

Bricks = 1.0 tonne per m³

Tiles = 0.75 tonne per m³

Steel = 2.4 tonne per m³

To improve/provide more reliable figures:

- Compare your projected waste quantities with actual waste produced.
- Conduct waste audits of current projects.
- Note waste generated and disposal methods.
- Look at past waste disposal receipts.
- Record this information to help estimate future waste management plans.
- On a waste management plan amounts of waste may be stated in – m² or m³ or tonnes (t).

DEMOLITION

Demolition works required for the development include removal of the residential building and shed in Lot 4 DP 38280 and redundant driveway crossovers on all sites.

An estimate of the expected waste generated from the demolition is detailed below. Quantities to be confirmed onsite.

Total estimate = 120m³ total waste from a standard 150sqm dwelling.

Type of waste generated	Estimate Volume (m ³) or Weight (t) of Waste Generated.	Estimate volume (m3) or Weight (t) of Recyclables All waste to TRC Waste Management Depot	Estimate Volume (m ³) or Weight (t) disposed. All waste to TRC Waste Management Depot
Concrete & Masonry (Approx 50-60%) (Inc bricks, tiles, pavers, slabs, walls & footings and driveways.)	50m ³	50m ³	NIL
Timber (20-30%) (Framing, floorboards, trusses and cabinetry)	30m ³	30m ³	NIL
Plaster Board (10-15%)	15m ³	NIL	15m ³
Metal (5-10%) Including Roofing, plumbing pipes, nails screws and structural steel component	15m ³	15m ³	Nil
Other (5-10%) Including Insulation, glazing, electrical wiring, fixtures & fittings	8m ³	4m ³	4m ³
Floor coverings	2m ³	NIL	2m ³
Packaging (used pallets, pallet wrap)	N/A		
Green waste Inc Trees, gardens etc.	N/A	N/A	N/A
Hazardous/special waste e.g. asbestos (specify)	To be identified prior to demolition works commencing		
Other (specify)	N/A	N/A	N/A

CONSTRUCTION STAGE

Construction waste will be separated on site by builder's contractors during the construction stage. The site shall be checked on a regular basis to make sure no recyclable materials are mixed with non-recyclable materials; and to set aside on site an area to store the recyclable materials for transportation to local recycling plants.

The site manager will erect a sign on site for waste areas and will inform the builder's staff where material is to be collected for recycling. The site manager and/or builder will impose the execution of the waste separation policy on a regular basis and have on-going checks. Stockpiles shall be located and managed appropriately to prevent sediment runoff and ensure minimal environmental impact from the building site.

Suitable all-weather vehicular access points shall be provided for the construction phase, and all sediment and erosion control devices implemented on site prior to commencement of construction works.

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Excavation material	<10m ³ per building footing	Re-used cut to fill onsite	NIL
Timber	2m ³	All timber waste to recycling.	NIL
Concrete	0.5m ³	0.5m ³	NIL
Bricks	NA	N/A	NIL
Tiles	N/A	N/A	NIL
Metal (Cladding offcuts)	<5.0m ³	All metal to recycling.	NIL
Glass	Nil	N/A	N/A
Plasterboard	1.5m ³	N/A	1.5m ³
Packaging (used pallets, pallet wrap)	1m ³	Recycled back to suppliers	N/A
Garden organics (Green waste)	Nil	NA	Nil
Containers (cans, plastic, glass)	1.5m ³	All to recycling.	NIL
Paper/cardboard	1.5m ³	All to recycling.	1NIL
Other (specify)	N/A	N/A	N/A

ONGOING OPERATION

The operation is provided with a bin enclosure which will house individual general waste and recycling bins. These bins are to be appropriately sized, and easily transported manually for collection within the service bay through the roller doors.

Projected weekly waste volumes calculated based on the NSW EPA Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities for a food retail premises are detailed in the table below:

Type of waste generated	Estimate Volume (L) per week.	Reuse & recycling (Offsite) All waste to TRC Waste Management Depot	Disposal to Landfill. All waste to TRC Waste Management Depot
Food & general waste	3,326L (based on 180L average per 100m ² per day)	NIL	Disposed of at local landfill by waste contractor
Recyclable Waste	2,494L (based on 135L average per 100m ² per day)	All to TRC Waste management Depot	NIL

Whilst the above waste generation rates are consistent with EPA Guidelines, based on extensive operator experience, the Hungry Jacks restaurant is likely to generate less waste than stated above, i.e., this is a worst-case scenario.

It is estimated that waste collection will occur twice weekly. However, this will be confirmed once the premises is operational.