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CIVIL • STRUCTURAL • HYDRAULIC

# WASTE MANAGEMENT PLAN

## 50 MORISSET STREET
## QUEANBEYAN

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## INTRODUCTION

The purpose of this plan is to outline how general waste, recycling and green waste will be managed on the site; and to define the roles and responsibilities of everyone involved in the waste management process.

The plan covers various aspects of waste management including:

Post Development Operations

- Estimated waste, recycling and green waste generated by the development
- Number and location of waste and recycling hoppers.
- Roles and responsibilities for maintaining the hoppers.
- Use and management of waste chutes.
- Vehicle movements of the waste collection vehicle.
- Use and management of mechanical assistance for waste management.
- Management of commercial waste and recycling.

Construction Waste Management

- Site Management
- Waste Generation
- Dust Control
- Noise Management
- Air Quality
- Waste Management
- Hazardous substances
- Paints
- Contamination

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# POST DEVELOPMENT OPERATIONS

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## WASTE, RECYCLING AND GREEN WASTE GENERATION

| Type of units by size | Waste (litres/week) | | | Recycling (litres/week) | | |
|---|---|---|---|---|---|---|
| | Number of units | litres/week per unit | Total litres/week | Number of units | litres/week per unit | Total litres/week |
| 1 bedroom or studio unit | 80 | 80 | 6,400 | 80 | 70 | 5,600 |
| 1 bedroom with separate study room | | 90 | 0 | | 80 | 0 |
| 2 bedroom unit | 80 | 100 | 8,000 | 80 | 90 | 7,200 |
| 3 bedroom unit | | 120 | 0 | | 110 | 0 |
| 4 bedroom unit or greater | | 140 | 0 | | 120 | 0 |
| **Total calculated waste** | | | **14,400** | | | **12,800** |

**Table 1.1 – Residential Waste Generation**

| | | | | | |
|---|---|---|---|---|---|
| Retail Cafe - Waste | | | | | |
| Use | Area | Waste/100m2 /Day (litres) | Total Waste/ Day (L) | Operating Days | Weekly Generation (L) |
| | 107 | 660 | 706 | 6 | 4237 |
| | | | | Total Waste | 4237 |
| | | | | | |
| Retail Cafe - Recycling | | | | | |
| Use | Area | Recycling/ 100m2/Day (litres) | Total Recycling /Day (L) | Operating Days | Weekly Generation (L) |
| | 107 | 135 | 144 | 6 | 867 |
| | | | | Total Recycling | 867 |
| | | | | | |
| Retail non-food Commercial - Waste | | | | | |
| Use | Area | Waste/100m2 /Day (litres) | Total Waste/ Day (L) | Operating Days | Weekly Generation (L) |
| | 518 | 50 | 259 | 6 | 1554 |
| | | | | Total Waste | 1554 |
| | | | | | |
| Retail non-food Commercial - Recycling | | | | | |
| Use | Area | Recycling/ 100m2/Day (litres) | Total Recycling /Day (L) | Operating Days | Weekly Generation (L) |
| | 518 | 25 | 130 | 6 | 777 |
| | | | | Total Recycling | 777 |
| | | | | | |
| | | | | | |
| TOTAL WASTE PER WEEK | | | | | 5791 |
| TOTAL RECYCLING PER WEEK | | | | | 1644 |

**Table 1.2 – Commercial Waste Generation**

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## NUMBER AND LOCATION OF WASTE AND RECYCLING HOPPERS

The number of hoppers required for the site has been calculated in accordance with Council requirements and the generation rates provided above.

The site will be serviced with a shared hopper arrangement, which includes enough hoppers to accommodate both general waste and recycling.

Collection will occur 2 times per week for both waste and recycling.

The total number of hoppers will be as follows:
7 x 1100L hoppers for General Waste
7 x 1100L hoppers for Recycling.

This does not include the hoppers which are required for the chute system and are described below.

Hoppers will be stored in a designated waste enclosure that is accessible by the waste collection contractor and strata manager vehicle to manage waste services on the site.

## MANAGEMENT OF GREEN WASTE

The site will be managed by a strata manager, who will employ a landscape maintenance contractor to attend to the site as required.

It will be their responsibility to remove green waste from the site as required.

No residential units have access to a ground floor courtyards or open space therefore the likelihood of green waste generated from residential units is deemed negligible.

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## ROLES AND RESPONSIBILITIES FOR MAINTAINING THE HOPPERS

The Strata / Site Manager has sole responsibility for maintaining the waste and recycling storage facilities and hoppers. The Strata / Site Manager shall ensure that the storage area is kept clean and free of litter, and that the hoppers are well-maintained and in good condition. Regular inspections should be carried out to identify any issues or repairs that need to be made.

## USE AND MANAGEMENT OF WASTE CHUTES

As a result of the overall height of this development, a waste chute system is required to be installed as per the Development Control Code.

Dedicated waste and recycling chutes shall be installed through the building and have a chute service compartment located on each residential floor of the development.

Residents must take their waste and recycling to the chute compartment on their floor and dispose of it accordingly.

Residents should be informed of the chute system and provided with clear instructions on how to use it by the Strata / Site manager.

Each chute will discharge into a dedicated hopper at the bottom of the chute system.

Each chute shall also be furnished with a spare hopper to allow for easy and safe rotation of hoppers once they are fully loaded.

The Strata / Site manager shall maintain the waste and recycling chute system by ensuring regular cleaning and maintenance of the chutes; to ensure that they are clean, safe, and functional. They will also be responsible for identifying and addressing any issues with the chute system.

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## PATH OF TRAVEL FOR THE WASTE COLLECTION VEHICLE

The waste truck will enter and exit the site through a designated verge crossing and driveway to ensure that it can safely maneuver through the site. The strata / site manager will ensure that the driveway is clearly marked and that any potential obstacles, such as parked cars or obstructions are removed / relocated prior to collection days to ensure that waste and recycling can be collected.

As an exact collection time is not known for collection day, the strata / site manager shall ensure that all residents are informed of the scheduled waste collection days to ensure that waste and recycling is disposed of prior and to minimize the potential for conflicts arising from last minute disposals or drop offs.

## MANAGEMENT OF COMMERCIAL WASTE AND RECYCLING

Commercial waste and recycling will be stored in a separate enclosure to residential waste and recycling and will be managed separately by the strata/site manager. The collection of commercial waste and recycling will be done by a private contractor, as opposed to the Council's waste collection service.

The strata / site manager and the private contractor will be responsible for ensuring that the waste and recycling is collected and disposed of in accordance with all relevant regulations and requirements.

The strata/site manager will be responsible for ensuring that the enclosure is maintained and that the waste and recycling is correctly segregated and managed.

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# CONSTRUCTION WASTE MANAGEMENT

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**Site Management**

The builder is responsible for all construction waste management through the construction phase of the project.

**Waste Generation**

The estimated waste which is likely to be generated by the proposed development during construction is as follows:

| WASTE GENERATION SUMMARY | | | |
|---|---|---|---|
| TYPE OF WASTE | ESTIMATED QUANTITY | | DISPOSAL FACILITY |
| | VOLUME (m3) | Weight (T) | |
| Excavated Material | 2400 | 3800 | MUGGA |
| Bricks | 10 | 16 | CCR |
| Concrete | 10 | 24 | CCR |
| Timber | 300 | 300 | MUGGA |
| Plasterboard/Gyprock | 150 | 150 | MUGGA |
| Metals | 20 | 20 | MUGGA |
| Cardboard/Paper | 15 | 5 | MUGGA |
| Plastics | 20 | 5 | MUGGA |
| Mixed Waste | 15 | 15 | MUGGA |
| Green Waste | 5 | 2.5 | MUGGA |
| Other | 0 | 0 | |
| TOTAL | 2945 | 4337.5 | |

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**Dust control measures**

Where construction work generates dust, all reasonable and practicable measures should be taken to minimize that dust. This shall include:

- Retaining existing vegetation where possible.
- Stripping areas progressively and only where it is necessary for works to occur.
- Employing stabilisation methods such as matting, grassing or mulch.
- Dampening the ground with a light water spray (contact the epa for requirements during extreme drought conditions). If additives in the water are used to increase its dust suppression properties, the chemical should have no adverse impact on adjacent water bodies.
- Roughening the surface of exposed soil.
- Covering stockpiles and locating them where they are protected from the wind.
- Restricting vehicle movements
- Covering the load when transporting material
- Constructing wind breaks such as wind fences in accordance with the nsw blue book.
- Immediately revegetating the area when an area of works is completed to inhibit the generation of dust.

**Noise Management**

- Ensure all construction work that generates noise is conducted within the time periods as approved by Council and the relevant environmental protection authority.
- Schedule noisy activities for the least sensitive times of the day, such as mid- morning and mid-afternoon
- Select machinery that produces less noise
- Ensure machinery is well maintained.
- If work may unavoidably exceed the noise limits during the times set, seek written approval from the epa and inform nearby residents.

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**Air quality**

- Mismanagement of air quality on site has the potential to result in detrimental effects on the health and amenity of neighbours and employees, reduced visibility on site, increased wear on machinery and equipment and complaints from neighbours.
- Incorporate measures to limit the effect on air quality by minimising dust from construction activities and smoke from fires.

**Waste management**

Principles of waste management:

- Operate a material collection and disposal system.
- Follow the waste minimisation hierarchy of reduce, reuse, recycle and dispose appropriately.
- Use reusable or recycled products where practicable.
- Reuse construction, demolition or green waste materials on site where practicable.
- Recycle--where disposal of materials is required, provide waste to construction material recovery facilities where possible.
- Dispose appropriately--materials that cannot be recycled should be disposed to a licensed facility.

**Hazardous substances**

- Store all possible pollutant materials (e.g. chemicals and fuel) well clear of any poorly drained areas, flood prone areas, streambanks, channels and stormwater drainage areas.
- Store pollutant materials in a designated area, under cover where possible.
- Construct containment bunds with provision for collection and storage of any spilt material.
- Implement a contingency plan to handle spills so environmental harm is avoided.
- Dispose of any liquid waste (fuel, wet paint, solvents etc.) Through a hazardous waste contractor.

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**Paints:**

- Wash water-based paints in small amounts of water over newspaper to collect residue. Place paper in a solid waste bin.
- Wash oil-based paints in a series of solvent baths. Solvent can be reused several times and must be stored in labelled, sealed containers. You must dispose of waste solvent through a hazardous waste contractor. Do not place in a normal bin or on the ground.
- Do not burn waste materials on the site, such as plastics, chemicals or wood that is painted, chemically treated, or contaminated with chemicals; as it is illegal to do so.

**Contamination**

- Placing contaminated material on land can harm the environment by polluting waterways, destroying vegetation and contaminating land, and may leave you with an expensive clean-up bill.
- An unexpected finds protocol should be incorporated into contract documentation to detail what actions will be undertaken if any contamination is uncovered while undertaking earthworks.

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