

93 - 97 Webb Street, Fitzroy

Waste Management Plan



170618WMP001A-F
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1 INTRODUCTION

onemilegrid has been requested by Outline Projects to prepare a Waste Management Plan for the proposed mixed-use development at 93 – 97 Webb Street, Fitzroy.

The preparation of this management plan has been undertaken with due consideration of the Sustainability Victoria Best Practice Guidelines for Waste Management in Multi-Unit Development and relevant Council documentation.

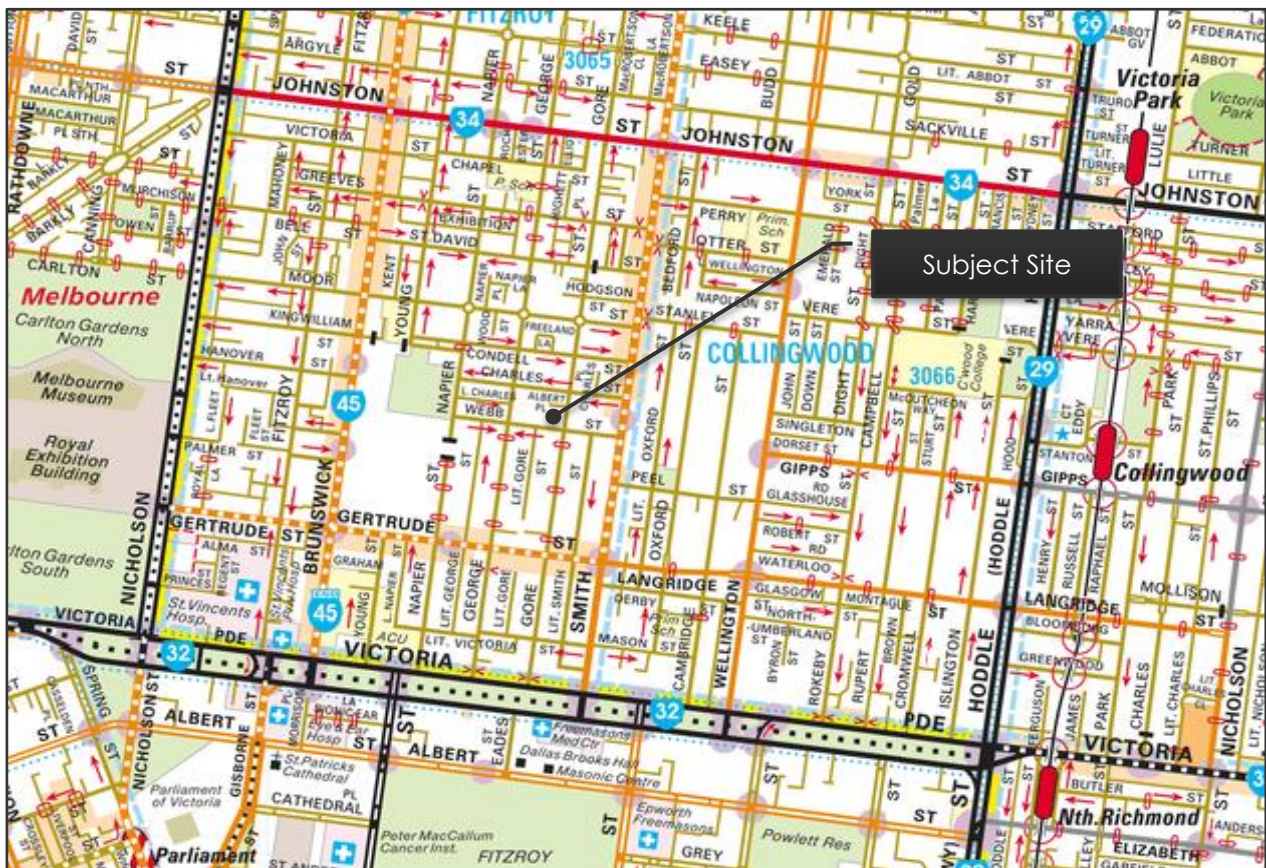
2 EXISTING SITE CONDITIONS

The subject site is bound by Charles Street to the north, Webb Street to the south and a laneway to the east, as shown in Figure 1.

The site is irregularly shaped with a frontage to Webb Street of 22 metres, a depth along the laneway of approximately 63 metres and a frontage to Charles Street of approximately 13 metres, with a total site area of approximately 995 square metres.

Land use in the immediate vicinity of the site is mixed in nature, and includes residential uses to the west and retail / commercial uses to the east along Smith Street within the strip shopping centre. Of note, a two full line supermarkets are available in close proximity in amongst a multitude of other amenities including banks, retail outlets and leisure venues.

Figure 1 Site Location



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3 DEVELOPMENT PROPOSAL

3.1 General

It is proposed to develop the subject site for the purposes of a mixed-use development, containing a single office tenancy on the ground floor, residential apartments and residential townhouses.

A summary of the proposed development is shown in Table 1.

Table 1 Proposed Development

<i>Use</i>	<i>Component</i>	<i>No. / Area</i>
Townhouses	3-Bedroom Dwelling	9
	1-Bedroom Dwelling	2
Apartment	2-Bedroom Dwelling	10
	3-Bedroom Dwelling	4
Office	1 tenancy	158m ²

3.2 Waste Management

It is proposed to utilise Yarra Council's municipal waste collection services, to manage the collection and disposal of all waste streams associated with the development.

Each townhouse will be provided with 2 bins, one for waste (80L) and the other for recycling (120L) to ensure garbage and recyclables are sorted at the time of disposal in accordance with Council's typical allocation. Bins will be stored within the individual garages. Residents of townhouses 1 – 4 will transfer their bins to the Webb Street kerbside, whilst residents of townhouses 5 – 9 will transfer their bins to the Charles Street kerb.

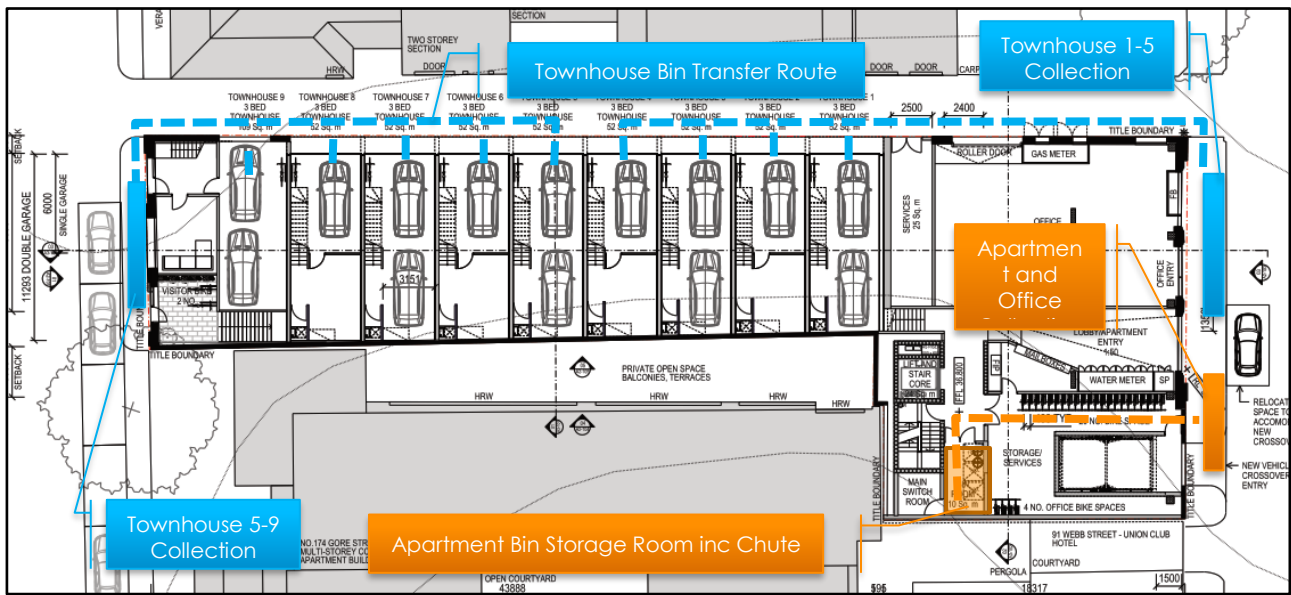
The apartment building includes a bin room on the ground floor which will be shared by all dwellings. A bin chute for each waste stream is included on each level which leads to a bin chute room on the ground floor. The bin chute room is located adjacent to the main bin room with bins rotated on an as needs basis by the building contractor. On collection days, bins will be transferred by the building manager or caretaker from the storage room and placed adjacent to the Webb Street kerb for collection on the specified collection days. Following collection, bins will be collected and returned to the bin room.

Residents will be responsible for disposing of recyclables or bagged garbage into the appropriate waste chutes, or directly into the appropriate bins located within the bin storage room.

Bins for the office tenancy will be stored within the tenancy and moved to Webb Street for collection on collection days.

The collection location and expected transfer route is shown in Figure 2.

Figure 2 Bin Storage Room and Collection Details



4 WASTE GENERATION

4.1 Residential

Yarra Council's Requirements for Waste Management Plans for Multi-Unit Developments identify the adopted waste generations rates for residential developments, as shown below:

Table 2 City of Yarra Waste Generation - Apartments

Dwelling Type	Garbage	Recycling
One-bedroom apartment	40L per week	60L per week
Two-bedroom apartment	50L per week	80L per week
Three-bedroom apartment	60L per week	100L per week

It is noted that Yarra City Council do not provide waste generation rates for individual dwellings (townhouses), therefore for the purposes of this assessment the standard bin allocation of 80L for waste and 120L for recycling per week will be adopted.

4.2 Office

Waste generation rates published within Sustainability Victoria's "Guide to Best Practice for Waste Management in Multi-Unit Developments" recommends adoption of the following rates for non-residential uses, based on rates published by the City of Melbourne:

Table 3 Sustainability Victoria Recommended Rates – Commercial

Use	Garbage Rate	Recycling Rate
Office	10L per 100m ² per day	10L per 100m ² per day

4.3 Expected Waste Generation

4.3.1 Garbage and Recycling

Based on the rates detailed, the following weekly waste generation is expected for each component of the development.

Table 4 Expected Waste Generation – Apartments

Component – Stream	No of Dwellings	No of Bedrooms	Rate/Dwelling	Total Waste / Week
Garbage	16	2	40 litres	820 litres
		10	50 litres	
		4	60 litres	
Recycling	16	2	60 litres	1,320 litres
		10	80 litres	
		4	100 litres	

Table 5 Expected Waste Generation – Townhouses

Component – Stream	No of Dwellings	Rate/Dwelling	Total Waste / Week
Garbage	9	80 litres	720 litres
Recycling	9	120 litres	1,080 litres

Table 6 Expected Waste Generation – Office

Component – Stream	Floor Area	Rate/100m²/week	Total Waste / Week
Garbage	158 m ²	50 litres	79 litres
Recycling	158 m ²	50 litres	79 litres

*Assuming 5 day working week

4.3.2 Green Waste

Given the nature of the proposed development and dwellings (being multi-unit/multi-level), it is expected that green waste generation will be minimal or negligible, and therefore a green waste collection service is not expected to be required.

4.3.3 Hard Waste

Yarra City Council provides two hard waste collections per dwelling per year, and in multi-unit developments. It is recommended that hard waste collections are managed by the body corporate to limit the number of collections required to the property. An area within the bin room is available for the temporary storage of hard waste between collections.

5 BIN REQUIREMENTS

5.1 Bin Provision and Specifications

It is proposed to utilise Council's municipal waste collection for all waste services for the proposed development.

The City of Yarra provides residential waste collection services for bins up to 1,100 litres. As such it is proposed to use 2 x 1,100 litre bins for waste and 1 x 1,100 litre bin for recycling. With regard to the townhouses, the City of Yarra offers a standard 80 litre bin for garbage and a standard 120 litre bin for recycling, as such, each townhouse will have these bins within their respective garages.

The City of Yarra also offers a Business Waste Collection Service, with a weekly garbage and recycling collection provided utilising a 120 litre bin for garbage and recycling.

Consequently, the following bins will be required for the proposed development.

Table 7 Bin Provision

Component – Stream	Total Waste / Week	Bin Size	Collection Frequency	Bins Required
Townhouses – Garbage	720 litres	80 litres	Weekly	9 bins
Townhouses – Recycling	1,080 litres	120 litres	Weekly	9 bins
Commercial – Garbage	79 litres	120 litres	Weekly	1 bin
Commercial – Recycling	58 litres	120 litres	Weekly	1 bin
Apartments – Garbage	820 litres	1,100 litres	Weekly	1 bin
Apartments – Recycling	1,320 litres	1,100 litres	Weekly	2 bins
Total				24 bins

**It is noted that the weekly recycling generation is only slightly higher than the 1,100L bin size proposed. This is quite common given that the volume of recyclables can decrease significantly with residents and tenants fully informed of proper bin usage such as the flattening cardboard boxes and plastic materials before being placed into the shared bin. As such the requirement for the second 1,100L bin may be reduced in time.*

Table 8 Bin Specifications

Stream	Capacity	Width	Depth	Height	Colour
Garbage	80 litres	0.47m	0.55m	0.89m	Dark green lid and body
Garbage	120 litres	0.50m	0.55m	0.95m	Dark green lid and body
Recycling	120 litres	0.50m	0.55m	0.95m	Yellow lid and dark green body
Garbage	1,100 litres	1.25m	1.10m	1.35m	Dark green lid and body
Recycling	1,100 litres	1.25m	1.10m	1.35m	Yellow lid and dark green body

5.2 Bin Storage

It is proposed to provide a bin storage area on the ground floor for the residential apartments component of the proposed development, capable of accommodating 2 x 1,100 litre bins. These bins will be rotated within the bins located in the bin chute room as required.

Some additional area is also provided within the bin storage room to allow for the temporary storage of bulk items and packaging, under the control of the Owners Corporation.

Furthermore, the bin storage room is located appropriately for access by residents, and is secured from the common areas.

The bin storage room should be vermin proof, and have appropriate lighting and drainage.

Residents in the townhouse dwellings have sufficient area within their garages to accommodate 1 x 90L bin for waste and 1 x 120 litre bin for recycling.

The office tenancy will be required to store their 120 litre bins for waste and recycling within the tenancy.

The proposed bin storage areas are therefore appropriately sized to accommodate the provision of bins in accordance with Council requirements.

5.3 Bin Collection

To allow for collection, bins will be transported to Webb Street and Charles Street frontage and positioned kerbside for collection by Council.

Allowing for approximately 300 mm between bins, a maximum kerbside length of 12 metres will be required for bin collection on Webb Street and 7.25 metres on Charles Street. Given the kerbside lengths available on each street, the collection location is considered acceptable. A review of the bins against the available frontage is provided in Table 9.

Table 9 Bins vs Available Frontage

<i>Street</i>	<i>Kerbside Frontage</i>	<i>No. of bins</i>	<i>Length Required</i>	<i>%</i>
Webb Street	18 metres (excluding crossover)	4 x 80L 6 x 120L 3 x 1,100L	12 m	67%
Charles Street	13 metres	5 x 80L 5 x 120L	7.25m	56%

5.4 Bin Cleaning

The Owners Corporation shall ensure that the shared residential apartment bins are kept in a clean state, to minimise odours and to discourage vermin. This may include regular cleaning by a third party, or maintenance by residents.

Residents in the townhouse dwellings and office tenants are responsible for the maintenance and cleaning of their own bins.

6 WASTE MANAGEMENT

6.1 Best Practice Waste Management

Best Practice Waste Management is an initiative designed to reduce the amount of waste generated through encouraging a change of behaviour and action on waste management and moreover recycling.

The benefits of reducing waste generation are far reaching and has been identified as significantly important by Council and the Victorian Government.

The Victorian Waste and Resource Recovery Policy "Getting Full Value" has been prepared by the Victorian Government, and "sets out a position and an approach that will position Victoria as a national leader in resource recovery".

One of the primary goals of the policy is to "Assist Victorians to reduce the waste they generate and save Victorians' money through efficient use of resources", for which the following strategic directions are listed:

- Support commercial, not-for-profit and Victorian public sector organisations to achieve financial savings through waste reduction;
- Provide households with the information and support they need to reduce waste by using household goods more efficiently;
- Continue to work in partnership with the Commonwealth Government through the National Waste Policy: Less Waste, More Resources, and take a lead role in national strategies that harness Victoria's strengths and capabilities

This policy builds on the Towards Zero Waste strategy, which was launched in 2005.

The Owners Corporation shall encourage residents and staff to participate in minimising and reducing solid waste production by:

- Promoting the Getting Full Value Strategy and the Municipalities Waste Management Strategy, including the use of The Waste Hierarchy, which in order of preference seeks to:
 - ✦ Avoid waste generation in the first place;
 - ✦ Increase the reuse and recycling of waste when it is generated; and
 - ✦ Recover, treat or contain waste preferentially to;
 - ✦ Its disposal in Land Fill (which is least desirable).
- Providing information detailing recyclable materials to ensure that non-recyclable materials do not contaminate recycling collections;
- Providing information regarding safe chemical waste disposal methods and solutions, including correct battery and electronics disposal methods;
- Encouraging composting for residents and staff; and
- Providing tips for recycling and reusing waste, including encouraging the disposal of reusable items in good condition via donations to Opportunity Shops and Charities.

Furthermore, to maximise recycling, a dual bin system will be installed within each townhouse, providing separate bins for garbage and recycling.

6.2 Bin Usage

Residents associated with the apartment dwellings will transport and dispose of recyclables (non-bagged) in the provided bins directly or via the bin shoots. Cardboard boxes should be flattened, and containers rinsed and cleaned prior to disposal in the provided bins.

Townhouse residents and office tenants will dispose of garbage and recyclables in their individual bins.

6.3 Common Property Litter and Waste Removal

The proposed development includes a number of common property areas, including foyers, hallways, parking areas and the bin storage area.

The building manager shall ensure that all common areas are kept clear of litter, and that all waste is removed from common areas on a regular basis. This includes the bin storage area in particular, to discourage vermin.

6.4 Signage

To avoid contamination between garbage streams, bin lids will be colour coded in accordance with Council standards, to ensure the bin type is easily distinguishable. Furthermore, bins should include typical signage (preferably on the bin lid) to reinforce the appropriate materials to be deposited in each bin. Example signage available from Sustainability Victoria is shown below.

Figure 3 Example Waste Signage



6.5 Resident and Tenant Information

To ensure all residents and tenants are aware of their responsibilities with regard to waste and bin management, an information package should be provided to all residents, including the following information:

- A copy of this Waste Management Plan;
- Methods and techniques for waste reduction and minimisation;
- Information regarding bin collection days and requirements;
- Resident and tenant responsibilities with regard to bin usage, storage, and collection; and
- Resident and tenant responsibilities with regard to litter and waste removal from the common property.

6.6 Municipal Charges

It is noted that every rateable tenant within the proposed development is liable for municipal waste charges, irrespective of the services provided by Council.

7 OCCUPATIONAL HEALTH & SAFETY RESPONSIBILITIES

The Owners Corporation/site operator shall ensure compliance to all relevant OH&S regulations and legislation, including the following:

- Worksafe Victoria Guidelines for Non-Hazardous Waste and Recyclable Materials

8 CONTACT INFORMATION

8.1 Council

Yarra City Council

Phone: (03) 9205 5555 (Customer Service)

Web: www.yarracity.vic.gov.au

Email: info@yarracity.vic.gov.au

8.2 Equipment

Eco-Safe Technologies (odour control equipment)

Phone: 0411 335 753

Web: www.eco-safe.com.au

Email: info@eco-safe.com.au

8.3 Others

Sustainability Victoria

Services: Sustainable Waste Management initiatives and information

Phone: 1300 363 744 (Energy, Waste and Recycling)

Web: www.sustainability.vic.gov.au

Email: info@sustainability.vic.gov.au