

8 Louise Street, Melbourne

Waste Management Plan



210166WMP001C-F

4 August 2021

onemilegrid



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1 INTRODUCTION

onemilegrid has been requested by 8 Louise St Pty Ltd to prepare a Waste Management Plan for the proposed mixed-use development at 8 Louise Street, Melbourne.

The preparation of this management plan has been undertaken with due consideration of the Sustainability Victoria Better Practice Guide for Waste Management and Recycling in Multi-unit Developments and relevant Council documentation.

2 EXISTING SITE CONDITIONS

The subject site is located at the southeast corner of the intersection of Louise Street and Queens Lane, as shown in Figure 1.

Figure 1 Site Location



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The site is rectangular in shape and has a frontage of approximately 41 metres to Louise Street and approximately 30 metres to Queens Lane.

3 DEVELOPMENT PROPOSAL

3.1 General

It is proposed to develop the subject site for the purposes of a mixed-use development, containing a ground floor retail use, with residential apartments above, as shown in Table 1.

Table 1 Proposed Development

Use	Component	No./Area
Dwellings	1-Bedroom Dwelling	13
	2-Bedroom Dwelling	69
	3-Bedroom Dwelling	16
	4-Bedroom Dwelling	6
	Sub-Total	104
Retail / Food & Drink		175 m ²
Communal Space	Gym, cinema, dining / multipurpose	272 m ²

3.2 Waste Management

It is proposed to utilise a private contractor to manage the collection and disposal of all waste streams associated with the development.

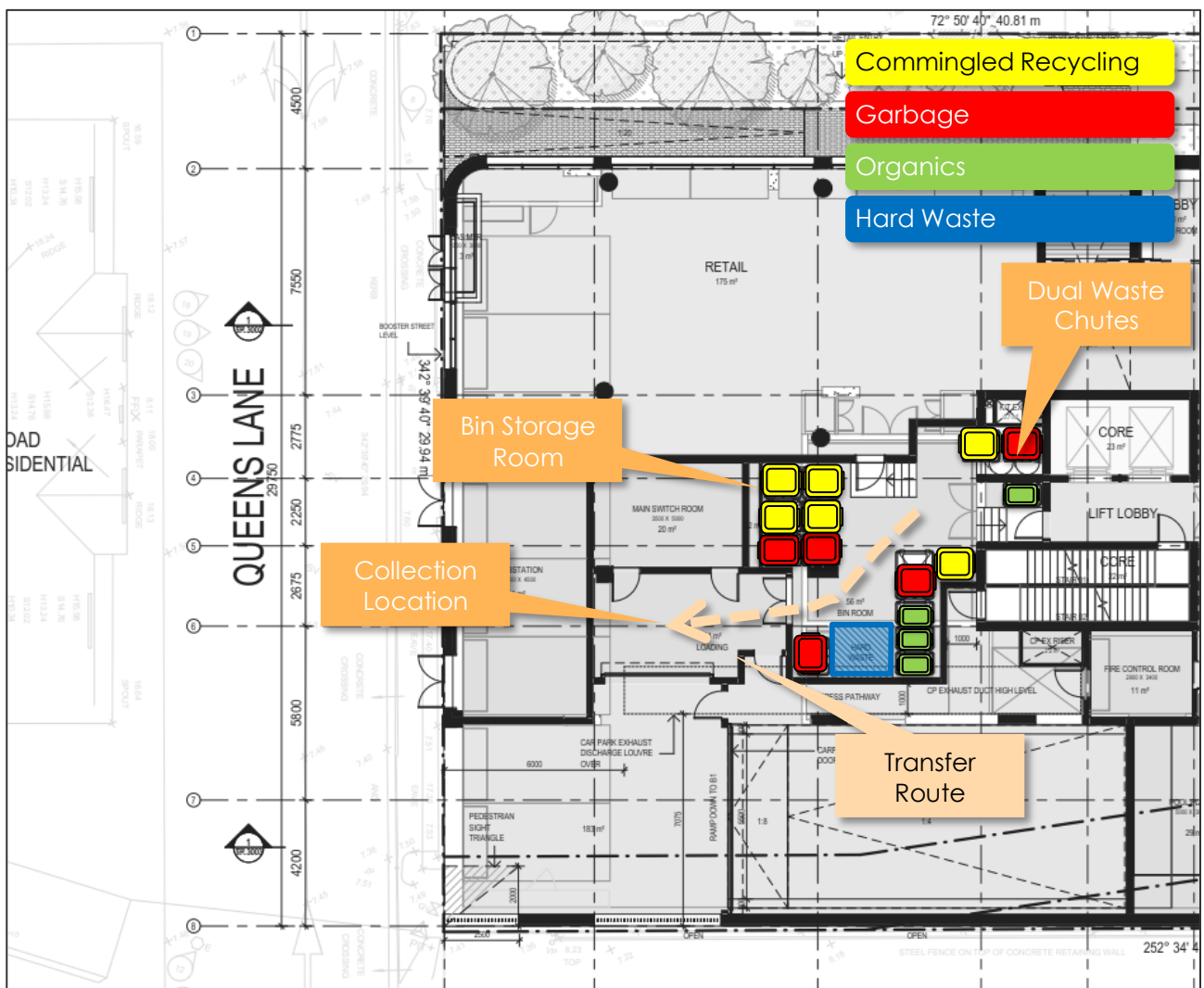
All bins will be stored within a dedicated bin storage room on the ground floor of the development. dual waste chutes will be available for residents on the levels above whilst the ground floor tenancy will have direct access to the bin storage room.

Residents will be responsible for disposing of recyclables or bagged garbage into the appropriate waste chutes located on each floor of the development. A dual chute system will be utilised, separating garbage and recyclables. The Owner's Corporation will be responsible for rotating bins within the bin storage room to ensure the bins do not overflow. Organics will need to be transported directly to the appropriate bins, within the waste room.

The ground floor tenant will be responsible for disposing of garbage and recycling, directly to their bins in the waste room.

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 Adopted Council Rates

4.1.1 Residential

Waste generation data has been sourced from the Waste Management Plan guidelines for developments prepared by the City of Port Phillip. This document, developed to assist in the development of Waste Management Plans, provides estimates of waste generation rates for typical residential developments. The guidelines identify the following typical generation rates.

Table 2 City of Port Phillip Waste Generation

<i>Dwelling Type</i>	<i>Garbage</i>	<i>Recycling</i>
Individual Dwelling	120L per week	120L per week
Studio or one-bedroom apartment	70L per week	70L per week
Two-bedroom apartment	80L per week	80L per week
Three-bedroom apartment	120L per week	120L per week

In relation to residential dwellings, Sustainability Victoria indicates that approximately 35% of garbage is made of food waste, therefore, the provision of organics waste collection can result in a reduction in garbage generation by 35%.

Based on the above, the following rates are suggested.

Table 3 Sustainability Victoria Recommended Rates – Residential

<i>Dwelling Size</i>	<i>Garbage</i>	<i>Recycling</i>	<i>Organics</i>
3-bedroom apartment or greater	78L	120L	42L
2-bedroom apartment	65L	100L	35L
1 bedroom or studio apartment	52L	80L	28L

4.1.2 Ground Floor Tenancy

The make-up of the ground floor tenancy at this stage is not confirmed however could comprise a standard retail (non-food) tenancy or a takeaway café tenancy.

Waste generation for garbage and recycling data has been sourced from the Waste Management Plan guidelines for developments prepared by the City of Port Phillip. This document, developed to assist in the development of Waste Management Plans, provides estimates of waste generation rates for typical commercial developments. The guidelines identify the following typical generation rates for the retail and takeaway tenancy type.

Table 4 City of Port Phillip Waste Generation

<i>Type</i>	<i>Garbage</i>	<i>Recycling</i>
Retail (non-food)	50L per 100m ² per week	50L per 100m ² per week
Takeaway	150L per 100m ² per day	150L per 100m ² per day

For the purposes of a conservative assessment, the higher generation rate will be adopted assuming a 6 day operation. In relation to organic waste, it is expected that 50% of garbage comprises organics.

4.2 Expected Waste Generation

4.2.1 Garbage, Organics and Recycling

Based on Council's adopted waste generation rates, the following weekly waste generation is expected.

Table 5 Expected Waste Generation – Residential

Component – Stream	No of Dwellings	Total Waste/Week
Garbage	104	6,877 litres
Recycling	104	9,070 litres
Organics	104	3,703 litres

Table 6 Expected Waste Generation – Commercial

Component – Stream	Floor Area	Total Waste/Week
Garbage	175m ²	788 litres
Recycling	175m ²	1,575 litres
Organics	175m ²	788 litres

4.2.2 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, with any plant clippings to be placed in the organics bins.

It is expected that any maintenance and gardening undertaken on common property will be managed by a contractor appointed by the Owner's Corporation. The appointed contractor will be responsible for the disposal of any green waste accumulated during the course of their duties.

4.2.3 Hard Waste

Hard waste services will also be provided by the private contractor, under the management of the Owners Corporation. A hard waste area is proposed on the ground floor within the bin room which will be under the management of the owner's corporation. All hard waste disposal will be coordinated by the owner's corporation to minimise the frequency of collections.

Additional to the above, hard waste may be disposed of independently by residents, at Council's Recycling Centre/Transfer Station.

4.2.4 Soft Plastics

Soft plastic waste is estimated to contribute approximately 20% of landfill waste volumes, and includes such things as bread bags, plastic bags, bubble wrap and snap lock bags.

Soft plastics can be recycled via REDcycle bins located at most Coles and Woolworths supermarkets, including Woolworths and Coles Prahara in the vicinity of the site.

No specific bin provision is required for soft plastic recycling, though it is recommended that residents/staff are made aware of soft plastic recycling, and are encouraged to facilitate the collection and deposit of soft plastics at REDcycle bin locations.

4.2.5 Electronic Waste (E-Waste)

E-waste must be taken by residents to the appropriate collection centre, as described below:

- Port Phillip Resource Recovery Centre accepts all e-waste;
- Planet Ark operate a number of e-waste recycling drop-off locations throughout Victoria (<https://recyclingnearyou.com.au/electrical>);
- Officeworks stores accept small amounts of personal E-waste;
- Aldi stores accept batteries; and
- Some Bunnings stores accept batteries.

Additional recycling locations are provided at <https://www.sustainability.vic.gov.au/Campaigns/eWaste>.

4.2.6 Re-Useable Items

Residents and tenants should be encouraged to offer items which are still in good usable condition to local charity organisations or for free pickup on social media, before being sent for disposal.

Additionally, a charity bin may be placed within the bin storage room to encourage reuse of suitable items.

5 BIN REQUIREMENTS

5.1 Bin Provision and Specifications

It is proposed to utilise a private waste contractor for all waste services, for both the residential and commercial components of the proposed development. 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
Residential	Garbage	6,877 litres	1,100L	2 x per week	4 bins
	Recycling	9,070 litres	1,100L	2 x per week	5 bins
	Organics	3,703 litres	660L	2 x per week	3 bins
Commercial	Garbage	788 litres	1,100L	1 x per week	1 bin
	Recycling	1,575 litres	1,100L	2 x per week	1 bin
	Organics	788 litres	660L	2 x per week	1 bin
Total					15 bins

Table 8 Bin Specifications

Capacity	Width	Depth	Height	Area
660 litres	1.25m	0.80m	1.30m	1.00 m ²
1,100 litres	1.25m	1.10m	1.35m	1.38 m ²

Bin lids will be colour coded to the Australian Standard (AS4123) or to the standard colour specifications of the private contractor.

5.2 Bin Storage

As indicated in Figure 2, it is proposed to provide a bin storage area on the ground floor for all components of the proposed development.

The proposed bin storage room measures 56 square metres and has been designed to store the required bins and also allow for the movement of bins and other items as required. The bin room is therefore appropriately sized to accommodate the provision of bins in accordance with contractor requirements. 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 staff and residents, and is secured from the common areas.

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

The bin storage room shall be ventilated, and shall be cleaned regularly by the operator or waste collection contractor, to minimise odour.

5.3 Waste Chutes

Waste Chute cupboards are located on each level of the apartment building. The waste room will include dual chutes and a self-closing door to ensure that odours do not permeate into the lobby.

The following general rules apply when using the garbage chutes:

- General household rubbish (essentially kitchen & bathroom rubbish) is the **ONLY** waste that should be placed in the garbage chutes;
- All rubbish must be securely bagged & tied before placing down the chute;
- NO glass is to be placed down the garbage chute; **use the recycling chute**;
- NO cardboard, open food containers, plastic, polystyrene (foam), newspapers or plastic wrap is to be placed down the garbage chute; **use the recycling chute**;
- NO organics is to be placed down the chutes; **use the organics bins**; and
- No rubbish is to be left on floor in the waste chute room.

5.4 Bin Cleaning

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

A bin cleaning area should be provided within the bin storage area, with a drain connected to sewer.

Commercial 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.

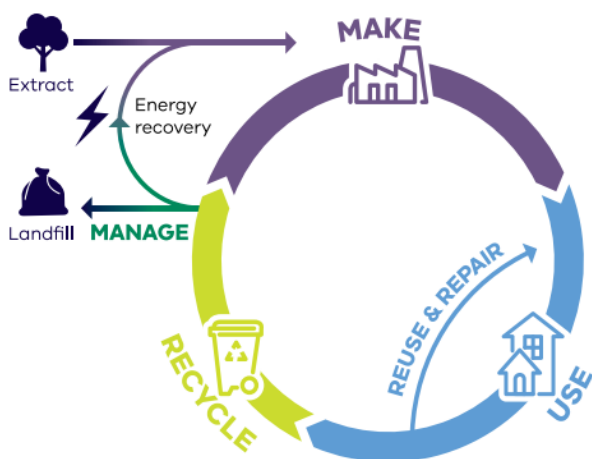
The benefits of reducing waste generation are far reaching and have been identified as significantly important by Council and the Victorian Government.

Recycling Victoria: A New Economy is a policy and 10-year action plan, prepared by the Victoria Government, to “deliver a cleaner, greener Victoria, with less waste and pollution, better recycling, more jobs and a stronger economy”.

Four overarching goals have been identified in order to achieve a circular economy in relation to waste, as below:

1. MAKE – Design to last, repair and recycle;
2. USE – Use products to create more value;
3. RECYCLE – Recycle more resources;
4. MANAGE – Reduce harm from waste and pollution.

Figure 3 Resource Flows in a Circular Economy



In relation to the proposed development, recycling is of key importance, and in this regard, the Owners Corporation shall encourage residents and staff to participate in minimising and reducing solid waste production by:

- Promoting 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; 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.

6.2 Bin Usage

Residents will:

- Bag and dispose of garbage in the provided chute;
- Transport and dispose of recyclables (non-bagged) in the provided chute;
- Flatten cardboard boxes and rinse containers prior to disposal; and
- Dispose of organics directly to the provided bins, within the storage room.

Commercial tenants will:

- Bag and dispose of garbage in the provided bin; and
- Transport and dispose of recyclables (non-bagged) in the provided bin.

Furthermore, the Owner's Corporation will engage cleaners who will be responsible for cleaning and disposing of waste from all common areas.

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 Owners Corporation 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 contractor 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](https://www.sustainability.vic.gov.au/) is shown below.

Figure 4 Example Waste Signage



6.5 Collection

On collection days, the waste contractor will drive into the site using a 6.4m mini waste loader, before reversing into the loading/services room. The truck will protrude from the services room, partially propping across the basement accessway. From this location, the contractor will collect the relevant bins from the waste room, replacing them immediately after emptying. Once complete, the waste contractor will exit the site back to Queens Lane in a forward direction.

Swept paths are attached in Appendix A, which demonstrates access to and from the site, as described above.

6.6 Noise Control

It is noted that with the bin storage and collection area being situated within the ground level loading area, disturbance to residents during waste collection will be minimal. Regardless, to minimise the disturbance to residents during waste collection, the collection should follow the criteria specified by the EPA, as below:

- Collections occurring once a week should be restricted to the hours 6:00am to 6:00pm, Monday to Saturday;
- Collections occurring more than once a week should be restricted to the hours 7:00am to 6:00pm, Monday to Saturday;
- Compaction should only be carried out while on the move;
- Bottles should not be broken up at the point of collection;
- Routes that service entirely residential areas should be altered regularly to reduce early morning disturbance; and
- Noisy verbal communication between operators should be avoided where possible.

6.7 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 will be provided by the Owners Corporation 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.

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

Port Phillip City Council

Phone: (03) 9209 6777 (Customer Service)

Web: www.portphillip.vic.gov.au

8.2 Contractors

Urban Waste

Services: Private contractor

Phone: 0429 309 269

Web: www.urbanwaste.com.au

Email: info@urbanwaste.com.au

Cleanaway

Services: Private contractor

Phone: 131 339

Web: www.cleanaway.com.au/

JJ Richards & Sons

Services: Private contractor including bin tugs

Phone: (03) 9703 5222

Web: www.jjrichards.com.au

Email: operations.melbourne@jjrichards.com.au

WasteWise

Services: Private contractor

Phone: 1300 550 408

Web: www.wastewise.com.au

BioPak (Organic Waste Compost Service)

Services: Private contractor

Phone: 1300 246 725

Web: www.biopak.com.au/compost-service

8.3 Equipment

Eco-Safe Technologies (odour control equipment)

Phone: 0411 335 753

Web: www.eco-safe.com.au

Email: info@eco-safe.com.au

8.4 Others

Sustainability Victoria

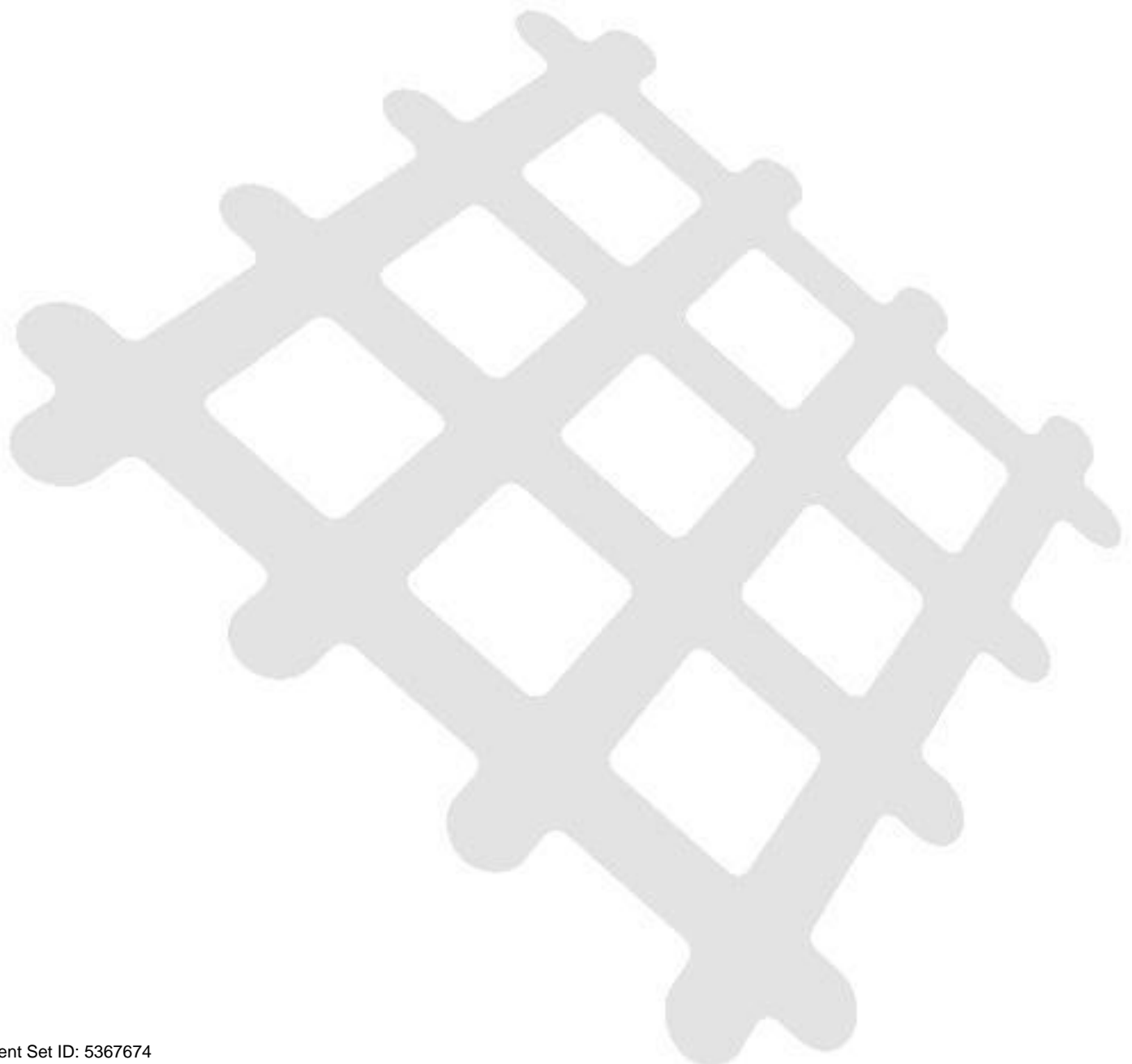
Services: Sustainable Waste Management initiatives and information

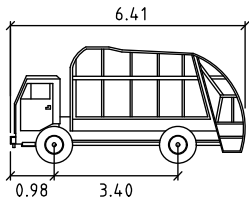
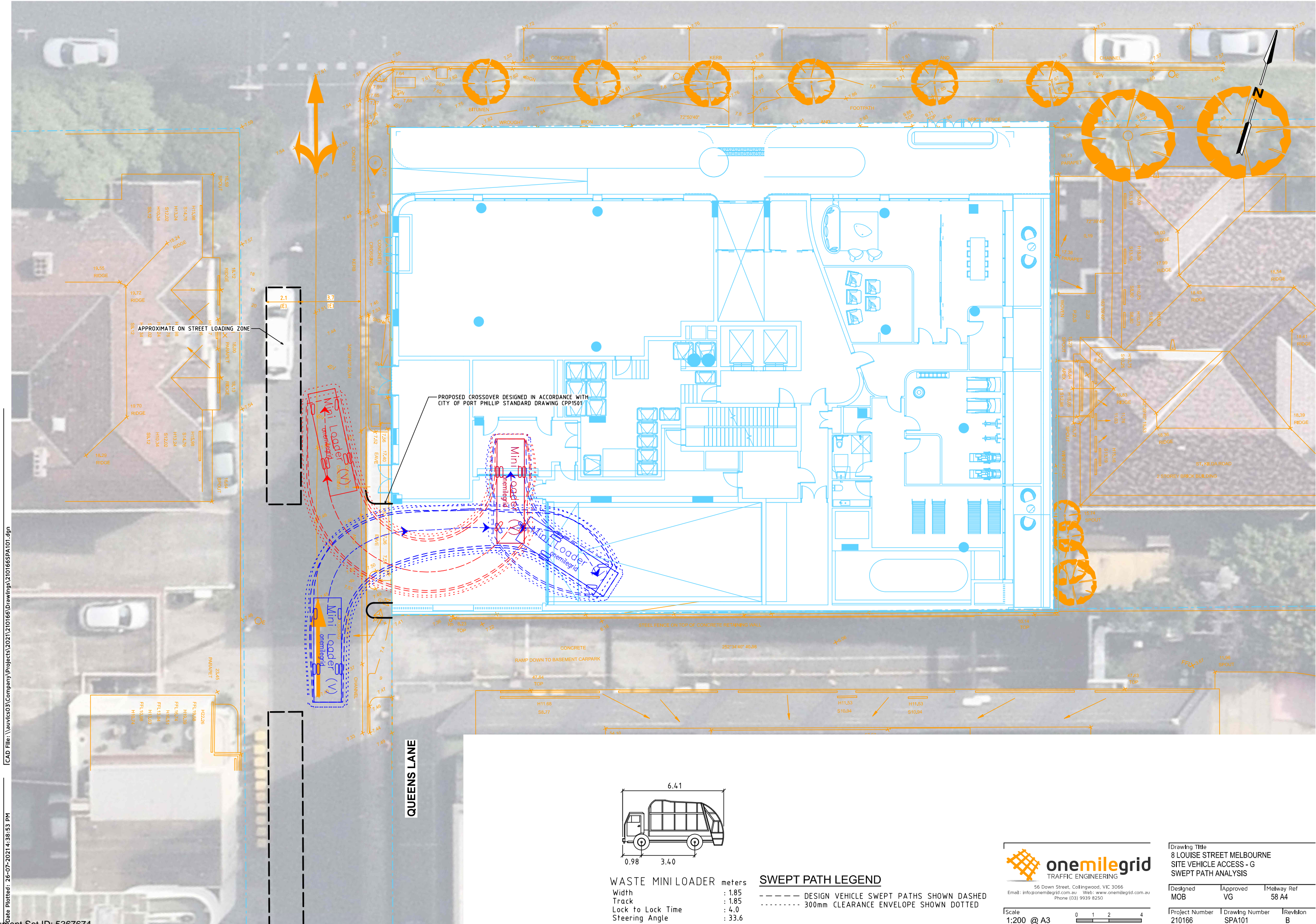
Phone: 1300 363 744 (Energy, Waste and Recycling)

Web: www.sustainability.vic.gov.au

Email: info@sustainability.vic.gov.au

Appendix A Waste Truck Swept Paths





WASTE MINI LOADER meters
Width : 1.85
Track : 1.85
Lock to Lock Time : 4.0
Steering Angle : 33.6

SWEPT PATH LEGEND

----- DESIGN VEHICLE SWEPT PATHS SHOWN DASHED
..... 300mm CLEARANCE ENVELOPE SHOWN DOTTED

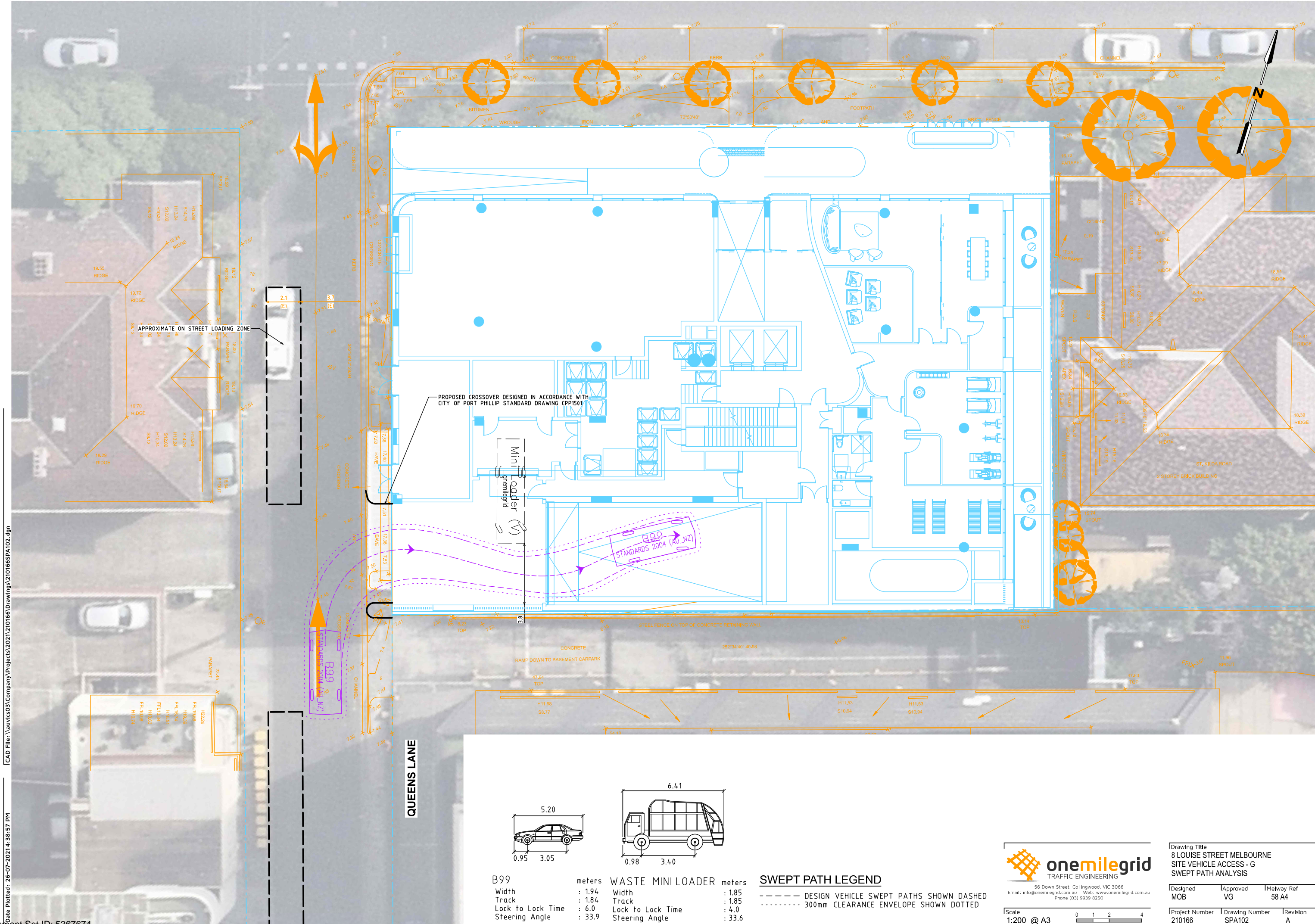


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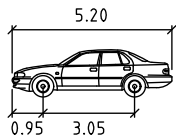
Drawing Title
8 LOUISE STREET MELBOURNE
SITE VEHICLE ACCESS - G
SWEPT PATH ANALYSIS

Designed MOB	Approved VG	Metway Ref 58 A4
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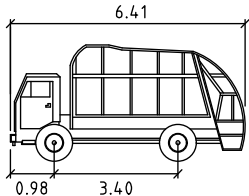
Project Number 210166	Drawing Number SPA101	Revision B
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QUEENS LANE



B99
Width : 1.94
Track : 1.84
Lock to Lock Time : 6.0
Steering Angle : 33.9



WASTE MINI LOADER
Width : 1.85
Track : 1.85
Lock to Lock Time : 4.0
Steering Angle : 33.6

SWEPT PATH LEGEND

----- DESIGN VEHICLE SWEEP PATHS SHOWN DASHED
----- 300mm CLEARANCE ENVELOPE SHOWN DOTTED



Scale 1:200 @ A3
0 1 2 4

Drawing Title
8 LOUISE STREET MELBOURNE
SITE VEHICLE ACCESS - G
SWEPT PATH ANALYSIS

Designed MOB	Approved VG	Metway Ref
		58 A4

Project Number	Drawing Number	Revision
210166	SPA102	A

