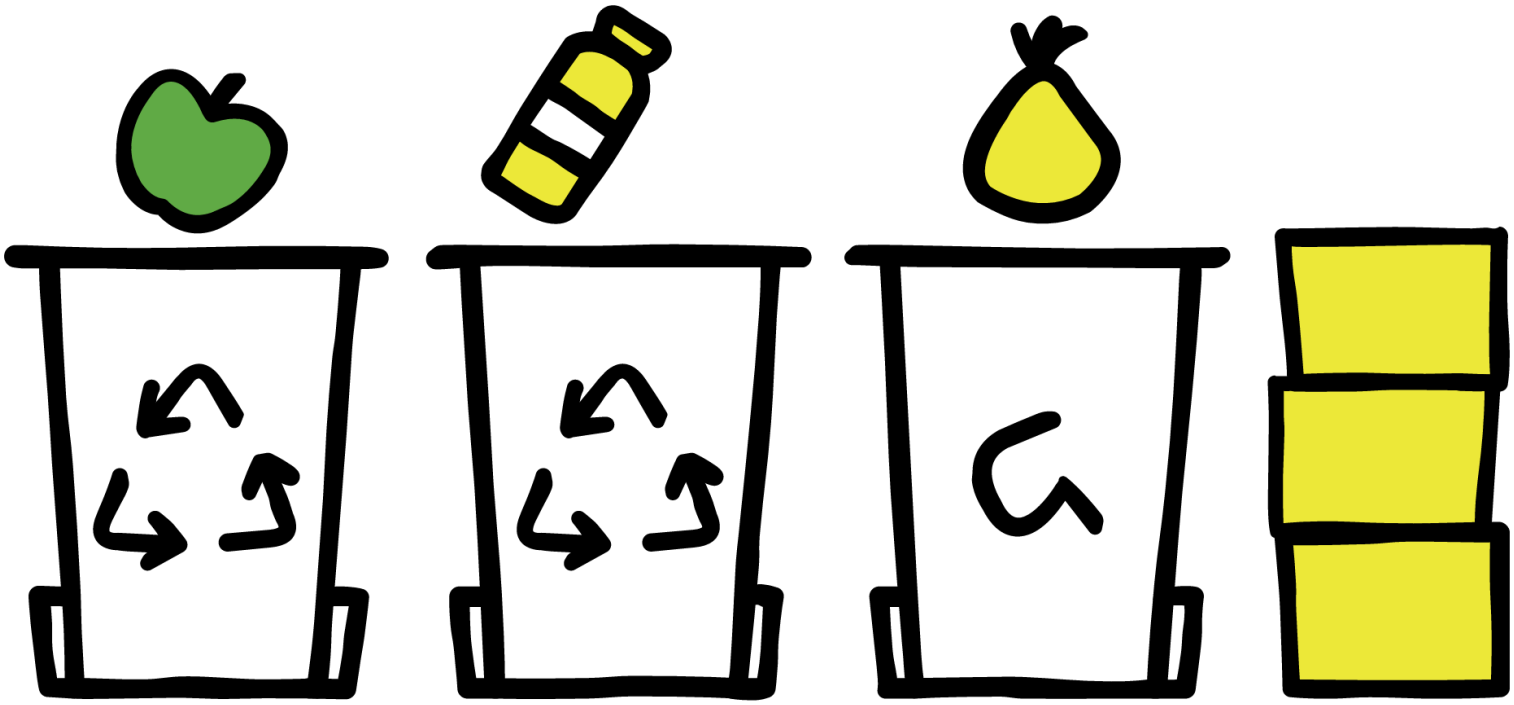
lid Low Impact Development Consulting



Waste Management Plan

Mixed-use development (residential, hotel and restaurant)

28-32 Albert Rd, South Melbourne

Prepared for: DCF Developing Entity 28 Albert Road, South Melbourne Pty Ltd
Prepared by: AV – Low Impact Development Consulting

DATE: 6/06/2022

e: info@lidconsulting.com.au
p: 03 9016 9486
a: Suite 7, 252 St Georges Rd, Fitzroy North Vic 3068
w: www.lidconsulting.com.au

Version	Date	Description	Prepared by
1.0	16/04/2020	**For Issue**	**VH**
2.0	6/06/2022	**Revised per drawings REV F**	**AV**

Disclaimer

The content of this document represents the entirety of work output or recommendations offered by LID Consulting for this particular project. This content supersedes all other verbal discussions undertaken by LID Consulting representatives in relation to this project.

Commercial waste calculations are based on rates provided by government organisations and adopted and used as an industry standard. Bin numbers and spatial requirements have been calculated in accordance with these guidelines. The end user requirements may vary from this depending on the business use, type and operational practice.

Contents

LID acknowledges and pays respect to the Australian Aboriginal and Torres Strait Islander people, to their ancestors and elders, past, present and emerging, as the traditional custodians of the lands upon which we work and live. We recognise Aboriginal and Torres Strait Islander people's deep cultural and spiritual relationships to the water, land and sea, and their rich contribution to society.

Condition requirement	Page where the information is found
Frequency of collection	2, 3 & 4
Food and drink waste and recycling estimates	4 & 5
Signage	12
Bin collection plan	15, 16 & 17
Bin store design & details	11
Swept paths	19, 20, 21 & 22

1 Overview

Low Impact Development (LID) Consulting was engaged by DCF Developing Entity 28 Albert Road, South Melbourne Pty Ltd to assess the proposed amendments to the development at 28-32 Albert Rd, South Melbourne and document a Waste Management Plan.

A waste management analysis has been undertaken based on the following documents:

1. Sustainability Victoria Better Practice Guide for Waste Management and Recycling in Multi-Unit Developments 2018;
2. Port Phillip Council planning scheme clauses 19.03-5S and 58.06-3 (Standard D23)

This report is based on the drawing sets:

- A0099, A0106-A0107 & A0115 Revision F, dated 14 April 2022, A0107-A111 Revision F dated 19 April 2022, A0121-A0126 Revision F, dated 20 May 2022 and A0100, A0100LG & A0101-A0103, Revision F, dated 25 May 2022 received 26th of May 2022.

1.1 Waste Collection Summary

A private collection service is proposed to collect the residential 1 x 1100L garbage, 1 x 1100L& 1 x 240L co-mingled recycling bins, 2 x 240L glass recycling bins and 3 x 240L food organics and garden waste (FOGO) bins three times per week. The private waste contractor will also collect the commercial 4 x 1100L garbage bins, 2 x 1100L co-mingled recycling bons, 4 x 240L glass recycling bins and 5 x 240L food organics and garden waste (FOGO) bins three times per week.

Collection is to occur on the lower ground level (LG). The private collection contractor is responsible to transfer bins from the bin store located on the lower ground level, next to the loading bay. The waste vehicle will collect and empty bins onsite. The private collection contractor will be responsible for returning bins to the bin store and under the waste chutes immediately after collection has occurred.

The approved Waste Management Plan (WMP) will be the model to be adopted for this development. Detailed design and as-built installation must incorporate the design proposed and approved under this WMP. Any revisions of the WMP or changes to the approved waste system of the development may require Council approval and may require a re-submitted Waste Management Plan. More detail is contained within this report.

Development Summary

Address:	28-32 Albert Rd, South Melbourne
Type:	Mixed use (residential apartments, hotel, restaurant and gym)
Dwellings:	44
Break up of units:	16 x 1 bed apartments 4 x 2 bed apartments 18 x 3 bed apartments 6 x 4 bed apartments

Commercial tenancy/ space:	**Qty/Area**
Hotel (no. beds)	88
Hotel lobby	99m^2
Restaurant	316m^2
Gym	70m^2
Bar	177m^2
Workspace	300m^2

Site Layout: Refer to **Appendix 1** for Site Layout Plan

Collection Type: Private collection service to collect all waste streams

Collection Location: On site

Bin Store Location: Lower Ground Level

A private collection service using a mini rear loader will be used for collection. The site plan in **Appendix 1** shows the site area collection identified as a loading bay during off peak periods.

A small Mini Rear Loader vehicle (length 6.4m, 2.5m wide, 2.08m head clearance) has sufficient clearance required (ie. 2.4m in the loading bay) for the loading of bins, therefore onsite collection can occur.

Proposed Solution – Residential

Residential	**Port Phillip Council Waste generation rates**			**Proposed Solution**		
	No. units	**Allowances**	**Total estimated waste volume**	**No. of Bins**	**Bin Size**	**Collection Frequency**
General Waste (landfill)	44	Rates are per dwelling per week: 1 bed = 80L 2 beds = 100L 3+ beds = 120L	3120L to landfill	1	1100L	Three times weekly
Co-mingled Recycling		Rates are per dwelling per week: 1 bed = 80L 2 beds = 100L 3+ beds = 120L	3360L of recycling	1 1	1100L 240L	Three times weekly
FOGO / Garden waste		35% of garbage waste rates[1]	1680L of food & garden organics	3	240L	Three times weekly
Glass[2]		30% of recycling waste rates	1440L of glass	2	240L	Three times weekly

[1] Sustainability Victoria – Multi-unit and Commercial Development Waste and Recycling Generation Rates Calculator: https://calculators.sustainability.vic.gov.au/mud-waste-management/

[2] The Age (2019), https://www.theage.com.au/national/victoria/victorians-to-get-cash-for-bottles-scheme-20200224-p543ms.htm

Hard Waste		5m² provided	N/A	N/A	N/A	As required by a private contractor
Clothes / Charity Bin		N/A	N/A	1	240L	As required by a private contractor

Proposed Solution - Commercial

Commercial	**Port Phillip Council Waste generation rates**		**Proposed solution**		
	Allowances	**Total estimated waste volume**	**No. of Bins**	**Bin Size**	**Collection Frequency**
General Waste (landfill)	Hotel: 5L/bed per day	Hotel: 5 x 88 x 7 = 3,080L per week	See below	See below	See below
	Hotel lobby: 10L/100m² per day	Hotel lobby: 10 x 0.99 x 7 = 69L per week			
	Restaurant: 660L/100m² per day (open 6 days)	Restaurant: 660 x 3.16 x 6 = 12,514L per week			
	Gym: 10L/100m² per day	Gym: 10 x 0.7 x 7 = 49L per week			
	Bar: 50L/100m² per day (open 6 days)	Bar: 50 x 1.77 x 6 = 531L per week			
	Workspace: 10L/100m² per day (open 6 days)	Workspace: 10 x 3.00 x 6 = 180L per week			
	TOTAL (excluding FOGO)	**13,138L per week**	**4**	**1100L**	**Three times a week by a private contractor**
Co-mingled Recycling and glass	Hotel: 5L/bed per day	Hotel: 5 x 88 x 7 = 3,080L per week	See below	See below	See below

	Hotel lobby: 10L/100m² per day	Hotel lobby: 10 x 0.99 x 7 = 69L per week			
	Restaurant: 200L/100m² per day (open 6 days)	Restaurant: 200 x 3.16 x 6 = 3,792L per week			
	Gym: 10L/100m² per day	Gym: 10 x 0.7 x 7 = 49L per week			
	Bar: 50L/100m² per day (open 6 days)	Bar: 50 x 1.77 x 6 = 531L per week			
	Workspace: 10L/100m² per day (open 6 days)	Workspace: 10 x 3.00 x 6 = 180L per week			
	TOTAL (excluding glass)	**5,391L per week**	**2**	**1100L**	**Three times a week by a private contractor**
Glass	Included in above co-mingled recycling generation rates.	Glass assumed to equate to 30% of recycling waste rates. **2,310L per week**	**4**	**240L**	**Three times a week by a private contractor**
FOGO / Garden waste	Included in above general waste (landfill) generation rates.	FOGO assumed to equate to 20% of recycling waste rates. **3,285L per week**	**5**	**240L**	**Three times a week by a private contractor**
Hard Waste	NA	N/A See Section 2.3 for Hard Waste Collection	See Section 2.3 for more detail		As required by a private contractor
E-waste	NA	N/A See Section 2.4 for E-Waste Recycling	See Section 2.4 for more detail		As often as required to the maintain space

Council Considerations

- Whilst Port Phillip Council does offer collection of larger bin sizes (ie. 660L and 1100L bins), it currently has a limit of one kerbside collection per week for business and commercial tenancies.
- Utilizing the Council collection service is not possible in this instance for general waste/recycling, green waste or hard waste due to the large number of residential and commercial bins to be collected at a higher frequency.
- The private collection service is to occur within the site boundaries and utilise the loading bay during off-peak periods. Off-peak periods have been identified as any time outside of 7-9am and 4-7pm on weekdays.
- Onsite collection is the most feasible. Swept paths have been provided (see Appendix 3) indicating that a Garwood mini rear-loader only is able to enter the site from Palmerston Crescent, traverse the rear laneway and enter the site in a forward direction. The waste vehicle will collect the waste from within the site, use the turntable to turnaround and exit the property in a forward direction.

Waste Links

City of Port Phillip Council Waste and Recycling Directory:

- http://www.portphillip.vic.gov.au/waste-management.htm

Waste collection companies in Victoria:

- Waste Wise Environmental www.wastewise.com.au
- Kartaway http://www.kartaway.com.au/melbourne/index.html
- iDump Waste Management www.idump.com.au
- Wastech www.wastech.com.au
- Easy Waste - http://www.easywaste.com.au
- Citywide www.citywide.com.au
- JJ Richards & Sons www.jjrichards.com.au
- Sita – www.sita.com.au

2 Waste Collection Details

2.1 Garbage and Recycling Collection

Waste Management

- Residents will be required to cart their waste from the dwellings to the bin rooms located on each floor and dispose of waste streams accordingly. Garbage and co-mingled recycling excluding glass and FOGO can be disposed of via the waste chutes. Glass and FOGO are to be disposed of in the dedicated bins located in the bin room. Glass is not to be disposed of via the chute as they may break up on impact with the bin located on lower ground level.
- The Owner's Corporation and/or facilities manager will be responsible for transferring glass recycling and FOGO bins from each level to the lower ground bins in the bin store room as required.
- Similarly, large items such as cardboard boxes and hard waste will need to be disposed of directly in the bin store room located on lower ground. It is the resident's responsibility to appropriately dispose of these items to ensure the bin chutes do not get blocked up with large items.

- The Owner's Corporation and/or facilities manager will be responsible for monitoring and manually rotating residential bins located under the bin chutes as necessary. An empty 1100L bin will need to be manoeuvred under the waste chute as the previous bin fills up.
- A sign is to be included within each level's bin chute room indicating that the garbage, co-mingled recycling, glass recycling and FOGO will not be available during waste collection time.
- Commercial tenancies and/or the maintenance staff will be required to cart their waste from tenancies to the lower ground bin store location and transfer waste to the shared bins. This includes waste generated from the hotel rooms, hotel lobby, gym, restaurant, bar and workspace.
- The Owner's Corporation is responsible for all aspects of waste management including access for the waste contractor to enter the site and bin store on the days of collection.
- The private collection contractor will be responsible for transferring all residential and commercial bins from the bin store to the waste vehicle parked on the loading bay next to the bin store.
- Emptied bins will be returned to the bin store and placed under the residential bin chutes immediately after collection.

See **Section 4** for detail of Ongoing Waste Management.

Bin Store Access

- Manoeuvrability within the bin store area is generally open, with separate bin stores for the commercial and residential bins.

Waste Vehicle Requirements

- A Garwood mini rear-loader waste vehicle only is to enter the site from the rear laneway traverse towards the loading bay/waste collection area, retrieve, empty and return bins to/from the bin store, turn onsite using the turntable and exit the site in a forward direction onto the rear laneway.
- The loading bay has sufficient head clearance of greater than 2.4m required to load bins (see plans).
- The Owner's Corporation is responsible for ensuring the waste contactor has access to the site and bin store on the days of collection.
- A swept path for a mini-rear loader has been prepared and assessment included in Appendix 3.

Collection Times

Collection times Domestic waste – bin collection shall be in accordance with Council and EPA Noise Control Guidelines Publication 1254, which state:

- Collections occurring more than once a week are to be restricted to the hours 7 am — 6 pm Monday to Saturday

Waste collections from private services are best suited on an alternate day to the Council service and completed at times of least interference/inconvenience to the local amenity and traffic conditions.

Internal Waste Management

- General landfill **garbage shall be placed in plastic bags** before placement into bins or in the bin chute.

- **Recycling materials are <u>not</u> to be bagged** and are to be placed loosely into the recycling bins. (Items in plastic bags in recycling bins are not recycled). Recyclable items in domestic bin collections include:
    - Rigid plastic containers
    - Paper, cardboard
    - Glass bottles and jars
    - Steel cans, aluminium cans and aluminium foil are among items that can be recycled.
- But exclude:
    - Plastic bags
    - Garden hoses
    - Rope (ropes and garden hoses can wrap around and damage equipment in the recycling plant).

For further detail of Ongoing Waste Management, please see **Section 4.**

Response to Increasing Rates of Waste Generation

- The total waste capacity exceeds the required allowance calculation by rounding up to the nearest bin size so there is built in capacity should waste levels increase beyond estimates.
- Garbage volumes can also be reduced if food waste and soft plastics are directed to recycling streams (see **Section 2.2** and **Soft Plastic** Recycling below).

- Should commercial glass recycling generation exceed that of co-mingled recycling, it may be appropriate to swap a co-mingled recycling bin for another glass bin.

- Should commercial garbage waste generation be lower than estimated, but recycling streams higher, then it may be appropriate to swap an 1100L garbage bin for an 1100L recycling bin.

- Where residential or commercial waste rates increase beyond the estimated volume, an additional 660L can be accommodated for within the bin store. The addition of this bin still maintains equal access to the commercial bins. Where waste continues to exceed the estimated rates, up to four additional 1100L bins can be accommodated for, however this would require rotation of the commercial bins to allow access to empty bins.

Soft Plastic Recycling

- Coles offer plastic bag and soft plastic recycling. Residents can take soft plastics and plastic bags to the supermarket for disposal. Any location identified on the Redcycle website http://www.redcycle.net.au/where-to-redcycle/ .

2.2 Organic Food Waste Recycling

In Victoria, food and garden organics make up approximately 50 per cent of household garbage with food comprising on average 39 per cent (by weight)[3]. Food waste, when stuck in landfill is starved of air and rots and producing methane, 26 times more damaging than carbon dioxide. Diverting food waste from landfill is not only a really effective way to reduce greenhouse gas emissions, but also a regenerative solution, creating rich, healthy soil.

It is expected that organics collection will become standard practice amongst all councils over the next 1-3 years, so the option for separate organics collection should be included where space allows.

Organic Food Waste Diversion Options

- Sustainability Victoria provides information for households, schools and businesses alike to reduce food waste through their **Love a List Challenge. Love Food Hate Waste** aims to raise awareness of avoidable food waste from Victorian households. The average family in Victoria loses over $2,000 a year from wasting food. And two thirds of it could have been eaten. https://www.sustainability.vic.gov.au/

- **Bokashi bins** http://www.bokashi.com.au/ are an effective way of reducing waste volumes and breaking down food waste for apartment dwellers. Food scraps are placed in bokashi bins with an accelerator mix added. The volume of waste food is reduced, and the waste in the bin is already on the path to being composted. Bokashi bins can be emptied into compost bins so providing a compost bin on site and having a garden also helps. Bokashi bins are also available from http://www.eco-organics.com.au/about-us.htm

Figure 1. Apartment Bokashi bin

2.3 Hard Waste Collection

- Hard rubbish collection is to be arranged with the Owner's corporation and collected by a private service as required to maintain the space. Residents and commercial tenants should liaise with body corporate to ensure hard waste collection occurs throughout the year.

- 5m2 have been provided for residential hard waste storage in the lower ground bin store.

- Alternatively, items can be taken directly to the Council local waste recovery centre located in South Melbourne:
  - http://www.portphillip.vic.gov.au/tips.htm

- Unwanted bulky items, clothes and other consumables can be donated to charities, sold on online or at second-hand local market places as is if in good condition. If repair is required, seek out repair community centres for re-purposing. Search PlanetARK for a comprehensive

[3] Metropolitan Waste and Resource Recovery Group, Victoria State Government (2019), Introducing a kerbside food and garden organics collection service: A guide for local government < https://www.mwrrg .vic.gov.au/assets/resource-files/MWRRG-FOGO-Text-Interactive-20181119.pdf>

listing to each council.
    - https://recyclingnearyou.com.au/councils/

- Other sites that look to match unwanted items with new owners:
    - https://au.ziilch.com
    - https://www.freecycle.org
    - https://www.ozrecycle.com

- In addition suppliers such as **Ecycle** http://www.ecyclesolutions.net.au will deliver whitegoods and either collect clean polystyrene from retailers or take polystyrene away after delivery.

- **TerraCycle** is a national initiative where you can look up where to deposit non-recyclable waste such as contact lenses, coffee capsules, mailing satchels, toothbrushes & tubes.
    - http://www.terracyclemap.com

2.4 E-Waste Recycling

As of 1st July 2019, there is a ban on e-waste to landfill in Victoria. Any item with a plug, battery or cord can no longer be placed in kerbside bins and instead must be deposited at a designated e-waste drop-off point. Electronic waste includes old mobile phones, computers, audio devices, refrigerators and other white goods, hair dryers, TVs, heaters, and air-conditioners.

- Authorised electrical waste disposal locations can be found at https://recyclingnearyou.com.au/electrical. More details can also be found at https://www.sustainability.vic.gov.au/Campaigns/eWaste/Where-do-I-take-ewaste at https://www.mobilemuster.com.au

Household Collection of E-Waste

- One container with drawers or a number of small stackable plastic crates with minimum footprint 500x500mm are to be supplied to the development to collect e-waste recyclables such as:
    - batteries
    - light globes
    - printer cartridges
    - clothes.

- These items are to be recycled periodically as arranged by the Owners Corporation an as needs basis.

- Note in addition to Council recycling hubs and the e-waste links to over 1000 locations state-wide, Officeworks provide recycling drop-off points for printer cartridges, old IT equipment, and mobile phones.

3 Design Inclusions

3.1 Bin Store Design

Bin Store Design must include the following:

- A layout that allows access to all of the bins with adequate size to allow easy movement/transfer of the required number of bins. As residential bins will need to be moved to under the bin chute, equal access is not vital. Commercial bins currently have equal access to all bins.
- Hard rubbish area doors located in the lower ground bin store should be designed for easy access of larger hard waste.
- Floor and wall surfaces in the bin store area are to be appropriately durable and easily cleaned.
- Space suitable for bin wash down is to be available in the development. If this is the bin store then the floor is to be graded to a waste outlet with a litter trap. Alternately, a private contractor can be arranged to swap dirty bins for clean ones on a regular basis.
- If a bin wash is installed, a water tap and hose installed in or near the bin wash areas and correct drainage to sewer (never direct waste to storm water drains) should be designed in accordance with the relevant EPA Bunding Guidelines. Drains to the sewer to be located undercover to prevent rainwater infiltration.
- Ensure adequate lighting is provided in accordance with National Construction Code (NCC) guidelines.
- Meter boxes should not be included in bin store area.

3.2 Traffic Management

- Traffic management along Palmerston Crescent and Albert Road will not be an issue with collection occurring within the property boundary. As the waste vehicle will be parked in the loading bay, the internal driveway will also not be obstructed.
- Appropriate engineering standards will be addressed in the detailed design stage to ensure adequate pavement depths and clearance height.

3.3 Litter Spread

- Litter spread is to be managed by ensuring garbage and recycling bins are not overloaded, and lids are always closed.
- Litter spread is to be managed by the system of contractors collecting bins from within the property. As bins are not left outside overnight, the possibility of vandalism is removed.
- The private collection contractor's agreement should require their pickup of any waste that spills from the bins during collections.

3.4 Noise Management

- Collections occurring during the stipulated collection timeframes (per Section 2.1) restricts the hours of noise from collections.
- Collection vehicles should not break up bottles at the point of collection, only once off site.
- Compaction of waste should only be carried out whilst waste vehicles are on the move.

3.5 Odour Reduction

- The bin store area and bins are to be monitored and cleaned on a regular basis to remove sources of smells.
- Mechanical ventilation (if proposed) will help to prevent odours from culminating in this area. Adnominally, the higher frequency of commercial waste will assist with removing sources of odour.

3.6 Signage, Education & Safety

It will be the responsibility of the Owner's Corporation to ensure all occupants have all of the material available to them and that they adhere to the required practices regarding waste management, sustainability and promoting waste minimisation.

- All education material will be in accordance with Council requirements.
- Instructional signage within shared communal bin stores is to indicate which bin and bin chutes is for garbage, co-mingled recyclables, glass and FOGO, and also include what items can be included in garbage and recycling bins, and items that need to be disposed of via other services.

Figure 2. Simple, brightly coloured signs, such as the example shown above, quickly communicate what items are acceptable for each bin.

- **A preliminary OHS risk assessment** has been included to identify potential OHS issues, however this risk assessment does not replace the need for the Owners Corporation and collection contractors to complete their own OHS assessment for the bin collection process. See **Appendix 2** for further detail.

- A sign will be placed in the bin chute room and also in the bin store room that soft plastics can be recycled at any location identified on the Redcycle website http://www.redcycle.net.au/where-to-redcycle/

Figure 3. A quick guide to some most commonly recycled Soft Plastic item

4 Ongoing Waste Management

The management and maintenance of the waste system will be the responsibility of the Owner's Corporation. Items to be addressed in maintaining the system include:

- The tenancy agreements are to outline a schedule of waste collection dates in accordance with the collection parameters outlined in **Section1.1** of this document.
- Ensuring the waste contractor has access to the loading bay and bin store on the days and time of collection and for also providing information to make building occupants aware that waste vehicles enter the site on lower ground level.
- Individual occupants and commercial tenants/staff and occupants are responsible for placing their waste in the appropriate bin or bin chute to ensure all waste types are collected and recycled where possible.
- That bins and bins stores are monitored regularly with bins rotated as required to ensure areas are fully operational with regular cleaning of the bins and bin store spaces and clean-up after collection if necessary. This includes rotating residential bins located under the bin chutes on lower ground.
- Management and coordination with the Owner's Corporation for hard waste collection.
- Provision of information to residents with guides of how to using the various bin systems. This includes (but not limited to) use of bin chutes, correct disposal of glass and FOGO, large items not to be disposed of via chutes, boxes to be flattened, containers for recycling washed and bins to not be over-full etc. See **Section 3.6** for further information about Signage, Education & Safety.
- Monitoring and feedback to residents and commercial tenancies if the system is not working properly. Undertake a waste audit should it be suspected waste is not being placed in the correct bins.

5 Disclaimer

This report is written exclusively for the subject project discussed throughout. No part of this document may be reproduced or transcribed without the express agreement of LID Consulting. The content of this report remains the intellectual property of LID Consulting.

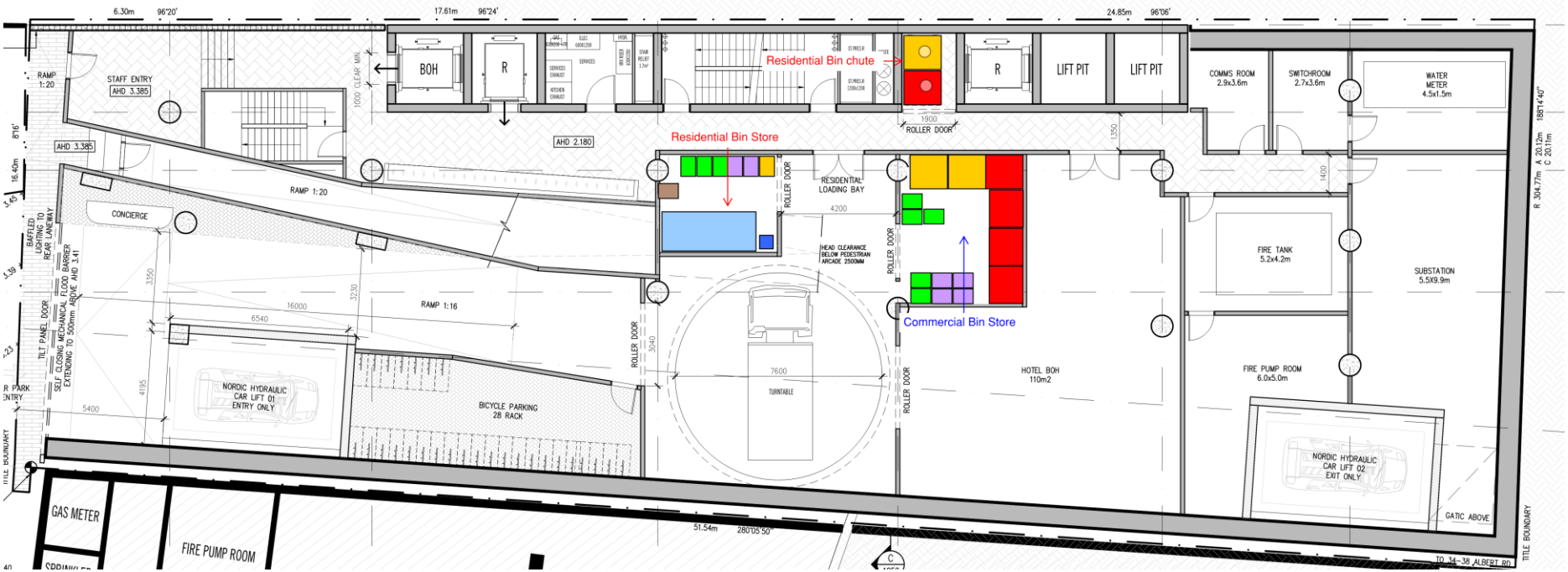
The content of this document represents the entirety of work output or recommendations offered by LID Consulting for this particular project. This content supersedes all other verbal discussions undertaken by LID Consulting representatives in relation to this project. If you have any questions in relation to items discussed with LID Consulting representatives or this report, please contact Craig Harris of LID Consulting.

Commercial waste calculations are based on rates provided by government organisations and adopted and used as an industry standard. Bin numbers and spatial requirements have been calculated in accordance with these guidelines. The end user requirements may vary from this depending on the business use, type and operational practice.

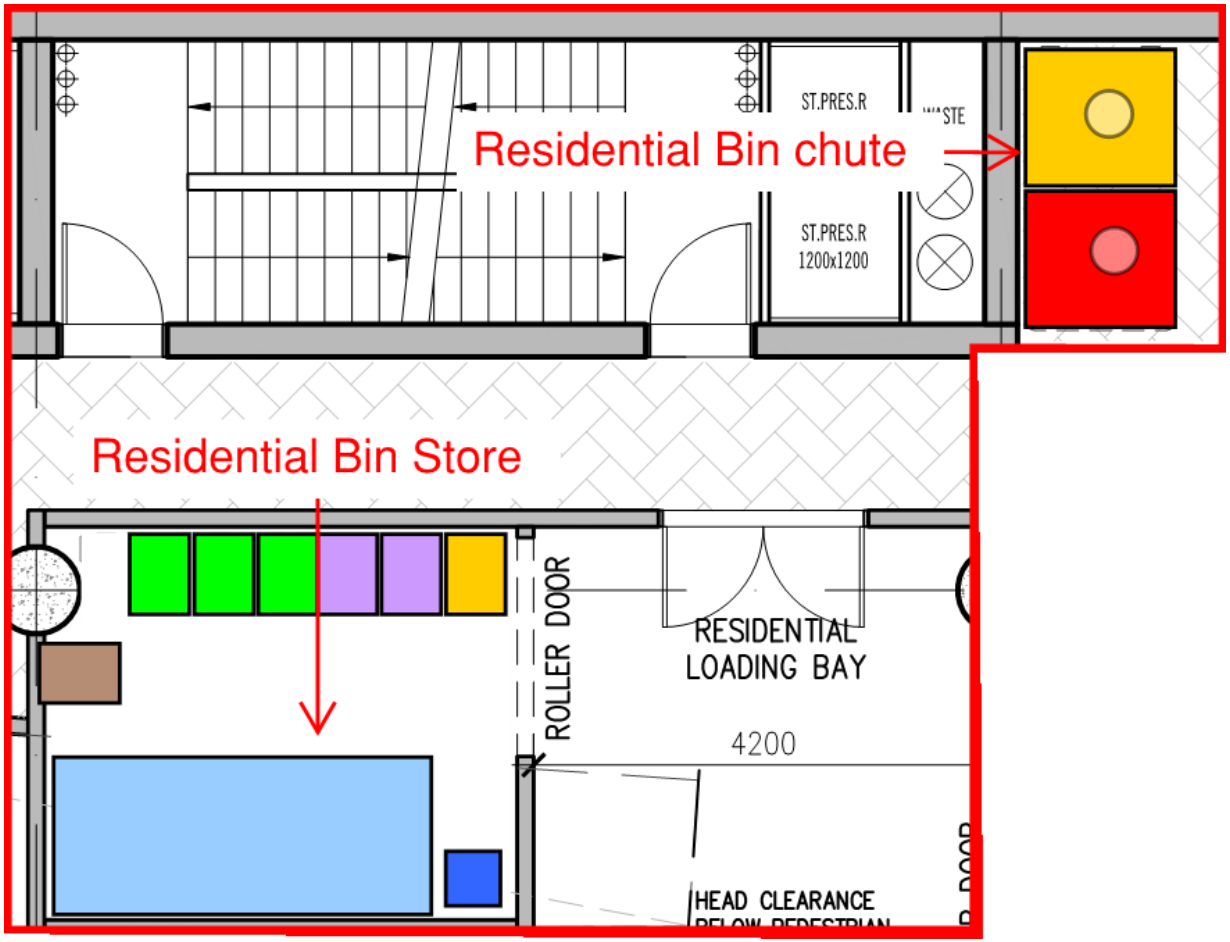
Appendix 1 - Bin Collection Plan

See Appendix 3 for swept path assessment of the waste vehicle.

Lower ground – Overview



Bin store layout – Residential bins



Legend Residential Waste

- 1 x 1100L (1.24m(D) x 1.37m(W)) garbage bins collected 3 times weekly by private contractor
- 1 x 1100L (1.24m(D) x 1.37m(W)) co-mingled recycling bins collected 3 times weekly by private contractor
- 1 x 240L (0.73m(D) x 0.58m(W)) glass bins collected 3 times weekly by private contractor
- 2 x 240L (0.73m(D) x 0.58m(W)) co-mingled recycling bins collected 3 times weekly by private contractor
- 3 x 240L (0.73m(D) x 0.58m(W)) FOGO bins collected 3 times weekly by private contractor
- 1 x 0.5m x 0.5m miscellaneous items container emptied as required
- 5m² Hard waste storage area collected as often as required to maintain space
- 1 x 240L (0.73m(D) x 0.58m(W)) Clothes/charity bin collected as often as required to maintain bin

Bin store layout – Commercial bins

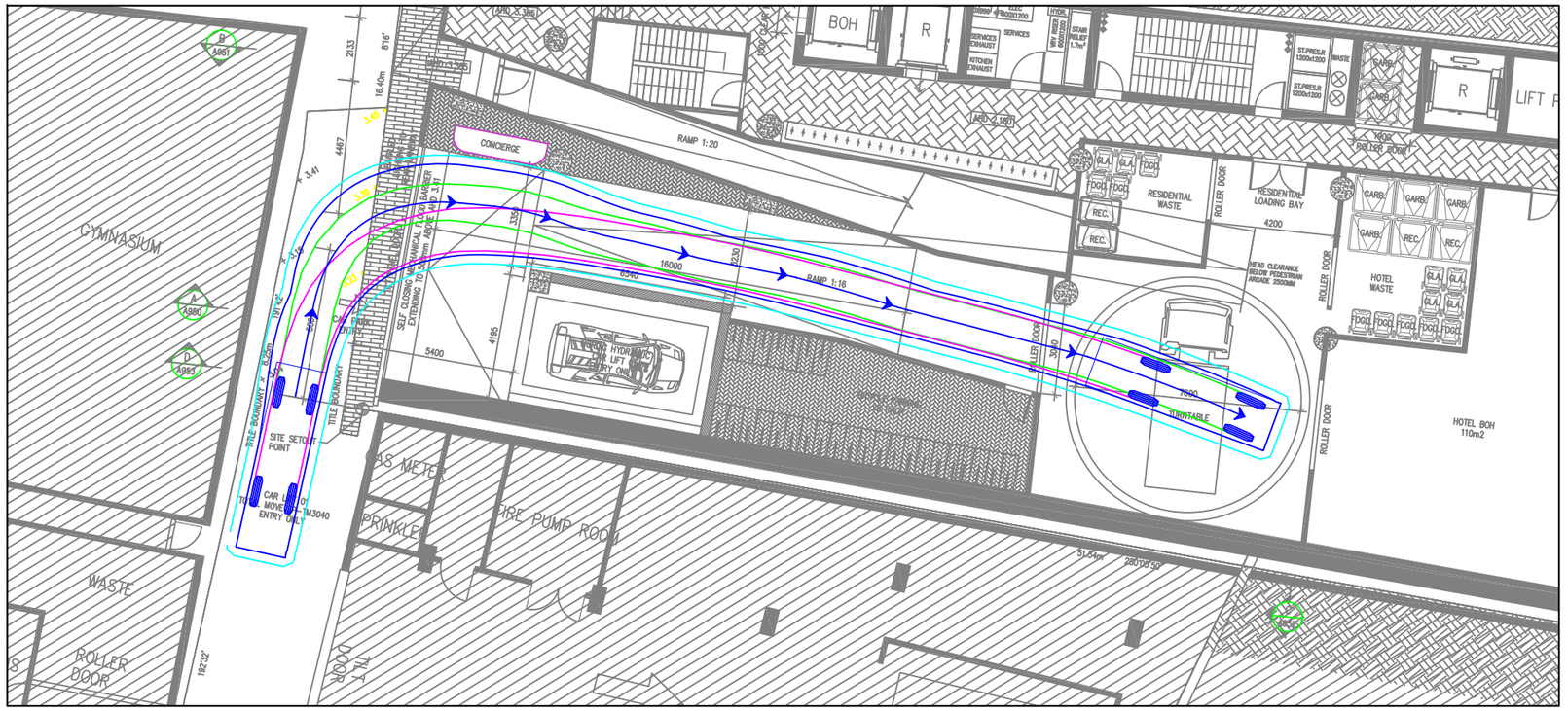
Appendix 2 - Preliminary Risk Review

Class 1 Risk = Potential to cause death or permanent injury.	**Class 2 Risk** = Potential to cause injury requiring medical attention.	**Class 3 Risk** = Potential to cause an injury treatable with first aid.

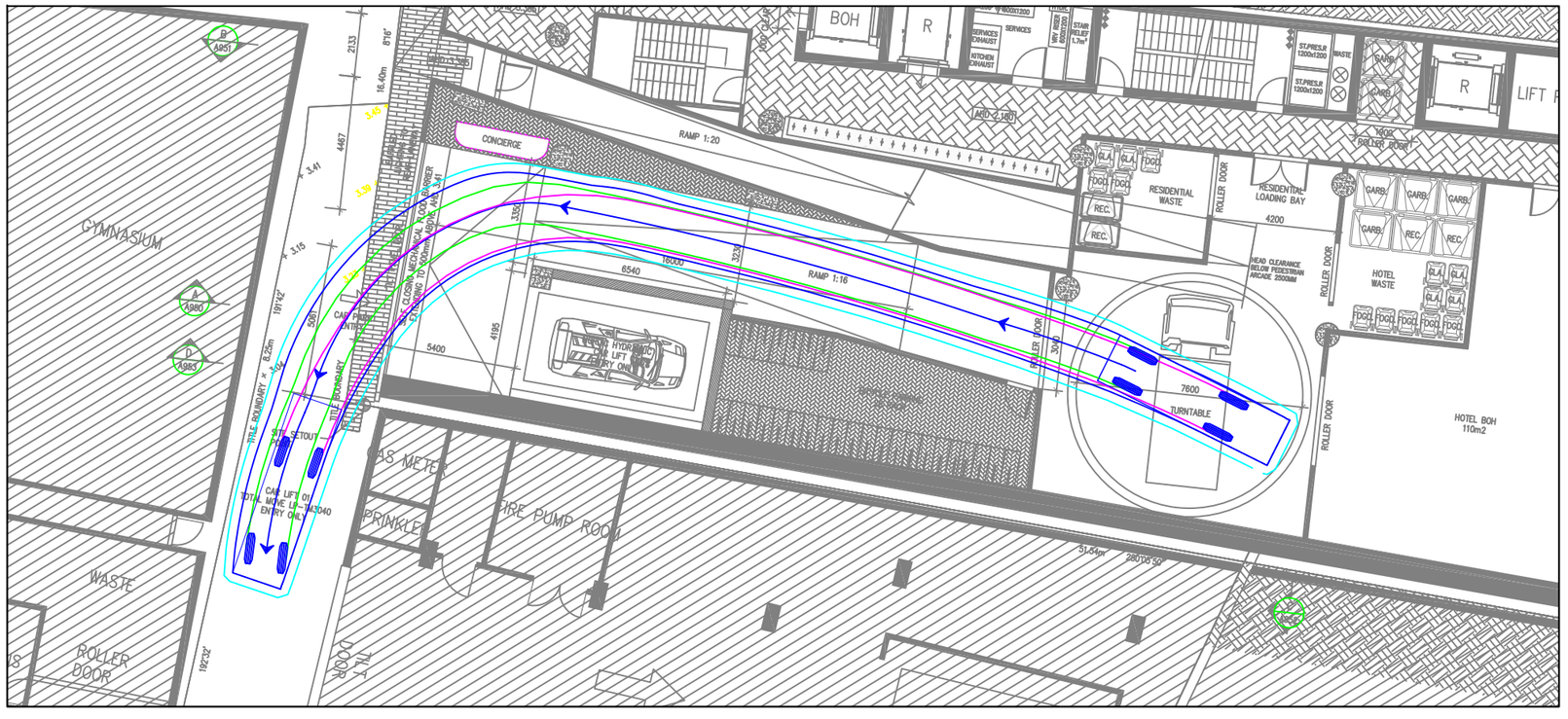
Activity	Steps involved in completing activity & risk	Risk level	Risk mitigating measures	Implementation responsibility
Moving of bins from bin store to collection space	Distance bins to be moved up the bin lift to the loading bay where the waste vehicle is parked.	2	Use max bin sizes of 1100L. Minimise distance of travel, with the area kept free of all obstacles including loose gravel or dirt, steps, kerbs, speed bumps, berms, sills or ramps. Ensure all access points have suitably wide doorways and circulation areas. Use the allocated bin lift appropriately. Ensure training is provided for the safe operation of the bin lift.	Building Designer / Owners Corporation
Vehicle comes on site for collection	Large vehicle entering site, and reversing before exiting site. Major risk is hitting, particularly when reversing, young children, the elderly or unaware people	1	Vehicle driver entering site is to survey carpark for activity. If there is no activity near reversing location, driver to execute reverse move immediately before the situation can change. If there is activity, the driver should ensure the person/persons moving in the basement are aware of the pending reversing action, and have time to stay away from the reversing zone or ensure children are away from the reversing zone. Reversing should be at very slow speed. Reversing buzzers to be applied to all trucks. The disabled carpark is allocated as a loading bay during off-peak periods. As collection is to occur during off-peak periods, there should be limited persons in the area. Signs indicating collection vehicles entering and exiting the site should be installed on basement level 1.	Waste collection contractor / Owners Corporation

Appendix 3 - Swept Paths

LOADING BAY AREA - INGRESS



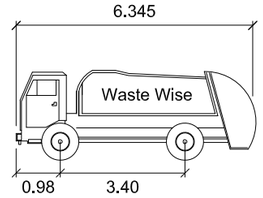
LOADING BAY AREA - EGRESS



VEHICLE PROFILE

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5KM/H)



Waste Wise Mini (Hino 300)

Width	: 1.7m
Front Track	: 1.4m
Rear Track	: 1.44m
Kerb to Kerb Radius	: 12.4m

LEGEND

REAR WHEELS — VEHICLE BODY

FRONT WHEELS — BODY CLEARANCE

REV	DATE	NOTES	DESIGNED BY	CHECKED BY
A	26/05/22	87A AMENDMENT	J. YOUNG	L. FURNESS

28-32 ALBERT ROAD, SOUTH MELBOURNE

MIXED USE DEVELOPMENT

GENERAL NOTES:

BASE INFORMATION FROM: 17016_a0099.dwg, 17016_a0100.dwg & 17016_a0100LG.dwg
PREPARED BY Elenberg Fraser

FILE NAME: G28080-02

SHEET NO.: 02

SCALE: 1:200 (A3)

0 2 4

Traffix Group
Level 28, 459 Collins St, MELBOURNE VIC 3000
T: (03) 9822 2888
www.traffixgroup.com.au