Urbii

Reduce. Reuse. Recycle

34-36 St Michael Terrace, Mount Pleasant
Proposed Child Care Centre

Waste Management Plan

Prepared for:
Carcione Nominees Pty Ltd

June 2025

34-36 St Michael Terrace, Mount Pleasant

Prepared for: Carcione Nominees Pty Ltd
Prepared by: Paul Ghantous
Date: 10 June 2025
Project number: U24.177

Version control

Version No.	Date	Prepared by	Revision description	Issued to
U24.177.r02	21/04/25	PG	DRAFT	Element
U24.177.r02a	10/06/25	PG	FINAL	Element

Scan me

Urbii Consulting Pty Ltd
ABN 34 630 529 476
PO BOX 4315
BALDIVIS WA 6171
T: + 61 433 858 164
E: customer@urbii.com.au
W: www.urbii.com.au

Contents

Figures

Tables

Appendices

1 Introduction

This Waste Management Plan has been prepared by Urbii on behalf of Carcione Nominees Pty Ltd with regards to the proposed child care centre, located at 34-36 St Michael Terrace, Mount Pleasant.

The subject site is situated on the north-west corner of St Michael Terrace and Queens Road, as shown in Figure 1. The site is presently vacant and is surrounded by a mix of residential, education and commercial land uses.

It is proposed to develop the site into a child care centre catering for up to 113 children and 29 staff.

The key issues that will be addressed in this WMP include calculation of the waste generation of the site, assessment of waste storage provisions and documentation of the waste collection arrangements.

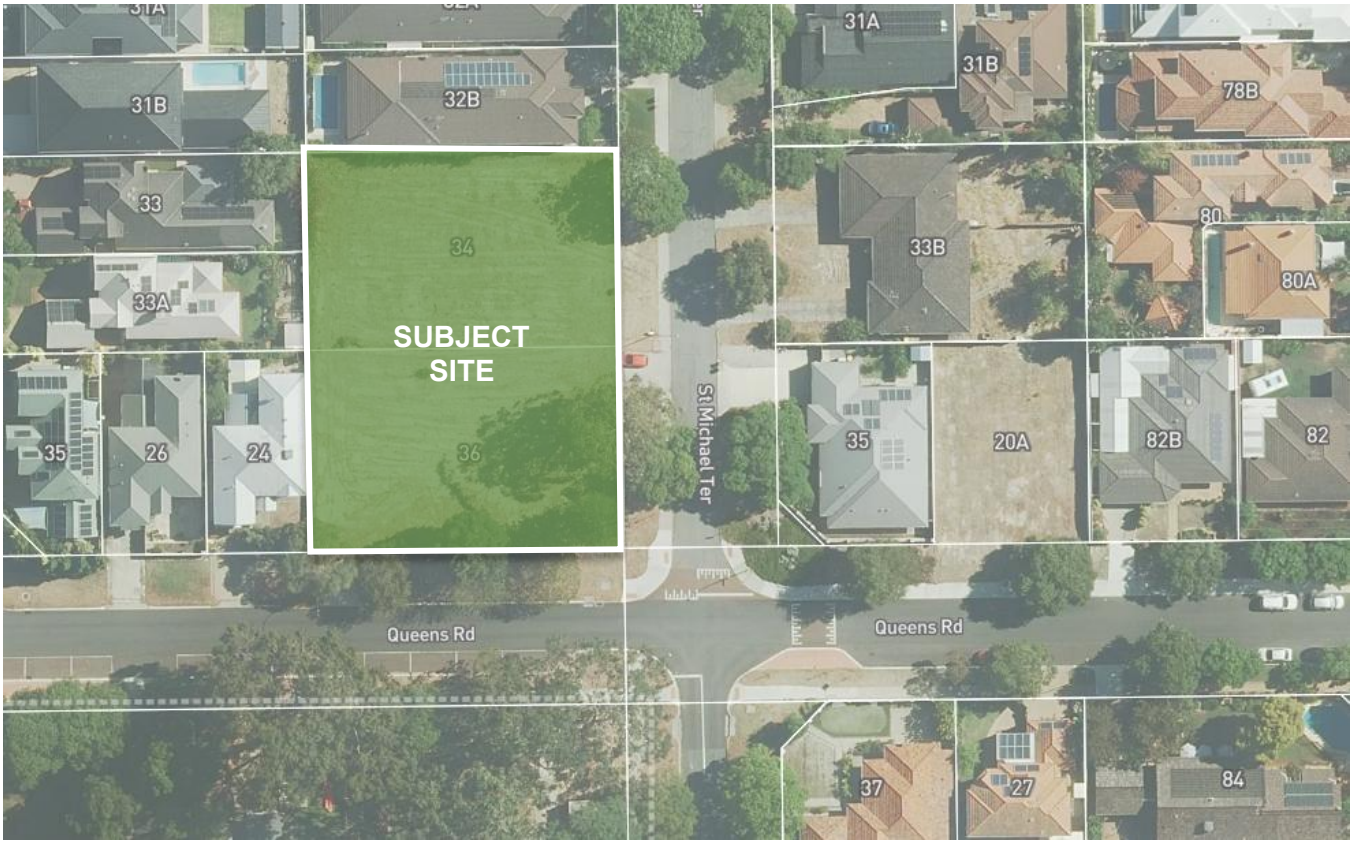


Figure 1: Subject site

2 Objectives

The objectives of this WMP are adapted from WALGA:

- Ensure that the long-term waste management needs for the development are met in an efficient and sustainable manner.
- Minimise the impact of waste services and facilities on the streetscape and surrounds, in relation to both the footpath/public realm and the frontage of the development.
- Reduce the impact of waste collection services and facilities on the amenity of the locality particularly in terms of noise and odour.
- Maximise safety for both waste collection staff and the public.
- Minimise traffic and footpath obstruction.

3 Referenced documents

The documents referenced in preparing this WMP may include, but are not limited to:

- City of Melbourne *Guidelines for Waste Management Plans* 2021;
- City of Perth *Waste Guidelines for all Developments* 2019;
- WALGA *Multiple Dwelling Waste Management Plan Guidelines*;
- WALGA *Subdivision Waste Management Plan Guidelines*; and,
- Waste Authority WA *Waste Avoidance and Resource Recovery Strategy for 2030*.

4 Guiding concepts

Urbii adopts the guiding concepts of the State's Waste Strategy and encourages these concepts to be considered in all developments to the furthest extent feasible.

4.1 Waste hierarchy

The *Waste Avoidance and Resource Recovery Strategy 2030* applies the waste hierarchy (Figure 2), which is a widely accepted decision-making tool. The waste hierarchy ranks waste management options in order of their general environmental desirability. Waste avoidance is the most preferred option in the hierarchy.

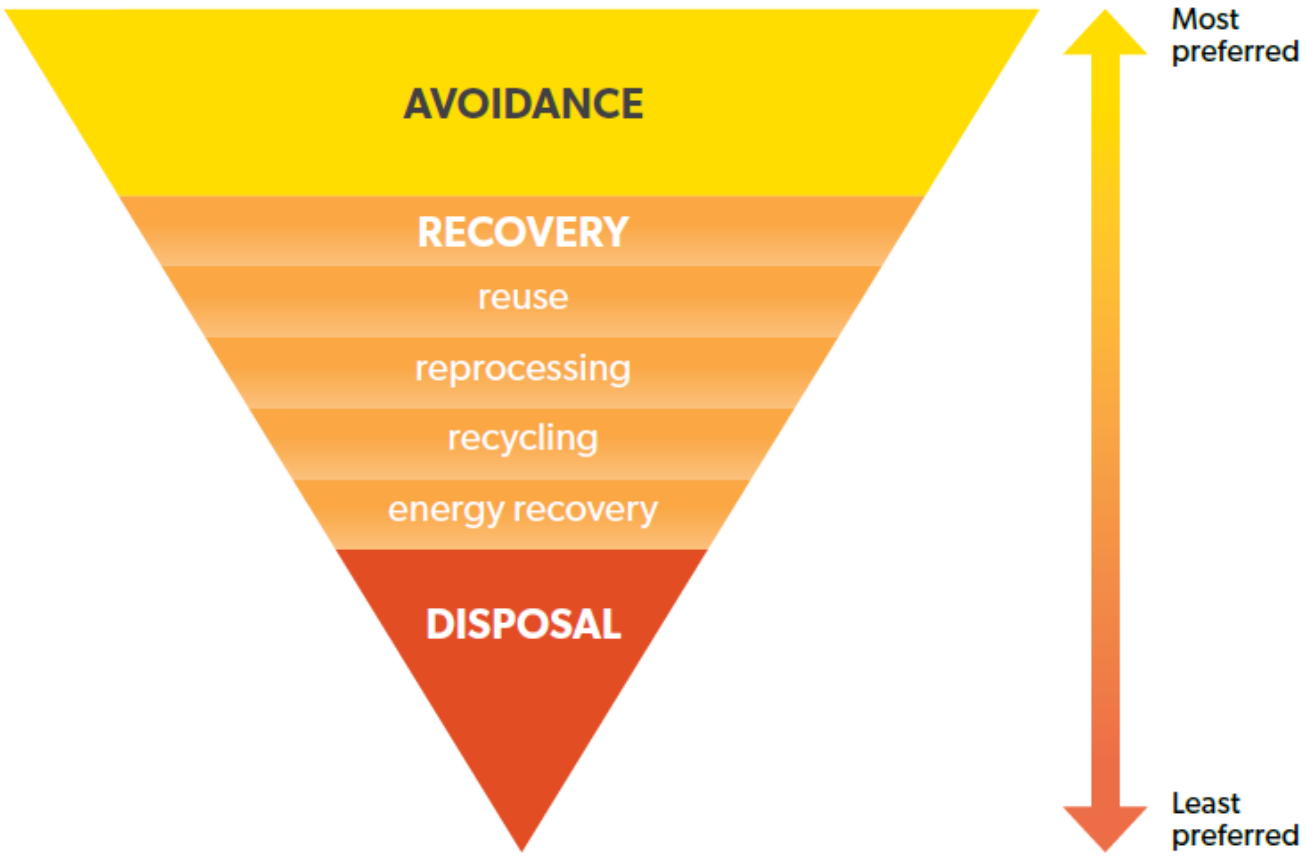


Figure 2: Waste hierarchy

Source: Waste Authority WA *Waste Avoidance and Resource Recovery Strategy for 2030.*

Resource recovery options recover value from materials, thereby offsetting the environmental impacts of extracting and processing raw materials. Energy recovery is the least preferred recovery option. Disposal is the least preferred option. Disposal generally recovers the least value from materials and delivers the least environmental benefit.

4.2 Circular economy

A circular economy (Figure 3) makes use of established sustainability concepts, including life cycle thinking and resource efficiency. A circular economy should consider the flow of both materials and energy. It moves away from the linear 'take, make, use and dispose' model, to one which keeps materials and energy circulating in the economy for as long as possible.

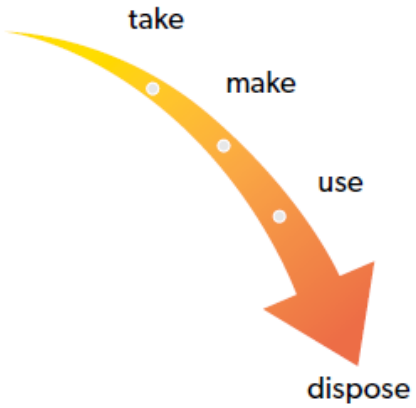
Current approach	Circular economy
	
Linear flow of materials – 'take, make, use and dispose' model.	Circular flow of materials – materials sorted and retained in the economy for as long as possible.
Limited use of renewable materials and energy.	Preference for renewable materials and energy.
Significant volumes of materials disposed of and lost to the economy. Loss of embodied materials, energy and water.	Materials recovered as high up the waste hierarchy as possible. Embodied materials, energy and water retained in the economy. Organic materials re-enter and regenerate the environment safely (for example, as compost).
Materials managed locally and globally.	Preference to manage materials locally to reduce the costs and impacts of transport, and to provide local employment and investment opportunities.
Economic value of materials, employment and investment not fully accounted for.	Economic value of materials, employment and investment accounted for.
Limited focus on life cycle thinking.	Products designed and manufactured to minimise environmental impact through whole of life.

Figure 3: Transitioning to a circular economy

5 Proposed development

The anticipated volume of general waste, and recyclables is based on the floor area of the development. For robust assessment, the full floor area of the building was adopted, which is around 843m^2.

The proposed development plans are included for reference in Appendix A.

6 Waste generation

6.1 Waste generation rates

The waste generation rates for general waste and recyclables are sourced from the *City of Melbourne Guidelines for Waste Management Plans 2021.* Waste generation rates are detailed in Table 1.

Table 1: Commercial waste generation rates

Land use	General waste generation rate	Recyclables generation rate
Child Care Centre	350L/100m^2 Floor area/week	350L/100m^2 Floor area/week

6.2 Waste generation calculations

The waste generation calculations are detailed in Appendix C. The estimated waste generation for the development is:

- General Waste: around 2,950L per week.
- Recyclables: around 2,950L per week.

7 Waste systems

7.1 Internal waste storage

Internal bins should be provided throughout the child care centre for separate disposal of general waste and recycling.

Internal bins will be emptied by cleaners at regular intervals throughout the week and transferred to the Bin Storage Area for disposal into the appropriate bins.

7.2 External bin storage areas

7.2.1 Bin size, quantity and colour

It is proposed to provide the following bins in a centralised bin store:

- 5 x 240L General waste (red lid bin).
- 5 x 240L Co-mingled recycling (yellow lid bin).

The number of bins required for the development is detailed in Appendix C.

7.2.2 Bin storage area size

As detailed in Table 2, each 240L bin has a footprint area of 0.43m^2. A 50mm gap is allowed between the bins to allow easy pull movement.

The proposed bin storage area size is sufficient to accommodate the required bins.

Table 2: Larger Mobile Garbage Bin (MGB) dimensions

Bin capacity	80L	120L	140L	240L	360L
Height (mm)	870	940	1065	1080	1100
Depth (mm)	530	560	540	735	885
Width (mm)	450	485	500	580	600
Approximate footprint (m^2)	0.24	0.27	0.27	0.43	0.53

Source: WALGA

7.2.3 Bin storage area design

Urbii has checked the proposed bin storage location and confirmed that required clearances are provided. A bin storage plan is included in Appendix B.

The following is a list of generic advice offered for consideration at subsequent detailed design stages of the project:

- **Size:** Ensure the size of the area set aside for the management of waste is sufficient to accommodate the number of bins required.
- **Ventilation and odour:** If covered, the design of the bin store will provide for adequate natural ventilation through ventilated doors or an alternative method which will be permanent, unobstructed natural ventilation openings direct to the external air, not less than one-twentieth i.e. 5% of the floor area.
- **Lighting:** Artificial light controlled by switches will be located near the bin store entrance.
- **Noise:** Bins will be collected from the waste collection presentation point outside of the peak operating hours of the development.
- **Aesthetics:** The bin store should be consistent with the overall aesthetics of the development.
- **Vermin:** Self-closing doors can be considered to eliminate access to vermin.
- **Washing bins and waste storage area:** The internal bin store will have bin-washing facilities including an adequate supply of hot and cold water mixed through a centralised mixing valve with hose cock and have floor drainage installed. Staff will be responsible for washing bins (or contracting a provider to wash bins) and for maintenance of their bin stores.

7.3 Access to bins

Waste and recycling storage facilities are in positions that:

- Permit easy, direct and convenient access for the users of the facility.
- Permit easy transfer of bins to the presentation point.
- Permit easy, direct and convenient access for collection service providers.
- Are well screened and do not reduce amenity.
- Are secure and provide protection against potential vandalism.
- Reduce potential noise pollution and disturbance of residents.
- Are close to building exits.

8 Waste collection

8.1 Waste vehicle types

Waste collection will be serviced through the City of Melville commercial waste collection service. Either a side or rear loader truck can be used due to the 240L bin size.

8.2 Waste collection frequency

Waste collection will be scheduled at a frequency of three times per week.

8.3 Waste collection method and presentation points

Bins are proposed to be wheeled out from the bin store to the St Michael Terrace verge for presentation on municipal waste collection days.

Collection by the City of Melville will be scheduled at a frequency of three days per week. A bin presentation plan is included in Appendix B.

8.4 Vehicle access and maneuvering

Waste collection will be facilitated on-street from the St Michael Terrace verge. Therefore, no internal waste truck access or circulation needs to be allowed for.

9 Additional waste requirements

9.1 Bulk waste

Bulk waste can be temporarily placed in a store room within the building until private arrangement for collection is made.

9.2 E-Waste

Storage space for E-waste will be accommodated within the building. E-waste will be disposed in a suitable manner, such as bulk drop-off to the tip or using public battery recycling boxes.

9.3 Garden organics

The site caretaker will manage garden organic waste. Garden waste can be placed in general waste bins if there is space or can be removed by trailer to be disposed offsite in a suitable location.

10 Waste management

Staff/cleaners will be responsible for:

- Cleaning their bin storage areas and facilities;
- Transferring waste stored internally to the consolidated bin storage area daily; and,
- Regularly cleaning their bins.

Staff should comply with the waste contractor's sorting requirements and only place permitted waste in each respective bin type. Waste that does not belong in any bin should be disposed of through private services or another appropriate method.

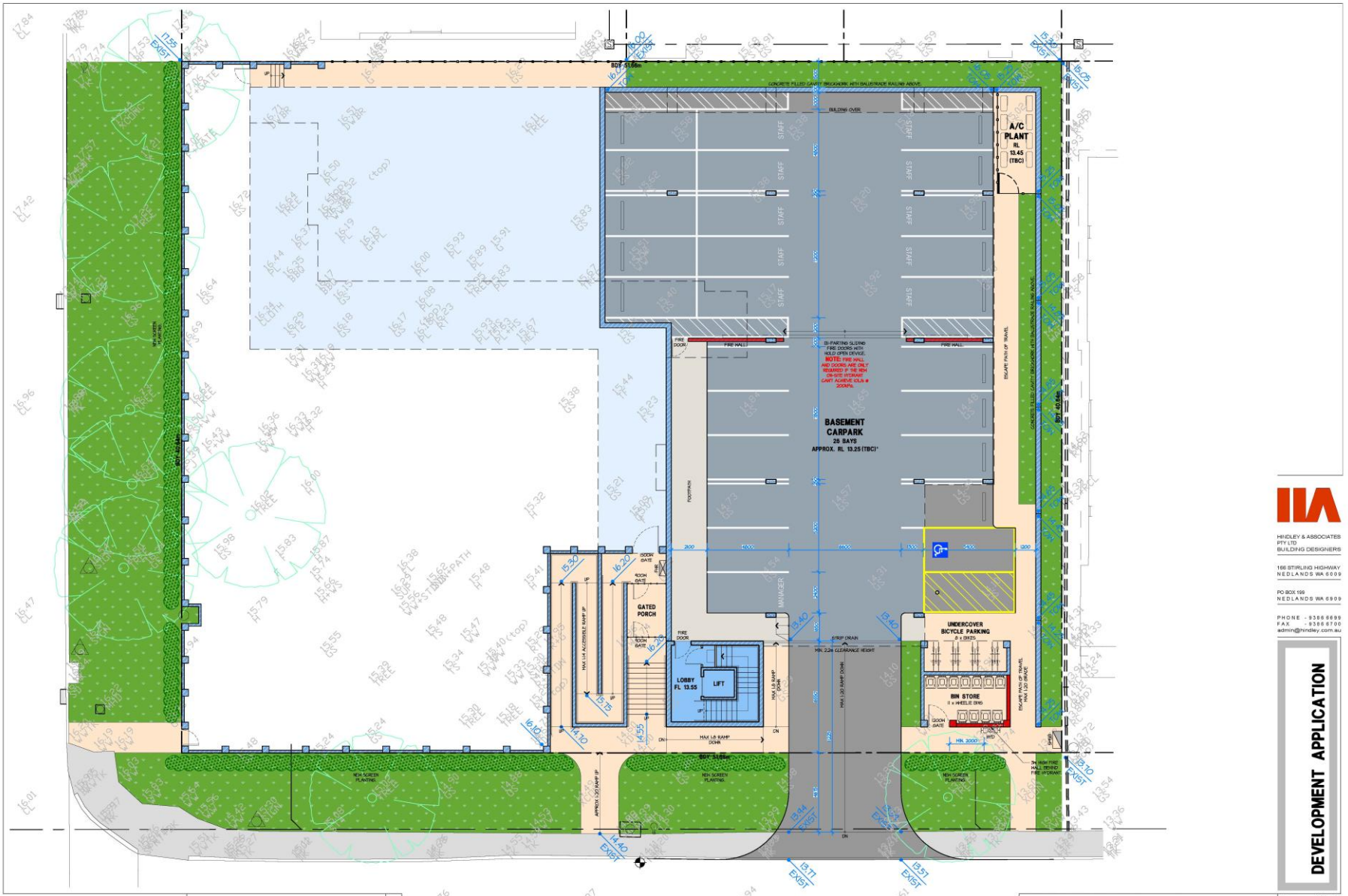
11 Conclusion

As demonstrated within this Waste Management Plan, the proposed development provides sufficient bin storage and adequate bins to service the site for general waste, recyclables and other waste.

Furthermore, the servicing of the bins by the City can be adequately achieved without having an adverse impact on the site and the local street network.

Appendices

Appendix A: Proposed development plans



HINDLEY & ASSOCIATES PTY LTD
BUILDING DESIGNERS

166 STIRLING HIGHWAY
NEDLANDS WA 6009

PO BOX 199
NEDLANDS WA 6909

PHONE - 9386 6699
FAX - 9386 6700
admin@hindley.com.au

DEVELOPMENT APPLICATION

HINDLEY & ASSOCIATES PTY LTD AS TRUSTEE FOR HINDLEY TRUST
ACN No. 088 989 904

NO:	DATE:	REVISION:	DRAWN:	CHECK:
A	15.05.25	ISSUED FOR DA	JJR	SDS
B	30.05.25	TOWN PLANNER'S COMMENTS	JJR	SDS

A1 SHEET

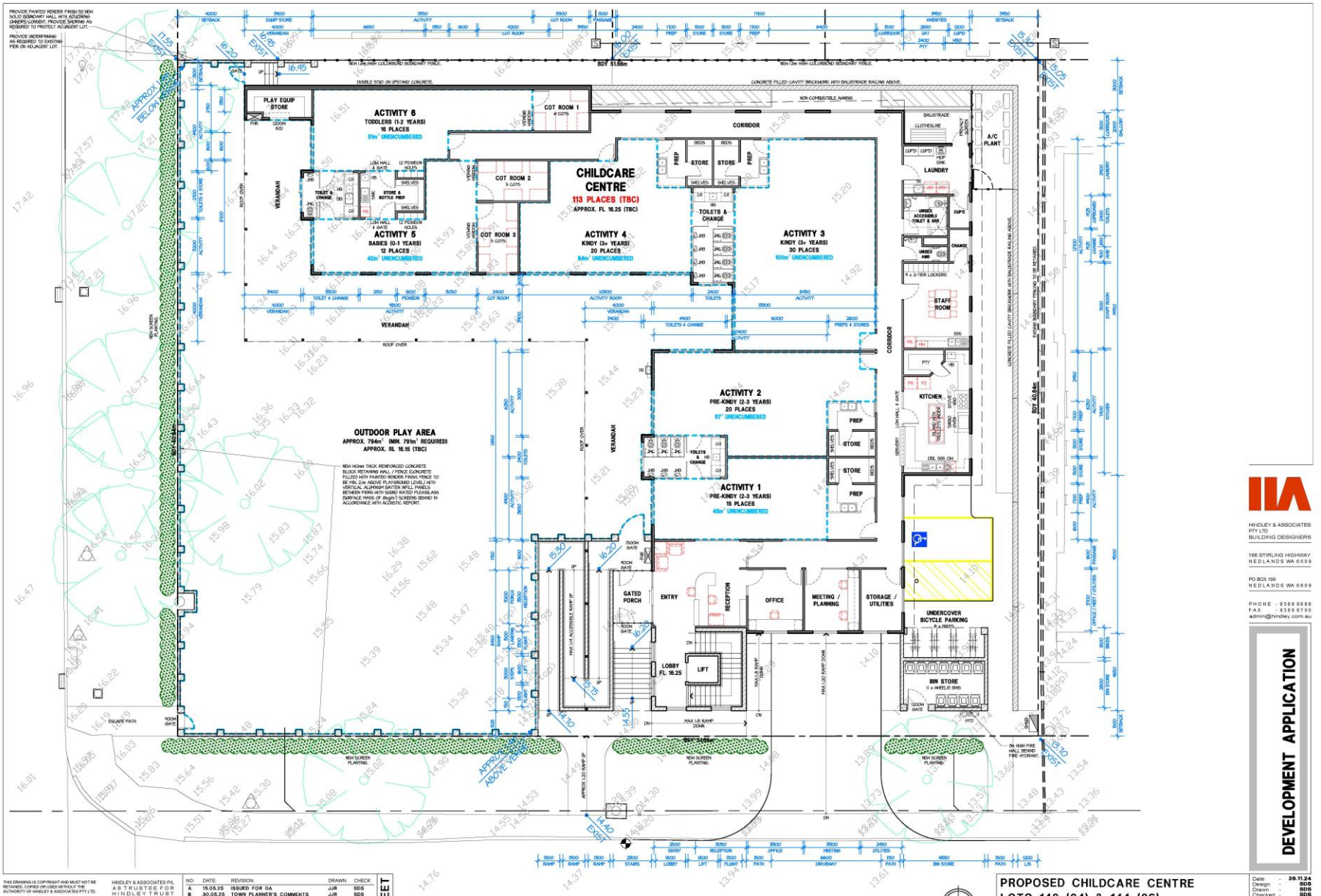
PROPOSED BASEMENT FLOOR PLAN

SCALE 1:100

N

PROPOSED CHILDCARE CENTRE
LOTS 143 (34) & 144 (36)
ST MICHAEL TCE, MOUNT PLEASANT
for STOCK ROAD LAND PTY LTD

Date	28.11.24
Design	SDS
Drawn	SDS
Checked	SDS
Scale	1:100
Job No.	0847
Dwg -	DA03
Rev -	B



HINDLEY & ASSOCIATES PTY LTD
BUILDING DESIGNERS

166 STIRLING HIGHWAY
NEDLANDS WA 6009

PO BOX 199
NEDLANDS WA 6909

PHONE - 9386 6699
FAX - 9386 6700
admin@hindley.com.au

DEVELOPMENT APPLICATION

HINDLEY & ASSOCIATES P/L ATF HINDLEY TRUST
ACN No. 088 989 904

NO:	DATE:	REVISION:	DRAWN:	CHECK:
A	15.05.25	ISSUED FOR DA	JJR	SDS
B	30.05.25	TOWN PLANNER'S COMMENTS	JJR	SDS

A1 SHEET

PROPOSED GROUND FLOOR PLAN

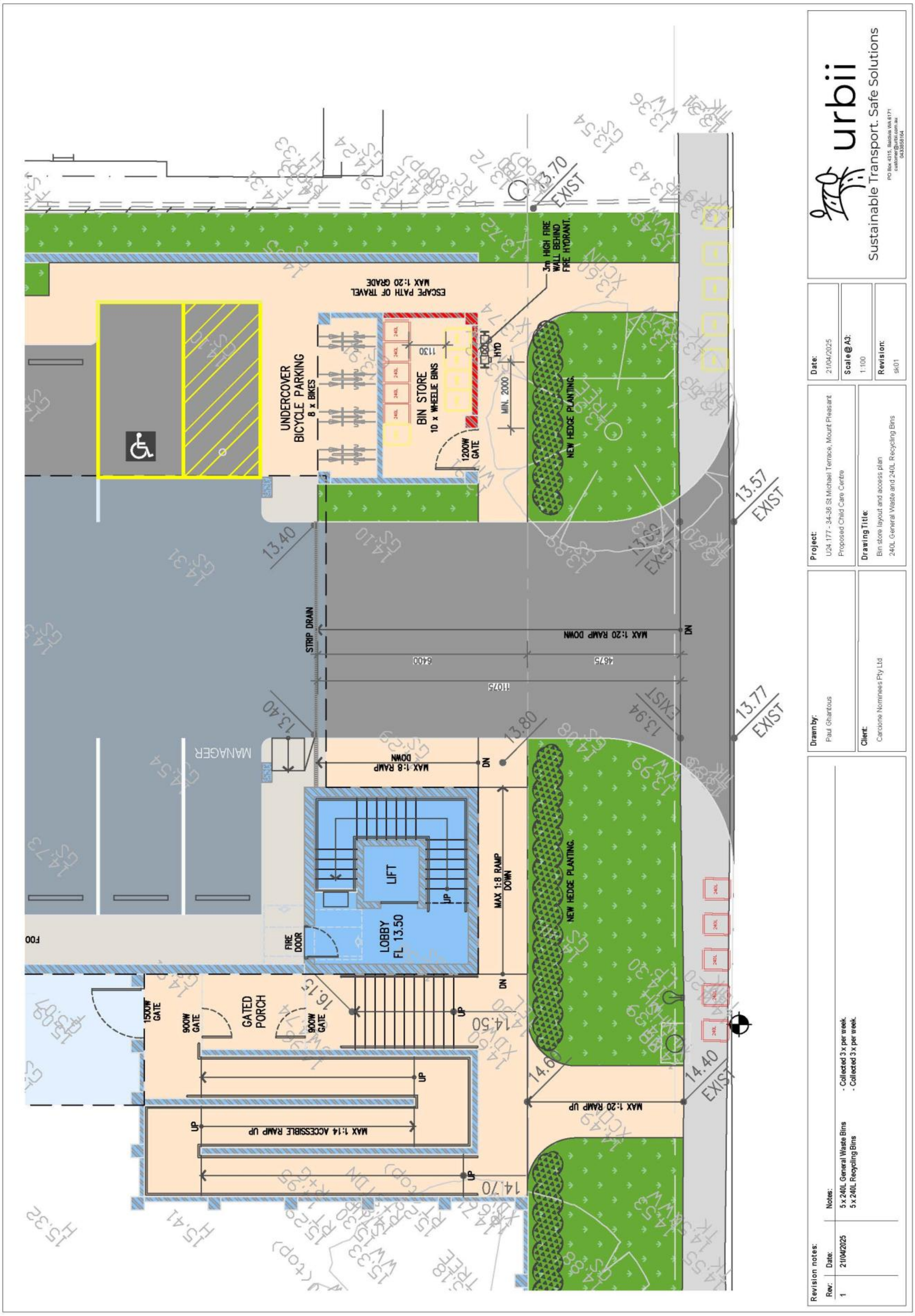
SCALE 1:100

N

PROPOSED CHILDCARE CENTRE
LOTS 143 (34) & 144 (36)
ST MICHAEL TCE, MOUNT PLEASANT
for STOCK ROAD LAND PTY LTD

Date	28.11.24
Design	SDS
Drawn	SDS
Checked	SDS
Scale	1:100
Job No.	0847
Dwg.	DA04
Rev.	B

Appendix B: Bin storage and bin presentation plans


urbii
Sustainable Transport. Safe Solutions
ESCAPE PATH OF TRAVEL
MAX 1:20 GRADE
3m HIGH FIRE WALL BEHIND FIRE HYDRANT.
UNDERCOVER BICYCLE PARKING
8 x BIKES
BIN STORE
10 x WHEELIE BINS
1130
HYD
MIN. 2000
1200W GATE
NEW HEDGE PLANTING.
STRIP DRAIN
MAX 1:20 RAMP DOWN
MANAGER
MAX 1:8 RAMP DOWN
LIFT
LOBBY
FL 13.50
FIRE DOOR
MAX 1:8 RAMP DOWN
NEW HEDGE PLANTING.
GATED PORCH
1500W GATE
900W GATE
900W GATE
MAX 1:14 ACCESSIBLE RAMP UP
MAX 1:20 RAMP UP
Date: 21/04/2025
Scale @ A3: 1:100
Revision: sk01
Project: U24.177 - 34-36 St Michael Terrace, Mount Pleasant
Proposed Child Care Centre
Drawing Title: Bin store layout and access plan
240L General Waste and 240L Recycling Bins
Drawn by: Paul Ghantous
Client: Carcione Nominees Pty Ltd
Revision notes:
Rev: 1 Date: 21/04/2025
Notes: 5 x 240L General Waste Bins - Collected 3 x per week.
5 x 240L Recycling Bins - Collected 3 x per week.

Appendix C: Waste calculations

Table 3: Weekly waste generation, bin types and collection frequency

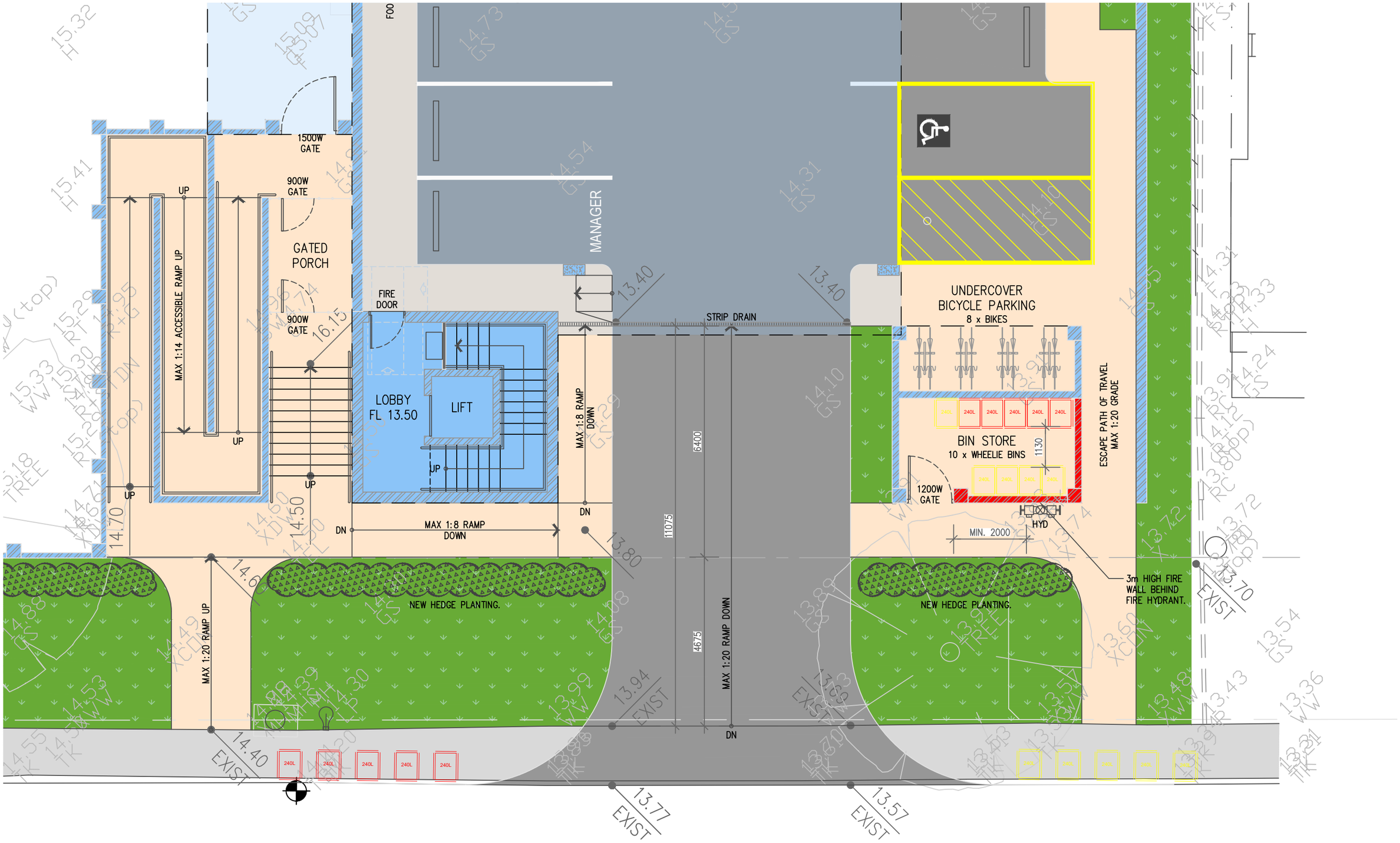
Waste type	Daily generation (L)	Days in operation (per week)	Weekly waste generation (L)	Weekly collection frequency
General waste	421.5	7	2950.5	3
Recyclables	421.5	7	2950.5	3

General Waste Bins

Bin Size (L)	Number of bins	Weekly capacity
240	5	3600
	Total weekly capacity (L)	3600

Recycle Waste Bins

Bin Size (L)	Number of bins	Weekly capacity
240	5	3600
	Total weekly capacity (L)	3600



Revision notes:

Rev:	Date:	Notes:	
1	21/04/2025	5 x 240L General Waste Bins	- Collected 3 x per week.
		5 x 240L Recycling Bins	- Collected 3 x per week.

Drawn by: Paul Ghantous

Client: Carcione Nominees Pty Ltd

Project: U24.177 - 34-36 St Michael Terrace, Mount Pleasant
Proposed Child Care Centre

Drawing Title: Bin store layout and access plan
240L General Waste and 240L Recycling Bins

Date: 21/04/2025

Scale @ A3: 1:100

Revision: sk01

urbii
Sustainable Transport. Safe Solutions
PO Box 4315, Baldivis WA 6171
customer@urbii.com.au
0433858164