DICKENS SOLUTIONS

(REF – 24120)

WASTE MANAGEMENT PLAN

CDA ARCHITECTS
(FOUR JS GROUP)

COMMERCIAL DEVELOPMENT
@
1-3 CAREEL HEAD ROAD
AVALON

AUGUST 2024

Dickens Solutions Pty Ltd
(ABN 41 603 040 446)
1214 Botany Road, Botany NSW 2019
Telephone (Mb) 0400 388 996
Website: www.dickenssolutions.com.au **E-mail:** garry@dickenssolutions.com.au

TABLE OF CONTENTS

PART	SUBJECT	PAGE
PART 1 – OVERVIEW & PROPOSAL		
1.1	Introduction	3
1.2	Project and Property Description	4
1.3	Applicants Details	4
1.4	Proposal	4
PART 2 – DEMOLITION		
2.1	Demolition – Generally	6
2.2	Buildings to be Demolished	6
2.3	Management of Hazardous Waste Materials	6
2.4	Demolition – Recycling, Reuse and Disposal Details	7
2.5	Demolition – On Site Storage of Materials	9
2.6	Demolition – Excavated Material	10
2.7	Licensed Processing and Disposal Facilities	10
PART 3 – CONSTRUCTION		
3.1	Construction – Generally	11
3.2	Construction – Recycling, Reuse and Disposal Details	11
3.3	Construction – On Site Storage of Materials	14
3.4	Construction – Excavated Material	15
3.5	Licensed Processing and Disposal Facilities	15
PART 4 – ON GOING USE		
4.1	Objectives	16
4.2	Assumptions	16
4.3	Provision of Waste & Recycling Services – Retail Component	18
4.4	Provision of Waste & Recycling Services – Child Care Centre	21
4.5	Bulky Waste	25
4.6	Collection Schedule	25
4.7	On Going Operation, Use & Management of Facilities	26
PART 5 – SUMMARY		
5.1	Summary	27

PART 1 – OVERVIEW AND PROPOSAL

1.1 INTRODUCTION

This Waste Management Plan (WMP) is an operational plan that describes in detail the manner in which all waste and other materials resulting from the construction and on-going use of the site are to be dealt with.

The aims and objectives of this WMP are to:

a) Satisfy all State and Local Government regulatory controls regarding waste management and minimisation practices;
b) Promote the use of recyclable materials in the excavation, demolition, construction and on-going operation of the building;
c) Maximise waste reduction, material separation, and resource recovery in the development;
d) Ensure the design of waste and recycling storage facilities are of an adequate size, appropriate for the intended use of the building, hygienic with safe and manoeuvrable access:
e) Ensure that the provision of waste and recycling services to the completed buildings are carried out in an efficient manner, which will not impact negatively on the health, safety and convenience of all stakeholders.

The land on which the development is proposed is located within the Northern Beaches (former Pittwater) LGA.

This WMP is prepared in accordance with:

- Warringah LEP 2011,
- Warringah DCP 2011, and relevant waste management guidelines,
- The 'Better Practice Guide for Resource Recovery in Residential Buildings, prepared by the NSW EPA (April 2019),
- All conditions of consent issued under the approved DA; and,
- The objective of ensuring that all waste management facilities and collection services will provide an outcome that will be efficient, as well as promoting the principles of health, safety and convenience.

This Waste Management Plan (WMP) has been prepared for a Development Application to be submitted to the Northern Beaches Council for the construction It is proposed to construct a two (2) storey commercial building at 1 & 3 Careel Head Road, Avalon Beach, comprising of:

- Ground level retail unit – Dan Murphy bottle shop franchise,
- 60-place Child-Care Centre on Level 1,
- One (1) basement area, and,
- Associated infrastructure.

The WMP is dated 5 August 2024 and has been prepared to be submitted to Council as part of the DA Package for the project.

The WMP has been developed and documented in accordance with the Architectural Drawings prepared by CD Architects – Job No J23587D.

1.2 PROJECT & PROPERTY DESCRIPTION

This Waste Management Plan (WMP) has been specifically designed for:

DESCRIPTION	**Industrial Development – Storage Units**
DETAILS	- **Ground level retail unit – Dan Murphy bottle shop franchise,** - **60-place Child-Care Centre on Level 1,** - **One (1) basement area, and,** - **Associated infrastructure.**
PROPERTY DESCRIPTION	**The development is to be constructed over an existing allotment of land at 1 and 3 Careel Head Road, Avalon Beach.**
STREET ADDRESS	**1-3 Careel Head Road, Avalaon Beach**
AREA	**2.024sqm**
LGA	**Northern Beaches Council**
DIMENSIONS	**Refer to Survey and Site Plans**
ZONING	**Zone E3 – Productivity Support**
PLANNING INSTRUMENT	**Pittwater LEP 2014** **Pittwater DCP 2014**

1.3 APPLICANTS DETAILS

APPLICANT	**Four JS Group Pty Ltd** **C/- CD Architects**
ADDRESS	**Level 2, 60 Park Street, Sydney. NSW. 2000.**
TELEPHONE	**02 9267 2000**
E-MAIL	**ganesh@cdarchitects.com.au**

1.4 PROPOSAL

The proposal involves the construction a two (2) storey commercial building at 1 & 3 Careel Head Road, Avalon Beach, comprising of:

- Ground level retail unit – Dan Murphy bottle shop franchise,
- 60-place Child-Care Centre on Level 1,
- One (1) basement area, and,
- Associated infrastructure.

Vehicular access to the site is onto Barrenjoey Road at the southern frontage of the site.

All waste and recycling services will be provided by a licensed private waste and recycling collection contractor.

All waste and recycling services will take place from a loading dock situated at ground level on the northern side of the site as indicated on the Architectural Drawings.

Current buildings and structures on the site include a single storey timber, brick and glazed building, with a metal roof, comprising of three (3) shops, bitumen car park and driveway, timber lattice fencing around the Careel Head Road side of the site and a hedged fence along the Barrenjoey Road frontage.

The project consists of: -

1. The demolition of the dwelling all associated structures, and the removal of all associated structures on all lots,
2. Levelling and clearing of the site,
3. The excavation of the site to construct the basement and building,
4. The construction of the building,
5. The provision of landscaping, off streetcar park, driveways, concrete pathways and other elements associated with the development, and,
6. The on-going use of the building.

The Northern Beaches Council require a demolition, construction, and operational waste management plan to be submitted describing how all demolition, construction and operational waste will be stored, disposed of, and managed.

This Waste Management Plan has been developed not only to satisfy Council's requirements, but also to ensure that all waste management activities associated with the development are carried out and conducted in accordance with best practice industry standards.

PART 2 – DEMOLITION

2.1 OVERVIEW

It is recognised that Sydney has an ever-increasing waste problem, and this practice is not sustainable. In alignment with current NSW waste management legislation, this WMP aims, where possible, to promote waste avoidance, reuse, and the recycling of material, particularly during the course of demolition and construction works.

This Part (Part 2) on Pages 6, 7, 8, 9 and 10 of this WMP describes the manner in which waste is to be managed during the course of the demolition and construction works.

The processes outlined herein are to be read in conjunction with, and comply, with the Development Consent issued in respect of the proposal. It will be the developer's overall responsibility to ensure compliance in this regard.

All material moved offsite shall be transported in accordance with the requirements of the Protection of the Environment Operations Act (1997). Approved receptacles of an appropriate size will be located on site for the collection of food scraps, beverage containers, and other waste generated on site by workers.

2.2 BUILDINGS TO BE DEMOLISHED

Current buildings and structures on the site include a single storey timber, brick and glazed building, with a metal roof, comprising of three (3) shops, bitumen car park and driveway, timber lattice fencing around the Careel Head Road side of the site and a hedged fence along the Barrenjoey Road frontage.

2.3 MANAGEMENT OF HAZARDOUS MATERIALS

Due to the age and construction of the existing buildings on the site, there may be potential for hazardous building materials to be present in the buildings to be demolished. Accordingly, the generation, storage, treatment, and the disposal of hazardous waste (including asbestos) will be conducted in accordance with relevant waste legislation administered by the NSW EPA and any applicable WH&S legislation administered by Work Cover NSW.

All friable and non-friable asbestos-containing material shall be handled and disposed of off-site at an EPA licensed waste facility by an EPA licensed contractor in accordance with the requirements of the Protection of the Environment Operations (Waste) Regulation 2014 and the Waste Classifications Guidelines – Part 1 'Classifying Waste (EPA 2014) and any other instrument as amended.

All friable hazardous waste arising from the demolition process shall be removed and disposed of in accordance with the requirements of Work Cover NSW and the EPA, and with the provisions of:

a) Work Health and Safety Act 2011,
b) NSW Protection of the Environment Operations Act 1997 (NSW), and,
c) NSW Department of Environment and Climate Change Environmental Guidelines; Assessment, Classification and Management of Liquide and Non-Liquid Wastes.

2.4 DEMOLITION – RECYCLING, REUSE & DISPOSAL DETAILS

The following details prescribe the manner in which all material involved in the demolition of the building will be dealt with, and includes: -

1. An estimate of the types and volumes of waste and recyclables to be generated,
2. How demolished waste materials will be reused, and, or recycled and where residual wastes will be disposed (see below), and,
3. The total percentage of demolition waste that will be reused or recycled.

It is noted that the quantities of materials detailed in this part (Part 2.2) on page 9 are estimates only, based on current industry standards and quantity analysis, and may vary due to the prevailing nature of site constraints, weather conditions, and any other unforeseeable activities associated with the demolition works, which are beyond the control of the developer, including but not being limited to theft, accidents, and, or, other acts of misadventure. Notwithstanding any of the above, the developer will provide Council with all details in relation to any major variations in this regard.

1. Excavated Materials

Volume / Weight	610 cubic metres / 1,037 Tonnes
On Site Reuse	To be Determined
Percentage Reused or Recycled	75% - 90%
Off Site Destination	Refer to Part 2.8 on page 10

2. Bricks

Volume / Weight	60 cubic metres / 60 Tonnes
On Site Reuse	Clean and remove lime mortar from bricks.
Percentage Reused or Recycled	75% - 90%
Off Site Destination	Refer to Part 2.8 on page 10

3. Concrete / Bitumen

Volume / Weight	100 cubic metres / 240 Tonnes
On Site Reuse	Nil – all to be disposed of, or processed off-site
Percentage Reused or Recycled	75% - 90%
Off Site Destination	Refer to Part 2.8 on page 10

4. Timber

Volume / Weight	110 cubic metres / 44 Tonnes
On Site Reuse	Re-use for formwork and studwork.
Percentage Reused or Recycled	65% - 90%
Off Site Destination	Refer to Part 2.8 on page 10

5. Plasterboard & Fibro

Volume / Weight	75 cubic metres / 26.25 Tonnes
On Site Reuse	No. All materials will be processed off-site
Percentage Reused or Recycled	To be determined (dependent on asbestos content)
Off Site Destination	
Off Site Destination (Asbestos)	Refer to Part 2.8 on page 10.

6. Metals / Steel / Guttering & Downpipes

Volume / Weight	120 cubic metres / 40 Tonnes
On Site Reuse	No
Percentage Reused or Recycle	60% - 90%
Off Site Destination	Refer to Part 2.8 on page 10

7. Roof Tiles / Tiles

Volume / Weight	Minimal

8. Fixture & Fittings (Doors Fittings, Other Fixtures, etc)

Volume	100 cubic metres / 35 Tonnes
On Site Reuse	No. All material will be processed or disposed of 0ff-site.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Refer to Part 2.8 on page 10

9. Glazing, Electrical & Light Fittings, Cabling, PC items, Ceramics, etc

Volume	125 cubic metres / 37.5 Tonnes
On Site Reuse	No. All material will be processed or disposed of 0ff-site.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Refer to Part 2.8 on page 10

10. Residual Waste

Volume / Weight On Site Reuse Off Site Destination	130 cubic metres / 130 Tonnes No Refer to Part 2.8 on page 10
Notes on calculation of volume of residual waste	1. In calculating the amount of residual waste produced from the demolition of all buildings on site, it is estimated that 10% of it, will be residual waste. 2. As all of the materials vary in weight per volume, a figure of 1 cubic metre of material is equal to 1 tonne in weight has been used.

It is noted that the quantities of materials detailed in this section (Part 2.2) are estimates only, based on current industry standards and quantity analysis, and may vary due to the prevailing nature of construction constraints, weather conditions, and any other unforeseeable activities associated with the demolition of the buildings, which are beyond the control of the developer, including but not being limited to theft, accidents, and other acts of misadventure.

Notwithstanding any of the above, the developer will provide Council with all details in relation to any major variations in this regard.

The facilities and agencies that have been nominated to receive the materials listed above have been identified within the NSW waste industry as being a facility or agency that will accept the materials specified in each respective table. The developer understands that any costs associated with the transportation and receival of these materials will be their responsibility.

The developer is under no obligation to use any nominated facility or agency, but should any alternative arrangements be made, it will be the contractors' responsibility to ensure that all materials excess to construction removed from the site are disposed of, or processed, appropriately.

The developer will keep a written record of all documentation associated with the transportation, disposal and processing of all materials associated with the demolition of all structures on site.

2.5 ON-SITE STORAGE OF MATERIALS

During the demolition and construction stages of the project, an area will be set aside on the site as a compound for the on-site storage of materials prior to their removal from the site. This compound will provide for: -

- Material sorting,
- Segregation of materials that may be hazardous and which will be required to be disposed of,
- Recovery equipment, such as concrete crushers, chippers, and skip bins,
- Material storage, and,
- Access for transport equipment.

Appropriate vehicular access will be provided on and off site, and to the compound, to enable the efficient removal of reusable, recyclable, and waste materials.

Prior to the commencement of demolition works, the developer will provide Council with a 'Site Plan for the On-Site Storage of Materials at Demolition'. This plan will show in detail the location of each area within the compound, set aside for the segregated storage of all materials involved in the demolition of all buildings on the site.
se the amount of building materials excess to construction.

2.6 DEMOLITION – EXCAVATED MATERIAL

All excavated material removed from the site, as a result of the demolition of all buildings, must be classified in accordance with the Department of Environment, Climate Change and Water NSW Waste Classification Guidelines prior to their removal, transportation, and disposal to an approved waste management facility.

All relevant details must be reported to the PCA.

2.7 LICENSED WASTE MANAGEMENT AND RECYCLING FACILITIES.

The facilities nominated below are appropriately licensed to receive the materials nominated in Tables 1 to 10 on pages 6 to 9.

1. Kimbriki Waste Management Facility, Kimbriki Road, Ingleside. Tel 02 9486 3512.
2. Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights.
   Tel 1300 651 116
3. Bingo Industries, 3-5 Duck Street, Auburn, or 38 McPherson Street, Banksmeadow.
   Tel 1300 424 646
4. Jacks Gully Waste Management Centre, Richardson Road, Narellan.
   Tel 1300 651 116
5. Veolia Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112

The facilities and agencies that receive the materials listed above are, licensed and generally able, to accept the materials specified.

The appointed contractor understands that any costs associated with the transportation and receival of these materials will be their responsibility.

Based on the above information, it is anticipated that between 75% and 85% of all materials excess to construction needs will be able to be recycled or re-used, well above the Council's required targets. The appointed contractor is under no obligation to use any nominated facility or agency, but should any alternative arrangements be made, it will be the contractors responsibility to ensure that all demolished materials removed from the site are disposed of, or processed, appropriately.

The developer will keep a written record of all documentation associated with the transportation, disposal, and processing of all materials excess to the construction of the building.

Additionally, during the construction of the building, every effort will be made to reduce and minimise the amount of building materials excess to construction.

PART 3 – CONSTRUCTION

3.1 CONSTRUCTION – GENERALLY

Upon completion of all demolition works, construction of the building will commence with the excavation of the site for the basement levels of the building. All materials sourced from these activities will be disposed of in accordance with the information provided in Part 3.2 on pages 11, 12, 13, 14 and 15 of this WMP.

Additionally, all materials used in the construction of the building that are not required to be incorporated into it, shall be recycled, reused, or disposed of in accordance with these provisions, and the requirements of the Protection of the Environment Operations Act (1997). It will be the developer's overall responsibility to ensure compliance in this regard.

Mobile Bins of an appropriate size will be located on site for the collection of food scraps, beverage containers, and other waste generated on site by workers.

3.2 CONSTRUCTION – RECYCLING, REUSE & DISPOSAL DETAILS

The following details prescribe the manner in which all materials surplus to the construction of the building will be dealt with, and includes: -

a) An estimate of the types and volumes of waste and recyclables to be generated,
b) A site plan showing sorting and storage areas for construction waste and vehicle access to these areas (see Part 3.3 of this Plan),
c) How excavated and other materials surplus to construction will be reused or recycled and where residual wastes will be disposed (see below), and,
d) The total percentage of waste surplus to construction to be reused or recycled.

1. Excavated Materials

Volume / Weight	7,000 Cubic Metres / 11,900 (Basement excavation)
On Site Reuse	Yes. Keep and reuse topsoil for landscaping. Shore on site. Use some for support of retaining walls (Excavated Materials are only to be used if the material is not contaminated or has been remediated in accordance with any requirements specified by any Environmental Consultancy engaged to carry out any contamination assessment of excavated material).
Percentage Reused or Recycled	To be determined (see above comments)
Off Site Destination	Refer to Part 3.5 on page 15.

2. Bricks

Volume / Weight	5 cubic metres / 5 Tonnes
On Site Reuse	Clean and remove lime mortar from bricks. Broken bricks for internal walls. Crush and reuse as drainage backfill. Crushed and used as aggregate.
Percentage Reused or Recycle	75% - 90%
Off Site Destination	Refer to Part 3.5 on page 15.

3. Concrete

Volume / Weight	6 cubic metres / 14.4 Tonnes
On Site Reuse	Existing driveway to be retained during construction. Crushed and used as aggregate, drainage backfill.
Percentage Reused or Recycled	60% - 75%
Off Site Destination	Refer to Part 3.5 on page 15.

4. Timber

Volume / Weight	5 cubic metres / 7 Tonnes
On Site Reuse	Re-use for formwork and studwork, and for landscaping
Percentage Reused or Recycled	65% - 90%
Off Site Destination	Refer to Part 3.5 on page 15.

5. Plasterboard & Fibro

Volume / Weight	6 cubic metres / 2 Tonnes
On Site Reuse	No – all material will be transported for disposal off-site.
Percentage Reused or Recycled	To be determined
Off Site Destination	Refer to Part 3.5 on page 15.

6. Metals / Steel / Guttering & Downpipes

Volume / Weight	5 cubic metres / 0.25 Tonnes
On Site Reuse	No
Percentage Reused or Recycled	60 – 90%
Off Site Destination	Refer to Part 3.5 on page 15.

7. Roof Tiles / Tiles

Volume / Weight	4 cubic metres / 3 Tonnes
On Site Reuse	Broken up and used as fill.
Percentage Reused or Recycled	80% - 90%
Off Site Destination	Refer to Part 3.5 on page 15

8. Plastics

Volume / Weight	5 cubic metres / 1 Tonne
On Site Reuse	Nil
Percentage Reused or Recycled	80% - 95%
Off Site Destination	Refer to Part 3.5 on page 15.

9. Glass, Electrical & Light Fittings, PC items

Volume / Weight	5 cubic metres / 1 Tonne
On Site Reuse	No
Percentage Reused or Recycled	70% - 90%
Off Site Destination	Refer to Part 3.5 on page 15.

10. Fixture & Fittings (Doors Fittings, Other Fixtures, etc)

Volume	10 cubic metres / 3.3 Tonnes
On Site Reuse	Broken up and used as fill.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Refer to Part 3.5 on page 15.

11. Pallets

Volume / Weight	25 cubic metres / 8 Tonne
On Site Reuse	No
Percentage Reused or Recycle	90% - 100%
Off Site Destination	Refer to Part 3.5 on page 15.

11. Residual Waste

Volume / Weight On Site Reuse Off Site Destination	750 cubic metres / 750 Tonnes No Refer to Part 3.5 on page 15.
Notes on calculation of volume of residual waste	1. In calculating the amount of residual waste produced from the demolition of all buildings on site, it is estimated that 10% of it, will be residual waste. 2. As all of the materials vary in weight per volume, a figure of 1 cubic metre of material is equal to 1 tonne in weight has been used.

It is noted that the quantities of materials detailed in this section (Part 3.2) are estimates only, based on current industry standards and quantity analysis, and may vary due to the prevailing nature of construction constraints, weather conditions, and any other unforeseeable activities associated with the construction of the buildings, which are beyond the control of the developer, including but not being limited to theft, accidents, and other acts of misadventure. Notwithstanding any of the above, the developer will provide Council with all details in relation to any major variations in this regard.

The facilities and agencies that have been nominated to receive the materials listed above have been identified within the NSW waste industry as being a facility or agency that will accept the materials specified in each respective table.

The developer understands that any costs associated with the transportation and receival of all materials will be their responsibility. The developer is under no obligation to use any nominated facility or agency, but should any alternative arrangements be made, it will be the developers' responsibility to ensure that all materials excess to construction removed from the site are disposed of, or processed, appropriately.

The developer will keep a written record of all documentation associated with the transportation, disposal and processing of all materials associated with the demolition of all structures on site. Additionally, during the construction of the building, every effort will be made to reduce and minimise the amount of building materials excess to its construction.

3.3 CONSTRUCTION – ON-SITE STORAGE OF MATERIALS

During the construction of the buildings, an area will be set aside on the site as a compound for the on-site storage of materials prior to their removal from the site. This compound will provide for: -

- Material sorting,
- Segregation of materials that may be hazardous and which will be required to be disposed of,
- Recovery equipment, such as concrete crushers, chippers, and skip bins,
- Material storage, and,
- Access for transport equipment.

Appropriate vehicular access will be provided on and off site, and to the compound, to enable the efficient removal of reusable, recyclables, and waste materials.

Prior to the commencement of construction works, the developer will provide Council with a 'Site Plan for the On-Site Storage of Materials at Construction'. This plan will show in detail the location of each area within the compound, set aside for the segregated storage of all materials involved in the demolition of all buildings on the site.

3.4 CONSTRUCTION – EXCAVATED MATERIAL

All excavated material removed from the site, as a result of any activities associated with the construction of the building, must be classified in accordance with the Department of Environment, Climate Change and Water NSW Waste Classification Guidelines prior to removal, transportation and disposal to an approved waste management facility. All relevant details must be reported to the PCA.

3.5 LICENSED WASTE MANAGEMENT AND RECYCLING FACILITIES.

The facilities nominated below are appropriately licensed to receive the materials nominated in Tables 1 to 10 on pages 6 to 8 and Part 2.7 on page 10.

1. Kimbriki Waste Management Facility, Kimbriki Road, Ingleside. Tel 02 9486 3512.
2. Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights.
   Tel 1300 651 116
3. Bingo Industries, 3-5 Duck Street, Auburn, or 38 McPherson Street, Banksmeadow.
   Tel 1300 424 646
4. Jacks Gully Waste Management Centre, Richardson Road, Narellan.
   Tel 1300 651 116
5. Veolia Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112

The facilities and agencies that receive the materials listed above are, licensed and generally able, to accept the materials specified. The appointed contractor understands that any costs associated with the transportation and receival of these materials will be their responsibility.

Based on the above information, it is anticipated that between 75% and 85% of all materials excess to construction needs will be able to be recycled or re-used, well above the Council's required targets.

The appointed contractor is under no obligation to use any nominated facility or agency, but should any alternative arrangements be made, it will be the contractors responsibility to ensure that all demolished materials removed from the site are disposed of, or processed, appropriately.

The developer will keep a written record of all documentation associated with the transportation, disposal, and processing of all materials excess to the construction of the building.

Additionally, during the construction of the building, every effort will be made to reduce and minimise the amount of building materials excess to construction.

PART 4 – ON GOING USE

4.1 OBJECTIVES

1. To ensure that the storage, amenity, and management of waste is sufficient to meet the needs of the development.
2. To ensure that all waste management activities are carried out effectively and efficiently, and in a manner, that will promote the principles of health, safety, and convenience.
3. To promote waste minimisation practices.

4.2 ASSUMPTIONS

In preparing this Plan, the following assumptions have been made: -

1. The proposal incorporates the construction of a two (2) storey commercial building at 1 & 3 Careel Head Road, Avalon Beach, comprising of:
   a) Ground level retail unit – Dan Murphy bottle shop franchise,
   b) 60-place Child-Care Centre on Level 1,
   c) One (1) basement area, and,
   d) Associated infrastructure.
2. Egress from the site is onto Thunderbolt Drive onto the northern frontage of the site.
3. One (1) Bin Storage Area (BSA) will be provided for the development as detailed herein.
4. The Bin Storage Area is located on the northern eastern side of the ground level as indicated on the Architectural Drawings.
5. For the Retail Component, which comprises of a bottle shop, and three (3) retail units, the following provisions will apply:
   a) All waste will be stored in 8 x 240-litre waste bins, to be serviced two (2) days per week,
   b) All waste will be stored in 8 x 240-litre waste bins, to be serviced two (2) days per week,
   c) All waste bins will be service two (2) times per week,
   d) All recycling bins will be service two (2) times per week, and,
   e) All waste and recycling bins will be stored within the confines of a Retail Bin Room provided in the basement as indicated on the Architectural Drawings.
6. For the Child Care Centre, the following provisions will apply:
   a) All waste will be stored in 5 x 240-litre waste bins,
   b) All recycling will be stored in 2 x 240-litre recycling bins,
   c) All waste bins will be service two (2) days per week,
   d) All recycling bins will be service two (2) days per week,
   e) All waste and recycling bins will be serviced from a loading bay located adjacent to the Waste Room as indicated on the Architectural Drawings, and,
   f) All clinical and medical waste will be dealt with as specified in Part 4.3.9 on page 23.
9. As Council's Waste Management DCP does not prescribe waste and recycling generation rates for Child Care Centres, all waste and recycling generations have been calculated according to information provided by officers of Council's waste management department.

10. A licensed private waste collection contractor will provide all waste and recycling services to the development.
11. As required by Council, all waste and recycling collections will take place from within the site, in a collection area (loading bay) adjacent to the WSA, using a standard SRV.
12. The Developer will appoint a Building Manager whose responsibilities will include the supervision of all waste management, activities, services and facilities.
13. The Building Manager will ensure that access is available to collection facilities on all collection days.

4.3 PROVISON OF WASTE MANAGEMENT SERVICES – RETAIL COMPONENT

4.3.1 Overview

This Part (Part 4.5) details all waste management activities associated with the retail component of the development, which comprises of the following land uses:

- Retail 1 – Dan Murphy Licensed Liquor store (bottle shop) with an area of 500sqm,
- Retail 2 – Café / Takeaway Food Shop, with an area of 90sqm,
- Retail 3 – Shop (use to be determined), with an area of 41sqm, and,
- Retail 4 – Shop (use to be determined), with an area of 60sqm.

4.3.2 Waste Handling and Management

The proprietors of all retail units will be responsible for depositing their waste and recycling material into the appropriate bins. All waste is to be placed in the red lidded waste bins. All recyclable material is to be placed in the yellow lidded recycling bins.

All waste and recyclable material is to be removed from the café at the conclusion of each days' operations and is to be deposited in the appropriate bins provided in the Retail Bin Storage Area.

Appropriate signage will be erected in a prominent place within the building to assist employees of the Centre to ensure that all waste and recyclable material is placed into the appropriate bins.

4.3.3 Service Requirements

Waste and recycling services will be provided to both the retail tenancy and café in accordance with the requirements of this WMP.

All waste and recycling materials will be stored in approved receptacles of an appropriate size as specified in this WMP. The lids of the bins shall be closed at all times to reduce litter, stormwater pollution, odour, and vermin.

4.3.4 Waste and Recycling Generation Rates

The Table below (Table 1) details the waste and recycling generation rates for the commercial land uses proposed. All waste and recycling generation rates have been calculated from information provided in the Better Practice Guide for Resource Recovery in Residential Buildings as they are not covered by Council's DCP.

TABLE 1 – FORMULA FOR CALCULATION WASTE & RECYCLING GENERATION RATES FOR CAFES

SERVICE	LAND USE	WASTE & RECYCLING GENERATION RATES
Waste	Liquor Store	50-litres of space per 100sqm of floor area per day
Recycling	Liquor Store	50-litres of space per 100sqm of floor area per day
Waste	Takeaway / Cafe	100-litres of space per 100sqm of floor area per day
Recycling	Takeaway / Cafe	120-litres of space per 100sqm of floor area per day
Waste	Retail (No Food)	50-litres of space per 100sqm of floor area per day
Recycling	Retail (No Food)	100-litres of space per 100sqm of floor area per day

4.3.5 Commercial Waste Services

All commercial waste services will be provided in accordance with the waste generation rates as prescribed in Table 2. The following table (Table 8) on page 22 specifies the criteria for waste generation rates, and the service requirements as a result of applying the waste generation rates to both tenancies.

TABLE 2 – WASTE GENERATION RATES

ACTIVITY	FORMULA	CALCULATION	LITRES PER WEEK
Liquor Store	50-litres per 100sqm per day	50 x 500 / 100 x 7	1,750.00
Takeaway Café	100-litres per 100sqm per day	100 x 90 / 100 x 7	630.00
Retail No Food	50-litres per 100sqm per day	50 x 101 / 100 x 6	303.00
Total Litres of Waste Generated per Week			**2,683.00**
Service Requirements		**1 x 1100-litre Mobile Bin Serviced three (3) times per week**	
Total Litres of Waste Serviced per Week		**3,300-litres per week.**	

It is considered that the one (1) contractor provide all waste services to all units, tenancies, but both tenancies and that 1 x 1100-litre mobile waste bin be provided to service both tenancies three (3) days per week.

The Proprietors of each unit will be required to enter into a Service Level Agreement with the contractor, and written evidence of the Agreement will be kept on the premises, in order to demonstrate that the regular collection and disposal of all waste generated from these activities, has taken place.

All commercial waste services are to be undertaken in a manner that will not adversely impact on the principles of health, safety or convenience.

All waste services will be carried out so as not to impede or impact on vehicular and pedestrian traffic movement throughout, and adjacent to the development.

4.3.6 Commercial Recycling Services

All commercial waste services will be provided in accordance with the waste and recycling generation rates as prescribed in Table 1.

The following table (Table 3) specifies the criteria for recycling generation rates, and the service requirements as a result of applying the waste generation rates to all units.

TABLE 3 – RECYCLING GENERATION RATES

ACTIVITY	FORMULA	CALCULATION	LITRES PER WEEK
Liquor Store	50-litres per 100sqm per day	50 x 500 / 100 x 7	1,750.00
Takeaway Café	120-litres per 100sqm per day	120 x 90 / 100 x 7	756.00
Retail No Food	100-litres per 100sqm per day	100 x 101 / 100 x 6	606.00
Total Litres of Recycling Generated per Week			**3,112.00**
Service Requirements		**1 x 1100-litre Mobile Bin Three (3) Services per week**	
Total Litres of Waste Serviced per Week		**3,300-litres per Week**	

It is considered that the one (1) contractor provide all recycling services to all units and that 1 x 1100-litre mobile recycling bin be provided to service all units three (3) days per week.

The Proprietors of each unit will be required to enter into a Service Level Agreement

with the contractor, and written evidence of the Agreement will be kept on the premises, in order to demonstrate that the regular collection and disposal of all waste generated from these activities, has taken place.

All commercial recycling services are to be undertaken in a manner that will not adversely impact upon the principles of health, safety or convenience.

All recycling services will be carried out so as not to impede or impact on vehicular and pedestrian traffic movement throughout, and adjacent to the development.

4.3.7 Retail Bin Storage Area (RBSA)

The Retail Bin Storage Area is located in the basement of the building as indicated on the Architectural Drawings. It is an enclosed rectangular structure measuring 3.2m x 3.0m, with an area of 9.6sqm, and will provide sufficient space for:

- Storage space for 1 x 1100-litre waste bins, and,
- Storage space for 1 x 1100-litre recycling bin.

4.3.8 Retail Waste and Recycling Collections

All commercial waste and recycling collections will be collected from the loading bay, located at ground level adjacent to Careel Head Road as indicated on the Architectural Drawings.

The loading bay has been designed to accommodate rear loading MRV waste and recycling collection vehicles.

On the evening prior to collections, the Building Manager or their authorised representative will transport the bins from the basement storage area to a collection point behind the loading area, where they will be stored for collection.

As required by Council, all collection vehicles will enter and exit the building in a forward direction. Collection and servicing activities will take place as follows: -

a) The Collection vehicle will enter the building from Careel Head Road, and will reverse into the collection area with one (1) manoeuvre,
b) Once into the site, a member of contractors' collection team will remove the bins from the collection point and place the contents of the respective bins onto the lifting device and deposit the contents of each bin into the body of the collection vehicle,
c) The contractor's representative will return the emptied bins back to the collection point,
d) Once the bins have been serviced, the collection vehicle will exit the collection area and exit the building in a forward direction.

All internal access, parking and servicing arrangements are to comply with all relevant Australian Standards.

4.4 PROVISON OF WASTE MANAGEMENT SERVICES – CHILD CARE CENTRE

4.4.1 Overview

This Part (Part 4.4) details all waste management activities associated with the Child Care Centre (CCC) component of the development. The CCC will provide places for 60 children.

The Child Care Centre is located on the First Floor of the building as indicated on the Architectural Drawings, and comprises of:

- Three (3) indoor play rooms,
- One (1) outdoor play area,
- Offices and administration areas, kitchen and amenities, lift,
- Two (2) safe havens, and,
- Associated infrastructure.

4.4.2 Waste Handling and Management

The proprietors of the Child Care Centre will be responsible for depositing their waste and recycling material into the appropriate bins. All waste is to be placed in the red lidded waste bins. All recyclable material is to be placed in the yellow lidded recycling bins.

All waste and recyclable material is to be removed from the centre at the conclusion of each days' operations and is to be deposited in the appropriate bins provided in the Bin Storage Area (BSA).

Appropriate signage will be erected in a prominent place within the building to assist employees of the Centre to ensure that all waste and recyclable material is placed into the appropriate bins.

4.4.3 Service Requirements

The Child Care Centre is a commercial enterprise, and due to the nature of its use, will generate both waste and recyclable material. Due to its commercial nature, the provision of residential waste and recycling services to the development do not apply.

Accordingly, commercial waste and recycling services will be provided to the Centre.

4.4.4 Waste and Recycling Generation Rates

All waste and recycling generation rates have been calculated from information provided in the Better Practice Guide for Resource Recovery in Residential Buildings as they are not covered in Council's DCP.

The number and size of bins have been calculated using this guide. which is summarised in the following table (Table 1) on page 15.

Waste generation rates do not make provision for sanitary waste, which given the nature of the use, will be generated. All sanitary waste management issues are dealt with in Part 4.3.9.

TABLE 1 – FORMULA FOR CALCULATION WASTE & RECYCLING GENERATION RATES FOR CHILD CARE CENTRES

SERVICE	WASTE & RECYCLING GENERATION RATES
Waste	5.0 litres of waste per child per day (5-litres x 60 children per day)
Recycling	5.0 litres of recyclable material per child per day (5-litres x 60 children per day)
Sanitary Waste	Refer to Part 4.4.9 of WMP

The following table (Table 2) specifies the criteria for waste and recycling generation rates based on the above formula.

TABLE 2 – CHILD CARE WASTE & RECYCLING GENERATION RATES & SERVICE REQUIREMENTS

SERVICE TYPE	WASTE GENERATION RATES Litres of Space / Child / Day			TOTAL SPACE REQUIRED	BIN SIZE	SERVICES PER WEEK	BINS REQUIRED	BINS PROVIDED
	Litres	Children	Day					
Waste	**5**	**60**	**5**	**1,500**	**240**	**2**	**3.12**	**4**
Recycling	**5**	**60**	**5**	**1,500**	**240**	**2**	**3.12**	**4**
Sanitary	**Refer to Part 4.4.9 of WMP**							

The following table (Table 3) specifies the proposed bin servicing arrangements for the development and is based on the above waste and recycling generation rates: -

TABLE 3 – PROPOSED SERVICING ARRANGEMENTS

WASTE	RECYCLING	SANITARY WASTE
4 x 240-litre bins Two (2) x Services per Week	4 x 240-litre bins Two (2) Services per Week	Refer to Part 4.4.9

4.4.4 Waste and Recycling Collection Service Provider Details

All waste services and recycling services to the Child Care Centre will be provided by a licensed private waste collection contractor.

The Proprietors of the Child Care Centre will enter into a Service Level Agreement with the waste and recycling contractor in relation to the provision of both waste and recycling services to the development, and the manner in which they will be provided.

4.4.5 Details of Mobile Containers

In relation to the size and design of the waste and recycling mobile bins, the following technical information is provided: -

CONTAINER TYPE	HEIGHT (metres)	DEPTH (metres)	WIDTH (metres)
240 litre mobile container	1.080	0.735	0.585

4.4.6 Location, Design, and Construction of Bin Room

The Child Care Bin Storage Area (CCBSA) is located in the basement of the building as indicated on the Architectural Drawings. It is an enclosed rectangular structure measuring 5.1m x 2.2m, with an area of approximately 11sqm, and will provide sufficient space for:

- 4 x 240-litre mobile waste bins, and,
- 4 x 240-litre recycling bins.

All mobile waste and recycling bins required for the on-going operation of the development will be stored within the confines of this Waste Room at all times.

4.4.7 Servicing Arrangements – Waste Collections

All waste bins will be serviced from a Loading Bay located adjacent to the Bin Area. The appointed contractor will be responsible for transporting the waste bins from the bin room to the collection vehicle. The loading bay has been designed to accommodate a rear loading SRV collection vehicle.

These bins will be transported from the Waste Room to the collection vehicle in accordance with all relative work, health, and safety requirements.

Waste bins will be serviced two (2) days per week, on days to be determined.

All 4 x 240-litre mobile waste bins will be serviced on each collection day.

The waste bins will be returned to the bin room as soon as they have been serviced.

4.4.8 Servicing Arrangements – Recycling Collections

All recycling bins will be serviced from a Loading Bay located adjacent to CCCBR. The appointed contractor will be responsible for transporting the recycling bins from the bin room to the collection vehicle. The loading bay has been designed to accommodate a rear loading SRV collection vehicle.

These bins will be transported from the bin room to the collection vehicle in accordance with all relative work, health, and safety requirements.

Recycling bins will be serviced two (2) days per week, on a day to be determined.

All 4 x 240-litre mobile recycling bins will be presented for servicing on each collection day.

The bins will be returned to the bin room as soon as they have been serviced.

4.4.9 Sanitary Waste

Sanitary waste includes disposable nappy and incontinence waste product waste and is to be disposed of in accordance with the requirements of the NSW EPA.

According to EPA standards sanitary waste is not classified as clinical waste, as such it does not need to be treated and can be disposed of directly to landfill through supervised burial.

All sanitary waste will be stored in an appropriate number of receptacles and be disposed of separately to the general waste bins by a licensed contractor authorized to do so.

Given the number of children attending the centre on a daily basis will be 60, an appropriate number of 45-litre nappy bins will be provided to store all sanitary (nappy and toilet) waste. It is understood that these bins measure approximately 600mm x 300m and will hold approximately 50 to 60 soiled nappies, which will account for approximately 4 x episodes per child per day of sanitary waste.

All sanitary waste will be stored in nappy bins provided in the Nappy Change Room. The bins will be stored in a small area of approximately 1.5m x 0.5m. The area is to be cleaned and maintained twice per day.an appropriate number of receptacles and be disposed of separately to the general waste bins by a licensed contractor authorized to do so.

Example 45-litre Nappy Bin

Efficient changing and disposal of soiled nappies, significantly reduces the risk and spread of diseases transmitted by faeces and body fluids.

In order to minimise the risk and spread of infectious diseases that are transmitted by faeces and other body fluids through changing nappies, the following resources will be provided in an appropriate location within the facility:

- Stable Nappy Change table or bench,
- A mat or surface of change table that is impervious (non-penetrable),

- Hand washing facilities,
- Sanitary facilities for storage of wet and soiled nappies,
- Storage area for clean nappies,
- Gloves, and,
- Paper towels, wipes, soap, and detergent and warm water

The proprietor of the facility will abide by their obligations under the current Education and Care Services National Regulations and the relevant National Quality Standard in relation to nappy changing and nappy changing practices with children.

Any nappy changing bench or mat must be cleaned after each use

Nappy changing facilities must be designed, located and maintained so as to prevent unsupervised access by children (this relates to children not being able to climb on high change tables nor access unsafe products).

Nappy changing facilities must be separate from food preparation facilities.

The dignity and need for privacy of each child is respected during Nappy Changing, incorporating the following procedures:

- Children be closely attended on the nappy change table (if applicable),
- Liaise with families to establish and maintain Nappy Change routines with each child that are workable at home and in the Day Care setting,
- Provision of information about each child's Nappy Changing to their family each day via methods that suit the home environment and family,
- Support Nappy Changing as being a relaxed and positive experience, and,
- Consider and accommodate the specific health and hygiene needs of older children in care, giving consideration to protecting their dignity and respecting their right to privacy.

4.5 BULKY WASTE AREA

As required by Council an area for the storage of bulky waste material has been provided. All bulky waste will be stored in a Store Room provided in the rear yard of the site adjacent to the eastern side boundary of the site as indicated on the Architectural Drawings.

All bulky waste will be disposed of a by a licensed private waste collection contractor on a regular basis.

The Proprietor of the centre will be responsible for ensuring that all bulky waste material is disposed of regularly and appropriately.

4.6 COLLECTION SCHEDULE

In order to facilitate the collection process and avoid a conflict in accessing the loading bay, it is recommended that all servicing arrangement be undertaken in accordance with the following collection schedule:

- Retail Waste Collections – waste bins to be serviced three (3) days per week, on Monday, Wednesday and Friday of each week, between 7.00am and 8.00m,

- Retail Recycling Collections – recycling bins to be serviced three (3) days per week on Monday, Wednesday and Friday of each week, between 8.00am and 9.00m,
- Child Care Centre Collections – waste bins to be serviced two (2) days per week on Tuesday and Thursday of each week, between 7.00am and 8.00m,
- Retail Recycling Collections – recycling bins to be serviced to (2) days per week on Tuesday and Thursday of each week, between 8.00am and 9.00m,

This will provide a continuous and regimented frequency of servicing arrangements that will lessen the impact of collections on business operations.

It is also recommended that this schedule be incorporated into contractual arrangements in relation to both the retail and child care components of the development.

4.7 ON GOING OPERATION, USE & MAINTENANCE OF WASTE MANAGEMENT FACILITIES

All waste management facilities will be maintained in a clean and hygienic condition that will promote the principles of health, safety, and convenience.

In order to achieve these objectives, the following requirements will apply: -

1. The walls and floor of the bin room will be constructed of smooth faced masonry or concrete.
2. The bin room is to be washed and cleaned on a regular basis.
3. All mobile bins will be washed and cleaned on a regular basis.
4. The bin room will be provided with appropriate plumbing and drainage, including hot and cold running water, taps, hose connects and fixtures and fittings in accordance with the requirements of Sydney Water.
5. The floor of the bin room will be provided with a floor waste graded and drained to the sewer in accordance with all applicable Sydney Water requirements.
6. Any electrical equipment, including the provision of lighting, will be installed in accordance with the relevant Australian Standards.
7. Appropriate signage will be displayed in a prominent position within the Centre identifying the location of the WSA as well as providing instruction to employees on how to use waste and recycling facilities, including what is and what is not recyclable.
8. The proprietor of the centre will be responsible for ensuring that all waste and recyclable matter and materials are placed and stored within the appropriate containers provided.

PART 5 – SUMMARY

5.1 SUMMARY

In summarising this proposal, the following information is provided:

1. This Waste Management Plan has been developed and documented in accordance with the requirements of Council.
2. Council's Waste Management DCP does not prescribe waste and recycling generation rates for Child Care Centres. As such all waste and recycling generations have been calculated according to information obtained in the Better Practice Guide for Resource Recovery in Residential Buildings, published by the NSW EPA.
3. All waste and recycling services will be provided by a licensed private waste and recycling collection contractor.
4. The proprietor of the Child Care Centre will be responsible for ensuring that all on-going waste management activities are carried out in accordance with the provisions of this Waste Management Plan.
5. The WMP aims to promote the use of recyclable materials in the excavation, demolition, construction, and on-going operation of the building.
6. The WMP aims to ensure the design of waste and recycling storage facilities are of an adequate size, appropriate for the intended use of the building, hygienic with safe and manoeuvrable access.
7. The WMP aims to ensure that the provision of waste and recycling services to the completed buildings are carried out in an efficient manner, which will promote the principles of health, safety, and convenience.

The measures set out in this WMP aim to demonstrate that all such activities will be carried out effectively and efficiently, in a healthy, safe, and convenient manner, to acceptable community standards, and to the requirements of the Northern Beaches Council.