WASTE MANAGEMENT PLAN

Mirwan Hanna
(ROSS HOWIESON ARCHITECTS)

MIXED USE
RESIDENTIAL & COMMERCIAL
DEVELOPMENT
@
6-8 KENT STREET
BELMORE

October 2024

Multiform Design & Construction P/L
(ABN 14126 899 385
12/27 Crinan Street Hurlstone park NSW 2193
Telephone (Mb) 0414 589815
E-mail: mirwan@multiform.net.au

TABLE OF CONTENTS

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 demolition, construction and on-going use of the site are to be dealt with.

The aims and objectives of this WMP are to: -

1. Satisfy all State and Local Government regulatory controls regarding waste management and minimisation practices.
2. Promote the use of recyclable materials in the excavation, demolition, construction and on-going operation of the building.
3. Maximise waste reduction, material separation, and resource recovery in all stages of the development.
4. 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.
5. 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.

This WMP is prepared in accordance with: -

- Canterbury Local Environment Plan 2021,
- Canterbury DCP 2023 – Chapter 3.3 Waste Management,
- All conditions of consent for the approved Development Application,
- The 'Better Practice Guide for Resource Recovery in Residential Buildings published by the NSW EPA (April 2019),
- Current industry standards and practices for the storage and collection of waste within Multi Unit Dwellings and Mixed-Use Developments, 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 WMP has been prepared for a Development Application to be submitted to Canterbury-Bankstown Council for a five (6) storey mixed use development to be constructed at 6-8 Kent Street, Belmore. The proposal includes: -

- The demolition of all existing structures,
- A mix of 27 x 1, 2 and 3 bedroom units,
- One (1) commercial unit on the ground floor with an area of 257sqm,
- Two (2) basement level for car parking, storage, servicing and ancillary facilities, and,
- Associated infrastructure.

This WMP is dated October 2024.

1.2 PROJECT & PROPERTY DESCRIPTION

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

PROJECT DESCRIPTION	**Five (6) Storey Mixed Use Residential and Commercial Building**
NUMBER OF UNITS	**- 27 x 1, 2 and 3 bedroom units,** **- One (1) Ground Floor Commercial Unit, and,** **- Two (2) basement Level.**
PROPERTY DESCRIPTION	**The development is to be constructed over two (2) existing lots at Lots 2, Section 1, DP4291, No's 6-8 Kent Street, Belmore.**
STREET ADDRESS	**6-8 Kent Street, Belmore**
DIMENSIONS	**Front (West) boundary – 20.5m,** **Rear (East) boundary – 20.5m,** **Side (North) boundary – 49.4m; and,** **Side (South) boundary – 49.2m.**
AREA	**1,010sqm (Approx.)**
LGA	**Canterbury-Bankstown Council**
ZONING	**Zone B4 – Mixed Use**
PLANNING INSTRUMENT	**Canterbury Local Environmental Plan 2021** **Canterbury DCP 2023**

The subject site comprises two (2) allotments and is located on the eastern side of Kent Street, Belmore, with Burwood Road to its rear, and Leyland Parade to the north and Chalmers Street to the south.

The site is approximately 300m south of the Belmore railway station and town centre and a similar distance north of Canterbury Road. The site currently contains a two (2) storey brick building previously used as a warehouse.

This section of Kent Street is characterised by a mix of commercial and light industrial development as well as low and medium density residential development.

Further west of the site there is a mix of low and medium density residential development. To the north-east of the site, across Burwood Road is also a mix of low and medium density housing, with Belmore Oval approximately 500m north-east of the site.

1.3 APPLICANTS DETAILS

APPLICANT	**Ross Howieson Architects** **(Multiform Design & Construction) P/L**
ADDRESS	**Suite 12/27-31 Crinan Street, Hurlstone Park. NSW. 2193.**
TELEPHONE	**02 9571 5666 (Ross Howieson)**
E-MAIL	**ross@rharch.com.au**

1.4 PROPOSAL

The proposal consists of the construction of a five (5) storey mixed building of mixed residential and commercial components to be constructed at 6-8 Kent Street, Belmore, comprising of: -

- The demolition of all existing structures,
- A mix of 27 x 1, 2 and 3 bedroom units,
- One (1) commercial unit on the ground floor with an area of 257sqm,
- Two (2) basement level for car parking, storage, servicing and ancillary facilities, and,
- Associated infrastructure.

Vehicular entry and egress to, and from the building will be on to Kent Street at the south-western frontage of the site.

It is proposed to install a garbage chute within the building design. The chute will be for the disposal of waste material only.

A Residential Waste Storage Area (Waste Room) is located on the Ground Floor of the building as indicated on the Ground Floor Plan.

All residential waste and recycling bins will be transported from the RWSA to a Bin Collection Area located on the ground floor as indicated on the Ground Floor, approximately 5 metres from the front boundary Plan Collections will take place via Council's collect and return waste service from Kent Street.

Commercial waste storage facilities are also provided on the Ground Floor adjacent to the RWSA.

Current structures on the site are a two (2) storey brick and masonry building, with a metal roof, concrete driveway, parking and paved areas, with brick and timber perimeter fencing.

The project involves:

1. The demolition of all existing buildings on site;
2. The removal of all demolished materials in accordance with this WMP;
3. The excavation of the site to construct two (2) basements level for car parking and other services;
4. The construction of a five (6) storey building;
5. The provision of stormwater drainage systems, landscaping, driveways, concrete pathways and other elements associated with the development; and,
6. The on-going use of the building.

PART 2 – DEMOLITION

2.1 DEMOLITION

2.1.1 General Requirements

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.

Part 2.2 on Pages 6, 7, 8, 9, 10 and 11 of this WMP describes the manner in which waste is to be managed during the course of the demolition of the existing structures.

The processes outlined in Part 2.2 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.

2.1.2 Management of Hazardous Materials

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 WH&S legislation administered by Work Cover NSW.

2.2 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. A site plan showing sorting and storage areas for demolition waste and vehicle access to these areas (see Part 2.3 of this Plan);
3. How excavation and demolition waste materials will be reused, and, or recycled and where residual wastes will be disposed (see below); and,
4. 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) 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, Overburden and Green Waste

Volume / Weight	355 cubic metres / 603.5 Tonnes
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	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) or, Other approved Facility.

2. Green Waste

Volume / Weight	Minimal – See Table above

3. Bricks

Volume / Weight	160 cubic metres / 160 Tonnes
On Site Reuse	Clean and remove lime mortar from bricks. Re-use in new footings. Broken bricks for internal walls. Crush and reuse as drainage backfill. Crushed and used as aggregate.
Percentage Reused or Recycled	75% - 90%
Off Site Destination	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116)

4. Concrete

Volume / Weight	500 cubic metres / 1,200 Tonnes
On Site Reuse	Existing driveways to be retained during construction. Crushed and used as aggregate, drainage backfill.
Percentage Reused or Recycled	60% - 75%
Off Site Destination	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116)

5. Timber

Volume / Weight	25 cubic metres / 10 Tonnes
On Site Reuse	Re-use for formwork and studwork, landscaping, shoring.
Percentage Reused or Recycled	65% - 90%
Off Site Destination	Artistic Popular Furniture, 10 Raglan Road, Auburn (Tel 02 96443054) or, Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883)

6. Plasterboard & Fibro

Volume / Weight	20 cubic metres / 7 Tonnes
On Site Reuse	Nil – All to be disposed of off-site.
Percentage Reused or Recycled	To be determined (dependent on asbestos content)
Off Site Destination	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256)
Off Site Destination (Asbestos)	or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116)

7. Metals / Steel / Guttering & Downpipes

Volume / Weight	40 cubic metres / 15 Tonnes
On Site Reuse	No
Percentage Reused or Recycle	60% - 90%
Off Site Destination	Sydney Wide Scrap Metal, 4/18 Alfred Street, Chipping Norton (Tel 9738 9771) or, Boral Recycling, 3 Thackeray Street, Camelia (Tel 9529 4424) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)

8. Roof Tiles / Tiles

Volume / Weight	5 cubic metres / 3.75 Tonnes
On Site Reuse	Broken up and used as fill, aggregate, driveways.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Obsolete Tiles, 3 South Street, Rydalmere. (Tel 02 9684 6333) or, Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)

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

Volume	20 cubic metres / 7 Tonnes
On Site Reuse	Broken up and used as fill.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116).

10. Glass, Electrical & Light Fittings, PC Items, Ceramics, etc

Volume / Weight	20 cubic metres / 5Tonnes
On Site Reuse	No
Percentage Reused or Recycle	To be determined (dependent upon nature of material)
Off Site Destination	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116).

11. Residual Waste

Volume / Weight	120 cubic metres / 120 Tonnes
On Site Reuse	No
Off Site Destination	Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights. (Tel 1300 651 116), or, Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)
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 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.

2.3 DEMOLITION – ON-SITE STORAGE OF MATERIALS

During the demolition stage 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.

2.4 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.

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 12, 13, 14, 15 and 16 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	6,000 cubic metres / 10,200 Tonnes
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	Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights. (Tel 1300 651 116), or, Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116).

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	Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights. (Tel 1300 651 116), or, Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116).

3. Concrete

Volume / Weight	5 cubic metres / 12 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	Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights. (Tel 1300 651 116), or, Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116).

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	Artistic Popular Furniture, 10 Raglan Road, Auburn (Tel 02 96443054) or, Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883)

5. Plasterboard & Fibro

Volume / Weight	12 cubic metres / 4 Tonnes
On Site Reuse	Nil – All to be disposed of off-site.
Percentage Reused or Recycled	Eco cycle, 155 Newtown Road, Wetherill Park (Tel 02 0757 2999)
Off Site Destination	or, Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights. (Tel 1300 651 116), or, Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116). or, Enviroguard, Cnr Mamre and Erskine Roads, Erskine Park (Tel 02 9834 3411).

6. Metals / Steel / Guttering & Downpipes

Volume / Weight	15 cubic metres / 3.75 Tonnes
On Site Reuse	No
Percentage Reused or Recycled	60 – 90%
Off Site Destination	Boral Recycling, 3 Thackeray Street, Camelia (Tel 9529 4424) or, Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)

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	Obsolete Tiles, 3 South Street, Rydalmere. (Tel 02 9684 6333) or, Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)

8. Plastics

Volume / Weight	6 cubic metres / 1 Tonne
On Site Reuse	Nil
Percentage Reused or Recycled	80% - 95%
Off Site Destination	Recycle Works, 45 Parramatta Road, Annandale (Tel 02 9517 2711)

9. Glass, Electrical & Light Fittings, PC items

Volume / Weight	6 cubic metres / 1 Tonne
On Site Reuse	No
Percentage Reused or Recycled	70% - 90%
Off Site Destination	Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights. (Tel 1300 651 116), or, Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116).

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	Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116) or, Recycle Works, 45 Parramatta Road, Annandale (Tel 02 9517 2711)

11. Pallets

Volume / Weight	25 cubic metres / 8 Tonne
On Site Reuse	No
Percentage Reused or Recycle	90% - 100%
Off Site Destination	To an approved agency, or agencies, for reuse and resale.

12. Residual Waste

Volume / Weight	610 cubic metres / 610 Tonnes
On Site Reuse	No
Off Site Destination	Lucas Heights Waste Management Centre, New Illawarra Road, Lucas Heights. (Tel 1300 651 116), or, Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)
Notes on calculation of volume of residual waste	3. 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. 4. 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 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 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.

PART 4 – GARBAGE CHUTE SYSTEM

4.1 CHUTE DESIGN REQUIREMENTS

A Garbage Chute System will be incorporated into the building design. The chute system will be for the disposal of waste material only.

The chutes will deposit waste material into a chute outlet point in a Bin/Chute Room located in the north-eastern corner of the ground floor as indicated on the Architectural Drawings. The chute will deposit all waste into 1 x 1100-litre bin located under the chute outlet point.

Waste and Recycling Compartments will be located on each residential floor of the building for residents to deposit their waste into the chute. Next to the chute will be 2 x 240-litre recycling bins for the residents of each floor to dispose of their recycling material.

4.2 BIN/CHUTE ROOM

Waste and Recycling Compartments for all units are situated on each residential floor, as indicated above.

Each waste and recycling compartment will have approximate internal dimensions of 2.5m x 2.0m, with an area of 5.0sqm, and will provide space for a Garbage Chute compartment, which will have internal dimensions of 750 mm x 750 mm. The Garbage Chute will be installed within these confines in a fire rated compartment.

The Bin/Chute Room is located in the north-eastern corner of the ground floor.

All waste deposited into the Waste Chute will discharge into 1 x 1100-litre bin positioned under the chute outlet point in the Bin/Chute Room.

Based on Council's waste generation rates, it is anticipated that the 27 units in the building will generate 3,780-litres of waste per week, or 540 litres per day. Based on these figures, it is estimated that the bin system will need to be inspected at least once every day. Full bins will be removed from under the Chute outlet and replaced immediately with an empty one.

Representatives of the Owners Corporation will monitor all activities associated with the use and operation of the chute, the depositing of waste into it, to ensure that there will be no spillage, and that the system operates effectively.

Representatives of the Owners Corporation will be responsible for transferring full 1100-litre waste bins from under the chute into the waste bin storage area of the Bin/ Chute Room.

Full bins will be removed from under the Chute outlet and replaced immediately with an empty one.

4.3 DESIGN & OPERATIONAL REQUIREMENTS

At a minimum, each Garbage Chute System will be designed to meet the following requirements: -

1. Chutes and service openings must be constructed of metal or other smooth faced, durable, fire resistant and impervious material of non-corrosive nature.
2. Chutes will be cylindrical in section with a minimal internal diameter of 500 mm. The diameter around each chute will be a minimum width of 750 mm to allow for infrastructure fittings, such as fixing brackets and noise insulation.
3. Chutes will be vertical without bends or “off-sets” (except for the chute outlets) and not be reduced in diameter.
4. The Chutes and service openings must be capable of being easily cleaned.
5. Chutes must be ventilated to ensure that air does not flow from the chute through any service opening.
6. The Splitter Garbage Chute systems must comply with the relative provisions of the Building Code of Australia, and relevant Australian Standards (e.g., AS1530.4-2005).
7. Upon the appointment of the company selected to install the chutes, and completion of the chute design, Council will be provided with a manufacturers specification of all chute systems.
8. The chute discharge points will be restricted to residents by a caged enclosure in order to prevent injury, and will be provided with suitable circulation space, in accordance with the manufacturers’ specification.

Representatives of the Owners Corporation will monitor all activities associated with the use and operation of the chutes and the depositing of waste and recycling material into them and will also be responsible for transferring full 660-litre waste bins from under the chute to the waste bin storage area in the bins room, where they will be stored prior to being transferred to the bin presentation area for servicing.

Bins will be manoeuvred though the development by the Building Manager or their representative.

All bin rooms and waste and recycling compartments will be inspected daily in order to ensure that 1100-litre waste bins will be removed when full.

Full waste bins will be removed from under Chute outlet compartments and replaced immediately with an empty one.

4.4 ON GOING MANAGEMENT & MAINTENANCE OF CHUTE SYSTEM

4.4.1 Generally

The Owners Corporation will be responsible for all issues associated with the on-going management and maintenance of the Garbage Chute Systems and all activities associated with it.

These activities will include, but not be limited, to the following: -

1. Displaying signage indicating appropriate use of all waste management systems, including what is and what is not recyclable.
2. Educating residents in the correct use of the chute, and the need to keep bulky items out of the chute systems.
3. Providing regular maintenance, including cleaning and unblocking chutes.

4. Regular inspection of the Garbage Chute Compartments, the Garbage Chute Outlet Compartments, and the Bin Rooms to ensure that all waste and recyclables are managed appropriately.
5. Educating residents in the correct use of each chute, to ensure that waste material is not deposited into the recycling chute, and that recycling material is not placed into the waste chute.

4.4.2 Bin Room Infrastructure

In accordance with Council requirements, the following infrastructure will be incorporated into the design of all bin rooms: -

1. Suitable door access for the service of bins,
2. Where roller doors are provided, an additional service door will be provided inclusive of an Abloy key system,
3. All floors will be finished with a non-slip and smooth and even surface covered at all intersections,
4. The floor will be graded to a central drainage point connected to the sewer,
5. Rooms will be fully enclosed and roofed with a minimum internal room height in accordance with the BCA 2022,
6. Rooms are to be provided with an adequate supply of water through a centralised mixing valve with hose cock, and.
7. Incorporation of adequate light and ventilation in accordance with requirements of the BCA 2022.

4.5 MANAGEMENT OF RECYCLING

The Waste and Recycling Compartments for all units are located in the northern-eastern section of the building next to the lift.

Residents will place their recycling material into the 240-litre mobile recycling bin located in the waste and recycling compartment on that level of the building.

Based on Council's recycling generation rates, it is anticipated that the 27 units on all floors of the building will generate 540-litre of recycling per floor per week, or 77.00 litres per floor per day. Based on these figures, it is estimated that the recycling bins will need to be inspected at least once 2 every 3 days.

A representative of the Owners Corporation will be responsible for transporting full 240-litre mobile bins from each compartment on each floor of the building into the recycling bin storage area, the recycling material in the 240 l bins will be dumped into into 1100L using a bin lifter in the Bin Presentation Area, where they will be stored prior to being serviced.

An empty 240 litre mobile recycling bin will be placed in the waste and recycling compartment when a full one is emptied.

Servicing and replacement of 240 litre recycling bins located in the waste and recycling compartments on each residential level of the building will take place on a regular basis to avoid hygiene, spillage and dumping problems.

All waste handling activities (including the transfer of recycling bins) will be undertaken by representatives of the Owners Corporation.

PART 5 – ON GOING USE OF BUILDING

5.1 OBJECTIVES

1. To ensure 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 efficiently, and in a manner that is efficient, and promotes the principles of health, safety, and convenience.
3. To promote waste minimisation practices.

5.2 ASSUMPTIONS

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

1. The development involves the construction of a five (6) storey mixed building of mixed residential and commercial components.
2. The residential component consists of a mix of 27 x 1, 2 and 3 bedroom units.
3. The commercial component consist of one (1) unit on the ground floor with an area of 257qm.
4. The Residential Waste Storage Area (RWSA) is located on the Ground Floor of the building adjacent to the lift as indicated on the See Ground Floor Plan.
5. The RWSA will house all mobile bins allocated for the disposal of residential waste and recycling material.
6. All residential waste will be stored in 4 x 1100-litre mobile bins.
7. All recycling material will be stored in 12 x 240-litre mobile bins.
8. All recycling to be transfered into 3 x 1100 bins for pick up
9. All green waste material will be stored in 3 x 240-litre mobile bins.
10. Residential waste services will be provided weekly.
11. Residential recycling services will be provided weekly.
12. Green Waste services will be provided fortnightly.
13. The number and size of bins have been calculated from information provided by Canterbury-Bankstown Council.
14. All residential waste and recycling services will take place from a Bin Presentation Area located approximately 5 metres from the front boundary, where the bins will be removed for servicing to Council's collection vehicle in Kent Street, via Council's 'collect and return' service.
15. The Building Manager will ensure that access is available to the Bin Presentation Area all collection days.
16. Canterbury-Bankstown Council will provide all residential waste and recycling services to the development.
17. Commercial waste and recycling services will be provided to the commercial component of the development.
18. The Commercial Waste Storage Area is located on the ground floor of the building, next to the RWSA (see Ground Floor Plan). This area will house all mobile bins allocated for the disposal of commercial waste and recycling material from the complex.
19. A licensed private waste contractor will provide all commercial waste and recycling services to the development.
20. The Owners Corporation will appoint a Building Manager whose responsibilities will include the supervision of all waste management services and facilities.

5.3 RESIDENTIAL WASTE HANDLING & MANAGEMENT

A cabinet will be located within each unit so that a receptacle, or receptacles, may be stored or housed in a convenient and practical location within the unit, for the reception of waste and recyclable material.

All residents 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.

Appropriate signage will be erected in the RWSA to assist residents in placing their waste and recyclables into the appropriate bins.

Unrestricted access to the RWSA will be provided at all times to the residents of the building so that waste and recycling material can be deposited within the appropriate bins at any time.

5.4 RESIDENTIAL WASTE & RECYCLING – SERVICE REQUIREMENTS

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

The Council in general requires that colour coded receptacle lids that distinguish each service component are to be provided: -

- Waste Service – Red Lidded receptacle;
- Recycling Service – Yellow Lidded receptacle; and,
- Green Waste – Green Lidded receptacle.

5.5 RESIDENTIAL WASTE & RECYCLING – SERVICE ARRANGEMENTS

The following table (Table 1) specifies the criteria for waste and recycling generation rates (as specified in Council's DCP 2023

- Waste – 140 litres of bin space per unit per week,
- Recycling – 120 litres of bin space per unit per week, and,
- Green Waste – 1 x 240 l for every 10 dwellings.

TABLE 1 – WASTE & RECYCLING GENERATION RATES

SERVICE TYPE	UNITS	BIN SPACE PER UNIT	TOTAL SPACE REQUIRED	BINS SIZE	SERVICES PER WEEK	BINS REQUIRED	BINS PROVIDED
Waste	27	120.0	3,780	1100	1	3.44	4
Recycling	27	140.0	3240	1100	1	2.94	3
Green Waste	27	27 / 10		240	2	2.7	3

The following table (Table 2) specifies the proposed bin servicing requirements for the building and is based on the above waste and recycling generation rates:

TABLE 2 – PROPOSED SERVICING ARRANGEMENTS

WASTE	RECYCLING	GREEN WASTE
4 x 1100-litre bins / 1 x week	3 x 1100-litre bins / 1 x week	3 x 240-litre bins / fortnighly

5.6 PROVISION OF WASTE & RECYCLING SERVICES

5.6.1 Waste and Recycling Collection Service Provider Details

Canterbury Bankstown Council will provide all residential waste and recycling services to the building.

5.6.2 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
1100-litre mobile container	1.300	0.780	1.260

5.6.3 Waste & Recycling Requirements

Waste and recycling requirements are provided in the table below.

SERVICE	NUMBER OF CONTAINERS	COLLECTION FREQUENCY
Waste Service	4 x 660-litre mobile containers	Weekly
Recycling Service	3 x 1100-litre mobile containers	Weekly
Green Waste	3 x 240-litre mobile containers	fortnight

5.6.4 Location, Design, and Construction of Residential Waste Storage Area

The Residential Waste Storage Area (RWSA) provides space for residents to deposit their waste and recycling material into the allocated bins located in this area.

The RWSA will be located on the ground floor of the building adjacent to the lift. It is a fully enclosed rectangular structure measuring 4.5m x 4.0m with an area of 18sqm. It will be fitted with a 1.5m access doorway and within its confines will be space for:

- 4 x 1100-litre waste bins,
- 3 x 1100-litre recycling bins, and,
- 3 x 240-ltre green waste bins.

All electrical equipment, including the provision of lighting, will be installed in accordance with the relevant Australian Standards.

Natural and mechanical ventilation will be required to be installed within each Garbage Room in accordance with the relative provisions of the Building Code of Australia.

5.6.5 Bin Collection Area

All collection and servicing activities will take place from the Bin Collection Area which is situated adjacent to the front boundary of the site.

All waste and recycling services will take place from this area, utilising Council's wheel out / wheel back collection service.

The bin presentation area has been designed and will be constructed in accordance with the provisions of Parts 3.3 of the DCP

5.6.6 Servicing Arrangements – Waste Collections

All waste services will be provided by Canterbury Council's waste collection contractor using a collection vehicle, that will enable all collections to be carried out effectively and efficiently, and in a manner, that will aim not impact negatively on the principles of health, safety or convenience.

On each collection day, all waste bins will be removed from the Bin Collection Area to the Kent Street kerbside by a member of Council's collection team, utilising Council's 'wheel out / wheel back' collection service.

The contents of the waste bins will then be placed into Councils collection vehicle. Council operators will return the waste bins to the on-site Bin Collection Area on completion of their servicing.

The waste bins will be serviced one (1) day per week on a day to be determined by Council.

All 4 x 660-litre waste bins will be presented for servicing on each collection day.

5.6.7 Servicing Arrangements – Recycling Collections

All recycling services will be provided by Canterbury Council's waste collection contractor using a collection vehicle, that will enable all collections to be carried out effectively and efficiently, and in a manner, that will aim not impact negatively on the principles of health, safety or convenience.

On each collection day, all recycling bins will be removed from the Bin Collection Area to the Kent Street kerbside by a member of Council's collection team, utilising Council's 'wheel out / wheel back' collection service.

The contents of the recycling bins will then be placed into Councils collection vehicle. Council operators will return the recycling bins to the on-site WSA on completion of their servicing.

The recycling bins will be serviced one (1) day per week on a day to be determined by Council.

All 3 x 1100 litre recycling bins will be presented for servicing on each collection day.

5.6.8 Servicing Arrangements – Green Waste Collections

All green waste services will be provided by Canterbury Council's waste collection contractor using a collection vehicle, that will enable all collections to be carried out effectively and efficiently, and in a manner, that will aim not impact negatively on the principles of health, safety or convenience.

On each collection day, all green waste bins will be removed from the Bin Collection Area to the Kent Street kerbside by a member of Council's collection team, utilising Council's 'wheel out / wheel back' collection service.

The contents of the green waste bins will then be placed into Councils collection vehicle. Council operators will return the bins to the on-site WSA on completion of their servicing.

The green waste bins will be serviced one (1) day per fortnight on a day to be determined by Council. Both 240-litre recycling bins will be presented for servicing on each collection day.

5.7 BULKY WASTE STORAGE

Secure storage spaces are required to be provided for each residential unit in accordance with the provisions of Council's DCP .

This space may be used to store bulky waste items that can be disposed of as part of any Clean Up services to be provided to this complex.

Consistent with these requirements, a bulky waste storage area have been provided for residents to place unwanted materials awaiting collection and removal.

The bulky waste area is located next to the RWSA on the ground floor level of the site as indicated on the Ground Floor Plan.

It has a floor area of approximately 9.45sqm. It will be an enclosed structure, partially constructed of caged wire and is fitted with a 1.5m double doorway.

All residents of the complex will be provided with unrestricted 24-hour access to this facility. It will be the responsibility of the occupants of individual residential units, to dispose of this material, appropriately.

The Building Manager / Caretaker will monitor this area regularly to ensure that all materials stored within its confines are done so in a manner that will not adversely impact on the health, safety and convenience.

The Owners Corporation will also be responsible for liaising with Council in relation to 'Clean Up' arrangements and frequencies, in order to ensure the efficient and regular removal at these materials.

All material presented to the kerbside as part of Council's clean-up collection programs will be done so, strictly in accordance with Councils requirements. Material will only be presented for clean-up collections, by the Building Manager / Caretaker, or their representative, at the time and date prescribed by Council.

Further information in relation to Council's clean up services can be obtained from their website at www.cbcity.nsw.gov.au

5.8 COMMERCIAL WASTE & RECYCLING SERVICES

5.8.1 Details of Commercial Land Use

An area of the ground floor is set aside for one (1) commercial unit with a floor area of 268.5sqm. However, the end use occupancies are yet to be determined. Notwithstanding, any land use activities are to comply with the provisions of Table 3 below.

5.8.2 Commercial Waste and Recycling Generation Rates

The Table below (Table 3) details the waste and recycling generation rates for the commercial land uses. These rates have been obtained from the Appendix 2 'Waste Generation Rates' on page 22 of the Canterbury Waste Management DCP .

TABLE 3 – FORMULA FOR CALCULATION WASTE & RECYCLING GENERATION RATES FOR COMMERCIAL LAND USES

SERVICE	LAND USE	WASTE & RECYCLING GENERATION RATES
Waste	Office	10.0 litres of waste per 100m2 of floor area per day
Waste	Retail	50.0 litres of waste per 100m2 of floor area per day
Waste	Café / Takeaway	80.0 litres of waste per 100m2 of floor area per day
Recycling	Office	10.0 litres of recyclable material per 100m2 of floor area per day
Recycling	Retail	50.0 litres of recyclable material per 100m2 of floor area per day
Recycling	Café / Takeaway	Discretionary 40.0 litres of recyclable material per 100m2 of floor area per day

5.8.3 Commercial Waste Services

The commercial unit will be required to have commercial waste services in accordance with the waste generation rates as prescribed in Table 3. All commercial waste services will be provided by a licensed private waste contractor. All commercial waste bins will be removed from the Commercial Waste Area and conveyed for collection by the contractor.

The Lessee of the Commercial Unit will enter into a Service Level Agreement with the contractor and will keep written evidence on site of this agreement with the contractor for the regular collection and disposal of all waste generated from these activities. A copy of this agreement will be provided to the Council.

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

5.8.4 Commercial Recycling Services

The commercial unit will be required to have commercial recycling services in accordance with the recycling generation rates as prescribed in Table 3. All commercial recycling services will be provided by a licensed private recycling contractor. All commercial recycling bins will be removed from the Commercial Waste Storage Area and conveyed for collection by the contractor.

The Lessee of the Commercial Unit will enter into a Service Level Agreement with the contractor and will keep written evidence on site of this agreement with the contractor for the regular collection and disposal of all recycling material generated from these activities. A copy of this agreement will be provided to the Council.

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

5.8.5 Storage of Commercial Waste and Recycling Bins

A Commercial Waste Storage Area is located on the Ground Floor of the building next to the RWSA (see Ground Floor Plan).

The Commercial Waste Storage Area is a rectangular shaped structure measuring 3.0m x 2.0m, with an area of 6qm. It will provide storage space for a minimum of:

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

Commercial waste (and recycling) bins will be colour coded to reflect the nature of each service component.

The Lessee of the Commercial Unit will be responsible for ensuring that all commercial waste and recycling services are undertaken in an efficient manner that will promote the principles of health, safety and convenience and not impact negatively on the amenity of the complex and its surrounds.

The Commercial Waste Storage Area will be designed and constructed in accordance in accordance with the provisions of Sections of Sections B9.5, B9.6.1, and B9.6.2 of the Canterbury DCP 2012.

Access to the commercial waste storage area will be restricted to the occupier of the commercial unit only.

Appropriate signage will be erected within the complex advising all occupants that access to the Commercial Waste Storage Area is restricted to occupants of the commercial component of the building only.

5.9 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 facilities and devices will be required: -

1. All waste storage areas will be designed in accordance with the requirements of Canterbury Bankstown DCP 2023.
2. The walls and floors of the Residential Waste Storage Area and the Commercial Waste Storage Area (WSA), are be constructed of smooth faced masonry or concrete, and all walls will be painted with light coloured and washable paint.
3. The junction between all floors and walls will be coved and sealed up to 100mm above the floor level, in order to eliminate the build-up of dirt and grime.
4. A floor waste, connected to the Sydney Water drainage system in accordance with that Authority's requirements, will be provided to both WSA's, and the floors will be graded to drain into it.
5. Appropriate washing facilities will be provided to both WSA's, including appropriate plumbing and drainage fixtures and fittings, and the provision of running water.
6. The WSA's are to be washed and cleaned on a regular basis.
7. All mobile bins will be washed and cleaned on a regular basis.

8. All electrical equipment, including the provision of lighting, will be installed in accordance with the relevant Australian Standards.
9. Natural and mechanical ventilation will be required to be installed within each WSA in accordance with the relative provisions of the Building Code of Australia.
10. Appropriate signage will be displayed in both basements clearly identifying waste and recycling bins and the waste storage areas.
11. Appropriate signage will be erected within both WSA's, providing instruction to residents on how to use waste and recycling facilities, including what is and what is not recyclable.
12. The Building Manager will be responsible for ensuring that all waste and recyclable matter and materials are placed and stored within the appropriate containers provided.

PART 6 – SUMMARY

6.1 SUMMARY

In summarising this proposal, the following information is provided:

1. This Waste Management Plan (WMP) has been developed and documented in accordance with: -

a) Canterbury Local Environment Plan 2021;
b) Part 3.3 of the Canterbury Bankstown DCP 2023 – Waste Management;
c) All Conditions of Consent for the DA to be issued in respect of the development; and,
d) The 'Better Practice Guide for Waste Management in Multi Unit Dwellings and Mixed-Use Developments.

2. The WMP aims to promote the use of recyclable materials in the excavation, demolition, construction and on-going operation of the building.

3. 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.

4. 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.

This is a unique development with a unique set of arrangements for its waste management activities.

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