

DICKENS SOLUTIONS

(REF – 22318)

WASTE MANAGEMENT PLAN

MODE DESIGN ARCHITECTS (NSW LAHC)

PROPOSED SENIORS LIVING HOUSING DEVELOPMENT

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16-22 FUNDA PLACE LALOR PARK

JANUARY 2023

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PART 1 – OVERVIEW AND PROPOSAL

1.1 INTRODUCTION

This Waste Management Plan (WMP) describes in detail the manner in which all waste and other materials resulting from the construction and on-going operational use of the building on 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, construction and on-going operation of the building;
- c) Maximise waste reduction, material separation, and resource recovery in all stages of 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 Blacktown City LGA.

This WMP is prepared in accordance with: -

- Blacktown Local Environment Plan 2015;
- Blacktown DCP 2015, and relevant waste management guidelines;
- All conditions to be issued by Council under the approved Development Consent;
- The 'Better Practice Guide for Resource Recovery in Residential Buildings, published by the NSW EPA (April 2019);
- The objective of ensuring that all waste management facilities and collection services will provide an outcome that will be effective and efficient, as well as promote the principles of health, safety and convenience.

This Waste Management Plan (WMP) has been prepared for a Development Application submitted to Blacktown City Council for construction of a two (2) storey residential building to be used for senior housing accommodation at 16-22 Funda Crescent, Lalor Park, comprising of: -

- 18 x 1 and 2 bed room units,
- At grade parking at the rear of the site, and,
- Associated infrastructure.

This WMP is dated 16 January 2023 and has been prepared to be submitted as part of the Part 5 DA Package for the proposed development. The WMP has been developed and documented in accordance with the Architectural Drawings prepared by Mode Design Architects – Project No 22032 – Revision G.

1.2 PROPERTY DESCRIPTION

PROPERTY DESCRIPTION	The development is to be constructed over three (3) existing land parcels at Lot 360-363, in DP31954, 16-22 Funda Crescent, Lalor Park.
STREET ADDRESS	16-22 Funda Crescent, Lalor Park
DIMENSIONS	Refer to Architectural Drawings
AREA	2287sqm (Survey)
ZONING	Zone R3 – Medium Density Residential
PLANNING INSTRUMENTS	Blacktown LEP 2015 Blacktown Development Control Plan 2015

1.3 APPLICANTS DETAILS

APPLICANT	NSW Land and Housing Corporation (NSWLAHC) C/- Mode Design Architects
ADDRESS	Level 5, 111-117 Devonshire Street, Surry Hills. NSW. 2101.
TELEPHONE	02 8396 9500
E-MAIL	kmacdonnell@modedesign.com.au

1.4 PROPOSAL

The proposal involves the construction of a two (2) storey residential building to be used for senior housing accommodation at 16-22 Funda Crescent, Lalor Park, comprising of: -

- 18 x 1 and 2 bed room units,
- At grade parking at the rear of the site, and,
- Associated infrastructure.

Egress from the buildings will be onto Funda Crescent, onto the southern frontage of the development.

Waste Storage facilities for the development are located in two (2) separate Waste Storage Area as indicated on the Architectural Drawings.

All bins will be serviced from the Funda Crescent kerbside as detailed herein.

Existing structures on the site are: -

- No 16 Funda Crescent – a single storey timber framed fibro clad dwelling with a tiled roof, sub-floor brick walls, detached timber framed weatherboard garage with a metal roof, concrete strip driveway, rear outbuilding, front and rear yard grassed areas, some trees and shrubs and miscellaneous vegetation, and metal panel internal and perimeter fencing,
- No 18 Funda Crescent – a single storey timber framed fibro clad dwelling with a tiled roof, sub-floor brick walls, timber framed weatherboard garage with a metal roof, concrete strip driveway, front and rear yard grassed areas, some trees and shrubs and miscellaneous vegetation, and metal panel internal and perimeter fencing,
- No 20 Funda Crescent – a single storey timber framed fibro clad dwelling with a tiled roof, sub-floor brick walls, detached carport, concrete strip driveway, rear outbuilding, front and rear yard grassed areas, some trees and shrubs and miscellaneous vegetation, and metal panel internal and perimeter fencing, and,

- No 22 Funda Crescent – a single storey timber framed fibro clad dwelling with a tiled roof, sub-floor brick walls, concrete strip driveway and paving, rear outbuilding, front and rear yard grassed areas, some trees and shrubs and miscellaneous vegetation, and metal panel internal and perimeter fencing, and a wrought iron fence along the front boundary.

The project consists of: -

- a) The demolition of all existing buildings and structures on the site on the site;
- b) The removal of all demolished materials in accordance with this WMP;
- c) The excavation of the site to construct the basement level of the building
- d) The construction of the buildings:
- e) The provision of landscaping, driveways, concrete pathways and other elements associated with the development; and,
- f) The on-going use of the building.

Blacktown City 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 DEMOLITION – 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.

Part 2.2 on Pages 6, 7, 8, 9, 10, 11 and 12 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.

2.2 BUILDINGS TO BE DEMOLISHED

Existing structures on the site are: -

- No 16 Funda Crescent – a single storey timber framed fibro clad dwelling with a tiled roof, sub-floor brick walls, detached timber framed weatherboard garage with a metal roof, concrete strip driveway, rear outbuilding, front and rear yard grassed areas, some trees and shrubs and miscellaneous vegetation, and metal panel internal and perimeter fencing,
- No 18 Funda Crescent – a single storey timber framed fibro clad dwelling with a tiled roof, sub-floor brick walls, timber framed weatherboard garage with a metal roof, concrete strip driveway, front and rear yard grassed areas, some trees and shrubs and miscellaneous vegetation, and metal panel internal and perimeter fencing,
- No 20 Funda Crescent – a single storey timber framed fibro clad dwelling with a tiled roof, sub-floor brick walls, detached carport, concrete strip driveway, rear outbuilding, front and rear yard grassed areas, some trees and shrubs and miscellaneous vegetation, and metal panel internal and perimeter fencing, and,
- No 22 Funda Crescent – a single storey timber framed fibro clad dwelling with a tiled roof, sub-floor brick walls, concrete strip driveway and paving, rear outbuilding, front and rear yard grassed areas, some trees and shrubs and miscellaneous vegetation, and metal panel internal and perimeter fencing, and a wrought iron fence along the front boundary.

2.3 MANAGEMENT OF HAZARDOUS MATERIALS

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 Liquid 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: -

- 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 demolition waste and vehicle access to these areas (see Part 2.3 of this Plan);
- c) How excavation and demolition waste materials will be reused, and, or recycled and where residual wastes will be disposed (see below); and,
- d) The total percentage of demolition waste that will be reused or recycled.

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 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 into this Plan.

1. Excavated Materials & Overburden

Volume / Weight	700 cubic metres / 1,190 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, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646).

2. Green Waste

Volume / Weight	240 cubic metres / 36 Tonnes
On Site Reuse	To be separated. Chipped and stored on site for re-use in landscaping.
Percentage Reused or Recycled	90%
Off Site Destination	Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) or, Australian Native Landscapes, Lot 22, Martin Road, Badgerys Creek (Tel 02 4774 8484)

3. Bricks

Volume / Weight	75 cubic metres / 75 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, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.

4. Concrete

Volume / Weight	60 cubic metres / 144 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	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.

5. Timber

Volume / Weight	120 cubic metres / 48 Tonnes
On Site Reuse	Re-use for formwork and studwork, landscaping, shoring.
Percentage Reused or Recycled	65% - 90%
Off Site Destination	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.

6. Plasterboard & Fibro

Volume / Weight	120 cubic metres / 42 Tonnes
On Site Reuse	Nil – All to be processed and 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, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.
Off Site Destination (Asbestos)	

7. Metals / Steel / Guttering & Downpipes

Volume / Weight	80 cubic metres / 30 Tonnes
On Site Reuse	No
Percentage Reused	60% - 90%
Off Site Destination	Boral Recycling, 3 Thackeray Street, Camelia (Tel 9529 4424) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646) or, Jacobson Metaland, 62-70 Silverwater Road, Silverwater (Tel 02 9748 2487)

8. Tiles

Volume / Weight	100 cubic metres / 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 424 646)

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

Volume	125 cubic metres / 43.75 Tonnes
On Site Reuse	Broken up and used as fill.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Recycle Works, 45 Parramatta Road, Annandale (Tel 02 9517 2711) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646)

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

Volume / Weight	120 cubic metres / 42 Tonnes
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, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.

11. Residual Waste

Volume / Weight	175 cubic metres / 175 Tonnes
On Site Reuse	No
Off Site Destination	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.
Notes on calculation of volume of residual waste	<ol style="list-style-type: none">1. In calculating the amount of residual waste produced from the demolition of all buildings on site, it is estimated that approximately 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.

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 receipt 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 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 associated with the demolition of all structures on site.

2.5 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.

2.6 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.

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 13, 14, 15, 16, 17 and 18 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	625 cubic metres / 1,062.50 Tonnes (Footings & Slabs)
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, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.

2. Bricks

Volume / Weight	5 cubic metres / 6.5 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	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.

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	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.

4. Timber

Volume / Weight	5 cubic metres / 7 Tonnes
On Site Reuse	Re-use for formwork and studwork, and for landscaping
Percentage Reused	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	No – all material will be transported for disposal off-site.
Percentage Reused or Recycled	To be determined
Off Site Destination	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), 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	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.

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	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646).

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) or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 651 116)

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	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.

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	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.

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	95 cubic metres / 95 Tonnes
On Site Reuse	No
Off Site Destination	Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112 or, Blacktown Waste Services, 920 Richmond Road, Marsden Park. Tel 9835 4544 or, Bingo Industries, 3-5 Duck Street, Auburn (Tel 1300 424 646), or, To another approved Facility.
Notes on calculation of volume of residual waste	<ol style="list-style-type: none">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 receipt 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 excavation of the site and all waste materials excess to construction. This information is to be made available at the request of an Authorised Officer of Council.

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 – ON GOING USE OF BUILDING

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 promotes the principles of health, safety and, convenience.
3. To promote waste minimisation practices.

4.2 ASSUMPTIONS

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

1. The proposal involves the construction of a two (2) storey residential building to be used for senior housing accommodation at 16-22 Funda Crescent, Lalor Park, comprising of 18 x 1 and 2 bed-room units, and at grade parking at the rear of the site.
2. Egress from the buildings will be onto Funda Crescent, onto the southern frontage of the site.
3. Waste Storage facilities for the development are located in two (2) separate Waste Storage Areas (WSA's) as indicated on the Architectural Drawings.
4. WSA 1 (located on the southern side of the site) will provide storage space for 5 x 240-litre waste bins, 3 x 240-litre recycling bins and 2 x 240-litre FOGO bins to be allocated for Units 1, 2, 3, 4, 5, 10, 11, 12, 13 and 14 (10 units).
5. WSA 2 (located on the northern side of the site) will provide storage space for 4 x 240-litre waste bins, 3 x 240-litre recycling bins and 1 x 240-litre FOGO bins, for Units 6, 7, 8, 9, 15, 16, 17 and 18 (8 units).
6. All waste services will be provided two (2) days per week.
7. All recycling services will be provided weekly.
8. All FOGO services will be provided fortnightly.
9. The number and size of bins have been calculated from information provided by Blacktown City Council, by Council staff and from information provided by Council.
10. All waste and recycling collections will take place from the Funda Crescent kerbside.
11. All waste and recycling collections will be provided by Blacktown City Council
12. The NSW LAHC will appoint a Building Manager or Caretaker who will be responsible for the management and maintenance of all activities associated with the storage and collection of waste and recycling.

4.3 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 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 recyclables should be appropriately bagged or wrapped prior to being deposited into the designated bin.

4.4 WASTE & RECYCLING – SERVICE REQUIREMENTS

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.

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,
- FOGO Service – Green Lidded receptacle.

4.5 WASTE & RECYCLING – SERVICE ARRANGEMENTS

The following table (Table 1) specifies the criteria for waste and recycling generation rates (as specified by Blacktown City Council) based on: -

- Waste – 240 litres of bin space per unit per week,
- Recycling – 80 litres of bin space per unit per week, and,
- FOGO – Not stated – 4 x 240-litre bins provided.

All waste and recycling generation rates were obtained from discussions with and advice from Council staff, and from information contained in Blacktown City Council's DCP 2015 – Part G 'Site Waste Management and Minimisation'.

TABLE 1 – RESIDENTIAL WASTE & RECYCLING GENERATION RATES

SERVICE TYPE	UNITS	BIN SPACE PER UNIT	TOTAL SPACE REQUIRED	BINS SIZE	SERVICES PER WEEK	BINS REQUIRED	BINS PROVIDED
Waste	18	240	4,320	240	2	9.00	9
Recycling	18	80	1,440	240	1	6.00	6
FOGO	18	N / A	N / A	240	0.5	3.00	3

4.6 PROVISION OF WASTE & RECYCLING SERVICES

4.6.1 Waste and Recycling Collection Service Provider Details

All waste and recycling services to the building will be provided by Council's waste and recycling collection contractor.

4.6.2 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

4.6.3 Waste & Recycling Requirements

Waste and recycling requirements are provided in the table below.

SERVICE	NUMBER OF CONTAINERS	COLLECTION FREQUENCY
Waste Service	9 x 240-litre mobile containers	Two (2) Services per week
Recycling Service	6 x 240-litre mobile containers	One (1) Service per Week
FOGO Service	3 x 240-litre mobile containers	One (1) Service per Fortnight

4.6.4 Location, Design, and Construction of Waste Storage Areas (WSA's)

Two Waste Storage Areas (WSA's are provided for the development.

WSA 1 is located on the southern side of the site and will provide storage spaces for Units 1, 2, 3, 4, 5, 10, 11, 12, 13 and 14 (10 units). It is a fully enclosed structure with an area of approximately 15.6sqm. Within its confines will be:

- Storage space for 5 x 240-litre red lidded mobile waste bins,
- Storage space for 3 x 240-litre yellow lidded mobile recycling bins,
- Storage space for 2 x 240-litre green lidded bin, and,
- All required infrastructure.

WSA 2 is located on the northern side of the site and will provide storage spaces for Units 6, 7, 8, 9, 15, 16, 17 and 18 (8 units). It is a fully enclosed structure with an area of approximately 15.2sqm. Within its confines will be:

- Storage space for 4 x 240-litre red lidded mobile waste bins,
- Storage space for 3 x 240-litre yellow lidded mobile recycling bins,
- Storage space for 1 x 240-litre green lidded bin, and,
- All required infrastructure.

4.6.7 Servicing Arrangements – Waste Collections

All waste services will be provided by Blacktown Council's waste and recycling collection contractor, using 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 the evening prior The Building Manager or their authorized representative will remove all 9 x 240-litre waste bins from both WSA's and transfer them to the Funda

Crescent kerbside where they will be presented for servicing.

The waste bins will be serviced two (2) days per week, on a day to be determined by the Council.

All 9 x 240-litre mobile waste bins will be serviced on each collection day.

The bins will be returned to each WSA as soon as practical after collection, but no later than 2 hours after servicing.

4.6.8 Servicing Arrangements – Recycling Collections

All recycling services will be provided by Blacktown Council's waste and recycling 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 the evening prior The Building Manager or their authorized representative will remove all 240-litre recycling bins from both WSA's and transfer them to the Funda Crescent kerbside where they will be presented for servicing.

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

All 6 x 240-litre mobile recycling bins will be serviced on each collection day.

The bins will be returned to each WSA as soon as practical after collection, but no later than 2 hours after servicing.

4.6.9 Servicing Arrangements – FOGO Collections

All FOGO services will be provided by Blacktown Council's waste and recycling 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 the evening prior the Building Manager or their authorized representative will remove the FOGO bins from both WSA's and transfer them to the Funda Crescent kerbside where they will be presented for servicing.

The FOGO bins will be serviced one (1) day per fortnight, on a day to be determined by the Council.

All 3 x 240-litre mobile FOGO bins will be serviced on each collection day.

The bins will be returned to each WSA as soon as practical after collection, but no later than 2 hours after servicing.

4.7 BULKY WASTE STORAGE

Secure storage spaces are required to be provided for each residential unit in accordance with the provisions of Council's DCP 2015.

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 has been provided for residents to place unwanted materials awaiting collection and removal.

This area is located in the rear yard area of the site as indicated on the Architectural Drawings. This area has internal dimensions of 4.0m x 2.0m, with an area of approximately 8sqm. Council's requirement for 18 units is 8sqm.

In accordance with Council's requirements, the Bulky Waste Storage area will be an enclosed caged structure, fitted with a doorway with a minimum width of 1.5m.

All residents of the building will be provided with unrestricted 24-hour access to this facility.

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. Regular maintenance of this area will be carried out.

It will be the responsibility of the occupants of individual residential units, to dispose of this material, appropriately.

It will be the responsibility of the Building Manager to liaise with Council in relation to the arrangement of clean-up operations. The Building Manager or their representative to transfer all bulky waste material for collection from the Bulky Waste Storage to the ground floor collection area.

4.8 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 maintained in a clean and tidy state at all times.
2. It will be the responsibility of the NSW LAHC to ensure that all waste storage areas, are cleaned and maintained in an appropriate condition.
3. All mobile bins will be washed and cleaned on a regular basis.
4. The occupants of each individual unit will be responsible for ensuring that all waste and recyclable material are stored within the appropriate containers provided.
5. The NSW LAHC will be responsible for ensuring that the requirements of this WMP are observed at all times.
6. All requirements specified in this WMP shall be inserted into the rules of the Plan of Management.
7. The NSW LAHC will be responsible for managing illegal dumping, including the prompt removal at their own cost when requested by Council.

PART 5 – SUMMARY

5.1 SUMMARY

In summarising this proposal, the following information is provided:

1. Where relevant, this Waste Management Plan (WMP) has been developed and documented in accordance with the requirements of Blacktown Council.
2. This WMP aims to promote the use of recyclable materials in the demolition, excavation, construction and on-going operation of the building.
3. This WMP aims to ensure the design of waste and recycling storage facilities are of an adequate size, appropriate for the intended use of the buildings, hygienic with safe and manoeuvrable access.
4. This 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 efficiently and effectively, in a healthy, safe and convenient manner, to acceptable community standards, the buildings occupants, and to the requirements of Blacktown City Council.
