# DICKENS SOLUTIONS

# **WASTE MANAGEMENT PLAN**

# MONTESSORI ACADEMY CHILD CARE CENTRES

# PROPOSED CHILD CARE CENTRE @ 170 DERBY STREET PENRITH

# **NOVEMBER 2020**

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Dickens Solutions Pty Ltd (ABN 41 603 040 446) 1214 Botany Road, Botany NSW 2019

Website: www.dickenssolutions.com.au

# **TABLE OF CONTENTS**

PART	SUBJECT	PAGE
PART 1 – OVERVIEW & PROPOSAL		
1.1	Introduction	3
1.2	Description of Property	4
1.3	Applicants Details	4
1.4	Proposal	5
	PART 2 – DEMOLITION	
2.1	Demolition – Generally	6
2.2	Management of Hazardous Waste Materials	6
2.2	Demolition – Recycling, Reuse and Disposal Details	7
2.3	Demolition – On Site Storage of Materials	12
2.4	Demolition – Excavated Material	12
	PART 3 – CONSTRUCTION	
3.1	Construction – Generally	13
3.2	Construction – Recycling, Reuse and Disposal Details	13
3.3	Construction – On Site Storage of Materials	18
3.4	Construction – Excavated Material	18
	PART 4 – ON GOING USE	
4.1	Objectives	19
4.2	Assumptions	19
4.3	Waste Handling & Management	19
4.4	Waste & Recycling – Service Requirements	20
4.5	Waste & Recycling – Waste Generation Rates	20
4.6	Provision of Waste & Recycling Services	21
4.7	Sanitary Waste	22
4.7	Green Waste	22
4.8	On Going Operation, Use & Management of Facilities	23
	PART 5 – SUMMARY	
5.1	Summary	24

# 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: -

- 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, 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, and,
- 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: -

- Penrith Local Environment Plan 2010,
- Penrith DCP 2014 Part C5 Waste Management,
- All Conditions of Consent to be issued under the approved DA for the project,
- All relative requirements of SEPP Educational Establishments and Child Care Facilities) 2017, as they apply to the provision of waste management facilities and services,
- Current industry standards and practices for the storage and collection of waste within Commercial Developments, specifically for Child Care Centres, and,
- 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 has been prepared for a Development Application to be submitted to Penrith City Council, for the construction of a two (2) storey building, over one (1) basement level, with the provision for car parking, servicing, associated amenities and ancillary facilities, to be used as a Child Care Centre, at 170 Derby Street, Penrith. The centre will provide day care services for 86 children.

This WMP is dated 10 November 2020.

# 1.2 PROJECT & PROPERTY DESCRIPTION

This Waste Management Plan (WMP) has been specifically designed for the development described below: -

DESCRIPTION	Child Care Centre (86 Children)
DETAILS	Two (2) Storey Building, comprising:  - Five (5) x Classrooms,  - Two (2) Outdoor Play Areas,  - Cot Rooms and Nappy Change,  - Kitchen, staff amenities, offices, and storerooms,  - One (1) basement for off street-car parking,  - Associated site works, drainage, landscaping and ancillary facilities; and,  - The provision of waste storage facilities.
PROPERTY DESCRIPTION	The development is to be constructed over one (1) existing Torrens Title allotment at Lot 2, DP 109053, 170 Derby Street, Penrith.
LOCATION	170 Derby Street, Penrith
DIMENSIONS	Front (North) Boundary – 23.65m, Rear (South) Boundary – 23.66m, Side (East) Boundary – 54.74m, and, Side (West) Boundary – 55.29m.
AREA	1,296sqm (Approx.)
LGA	Penrith City Council
ZONING	Zone R3 – Medium Density Residential
PLANNING	Penrith LEP 2010
INSTRUMENTS	Penrith DCP 2014

The site is located on the southern side of Derby Street, Penrith, with Evan Street to the west and Doonmore Street to the east. It is approximately 500m east of Mulgoa Road and the Penrith industrial area.

The site currently comprises of one (1) Torrens Title allotment upon which an existing single storey timber framed weatherboard dwelling is located. It is currently being used as a medical centre. The building an all associated structures will be demolished to make way for the proposed development.

The immediate surrounding area predominantly consists of a mix of low and medium density housing. It is a short distance west of the Nepean District hospital precinct. The Penrith CBD, railway station and the main suburban and regional railway line is located a short distance to the north of the site.

The land upon which the development is proposed is zoned under the Penrith LEP as R3 – Medium Density Residential.

# **1.3 APPLICANTS DETAILS**

APPLICANT	Montessori Academy Child Care Centres
ADDRESS	60-70 Parramatta Road, Summer Hill. NSW. 2130.

# 1.4 PROPOSAL

The proposal involves the construction of a two (2) storey building, over one (1) basement level, with the provision for car parking, servicing, associated amenities and ancillary facilities, to be used as a Child Care Centre.

The centre will provide day care services for 86 children.

Egress from the site is onto Derby Street at the northern frontage of the site.

Waste storage facilities are located in a designated Waste Storage Area (WSA) located on the north-western side boundary of the site adjacent to Class 3 as indicated on the Architectural Drawings.

Current buildings and structures on the site consist of a large single storey timber framed weatherboard, detached outbuildings, large concrete areas, paved area, grassed garden areas, are number of trees, some shrubbery and timber paling and metal paling fencing, all of which are to be demolished and removed from the site to make way for the proposed development.

The project consists of: -

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

Penrith 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

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 MANAGEMENT OF HAZARDOUS WASTE MATERIALS

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

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

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

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

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.

# 2.3 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 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

Volume / Weight	455 cubic metres / 773.50 Tonnes
On Site Reuse	Yes. Keep and reuse topsoil for landscaping. Store 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 424 646)
	or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116)
	or, other authorised facility.

# 2. Green Waste

Volume / Weight	50 cubic metres / 7.50 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	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 424 646) or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) or, other authorised facility.

# 3. Bricks

Volume / Weight	25 cubic metres / 25 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 424 646) or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) or, other authorised facility.

# 4. Concrete

Volume / Weight	100 cubic metres / 240 Tonnes
On Site Reuse	Existing driveways to be retained during construction. Crushed and used as aggregate, drainage backfill.
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, Jacks Gully Waste Management Centre, Richardson Road,
	Narellan (Tel 1300 651 116) or, other authorised facility.

# 5. Timber

Volume / Weight	35 cubic metres / 14 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, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) or, other authorised facility.

# 6. Plasterboard & Fibro

Volume / Weight	30 cubic metres / 10 Tonnes
On Site Reuse	No. All materials will be processed off-site
Percentage Reused or Recycled	To be determined (dependent on asbestos content)
Off Site Destination	Eco cycle, 155 Newtown Road, Wetherill Park (Tel 02 0757 2999)
Off Site Destination (Asbestos)	or, Suez Eastern Creel Resource Recovery Park, Wallgrove Road, Eastern Creek. Tel 8887 6112.

7. Metals / Steel / Guttering & Downpipes

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Volume / Weight	55 cubic metres / 19.25 Tonnes	
On Site Reuse	No	
Percentage Reused or Recycle	60% - 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, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116)	

# 8. Roof Tiles / Tiles

Volume / Weight	18 cubic metres / 13.50 Tonnes
On Site Reuse	Broken up and used as fill, aggregate, driveways.
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, Jacks Gully Waste Management Centre, Richardson Road,
	Narellan (Tel 1300 651 116) or, Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883).

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

	(200101 Ittiligo, Othor I Ixtaroo, oto)
Volume	60 cubic metres / 50 Tonnes
On Site Reuse	No. All material will be processed or disposed of 0ff-site.
Percentage Reused or Recycle	80% - 90%
Off Site Destination	Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116)
	or, Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys
	(Tel 02 9833 0883).

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

·	Light Fittings, Forteins, Cerannos, etc
Volume / Weight	90 cubic metres / 30 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, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) or, Hallinan's Recycling Centre, 37 Lee Holm Road, St. Marys (Tel 02 9833 0883). or, other authorised facility.

#### 11. Residual Waste

Volume / Weight	95 cubic metres / 95 Tonnes
On Site Reuse	No
Off Site Destination	Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) or,
	Other authorised facility.
Notes on calculation of volume of residual waste	<ol> <li>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.</li> <li>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.</li> </ol>

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.

# 2.4 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 <u>'Site Plan for the On-Site Storage of Materials at Demolition'.</u> 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.

# 2.5 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	1,500 Cubic Metres / 2,550 Tonnes
On Site Reuse	Yes. Keep and reuse topsoil for landscaping. Store 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	Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) or,
	To an approved Agency – excavated materials may need to be assessed to determine the quality of the material to ensure that all excavated material will be acceptable to the designated receival authority.

# 2. Bricks

Clean and remove lime mortar from bricks. Broken bricks for nternal walls. Crush and reuse as drainage backfill.
nternal walls. Crush and reuse as drainage backfill.
Crushed and used as aggregate.
75% - 90%
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, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) or, other authorised facility.
7: S

# 3. Concrete

Volume / Weight	6 cubic metres / 14.4 Tonnes
On Site Reuse	Existing driveway to be retained during construction. Crushed and used as aggregate, drainage backfill.
Percentage Reused or Recycled	60% - 75%
Off Site Destination	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, Jacks Gully Waste Management Centre, Richardson Road, Narellan (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	Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or.
	Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116).

# 5. Plasterboard & Fibro

Volume / Weight	6 cubic metres / 2 Tonnes
On Site Reuse	No – all material will be transported for disposal off-site.
Percentage Reused or Recycled	To be determined
Off Site Destination	Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or,
	Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116)Eco cycle, 155 Newtown Road, Wetherill Park
	(Tel 02 0757 2999).

6. Metals / Steel / Guttering & Downpipes

Volume / Weight	5 cubic metres / 0.25 Tonnes
On Site Reuse	No
Percentage Reused or Recycled	60 – 90%
Off Site Destination	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, Jacks Gully Waste Management Centre, Richardson Road, Narellan (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, Other authorised facility.

# 8. Plastics

Volume / Weight	5 cubic metres / 1 Tonne
On Site Reuse	Nil
Percentage Reused or Recycled	80% - 95%
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, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116).

9. Glass, Electrical & Light Fittings, PC items

Volume / Weight	5 cubic metres / 1 Tonne
On Site Reuse	No
Percentage Reused or Recycled	70% - 90%
Off Site Destination	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, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116).

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

1011 1/1011 0 0 1 111111190	(Doors i ittings, Other i ixtures, 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, Brandown, Lot 9 Elizabeth Drive, Kemps Creek (Tel 02 9826 1256) or, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116) or, other authorised 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	160 cubic metres / 160 Tonnes		
On Site Reuse	No		
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, Jacks Gully Waste Management Centre, Richardson Road, Narellan (Tel 1300 651 116), or,		
Notes on calculation of volume of residual waste	<ol> <li>other authorised facility.</li> <li>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.</li> <li>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.</li> </ol>		

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

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

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

The developer understands that any costs associated with the transportation and receival of all materials will be their responsibility.

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

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

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

# 3.3 CONSTRUCTION - ON-SITE STORAGE OF MATERIALS

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

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

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

Prior to the commencement of construction works, the developer will provide Council with a <u>'Site Plan for the On-Site Storage of Materials at Construction'.</u> 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

# **4.1 OBJECTIVES**

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

# 4.2 ASSUMPTIONS

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

- 1. The proposal involves the construction of a two (2) storey building to be used as a Child Care Centre for 86 children.
- 2. A dedicated Waste Storage Areas (WSA) will be provided to house all mobile waste bins and recycling bins for the proposed development.
- The WSA is an enclosed rectangular structure located on the north-western side of the site adjacent to Class Room 3 as indicated on the Architectural Drawings.
- 4. All mobile waste and recycling bins required for the on-going operation of the development will be stored within the confines of the WSA at all times.
- 5. As Council's Waste Management DCP does not prescribe waste and recycling generation rates for Child Care Centres, all waste and recycling generations have been calculated according to information obtained in a number of Sydney Councils DCP'S for developments of a similar type, as well as from research undertaken by Dickens Solutions in respect of waste and recycling generation in child care centres.
- 6. All waste will be stored in 2 x 660 litre mobile bins.
- 7. All recycling material will be stored in 2 x 240 litre mobile bins.
- 8. Waste Services will be provided at least two (2) times per week.
- 9. Recycling services will be provided at least two (2) times per week.
- 10. As the centre is a commercial operation, a licensed private waste collection contractor will provide all waste and recycling services to the building.
- 11. If the waste and recycling material generated from the use exceeds the waste generation rates specified in this WMP, the frequency of collections may need to be increased. Any increase in the frequency of collections will be determined in consultation with Council and the proprietors of the Child Care Centre.
- 12. All waste and recycling collections will take place from the kerbside, where bins will be presented for collection by the appointed contractor.

# **4.3 WASTE HANDLING & MANAGEMENT**

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

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

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

# 4.4 WASTE & RECYCLING - SERVICE REQUIREMENTS

The Child Care Centre is a commercial enterprise, and due to the nature of its use, will generate both waste and recyclable material.

Due to its commercial nature, the provision of residential waste and recycling services to the development do not apply. Accordingly, commercial waste and recycling services will be provided to the Centre.

No formal green waste service will be provided to the building. All green waste will be disposed of privately by a contractor to be appointed by the Proprietor.

It will be the responsibility of the Proprietors of the Child Care Centre to ensure that all green waste is removed from the complex in an appropriate manner.

# **4.5 WASTE & RECYCLING GENERATION RATES**

Council's Waste Management DCP does not prescribe waste and recycling generation rates for Child Care Centres. As such all waste and recycling generations have been calculated according to information obtained in a number of Sydney Councils DCP'S for developments of a similar type, as well as from research undertaken by Dickens Solutions in respect of waste and recycling generation in child care centres.

Table 1 below provides all details of these calculations.

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

SERVICE	WASTE & RECYCLING GENERATION RATES	
Waste	20.0 litres of waste per child per week (20.0 litres x 86 children per week)	
Recycling	10.0 litres of recyclable material per child per week (10.0 litres x 86 children per week)	
Sanitary Waste	Refer to Part 4.7 of WMP	

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

TABLE 3 – CHILD CARE WASTE & RECYCLING GENERATION RATES

# <u>&</u> SERVICE REQUIREMENTS

SERVICE TYPE	WASTE GENERATION RATES Litres of Space / Child / Week		TOTAL SPACE	BIN SIZE	SERVICES PER	BINS REQUIRED	BINS PROVIDED	
	Litres	Children	Week	REQUIRED		WEEK		
Waste	20	86	1	1,720	660	2	1.31	2
Recycling	10	86	1	860	240	2	1.80	2
Sanitary		Refer to Part 4.7 of WMP						

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

TABLE 3 – PROPOSED SERVICING ARRANGEMENTS

WASTE	RECYCLING	SANITARY WASTE
2 x 660-litre bins /	2 x 240-litre bins /	Refer to Part 4.7
2 x Services per Week	2 x Services per Week	(Page 27)

# **4.6 PROVISION OF WASTE & RECYCLING SERVICES**

# 4.6.1 Waste and Recycling Collection Service Provider Details

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

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

# **4.6.2 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
660-litre mobile containers	1.250	0.850	1.370

# 4.6.3 Waste & Recycling Requirements

Waste and recycling requirements are provided in the table below.

SERVICE	NUMBER OF CONTAINERS	COLLECTION FREQUENCY
Waste Service	2 x 660 litre mobile containers	Two (2) Services per Week
Recycling Service	2 x 240 litre mobile containers	Two (2) Service per Week

# 4.6.4 Location, Design, and Construction of Waste Storage Area (WSA)

The WSA is a partially enclosed rectangular structures located on the north-western side of the site adjacent to Class Room 3 as indicated on the Architectural Drawings. It measures  $2.7m \times 2.5m$ , with an area of 6.75sqm, and will provide storage space for  $2 \times 660$ -litre mobile waste bins and  $2 \times 240$ -litre mobile recycling bins.

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

# 4.6.6 Servicing Arrangements - Waste Collections

All waste bins will be presented for servicing at the Derby Street kerbside.

The appointed contractor will be responsible for transporting the waste bins from the Waste Storage Area (WSA) to the collection vehicle waiting at the kerbside.

As the collection of waste bins will be done separately in separate collection vehicles, the maximum number of waste bins to be transported to the collection vehicle on any one collection day will be 2 x 660-litre waste bins.

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

No waste bins will be presented to the kerbside for collection until the collection vehicle has arrived at the site.

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

proprietor of the centre in conjunction with the Contractor, but on separate days to the recycling bins.

Both 660-litre mobile waste bins will be presented for servicing on each collection day.

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

# 4.6.7 Servicing Arrangements - Recycling Collections

All recycling bins will be presented for servicing at the Derby Street kerbside.

The appointed contractor will be responsible for transporting the waste bins from the Waste Storage Area (WSA) to the collection vehicle waiting at the kerbside.

As the collection of recycling bins will be done separately in separate collection vehicles, the maximum number of recycling bins to be transported to the collection vehicle on any one collection day will be 2 x 240-litre recycling bins.

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

No recycling bins will be presented to the kerbside for collection until the collection vehicle has arrived at the site.

Recycling bins will be serviced two (2) days per week, on days to be determined by the proprietor of the centre in conjunction with the Contractor, but on separate days top the servicing of waste bins.

Both 2 x 240-litre mobile recycling bins will be presented for servicing on each collection day.

# **4.7 SANITARY WASTE**

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

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

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

# **4.8 GREEN WASTE**

No formal green waste service will be provided to the development.

It will be the responsibility of the Proprietors of the centre to ensure that all green waste generated from the on-going use of the development is disposed of appropriately.

# 4.9 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 requirements will apply: -

- 1. The walls and floor of the WSA will be constructed of smooth faced masonry or concrete.
- 2. The WSA is to be washed and cleaned on a regular basis.
- 3. All mobile bins will be washed and cleaned on a regular basis.
- 4. Any electrical equipment, including the provision of lighting, will be installed in accordance with the relevant Australian Standards.
- 5. Appropriate signage will be displayed in a prominent position within the Centre identifying the location of the WSA as well as providing instruction to employees on how to use waste and recycling facilities, including what is and what is not recyclable.
- 6. The proprietor of the centre will be responsible for ensuring that all waste and recyclable matter and materials are placed and stored within the appropriate containers provided.

# PART 5 – SUMMARY

# **5.1 SUMMARY**

In summarising this proposal, the following information is provided:

- 1. This Waste Management Plan has been developed and documented in accordance with the requirements of Council.
- 2. Council's Waste Management DCP does not prescribe waste and recycling generation rates for Child Care Centres. As such all waste and recycling generations have been calculated according to information obtained in a number of Sydney Councils DCP'S for developments of a similar type, as well as from research undertaken by Dickens Solutions in respect of waste and recycling generation rates for child care centres.
- 3. All waste and recycling services will be provided by a licensed private waste and recycling collection contractor.
- 4. The proprietor of the Child Care Centre will be responsible for ensuring that all on-going waste management activities are carried out in accordance with the provisions of this Waste Management Plan.
- 5. The WMP aims to promote the use of recyclable materials in the excavation, demolition, construction, and on-going operation of the building.
- 6. The WMP aims to ensure the design of waste and recycling storage facilities are of an adequate size, appropriate for the intended use of the building, hygienic with safe and manoeuvrable access.
- 7. The WMP aims to ensure that the provision of waste and recycling services to the completed buildings are carried out in an efficient manner, which will promote the principles of health, safety, and convenience.

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