

# **WASTE MANAGEMENT REPORT**

MIXED USE DEVELOPMENT | 342-350 HIGH STREET PENRITH  
8 OCTOBER 2021

FOR

Colin & Andrea Henry  
344 High Street  
PENRITH NSW 2750

## PENRITH COUNCIL KEY DEVELOPMENT STANDARDS

The following statement provides an assessment of the development against the Penrith Development Control Plan 2014 and Penrith Local Environmental Plan 2010

APPLICANT DETAILS	
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PROJECT DETAILS	
<b>SITE ADDRESS</b>	342-350 High Street, Penrith, NSW, 2750
<b>EXISTING BUILDINGS AND OR OTHER STRUCTURES ON THE SITE</b>	The site currently contains a 2-storey masonry retail /commercial building on High Street. The rear of the site is an on-grade carpark with concrete surface and a small carport structure.
<b>DESCRIPTION OF PROPOSED DEVELOPMENT</b>	The proposed 7 storey development is a mix of uses including commercial, retail and residential apartments. The ground floor contains retail/commercial tenancies to High Street with apartments above (total 29 across the site).

### WASTE TRANSFER AND RECYCLING CENTRE

Throughout this report reference is made to the nominated waste transfer and recycling centre. We note that for this development this refers to Penrith City Council Waste Centre, 842 Mulgoa Road, Mulgoa.

## DEMOLITION

TYPE OF WASTE GENERATED	ESTIMATED WASTE	REUSE	RECYCLE	DISPOSAL	METHOD OF ONSITE REUSE, CONTRACTOR AND RECYCLING/WASTE OUTLE/DEPOT
EXCAVATION MATERIAL	600m <sup>3</sup>		✓	✓	Excess material will be removed by excavation contractor to nominated waste transfer/recycle centre.
GREEN WASTE	40m <sup>3</sup>	✓			Removed trees to be mulched, stored on site, and re-used in landscaping.
BRICKS/PAVERS	150m <sup>3</sup>	✓	✓		All waste bricks will be crushed and utilised at the principal entrance to the site for gravel shaker ramp to minimise soil deposits on the surrounding road network.
CONCRETE	780m <sup>3</sup>	✓	✓		Reused for filling, levelling or road base. All excess material to be recycled at nominated waste transfer/recycle centre.
TIMBER	210m <sup>3</sup>	✓	✓		Reuse for formwork, remainder removed from site and recycled off site at nominated waste transfer/recycle centre
PLASTERBOARD	190m <sup>3</sup>		✓	✓	Any leftovers to be disposed of or recycled at nominated waste transfer/recycle centre.
METAL	90m <sup>3</sup>		✓	✓	Any leftovers to be disposed of or recycled at nominated waste transfer/recycle centre.
GLASS	80m <sup>3</sup>		✓	✓	Any leftovers to be disposed of or recycled at nominated waste transfer/recycle centre.
FIXTURES/FITTINGS	15m <sup>3</sup>		✓	✓	Any leftovers to be disposed of or recycled at nominated waste transfer/recycle centre.
FLOOR COVERINGS	100m <sup>3</sup>		✓	✓	Any leftovers to be disposed of or recycled at nominated waste transfer/recycle centre.
HAZARDOUS/SPECIAL WASTE	TBC at demolition			✓	All quantities of asbestos will be determined at the time of demolition. Removal and Disposal will be in accordance with the relevant Australian Standards, OH&S and EPA guidelines. All work to be completed by a suitably qualified and registered contractor.
Waste generation quantities are estimated based on area. Detailed volumes and recycling/disposal locations to be confirmed by contractor/builder at construction stage.					

## CONSTRUCTION

TYPE OF WASTE GENERATED	ESTIMATED WASTE	REUSE	RECYCLE	DISPOSAL	METHOD OF ONSITE REUSE, CONTRACTOR AND RECYCLING/WASTE OUTLE/DEPOT
EXCAVATION MATERIAL	11,980m <sup>3</sup>		✓	✓	Excess material will be removed by excavation contractor to nominated waste transfer/recycle centre.
GREEN WASTE	15m <sup>3</sup>	✓	✓		Mulched, composted in landscape
BRICKS/PAVERS	15m <sup>3</sup>	✓	✓		Offcuts crushed and used in landscape. Excess material removed by contractor to nominated waste transfer/recycle centre.
CONCRETE	15m <sup>3</sup>		✓	✓	Excess material removed by contractor to nominated waste transfer/recycle centre.
TIMBER	15m <sup>3</sup>	✓	✓		Reuse for formwork, remainder removed from site and recycled off site at nominated waste transfer/recycle centre.
PLASTERBOARD	15m <sup>3</sup>	✓	✓		Removal for recycling or return to supplier.
METAL	N/A				No metal roofing to be used in this development.
GLASS	N/A				Made to measure into proposed wall system with construction off site.
FLOOR COVERINGS	15m <sup>3</sup>		✓	✓	Any leftovers to be disposed of or recycled by appropriate sub-contractor.
PACKAGING	20m <sup>3</sup>		✓		Recycled by appropriate sub-contractor.
PAPER/CARDBOARD	12m <sup>3</sup>		✓		Recycled by appropriate sub-contractor.
Waste generation quantities are estimated based on area. Detailed volumes and recycling/disposal locations to be confirmed by contractor/builder at construction stage.					

**ONGOING OPERATION (MULTI DWELLING RESIDENTIAL & COMMERCIAL/RETAIL)**

TYPE OF WASTE GENERATED	CAFE		COMMERCIAL (RETAIL)		COMMERCIAL (OFFICE)		APARTMENTS	
	WASTE	RECYCLING	WASTE	RECYCLING	WASTE	RECYCLING	WASTE	RECYCLING
AMOUNT	77 sqm NLA		319 sqm NLA		2440 sqm NLA		29 units	
DAYS/WEEK	7 DAYS		7 DAYS		5 DAYS		7 DAYS	
RATE	80L/100sqm/day		50L/100sqm/day		10L/100sqm/day		80L/unit/week	40L/unit/week
AMOUNT GENERATED (L PER UNIT PER WEEK)	560L	560L	1116.5L	1116.5L	1220L	1220L	2320L	1160L
FREQUENCY OF COLLECTIONS (PER WEEK)	1	1	1	1	1	1	1	1
SIZE OF BINS	1100	1100	1100	1100	1100	1100	1100	1100
NUMBER OF STORAGE BINS REQUIRED	0.5	0.5	1.0	1.0	1.1	1.1	2.1	1.0
<p><i>Waste generation quantities are estimated based on rates provided in the Penrith City Council Draft Development Control Plan 2010 – Waste Management APPENDIX F5. Reference has been made to the Draft Waste management Plan DCP.</i></p> <p><i>It is suggested that the waste management system be monitored in the initial stages to ensure that sufficient bins have been provided to handle the waste generated. The number of bins provided and collection frequency will need to be monitored and adjusted to suit the needs of the individual tenants. Tenants may nominate an appropriate bin size to suit their needs. Compaction facilities will be provided for use as required.</i></p>								

## ONGOING OPERATION (MULTI DWELLING RESIDENTIAL & COMMERCIAL/RETAIL)

ONSITE WASTE COLLECTION	
DRIVEWAY LOCATION	The bin collection service area is accessed from John Cram Place.
DRIVEWAY AND ACCESS ROUTE WIDTH	The driveway access is 5500mm clear with 300mm kerbs on either side.
TYPE OF WASTE COLLECTION AREA ie. BASEMENT/LOADING DOCK	The waste collection area is located on the Ground Floor of Building B (3 John Cram Place.) See architectural DA plan DA-0600 for waste management.
MAXIMUM REVERSING DISTANCE FOR COLLECTION VEHICLES AND CONFIGURATION OF PATH (STRAIGHT, CURVED)	N/A. There is no requirement for waste vehicles to reverse during the process of waste collection for this development.
DISTANCE FROM COLLECTION AREA TO THE PROPERTY BOUNDARY	The collection area is accessed from the driveway to Building B and is roughly 15m from the property boundary.
HEADROOM ALONG VEHICLE TRAVEL PATH – MEASURED AT ITS LOWEST POINT FROM CEILING, DUCTING CONDUITS OR ANY OTHER OBSTRUCTION	The headroom along the garbage collection path of travel is 3.8m to allow for the required clearance height of 3.5m. The collection area headroom is 3.8m to allow for additional operational height of the garbage truck. In accordance with the dimensions outlines for councils 9.7m Garbage truck in the Residential Flat Building Waste Management Guidelines. Refer to Sections in the Architectural Drawings.
DIMENSIONS FOR VEHICLE MANOUVERING/TURNING CIRCLES. INCLUDING ON STREET TURNING CIRCLES	A sweep path analysis has been conducted based on the 9.7m truck. Refer to Traffic Report by Varga Traffic Planning Associates.
STRUCTURAL CAPACITY OF SLAB FOR COLLECTION AREAS	The driveways and basement floor are to be designed and constructed to offer sufficient structural capacity to accommodate Council vehicles of a minimum 16 tonnes.
RAMP GRADIENTS	Ramp gradients are in accordance with AS. Refer to Traffic Report by Varga Traffic Planning Associates.
VEHICLE TURNTABLE USE	A 9.7m truck turn table has been allowed for, which accommodates the 9.7m garbage truck. With 1.2m tolerance for the truck's wheels to align correctly on the turntable. The truck turntable area has also allowed for a 11.7m clear zone to allow for additional tolerances when aligning the truck on the turntable.
DIMENSIONS, LAYOUT AND FLOOR AREA PROVIDED AT BIN COLLECTION POINT	The bin collection area has been designed to comply with Penrith City Council DCP requirements outlined in Residential Flat Building Waste Management Guideline Section 3.5.2 and 3.5.3 and Industrial, Commercial and Mixed Use Waste Management Guideline Section 2.4.1. The commercial and residential collection areas are 4.4 x 4.0m with 1.6m clear between bins.
DIMENSIONS, LAYOUT AND FLOOR AREA PROVIDED FOR COLLECTION VEHICLE STANDING/COLLECTION AREA	The collection vehicle area has been allocated a clear space of 11.7m to allow for truck turntable clearances and a dedicated collection space of 2.8 x 2.0m at the rear of the truck for loading.

<p>GRADE OF BIN COLLECTION AREA, INCLUDING FOR WASTE COLLECTION VEHICLE</p>	<p>Step free and level access is provided between waste storage room and collection point. Maximum gradient is 1 in 100.</p>
<p>OBSTRUCTIONS TO OTHER USERS DURING COLLECTION</p>	<p>There is no obstruction to other users whilst the waste collection vehicle is loading.</p>
<p>LEGAL ARRANGEMENTS FOR ACCESS FOR COLLECTION STAFF</p>	<p>Garbage Collection room will be locked and master key provided to maintenance / collection staff.</p>
<p>SCREENING AND AMENITY OF COLLECTION AREAS</p>	<p>Garbage Collection room will be enclosed by floor to ceiling concrete wall and accessed via locked roller shutters.</p>

## DESIGN FOR WASTE MANAGEMENT

### MATERIALS

The development has been designed to incorporate a consistent floor plate within its different uses. Standardisation generally results in more efficient construction.

Most of the materials used are pre-fabricated offsite and can be made and be purchased to measure, minimising wastage onsite. In particular, the proposed wall system (AFS concrete walls) is a permanent formwork system which is pre-made off-site, cranes and locked into position on site and concrete poured into the walls to minimise all concrete waste on site, and reduce the waste from on-site construction methods such as brick and cladding.

Where possible, existing materials on site, such as demolished concrete / bricks can be reused in landscaping and on roof tops.

### LIFECYCLE

Durable, low maintenance materials are selected to form the building fabric. For instance the external louvres are aluminium finish which has a long durability and does not require constant maintenance over its lifecycle. The windows are an aluminium frames system which is powder coated and requires no maintenance. The AFS wall system is a textured paint finish which depending on the manufacturer can have up to a 20 year lifecycle between maintenance.

### DISPOSAL

Residents and Commercial tenants will be serviced by a centrally located garbage chute on each level which delivers waste to 1100 L bins on a linear waste compaction system on the basement level. A chute is also provided for recycling which leads directly to a 1100L bin in the basement. Tenants are required to transport all waste to the garbage chutes and recycling bins in the garbage rooms. A bulky items storage area is also provided for residents to use to avoid these items being stored at street level.

A retail and commercial waste room is also provided at the ground level. This has a compacter in it for the retail food cafe, and a general 1100L bin for the other commercial areas.

### TRANSFER

Once compaction bins under the waste chutes are full, building maintenance will move the bins to the garbage holding room on basement level one.

Recycling bins and rubbish from retail tenants will also be transferred by building maintenance staff after hours and transferred to the garbage holding room on basement level one for compaction, sorting and storage.

### COLLECTION

Commercial/cafe waste is to be collected by a private contractor via the ground level commercial waste room. Adequate turning and height clearances have been provided and are shown on the DA documentation provided as necessary. Pickup will occur on a contractual basis via John Cram Place.

For residential waste the garbage will be transferred from basement waste storage rooms to a ground level holding room by building management. From here the waste will be picked up by Penrith City Council's waste collection service once a week where the truck will park on site adjacent to the John Cram Place street entrance (see Waste management drawing DA 9002). Bins will be transferred from holding room to the truck. The truck will then leave the site in a forward fashion. The swing and access of the truck is accessed in the Traffic Report prepared by Varga Traffic Planning and Associates.

### WASTE CARETAKER

Building maintenance is to be employed to manage the garbage system of the development. Furthermore, it is also strongly suggested that a part-time caretaker be employed to manage the system in the full time caretakers absence, i.e. on weekends and Public Holidays when the waste generation is expected to peak.

The caretaker's duties would include the following:

1. Generally maintaining and cleaning the garbage rooms. (Suggested at least once per week)
2. Organising, maintaining and cleaning the general and recycled materials holding areas. Due to the nature of the waste it is recommended that in addition to cleaning, the garbage rooms be deodorised (suggested at least once per week).
3. Sorting recycled materials into appropriate receptacles.
4. Organising for both Garbage and Recycled Materials pick-ups as required.
5. Transporting appropriate waste containers between garbage rooms and collection areas to coincide with collection cycles and vice versa.

Assisting with the emptying of bins during collection.

### ORGANIC WASTE

It is suggested that all organic waste be handled and managed by the personnel responsible for maintaining communal rooftop landscaped areas.



**COMPOSTING WASTE STORAGE**

Considering the impact on amenity involved with establishing a compost farm, it is suggested that a compost farm be used on this development on the rooftop landscaped garden areas. This process will be handled and managed by the personnel responsible for maintaining landscaped areas.

**GARAGE ROOMS**

Construction of both the garbage areas and garbage rooms is to meet all requirements set out in Penrith City Council Codes, BCA, Australian Standards and WorkCover NSW Work Health and Safety requirements.

Construction of waste storage room, including its finishes, fittings and hardware, should be durable. Each garbage room should have a minimum of one (1) hose cock to allow for the connection of a hose for washing and cleaning purposes.

Sufficient signage should be installed to inform, educate and encourage users of the appropriate waste bins to use and storage methods.

**CONSTRUCTION WASTE MANAGEMENT**

A construction waste management plan will need to be prepared by the contractor engaged for the construction stage of the development detailing access and storage for on-site construction waste.

This report has been prepared by INTEGRATED DESIGN GROUP on behalf of the applicant Colin & Andrea Henry.