LOUCAS
ARCHITECTS

WASTE MANAGEMENT PLAN

221-235, 241 Homer St & 208 Wardell Rd, Earlwood

Project No
Pn_0336

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WASTE MANAGEMENT PLAN

0. INTRODUCTION

Proposed Development:

Demolition of the existing buildings and construction of a 5 storey shop top housing development with Commercial/retail space at ground floor, sixty-three (63) residential units at upper levels and 2 x levels of basement carparking, including proposed site subdivision for the purposes of a lane way.

Particular waste management guidelines and/or procedures are proposed for:

- Onsite; during the excavation and construction phases
- Ongoing; for the life of the project

1. ONSITE WASTE MANAGEMENT – DEMOLITION AND CONSTRUCTION

Completed demolition and construction forms following council's CDCP template for Waste management Plan can be found at Appendix A.

NOTE: Volumes and range of materials are under the preliminary estimation based on the existing drawings and documents available at this stage. Figures that are the rough approximation are for reference only and will be revised after the demolition work is completed.

A more detailed waste management plan will be prepared, in coordination with the builder, for the Construction Certificate. This will also include a plan to indicate designated areas for stockpile materials, general waste and recycling.

DESCRIPTIONS

The contractor awarded for the tendered works will appoint the waste contractors, recyclers, recycling outlets and the landfill site. The contractor will submit detailed information relating to the contractor's site management and the method of reuse, recycling and disposal of material before the date of commencement of work.

Excavation Material
Excavation of 2 Level Basement Carpark. Appointed waste contractor will dispose the excavated and import soil from an approved landfill site from the awarded builder.

Green Waste
There is minimal green waste.

Bricks
The concrete mortar bricks will be separated and sent to a crushing and recycling company. Some brickwork may be re-used on site at the main contractor's discretion.

Concrete
All existing concrete structures and rubble will be separated and sent to a crushing and recycling company.

Timber
Door leaves, door frames, and cabinet carcasses will be stockpiled and recycled by a timber recycler or waste contractor appointed by the main contractor. Door leaves in good condition could be resold for recycling. Wall stud framing and roof framing will be recycled for formwork or studwork where possible and the remainder transported by the waste contractor.

Plasterboard
Any wall or ceiling plasterboard will be sent to a landscape supplier or a recycling outlet for recycling.

Metal
Existing steel roofing and any metalwork demolished will be delivered to an approved metal recycler.

Asbestos
The contractor awarded for the tendered works will appoint licensed asbestos contractor/s to remove the asbestos found on site and send them to special waste management plant/s as required by statutory controls.

Others
Ceramic tiles and sanitary fittings will be sent to crushing and recycling company for recycling. Door hardware will be delivered to any recycling building supply company.

SITE MANAGEMENT

1. All machinery, equipment and materials will be loaded, unloaded and used via Wardell Rd.

2. Excavated material and waste will be placed and stored in a waste bin. Debris is to be hosed down and kept damp to prevent dust nuisance.

3. Adequate protection will be provided to the road and footpath area from building activities, no crossings by heavy equipment, plant and materials delivery, static loads from cranes, concrete pumps, and the like, to prevent any damage.

4. The contractor awarded will provide application of a construction zone, a pumping permit, standing a mobile crane and/or an application to pump water into a public road. All applications are subject to the discretion of the awarded contractor determining their specific construction process, procedures, programmes and schedules. The contractor will submit all necessary applications to Council and approval obtained before the commencement of work, once the contractor is awarded after tender.

5. Proposed areas to be used for storage of construction materials, recycled materials, excavated material and waste to be located on site.

6. Demolition, excavation, building work associated with the proposed development will be restricted to the hours of 7.00am to 5.30pm Monday to Friday inclusive, 7.00am to 1.00pm Saturday. Work is not to be carried out on Sunday or Public Holidays. Times for truck delivery of concrete and other bulky materials and spoil removal of the site will be within the period above and will be notified to neighbouring properties 24 hours prior to any major traffic/delivery activities happen.

7. Soil/excavated material is not to be transported on wheels or tracks of vehicles entering or leaving the site. At the end of each working day any dust, dirt or other sediment shall be swept off the road and contained on site and not washed down any storm water pit

2. ONGOING WASTE MANAGEMENT

2.1 RESIDENTIAL

Two garbage/recycling waste rooms have been provided for the residential units at the basement level 2. A bulky waste room has also been provided on the same basement level 2 with an area of 11sqm. There is one waste room provided for the residents of Building A with capacity for 4 x 600L bins. The second and main waste room has been provided for the use of residents of buildings B and C with capacity for 22 x 660L bins (waste and recycle) and 2 x 240L bins (green).

All on-going waste within the development will be managed by a 'building manager/caretaker' that will wheel the bins through the lift bin from the waste bins storage areas (basement 2) to the residential waste holding room on ground floor next to Wardell Road. From here, all bins will be collected by council's weekly waste services (on-street collection proposed) as a collect and return service. The building manager will then wheel the bins back to the bins storage area on basement 2. The property manager will also be responsible to present the garden waste bins to the kerbside for collection by council the evening before the designated collection day.

Waste management facilities will:

- be conveniently located to enable access for on-site movement and collection;
- relate to other loading/unloading facilities;
- have sufficient space for the quantity of waste generated and careful source separation of materials (e.g. recyclables);
- have sufficient space to comfortably contain any on-site treatment facilities (e.g. compaction equipment);
- have adequate weather protection;
- where appropriate or required be enclosed or undercover;
- be secure and lockable, where appropriate;
- be well-ventilated and drained to the sewer;
- be attractive, adding to the scene, not detracting from it; and
- be clearly signposted to ensure appropriate use.

Waste Generation

Completed council's DCP forms for residential waste generation can be found at Appendix A.

2.2 COMMERCIAL

The commercial Waste room, located on the ground floor next to Wardell Road, provides space for 12 x 660L bins for the use of the three retail tenancies (all except the supermarket). There is a 1.5m wide corridor that connects the retail tenancies with the Commercial/retail waste room on ground floor.

Garbage bins for the supermarket are located adjacent to the loading dock. The supermarket will engage private contractors and use in house collections for all waste. A compactor is located within the loading dock. The compactor is used to recycle cardboard from the store. The supermarket will collect plastic inside the store and send it back to their distribution centre for collection and recycling. The supermarket will retain all food that is not sellable, but still able to be consumed and donate this to charity (OzHarvest).A 1.5 m3 bin has been provided for other, non-recyclable waste.

Commercial waste will be collected by private contractors.

Waste Generation

Completed council's DCP forms for commercial waste generation can be found at Appendix A.

Appendix A

Waste Management Plan - Part One (Demolition Phase)

Site Address:	221 – 235, 241-247A Homer Street & 208 Wardell Road

Section 1: Asbestos Declaration

TBA

Does Demolition Contain Asbestos? Yes ☐ No ☐

All asbestos waste is to be managed in accordance with provisions of the NSW *Work Health and Safety Regulation* 2011

Is the asbestos friable ☐ Yes (go to section 2) ☐ No

Is the asbestos non friable and over 10m^2 ☐ Yes (go to section 2) ☐ No

Is the asbestos non-friable and under 10m^2 ☐ Yes (go to section 3) ☐ No

Section 2: Asbestos Removal Details

WorkCover Licence No. and Class:	TBA
Demolition Contractor Details:	
Licensed Landfill:	

Section 3: General Demolition Waste

		How will you manage this waste?		
Type of Material	**Estimated Amount (m³)**	**Re-use On-site**	**Recycle Offsite**	**Landfill**
Bricks	20	☐	☑	☐
Concrete	250	☐	☐	☐
Tiles		☐	☐	☐
Timber (clean)	50	☐	☑	☐
Timber (treated)		☐	☐	☐
Plasterboard	10	☐	☑	☐
Metals	6	☐	☑	☐
Green Waste	10	☐	☑	☐
Other		☐	☐	☐

Principal Off-Site Recycler	**Principal Licensed Landfill Site**
TBA	T B A

Waste Management Plan - Part Two (Construction Phase)

Site Address: 221 – 235, 241-247A Homer Street & 208 Wardell Road	
Section 1: Estimated Amount of Excavation Material (m^3): 21,000 m3	☐ Re-use on-site ☐ Re-use off site (go to section 2) ☑ Landfill Disposal (go to section 3)
Section 2: Address if re-used off site:	
Section 3: Name and Address of licensed landfill: TBA	
Section 4: Estimated Construction Material Waste	

Type of Material:	**Estimated Amount (m^3):**	**How will you manage this waste?**		
		Re-use on-site	**Recycle Offsite**	**Landfill**
Bricks	2	☐	☑	☐
Concrete	0.5	☐	☐	☑
Tiles		☐	☐	☐
Timber (clean) Timber (treated)	1	☐ ☐	☑ ☐	☐ ☐
Plasterboard	1.5	☐	☐	☑
Green Waste	0.5	☐	☑	☐
Other		☐	☐	☐

Off-Site Recycling Facilities	**Licensed Landfill Site/s**
----------T B A----------	----------T B A----------
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Waste Management Plan - Part Three (Ongoing Use)

Site Address:	221 – 235, 241-247A Homer Street & 208 Wardell Road
☐ Residential Flat Building ☐ Boarding House ☐ Multi Dwelling Houses ☐ Other _____ *Please complete Sections 1-3*	☑ Shop Top Housing ☐ Non Residential Development *Please complete Sections 1-4*

Section 1: Generation of Waste

RESIDENTIAL - GREEN WASTE - 2X240L BINS

RESIDENTIAL Number of dwellings	Rubbish generation/week (120L/dwelling)	Allocated rubbish bin size (140L or 240L)	TOTAL number of rubbish bins allocated	Recycling generation/week (80L/dwelling)	Allocated recycling bin size (240L)	TOTAL number of recycling bins allocated
63	7,560	660L	7 Collected (Twice / week)	5,040	660L	12 Collected (Once / week)
COMMERCIAL *(if applicable)* Premises Type	Rubbish generation/week *(Based on type of premises and m², see Appendix 3)*	Size and number of rubbish bins	Collection frequency per week	Recycling generation/week *(Based on type of premises and m², see Appendix 3)*	Size and number of recycling bins	Collection frequency per week
COMMERCIAL (108 m2)	76L /week	(11,844L)	2	76L /week	(3,294L)	2
RESTAURANT (229 m2)	10,690 L /week	9 x 660L bins		2,140L /week	3 x 660L bins	
RETAIL (NON-FOOD) (308 m2)	1,078L /week			1,078L/week		
SUPERMARKET (1,108 m2)	51,190L / week	2 x 660L	2/3	18,615L /week	compactor provided	2/3

Section 2: Storage of Waste Bins

1.	Is there sufficient space allocated within each dwelling for one day's waste and recycling?	Yes ☑ No ☐
2.	Is there a waste bin storage room/area provided?	Yes ☑ No ☐
	2a - What is the total area of bin storage provided?	Retail - 43 m2 Residential - 62 m2
	2b - Is there sufficient space provided for the allocated rubbish and recycling bins plus handling? *(see clause 6.9.4.1 and 6.9.4.2 for requirements)*	Yes ☑ No ☐
	2c - Has a minimum 4m² bulky waste storage area been allocated?	Yes ☑ No ☐
	2d - Have you submitted a detailed plan of the waste bin storage room/area, together with the nominated collection point and access pathway marked?	Yes ☐ No ☐

3.	Are you using a compactor in the bin storage room? If *NO*, proceed to question 4	Yes ☐ No ☑
	3a – Please detail the type of system (carousel, lineal, optic sensors, number of bins, automatic bin exchange, size etc.)	

	3b – What is the proposed compactor diameter?	
	3c – What is the ceiling height of the waste bin storage room room?	
	3d – What is the proposed compaction ratio? (Must NOT exceed 2:1)	
4.	Is there a garbage chute system installed? If *NO*, proceed to Section 3	Yes ☐ No ☑
	4a – Is there a service room provided on each storey?	Yes ☐ No ☐
	4b – Is there sufficient space allocated for 2x 240L recycling bins in the service room(s)?	Yes ☐ No ☐
	4c – How many storeys will the chute service?	

Section 3: Collection of Waste

1.	Is there a caretaker on-site responsible for managing waste?	Yes ☑ No ☐
	1a - Designate which body is responsible for cleaning of waste storage areas	STRATA
	1b - Designate which body is responsible for transfer of waste and recycling bins to and from the collection point (if applicable)	STRATA
2.	Are you proposing to use a waste bin presentation area for collection of waste?	Yes ☐ No ☑
3.	What is the maximum distance from the waste bin storage room/area to the street kerb?	3.8 m
4.	Are you proposing for Council's collection contractor to enter the site to collect the bins? (see clause 6.9.4.3)	Yes ☐ No ☑

Section 4: Shop Top Housing and Non-Residential Development

1.	Has a separate waste bin storage room/area been provided for commercial/retail tenancies?	Yes ☑ No ☐
	1a - Does the waste bin storage room/area have sufficient space allocated for storage of estimated bins? (as per Section 1)	Yes ☑ No ☐
	1b - Is the waste bin storage room/area size and layout flexible to allow for future changes in use?	Yes ☑ No ☐
	1c - Have you provided the necessary requirements for storage and collection of specific wastes types (i.e food, medical, hazardous etc.)	Yes ☑ No ☐

2.	Has sufficient space close to retail/commercial premises been allocated for storage of re-usable commercial items such as crates, pallets, kegs etc?	Yes ☑ No ☐

WASTE MANAGEMENT PLAN

Site address:	ALDI Store Earlwood 221-235 Homer Street & 208 Wardell Road, Earlwood
Applicants Name & Address:	ALDI Stores 10 Burando Road, Prestons NSW 2170
Telephone:	(02) 8783 3000
Facsimile:	(02) 8783 3299
Buildings and other structures currently on the site:	New Mixed Development
Brief Description of Proposal:	Proposed new ALDI tenancy within a new mixed development site.

The details provided within this document are the intentions for managing waste relating to this Project.

Introduction:

During construction stages, the Contractor shall be encouraged to recycle as many materials as practicable.

During the operation of the ALDI store staff will be trained in responsibilities related to waste management and minimisation and informed about the waste management plan, as approved by Council. Staff members will be provided with a list of recyclable and non-recyclable materials. They will be made aware of the location of bins, which type of waste should be placed in specific bins and when waste collection will occur.

DEMOLITION STAGE

MATERIALS ON SITE		DESTINATION		
		REUSE & RECYCLING		DISPOSAL
TYPE OF MATERIAL	ESTIMATED VOLUME (M^3/Wt. (t))	ON-SITE *specify proposed reuse or on-site recycling methods	OFF-SITE * specify contractor and recycling outlet	*specify contractor and landfill site
Excavation Material (1600kg/m^3)	Nil			
Green Waste (500kg/m^3)	Nil			
Bricks / Blocks (1900kg/m^3)	Nil			
Concrete (2400kg/m^3)	Nil			
Timber (700kg/m^3)	Nil			
Plasterboard (800kg/m^3)	Nil			
Metals (2700kg/m^3)	Nil			
Glass Shopfront (2600kg/m^3)	Nil			
Tiles (2500kg/m^3)	Nil			

CONSTRUCTION STAGE

MATERIALS ON SITE		DESTINATION		
		REUSE & RECYCLING		DISPOSAL
TYPE OF MATERIAL	ESTIMATED VOLUME (M^3/Wt. (t))	ON-SITE	OFF SITE	
		*specify proposed reuse or on-site recycling methods	* specify contractor and recycling outlet	*specify contractor and landfill site
Excavation Material (1600kg/m^3)	Nil			
Green Waste (500kg/m^3)	Nil			
Blocks (1900kg/m^3)	TBA		Recycled where possible Contractor to advise	Contractor to advise.
Concrete (2400kg/m^3)	TBA		Recycled where possible Contractor to advise	Contractor to advise.
Timber (Doors) (700kg/m^3)	TBA	Reuse on site where possible.	Recycled where possible Contractor to advise	Contractor to advise.
Plasterboard (Wall lining, Ceiling) (800kg/m^3)	TBA	Reuse on site where possible.	Recycled where possible Contractor to advise	Contractor to advise.
Metals (Trolley Bay, Battery Recharging Station, Door Frames) (2700kg/m^3)	TBA		Recycled where possible Contractor to advise	Contractor to advise.
Glass (2600kg/m^3)	Nil			
Tiles (2500kg/m^3)	Nil			

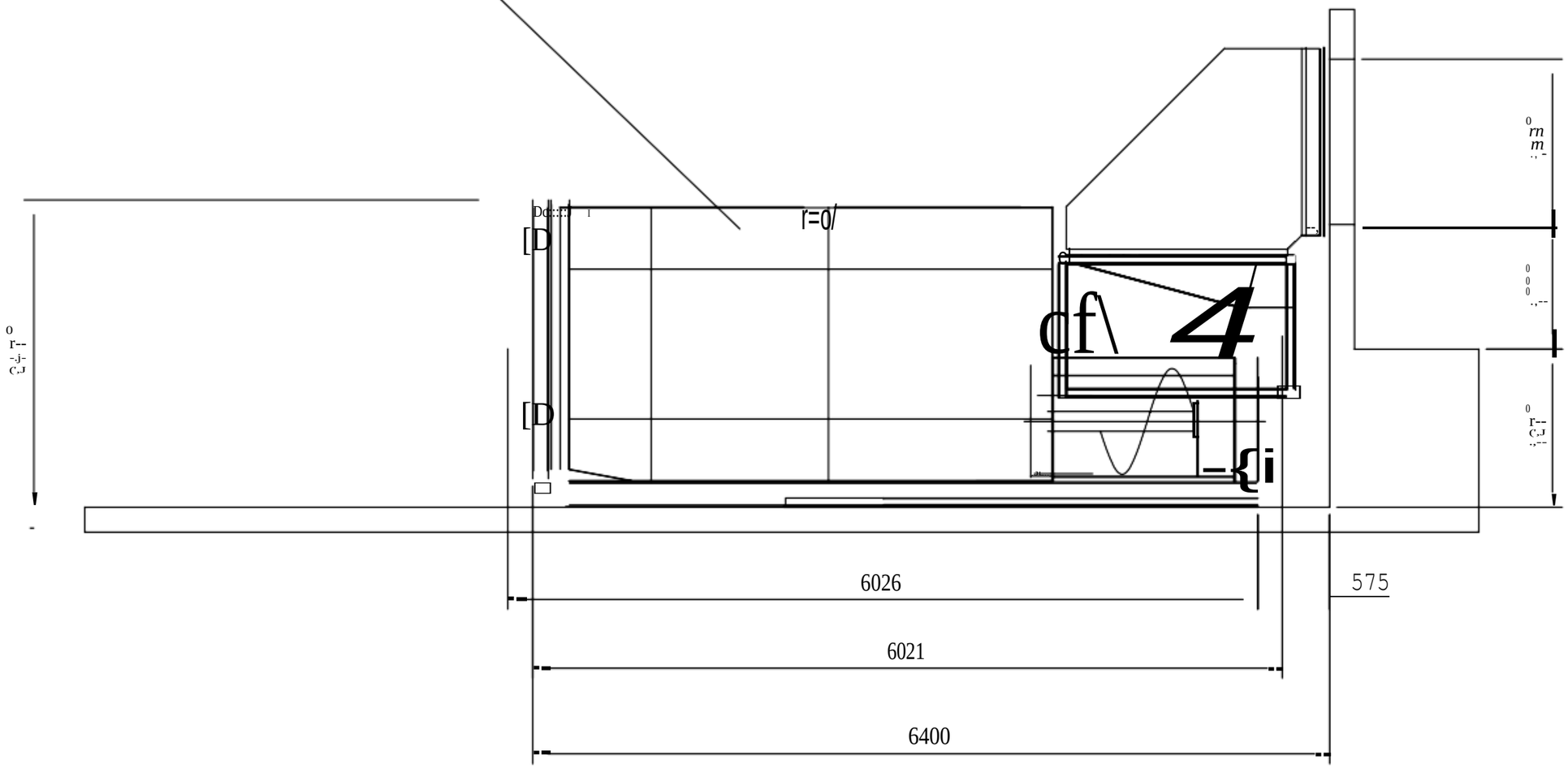
USE AND ONGOING MANAGEMENT

ISSUE	QUANTITIES	PROPOSED ARRANGEMENTS
Waste Generation	**ALDI Food Store** Estimated garbage generated per week: 6m³ per week. Estimated additional garbage generated per week - 0.25m³ per week Estimated recycling materials generated per week: Paper/Cardboard: 10m³ Existing – Paper/Cardboard: 10m³ Additional – Paper/Cardboard: 4m³ Proposed Number and Capacity of Waste Storage Facilities: Garbage Bins: 1.5m³ x 1 = 1500 litres Compactor for Cardboard/Paper: 19m³	 Garbage bins are located adjacent to the loading dock area in a secure store. ALDI engage private contractors and use in house collections for all waste. Additional pick-ups will be arranged if required. A compactor is located within the loading dock, accessible from inside the loading dock. The compactor reduces the cardboard and paper waste volumes. Recyclable materials including plastic and pallets will be removed by ALDI delivery truck drivers daily and returned to the ALDI main distribution centre for recycling. ALDI engage private contractors and use in house collections for all waste. Waste is collected 2/3 times a week depending on requirements.
On-site Access		The location of bin stores and compactor allows ease of pick-up.
Design	Mitigation of noise impacts Aesthetic Considerations Light and Ventilation Wash down facilities	Compactor will only operate during the daytime. Garbage/recycle collections occur during normal business/delivery hours. The location of the bin and compactor is within the loading dock and generally not visible from the street. Waste management areas will be suitably lit and ventilated. The bin enclosure will have suitable wash down facilities and will form part of the development maintenance plan.

Appendix B

ISSUE	DESCRIPTION	DATE

AT90.19m - 19m cubic metre
Transportable AUGER Compactor



BUCHER municipal

19 Astoria Street, Marsden Park, NSW 2765

AS1100 - 1992

REMOVE ALL BURRS, SHARP EDGES
DO NOT SCALE - IF IN DOUBT, ASK
ALL DIMENSIONS IN MILLIMETRES

TOLERANCES UNLESS OTHERWISE SPECIFIED:

UP TO 10	t 0.25
OVER 10 UP TO 100	± 0.5
OVER 100	± 1
ALL ANGLES	± 1"

PROJECT NO:

CUSTOMER:

DESIGNED:

DRAWN: PG

CHECKED:

DATE: 25/11/21

SCALE: 1:40

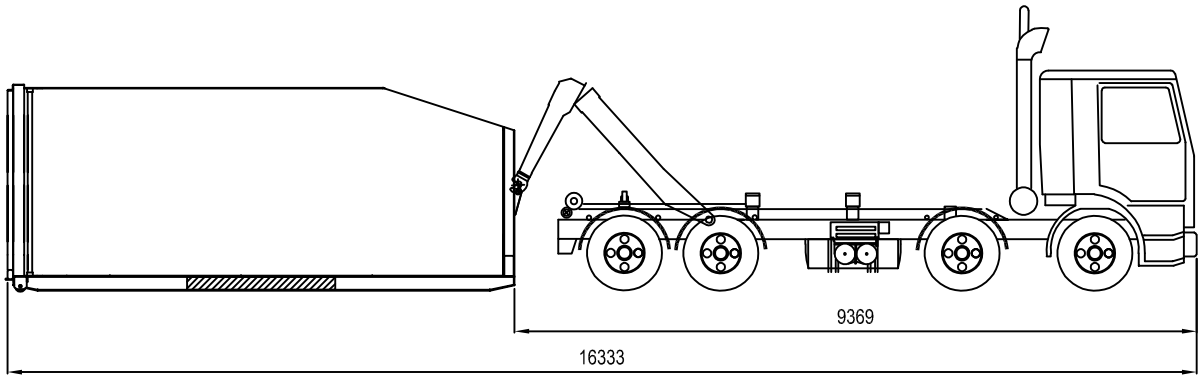
DRG. NO:

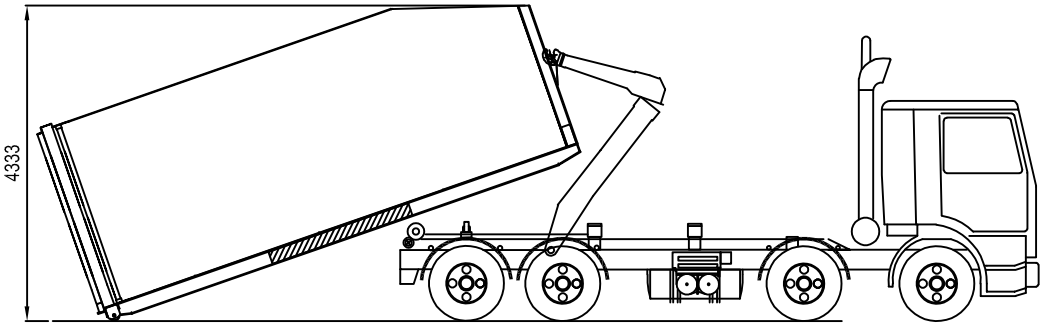
TITLE: Aldi Earlwood

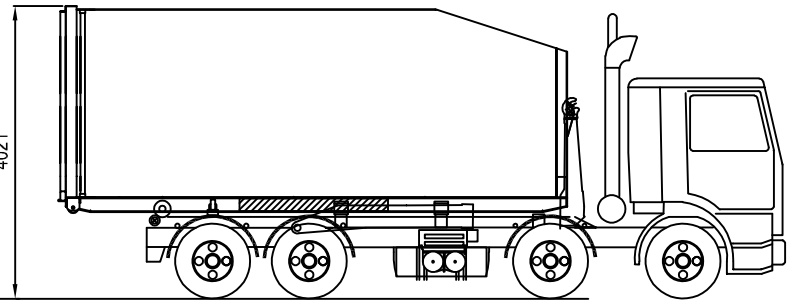
REV. 01

SHEET OF 1

A3







BUCHER municipal

35 Walker Street, South Windsor, NSW 2756

AS1100 - 1992

PROJECT NO:

CUSTOMER:

DESIGNED:

DRAWN:

CHECKED:

DATE:

TITLE:

SALES DATASHEET
38 m3 PACKER BIN
GENERIC TRUCK BODY

SCALE: NTS

DRG. NO:

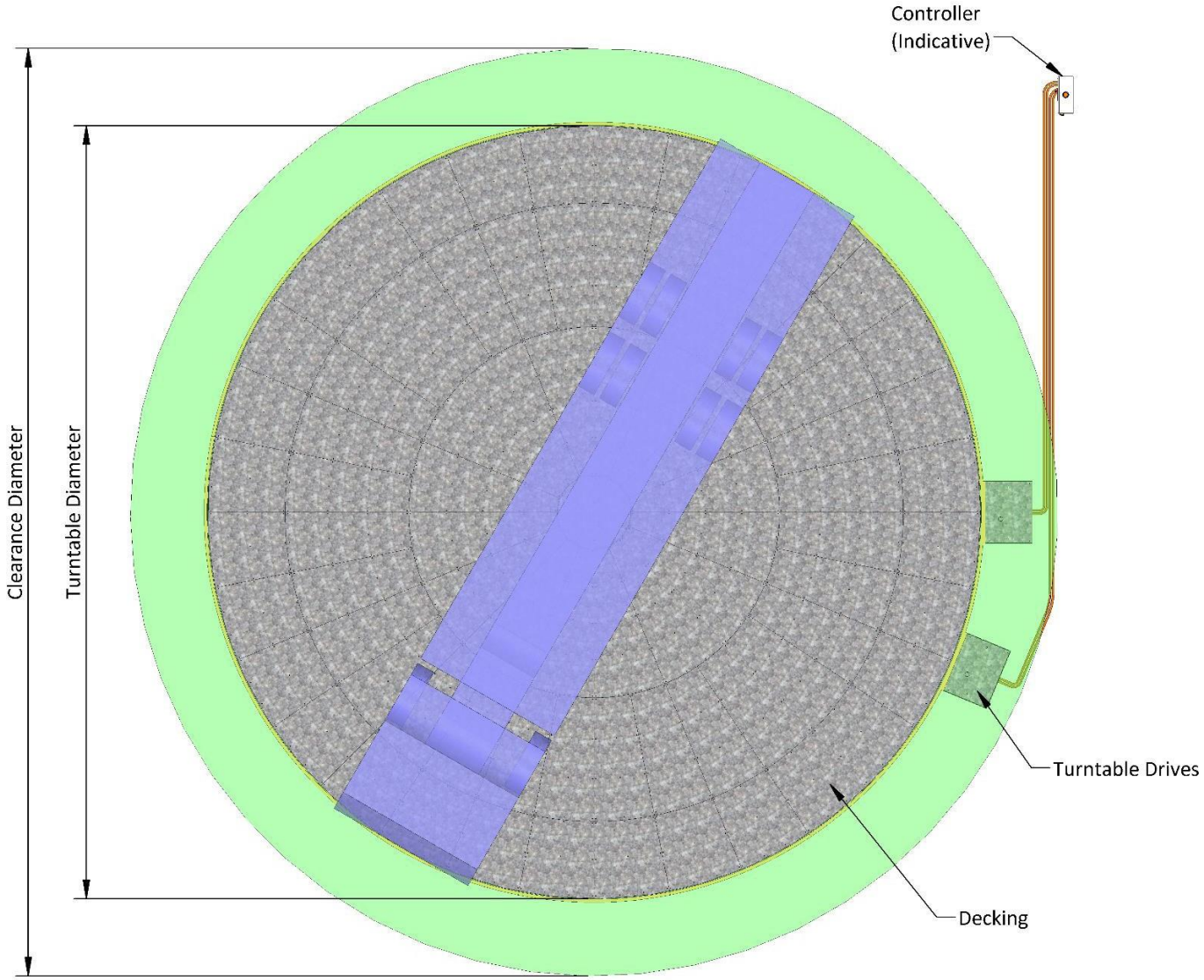
REV.

SHEET. 1 OF 1

A3

Appendix C

HTT12.5 to HTT15 - 250 Turntable Specification

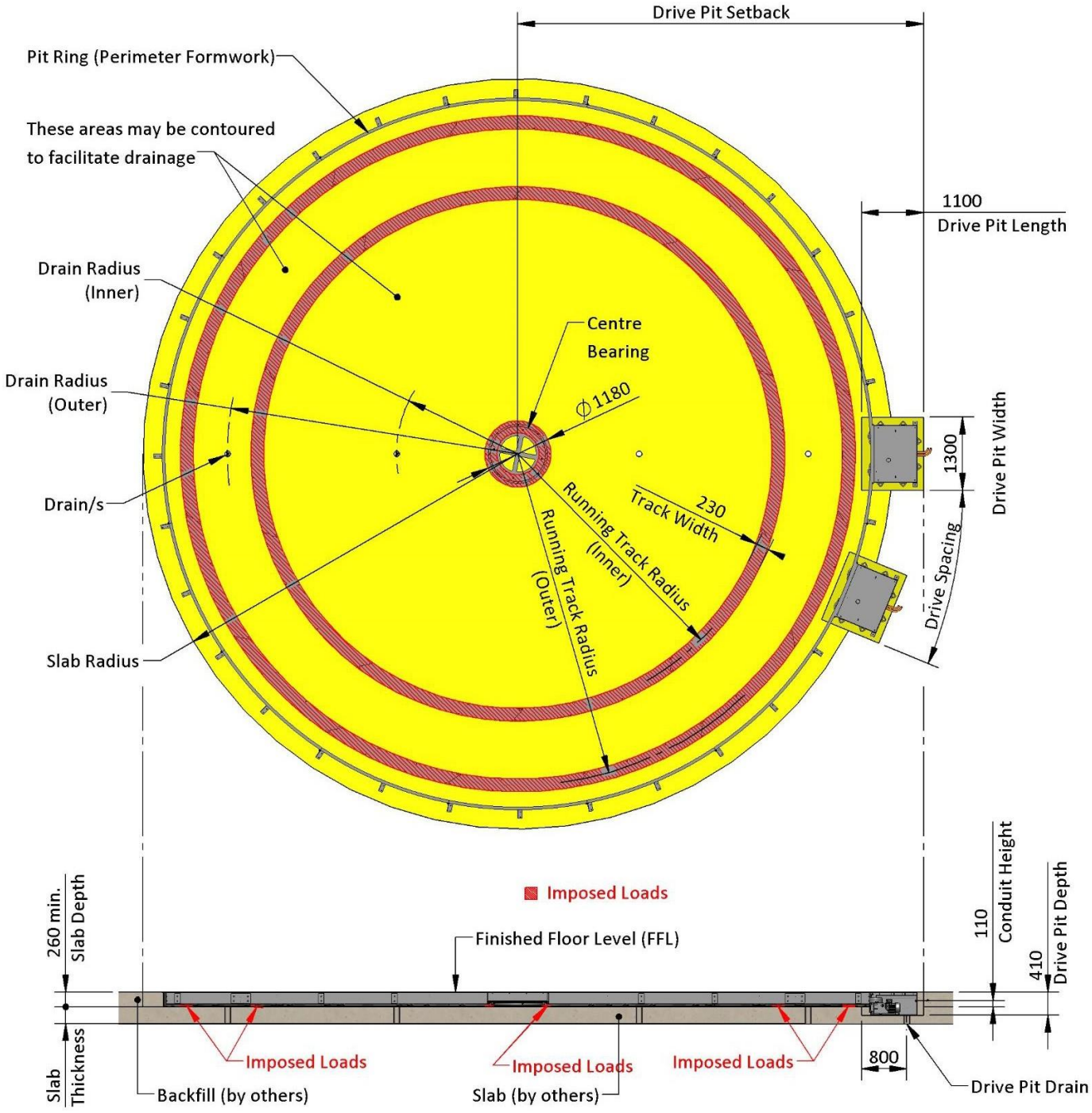


**See Specification table for dimensions*

Turntable Overview

Application:	Loading Dock, Garbage collection, suspended slabs
Platform Finish:	Hot dipped galvanised chequer plate – 5mm thick
Inspection Hatches:	Centre bearing and drive. Decking removable for access to Running Track/Drain
Corrosion Protection:	Hot dipped galvanised, zinc coating
Drive Mechanism:	Friction wheels driven powered by motor drives
Safety system: *(Optional extra)*	For projects where there is a chance of collision during rotation with people, building or other vehicles/objects ATC can design and supply a system to reduce risk.
Vehicle positioning system: *(Optional extra)*	ATC can design and supply a vehicle guidance and positional parking system to suit specific projects requirements. This system assists the driver in parking in the correct area to reduce chance of collision with people, building or other vehicles/objects.
Redundant drive: *(Optional extra)*	For projects were the turntable is considered critical infrastructure a redundant drive can be included. In cases of motor failure, the affected drive can be disengaged allowing the turntable to continue operation without loss of productivity.

Turntable Slab



**See Specification table for dimensions*

Slab Overview

1. The turntable slab provides the surface which the turntable is secured to via mechanical fastenings. Nominal 80mm embedment.
2. The slab size is larger than the turntable to accommodate the perimeter formwork and fixtures.
3. The overall size and shape of the slab can be made to suit the installation site provided it can accommodate the minimum required slab sizes as indicated below.
4. Once the turntable has been installed, a concrete backfill is poured up to the Pit Ring (perimeter formwork) to encase the turntable into the finished floor.
5. The imposed loads on the slab are concentrated through the Centre Bearing area and the Running tracks.

AUSTRALIAN TURNTABLES

Turntable Specifications

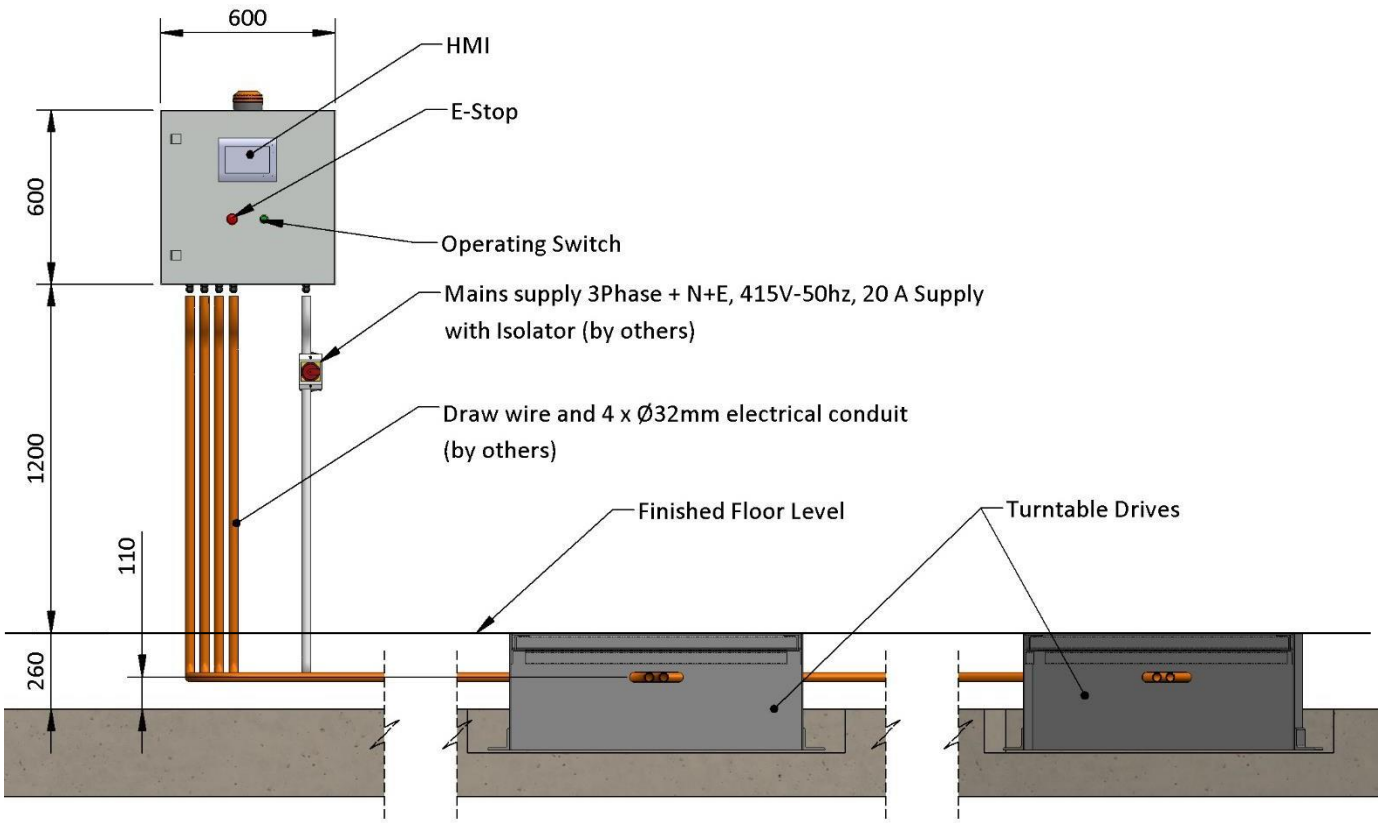
Model	HTT12.5-250	HTT15-250		
Turntable Diameter (mm)	12500	15000		
Vehicle length accommodated (1)	12500	15000		
Clearance Diameter (mm) (2)	14500	17000		
Slab Depth (mm) (3)	260 min.			
Slab Radius (mm)	6650	7900		
Drain Radius - Inner (mm) (4)	2500	2500		
Drain Radius - Outer (mm) (4)	5300	6000		
Drive Pit Setback (mm)	7200	8450		
Drive Pit Width (mm)	1300			
Drive Pit Length (mm)	1100			
Drive Pit Depth (mm)	400			
Drive Spacing (increments of X°)	22.5	20		
Running Track Radius - Inner (mm)	4625	4625		
Running Track Radius - Outer (mm)	5875	7125		
Operating Capacity (kg)	45000			
Operating Speed (Nominal RPM)	0.4	0.3		
Distributed Load Capacity (kPa) (5)	15			
Imposed Load - Centre (kN) (6)	423	408		
Imposed Load – Inner Running Track (kN/m)(6)	28	25		
Imposed Load – Outer Running Track (kN/m)(6)	12	25		
Lateral Force on Centre Bearing (7)	174	174		
Minimum Concrete strength (MPa) (8)	25			
Slab Thickness (8)	Subject to client engineering			

Notes

1. *Suggested vehicle length. ATC recommend that vehicles fit entirely on the turntable platform. Longer vehicles accommodated subject to wheelbase and installation location.*
2. *Suggested clearance diameter based on the nominated vehicle positioned correctly on the turntable. This clearance zone can be reduced when an optional scanner safety system is implemented*
3. *Slab surface to be steel trowel finished.*
4. *Recommended drainage location/s shown. Actual drainage requirements specified by the client engineer which may include grease traps or sump pits.*
5. *Structural load capacity generally in accordance with AS/NZS 1170. Allows for full use of turntable area as a general trafficable area.*
6. *Imposed loads stated are, un-factored load based on the Distributed Load Capacity plus the turntable dead load.*
7. *Lateral Force applied based on a vehicle of maximum turntable operating capacity coming to a complete stop on the turntable from a speed of 10km/h over a distance of 1m.*
8. *Slab thickness and strength is to be specified by the client engineer.*

AUSTRALIAN TURNTABLES

Electrical & Control



Feature	
Direction of Rotation	Bi-directional
Start-up	Soft start/stop, ramp up/ramp down
Operation	'Hold to Run' switch at control box location
Safety Inclusions	Emergency stop, isolation switch at control box location
Motor Power (kW)	1.5 x 4
RCD Type Required (by customer)	Compatible with inverters
Power Supply Required	AC – 415V 50Hz 32Amps
Minimum Wiring Design Standard	AS/NZ 3000
Max. power consumption during operation	20 amps
HMI screen	• Option for programmable Safe Operation Procedure or Safe Work Practices (SOP/SWP) • Advanced trouble shooting and fault finding • Simple integration with guidance and area scanner options
Enclosure	Lockable, IP66 rated
Operator safety (recommendations)	• Controller location should be chosen to ensure that the operator is in a safe position when operating the turntable. This includes doorways and other trafficable areas. • Consider elemental protection for operator in outdoor installations