Waste Management Plan

Proposed Development:

Assistance Dogs Australia National Training Facility

Location:

8 Austin Place
Lot 23 DP 239091
ORCHARD HILLS NSW 2748

Prepared for:

Assistance Dogs Australia

Report No:

2015.149.01

July 2017
Revised December 2017

HMC environmental consulting pty ltd

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RE: Proposed Assistance Dogs Training Facility - 8 Austin Place, Orchard Hills NSW 2748

HMC Environmental Consulting Pty Ltd is pleased to present our Waste Management Plan for the proposed creative arts precinct project. We trust this report meets with your requirements. If you require further information please contact HMC Environmental Consulting directly on the numbers provided.

Yours sincerely

Mark Tunks
(B.App.Sc.Env.Hlth)

Document Control Summary			
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KEY CONTACTS

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Assistance Dogs Australia	Project Manager		TBA
HMC Environmental Consulting	Waste Management On-site Sewage Management	Helen Tunks	0438 245170
Planit Consulting	Town Planner	Lance Newley	02 6674 5001

ENVIRONMENTAL EMERGENCY RESPONSE CONTACTS

Organisation	In the development of	Number
Ambulance	Injury/Illness	000 land line 112 mobile
Fire Brigade – Emergencies	Fire, Chemical/hazardous waste spill	000
Environment Protection Authority (EPA)	Pollution Reporting	TBA
Penrith City Council	Pollution Control Waste Services Section Rangers Section	TBA
On-site Sewage Management Service Agent	Sewage and wastewater treatment system malfunction	TBA

Abbreviations

C5	Section C5 *Penrith Development Control Plan* 2014
WMP	Waste Management Plan
HMC	HMC Environmental Consulting Pty Ltd
OEH	NSW Office of Environment & Heritage
PCC	Penrith City Council
Site	8 Austin Place, Lot 23 DP 239091, ORCHARD HILLS NSW 2748
ACM	Asbestos containing material
MGB	Mobile Garbage Bin
Proponent	Assistance Dogs Australia
SMF	Synthetic Mineral Fibres
Guidelines:	Section A15 Tweed Development Control Plan 2008
DECC, 2008	NSW EPA *Better Practice Guidelines For Waste Management and Recycling in Commercial and industrial Facilities* 2012

1 INTRODUCTION

HMC Environmental Consulting (HMC) has been engaged by Assistance Dogs Australia (the client) to provide a Waste Management Plan (WMP) for the proposed Assistance Dogs Australia National Training Facility at Lot 23 DP 239091, No. 8 Austin Place, Orchard Hills, NSW 2748.

The project would include the demolition of one existing building, and internal alterations to the remaining existing buildings, and construction of new buildings.

The WMP is to be used to assist in the management of waste storage and collection for the purpose of maximising reuse/recycling, improving the services and safety of the contractors, improving the amenity of the area, and to reduce costs of waste management.

1.1 Project Description

Table 1 Project Summary

Proposed Development	Proposed Assistance Dogs Australia National Training Facility The location of the site, its topographic features and relationship with adjoining development is shown on the map and aerial photograph in **Appendices 1 & 2.**
Address of development	8 Austin Place Lot 23 DP 239091 ORCHARD HILLS NSW 2748
Client	Assistance Dogs Australia
Local Government Authority	Penrith City Council
Property Land Area	Development site of approximately 0.8 Ha within larger lot.
Existing buildings and other structures currently on the site	Commercial buildings – currently vacant. Former accommodation and facilities for children with an intellectual disability.
Planning Approval	Development Application for a Material Change of Use subject to impact assessment
Local Authority Waste Collection Service	Penrith City Council - Visy (Recycled Waste), Sita (General Waste)
This development achieves the waste objectives set out in C5 Penrith DCP 2014. The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as PCC, EPA or WorkCover NSW.	
Name	Helen Tunks HMC Environmental Consulting
Signature	
Date	14.07.2017 (revised with updated plan 15th December 2017)

1.2 Aim

The principal aim of this Waste Management Plan (WMP) is to maximise resource recovery and minimise residual waste from demolition and construction activities and the operation of the Assistance Dogs Australia National Training Facility. The WMP aims to facilitate effective ongoing waste management practices consistent with the principles of Ecologically Sustainable Development (ESD).

1.3 Objectives

1. To maximise resource recovery and minimise residual waste
2. To maximise reuse and recycling of materials
3. To minimise waste generation
4. To ensure appropriate storage and collection of waste
5. To minimise the environmental impacts associated with waste management
6. To avoid illegal dumping
7. To promote improved project management.

2 STATUTES AND POLICY

2.1 Relevant Legislation & Guidelines

Table 2 Environmental Legislation and Policy Specific to Waste Management

Legislation	Details	Approvals/Permits Required
Waste Avoidance and Resource Recovery Act 2001	Repeals the Waste Minimisation and Management Act and replaces a target of 60% reduction in waste to landfill with a process for the preparation of waste strategies which identify more specific targets and objectives for waste reduction.	Compliance must be achieved in relation to waste management during construction. Permits may be required for offsite disposal of hazardous or contaminated material.
Contaminated Land Management Act 1997	Provides for the investigation and remediation of contaminated land.	Specific approvals are not required however, construction works must comply.
Environmentally Hazardous Chemicals Act 1985	Provides for the control of the effect on the environment of chemicals and chemical waste. Scheduled chemicals would not be used in the proposed development.	
Protection of the Environment Operations Act 1997	This Act is the primary NSW environment protection legislation that covers air, noise, water, land and waste management. It provides a framework to regulate and enforce pollution control in NSW. The Act identifies mechanisms for preventing environmental degradation including, pollution prevention, cleaner production, reduction in discharge levels likely to cause harm to the environment, recycling and progressive environmental improvement. The proposed development would adhere to the requirements of this legislation.	
Protection of the Environment Operations (Waste) Regulation 2014	The Waste Regulation 2014 provides for contributions to be paid by occupiers of scheduled waste facilities for each tonne of waste received at the facility or generated in a particular area; exempts certain occupiers or types of waste from these contributions; and allows deductions to be claimed in relation to certain types of waste.	

	It sets out provisions covering: • record-keeping requirements, measurement of waste and monitoring for waste facilities • tracking of certain waste • reporting • transportation of waste • transportation and management of asbestos waste • recycling of consumer packaging • classification of waste containing immobilised contaminants • miscellaneous topics.
Section C5 of the Penrith Development Control Plan 2014	Identifies requirement for Waste Management Plan and the information to be provided within the WMP regarding waste storage and collection facilities and controls. Appendix B within Section A15 describes waste generation rates. Appendix G within Section A15 provides requirements for the location, design and construction of Commercial/Industrial Waste and Recycling Storage areas. This WMP has been prepared to meet the objectives of this DCP.
DECC Better Practice Guide for Waste Management in Multi-Unit Dwellings (DECC, 2008)	Identifies installation and maintenance practices for services and infrastructure for waste handling and collection systems. The systems are aiming to achieve the best possible waste minimisation and resource recovery outcome. The waste management systems identified include effective, efficient and safe systems for both their ease of use by residents and their ability to be serviced by collection crews. This guide would be applicable for the proposed occupancy of the accommodation facilities.
Construction and Demolition Waste Guide – Recycling and Reuse Across the Supply Chain Department of Sustainability, Environment, Water Population and Communities 2011	The aim of this guide is to help develop effective markets for materials diverted or derived from the construction and demolition waste stream.

3 HAZARDOUS WASTE INSPECTION AND REMOVAL – PRE-DEMOLITION STAGE

The proposed demolition would include a brick veneer structure with a tiled roof, and partial demolition of remaining buildings. Due to the age of the buildings, internal and external linings are likely to include asbestos containing material and, if present, would require removal by a Safework NSW licensed contractor.

The initial inspection of the structures subject to demolition is to be carried out by a suitably qualified Occupational Hygienist, Safework NSW licenced contractor, or similar to assess hazardous materials including asbestos containing material, lead flashing and paint, synthetic mineral fibres, and refrigerants. Demolition contractors have Safework NSW licensed personnel trained for the identification and removal of hazardous waste in demolition projects.

It is expected that demolition would occur over a short period of time (1-2 weeks) to allow subsequent installation of erosion and sediment control prior to site stripping and earthworks for the proposed development.

The inspection of the structure, and the subsequent removal and management of hazardous material, is to occur prior to general demolition and is to be in accordance with Safework NSW requirements, as detailed in Table 3 below.

Table 3 Recommended Management of Hazardous Materials

Type of Waste	**Disposal at approved landfill facility** **Measures to include but not limited to:**
Hazardous Material: **Asbestos** containing material (ACM) including fibro sheeting & vinyl tiles	• Identified or suspected (ACM) is to be removed, prepared & disposed of by licensed asbestos handing contractor approved by Safework NSW. Asbestos material may be disposed at the **Genesis XERO Waste Landfill & Recycling, Honeycomb Drive, Eastern Creek**, or other approved facility. • A minimum of 24 hours notice should be given on **02 9832 3333**, prior to the disposal of asbestos to allow staff to manage the disposal of the asbestos at the facility
Hazardous Material: **Lead** including lead flashing	• Use personal respirators according to AS/NZS 1715 and as per Synthetic Mineral Fibre removal in this table. • Structures covered with lead-based paint should be removed intact, as far as possible. • The safe work methods used in removal or demolition will determine how elaborate the containment system should be. • Avoid power tools and any actions which create dust. However, if power tools need to be used, a higher level of containment must be used as opposed to when manual methods, such as scraping is used. • All waste and debris collection and disposal procedures must be clearly stated in the Safe Work Methods Statement. • Disposable suits and any vacuum bags/wet cloths to be appropriately bagged and disposed of as Hazardous Waste.
Hazardous Material: **Mercury** i.e. fluorescent lights	• Remove fluorescent lights in tact prior to mechanical demolition. • Any removed lights to be appropriately bagged and disposed of as general waste in domestic quantities only. • Personal Protective Equipment to be worn to minimise dust inhalation and eye/skin irritation

	• More information, including how and where fluorescent lights can be recycled, can be found at http://www.fluorocycle.org.au/ or http://www.environment.gov.au/settlements/ waste/lamp-mercury.html. FluoroCycle is a voluntary program established by the Commonwealth Government and the Australian Lighting Council to help reduce the amount of fluorescent lights going to landfill. • SUEZ provide a national fluorescent light collection and recycling service to dispose of used fluorescent tubes, HID and CFL light globes.
Hazardous Material: **Synthetic Mineral Fibre** (SMF) e.g. fibrewool insulation	• Filter mask, goggles, gloves and disposable coveralls. • Dust control measure such as use of plastic screen &/or exhaust fan to be used if significant contamination present. • Disposable suits and any removed insulation to be appropriately bagged and disposed of as general waste.
Hazardous Material: Refrigerants e.g. CFCs HFCs	• All refrigerants should be recovered and either recycled, reclaimed or returned to supplier, prior to disposal of unit.

4 WASTE GENERATION

4.1 Demolition Stage

Demolition would be required for the redevelopment of the National Training Facility as shown on the existing site plan (Dwg No DA02, Project No. A013, 08/12/2017)

- Buildings A, B, D – partial demolition within the existing building footprint
- Building C – complete demolition and removal.

The buildings are generally brick veneer construction with tiled roof.

Concrete reprocessing involves the use of relatively uncomplicated and well-established crushing techniques. Where high landfill fees exist (including levies), there is a strong incentive to avoid weight-based disposal charges by recovering the heavy components of the construction and demolition waste stream.

The following estimated waste volumes are based on the information booklet, "House deconstruction information booklet" by NSW Department of Environment, Climate Change & Water (DECCW), 2010.

Table 4 Demolition Stage – Waste Generation/Recycling Potential

Material Description	Volume/Area [(1)]	Method of Recycling / Reuse
Concrete, bricks, footings	120 tonne	Eastern Creek Resource Recovery Park or other approved facility.
Timber	10 tonne	
Roof tiles	12 tonne	
Metal	10% of total	
Plasterboard, gyprock, cladding off-cuts	2.5 tonne	
Fittings	1.5 tonne	
Other	5% of total	Landfill

4.2 Construction Stage

Waste generating activities during the construction stage would comprise:

- Removal of existing roads, underground services, concrete and soil.
- Construction of dog boarding and training facilities including building fitout, carparking, and landscaping.

The following typical waste generation figures have been provided based on similar construction sites.

Table 5 Construction Stage – Waste Generation/Recycling Potential

Material Description	Volume/Area [(1)]	Method of Recycling / Reuse
Excavated soil	Clean fill (Excavated Natural Material) 70m^3	Eastern Creek Resource Recovery Park or other approved facility.
Concrete	150m^2 (15m^3)	
Timber	25%	
Metal	10%	
Cardboard	15%	
Gyprock & external cladding off-cuts	5%	
Plastic	10%	Landfill
Other	5%	Landfill

Note Discussions with Suez indicate that a minimum 80% resource recovery is provided for construction and demolition waste.

4.3 Operational Stage

Waste generating activities during operation would comprise:

- Accommodation, catering and training for staff, students and visitors.
- Accommodation, care and exercise for dogs
- Office and administration operations
- Function catering

The waste generated from the residence, kennels, accommodation and function buildings would consist of predominantly organic food waste and general packaging (paper/cardboard/plastic).

For the purposes of the proposed development, the residential component (Building F) will be sorted into organics and compostables for composting on site, and general waste and co-mingled recyclables to suit the 2-bin road side collection system.

The commercial waste stream will be sorted into organics and compostables for composting on site (include dog manure and excess dog food), and general waste and co-mingled recyclables.

In the absence of project specific waste generation volumes, the estimated volumes of generated waste are based on Table 16 in the EPA document, "*Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities"* (EPA, 2012). The volumes have been estimated using the expected occupation and operations.

Table 6 provides a summary of daily and weekly estimated operational waste generation using the proposed occupancy details available. These estimates are based on the DECC 2008 Guideline and are more relevant to larger developments where the average waste generation includes a range of occupancies. For this small (4 unit) development, the typical domestic waste generation catered for in the local garbage collection service would be applicable.

Should additional waste be generated, Suez has advised that additional servicing would be available.

Table 6 Waste Generation Estimate

Location	No.	Area m2	Table 16 EPA (2012)				Waste Generation			
			General		Recycling		General	Recycling	General	Recycling
			L	/m2/day	L	/m2/day	L/day		L/week	
Building A										
Conference Room	1	275	25	100	3	100	69	8	413	50
Offices	3	240	8	100	6	100	19	14	115	86
Staff/Kitchen	1	15	10	100	2	100	2	0	9	2
Amenities							25	25	175	175
Sub-Total							**114**	**48**	**712**	**313**
Building B										
Cafe	1	25	215	100	130	100	54	33	323	195
Kitchen	1	12	10	100	2	100	1	0	7	1
Reception	1	8.5	10	100	2	100	1	0	5	1
Conference Rooms	2	34	25	100	3	100	9	1	51	6
Amenities							25	25	175	175
Sub-Total							**89**	**59**	**561**	**379**
Building C										
Storage/Workshop	1	200	40	100	10	100	80	20	480	120
Agility Rooms	2	100	10	100	25	100	10	25	60	150
Sub-Total							**90**	**45**	**540**	**270**
Building D										
Guest Rooms	6	75	20	100	0	100	15	0	90	0
Sub-Total							**15**	**0**	**90**	**0**
Building E										
Office	1	50	8	100	6	100	4	3	24	18
Meeting Room	1	20	25	100	3	100	5	1	30	4
Admin	1	10	8	100	6	100	1	1	5	4
Kennels	34						100	30	700	210
Sub-Total							**110**	**34**	**759**	**235**
Building F										
Caretaker's Residence(1	1								140	280
Sub-Total							**0**	**0**	**140**	**280**
Total							**419**	**186**	**2801**	**1476**

(1) Based on 2 bin collection system.

5 ON-SITE COMPOSTING

5.1 Kennel Waste

The estimated volume of solid dog faecal matter waste and other kennel waste expected to be generated by the kennel operations, and the methods of collection, storage and disposal, are detailed in Table 7.

Table 7 Management of Kennel Waste

WASTE MATERIAL	MANAGEMENT METHODS
Dog manure	Collected twice daily via dry method from kennels and training yards and potty areas. Storage within mobile containers/drums within tight fitting lids. Emptied daily into the On-site Composting Apparatus (OSCA). Approximately 26kg/day manure generated at 100% kennel occupancy
Soiled animal bedding	Bagged and disposed of as General Waste.
Food Waste	Collected daily. Storage within mobile containers/drums within tight fitting lids. Emptied daily into the On-site Composting Apparatus (OSCA). Approximately 10kg/day food waste generated at 100% kennel occupancy

5.2 On Site Composting Facility – OSCA

To increase efficiency and achieve significant waste minimisation, it is proposed that all organic waste including dog manure, dog and human food waste, compostable packaging, and green waste will be composted on the site in automated, aerobic composting system called an OSCA (On Site Composting Apparatus).The OSCA works on an automated, waterless, continuous feed system and can produce a high quality, safe and immediately usable compost within 10 - 14 days. An internal bio-filter minimises odour generation.

A staff member will be responsible for the operation and maintenance of the OSCA, and the management of the composted product to minimise nuisance or risk to human and environmental health. No human waste will be composted in this on site facility.

Figure 1 Photo of OSCA installed at Wongaburra Kennels in northern NSW (http://www.onsitecomposting.com.au)

6 WASTE STORAGE REQUIREMENTS

The following design storage volume recommendations have been based on the waste generation rates as detailed in the previous section, and are provided to establish site suitability.

Adequate space is available within the site for the storage of waste during the demolition, construction and occupation stages. Refer to site plans in Appendices 4 & 5.

6.1 Demolition/ Construction Stages

A fenced, temporary waste storage compound would be located on the site for the nominated receptacles and to minimise wind-blown litter. The proposed general location in shown on the Site Plan in Appendix 3 and remains subject to a change of location due to site works and scheduling.

Table 8 Recommended Waste Storage Bins - Construction

Waste Type	Volume	Service Frequency
Recycling & General Waste Service	1-2m^3 industrial bin or mobile garbage bin for general waste 1 x 10m^3 skip bin for concrete and other heavy waste 1 x 16m^3 bulk bin for co-mingled building waste to be sorted at facility	Serviced weekly or on demand.

6.2 Operational Stage

Two roofed bin areas form the waste storage areas and collection points for the proposed development and are detailed in the Site Plan (Therian Dwg DA02, 08/12/2017) contained in Appendix 3.

Each roofed bin area is sufficient in size, structure and accessibility to accommodate various bin configurations to maximise flexibility of service and manoeuvrability.

The proposed option detailed in the development design drawings is 3 x 4.5m2 bins.

The recommended Suez commercial bins are:

- 1100L rear lift mobile commercial garbage bins (1.07m wide x 1.36 deep x 1.485m high, OR
- 1.5m3 industrial bins on rubber wheels/tow hitch (1.805m wide x 0.905m deep x 0.910m high)

To maximise flexibility of service frequency and to accommodate varying waste volumes, it is considered that multiple small mobile industrial bins may be the preferred option, however this remains subject confirmation by final waste contractor appointed by the occupant.

Both waste storage areas will be provided with a water outlet for washing purposes, with washwater discharging via appropriate screening to an approved below ground rubble drain or similar. The washwater is not to be discharged to the on-site sewage management systems.

As stated previously, in the absence of project specific waste generation volumes, the EPA 2012 guidelines have been used to estimate the commercial waste generation volumes and will determine the storage volumes required. It is to be acknowledged that significant reduction of waste storage requirements will result from the on-site composting facility (OSCA). To remain conservative, this reduction has not been included in the storage requirement estimations.

It is therefore likely that the operational waste storage requirements will be significantly less than is stated in this Waste Management Plan.

Table 9 Recommended Waste Storage Bins - Operational Stage

Waste Type	Estimated m3/week waste generation	Proposed Industrial Bin Size (remains subject to confirmation by waste contractor)
General Waste	2.8m3	**Waste Storage Area 1**: 8 x 1100L bins **Waste Storage Area 2**: 4 x 1100L bins
Recycled Waste (co-mingled)	1.5m3	
Organic Waste (Including Manure/Food/ Cardboard/Paper/ Green waste)	Included in Recycled Waste & General Waste Composted on site.	**OSCA Composting Facility**: 1 x 1100L bin – storage only, no collection service

6.3 Signage

During all stages, all bins, collection facilities will be clearly marked with labels, colour coding, symbols and words. Signs will be highly visible. Signage should be consistent with those used at waste storage areas.

7 EDUCATION & EVALUATION

7.1 Information & Awareness

It is good practice for all sub-contractors, project staff, residents and visitors to be made aware of the aims and benefits of the waste minimisation program to encourage maximum participation.

During construction, the induction would include information on waste streams, waste storage receptacles and recycling.

Following occupation, occupiers would be provided with information on waste storage collection and recycling opportunities.

8 REVIEW & MONITORING

8.1 Monitoring of Waste Management

Waste monitoring is necessary to assess whether the strategies implemented have been effective in achieving the WMP's aims.

8.1.1 *Construction Stage*

Monitoring would be carried out on a weekly basis by the project Site Manager during construction.

The monitoring process would include:

- Site Manager to oversee waste collection activities to assess compliance with WMP.
- Waste volume monitoring carried out by the waste contractor during collection and servicing procedures.

8.1.2 *Operational*

Ongoing regular monitoring would be undertaken by the Site Manager with input from occupiers, maintenance staff and waste contractors. Community feedback would also be reviewed via complaints and other consultation.

8.2 Review of WMP

This WMP will be reviewed and updated if necessary using the results of monitoring of the waste volume and type being generated during the development stages.

The review will also address and reflect:

- changes in the development management process;
- changes in design or sequence of development staging;
- changes in access to the Project Site;
- changes or requests directed by local or state authorities i.e. Tweed Shire Council, State Government Departments;
- changes in the environment;
- changes in generally accepted environmental management practices;
- changes in legislation,
- new risks to the environment or public health;
- any pollution or contamination events.

9 RECOMMENDATIONS

The waste storage and servicing recommendations, as detailed in this report, are summarised below:

Table 10 Summary of Waste Management Recommendations

Project Stage	Activity	Waste Storage/Servicing – Recommended As Guide (remains subject to confirmation by waste contractor)
Construction & Demolition	Earthworks Building Servicing/trenching Waste offcuts, packaging, excess materials, Site office	• 1-2m^3 industrial bin or mobile garbage bin for general waste • 1 x 10m^3 skip bin for concrete/heavy waste serviced twice weekly or on demand • 1 x 16m^3 bulk bin for co-mingled serviced twice weekly or on demand
Operational	Administration Accommodation Dog Boarding & Exercise Functions & Catering	Each roofed waste storage area is sufficient in size, structure and accessibility to accommodate various bin configurations to maximise flexibility of service and manoeuvrability. The proposed waste bin option detailed in the development design drawings in Appendix 2 is: • **3 x 4.5m2 skip bins.** To maximise flexibility of service frequency and to accommodate varying waste volumes, it is considered that multiple small mobile industrial bins may be the preferred option: • **4 x 1100L mobile commercial garbage bins for general waste** • **8 x 1100L mobile commercial garbage bins for general waste** The final configuration will remain subject to confirmation by final waste contractor appointed by the occupant.
On Site Compositing	Organic waste Green waste Food waste Dog manure Paper/cardboard	• 1 x 1100L mobile commercial garbage bin for storage only prior to introduction into OSCAR composting unit
Waste Storage Areas	2 x Roofed Bin Areas	• To be provided with a water outlet for washing purposes, with washwater discharging via appropriate screening to an approved below ground rubble drain or similar. • The washwater is not to be discharged to the on-site sewage management systems.

10 CONCLUSION

A review of the plans shows there is adequate area available on the site to provide suitable storage facilities for waste generated during the construction and the operation of the assistance dog training facility. There is suitable access to the proposed waste storage and collection points for collection vehicles.

Tables 4-9 in Section 4-6 of this report demonstrate that the expected waste storage and collection service is compliant with the waste storage volumes estimates within the *Section C5 of the Penrith Development Control Plan 2014*.

The proposed waste management arrangements within this report are considered adequate for the purposes of the demolition, construction and operational activities associated with the proposed development at 8 Austin Place Lot 23 DP 239091 Orchard Hills NSW.

11 APPENDICES

Appendix 1 Locality Map

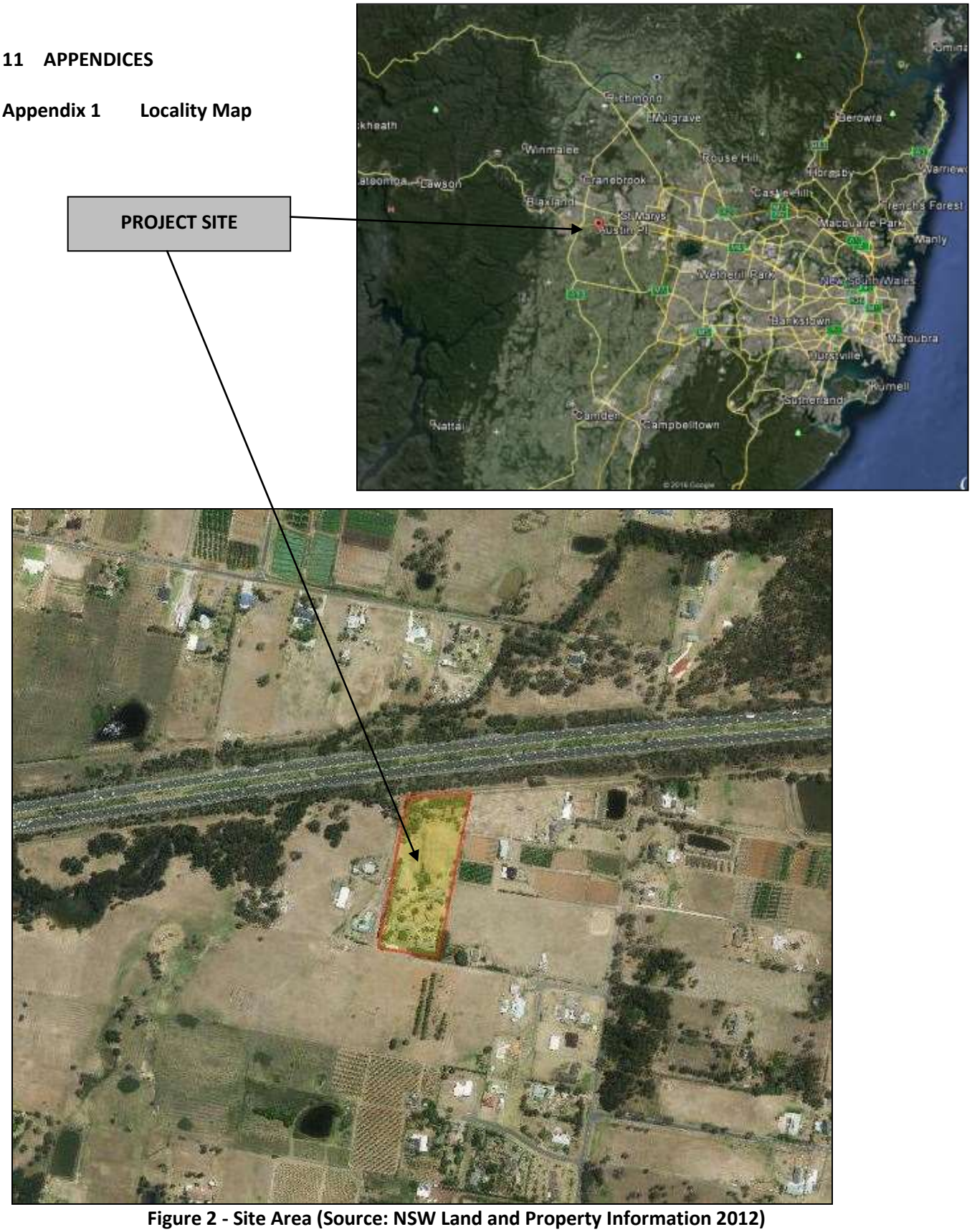


Figure 2 - Site Area (Source: NSW Land and Property Information 2012)

Appendix 2 Site Plan –Proposed

SEE NEXT PAGES

Building 'E1' & 'E2'
Bush Fire Rating: BAL 29
(Fire hydrants and fire hose reels will be incorporated on-site in accordance with BCA)
Buildings 'A', 'B', 'C', 'D' & 'F'
Bush Fire Rating: BAL 12.5
(Fire hydrants and fire hose reels will be incorporated on-site in accordance with BCA)
10
DP 833423
RESIDENCE
No. 17 CALVERTS RD.
BOUNDARY
228.545
10° 14' 25"
250.925
190° 14' 25"
91.53
278° 31' 05"
DENSELY LANDSCAPED MOUNDS 2.5m HIGH ABOVE NATURAL GROUND (ACOUSTIC & VISUAL BARRIERS) REFER TO NOISE IMPACT ASSESSMENT BY ACOUSTIC LOGIC
ADDITIONAL DENSELY LANDSCAPED MOUNDS 1.5m HIGH ABOVE NATURAL GROUND (ACOUSTIC & VISUAL BARRIERS).
CARPARK 1
BUS PARK
CARPARK 2
CARPARK 3
COMPLEX ENTRY
WASTE STORAGE
DOG-VAN TURN-IN BAY
OSCA
with awning roof over
FENCE 3 TO OUTDOOR RUNS
FENCE 3 TO ENRICHMENT RUNS
E1 (STAGE 1)
FFL 49.250
AREA = 631m²
E2 (STAGE 2)
FFL 47.750
AREA = 370m²
A
FFL 63.16
AREA = 257m²
B
FFL 59.95
AREA = 207m²
C
FIRST FFL 59.95
GROUND FFL 55.60
AREA = 227m²
D
FIRST FFL 58.42
GROUND FFL 55.56
AREA = 259m²
F
FFL 54.03
AREA = 143m²
23
DP 239091
2.192 Ha
EXISTING BUILDING TO BE COMPLETELY DEMOLISHED
STORAGE ACCESS
RESIDENT DROP-OFF & PICK-UP
OBSERVATION PLATFORM
TRAINING YARD 1
TRAINING YARD 2
TRAINING YARD 3
TRUCK TURN BAY
WASTE STORAGE
DOG TOILET
DRYING TRAINING
BBQ AREA
CLOTHES LINE / DRYING AREA
EXISTING PROTECTED TREES TO REMAIN
FENCE 1 TO ENTIRE NORTHERN BOUNDARY
SIGN 'A'
EXISTING ENTRY TO ADJACENT PROPERTY
NEW ROAD
EXISTING ROAD
AUSTIN PL.
EXISTING BOUNDARY EASEMENT
42
DP 818859
No. 39-49 CALVERTS RD.
41
DP 818859
RESIDENCE
No. 31-37 CALVERTS RD.
3
DP 225979
RESIDENCE
No. 19-29 CALVERTS RD.
6
DP 869116
DENSELY LANDSCAPED MOUNDS 2.5m HIGH ABOVE NATURAL GROUND (ACOUSTIC & VISUAL BARRIERS) REFER TO NOISE IMPACT ASSESSMENT BY ACOUSTIC LOGIC
LANDSCAPING BETWEEN BUILT ELEMENTS (ACOUSTIC & VISUAL BARRIERS)
ADDITIONAL DENSELY LANDSCAPED MOUNDS 1.5m HIGH ABOVE NATURAL GROUND (ACOUSTIC & VISUAL BARRIERS).
existing o'head electricity line to be realigned to suit the relocation of current power pole locations.

SITE PLAN - PROPOSED

scale: 1 : 300

LEGEND:

- INDICATES THE DIRECTION/CAPABILITY OF VEHICULAR MOVEMENT
- DENOTES EXTENT OF UPGRADE TO EXISTING AUSTIN PLACE ACCESS ROAD
- DENOTES LANDSCAPE MOUNDS
- DENOTES NEW BUILDINGS (C, E1- stage 1, E2 - stage 2 & F)
- DENOTES MODIFIED BUILDINGS (A, B & D)

FENCE LEGEND

FENCE 1: 2.1m BLACK PLASTIC COATED CHAIN WIRE FENCE WITH PDR. COATED POSTS & TOP/BOTTOM RAILS.

PHOTO - FENCE 1

FENCE 3: 1.8m (HIGH) PDR COATED ALUMINIUM 'POOL STYLE' FENCING WITH ALUMINIUM POSTS.

PHOTO - FENCE 3

FENCE 5: 2.0m (HIGH) ROCK VENEERED MASONRY FENCE

PHOTO - FENCE 5 ROCK VENEER

FENCE 2: 2.0m (HIGH) FRAMED BRACED & CLAD WITH HORIZONTAL POWDERCOATED ALUMINIUM BATTENS (SPACED 10mm APART) & ALUMINIUM POSTS.

PHOTO - FENCE 2

FENCE 4: DELETED

DRIVEWAY CROSSOVER
RL63.700
SOUTHERN BOUNDARY
BUILDING 'B'
APPROX U'SIDE OF EXISTING BUILDING 'B' TRUSSES
RL62.690
EXISTING BUILDING 'B'
RL59.950
BUILDING 'F' U'SIDE TRUSS
RL56.470
BUILDING 'F' GROUND FLOOR
RL54.030
BUILDING 'F'
BUILDING 'F' GROUND FLOOR
RL54.030
CAPPARK 2
finished ground level
natural ground level
BUILDING 'E1'
BUILDING 'E2'
NEW BUILDING 'E1' - TOP OF PRECAST PANEL
RL52.550
NEW BUILDING 'E2' - TOP OF PRECAST PANEL
RL51.050
NEW BUILDING 'E1' SOUTH - FLOOR PLAN
RL49.250
NEW BUILDING 'E2' NORTH - FLOOR PLAN
RL47.750
PROTECTED TREES

LONGITUDINAL SITE SECTION X-X

scale: 1 : 300

ARCHITECTURAL:
Therian Pty Ltd
10/75 Waterway Drive, Coomera QLD, Australia 4209
TEL: (07) 5657-6777 EMAIL: info@therian.com.au
FAX: (07) 5657-6788 WEB: www.therian.com.au

DESIGN NOT BE AMENDED WITHOUT REFERENCE TO DESIGN MANAGER

REV	DATE	AMENDMENT	APPROVED
A	09/06/17	FOR DA APPROVAL	GB
B	20/12/17	AMENDEMENTS TO ADDRESS COUNCIL'S R.F.I	GB

CLIENT:
Assistance Dogs Australia
996 Old Princes Hwy, Sydney NSW 2233
PH: 1800 688 364 FAX: 02 9699 1171
www.assistancedogs.org.au

FOR PROJECT ENQUIRIES: DESIGNERS
REFER: GAVIN BIGGS PH: (07) 5657 6777

CONSULTANT:

NOTES:
Do not scale the drawings - use figured dimensions taken from the drawings.
Verify all dimensions on site prior to commencement of any construction.
Refer any discrepancies to Therian Pty Ltd for resolution.
All works shall comply with the current edition of the National Construction Code (NCC) - Building Code of Australia (BCA) - Volume 1, relevant Australian Standards, Local Authority requirements and manufacturers installation specifications.
Comply with the Workplace Health & Safety requirements for the State/Territory in which the work is to be performed.

PROJECT: NATIONAL TRAINING CENTRE REDEVELOPMENT

ADDRESS: 8 AUSTIN PLACE, ORCHARD HILLS, NSW 2748

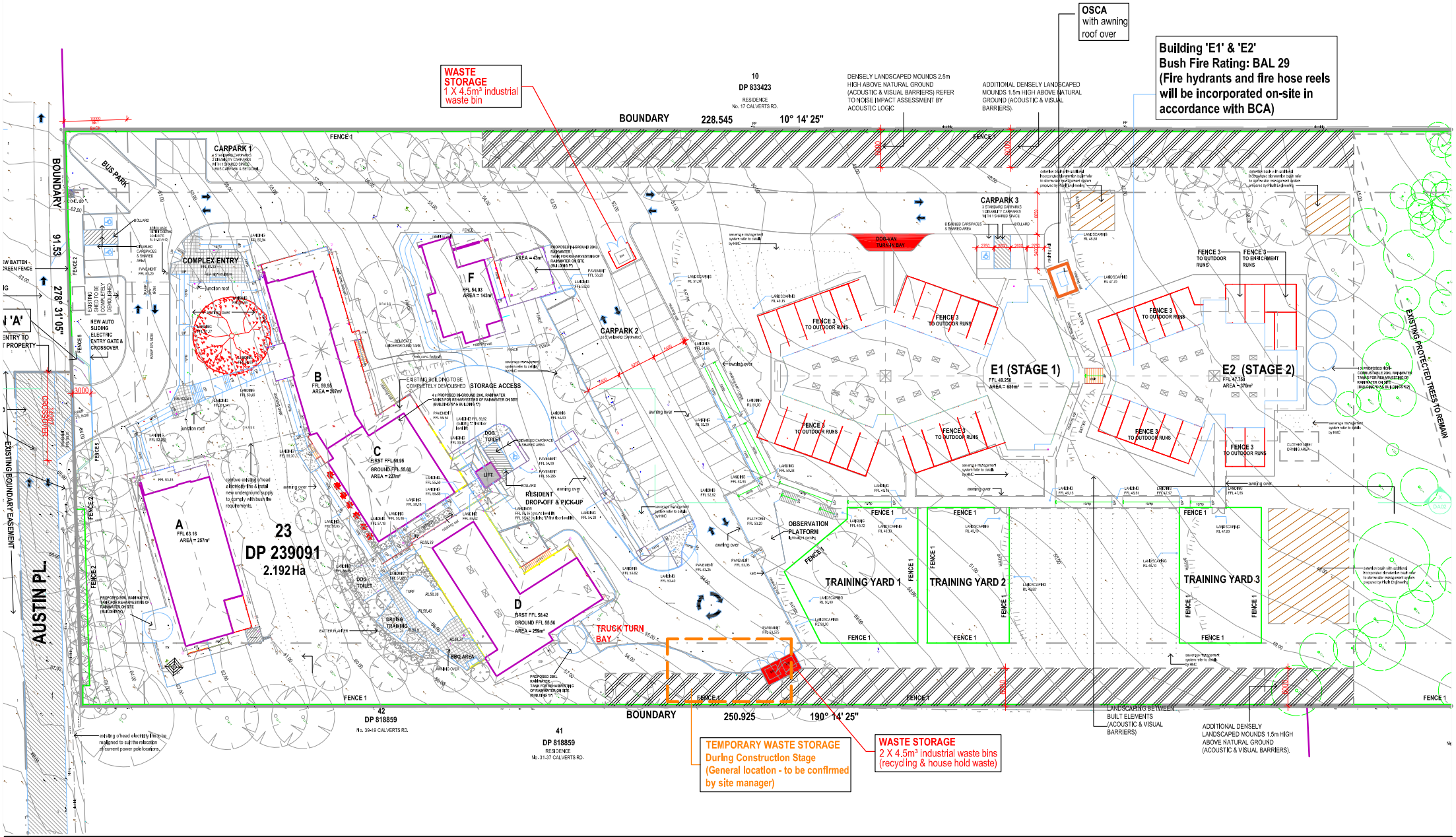
DESCRIPTION: SITE PLAN - PROPOSED

PROJECT No. A013
DATE: 20/12/17
DRAWN BY: SH
DWG SCALE: 1 : 300 AT A1
TH DRAWING No. DA02
ISSUE B

20-Dec-17 4:29:01 PM

Appendix 3 Waste Storage Areas – Demolition/Construction/Occupation

SEE NEXT PAGE



HMC Environmental Consulting Pty Ltd
PO Box 311
Tweed Heads NSW 2485

0755368863
0755367162

www.hmcenvironment.com.au
admin@hmcenvironment.com.au
ABN: 60108085614

Waste Management Plan - Waste Storage Locations

8 Austin Place
Orchard Hills

Base Drawing Source: ADA0228Rev B 201217

HMC Ref: HMCDWG2015.149.03WMP

Job No: 2015.149
Date: July 2017
Revision Date: 20.12.17

Appendix 4 OSCA Specifications

SEE NEXT PAGE

AUSTRALIAN MADE AND OWNED

specification

OSCA Bite-Size 200

Organic Waste Handling Ability

- kitchen waste including plate scrapes and paper napkins
- spoiled or unusable food
- kitchen preparation waste
- pre-harvest loss
- processing remains
- compostable food packaging, utensils and bags
- animal manures and bedding
- grass clippings
- mulched green waste

Waste Processing Capacity

As a rough guide OSCA Bite-size 200 can process 200ltrs per day or 1400ltrs per week mixed waste (balanced carbon: nitrogen)

Site Requirements

Hard standing flat surface

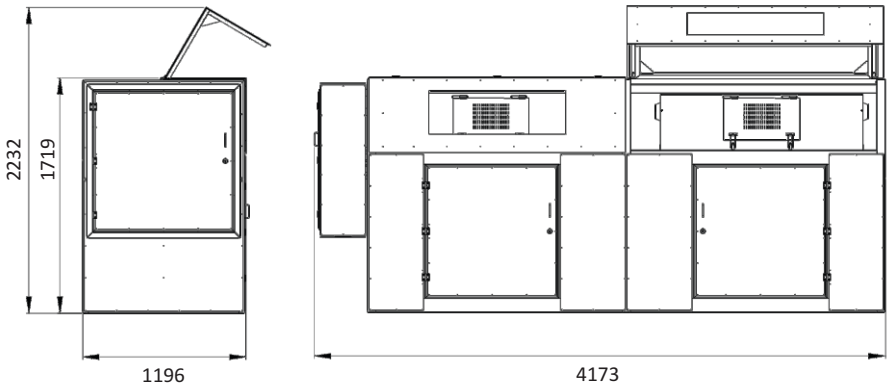
Operation

Simple to operate by alternating between two barrels which can be loaded over a period of time.

Why OSCA?

- Reduction in waste disposal costs & waste to landfill
- Generates quality compost for on-site landscaping in 2 weeks
- Short investment return and low operating costs
- Full Solar option available
- No odours and quiet operation
- Built to last - Heavy-duty construction
- No water/additives required
- Safety features included

OSCA Bite-size 200 Specification		
Length	m	4.2
Width	m	1.2
Height	m	1.7
Electricity (single phase)	volts	240
Power Consumption (per day)	kWh	2
Processing Capacity (per day mixed waste)	ltrs	200



For Further Information

www.onsitecomposting.com.au

OSCA@wormsdownunder.com.au

Contact phone +61 (0)7 5445 9704

Worms Downunder

Appendix 5 Waste Storage Receptacles

Front Lift Collection (SUEZ Environment)

CONTAINER SPECIFICATIONS			
Capacity	1.5m³	3.0m³	4.5m³
Depth	0.905m	1.505m	1.605m
Width	1.805m	1.805m	1.805m
Height	0.910m	1.225m	1.570m

**Availability of the complete suite of bin sizes varies across states. Sizes are approximate measurements and may vary by location.*

Rear Lift Collection (SUEZ Environment)

CONTAINER SPECIFICATIONS

Plastic (polyethelene)

Capacity	120L	240L	660L	1100L
Height	0.92m	1.075m	1.235m	1.485m
Width	0.54m	0.58m	1.36m	1.36m
Length	0.62m	0.715m	0.765m	1.07m
Weight	9.5kg	13.5kg	45kg	65kg

**Availability of the complete suite of bin sizes varies across states. Sizes are approximate measurements and may vary by location.*

Skip Bins (ProSkips)

BIN SIZES

2m3 Skip Bin

Height: 0.86m
Length: 1.8m
Width: 1.4m

Safe working load: 2 tonne

4m3 Skip Bin

Height: 1m
Length: 3.1m
Width: 1.75m

Safe working load: 4 tonne

7m3 Skip Bin

Height: 1.2m
Length: 4.1m
Width: 1.85m

Safe working load: 7 tonne

10m3 Skip Bin

Height: 1.6m
Length: 4.5m
Width: 1.85m

Safe working load: 10 tonne

16m Hook Lift

Height: 1.2m
Length: 6m
Width: 2m

Safe working load: 13 tonne

*16m bins have an opening at one end of the skip for easy access e.g. wheelbarrows, labourers etc.

Appendix 6 ProSkips Construction Resource Recovery

SEE FOLLOWING PAGES

PO Box 957
Nerang
Qld 4211

Phone:
(07) 5533 2547

Fax:
(07) 5533 2537

Email:
info@proskips.com.au

ABN:
89 114 580 308

PRO SKIPS
The Professionals in Waste Management
Recycling Specialists

Environmental Policy

Proskips is one of the Gold Coasts leading waste management and recycling companies. We specialise in construction and demolition waste. The company is locally owned and operates it's own waste transfer station. As a responsible corporate citizen we have chosen to work closely with the Environmental protection agency to adopt it's best business practice methods of dealing with all our C&D waste.

The EPA classify all waste transfer stations with a capacity of 20,000t or more a year to be an ERA-82 (environmentally relevant activity) and as such are required to be licensed by the EPA. Proskips engaged a national environmental planning agency "Planit Consulting" to lodge both the development application to the Gold Coast City Council and the ERA-82 (waste transfer station) to the EPA

The reason we have chosen to go to the expense and time of operating our own waste transfer station is one of economics, which at the same time is good for the environment. We have taken what we believe are the best methods from both European and Australia companies to develop our methods of dealing with C&D waste.

Our goal is to recycle 95% of all waste that comes into the transfer station, with only 5% going to landfill. The break up of our waste is as follows-:

20%	Concrete and Hardcore
20%	Wood
20%	Soil
10%	Green waste
10%	Metal
10%	Plastic
4%	Cardboard & Paper
3%	Gyprock
3%	Other

Recycling Methods

Concrete: All concrete and hardcore is crushed through an impact crusher and screened to several small aggregates and roadbase and is sold back to the building industry for drainage, walls, under slabs etc.

Wood/Green waste: The wood is transported to Rocky Point power station which is then used to generate power for the sugar mill with the excess power being sold to the national grid.

Soil: The soil is screen through a 10mm trommel and sold to landscape gardeners and builders.

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ABN:
89 114 580 308

Metal: The metal is separated into copper, aluminium, heavy gauge steel and pig metal then sold to One Steel to be melted down.
Cardboard: All cardboard is transported to Amcor recycling at Molendinar.
Gyprock: The gyprock is transported to Marlyn Compost at Jacobs Well where it is grinded down and added to garden soil and mulches.
Plastic: Landfill
Other: Landfill

This has been a brief outline of our recycling practices, as you can see when using the services of Pro Skips you can be confident of an environmentally conscious business.

These methods of collecting and recycling C&D waste will be adopted for all Constructions jobs on the Gold Coast. I have read through all the criteria for the Green Star rating system, where they are looking for 80% recycling by weight. We can easily achieve this for you as we currently recycle 80-90% by volume – in real terms this would amount to 95% recycling by weight as the only waste we send to landfill is very light after we have taken sand, soil, metal & concrete out of the equation.

To comply with the green star rating system we can give you a monthly environmental report to show the breakdown of waste generated from each job and percentage of waste recycled.

I trust this meets with your approval and assuring you of our best attention at all times

Yours sincerely

John Sheerin
Director