Qantas Group Flight Training Centre, 297 King Street, Mascot

Operational and Construction Waste Management Plan **APRIL 2019**

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1 Introduction

Waste Audit & Consultancy has been commissioned by Qantas Airways Ltd (Qantas) to prepare this report in accordance with the technical requirements of the Secretary's Environmental Assessment Requirements (SEARs), and in support of the **SSD 10154** for the development of a new flight training centre at 297 King Street, Mascot.

1.1 Description of site and locality

The site is located at 297 King Street, Mascot and comprises land known as Lots 2 & 4 DP 234489, Lot 1 DP 202747, Lot B DP 164829 and Lot 133 DP 659434. The site is identified in Figure 1.

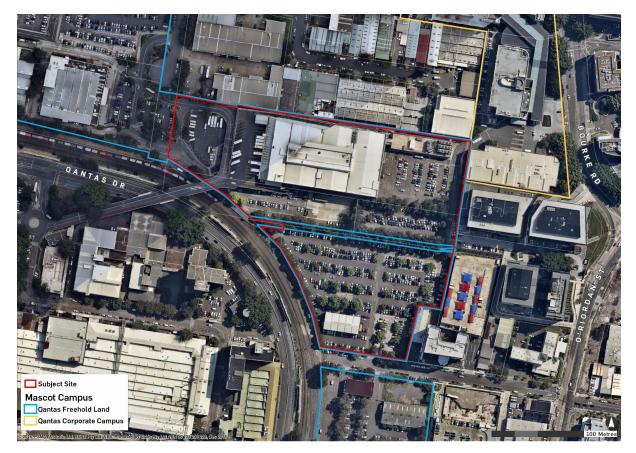


Figure 1 - The Site

Key features of the site are as follows:

- The site is approximately 5.417ha and is an irregular shape. It is approximately 240m in length and maintains a variable width of between approximately 321m in the northern portion of the site and approximately 93m along the King Street frontage (refer to Figure 1).
- The site possesses a relatively level slope across the site. An open Sydney Water drainage channel bisects the northern portion of the site in an east-west direction. There are some isolated changes in level immediately adjacent to this channel. A Site Survey Plan accompanies the application which details the topographic characteristics of the site.
- Multiple mature Plane Trees are scattered throughout the site. A variety of native and exotic tress and vegetation also exist around the perimeter of the site which help screen the site from surrounding uses.

- Site improvements include at-grade car parking for Qantas staff, an industrial shed to store spare aviation parts, a substation, a disused gatehouse, a Sydney Water Asset with two driveways over it, the Qantas catering facility and Qantas tri-generation plant.
- The site forms part of a larger land holding under the ownership of Qantas that generally extends between Qantas Drive to the west, Ewan Street to the south, Coward Street to the north, with the Qantas "Corporate Campus" fronting Bourke Road.
- Vehicular access to the site from the local road network is available from King Street. The site has
 intra-campus connections along the northern boundary in the form of two connecting driveways in
 the north-eastern and north-western corner of the site along the northern boundary which link it to
 the broader Mascot Campus.

The site is located within the Bayside LGA.

Key features of the locality are:

- North: The site is bounded to the north low scale industrial development, beyond which is Coward Street. Further north of the site is the Mascot Town Centre which is characterised by transportoriented development including high density mixed-use development focussed around the Mascot Train Station.
- **East:** The site is bordered to the east by commercial development including a newly completed Travelodge hotel which includes a commercial car park. Additional commercial development to the east includes the Ibis Hotel and Pullman Sydney Airport fronting O'Riordan Street.
- South: The site is bounded to the south by King Street, beyond which is Qantas owned at-grade car
 parking and other industrial uses. Further south is the Botany Freight Rail Line and Qantas Drive
 beyond which is the Domestic Terminal at Sydney Airport.
- West: The site is bordered to the west by the Botany Freight Rail Line and Qantas Drive, beyond which lies Sydney Kingsford Smith Airport and the Qantas Jetbase (location of the current Flight Training Centre).

1.2 Project description

Safety is Qantas' first priority. The flight training centre is a key pillar of this value. The facility enables pilots and flight crews to undertake periodic testing to meet regulatory requirements by simulating both aircraft and emergency procedural environments. The Project seeks consent for the construction and operation of a new flight training centre, and associated ancillary uses including a multi-deck car park. The Project is comprised of the following uses:

Flight Training Centre

- The proposed flight training centre will occupy the southern portion of the site. It is a building that comprises 4 core elements as follows:
 - An emergency procedures hall that contains;
 - cabin evacuation emergency trainers,
 - an evacuation training pool,
 - door trainers,
 - fire trainers

- slide descent towers,
- security room,
- aviation medicine training and equipment rooms.
- A flight training centre that contains:
 - o a flight training hall with 14 bays that will house aircraft simulators,
 - integrated procedures training rooms, computer rooms, a maintenance workshop, storerooms, multiple de-briefing and briefing rooms, pilot's lounge and a shared lounge.
- Teaching Space that contains
 - o training rooms,
 - \circ $\$ classrooms and two computer based exam rooms.
- Office Space
 - Office space for staff and associated shared amenities including multiple small, medium and large meeting rooms, think tank rooms, informal meeting spaces, a video room and lunch/tea room.
- Ancillary spaces including the reception area at the ground floor, toilets, roof plant and vertical circulation. The external ground floor layout will include a loading dock, at-grade car parking for approximately 39 spaces and a bus drop-off zone at the northern site boundary.

Car Park

The proposed multi-deck car park will be located to the north-east of the flight training centre and adjacent the existing Qantas catering facility and tri-generation plant. The car park is 13 levels and will provide 2059 spaces for Qantas staff. Vehicle access to the car park will be provided via King Street, Kent Road and from Qantas Drive via the existing catering bridge.

2 Glossary

Term	Definition						
The Site Qantas Airways Limited owned land in Mascot to the north of Sydney Kingsford consisting of Lots 2 & 4 DP 234489, Lot 1 DP 202747, Lot B DP 164829 and L 659434. Current site improvements include including at-grade car parking for 0 industrial shed to store spare aviation parts, a substation, a disused gatehouse Water Asset with two driveways over it, the Qantas catering facility and Qantas plant.							
The Project	The construction of a new Flight Training Centre and ancillary uses to replace the existing facility on the Qantas Jetbase that will be impacted by RMS' Sydney Gateway Project.						
Mascot Campus	Over 19ha of Qantas Airways Limited controlled land in Mascot to the north of Sydney Kingsford Smith Airport consisting of freehold and leased land.						
	The following lots are owned by Qantas: Lot 133 DP 659434; Lots 4 & 5 DP 38594 Lot 23 DP 883548; Lots 1 & 2 DP 738342; Lot 3 DP 230355; Lot 4 DP 537339; Lots 2 & 4 DP 234489; Lot 4 234489; Lot 1 DP 81210; Lot 1 DP 202093; Lot 1 DP 721562; Lot 2 DP 510447; Lot 1 DP 445957; Lot B DP 164829 and Lot 1 DP 202747 and equates to 16.5ha of land.						
	The following lots are leased by Qantas: Lot 14 DP 1199594 and Lot 2 DP 792885 and equates to 2.7ha of land.						
Jetbase	Qantas leased land within the boundaries of Sydney Kingsford Smith Airport.						
Sydney Gateway Project	A RMS Project including a road and rail component that is intended to increase capacity and improve connections to the ports to assist with growth in passenger, freight and commuter movements across the region, by expanding and improving the existing road and freight rail networks.						
Waste Audit	A process to quantify types and quantities of waste and recyclables						

3 Abbreviations

Acronym	Definition
	Combined materials such as beverage containers composed of glass, plastic and metals
Gateway	Sydney Gateway Project
General Waste	Waste destined for landfill
ISEPP	State Environmental Planning Policy (Infrastructure) 2007
LEP	Local Environmental Plan
LGA	Local Government Area
M2	Square Metres
МЗ	Cubic Metres
MGB	Mobile Garbage Bin
NSW	New South Wales
Qantas	Qantas Airways Limited
SACL	Sydney Airport Corporation Limited
Simulators	Full Motion Flight Simulators
SSD	State Significant Development
WACS	Waste Audit & Consultancy

4 Mitigation Measures and Environmental Risk Assessment

Risk comprises the likelihood of an event occurring and the consequences of that event. For the proposal, the following descriptors were adopted for 'likelihood' and 'consequence'.

LIKELIHOOD		CONSEQUENCE			
А	Almost certain	1	Widespread and/or irreversible impact		
В	Likely	2	Extensive but reversible (within 2 years) impact or irreversible local impact		
С	Possible	3	Local, acceptable or reversible impact		
D	Unlikely	4	Local, reversible, short term (<3 months) impact		
Е	Rare	5	Local, reversible, short term (<1 month) impact		

Table 1 – Risk Descriptors

The risk levels for likely and potential impacts were derived using the following risk matrix.

Table 2 – Risk Matrix

LIKELIHOOD

		A	В	С	D	E
	1	High	High	Medium	Low	Very Low
CONSEQUENCE	2	High	High	Medium	Low	Very Low
	3	Medium	Medium	Medium	Low	Very Low
	4	Low	Low	Low	Low	Very Low
	5	Very Low				

The results of the environmental risk assessment for the proposed development are presented in **Table 3** and are based upon the range of technical and specialist consultant reports appended to this EIS.

The table has directly related mitigation measures responding to each impact (satisfying the SEAR for a consolidated summary of all proposed mitigation measures) also based upon the range of technical and specialist consultant reports appended to this EIS.

It is considered that with the mitigation measures required the impacts resulting from the proposal will be acceptable.

Matter	Potential Impact	Likelihood	Consequence	Risk Level	Proposed Mitigation Measures
Litter	Contaminates neighbouring environment and contrary to regulations		4	Low	Bins closed between uses and bunding around bins to "trap" litter.
recyclables or waste into the	Recycling rejected by contractor	D	5		Education program implemented for all staff/cleaners as well as signage provided on waste and recycling bins.
wrong bin					
Hazardous					
	disposal of waste	D	3	Medium	Education program for contractors as to identifying hazardous waste.

Table 3 – Risk Assessment and Mitigation Measures

5 Objective of Waste Management Plan

This Waste Management Plan (WMP) has been prepared on behalf of APP Corporation Pty Ltd to accompany a State Significant Development Application for the Qantas Group Flight Training Centre at 297 King Street, Mascot.

The Plan has been developed with consideration of Bayside Council Local Government Area (LGA) and other Authority's requirements. It is intended to inform the design of the waste services by identifying the estimated waste profile for the development and providing the total area required by the recommended equipment/systems.

In doing so this Plan, which includes waste estimates and related management requirements, has been developed in accordance with Botany Bay Development Control Plan 2013 (BBDCP 2013), and specifically Part 3N – Waste Minimisation and Management. In addition, the WMP for this development is consistent with the aims, objectives and guidance in the NSW Waste Avoidance and Resource Recovery Strategy 2014-2021.

Management strategies reflect current best-practice requirements, and relevant Sections of the *Protection of the Environment Operations Act 1997* and the NSW Environment Protection Authority *Waste Classification Guidelines, Part 1: Classifying Waste*, as well as consideration of industry best practice for this type of development.

Waste audit and management strategies are recommended for new developments to provide support for the building design and promote strong sustainability outcomes for the building. All recommended waste management plans will comply with council codes and any statutory requirements.

To assist building management in achieving effective waste and recycling management, this waste management plan has three key objectives:

- to minimise the environmental impacts of the operations of the development this will be achieved by ensuring maximum diversion of waste from landfill; correct containerisation and transport of materials; correct segregation of materials into appropriate management streams; awareness among staff of waste avoidance practices.
- ii. to minimise the impact of the management of waste within the development on local residents this will be achieved by ensuring waste is managed so as to avoid odour and litter and collected during suitable times.
- iii. to ensure waste is managed so as to reduce the amount landfilled and to minimise the overall quantity generated – this will be achieved by implementing systems that assist staff to segregate appropriate materials that can be recycled; displaying signage in all relevant areas to remind and encourage avoidance and recycling.

6 Waste Generation

6.1 Waste Streams

Based on the development profile, the following waste streams would be expected:

- General Waste
- Paper/cardboard Recycling
- Commingled Recycling

There would also be other wastes such as toner cartridges, confidential documents, maintenance waste and other, materials generated in small quantities. Systems for these will be implemented within the buildings of this development.

6.2 Waste Generation Estimates

The following table shows the estimated waste generated for the development (per week) and the bin requirements based on the clearance frequencies noted. These estimates are based on averages for quantity of waste generated and composition as determined by industry data (ie., data/information provided by WACS' waste audits conducted in a broad range of sectors) as well as consideration of waste management requirements as specified by Bayside Council.

It is estimated that the development will generate a maximum of: **6,000 litres** (**6.0 m**³) of waste and recyclables per week (this is total).

Waste Stream	Bin Size	No. of Bins	Clearance Frequency per week	Capacity (litres per week)	Estimated volume / week
General Waste	3.0 m ³	1	1	3,000	3,000
Paper & Cardboard Recycling	3.0 m ³	1	1	3,000	2,000
Commingled Recycling	3.0 m ³	1	1	3,000	1,000
TOTAL		3		9,000	6,000

Waste/recycling generation

This system is based on a once per week collection system. Following the development becoming operational, a review will be undertaken to determine of the collections schedules need to be amended to cater for volumes of waste/recyclables generated.

6.3 Waste Management System

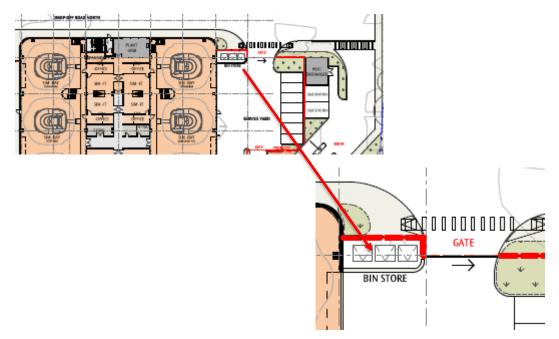
The following summarises the recommended waste and recycling systems that will be implemented for the Flight Training Centre. These recommendations are based on Bayside Council's requirements and systems implemented for similar developments.

Signage will be a crucial element of the waste management system. Appendix A contains examples of signage. These are the type of signs that should be used throughout the development and waste storage area(s).

All areas will be designed so as to allow effective segregation of recyclables. These sites will (depending on the types of wastes/recyclables generated) be provided with sufficient smaller bins to allow for effective segregation of wastes/recyclables. This will include:

- General waste
- Paper/Cardboard recycling
- Comingled recycling

Cleaners will be responsible for emptying bins located within all areas and transporting the waste/recyclables to the waste storage area located in the Service Yard. The following illustrates the location of the waste storage area:



Waste and recycling collection services will be provided by a commercial waste contractor (TBA). Utilising a commercial waste contractor affords the Flight Training Centre greater flexibility regarding collection schedules and the appropriate collection frequencies will be determined in consultation with the waste contractor once appointed – however once operational, collection schedules may need to be adjusted accordingly depending on actual waste generation.

The appointed contractor will service the bins directly from the waste storage area.

In addition to the system above, containers will be located within appropriate locations for the collection of toner cartridges and confidential documents. Separate bins (240 litre MGB's), will also be located in maintenance areas for the collection of oil contaminated waste, metals for recycling and e-waste.

These additional bins will be serviced from their positions within the development by the appointed contractors.

Appendix B contains examples of types of bins that could be located within the Flight Centre as well as equipment to move bins.

6.4 Waste Storage Design

In keeping with best practice sustainability programs, all waste areas and waste and recycling bins will be clearly differentiated through appropriate signage and colour coding to Australia Standards to reflect the materials contained.

All users of the building will be provided with information on the proper use of the waste management systems.

All waste and recycling bins will be colour coded and clearly signed. Each stream will be located in a designated area. This will assist in easy identification of correct bins by cleaners and staff.

The waste area will be screened so as to prevent the escape of litter and bunded to contain any spills. The floor will be concrete or similar materials to prevent any liquids being absorbed to the soil.

Cleaners will monitor the bin storage area and all spills will be attended to immediately by cleaners.

7 Staff Education

All staff will receive information regarding the waste collection systems including how to use the system, which items are appropriate for each stream and collection times.

Appropriate signage and updated information will also be provided, as well as receiving feedback on issues such as contamination of the recycling stream or leakage of the recyclables into the general waste. The facility management will have the responsibility for these tasks.

All waste receptacles will be appropriately signed and additional room signage is usually provided from most waste contractors during implementation of the waste contract.

It is recommended that all signs should;

- Clearly identify the waste/recycling stream;
- Use correct waste/recycling stream colour coding;
- Identify what can and cannot be disposed of in the receptacle; and
- Include highly visual elements to accommodate for individuals with inadequate English literacy.
- As part of the staff induction process, a waste and recycling toolkit will be provided. This toolkit will include the details of each of the systems in place; acceptance criteria for each stream and how each stream is managed.

On a quarterly basis waste and recycling performance reports will be reported back to staff so that they are aware of their performance and areas for improvement. An active waste monitoring program will be employed. The waste contracts will ensure that contractors actively participate in the waste reduction program for the site and meet monthly to identify performance and new opportunities for diversion and avoidance.

8 Ongoing Management

Having suitable systems in place is only one element of an effective waste management system. Compliance by all stakeholders is essential.

Cleaners are a key element in the effectiveness of the systems in place. Monitoring of the system will be carried out by the cleaning supervisor and Flight Training Centre management.

In addition, cleaners will be required to feed back to the facility management any noncompliance issues they observe during their cleaning activities. This may include contamination of recycling; non-participation in the recycling system, or missing or damaged bins. In this way issues can be promptly dealt with by management.

Waste and recycling contractors will be required to report actual volumes collected by stream so that management can monitor performance and feed this back to stakeholders.

It is highly recommended that a basic reporting program be set up at which would include bin tally sheets that detail the number of bins collected and how full they are at the time of collection, in addition to communication procedures to allow waste contractors to provide feedback regarding contamination and leakage.

9 Construction Waste Management Principles

The following waste hierarchy will be used as a guiding principle:



Avoid and Reduce

Minimise the production of waste materials in the construction process by:

- Assessing and taking into consideration the resultant waste from different design and construction options
- Purchasing materials that will result in less waste, which have minimal packaging, are pre-cut or fabricated.
- Not over ordering products and materials

Reuse

Ensure that wherever possible, materials are reused either on site or offsite.

- Identify all waste products that can be reused
- Put systems in place to separate and store reusable items
- Identify the potential applications for reuse both onsite and offsite and facilitate reuse

Recycling

Identify all recyclable waste products to be produced on site.

- Provide systems for separating and stockpiling of recyclables
- Provide clear signage to ensure recyclable materials are separated
- Process the material for recycling either onsite or offsite

Note: In some cases, it may be more economical to send the unsorted waste to specialised waste contractors who will separate and recycle materials at an offsite location.

Disposal

Waste products which cannot be reused or recycled will be removed and disposed of. The following will need to be considered:

- Ensure the chosen waste disposal contractor complies with regulatory requirements
- Implement regular collection of bins

9.1 Stormwater Pollution Prevention

All actions will be undertaken to avoid pollution entering stormwater drains and for litter generation. The following will be initiated:

- i. Prior to commencement of any works a Safe Work Method Statement will be completed and reviewed to determine potential for stormwater pollution and/or litter generation
- ii. The proponent (contractor), will need to develop a management strategy to manage the potential for these issues to be realised
- Site inspections will be conducted during the working day to monitor potential for stormwater pollution generation and where identified, works will cease until appropriate controls are implemented
- iv. Wastewater and storm water will be managed and disposed of in accordance with Water Authority requirements.

9.2 Litter Management

- i. Daily site inspections will be conducted to identify litter, remedy the situation and investigate the cause so as to reduce the potential for the issue to occur in the future.
- ii. Sufficient quantities of bins (and/or bin space), will be made available so as to avoid dumping of materials outside bins
- iii. All waste/recycling bins will have covers so as to ensure that wastes cannot be blown out during windy conditions. This will also apply to relevant stocks of materials to be used in construction.

iv. Personnel will be allocated the role of litter management in that they will periodically inspect the site and surrounds for litter and if identified collect and dispose of it.

9.3 Records

Records will be kept of all wastes and recyclables generated and either used on site, or transported offsite.

It will be a condition of appointment, that all waste/recycling contractors provide these records and that they also contain details of the types of materials weights/volumes and the facilities that the materials are transported to.

These records will be made available to Council or any relevant government agency on request.

9.4 Waste/recyclables storage (on-site)

All waste and recycling materials will be stored in bins provided by the appointed contractor(s). These bins will be appropriately coloured and signed to indicate what materials are to be deposited into them and located so as to maximise the recovery of reusable/recyclable materials.

As construction activities progress, the designated bins may be re-located so as to maximise the collection of materials that will be diverted from landfill. This will also involve relocating signage advising as to correct waste management.

All locations where waste/recycling bins are located will be designed so as to avoid contaminating surface/stormwaters and have active litter control measures.

9.5 Waste/recyclables treatment (on-site)

There will be no treatment of wastes or recyclables on-site except for possible removal of contaminants prior to forwarding to off-site recyclers.

10 Construction Waste

The following summarises the types, quantities and management systems for construction waste that may be generated during the construction phase of the development.

The quantity of waste materials to be generated onsite are estimates and therefore the systems that will be put in place need to incorporate flexibility to allow for variation in the total quantities generated. Active site management during the construction phase will ensure all waste/recyclable materials are disposed of appropriately and that all waste receptacles are of sufficient capacity to manage onsite activities.

The table below details the estimated composition by m^3 of construction waste to be generated for the total site.

Finalisation of the system(s) that will be implemented for the recovery of materials and for disposal of others to landfill will occur following appointment of contractor(s). A component of the appointment will be that contractors will be required to provide data as to the disposal pathway (eg., materials, volumes and final disposal site), as well as a validation process for this information.

The appointed contractor(s) will also be responsible for sourcing speciality recycling facilities for the materials that cannot be reused on site.

Materials o	n site		Destination	
Type of material	Estimated volume (m³)	On-site (Reuse or recycle)	Off-site (Detail contractor and recycling contractor)	Disposal (Detail contractor and landfill site)
Excavation material (non- contaminated soil and rock)	100m ³	Will either be stockpiled for use during construction if required and if not disposed off-site.	Excavation materials will be collected and used as clean fill by the appointed contractor with appropriate notification as to location and/or forwarded to various facilities such as garden landscapers, or roadworks	No disposal to landfill

Waste management systems – construction

Materials o	n site		Destination	
Type of material	Estimated volume (m³)	On-site (Reuse or recycle)	Off-site (Detail contractor and recycling contractor)	Disposal (Detail contractor and landfill site)
Concrete	40m ³	Separated on site and crushed for use in pavement construction where possible	Collected by contractor and disposed at concrete recycling facility	Facility TBA upon appointment of contractor
Bricks	30m ³	Bricks will be stockpiled and reused wherever possible.	Acceptable quality bricks collected by a contractor and sold for reuse. Unusable bricks will be collected and recycled at an appropriate brick/rubble recycling facility to be used in aggregate gravel products	Facility TBA upon appointment of contractor ¹
Timber (formwork)	55m³	Separated and where feasible, reused for further formwork	Unused material separate and stockpiled onsite. Collected by specialist timber subcontractor for recycling	Facility TBA upon appointment of contractor
Metals	30m ³	No on-site reuse	Collected by specialist metal subcontractor for recycling	Facility TBA upon appointment of contractor

¹ The actual site will be finalised once waste/recycling contractors have been appointed.

Materials o	n site		Destination	
Type of material	Estimated volume (m ³)	On-site (Reuse or recycle)	Off-site (Detail contractor and recycling contractor)	Disposal (Detail contractor and landfill site)
Plasterboard	35m³	No on-site reuse	Collected by the contractor for recycling.	Facility TBA upon appointment of contractor
Glazing	8m³	No on-site reuse	Recyclers consulted as to potential for recycling and if suitable separated for recycling.	Facility TBA upon appointment of contractor
Carpet	10m³	No on-site reuse	This will be disposed of into a designated bin and collected regularly as required for recycling if of the required quality or disposal to landfill	Facility TBA upon appointment of contractor
Mixed hard plastics	35m ³	No on-site reuse	Collected by contractor for recycling. Facility TBA upon appointment of contractor.	No disposal to landfill
Soil/Sand/Gravel	20m ³	Will be stockpiled for reuse.	Excavation materials will be collected and used as clean fill by the waste contractor with appropriate notification as to location	All remaining material will be disposed at landfill – facility (or other sites as fill), TBA upon appointment of contractor

Materials o	on site		Destination	
Type of material	Estimated volume (m³)	On-site (Reuse or recycle)	Off-site (Detail contractor and recycling contractor)	Disposal (Detail contractor and landfill site)
Mixed Recyclables	55m³	No on-site reuse	Contractor appointed to collect and recycle	No disposal to landfill
General waste	180m ³	No on-site reuse	No recycling or reuse	Facility TBA upon appointment of contractor

Other Materials

A range of other materials may be present on the site once the construction activities commence.

All potentially recyclable materials are to be separated and stored on-site for an appointed waste/recycling contractor to inspect and to determine the suitability of the material for recycling (or even reuse). If approved for either action, then the contractor can then remove the items.

For materials that are not designated as potentially able to be reused or recycled, then they are to be disposed of at a landfill licenced to receive those specific materials.

11 Hazardous Waste Materials

11.1 Management Procedures

If needed to be used, contractors employed to manage any identified hazardous wastes will be required (prior to appointment), to demonstrate their compliance with NSW EPA and WorkSafe requirements for management of the specific materials they are contracted to manage.

The following are the recommended approaches for managing the wastes and other materials, if they are identified during the site works.

The key principles that need to be adhered to are²:

- 1. All hazardous wastes need to be correctly identified and managed in accord with all relevant legislation and Codes of Practices.
- 2. Hazardous materials need to be separated into their individual categories and not mixed with any other materials

Prior to commencing any clean-up activities, a Workplace Health & Safety Plan will be developed, implemented and monitored with all relevant site personnel receiving specific training in management of hazardous waste materials (including suspected hazardous materials).

² Reference should be made to the NSW EPA publication, Waste Classification Guidelines Part 1: Classifying Waste.

12 Contracts and purchasing

Each subcontractor working on the site will be required to adhere to this Waste Management Plan.

The Head Contractor will ensure each subcontractor:

- Takes practical measures to prevent waste being generated from their work
- Implements procedures to ensure waste resulting from their work will be actively managed and where possible recycled, as part of the overall site recycling strategy or separately as appropriate
- Ensures that the right quantities of materials are ordered, minimally packaged and where practical pre-fabricated. Any oversupplied materials are returned to the supplier
- Implements source separation of off cuts to facilitate reuse, resale or recycling.

The Site Manager will be responsible for:

- Ensuring there is a secure location for on-site storage of materials to be reused on site, and for separated materials for recycling off site.
- Engaging appropriate waste and recycling contractors to remove waste and recycling materials from the site
- Co-coordinating between subcontractors, to maximise on site reuse of materials
- Monitoring of bins on a regular basis by site supervisors to detect any contamination or leakage
- Ensuring the site has clear signs directing staff to the appropriate location for recycling and stockpiling station/s. And that each bin/skip/stockpile is clearly sign posted
- Proving training to all site employees and subcontractors in regards to the WMP as detailed in section 13 below.

Should a subcontractor cause a bin to be significantly contaminated, the Site Manager will be advised by a non-conformance report procedure. The offending subcontractor will then be required to take corrective action, at their own cost. The non-conformance process would be managed by the Head Contractors' Quality Management Systems

13 Training and Education

All site employees and sub-contractors will be required to attend a site specific induction that will outline the components of the WMP and explain the site specific practicalities of the waste reduction and recycling strategies outlined in the WMP.

All employees are to have a clear understanding of which products are being reused/recycled on site and where they are stockpiled. They are also to be made aware of waste reduction efforts in regards to packaging.

The site manager will post educational signage in relation the recycling activities on site in breakout areas, lunch rooms etc.

Appendix A – Example Signage

LANDFILL



Don't waste YOUR future



Don't waste YOUR future



Example wall posters



Appendix B – Waste Management Equipment

The following diagrams illustrate colours and sizes of different bins and equipment that could be used within the development.

MGB bin



MGB bin



Bin movers and tugs







