SCEGGS Darlinghurst Masterplan 2040

Waste Management Strategy

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This report is based on information provided by SCEGGS Darlinghurst coupled with Foresight Environmental's knowledge of waste generated within the mixed-use development sector. To that extent this report relies on the accuracy of the information provided to the consultant. It has been compiled by Foresight Environmental on behalf of SCEGGS Darlinghurst.

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1	02 November 2018	Kyle Renwick	Scott Ebsary	Draft issue for review
2	05 November 2018	Kyle Renwick	Scott Ebsary	Update C&D section for all developments

Contents

Overview of Development

This section outlines the proposed scope to establish the context for future waste generation considerations from each distinct component within the masterplan.

The site is the SCEGGS Darlinghurst School campus located in Darlinghurst NSW and generally bounded by Forbes Street, Bourke Street, St Peters Street, St Peters Lane and Thomson Street.

The Masterplan for the school is aimed at redeveloping key areas of the SCEGGS campus that are currently underutilised and do not meet the contemporary learning requirements of the school. The Masterplan provides a framework for development of the campus over the next 20 years.

The redevelopment of the campus is aimed at providing improved facilities for the school and there is no proposal to increase student numbers.

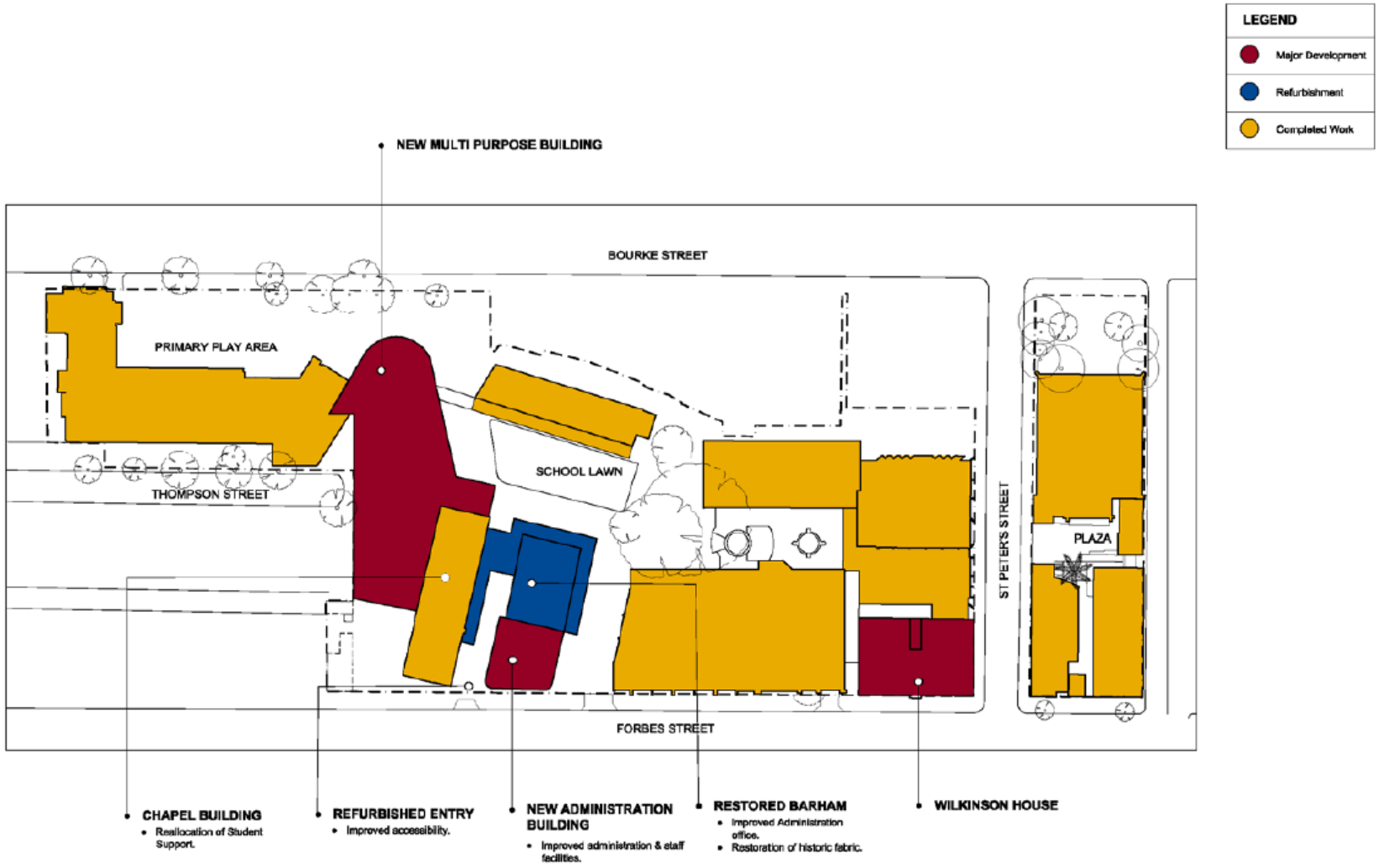
The Masterplan consists of 3 primary components:

- Wilkinson House Redevelopment
- New Administration Building/Barham Restoration/Revitalised School Entry
- New Multi-Purpose Building

The redevelopment of Wilkinson House is proposed to be carried out as the first stage of work in order to address the schools most pressing need for larger flexible learning spaces.

The purpose of this operational waste management plan is to outline the systems and practices involved in managing waste and recycling during the operation of the college.

Figure 1 - SCEGGS 2040 Masterplan Overview



WASTE MANAGEMENT PLAN

1. Waste Generation

The following waste estimate has been generated for the purposes of demonstrating the capacity of the waste systems to manage standard usage based on industry averages and historical audit data. The profiles have been produced for the entire campus – including the three new developments; Wilkinson House, New Administration Building and the New Multi-Purpose Building. A Wilkinson House specific profile has also been produced to outline the expected quantities to be produced within this new development.

While these profiles do not reflect the current composition of waste and recycling streams generated, it provides an overview of best practice targets based on similar developments and current volumes generated at the school.

Based on the information provided and benchmark data from similar developments, the primary waste streams expected to be generated in the ongoing operation of the development would be:

- Cardboard/paper recycling
- Comingled recycling
- Food organics recycling*
- General waste

*With the exception of within the café/canteen and food tech teaching rooms, food organics recycling will be combined with general waste due to contamination issues, however there is the opportunity to separate the stream as described in section 5.

Additional smaller waste streams may include toner cartridge recycling, fluoro tube/globe recycling and battery recycling.

1.1 Estimates

Based on industry averages and historical audit data, it is estimated that the entire school should generate a total of **370 kilograms** and **3,266 litres** of waste and recyclables per day. It should be noted that the following waste generation profiles are an estimation only, based on average teaching and office use – assuming full use during weekdays with a maximum number of 942 students and 157.5 equivalent full-time staff.

Table 1 – Entire school waste generation estimate

Waste Stream	kg/day	L/day	kg/week	L/week
Paper/Cardboard	76	1,143	381	5,730
Comingled Recycling	20	327	98	1,637
Organics	137	490	688	2,456
General Waste	137	1,306	688	6,549
Grand Total	**370**	**3,266**	**1,854**	**16,372**

It is estimated that Wilkinson House facilities will generate a total of **38 kilograms and 474 litres** of waste and recyclables per day. It should be noted that the following waste generation profile is an estimation only, based on average teaching use – assuming full use during weekdays with a total learning area of 1,166m^2.

Table 2 – Wilkinson House waste generation estimate

Waste Stream	kg/day	L/day	kg/wk	L/wk
Paper/cardboard	13	247	66	1,236
Comingled recycling	4	63	19	317
General waste	21	165	104	825
Total	**38**	**474**	**190**	**2,378**

1.2 Management Systems

The following table demonstrates how onsite systems would provide ample capacity for the estimated waste profile described in Table 1 above for the entire school.

Table 3 – Entire school recommended management systems

Stream	Bin Type	No. of Bins	Weekly Clearance Frequency	Weekly Capacity (L)	Estimated volume / week (L)	Footprint per bin (m^2)	Total Footprint (m^2)
Paper/Cardboard	MGB - 1100L	2	3	6,600	5,730	1.69	3.37
Comingled Recycling	MGB - 1100L	2	1	2,200	1,637	1.69	3.37
Organics	MGB - 120L	5	5	3,000	2,456	0.27	1.36
General Waste	MGB - 1100L	2	3	6,600	6,549	1.69	3.37
Total bin footprint							**11.47**
Recommended room size – including circulation space							**17.20**

The systems recommended have been derived as if there were only one waste storage area for the school, where in reality the school has two areas (see next section). Although it is unlikely that the total waste generated will be evenly split into halves, the following table demonstrates the systems of what each individual area would need:

Table 4 - Recommended management systems for individual waste rooms

Stream	Bin Type	No. of Bins	Weekly Clearance Frequency	Weekly Capacity (L)	Estimated volume / week (L)	Footprint per bin (m^2)	Total Footprint (m^2)
Paper/Cardboard	MGB - 1100L	1	3	3,300	2,865	1.69	1.69
Comingled Recycling	MGB - 1100L	1	1	1,100	819	1.69	1.69
Organics	MGB - 120L	3	5	1,800	1,228	0.27	0.81
General Waste	MGB - 1100L	1	3	3,300	3,274	1.69	1.69
Total bin footprint							**5.87**
Recommended room size – including circulation space							**8.81**

1.3 Other Waste/Recycling

The following waste stream will be collected on call as needed:

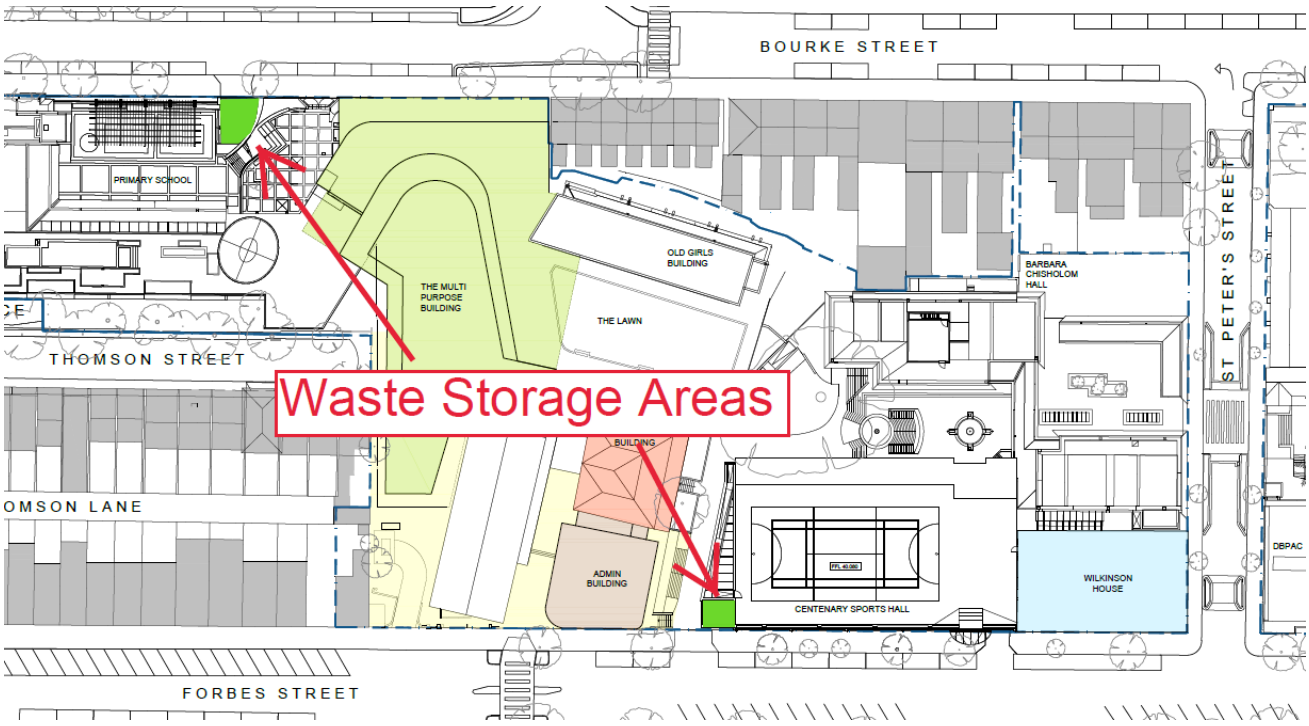
- Green Waste/vegetation – vegetation generated from onsite maintenance activities will be managed by grounds staff. A bulk $3m^3$ front lift bin is recommended for the management of this stream which should be collected on request as required.
- Battery Recycling – Battery recycling boxes will be present where deemed necessary e.g. copy rooms, office/study common areas. These boxes will be collected when full by a dedicated contractor.
- Toner Cartridge Recycling – Used toners will be collected by administration staff and consolidated for collection by specialty cartridge recycler (usually provided by office supplier).

2. Waste and Recycling Storage Areas

2.1 Storage Areas

The school currently has two garbage and recycling areas, which adequately service the school's waste and recycling generation. The main garbage and recycling area is located adjacent to Barham and the Jacaranda Gate. A separate garbage area is located off Bourke Street for the Primary School.

Figure 2 - Site plan and waste storage area locations



2.2 Signage

All waste and recycling streams should be differentiated with clear signage and colour-coding. This is to be present on all bins and on walls within the waste storage area. Below are examples of appropriate signage – incorporating textual information, pictures and colour-coding.

Figure 3 - Best practice signage

2.3 Colour-Coding

To further reinforce the differentiation between waste and recycling streams, it is highly recommended that the bin storage room be colour-coded to ensure bins are stored in the correct area and to enable easy identification of the streams provided. This can be done by painting borders on the floor indicating where bins should be stored. The colour of the paint should be consistent with the waste stream e.g. yellow paint for mixed recycling, red paint for general waste. The waste room walls can also be painted.

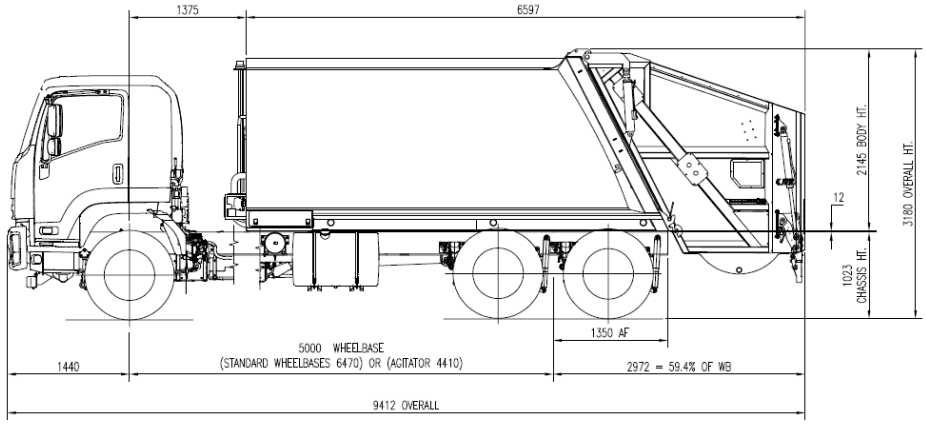
Photographs 1 & 2 – Examples of appropriate colour-coding

3. Collection

3.1 Waste Collection Vehicle

Waste truck specifications will vary slightly between contractors however as a guide, all streams and bins recommended in this report would typically be collected by a MRV rear lift waste truck – figure 4 details the indicative dimensions of a typical MRV rear-lift truck used by most commercial waste contractors.

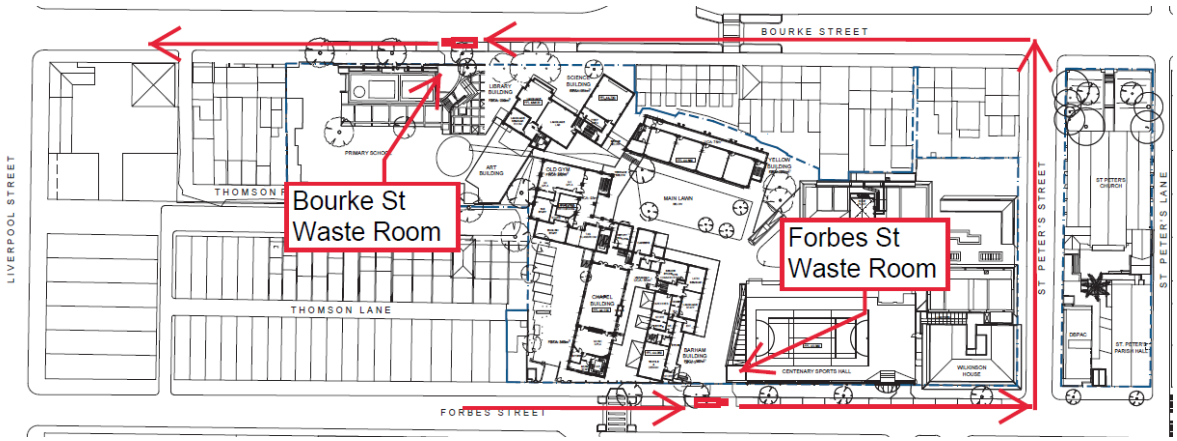
Figure 4 - Indicative waste contractor specs - assume 10.5m MRV



3.2 Collection Access

Collection practices are to continue as they are currently being conducted by the waste contractor. Bins are collected immediately adjacent to each waste room on the respective street and then returned to the waste room once emptied.

Figure 5 - Waste contractor collection process



4. Onsite Management Protocols

4.1 Waste Systems

Throughout the various teaching and meeting rooms in the school, it would be impractical and unnecessary to offer bins in every single room. Instead, it is recommended that smaller "Multi-sort" bin hubs be established throughout the floors in hallways and common spaces to service the smaller rooms as necessary. This encourages students/staff using the spaces to remove any waste they have and place it in the appropriate bin at the nearest hub – such a practice should promote recycling by giving users the choice of stream to dispose material into, and also reduce the time taken for cleaners to empty the bins.

Cleaners/facilities management will empty waste and recycling into trolley and then transfer to main waste storage area to be disposed into the larger bins for collection.

Figure 4 depicts a bin hub that would be best suited for small staff rooms and classrooms

Figure 6 - Multi-sort bin hubs

4.2 Outdoor Areas

Bin hubs should be implemented in appropriate outdoor areas. The following photographs provide examples of waste and recycling bin hubs. It is important to note that should recycling be implemented in these areas, both general waste and recycling bins be located next to each other. When separated, the likelihood of the recycling stream being contaminated by non-recyclables increases substantially.

For ease of use, bin hubs should be large enough to house a 240L MGB for each stream so that maintenance staff can simply remove the full bin and replace it with an empty one. Full bins can then be transferred to the waste storage/collection area for collection by the waste contractor.

Photographs 3 & 4 – Outdoor bin hubs

4.3 Bulky Design & Tech Materials

Bulky waste such as timber and metals from design technology labs will be managed by teaching staff within teaching areas. It is proposed for consideration that manoeuvrable crates/cages be located within design/technology workshops for the storage of scrap materials (timber, metal etc). These crates will have a duel function – scraps and offcuts can be placed in the crates and made available to other users for re-use. It is anticipated that most materials will be reused with only limited quantities of materials needing disposal periodically. When crates become full and the materials are deemed unfit for reuse, they can be wheeled to the waste storage area to be collected by the appointed waste contractor upon request.

Figure 7 - Bulky waste cage

4.4 Liquid/Hazardous waste

Liquid/hazardous waste generated from visual art studios and science labs should be managed in dedicated bunded hazardous waste storage cabinets – they should be implemented in visual arts store rooms and in science prep/chemical store rooms for the safe storage of any paints, solvents or liquid chemicals associated with class/science lab activities. These wastes should then be collected by a specialist contractor directly for appropriate disposal i.e. Chemsal.

Figure 8 - Hazardous waste storage cabinet

4.5 Waste Stream Collection Practices

Table 5 outlines the cleaners and campus operational staff collection practices for each waste stream.

Table 5 - Collection Practices

Waste Stream	Collection Practices
Paper/cardboard recycling	1. Cleaners empty bin hubs into cleaner trolleys. Material is then taken to the appropriate waste storage area and transferred into the paper/cardboard bins. 2. Where possible, bulky cardboard should be taken directly to the waste storage to be collected by cleaning staff. 3. Cleaners collect flattened cardboard as required and transfer it to the waste storage area where it is deposited into the paper/cardboard recycling MGB(s) 4. Bins collected from the waste storage areas directly by waste contractor via either Forbes St or Bourke St
Comingled Recycling	1. Cleaners empty bin hubs into cleaner trolleys. Material is then taken to the appropriate waste storage area and transferred into the MGB co-mingled bin(s) in waste storage area. 2. Bins collected from the waste storage areas directly by waste contractor via either Forbes St or Bourke St
Organics	1. The 120L bins located throughout any kitchens or food technology rooms are to be directly transported to either a) on-site compost facilities, or b) the appropriate waste storage area for collection. 2. With assistance from staff, the organic waste can then be managed by students participating in onsite compost programs.
General Waste	3. Cleaners to collect general waste from bin hubs using a trolley and transport the waste to the appropriate waste storage area to be transferred into the MGB(s). 4. Bins collected from the waste storage areas directly by waste contractor via either Forbes St or Bourke St

5. Additional Opportunities

5.1 Waste Diversion Opportunities

The following initiatives represent opportunities for SCEGGS Darlinghurst to explore in an effort to reduce total waste production. These options are not a requirement, however, should be considered in order to move towards best practice waste management.

5.2 Organics Recovery/Recycling

Although offering food/organic recycling throughout all areas is not recommended due to the challenges of contamination, options for the kitchen where there is more control over the type of materials being disposed should be investigated.

Alternatively, other onsite options that would reduce the quantity of waste being taken offsite by waste contractors should be investigated. An effective solution could incorporate one or both of the following:

- Onsite compost bins
- Onsite worm farms

Table 6 - Example of a compost setup

Table 7 - Example of a basic worm farm

6. Operational Monitoring and Performance

6.1 Ongoing Monitoring and Review

It is recommended that ongoing monitoring of the waste and recycling program be conducted by operations staff. The appointed waste contractor and cleaning contractor should be required to meet quarterly with operations staff to ensure all stakeholders are continuously working towards best practice.

The review process incorporates the following elements:

- Cleaners, managers and drivers regularly making note of any contamination in recycling streams and providing feedback to staff for them to address as appropriate.
- Waste contractor reports and invoices be reviewed and analysed on an ongoing basis to ensure the reported data and invoiced costs are reflective of onsite practices and performance.

6.2 Recycling Performance Targets

Based on the best practice waste composition for this development, approximately 62% of the total waste profile is recyclable. It should be noted that this profile assumes 100% separation of recyclables, which in practice in unlikely to be achieved.

With the implementation of the recycling streams proposed in this plan, the school will be equipped to capture the available recyclables generated from onsite operations. It is strongly recommended that all future recycling initiatives be focused on the continued effective capture of the common recyclables.
To sustain and improve performance, a three-year recycling target has been proposed based on achievable outcomes, which allows for progressive improvements to be made to the waste program each year.

The table below outlines an achievable target progression.

Table 8 - Year-on-year target progression

	Year 1	Year 2	Year 3
Recovery Target	20%	30%	40%
Primary focus	Paper/cardboard and co-mingled capture	Staged roll-out of organics to limited, managed areas	Potential complete rollout of organics to all possible food generating areas

These targets are provided as a conservative guide which should be reviewed and adjusted in light of actual onsite practices once operational. Greater diversion opportunities may be available to facility management.

CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN

7. Introduction

This Construction and Demolition Waste Management Plan has been prepared by Foresight Environmental on behalf of SCEGGS Darlinghurst (the 'Applicant'). The plan details the way in which the proposed developments:

- Wilkinson House Redevelopment
- New Administration Building/Barham Restoration/Revitalised School Entry
- New Multi-Purpose Building

will manage the waste and recycling generated during the demolition and construction phases of the development.

8. Waste Generation Estimate

The aim of this Plan is to ensure that all waste resulting from construction and demolition activities is managed in an effective and environmentally aware manner. Specifically,

- To maximize the reuse and recycling of demolition and construction materials
- To reduce the volume of materials going to landfill
- To maximise waste material avoidance and reuse on site
- To ensure that where practicable, an efficient recycling procedure is applied to waste materials
- To ensure efficient storage and collection of waste

The quantity of waste materials to be generated onsite are estimates based on the information provided to Foresight Environmental and therefore the systems that will be put in place need to incorporate flexibility to allow for variation in the total quantities generated.

8.1 Demolition

The testing and classification of any excavated material is not covered in this report. Where necessary separate specialist testing should be conducted by the project managers.

If acid sulphate soils are present on site, a separate management plan will need to be prepared for handling and disposal of such soil.

The tables below detail the estimated composition by area or volume of demolition waste to be generated.

Table 9 – Wilkinson House composition of demolition waste by volume

Material	M^3
Bricks	244.20
Concrete	151.54
Timber	50.00
Tiles	41.25
General Residual	35.00
Metal	30.00
Carpet	25.00
Plasterboard	5.00
Glazing	2.04
Total	**584.03**

Table 10 - New Administration Building composition of demolition waste by volume

Material	M^3
Bricks	76.80
Concrete	49.40
Plasterboard	43.40
Timber	28.00
Tiles	25.00
Carpet	24.35
General Residual	21.40
Metal	13.35
Glazing	1.54
Total	**283.34**

Table 11 - Multi-Purpose Building composition of demolition waste by volume

Material	M^3
Bricks	510.80
Concrete	470.00
General Residual	147.20
Metal	106.50
Timber	100.00
Carpet	76.50
Plasterboard	66.20
Asphalt	62.00
Tiles	34.80
Glazing	9.07
Total	**1,583.07**

8.2 Construction

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 tables below detail the estimated composition by area or volume of construction waste to be generated.

Table 12 – Wilkinson House composition of construction waste by volume

Material	M^3
Fill	302.7
Concrete	29.85
Residual Mixed Waste	24.00
Plasterboard	7.88
Insulation	3.49
Brick	2.98
Asphalt	2.93
Metal	8.08
Tiling	1.20
Timber	1.16
Carpet	0.30
Paint/waterproof	0.11
Total	**384.67**

Table 13 - New Administration Building composition of construction waste by volume

Material	M^3
Fill	332.45
Concrete	19.53
Residual Mixed Waste	15.71
Plasterboard	5.16
Insulation	2.29
Brick	1.95
Asphalt	1.92
Metal	5.29
Tiling	0.78
Timber	0.76
Carpet	0.29
Paint/waterproof	0.11
Total	**386.23**

Table 14 - Multi-Purpose Building composition of construction waste by volume

Material	M^3
Fill	1341.25
Concrete	66.12
Residual Mixed Waste	53.17
Plasterboard	34.28
Insulation	15.20
Brick	12.95
Asphalt	12.73
Metal	35.15
Tiling	5.21
Timber	5.05
Carpet	1.29
Paint/waterproof	0.48
Total	**1,582.86**

9. Waste Management Strategy

Consideration of waste management during all phases of the development will provide the best opportunity to minimise the volume of waste generated throughout the project's lifetime. Whilst recycling and reuse of materials are important aspects of waste management, waste minimisation techniques incorporated into construction and demolition can prevent materials from being brought onto the site that will eventually become waste. The following waste hierarchy will be used as a guiding principle:

The construction and demolition team will implement this Waste Management Plan, incorporating the following best practice management techniques as a minimum:

9.1 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. Where possible, arrange for packaging to be removed by the delivery company

- Not over ordering products and materials
- Ordering materials cut to size to reduce waste material onsite

9.2 Reuse

Ensure that where ever possible, materials are reused either on site or offsite

- Identify all waste products that can be reused
- Any demolition and excavation materials should be salvaged and retained onsite for re-use where possible
- Put systems in place to separate and store reusable items
- Identify the potential applications for reuse both onsite and offsite and facilitate reuse

9.3 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 efficient to send the unsorted waste to specialised waste contractors who will separate and recycle materials at an offsite location.

9.4 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 OEH requirements
- Implement regular collection of bins
- Maintain records of both recycled and general waste volumes being transferred offsite or reused onsite.
- The only materials to be sent to landfill are those that cannot be recycled due to contamination, legal requirements or lack of facilities to enable recycling.

10. Waste Management Systems

10.1 Onsite and Offsite Systems

Onsite separation of the various waste streams is encouraged to lower recycling costs so to avoid additional fees for sorting at appropriate facilities. However, it is highly unlikely that each stream will be separated and thus will need to be processed offsite for recycling. Those streams that may be hard to individually separate will be treated as "residual mixed waste".

The following tables combine the estimated volumes for each component of the development as the recycling practices are to be replicated during each respective phase.

10.1.1. Demolition

Table 15 – Waste management systems (demolition)

Material	Estimated volume (m^3)	Onsite (re-use or recycle)	Offsite (recycling contractor)
Concrete	670.94	Crushed for road base where possible	Removed from site as required for recycling/reuse at C&D facility for processing.
Bricks	831.80		
Asphalt	62.00		
Carpet	125.85		Stockpiled and collected as required by carpet supplier for recycling contractor
Metal	149.85		Stockpiled and collected as required by specialty metal recycler or taken to appropriate C&D facility for separation and recycling
Tiles	101.05		Collected by contractor to be sorted and re-processed at an appropriate C&D recycling facility into recycled products where possible
Residual Mixed Waste	203.6		
Timber	178.00		
Plasterboard	114.64		
Glazing	12.65		

10.1.2. Construction

Table 16 details the expected waste materials and management systems for the construction phase of the project.

Table 16 – Waste management systems (construction)

Material	Estimated volume (m^3)	Onsite (re-use or recycle)	Offsite (recycling contractor)
Fill + contaminated fill*	1,976.40	Suitable soil to be reused or remediated (capped) where appropriate for onsite landscaping/fill	All surplus fill will be taken offsite to suitable C&D facility for processing/reuse
Concrete	115.50	Crushed for road base	Separated where possible and taken to concrete recycling facility – deposited onsite directly into skips or trucks to be removed from site.
Brick	17.88		
Asphalt	17.58		
Metal	48.52		Stockpiled and collected as required by specialty metal recycler or taken to appropriate C&D facility for separation and recycling
Residual Mixed Waste	136.37		Collected by contractor to be sorted and re-processed into recycled products where possible

*refer to 10.4 of this report for specific details about contaminated fill.

Note: The quantities of construction and demolition waste materials have been estimated using industry guides for predicting waste quantities[1]. The figures in Tables 15 and 16 above are estimates and are used as a guide for designing the waste management systems on site. These figures will be adjusted according to the final building material selection and quantities. The waste management systems will be adjusted as necessary.

[1] McGregor Environmental Services (2000) Predicting C&D waste quantities in the Inner Sydney Waste Board Waste Planning Guide for Development Applications-Planning for Less Waste (1998) NSW Waste Boards

It should be noted that there are multiple offsite recycling/disposal facilities available for the appropriate processing of the materials detailed above and the facility choice will depend largely on the waste contractor/supplier engaged. See section 11.

10.2 Waste Storage and Collection

A designated waste storage area will be established for the collection of all waste and recyclables. The waste storage area shall have appropriate signage to clearly identify the area to construction workers and to prevent unauthorised access to the area.

Stockpile size should be minimised by regular removal of waste from site and construction staging plans must allow for the waste storage area to move within the site as the development progresses.

The construction waste storage area does not have to be enclosed. However, containers should be covered where possible to prevent transmission of dust and fine particles, odour, wind impacts, vermin and vandalism or theft. Containers will be stored on a hardstand area with appropriate sediment control measures implemented to mitigate run-off into stormwater. Any spillages in the waste storage area should be treated immediately using a spill kit. Contaminated or hazardous wastes should be stored in a secure area with appropriate signage.

10.3 Site waste control and management

To ensure adequate site environmental standards are maintained, is recommended that the following controls be implemented and enforced by the proponent:

1. All waste generated during the project is assessed, classified and managed in accordance with the "Waste Classification Guidelines Part 1: Classifying Waste" (DECCW, December 2009)
2. The body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to prevent any spill or escape of any dust, waste or spoil from the vehicle or trailer
3. Mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorized plant leaving the site, is removed before the vehicle, trailer or motorized plant leaves the premises.

10.4 Hazardous Wastes

During any demolition and material recovery activities, contractors should beware of potentially hazardous materials. Hazardous construction materials should be disposed of in accordance with EPA guidelines in order to protect the environment and personnel. In order to avoid risk to the environment and any breach of legislation this development endeavours to uphold the following practices:

- Early identification and reporting of hazardous waste
- Reporting of any suspicious activities of involved stakeholders (waste generator, transporter or receiver) to including handling waste unlawfully or illegally dumping waste through the Environment Line on 131 555.
- Ensure waste is transported to a place that can lawfully accept it under Section 143 of the Protection of the Environment Operations Act 1997.
- Take all reasonable precautions and exercise due diligence at all times to prevent/minimise commission of any offence.
- Keep accurate written records such as:
    - who transported the waste (company name, ABN, vehicle registration and driver details, date and time of transport, description of waste)
    - copies of waste dockets/receipts from the waste facility (date and time of delivery, name and address of the facility, its ABN, contact person).

10.5 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.
- Ensuring all skips/bins/stockpiles are clearly labelled identifying which material is suitable for each receptacle
- 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
- Providing training to all site employees and subcontractors in regards to the WMP as detailed in section 5.6 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
- Retaining demolition and construction waste dockets to confirm and verify which facility received the material for recycling or disposal.

10.6 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.

11. Waste Facilities

The following waste recycling facilities provide disposal options within reasonable distance to the project. It is the responsibility of the site manager to ensure that the chosen facilities can accept the material being sent to it.

Genesis Alexandria

Contact	Materials Accepted
76 Burrows Rd Alexandria NSW http://www.dadi.com.au/	• Solid Fill – Soil • Concrete • Bricks • Plasterboard

Bingo Recycling Centre - Banksmeadow

Contact	Materials Accepted
38 McPherson St Banksmeadow NSW https://www.bingoindustries.com.au/recycling-centres/nsw/banksmeadow/	• Aluminium Scrap, Iron & Steel, Other Metals • Solid Fill – Soil, Garden Cuttings • Concrete • Bricks

Note that this facility might not accept steel

Sydney Transwaste Industries

Contact	Materials Accepted
160 Arthur St Homebush West NSW 2141 http://www.transwaste.com.au/	• Solid Fill – Soil • Concrete • Scrap Metal • Vegetation • Bricks