

# Waste Management Plan

Melbourne Grammar School Centre for Humanities

19-May-2023 Centre for Humanities

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#### Waste Management Plan

Melbourne Grammar School Centre for Humanities

Client: Melbourne Grammar School

ABN: 000000000

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#### 1.0 Introduction

The following Waste Management Plan has been prepared for a proposed Melbourne Grammar School (MGS) Centre for Humanity to be located within the existing MGS campus. The development is to service the existing student population and as such no additional waste generation is anticipated as a result of this development.

This Waste Management Plan (WMP) has been prepared based on the City of Melbourne *Guidelines for Waste Management Plans 2021*, with waste generation rates based on existing waste generation for the existing campus.

This report is intended for the purpose of town planning endorsement.

#### 1.1 Subject Development

Client:	Melbourne Grammar School Centre for Humanity
Use Type:	Teaching and Learning Spaces
Number of Levels:	N/A

#### Table 1 Development Summary

Туре	Description
Teaching and Learning Spaces	Large 220-person informal learning space, specialist teaching spaces including broadcast studio, house room and roof function area complete with commercial/reheat kitchen.

#### 1.2 Existing Conditions

Figure 1 summarises existing waste storage areas onsite, with current practice as below:

#### • Location 1: St. Kilda Road Bin Store

Existing onsite waste store. Access from St Kilda Road is currently obstructed by the Metro Tunnel works, anticipated to complete circa 2025 as per the Victorian Government programme. Once metro tunnel works are complete, some waste storage will return to this location.

#### • Location 2: Kitchen Loading Dock & Bin Store

Waste generated by the kitchen is stored internally, at the rear of the kitchen loading dock. Collection occurs from the loading dock. The kitchen waste management is generally independent of the wider site. This arrangement will be retained as per existing conditions

#### • Location 3: Domain Road Bin Store - West

External bin holding area with a sliding gate opening onto Domain Road. The collection contractor props on Domain Road, ferrying the bins with the contractor ferrying bins from the bin store to the vehicle during collection.

• Location 4: Temporary Bin Store - East (to be removed as part of works) Temporary external bin holding area to be removed as part of the development works. The collection contractor currently props on Domain Road to perform collections.

Location 1, 2 and 3 will be retained as per existing conditions and collection arrangements. Location 4 waste will be relocated to Location 3 as part of the works for the subject development.

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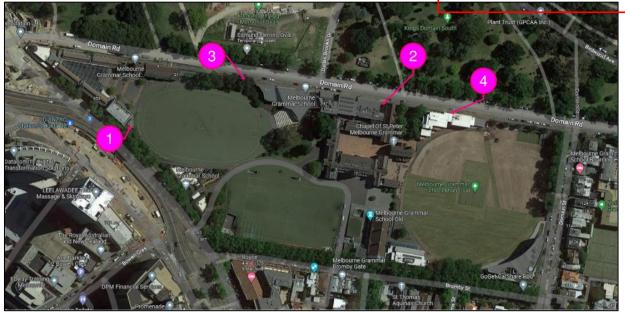


Figure 1 Existing Waste Management Storage Areas

#### 1.3 Extent of Development Works

The subject development will be limited to works associated with the new Centre of Humanity (refer Figure 2 below). With respect to waste management, no other changes are occurring to the site that would impact waste management planning. As such, existing conditions with respect to waste management will be retained, with the exception of relocating waste stored within Location 4 (Figure 1 above).

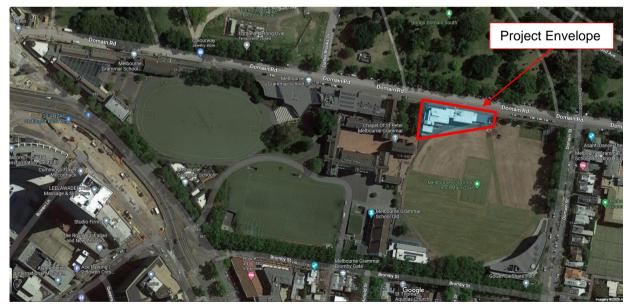


Figure 2 Existing Waste Management Storage Areas



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## 2.0 Strategic Intent

The approach to waste management will be in two stages:

- **Stage 1** (During Metro Tunnel Works): The Domain Road Bin Store West and Kitchen Bin Store will be accessible and used for waste storage and collection as per existing conditions.
- **Stage 2** (After Metro Tunnel Works Complete): The third onsite bin store (St Kilda Road Bin Store) will be accessible and some waste storage will relocate to this location as detailed.

The population of the campus will remain as per current conditions, therefore in both stages, the waste generation will be as per existing conditions.

## 3.0 Waste Management Plan

#### 3.1 Waste Systems

Waste shall be sorted on-site by staff and cleaners as appropriate into the following streams:

- General waste
- Comingled recycling
- Cardboard & Paper
- Food Organics (Kitchen Waste Only)
- Hard Waste

#### 3.1.1.1 Bin Stations

Throughout the new facility it will be ensured that it is as easy to dispose of recyclables as it is garbage. This will be achieved by ensuring the development is appropriately furnished with bin stations throughout the individual rooms, ancillary spaces and communal areas. Clear signage is to be appropriately displayed in combination with the bin stations to identify the segregation of waste streams and correct use of the bins.

Bin stations encourage the separation of recyclables. This system incorporates the provision of multiple bins for different waste streams at central locations and common areas for ease of disposal. This system is beneficial, as users are required to make a conscious decision as to which bin they place their items in. This typically results in a reduced volume of garbage (landfill).

The use of bin stations also reduces the amount of locations cleaners are required to service throughout the development.



Figure 3 Example Bin Stations



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#### 3.2 Waste Generation & Storage

Table 2 through Table 4 provide a summary of the waste storage arrangements for each location at Stage 2 (after metro tunnel works complete). As noted above, during metro tunnel works, the front lift bin anticipated for the St Kilar Road Bin Store will be held at the Domain Road Bin Store – West.

#### Table 2 Location 1: St. Kilda Road Bin Store - Waste Storage & Capacity

Stream	Volume	Storage (Litres)	Quantity	Collection Frequency
General Waste	9,000	3,000	1	3

Note: The 3000-litre front lift bin will be located at the Domain Road Bin Store – West, until the complete of the metro tunnel works

#### Table 3 Location 2: Kitchen Loading Dock & Bin Store - Waste Storage & Capacity

Stream	Volume	Storage (Litres)	Quantity	Collection Frequency
General Waste	1,320	660	1	2
Commingled Recycling	3,300	660	1	5
Food Organics	2,880	120	4	6

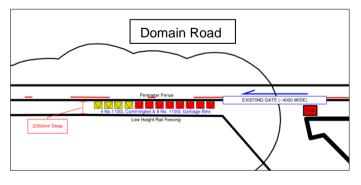
#### Table 4 Location 3: Domain Road Bin Store - West - Waste Storage & Capacity

Stream	Volume	Storage (Litres)	Quantity	Collection Frequency
General Waste	44,000	1100	8	5
Commingled Recycling	22,000	1100	4	5

#### 3.3 Primary Waste Storage Areas & Location

As discussed above, waste storage will be provided in two stages. Figure 4 illustrates the arrangement for the Domain Road Bin Store – West and St Kilda Road Bin Store, demonstrating sufficient storage area for the waste bins in both stages. Both stores are as per existing conditions and are outside the project envelope.

#### Domain Road Bin Store - West



#### St Kilda Road Bin Store



#### Figure 4 Waste Storage Area Sketches

Table 5 through Table 7 demonstrate the cumulative area requirements (excluding circulation) and provision of waste areas for the St. Kilda Road Bin Store - Waste Storage Area

l able 5	Table 5 Location 1: St. Kilda Road Bin Store - Waste Storage Area Requirements							
Stream	Storage (Litres)	Quantity	Area, ex. circulation (m <sup>2</sup> )	Area Provided (m²)				
General	<b>Waste</b> 3,000	1	2.48	37.00				
TOTAL	-	-	2.48	37.00				

Table 6 Location 2: Kitchen Loading Dock & Bin Store - Waste Storage Area Requirements

Stream	Storage (Litres)	Quantity	Area, ex. circulation (m2)	Area Provided (m²)
General Waste	660	1	0.98	
Commingled Recycling	660	1	0.98	15.00
Food Organics	120	4	1.04	
TOTAL	-	-	3.00	15.00

Table 7 Location 3: Domain Road Bin Store - West - Waste Storage Area Requirements

Stream	Storage (Litres)	Quantity		Area, ex. ulation (m2)	Area Provided (m²)
General Waste	1100	8	}	10.64	
Commingled Recycling	1100	4	ļ	5.32	55.00
TOTAL	-	•	•	15.96	55.00

Please refer to scaled waste area drawing shown in Appendix A.

#### 3.4 Bin Colour and Supplier

All bins will be provided by private supplier. The below bin colours are specified by Australian Standard AS4123.7 2006, however due the private nature of the collection, these are only recommendations and are not mandatory:

- Garbage (general waste) bins shall have red lids with dark green body.
- Recycle bins shall have yellow lids with dark green body.
- Cardboard bins shall have blue lids with blue body.
- Glass Bins shall have purple lids with dark green body
- Food Organics bins shall have green lids with dark green body

Private collection contractors often supply their own bins for collection.

#### 3.5 Signage

Waste drop-off areas and bins will be clearly marked and signed with appropriate waste disposal signage as illustrated in Figure 2 (or equivalent).

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Figure 5 Example Waste Disposal Signage (City of Melbourne)

#### 3.6 Waste Collection Methodology

All waste will be collected via private contractor in accordance with Table 8 below. As per existing conditions, waste collection will occur as follows (location numbers refer to Figure 6 below):

- Stage 1 (During Metro Tunnel Works):
  - Location 1: St Kilda Road Bin Store: No collection. In accessible due to Metro Tunnel works.
  - Location 2: Kitchen Loading Dock: Collection via kitchen loading dock accessed from Domain Road.
  - Location 3: Bin Store West: collection via Domain Road as per existing conditions, with the collection vehicle to prop on Domain Road. Bins to be ferried to/from the bin store by the operator.
- Stage 2 (After Metro Tunnel Works Completion):
  - **Location 1**: St Kilda Road Bin Store: Collection vehicle to enter site as per existing (previous) condition via St Kilda Road.
  - Location 2: Kitchen Loading Dock: Collection via kitchen loading dock accessed from Domain Road.
  - Location 3: Bin Store West: collection via Domain Road as per existing conditions, with the collection vehicle to prop on Domain Road. Bins to be ferried to/from the bin store by the operator.

Location 4 (Temporary Bin Store – East) will no longer be used due to construction of the subject development.

Bins will not be stored outside of the title boundary or presented to kerb for collection at any time.

Facilities management will ensure sufficient access is provided for operators during collection times. Typically, operators are provided with keypad/swipe card access to the service doors.



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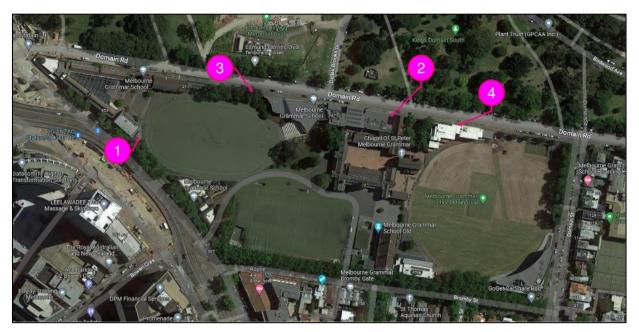


Figure 6 Existing Waste Management Storage Areas (Duplicate of Figure 1)

 Table 8
 Bin Collection Summary (whole of site)

Waste Stream	Bin Size	Bin Quantity	Collections Per Week (Existing Condition)
General Waste	3000 (3m³Front Lift Skip)	1	3
	1100	8	5
	660	1	2
Commingled	1100	4	5
Recycling	660	1	5
Food Organics	120	4	6

#### 4.0 Standards & Compliance

#### 4.1 Ventilation

Ventilation will be provided in accordance with Australian Standard requirements.

#### 4.2 Vermin Protection

Waste storage will be suitably protected to prevent vermin ingress and suitably tidy as to not attract vermin.

#### 4.3 Bin Washing

Bin washing shall occur onsite by the facilities management team or via third party contractor.

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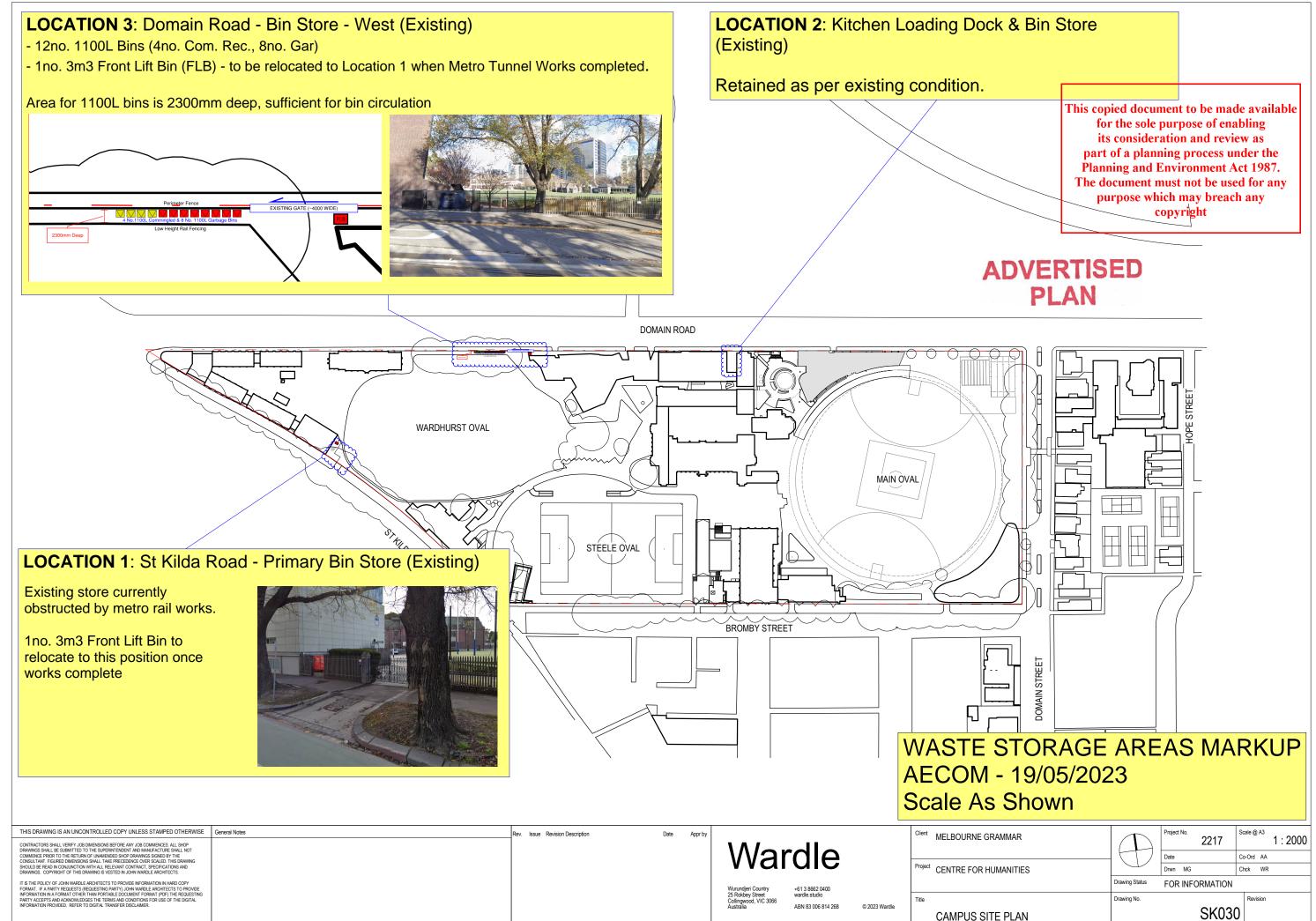
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# Scaled Architectural Drawings



	Drawing No.	Revis
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