

## **APPENDIX E**

# GLEDSWOOD HILLS PUBLIC SCHOOL

WASTE MANAGEMENT PLAN



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#### 1 Introduction

Waste management plans (WMP) have a key role to play in achieving sustainable waste management. Their main purpose is to give an outline of waste streams and treatment options. More specifically they aim to provide a planning framework for waste management process.

This Waste Management plan (WMP) describes how Hindmarsh Construction will manage the Waste removal responsibilities of the site for the successful delivery and construction of the Gledswood Hills Project. It sets out responsibilities and targets for waste management throughout the construction phase of project.

This plan will be submitted a copy of the plan to the Planning Secretary and to the Sydney City Council prior to the commencement of work

#### 1.1 Aims

- □ To achieve Company objectives and targets that generated waste from the project at least 90% will be recycled.
- To meet NSW Environmental Protection Agency "Rules and Guidance for Managing Construction and Demolition Waste".
- To apply relevant information from available reference documents
- Promotes the implementation of the waste management hierarchy, improves resource recovery and reduces waste going to landfill
- Helps avoid or minimise the risks of environmental harm from waste management.
- To control, minimised and salvage waste at construction waste
- To provide improved options for regulating illegal dumping and inappropriate stockpiling

#### 1.2 Objectives

The objectives of the Waste Management Plan are to provide a suitable method of removing waste from site. It is also to encourage and recognise management practices that minimise the amount to construction waste going to landfill and provide the following:

- Eliminating or minimising the amount of waste material brought to site
- Sorting the type and storing waste for appropriate disposal
- Disposal of all waste practicable by recycling
- Control of toxic and dangerous waste
- Relevant local recycling facilities and firms



- Minimising land-fill waste disposal
- Introduce and make aware plan to all subcontractors working onsite
- To adopt and implement the Waste Management Plan throughout the project. Monitor performance and review plan as required

#### 2 Responsibilities

Hindmarsh's responsibilities as follow:

- Implement the Waste Management Plan (WMP)
- Secure waste bins and protect from contamination
- Communicate WMP and strategies to subcontractors during induction and safety meetings etc. Indicate where bins are located to all subcontractors.
- Ensure everyone working onsite is aware of their obligations and responsibilities
- Keeping disposal dockets and receipts
- Share findings of the monthly recycling % achieved as required

#### 3 Glossary / Abbreviations

ACM Asbestos Containing Material

CLM Act Contaminated Land Management Act 1997

Compass Hindmarsh Management System

CoP Code of Practice

EIG Environmental Impact Guides

EMMP Environmental Management Plan

EMS Environmental Management System

EP&A Act Environmental Planning and Assessment Act 1979

EPA Environment Protection Authority NSW

GSW General Solid Waste

Hindmarsh Constructions Australia

LEP Local Environmental Plan

POEO Act Protection of the Environment Operations Act 1997

Project, the Gledswood Hills Public School

RSW restricted solid waste

SWNSW SafeWork NSW

VENM Virgin excavated natural material

WHS Act 2011 NSW Workplace Health & Safety Act 2011

WHS Regulation 2017 NSW Workplace Health & Safety Regulation 2017



#### 4 Reference Documents

Environmental Site Assessment and Remediation Action Plan	Environmental Investigation Services	31 MAY 2018
Site Safety Plan for Targeted Hazardous	Greencap NAA	September 2015
Materials Survey		
Asbestos Clearance Inspection	EHO Consulting	19 March 2018
Waste Classification Guidelines Part 1	EPA	2014
Waste – Construction and Operational	Foresight Environmental	October 2017
Waste Management Plan		
Waste classification guidelines Part 4: Acid	EPA	2014
Sulphate soils		
How to safely remove asbestos	SafeWorkNSW	Sept 2016
How to manage and control asbestos in the workplace	SafeWork NSW	Sept 2016

#### 5 Construction Stages

The project has been provided with demolition completed, with only some insitu retaining walls remaining. Clearance certificates have been provided for demolition and ACM removal.

The stages of work will consist of:

- Cut and fill excavation
- Detailed excavations
- Structure
- □ Fit out

During these stages Hindmarsh will utilise the Hindmarsh Compass management procedures for unexpected finds of potential hazardous contaminated waste material

### 6 Hazardous Materials Management

The site is generally a brownfield site, existing buildings or building materials have been removed and it is anticipated for removal remaining retaining walls will be re used or treated as GSW and disposed at and EPA approved waste management facility.

All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with SafeWork NSW and EPArequirements.



Hindmarsh or its agents will notify Transport Management Centre (TMC) of the truck route(s) to be followed by trucks transporting waste material from the Site, prior to the commencement of the removal of any waste material from the Site.

Hindmarsh will apply applicable Compass procedures in the safe management of any identified hazardous materials.

- Health Surveillance, Exposure Monitoring, Hazardous Substances
- Asbestos

#### 6.1 Removal or Remediation of Hazardous Materials

Identified Hazardous Materials shall be competently managed in accordance with the following EPA guidelines:

- Part 1: Classifying waste
- Part 4: Acid sulphate soils

Unexpected Finds of Asbestos shall be managed in accordance with NSW WHS Act 2011 and WHS Regulation 2017 and SWNSW codes of practice:

- How to safely remove asbestos
- How to manage and control asbestos in the workplace

Details demonstrating compliance with the relevant legislative requirements, associated with the removal of hazardous waste, particularly the method of containment and control of emission of fibres to the air, are to be submitted to the satisfaction of the Certifying Authority as appropriate prior to the removal of any hazardous materials.

#### 7 Construction Waste Management

Hindmarsh will engage a specialist waste management contractor to sort individual recycling bins for cardboard, metal, concrete and general mix waste. Hindmarsh have sourced a waste plan from Bingo and this will be provided as a separate document to this plan. RSW and GSW materials if required to be removed from site will transported to an approved waste management facility for processing.

Hindmarsh or its agents will notify Transport Management Centre (TMC) of the truck route(s) to be followed by trucks transporting waste material from the Site, prior to the commencement of the removal of any waste material from the Site.

#### 7.1 Waste Strategies

Hindmarsh is going to use and follow the "AVOID-REDUCE-REUSE-RECYCLE" framework from the waste management hierarchy to reduce waste on the project. The waste management hierarchy (figure as below) is recognised internationally as an aspiration framework for sustainability.





#### <u>Avoid</u>

- Encourage Subcontractors to consider modular and prefabricated construction materials that minimise onsite waste
- Encourage Subcontractors to plan and choose method of construction to minimise waste. For example: Plan the use of plasterboard/glass cuttings and reuse offcuts where applicable.

#### **Reduce**

- Encourage Subcontractors to limit waste when purchasing materials with minimal packaging, and consider recycling packaging off site and bringing minimal items to site, while ensuring goods are not damaged during delivery.
- Encourage Subcontractors to control purchasing to limit over-ordering & to encourage buying of recycled or recyclable materials where appropriate.

#### Reuse & Recycle

Implement plan of action that indicate the collection systems, waste management facilities and responsibilities. locations of on-site storage facilities for material to be reused on-site, or separated for recycling off-site; and destination and transportation routes of all materials to be either recycled or disposed of off-site.

Waste to be collected by the waste management company for recycling and re use. Specific waste listed below will managed by:

- re-use of excavated material on-site and disposal of any excess to an approved site;
- green-waste mulched and re-used in landscaping either on-site or off-site;
- bricks, tiles and concrete re-used on-site as appropriate, or recycled off-site;
- plasterboard re-used in landscaping on-site, or returned to supplier for recycling;
- timber re-used on-site or recycled elsewhere;
- windows, doors and joinery recycled off-site;



- Polystyrene recycled off-site
- plumbing, fittings and metal elements recycled off-site;
- Metal, an individual label waste bin is to be provided for any scrap metal waste on site. All metal waste on site will be collected and recycled into the individual bin and removed from site.
- Concrete waste on site will be monitored to not generate any waste water discharging into the stormwater system. Concrete slurry is to be dried and then to be disposed of in the appropriate manner.
- Synthetic Mineral Fibres Insulation will be controlled recycled off-site. Hindmarsh will implement CoP for the Safe Use of Synthetic Mineral Fibres 1993

The Percentages/Volume and mass amounts of recycled materials are to be maintained and monitored throughout the duration of the project and collected to note the required amount of recyclable materials that were completed over the duration of the project.

#### 7.2 Removal of Construction Waste

Hindmarsh will liaise with the nominated waste management contractor for changeover bins and waste bin collections.

- Bin lifters or similar may be used to load waste materials into allocated bins.
   Minimum of manual tasks are required.
- Bins are loaded wholly within the site onto dump trucks with no risk damaging the public surrounding
- Hindmarsh to take all measure to keep dust a minimum when waste are collected

#### 7.3 Recycling and Re use plan

The nominated waste management contractor will report against the Hindmarsh target of at least 90% of waste material is recycled or reused. The monthly recycle plan is attached for Just Skip Bins and will demonstrate evidence that the waste streams were effectively sorted and that recycling has occurred of each waste stream.

The nominated waste management contractor have indicated that have a number of EPA licenced recycling facilities in Sydney all with systems and processes that are ISO 14001 compliant. All facilities operate separately from any landfill operations and comply with Green Star credit rating requirements, providing auditable and accurate reporting on:

- The verification of resources recovered and recycled
- Waste residual separation vs recyclables (type, volume and weight)
- Non-conforming waste and the corrective action taken



- Current weighbridge maintenance certification and operational procedures
- In-bound and outbound facility waste balances

A monthly report will be provided to Hindmarsh

#### 8 Controls

Hindmarsh to take all measure to keep dust and noise to a minimum when waste are collected. All waste on site to be monitored and is not to generate any surplus waste water discharging into the stormwater system.

As part of Hindmarsh Compass systems and the Environment Management Plan, Environmental Impact Guides (EIGs) have been developed. EIGs provide project team with general guidance in the management of each respective environmental impact, describes the processes involved, the control measures to be implemented, the monitoring and reporting requirements.

#### EIGs include:

- acid sulphate soil,
- noise,
- vibration,
- liquid pollution controls
- Land Contaminate
- Storage, Handling Hazardous / Dangerous Substances / Materials
- Hindmarsh will monitor the EIGs by reporting the inspections using Weekly Environmental & Sustainability Checklist.

Any potential hazardous and liquid waste identified onsite are required to report to the Project Manager and disposal in accordance with EPA requirements





# APPENDIX F

# **Roosters Traffic Control**



# Hindmarsh Gledswood Hills Public School The Hermitage Way, Gledswood Hills Traffic Management Plan

**Author: Paul Winter** 

Date: 10th Oct 2018



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#### Introduction;

This traffic management plan (TMP) has been prepared on behalf of the applicants Hindmarsh to review the traffic arrangements to be implemented during the development of Gledswood Hills Public School, The Hermitage Way, Gledswood Hills.

**Please Note**; Roosters Traffic Control accepts responsibility for the preparation of this traffic management plan (TMP), but does not accept responsibility for its implementation if it is to be undertaken by other parties.

#### The Project & Project Background;

Hindmarsh has been engaged by the principal – NSW Government Education, to develop the site at The Hermitage Way, Gledswood Hills Between Road MC-07 and Road MC-06.

#### **Key Stakeholders:**

- Roads and Maritime Service N/A Heavy Vehicle Route Notification Only
- <u>Camden Council</u> 70 Central Ave, Oran Park NSW 2570 Ph. 02 4654 7777, Fax. 02 4654 7829
   E. Mail@camden.nsw.gov.au
- Busabout 44a Bluett Dr, Smeaton Grange NSW 2567 Ph. 02 4631 4200, Fax. 02 9647 0400
   E. customerservice@busabout.com.au
- Utility Providers E.g. Gas, Power, Water, as Per DA
- Local Shops and services Letter Box Drops and / or local advertisements
- any other Residences Letter Box Drops and / or local advertisements
- Hindmarsh Suite 2, Level 27, 100 Miller Street, North Sydney NSW 2060 Ph. 02 9274 1100 Fax. 02 6427 8898 E: nsw@hindmarsh.com.au
- Roosters Traffic Control
   Ph. 1300 365 903 Fax. 02 4647 6013

E: info@roosterstraffic.com.au



The Location; UBD Map, 305 Ref, L - 12.

Gledswood Hills Public School Site located on The Hermitage Way between Road MC-06 and Road MC 07 and is approximately 195m East of Creekside Place and approximately 173m West of Parkers Farm Place.



Figure 1



Figure 2 – Source Google Maps



#### **Proposed Works:**

Deliveries / loading and unloading of vehicles during the development of Gledswood Hills Public School.

 All deliveries, unloading and loading of vehicles shall be contained to the site area, ample room shall be provided for vehicles to enter and leave the site in a forward direction.

#### Site Access and Heavy Vehicle Routes:

- It is recommended that all heavy vehicles travel to and from the site area using the most direct route on RMS state and regional roads where possible.
- The most direct route to the site shall be via Camden Valley Way and The Hermitage Way, Attachment C shows vehicle access routes from the main roads, Camden Valley Way and The Hermitage Way.
- Consider the use of a traffic controller or spotter for vehicles needing to reverse into or out of site on all Roads.
- Any works affecting the road reserve e.g. Crane works / large deliveries that cannot fit within the site areas, Car park, driveway and / or footpath excavation works will require the approval of Camden council, see pg. 2 Key Stake Holders for contact information.