CONSTRUCTION WASTE MANAGEMENT PLAN

EPPING WEST PUBLIC SCHOOL
96 CARLINGFORD ROAD, EPPING

Revision Number: VERSION 3

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Presented by: JO DRUMMOND
EcCeLL ENVIRONMENTAL MANAGEMENT
35 WAVERLEY CRESCENT
BONDI JUNCTION NSW 2022
www.eccellenvironmental.com.au

Submitted to: Hansen Yuncken
Building 1, L3, 75-85 O'Riordan Street
Alexandria

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DISCLAIMER
This report is based on information provided by Hansen Yuncken. To that extent, this report relies on the accuracy of the information provided to the consultant. This report is not a substitute for legal advice on the relevant environmental related legislation, which applies to businesses, contractors or other bodies. Accordingly, EcCell Environmental will not be liable for any loss or damage that may arise out of this project.

DOCUMENT CONTROL				
ISSUE NUMBER	DATE	AUTHOR	REVIEW	APPROVED BY
VERSION 1	30/04/2021	Jo Drummond	Patrick Nolan	Jo Drummond
Version 2	2/09/2021	Jo Drummond	Patrick Nolan	Jo Drummond
Version 3	16/09/2021	Jo Drummond	Patrick Nolan	Jo Drummond

1 INTRODUCTION

This Construction Waste Management Plan (CWMP) has been prepared by EcCell Environmental on behalf of the School Infrastructure NSW (the Applicant) (SSD-9250948) for the Epping West Public-School. The school is located on 96-104 Carlingford Road and has a frontage to Carlingford Road in the City of Parramatta Council Local Government Area (LGA).

2 PROJECT DESCRIPTION

The Epping West Public School was established in 1927 and currently comprises of teaching spaces, demountable classrooms, outdoor play spaces, outdoor sports fields, a drop off for students with special needs and an on-grade staff carpark. The project will provide students with more permanent teaching spaces to better facilitate the delivery of modern teaching methods and support improving educational outcomes.

The project aims to:

- Demolish existing structure and build two buildings (one a two storey and one a three-storey building) and undertake refurbishment works.
- Upgrade core infrastructure and increase the capacity for new teaching and learning spaces across the Epping Primary Schools Community Group (SCG) to respond to the projected 2036 live-in catchment demand.
- Provide students with more permanent teaching spaces to better facilitate the delivery of modern pedagogies and support improving educational outcomes.

3 PROJECT LOCATION

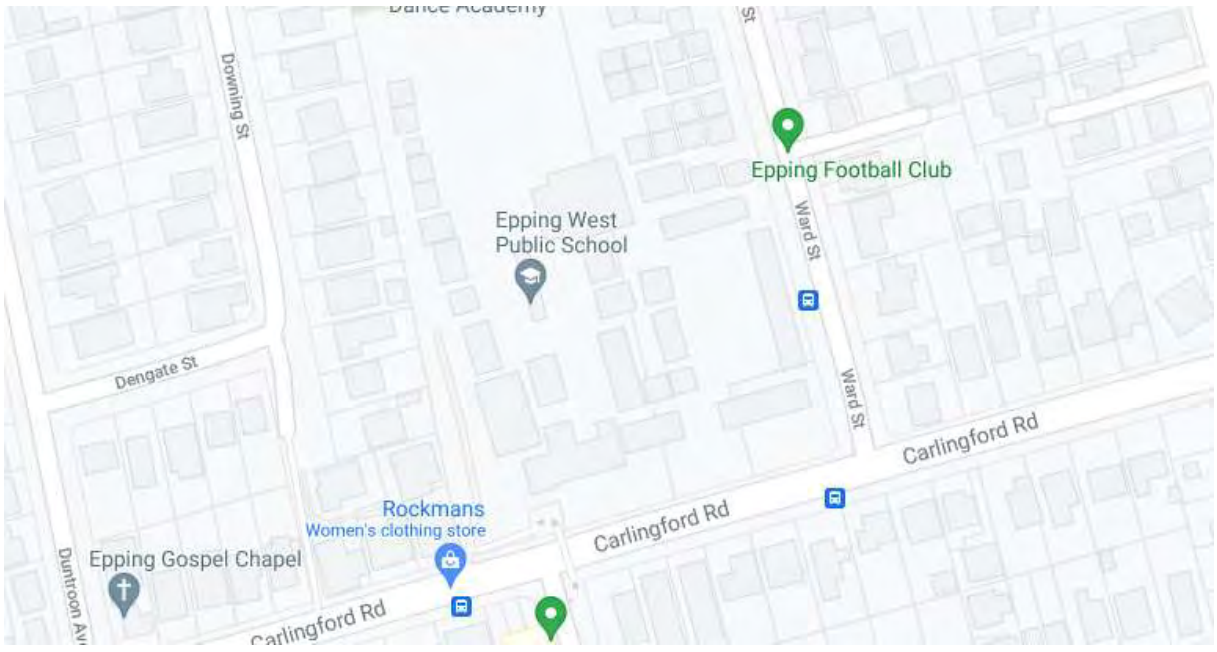


Figure 1. Approximate Site Location (Google Maps)

4 PURPOSE OF THE CWMP

The purpose of this CWMP is to meet the key waste requirements issues of the Secretary's Environmental Assessment Requirements (SEARs) Section 4.12 (8) of the Environmental Planning Assessment Act 1979 and SSD Condition B 12 and B 15 will:

- Identify, quantity and classify waste streams to be generated during construction.
- Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.
- To ensure storage and collection of waste is designed and managed having appropriate regard to space, location, amenity and ongoing management of waste management facilities.
- Describe measures to be implemented to manage, reuse, and recycle and safely dispose of the waste.
- To maximise reuse and recycling of construction materials and materials from development.
- To encourage building design techniques in general which minimise waste generation.
- To minimise the amount of waste being deposited to landfill with targets to reuse or recycle at least 90% of construction and demolition waste .and
- address relevant requirements of the Waste Classification Guidelines (EPA, 2014).
- A requirement to record quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed information regarding the recycling and disposal locations; and confirmation of the contamination status of the development areas of the site based on the validation results.

5 NSW LEGISLATIVE REQUIREMENTS AND GUIDELINES

Relevant key legislation and guidelines applicable to the project include:

- NSW Department of Planning and Environment, Secretary's Environmental Assessment Requirements (SEARs)
- P*rotection of the Environment (General) Operations Act* 1998
- Protection of the Environment Operations (Waste) Regulation 2014
- *Waste Avoidance and Resource Recovery Act* 2014
- NSW Environment Protection Authority (EPA) Waste Classification Guidelines, Part 1: Classifying Waste, November 2014 (EPA, 2014).

5.1 RESPONSE TO SEARS

The CWMP is required by the Secretary's Environmental Assessment Requirements (SEARs) for SSD-1. SSD-9250948) This table identifies the SEARs and relevant reference within this report.

Table 1 - SEARs Requirement & CWMP Page Reference

SEARs Item	Report Reference
Classification of the waste.	Page 8-10 PROJECT PHASE
Estimates / details of the quantity of each classification of waste to be generated during the construction of the project, including bulk earthworks and spoil balance.	Page 8-10 PROJECT PHASE
Handling of waste including measures to facilitate segregation and prevent cross contamination.	Page 4-5 ROLES AND RESPONSIBILITIES
Management of waste including estimated location and volume of stockpiles.	Page 8-10 PROJECT PHASE
Waste minimization and reuse.	Page 4-5 ROLES AND RESPONSIBILITIES
Lawful disposal or recycling locations for each type of waste.	Page 3-4 SERVICING ARRANGMENTS
Contingencies for the above, including managing unexpected waste volumes.	Page 3-4 SERVICING ARRANGMENTS

5.2 SSDA CONDITION B 12E AND B 15 A,B,C REQUIREMENT

The Construction Waste Management Sub-Plan (CWMSP) must address, but not be limited to, the procedures for the management of waste including the following:
use;

Table 2 – SSDA Conditions B12 e and B15 a,b,c

SSD Condition B 12 and B15 a,b,c	Report Reference
a) the recording of quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed	Section 8
(b) information regarding the recycling and disposal locations; and	Page 8/9/10
c) confirmation of the contamination status of the development areas of the site based on the validation results.	Douglas Partners Report on Hazardous Building Materials (HBM) Survey April 2021 Appendix B

6 WASTE MANAGEMENT STRATEGIES

6.1 SERVICING ARRANGMENTS

The current legislation determines that the generator of waste is the owner of the waste until the waste crosses a calibrated weighbridge into a licensed facility. Waste contractors to demolition and construction teams are the primary transporters of waste off-site, accordingly, waste contractors will be required to provide verifiable monthly reports on waste reused, reprocessed or recycled (diverted from landfill) or waste sent to landfill. These reports have a direct bearing on the generator's compliance with the relevant regulations. The CWMP will be implemented on site throughout including singularly or collectively through the construction and fit out phases.

A Waste Data File must be maintained on-site and all entries are to include:

- The classification of the waste
- The time and date of material removed
- A description of and the volume of waste collected
- The location and name of the waste facility that the waste is transferred to
- The vehicle registration and the name of the waste contractor's company

The Waste Data File will be made available for inspection to any authorized officer at any time during the life of the site works. At the conclusion of site works, the designated person will retain all waste documentation and make this validating documentation available for inspection. Arrangement's will be made with the Waste Contractor to increase bin supply if there is an unexpected increase in waste generation.

6.2 CONSTRUCTION WASTE MANAGEMENT EQUIPMENT, BIN SIZES AND COLLECTION FREQUENCY

All waste will be removed by a licensed waste contractor using 15-meter bins on site. The construction waste will be removed when bins are full and within the construction site hours to reduce disturbance of the neighbours.

6.3 ROLES AND RESPONSIBILITIES

The waste management strategy for the project will operate over the design, procurement, and construction including fit out of the project and is detailed in Table .

Table 3 - Breakdown of Tasks and Responsibilities

Management Strategies	Responsibilities
<u>Design:</u>	
Use of modular components in design	Architect & Engineer
Use of prefabricated components in design	Architect & Builder
Design for materials to standard sizes	Architect & Subcontractors
Design for operational waste minimisation	Architect & Builder
Consider ways to avoid, reuse and recycle construction wastes	Subcontractors.
<u>Procurement:</u>	
Select recycled and reprocessed materials	Architect, Engineer, Builder & Sub Contractors
Select components that can be reused after deconstruction	Architect, Engineer & Builder
Prioritise suppliers that take back offcuts and unused product.	Sub-Contractors
Encourage contractors and subcontractors that use unneeded offcuts and unused product for use on other jobs	
Ordering the right quantities of materials (Purchasing Policy);	Sub-Contractors
Include prefabrication of materials	
<u>Pre-construction:</u>	
Waste management plan to be reviewed & approved prior to construction	Builder
Contract a Waste Contractor	Waste Contractor
<u>Construction on-site:</u>	
Use the avoid, reuse, reduce, recycle principles	Builder & Waste Contractor
Minimisation of recurring packaging materials	Sub-contractors
Returning packaging to the supplier	Builder & Sub-contractor
Separation of recycling of materials off site	Waste Contractor
Audit and monitor the correct usage of bins	Builder & Waste Contractor
Audit and monitor the Waste Contractor	Builder
<u>Avoiding construction waste</u>	
Reduce extraneous packaging use reusable padding and careful packing	
All packaging generated on site should be captured for reuse or recycling wherever possible	Builder
Reuse formwork	
Use modular components	
Use reuse non-returnable containers on the job site to the maximum extent possible	

6.4 ON SITE WASTE MANAGEMENT REQUIREMENTS

There will be a designated waste storage area for the disposal and storage of demolition and construction waste prior to collection. This area will be located conveniently for the construction work team to use the bins as well as for waste contractors to collect. An indicative location has been provided in Appendix A. Other requirements include:

- The routes for movement of waste between work site and waste storage area are to be kept obstruction-free.
- The routes for movement of bins and waste between storage and collection points are marked in the site drawing, and will be kept obstruction-free (if waste is moved between the waste storage area(s).
- The waste bin collection point provided will be accessible for waste collection vehicles. There are no obstructions to turning or reversing, pulling up vehicles and lifting bins.
- Access for waste collection vehicles will not be compromised by construction-related activities vehicles or other consequences of construction staging.
- All waste not being reused on site will be removed during, or at the completion of, the construction stage.
- No waste will be left on site unless it is part of valid reuse on site, which is integral to and in place in the design.
- In order to manage noise levels, collection of waste from the construction site will only occur during hours approved for construction work.
- All vehicles entering or leaving the site must have their loads covered.
- All vehicles, before leaving the site, to be cleaned of dirt, sand and other materials, to avoid tracking these materials onto public roads.
- At the completion of the works, the work site is left clear of waste and debris
- A requirement to record quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed information regarding the recycling and disposal locations; and confirmation of the contamination status of the development areas of the site based on the validation results.

7 WASTE MANAGEMENT PLAN APPLICATION

Project

Epping West Public School

Address

96 Carlingford Road, Epping, NSW.

Applicant

Department of Education c/o School Infrastructure NSW

Details of Application

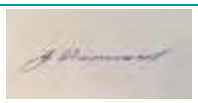
Upgrade core infrastructure and increase the capacity for new teaching and learning spaces across the Epping primary Schools Community Group (SCG) to respond to the projected 2036 live-in catchment demand. Modular Buildings, to be reused onsite.

Description of Buildings and Other Structures Currently on the Site

Remove Building 'G'. Assemble Modular replace with a Type 'C' building.

Brief Description of Proposal

Upgrade core infrastructure and increase the capacity for new teaching and learning spaces across the Epping primary Schools Community Group (SCG) to respond to the projected 2036 live-in catchment demand. Modular Buildings, to be removed for reuse and demolish Building 'G'. Assemble Modular replace with a Type 'C' building.

Prepared by :	
Name:	Jo Drummond
Signed:	
Contact Number:	0412 214 233
Date:	29/04/2021

8 PROJECT PHASE

8.1 DEMOLITION

MATERIAL TYPE ON SITE	ESTIMATED VOLUME (m^3) or WEIGHT (t)		ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Recycling	Disposal	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Waste Depot, Recycling Outlet or Landfill site
Building 'G': Concrete, Brick, Block & Tile	$180m^3$		Co-mingled	Aitken Civil	Met
Metal	$25m^3$		Co-mingled	Aitken Civil	Sell and Parker
Timber	$30m^3$		Co-mingled	Aitken Civil	Bingo
Glass	$5m^3$		Co-mingled	Aitken Civil	Bingo
General waste		$44m^3$	Co-mingled	Aitken Civil	Breen Holdings
Hazardous Material		TBA			
Sub Total:	**$240m^3$**	**$44m^3$**			
Total	**$284m^3$**				
Notes: Some asbestos has been identified in the Douglas Partners Report on Hazardous Building Materials (HBM) Survey April 2021 Appendix B for the site. Demountable classrooms to be relocated and reused on-site.					

8.2 EXCAVATION

MATERIAL TYPE ON SITE	ESTIMATED VOLUME (m^3) or WEIGHT (t) (Most Favourable → Least)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse	Recycling	Disposal	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Waste Depot, Recycling Outlet or Landfill site
Excavated Clean Fill	55 m^3	N/A	N/A	Reuse on site	N/A	N/A
Sub-total	55 m^3					
Total	**55 m^3**					

Narrative: Minor excavation of footing piers is expected to be reused on site
SSD Conditions
a) the recording of quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed
(b) information regarding the recycling and disposal locations; and
c) confirmation of the contamination status of the development areas of the site based on the validation results.

8.3 CONSTRUCTION

MATERIAL TYPE ON SITE	ESTIMATED WEIGHT (t) (Most Favourable → Least)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse	Recycling	Landfill Disposal	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Recycling Outlet or Landfill site
Brick, Block Work, Render, Tiles		57m^3		Co-mingled Bins	Bingo	Bingo crushed for road base
Metals		20m^3		Co-mingled Bins	Bingo	Scrap Metal Dealer for smelting (Sell and Parker)
Timber Off-Cuts		37m^3		Co-mingled Bins	Bingo	Bingo recycled for chips and mulch
Cardboard		22m^3		Co-mingled Bins	Bingo	Visy recycled into cardboard
Plasterboard		24m^3		Co-mingled Bins	Bingo	Bingo recycled as soil conditioner
Containers, Plastics, Plastic Packaging		* 22m^3	- 25m^3	Co-mingled Bins	Bingo	- Styrene and plastic to landfill *Paint drums nested and recycled
Pallets And Reels	30 units			Separated onsite	Sub Contractors	Returned to the supplier
Liquid Waste			27m^3	Separated onsite	Bingo	Genesis Eastern Creek
General Waste			67m^3	Co-mingled Bins	Bingo	Genesis Eastern Creek
Sub Total	**NB:20 units**	**182m^3**	**119m^3**			
TOTAL	**301m^3**			**NB: Plus, an additional 30 pallets (single units returned to suppliers for reuse)**		

Narrative:
All waste will be co-mingled and taken for off-site separation and reuse or recycling except pallets and reels.

APPENDIX A – WASTE COLLECTION AREA AND WASTE BIN TRUCK ACCESS AND EGRESS.

APPENDIX B DOUGLAS PARTNERS REPORT ON HAZARDOUS BUILDING MATERIALS (HBM) SURVEY APRIL 2021

DOUGLAS PARTNERS REPORT ON HAZARDOUS BUILDING MATERIALS (HBM) SURVEY\99674.02.R.001.REV2 - HAZARDOUS MATERIALS (1) (1).PDF