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WASTE MANAGEMENT PLAN

Lot 2889/DP1230906
Northbourne Drive, Marsden Park NSW 2765

Proposed Marsden Park Primary School Development

Prepared for:	ADCO Constructions Pty Ltd
Date Prepared:	18 December 2020
Revision:	2.1
Development Consent / State Significant Development	SSD 9809

INDEX

Introduction

AusWide Consulting was commissioned by ADCO Constructions Pty Ltd to prepare a Waste Management Plan (WMP) for the operation of the Northbourne Public School, at Northbourne Drive, Marsden Park NSW.

This plan has been developed in accordance the approved State Significant Development Application (SSD-9809) and the specific condition D33 as follows:

> ***D33.*** *Prior to the commencement of operation, the Applicant must prepare a Waste Management Plan for the development and submit it to the Certifier. The Waste Management Plan must:*
>
> *(a) detail the type and quantity of waste to be generated during operation of the development;*
>
> *(b) describe the handling, storage and disposal of all waste streams generated on site, consistent with the Protection of the Environment Operations Act 1997, Protection of the Environment Operations (Waste) Regulation 2014 and the Waste Classification Guideline (Department of Environment, Climate Change and Water, 2009);*
>
> *(c) detail the materials to be reused or recycled, either on or off site; and*
>
> *(d) include the Management and Mitigation Measures included within the Marsden Park New Primary School – Waste Management Plan dated July 2019 and prepared by GHD.*

The Marsden Park New Primary School will cater for 1,000 primary school students at completion. The project consists of the following key stages:

Construction Stage 1 (Temporary School): a temporary school facility constructed within the western portion of the development site located on the future sports grounds. This temporary school facility is to accommodate a maximum of 800 students at any given time.

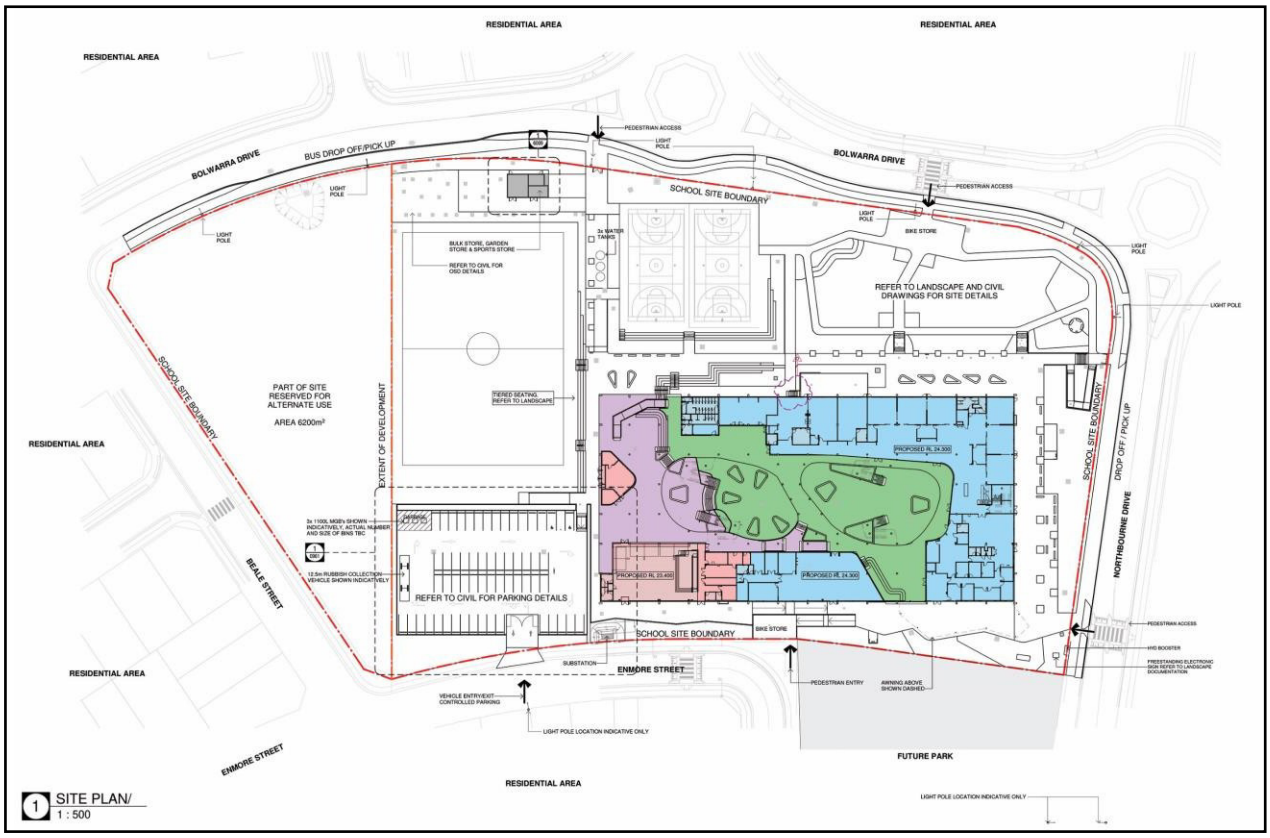
Construction Stage 2 (Construction of Permanent School Facility): a permanent consolidated two storey courtyard building with capacity to accommodate a maximum of 1,000 students.

This new school building is to comprise of:

- 40 teaching spaces
- A canteen
- Library
- Multipurpose hall
- Office and administration space
- Staff and student amenities, and
- Out of school hours care accommodation.
- Multi-purpose sporting facilities and outdoor play spaces.
- Associated site landscaping and public domain improvements.
- An on-site car park for 48 parking spaces and a drop-off and pick-up area, and
- Construction of ancillary infrastructure and utilities as required.

Construction Stage 3 (Temporary School Dismantle): On completion of Stage 2, the temporary school is proposed to be dismantled and in its place construction of school playing fields will be completed.

In the course of preparing this WMP, the subject site and its environs have been inspected, plans of the development examined, and all relevant council requirements and documentation collected and analysed.



This WMP has been prepared based on the following information:

- Architectural Plans provided by NBRS Architecture.
- As per the Blacktown DCP & NSW EPA Guidelines for Waste Management and Recycling in Residential, Commercial and Industrial Facilities.
- Waste Management Plan dated July 2019 and prepared by GHD
- Protection of the Environment Operations Act 1997, Protection of the Environment Operations (Waste) Regulation 2014 and the Waste Classification Guideline (Department of Environment, Climate Change and Water, 2009);

Background and Existing Conditions

The subject site is located at Lot 2889/DP1230906 Northbourne Drive, Marsden Park NSW, on north side of Enmore Street, and the nearby land uses are currently undeveloped with some residential properties' further south.

Figure 1 provides an overview of the area and its surrounding land uses whilst **Figure 2** provides an aerial view of the immediate area surround the subject site.

Figure 1: Location of the Subject Site

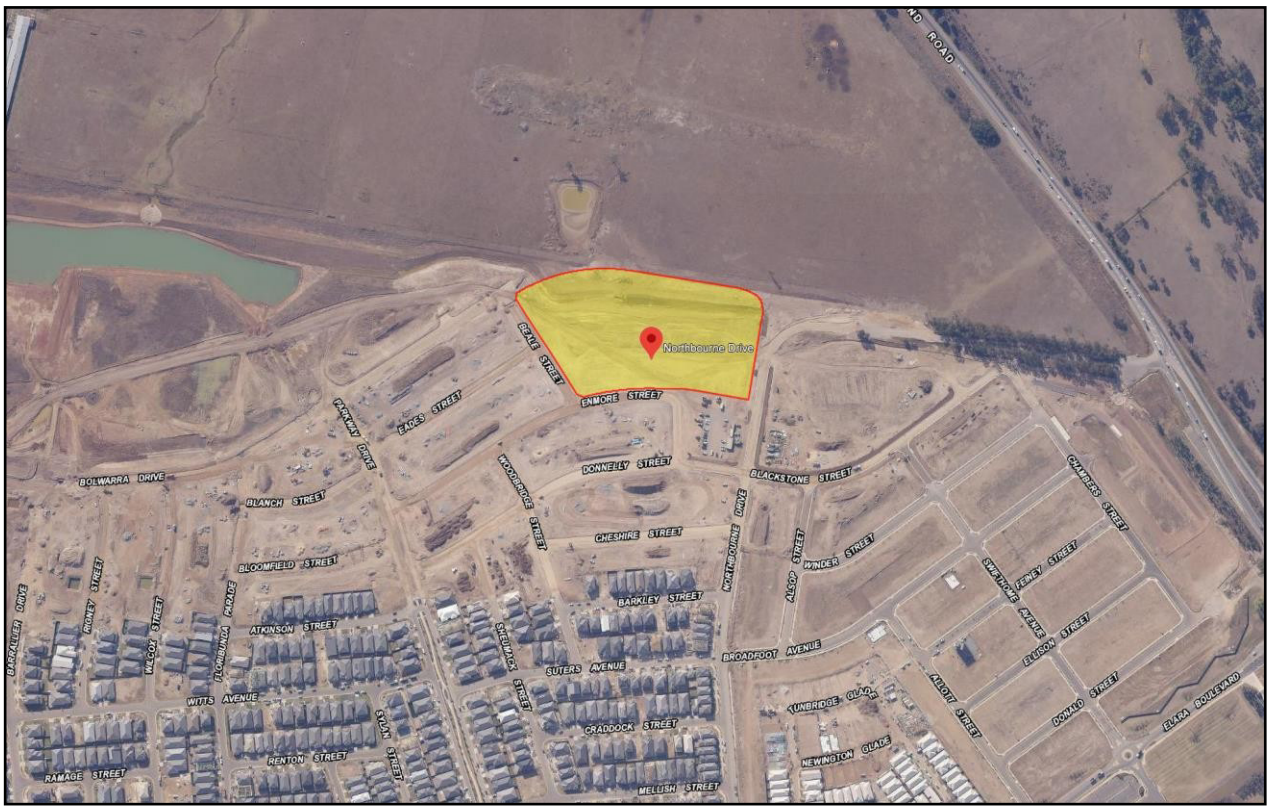


Figure 2: Aerial View of the Subject Site

Proposed Development

The proposed development consists of the Marsden Park New Primary School. The access to the proposed school grounds will be provided via a paved walkway and driveway off Enmore Street. A designated waste storage area accessible via the ground level carparking area **(Refer Appendix A).**

Anticipated Waste Generation, Storage and Collection

Waste collection should be done by a private contractor.

Waste Generation

As per the Blacktown DCP & NSW EPA Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities,

The waste entitlement for; School is 15L/student/week for general waste and 20L/student/week for recycling waste (mostly paper/cardboard). NOTE: Drink containers can be collected separately for the 10 cents as a fund raiser for the school.

The following table illustrates the typical garbage and recycling generation rates.

Table 1: Typical General and Recycling Generation Rates for Schools

Type of Premises	General Landfill Waste	Commingled Recycling Waste
Schools	15L/student/week	20L/student/week

Waste within Overall Development

Using the general and recycling generation rates above, the following can be calculated;

School Student Total (1,000)

- 15L/student/week general waste = 15,000L per week (uncompacted)
- 20L/student/week recycling waste = 20,000L per week (uncompacted)

NOTE: Generation rates are based on the Blacktown DCP & NSW EPA Guidelines for Waste Management and Recycling in Residential, Commercial and Industrial Facilities. The actual rates will vary and most likely be less than the guidelines as calculated above.

Waste Storage Area

There is one main waste storage area on the ground level located in the staff carpark

Main Waste Area:

- 3 x 1,100L General Waste MGB's – collected and emptied up to 5 days a week.
- 4 x 1,100L Recycling Waste MGB's – collected and emptied up to 5 days a week.

The following Table illustrates the typical dimensions of 240L & 1,100L MGB's mentioned above.

Table 2: Typical Mobile Garbage MGB's Measurements for Developments in NSW

Size	Height (mm)	Width (mm)	Depth (mm)
240L	1,080	580	735
1,100L	1,470	1,370	1,245

Handling, Storage and Handling of Waste Streams

All staff and students will receive detailed documentation detailing all necessary requirements for safe waste management and handling including all relevant contact information.

Food Waste: each classroom with be provided with an organic food scraps bin **(Refer Figure 4).**
URL Ref: https://compostapak.com.au/shop/home-sustainability-kits-and-products/kitchen-caddy/

Proposed Total Bins (Organic) to be Determined on Completion.

- Daily, the students will collect the food scrap bins from each classroom and put the waste into an organic waste bins which is located within the Community Garden.
- The Environmental Group (consists of students) will than manage the organic waste into compost bins which will be stored within the Community garden **(Refer Figures 4-5)**
- There are 4 x compost bins at 75L total capacity **(Refer Figure 5).**
- Once the compost is ready, the Environmental Group will be responsible for distributed the compost to be used in the garden.

General & Recycling Waste: 240L MGB's will be placed in strategic locations throughout the school property (secured and fitted with garbage lid height restrictors and screened if needed). Waste guideline information displayed on the front of all the MGB's educating students on waste placement for the MGB's. The 240L MGB's will be used to ferry the waste to the main waste storage area using the 240L bin lift to empty the bins into the 1,100L MGB's.

Drink Containers: Can be collected separately for the 10 cents as a fund raiser for the school. Otherwise, they can be placed within the recycling MGB.

Figure 3: Guidelines for Waste Placement within the General & Recycling MGB's

The following figure illustrates a scaled diagram of the MGB's within the waste storage area.

Figure 4: Scaled Diagram of the Waste Storage Area

The following figures illustrate diagrams of the proposed compost bins, 240L bin lift and bin tugs.

Figure 5: Diagram of the Proposed Kitchen Caddy

Figure 6: 75L Compost Bins within the Community Garden Waste Storage Area

Figure 7: Typical 240L MGB Lift

Figure 8: Typical 240L Bin Tug

Figure 9: Typical 1,100L Bin Tug

Waste Collection

The waste collection service for the proposed development will be provided by a private contractor.

The waste collection vehicle will enter the school grounds via Enmore Street and park near the main waste area within the carparking area. Once the MGB's have been emptied and returned to the waste area, the waste vehicle will exit in a forward motion. NOTE: Waste Collection should be done after hours.

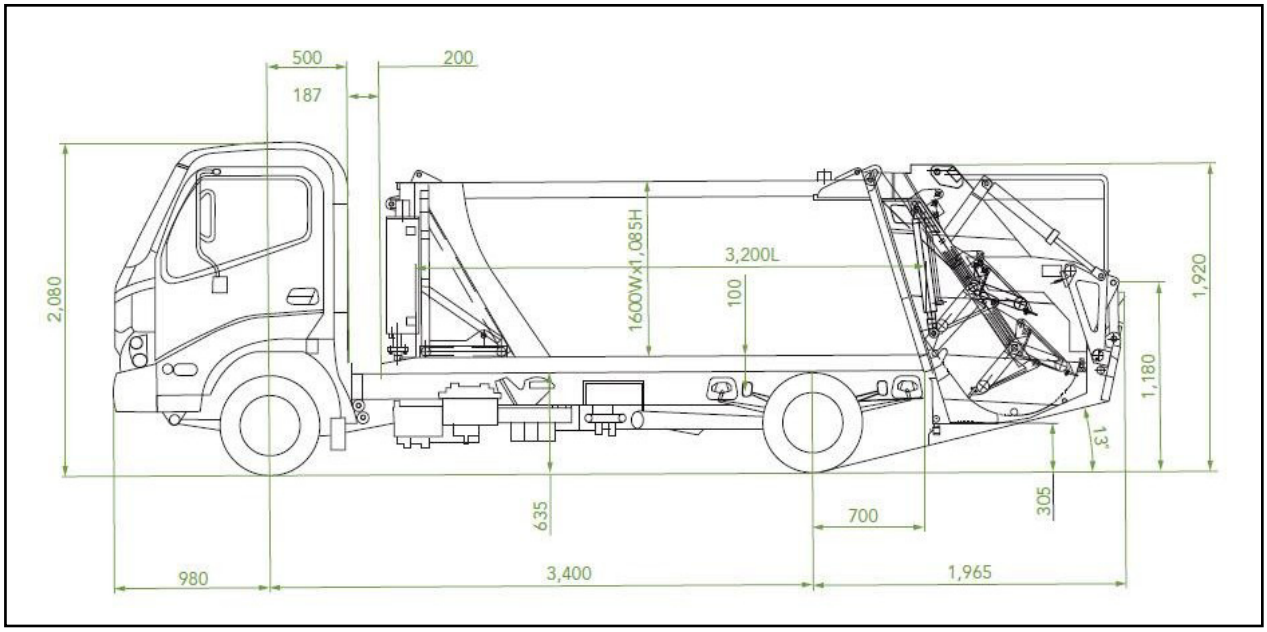


Figure 10: Template of a Typical 6.4m SRV Waste Collection Vehicle

Amenity

Noise

The only noise generated from the waste management at the property will be that of the waste management truck, wheeling the MGB's to/from the waste vehicle and emptying the MGB's. Any other noise related to the waste management will be kept to a minimum.

Ventilation

The waste bin area will not need to be ventilated.

Security/Communication Strategy

All MGB's will be stored within the waste bin area.

All staff and students will receive detailed documentation detailing all necessary requirements for safe waste management and handling including all relevant contact information.

Cleaning Facilities

The caretaker and private contractor will be responsible for keeping the MGB's clean.

NOTE: The outdoor waste area should consist of; (1) Impervious coated/treated ground surface. (2) The area entry must also be wet sealed to the ground surface. (3) With a tap and hose (hose cock must be protected from the waste containers) for use of cleaning the MGB's and waste area.

Prevention of Vermin

The occupiers will be advised to not overfill the bins so that the lids are closed at all times. It is suggested to place rat traps within the waste storage area.

Miscellaneous

Green Waste

All green waste will be handled by gardening contractor.

Bulky Hard Waste

If hard waste collection is required, the school should call a private contractor directly.

Food Waste

NOTE: Food Waste: Each classroom with be provided with an organic food scraps bin (Refer: Page 8).

E-Waste

Recyclable electronic goods include batteries, equipment containing printed circuit boards, computers, televisions, fluorescent tubes and smoke detectors. E-Waste will be placed in impermeable surface containers and collected by a registered E-Waste Re-Processor as required.

Communal Composting Facility

Refer **Food Waste** above.

Management & Mitigation Measures

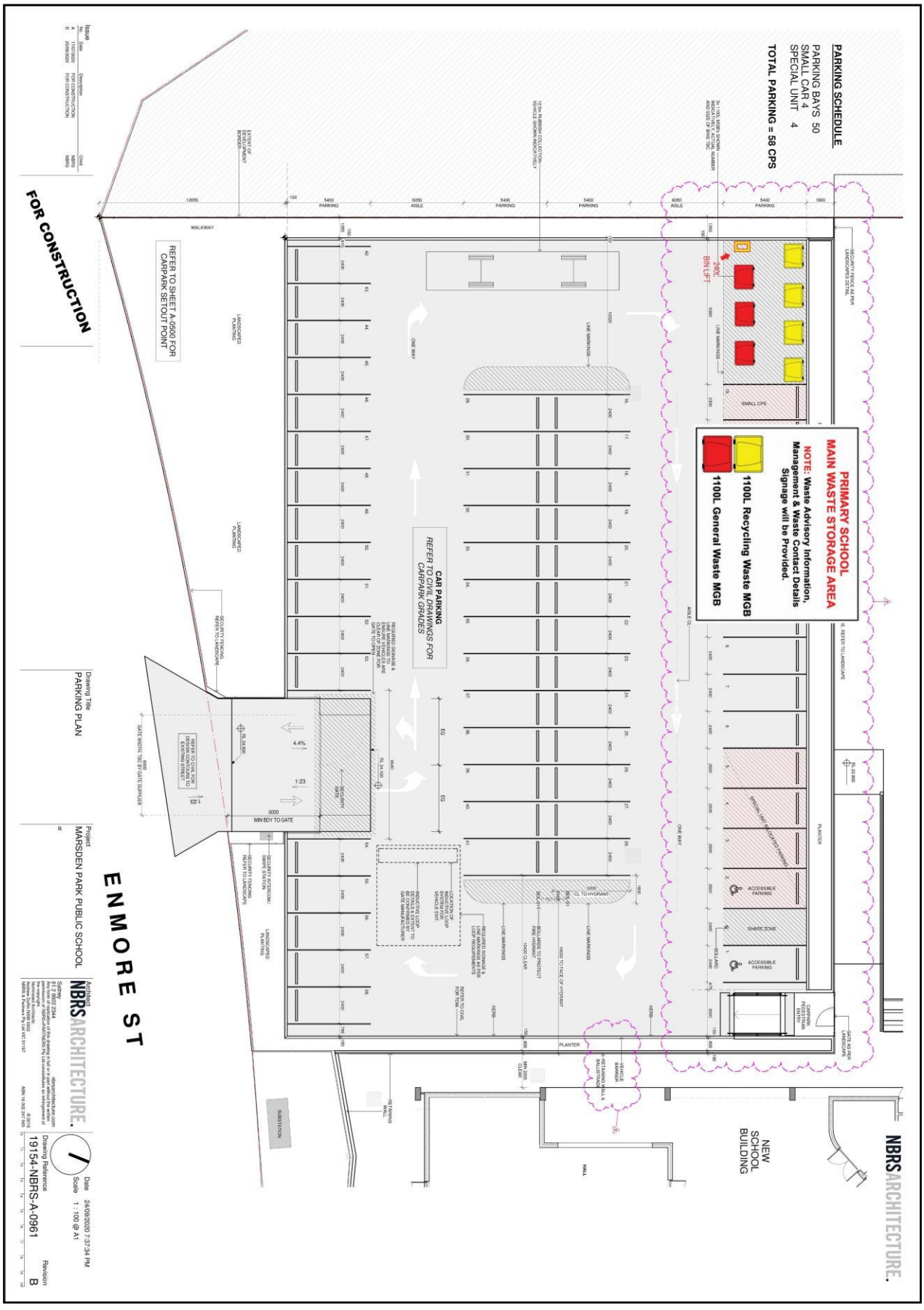
As per section 6.1.4 of the Environmental Impact Statement "There is potential for the school to generate excessive waste. As outlined in the submitted Waste Management Plan, Waste Minimisation is to be provided both during the construction and operational phase."

NOTE: Refer to Waste Management plan dated July 2019, prepared by GHD.

Conclusions

We trust that the information provided above shows that there is no issue regarding waste management for the proposed development. It has been demonstrated that all waste encountered shall be dealt with according to the best-practice principles outlined within the report. On-going waste management work involved shall be managed according to Council policy.

Appendix A – Site Plans


PARKING SCHEDULE
PARKING BAYS 50
SMALL CAR 4
SPECIAL UNIT 4
TOTAL PARKING = 58 CPS
PRIMARY SCHOOL
MAIN WASTE STORAGE AREA
NOTE: Waste Advisory Information, Management & Waste Contact Details Signage will be Provided.
1100L Recycling Waste MGB
1100L General Waste MGB
FOR CONSTRUCTION
REFER TO SHEET A-0600 FOR CARPARK SETOUT POINT
CAR PARKING
REFER TO CIVIL DRAWINGS FOR CARPARK GRADES
ENMORE ST
NEW SCHOOL BUILDING
NBRSARCHITECTURE.
Drawing Title
PARKING PLAN
Project
MARSDEN PARK PUBLIC SCHOOL
Architect
NBRSARCHITECTURE.
Drawing Reference
19154-NBRS-A-0961
Revision
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Date
24/09/2020 7:37:34 PM
Scale
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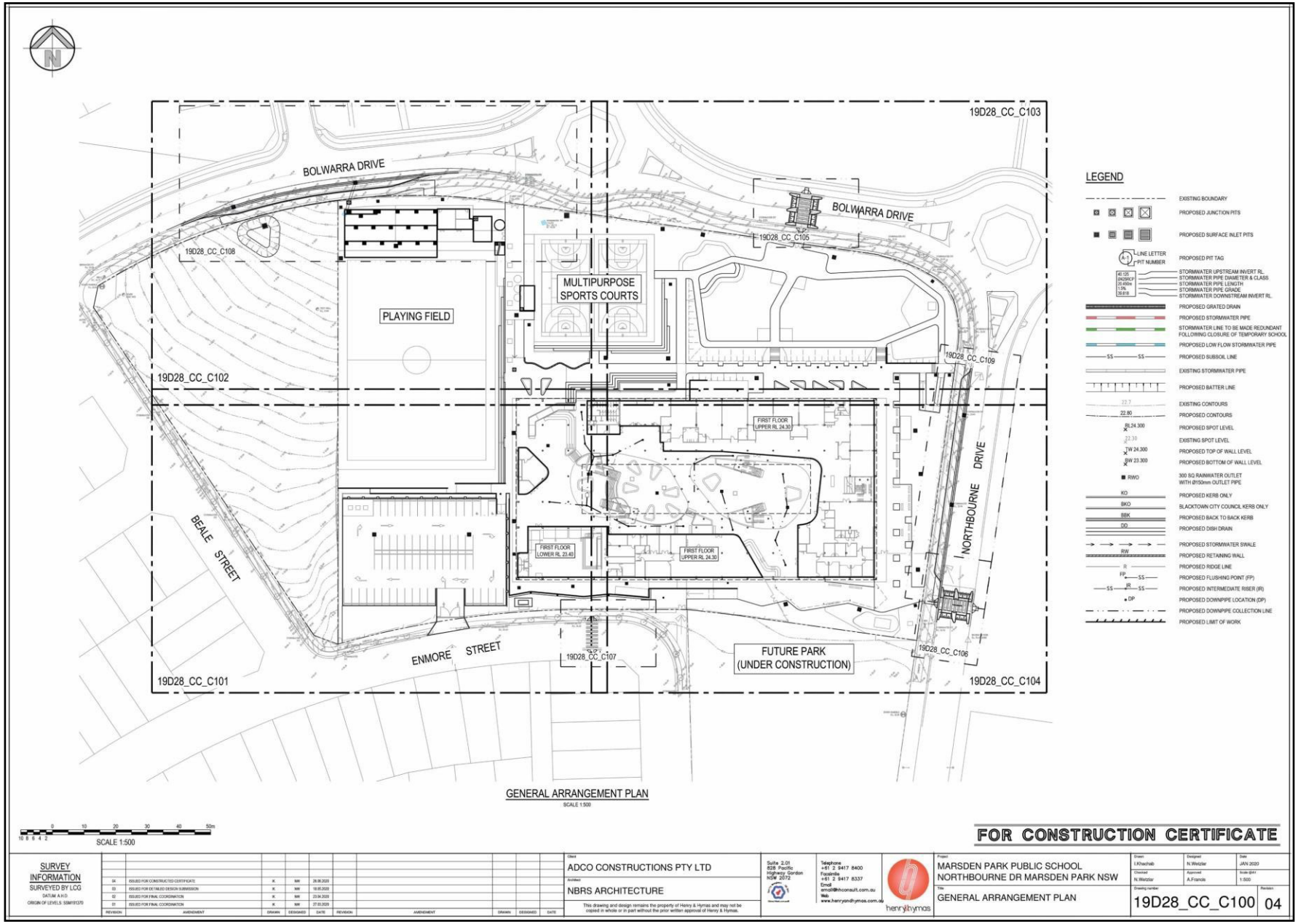

GENERAL ARRANGEMENT PLAN
SCALE 1:500

SCALE 1:500

FOR CONSTRUCTION CERTIFICATE

SURVEY INFORMATION
SURVEYED BY LCG
DATUM: A.H.D.
ORIGIN OF LEVELS: SSM31370

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
04	ISSUED FOR CONSTRUCTED CERTIFICATE	K	NW	26.06.2020
03	ISSUED FOR DETAILED DESIGN SUBMISSION	K	NW	18.05.2020
02	ISSUED FOR FINAL COORDINATION	K	NW	23.04.2020
01	ISSUED FOR FINAL COORDINATION	K	NW	27.03.2020

Client: ADCO CONSTRUCTIONS PTY LTD
Architect: NBRS ARCHITECTURE

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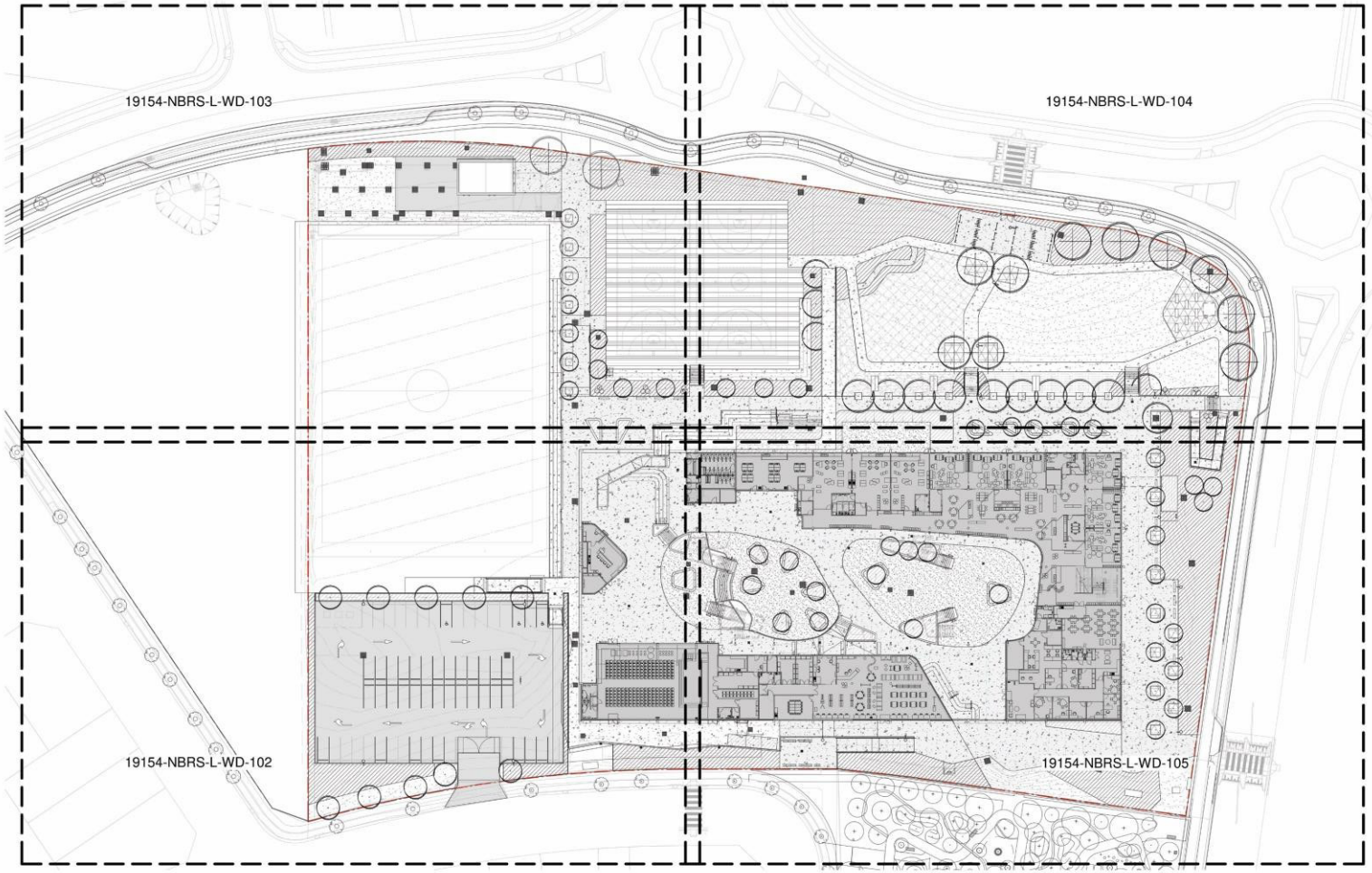
Project: MARSDEN PARK PUBLIC SCHOOL
NORTHBOURNE DR MARSDEN PARK NSW
Title: GENERAL ARRANGEMENT PLAN
Drawn: I.Khachab | Designed: N.Wetzlar | Date: JAN 2020
Checked: N.Wetzlar | Approved: A.Francis | Scale @A1: 1:500
Drawing number: 19D28_CC_C100 | Revision: 04

NBRSARCHITECTURE.
LANDSCAPE



Issue

No.	Date	Description	Chkd
1	03/07/2020	FOR INFORMATION	AL

DETAILED DESIGN

Drawing Title
LANDSCAPE SITE PLAN

Project
MARSDEN PARK PUBLIC SCHOOL

at
Marsden Park NSW 2765

for
NSW Department of Education

Landscape Architect
NBRSARCHITECTURE.
LANDSCAPE
Sydney
61 2 9922 2344
nbrsarchitecture.com

Nominated Architects:
Andrew Duffin NSW 5602
NBRS & Partners Pty Ltd VIC 51197

ABN 16 002 247 565

Date 4/07/2020 12:07:34 AM
Scale 1:400 @ A1

Drawing Reference
19154-NBRS-LWD-001

Revision
1

Appendix B – Swept Path Diagram