



SITE WASTE MINIMISATION AND MANAGEMENT PLAN

PROPOSED SUBDIVISION

November 2023

Prepared For: VENU Design Group

Lot 8 DP 589795
53 McAuleys Lane
Myocum NSW

HMC2023.320.02

RE: Lot 8 DP 589795, 53 McAuleys Lane, Myocum NSW.

HMC Environmental Consulting Pty Ltd is pleased to present our Site Waste Minimisation and Management Plan for the abovementioned development. We trust this report meets with your requirements. If you require further information, please contact HMC Environmental Consulting directly on the numbers provided.

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KEY CONTACTS

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Richmond Waste	Tony Martin	026621 7431	Mon-Fri 7am-4pm
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Maintenance Manager	TBA	TBA	TBA

ENVIRONMENTAL EMERGENCY RESPONSE CONTACTS

Organisation	Incident	Contact
Ambulance	Injury/Illness	000 land line 112 mobile
Fire Brigade – Emergencies	Fire Chemical/hazardous waste spill	000
NSW Environment Protection Agency	Pollution	1300 130 372
Byron Shire Council	Pollution	02 66267000 or 02 66227022 (A/H) council@byron.nsw.gov.au

ABBREVIATIONS

BSC	Byron Shire Council
EPA	NSW Environment Protection Authority
SWMMP	Site Waste Minimisation and Management Plan
HMC	HMC Environmental Consulting Pty Ltd
OEH	NSW Office of Environment & Heritage
Site	Lot 8 DP 589795, 53 McAuleys Lane, Myocum NSW
ACM	Asbestos containing material
MGB	Mobile Garbage Bin
Proponent	VENU Design Group
SMF	Synthetic Mineral Fibres
Guidelines:	
BDCP 2014	<i>Chapter B8 Waste Minimisation and Management Byron Shire Development Control Plan 2014</i>
NSW EPA (2012)	<i>Better Practice Guidelines for Waste Management in Commercial and Industrial Facilities</i>

1 INTRODUCTION

HMC Environmental Consulting (HMC) has been engaged by VENU Design Group to provide a Site Waste Minimisation and Management Plan (SWMMP) for the proposed subdivision to be located at Lot 8 DP 589795, 53 McAuleys Lane, Myocum NSW.

The proposed development includes the subdivision of the existing lot into 40 new lots (39 residential and a residual community lot), including the associated earthworks, tree removal, and construction of roadways and services. There is an existing rendered brick veneer dwelling existing on the property which will remain as part of the proposal. A detached weatherboard shed is located adjacent west to the dwelling which will be demolished along with the weatherboard secondary dwelling located on the northern boundary, as well as existing fencing and cattle yards.

The SWMMP is to be used to assist in the management of waste storage and collection for the purpose of maximising reuse/recycling, improving the services and safety of the contractors, improving the amenity of the area, and to reduce costs of waste management.

1.1 PROJECT DESCRIPTION

The proposed development of 53 McAuleys Lane is described as a development application for a subdivision including:

- 39 residential lots
- 1 residue lot acting as a community lot including a community building and roadways.
- Subdivision works including roadworks, drainage, earthworks, water supply, sewer, power and communications.

The site is currently largely grazing land with pasture grass cover. The proposed development would include site stripping of vegetation and earthworks to modify the current landform. Existing structures to be demolished would also be removed prior to the stripping of vegetation in those areas.

The site is extensive with large open areas and adequate access to provide a suitable area for waste storage and collection by the waste contractor during the demolition and constructure stages. The final waste storage locations would depend on the staging for the site works.

Table 1 Project Summary

Address	53 McAuleys Lane, Myocum NSW
Property Description	Lot 8 DP 589795
Existing buildings and other structures currently on the site	<ul style="list-style-type: none">- Rendered brick veneer dwelling to remain as proposed Lot 25.- Detached weatherboard shed to be demolished.- Weatherboard secondary dwelling to be demolished.
Description of proposed development	<p>Proposed 40-lot subdivision for future residential development.</p> <p>Waste would be generated during the demolition, construction, and operational stages of the development.</p> <p>The location of the site, its topographic features and relationship with adjoining development is shown on the map and aerial photograph in Appendix 1.</p>

This development achieves the waste objectives set out in Chapter B8 Byron DCP 2014. The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as BSC, NSW EPA or Safework NSW.

1.2 AIM

The principal aim of managing this activity is to maximise resource recovery and minimise residual waste from demolition, construction and operation activities associated with the proposed community title subdivision and facilitate effective ongoing waste management practices consistent with the principles of Ecologically Sustainable Development (ESD).

1.3 OBJECTIVES

1. To maximise resource recovery and minimise residual waste
2. To optimise adaptive reuse opportunities of existing structures during demolition
3. To maximise reuse and recycling of materials
4. To minimise waste generation
5. To ensure appropriate storage and collection of waste
6. To minimise the environmental impacts associated with waste management
7. To avoid illegal dumping
8. To promote improved project management.

2 STATUTES AND POLICY

2.1 RELEVANT LEGISLATION & GUIDELINES

Table 2 Environmental Legislation and Policy Specific to Waste Management

Legislation	Details	Approvals/Permits Required
<i>Waste Avoidance and Resource Recovery Act 2001</i>	Repeals the Waste Minimisation and Management Act and replaces a target of 60% reduction in waste to landfill with a process for the preparation of waste strategies which identify more specific targets and objectives for waste reduction.	Compliance must be achieved in relation to waste management during construction. Permits may be required for offsite disposal of hazardous or contaminated material.
<i>Contaminated Land Management Act 1997</i>	Provides for the investigation and remediation of contaminated land.	Specific approvals are not required however, construction works must comply.
<i>Environmentally Hazardous Chemicals Act 1985</i>	Provides for the control of the effect on the environment of chemicals and chemical waste. Scheduled chemicals would not be used in the proposed development.	
<i>Protection of the Environment Operations Act 1997</i>	This Act is the primary NSW environment protection legislation that covers air, noise, water, land, and waste management. It provides a framework to regulate and enforce pollution control in NSW. The Act identifies mechanisms for preventing environmental degradation including, pollution prevention, cleaner production, reduction in discharge levels likely to cause harm to the environment, recycling,	

	and progressive environmental improvement. The proposed development would adhere to the requirements of this legislation.
<i>Protection of the Environment Operations (Waste) Regulation 2014</i>	<p>The Waste Regulation 2014 provides for contributions to be paid by occupiers of scheduled waste facilities for each tonne of waste received at the facility or generated in a particular area; exempts certain occupiers or types of waste from these contributions; and allows deductions to be claimed in relation to certain types of waste. It sets out provisions covering:</p> <ul style="list-style-type: none"> ● record-keeping requirements, measurement of waste and monitoring for waste facilities ● tracking of certain waste ● reporting ● transportation of waste ● transportation and management of asbestos waste ● recycling of consumer packaging ● classification of waste containing immobilised contaminants ● miscellaneous topics.
<i>Chapter B8 Byron Shire Council Development Control Plan 2014</i>	Identifies requirement for Waste Management Plan and the information to be provided within the WMP regarding waste storage and collection facilities and controls. Appendix B8.2 within Chapter B8 describes waste generation rates. Appendix B8.4 within Chapter B8 provides requirements for location, design, and construction of waste storage rooms. This WMP has been prepared to meet the objectives of this DCP.
<i>NSW Environment Protection Authority Better Practice Guide for Waste Management and Recycling in Commercial and Industrial Facilities 2012</i>	Identifies installation and maintenance practices for services and infrastructure for waste handling and collection systems. The systems are aiming to achieve the best possible waste minimisation and resource recovery outcome. The waste management systems identified include effective, efficient, and safe systems for both their ease of use by residents and their ability to be serviced by collection crews.
<i>Construction and Demolition Waste Guide – Recycling and Reuse Across the Supply Chain Department of Sustainability, Environment, Water Population and Communities 2011</i>	The aim of this guide is to help develop effective markets for materials diverted or derived from the construction and demolition waste stream.

3 HAZARDOUS MATERIALS

The proposed demolition would include a weatherboard secondary dwelling and a detached weatherboard shed. No hazardous waste investigations have been completed on the development site, however asbestos containing material (ACM) may be present in external eaves and internal linings which would require removal by a Safework NSW Class B licensed contractor.

Management of hazardous material is to occur prior to general demolition, and is to be in accordance with Safework NSW requirements, as detailed in Table 3. Demolition contractors generally have Safework NSW licensed personnel trained for the identification and removal of hazardous waste in demolition projects.

No opportunities for recycling and reuse are available for hazardous materials. Co-mingling of hazardous material is to be prevented. Separate receptacles to be provided and managed in accordance with Safework NSW and Safe Work Australia requirements.

Table 3 Management of Hazardous Materials

Type of Waste	Disposal at approved landfill facility Measures to include, but not limited to:
Hazardous Material: Asbestos containing material (ACM) including fibro sheeting & vinyl tiles.	<ul style="list-style-type: none"> ● Identified or suspected (ACM) is to be removed, prepared & disposed of by licensed asbestos handling contractor approved by Safework NSW. ● Asbestos material may be disposed at the Stotts Creek Resource Recovery Centre at Leddays Creek Road, Stotts Creek. ● A minimum of 24 hours' notice must be given on 02 66707400, prior to the disposal of asbestos to allow Landfill staff to manage the disposal of the asbestos at the facility.
Hazardous Material: Lead including lead flashing.	<ul style="list-style-type: none"> ● Use personal respirators according to AS/NZS 1715 and as per Synthetic Mineral Fibre removal in this table. ● Structures covered with lead-based paint should be removed intact, as far as possible. ● The safe work methods used in removal or demolition will determine how elaborate the containment system should be. ● Avoid power tools and any actions which create dust. However, if power tools need to be used, a higher level of containment must be used as opposed to when manual methods, such as scraping is used. ● All waste and debris collection and disposal procedures must be clearly stated in the Safe Work Methods Statement. ● Disposable suits and any vacuum bags/wet cloths to be appropriately bagged and disposed of as Hazardous Waste.
Hazardous Material: Mercury i.e. fluorescent lights	<ul style="list-style-type: none"> ● Remove fluorescent lights intact prior to mechanical demolition. ● Any removed lights to be appropriately bagged and disposed of as general waste in domestic quantities only. ● Personal Protective Equipment to be worn to minimise dust inhalation and eye/skin irritation. ● More information, including how and where fluorescent lights can be recycled, can be found at http://www.fluorocycle.org.au/ or http://www.environment.gov.au/settlements/waste/lamp-mercury.html. FluoroCycle is a voluntary program established by the Commonwealth Government and the Australian Lighting Council to help reduce the number of fluorescent lights going to landfill. ● SUEZ Environment provide a national fluorescent light collection and recycling service to dispose of used fluorescent tubes, HID and CFL light globes.
Hazardous Material: Synthetic Mineral Fibre (SMF) e.g. fibrewool insulation	<ul style="list-style-type: none"> ● Filter mask, goggles, gloves, and disposable coveralls. ● Dust control measure such as use of plastic screen &/or exhaust fan to be used if significant contamination present. ● Disposable suits and any removed insulation to be appropriately bagged and disposed of as general waste.
Hazardous Material: Refrigerants e.g. CFCs HFCs	<ul style="list-style-type: none"> ● All refrigerants should be recovered and either recycled, reclaimed, or returned to supplier, prior to disposal of unit.

4 WASTE GENERATION

4.1 DEMOLITION STAGE

The existing weatherboard secondary dwelling (approx. 180m²) and the detached weatherboard shed (approx. 315m²) are the major structures that would require demolition.

Any services would be disconnected including power and town water supply, and the connection point to the Council sewer would be cut and sealed to prevent groundwater, debris or other material entering Council sewer system.

Initially the Safework NSW licensed demolition contractor would inspect the structure for the presence of asbestos containing materials and other hazardous wastes. It appears significant ACM is located on external cladding and roofing and perhaps internal linings/floor coverings. These would be removed prior to further demolition occurring.

Demolition would occur over a short period of time (1-2 weeks) to allow subsequent installation of erosion and sediment control prior to site stripping and earthworks for the proposed development.

Waste generation and management activities during the demolition stage would comprise:

- An initial inspection of the structures subject to demolition by a suitably qualified Occupational Hygienist, Safework NSW licenced contractor, or similar to assess hazardous materials including asbestos containing material, lead flashing and paint, synthetic mineral fibres, and refrigerants.
- Any identified hazardous materials to be removed by a Safework NSW licensed contractor prior to demolition to avoid co-mingling with general waste.
- Removal of existing dwellings and other structures following removal of any hazardous material.

Note: Discussions with resource recovery facilities indicate that a minimum 80% resource recovery is provided and may be up to 95% with significant heavy concrete and bricks. The Stotts Creek Resource Recovery Centre also accepts co-mingled demolition waste with significant resource recovery and recycling rates achieved.

Separation of masonry, brick, concrete from other recyclables is encouraged, with significant savings on resource recovery costs.

Metal, including copper pipe, is also a profitable waste stream with recyclers providing significant returns. The following waste generation volumes have been estimated based on approximate calculations using floor areas and similar demolition sites.

Table 4 Demolition Stage – Waste Generation/Recycling Potential

Material Description	Estimated Volume/Area ⁽¹⁾	Potential Method of Recycling / Reuse
Contaminated Soil (if present)	TBD	No recycling. Managed or remediated in accordance with an approved remedial action plan.
Asbestos Containing Material (bonded fibro)	To be determined on site by Safework NSW licensed contractor	Nil (Stotts Creek Resource Recovery Centre)
Electrical Lighting	<5m ³	Preliminary discussions have confirmed that various resource recovery and recycling facilities are available from contractors operating in the BSC area including:
Electrical Cable		
Distribution Boards		
Switchboards		

Pipework PVC HPDE Pipe	<100 lineal m	<ul style="list-style-type: none"> ● Byron Bay Resource Recovery Centre ● Proskips ● JJ Richards ● Red Neds ● SUEZ Environmental. <p>Other demolition contractors would also have preferred resource recovery and recycling options.</p>
Tap ware	<2m ³	
Gutters	Approx. 90 lineal m	
Roof Metal Sheetting	450 - 500m ²	
Timber Trusses & Roof Timber	<50m ³	
Weatherboard Walls	<450m ²	
Timber (floor)	<200m ²	
Concrete Slab	<350m ²	
Plasterboard/ Other	<40m ³	
Windows/ Doors	Doors 10-20 Windows 20-30	
Copper	<100 lineal m	
Floor coverings (carpet and tiles)	300-400m ² (Assumes carpet or vinyl across dwelling footprint)	
Fittings/fixtures/PC items	<5 WC pans <5 basins 1-2 kitchen sinks 1 baths 2-4 showers	

⁽¹⁾ Note: Volumes/areas are indicative only and are subject to change.

4.2 CONSTRUCTION STAGE

Waste generating activities during the construction stage would comprise:

- Site stripping & removal of vegetative material
- Erosion and sediment control
- Landform modification and retaining
- Installation of infrastructure and services
- Installation of roadways and landscaping

The following typical waste generation figures have been provided based on similar construction sites. As discussed in the previous section, resource recovery centres in the Byron Shire area indicate that 80-90% by volume (95% by weight) of construction waste is able to be recycled (see Table 5).

Table 5 Estimated Waste Generation – Construction

Type of Waste	Reuse	Recycling	Disposal	Method of Reuse/Recycling or Waste Depot
	<i>Estimated Volume or Weight</i>	<i>Estimated Volume or Weight</i>	<i>Estimated Volume or Weight</i>	
Excavation Material	TBD	-	TBD	Waste classification of excavated material would be required prior to removal off-site.
Vegetative material	TBD			Chipped/mulched and reused onsite

Timber Concrete Bricks/pavers Tiles Metal Glass Furniture Fixtures/fittings Floor coverings	Limited on construction sites.	80-90% construction and demolition waste recycled by resource recovery centres	10-20% Including site office general waste and packaging & debris/offcuts that cannot be recycled	<ul style="list-style-type: none"> ● Byron Bay Resource Recovery Centre ● JJ Richards ● Proskips, ● Red Neds ● Keber Recycled Building Materials ● SUEZ Environmental
Packaging Green waste organics Containers (cans/glass/plastic) Paper/cardboard Residual waste		<100m ³	<40m ³	80-90% recycled/reused: Byron Bay Resource Recovery Centre

4.3 OCCUPATION STAGE

Waste generating activities during operation would comprise:

- Occupation of proposed 39 residential lots.
- Occupation of proposed community building.

Byron Shire council uses a multi-bin system to collect waste and recyclables from residential properties. The three-bin system includes:

- **General Waste:** 1 x 140L red lid MGB serviced fortnightly (also available in 80L and 240L).
- **Co-Mingled Recyclables:** 1 x 240L yellow lid MGB serviced fortnightly (also available in 140L and 360L).
- **Organic Waste:** 1 x 240L green lid MGB serviced weekly (also available in 140L).

This arrangement will satisfy the waste requirements for future residential developments on the proposed lots as outlined in *Chapter B8* of the Byron Shire Development Control Plan 2014.

The proposed community structures on the northwest corner of the site within the residual community lot would act as hire spaces/community halls. There are no generation rates outlined in the Byron Shire DCP 2014, however the NSW EPA *Better Practice Guide for Waste Management and Recycling* Policy has generation rates for 'cultural and recreational services' which have been used as the basis of estimating the waste generated from these structures.

Table 6 Estimated Waste Generation – Occupation

Location	Waste Generation Rates		Waste Generation Volume	
	General (L/100m ² /Day)	Recycling (L/100m ² /Day)	General (L/Week)	Recycling (L/Week)
Community Structures (~500m ² Floor Area)	5	10	138	275

As the structures will not be in use full time 7 days a week, a conservative rate of 5.5 days have been used to calculate the estimated waste generation. If the spaces are hired for events, the event organisers will be responsible for managing and servicing the event's waste outside of the typical servicing.

5 WASTE STORAGE REQUIREMENTS

The following design storage volume recommendations have been based on the waste generation rates as detailed in the previous section and are provided to establish site suitability.

Adequate space is available within the site for the storage of waste during the demolition and construction stages. Refer to site plans in Appendices 3 & 4.

5.1 DEMOLITION STAGE

Adequate space is available onsite to provide temporary waste storage and recyclable building waste storage during demolition and construction stages of the development. Refer to site plans in Appendix 3 and 4.

During demolition, the site would be secured with safety fencing and demolition waste would be initially placed in waste streams in designated skip bins for transport to the resource recovery centre. Skip bins would be provided for:

- Co-mingled waste
- General waste

Discussions with demolition contractors indicates that direct loading into transport vehicles does occur for both co-mingled demolition waste and waste is also sorted on site. With the volumes of bricks, roof tiles, and concrete waste on this site, loads of this heavy material may be transported directly to resource recovery facilities for recycling.

Direct loading of co-mingled building waste into transport trucks for delivery to the approved resource recovery and recycling centre would reduce the site waste storage and servicing requirements during demolition.

Hazardous waste to be separated and managed in accordance with Safework NSW requirements (e.g., no co-mingling, wetting, wrapping ACM).

Table 7 Recommended Waste Storage Receptacles –Demolition Stage

Waste Type	Required Service	Proposed Industrial Bin Size at Collection Point ⁽¹⁾
Recycling & General Waste Service	<ul style="list-style-type: none"> ● 1 x 6m³ skip bin for general waste (includes site office) ● 1 x 6m³ skip bin for co-mingled building waste to be sorted at facility 	<ul style="list-style-type: none"> ● 1 x 6m³ skip bin serviced on demand for general waste ● 1 x 6m³ skip bin serviced on demand for co-mingled building waste ● 1 x 6m³ serviced on demand for hazardous waste, if required ● Optional 1 x 6m³ skip bin for heavy recyclables (concrete, masonry, tiles)

⁽¹⁾ Direct loading into transport vehicles for transport to landfill/resource recovery facility/recyclers would reduce required waste storage receptacles and servicing arrangements.

5.2 CONSTRUCTION STAGE

The construction would be staged, with a temporary waste storage on the site with a collection point near the McAuleys Lane frontage, and moved as the development continues and access becomes available for servicing.

Table 8 Recommended Waste Storage Bins – Construction

Waste Type	Required Service	Proposed Industrial Bin Size at Collection Point
General Waste	Waste generated from construction activities including the site offices.	● 1 x 10-15m ³ skip bin serviced on demand
Co-Mingled Recyclables	Off-cuts, packaging, and discarded erosion and sediment controls.	● 1 x 10-15m ³ skip bin serviced on demand and sorted at the waste facility.
Soil and Vegetative Material Waste	Stripped vegetation and top-soil material	Soil will be retained for landscaping and vegetative material chipped for uses as mulch/soil conditioner.

5.3 OCCUPATION STAGE

Operational waste for future residential developments on the subdivided lots would include the BSC's multi-bin system, serviced by Council's contractor. All operational waste provision and servicing would be part of any future development applications on the subdivided lots and organised by the property owners. All waste storage and servicing would be designed in accordance with Chapter B8 of the Byron Shire DCP 2014. All residents would be responsible to transporting their own bins to the new road frontages for collection. Lots 25 – 28 and Lots 29 – 32 would have temporary collection areas provided along the turn circle of the main roadways.

The community buildings will be serviced on the same council servicing rotation as the residential buildings. The waste collection and servicing would be monitored in the early stages by an appropriately nominated person to ensure all waste is collected. The nominated person would also be responsible for transporting the bins to the roadside for servicing. The design would be based on the final occupation and uses of these structures, with opportunities for additional bins and servicing available if required.

Table 9 Recommended Waste Storage Bins - Occupation

Waste Type	Estimated waste generation (L/Week)	Proposed Receptacle Size at Collection Point*
General Waste	140	2 x 140L MGBs serviced fortnightly
Co-Mingled Recycled Waste	275	1 x 360L and 1 x 240L MGBs services fortnightly
Organic Waste	Garden maintenance and green waste	1 x 240L MGB serviced weekly

6 BIN IDENTIFICATION AND SIGNAGE

6.1 SIGNAGE

All bins, collection facilities will be clearly marked with labels, colour coding, symbols, and words. Signs will be highly visible.

Signage should be consistent with those used at garbage storage areas.

7 EDUCATION & EVALUATION

7.1 INFORMATION & AWARENESS

It is good practice for all sub-contractors, project staff, and visitors to be made aware of the aims and benefits of the waste minimisation program to encourage maximum participation.

During construction, the induction would include information on waste streams, waste storage receptacles and recycling.

Several strategies can be used to avoid mistakes when separating waste and recyclables and make sure bins and equipment are used correctly. These include:

- using clear signage with consistent design and colours in waste storage rooms and on bins (standard signage).
- there is an existing waste supervisor responsible for the proper separation of waste, waste storage area and collection. The waste supervisor is to be also responsible for having the receptacles out for collection at the nominated collection point.

8 REVIEW & MONITORING

8.1 MONITORING OF WASTE MANAGEMENT

Waste monitoring is necessary to assess whether the strategies implemented have been effective in achieving the SWMMP's aims.

8.1.1 Demolition & Construction

Monitoring would be carried out on a weekly basis by the project Site Manager during demolition and construction.

The monitoring process would include:

- Site Manager to oversee waste collection activities to assess compliance with SWMMP.
- Waste volume monitoring carried out by the waste contractor during collection and servicing procedures.

8.2 REVIEW OF SWMMP

This SWMMP will be reviewed and updated, if necessary, using the results of monitoring of the waste volume and type being generated during the development stages.

The review will also address and reflect:

- changes in the development management process.
- changes in design or sequence of development staging.
- changes in access to the Project Site.
- changes or requests directed by local or state authorities i.e., Byron Shire Council, State Government Departments;
- changes in the environment.
- changes in generally accepted environmental management practices.
- changes in legislation,
- new risks to the environment or public health.
- any pollution or contamination events.

9 RECOMMENDATIONS

The waste storage and servicing recommendations, as detailed in this report, are summarised below:

Table 10 Summary of Waste Management Recommendations

Project Stage	Activity	Waste Storage/Servicing
Demolition ⁽¹⁾	Stripping recycling building products Skip bins for: <ul style="list-style-type: none"> General waste Co-mingled demolition waste Recycling of building materials where possible	Site fenced & skip bins located for collection. <ul style="list-style-type: none"> General Waste: 1 x 6m³ skip bin serviced on demand. Co-Mingled Recyclables: 1 x 6m³ skip bin serviced on demand.
Construction	Building Servicing/trenching Waste offcuts, packaging, excess materials, Site office	<ul style="list-style-type: none"> General Waste: 1 x 10-15m³ skip bin serviced on demand. Co-Mingled Recyclables: 1 x 10-15m³ skip bin serviced on demand for co-mingled building waste. Vegetative Material & excavated soil: chipped vegetative material and soil to be retained on project site.
Occupation ⁽²⁾	Multi-lot residential subdivision Community Structures	Council multi-bin system for future residential developments: <ul style="list-style-type: none"> General Waste: 1 x 140L red lid MGB serviced fortnightly (also available in 80L and 240L). Co-Mingled Recyclables: 1 x 240L yellow lid MGB serviced fortnightly (also available in 140L and 360L). Organic Waste: 1 x 240L green lid MGB serviced weekly (also available in 140L). Proposed community structures: <ul style="list-style-type: none"> General Waste: 2 x 140L MGBs serviced fortnightly. Co-Mingled Recyclables: 1 x 360L and 1 x 240L MGBs serviced fortnightly. Organic Waste: 1 x 240L MGB serviced weekly.

- (1) Note the demolition waste storage requirements would be reduced with direct loading of both co-mingled and sorted demolition waste into approved transport vehicles.
- (2) Indicative receptacle size and servicing only final volumes would depend on patronage and other factors including adherence to signage and waste recycling practices. Other waste receptacle configuration and servicing may be applicable to meet ongoing waste generation.

10 CONCLUSION

A review of the plans shows there is adequate area available on the site to provide suitable storage facilities for waste generated during the proposed demolition of the existing structures and the construction of the proposed subdivision development.

Tables 4-7 in this report demonstrate that the expected waste storage and collection service is generally compliant with the waste storage volumes estimates within the *Chapter B8 of the Byron Shire Development Control Plan 2014* (BSC, 2014).

The proposed waste management arrangements within this report are considered adequate for the purposes of the demolition, construction and occupation associated with the proposed subdivision to be located at Lot 8 DP 589795, 53 McAuleys Lane, Myocum NSW.

11 LIMITATIONS

The information within this document is and shall remain the property of HMC Environmental Consulting Pty Ltd.

This document was prepared for the sole use of client and the regulatory agencies that are directly involved in this project, the only intended beneficiaries of our work. No other party should rely on the information contained herein without the prior written consent of HMC Environmental Pty Ltd and client.

Your report is based on the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until project implementation has commenced and therefore your report recommendations can only be regarded as preliminary.

Because a report is based on conditions which existed at the time of the subsurface exploration, decisions should not be based on a report whose adequacy may have been affected by time, natural processes and the activities of man.

12 SIGNATURE

This report has been prepared by Mark Tunks, Principal of HMC Environmental Consulting Pty. Ltd. Note that HMC Environmental Consulting holds current Professional Indemnity Insurance to 4th August 2024.



Mark Tunks
Principal

3 November 2023
Completion Date

APPENDIX 1 - LOCATION MAPS



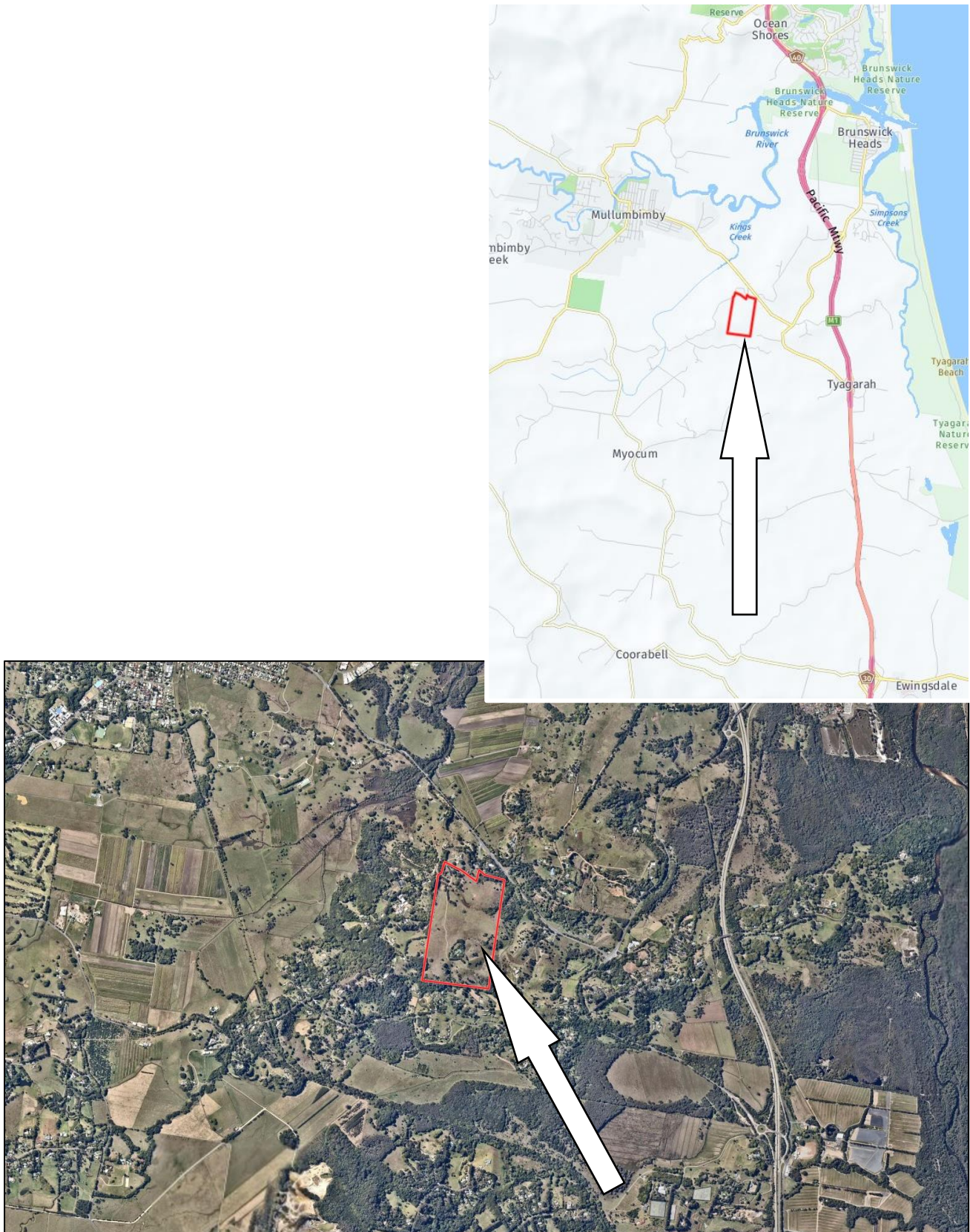
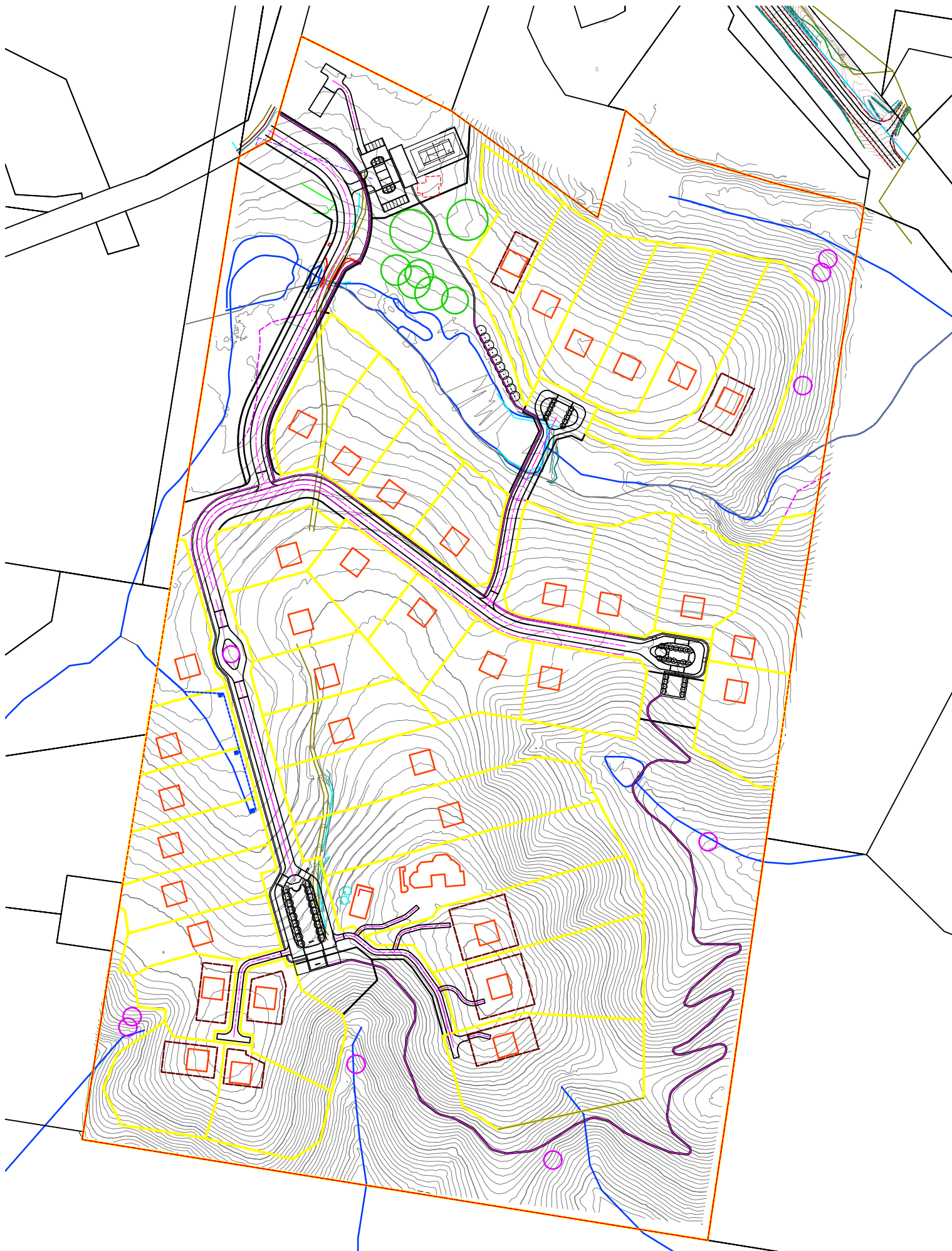




Figure 2 - Site Boundary (Source: Nearmap 2023)


APPENDIX 2 - SITE PLAN PROPOSED DEVELOPMENT

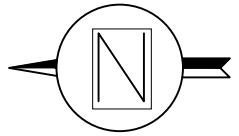


APPENDIX 3 - TEMPORARY WASTE STORAGE AREA - DEMOLITION

**SITE WASTE
MINIMISATION AND
MANAGEMENT
PLAN**

**TEMPORARY WASTE
STORAGE AREA
DURING DEMOLITION**

 Proposed
Demolition Area



Lot 8 DP 589795
53 McAuleys Lane
Myocum NSW

HMC2023.320.02
Date: October 2023
VERSION: 05/10/2023
DRAWN: MF
BASE: Nearmap 2023

**PROPOSED LAYOUT
OF WASTE STORAGE
AREA IS GENERAL
ONLY AND IS TO BE
CONFIRMED ON SITE
BY SITE MANAGER**


ENVIRONMENTAL CONSULTING Pty Ltd
HMC Environmental Consulting Pty Ltd
Tweed Heads NSW
0755368863
www.hmcenvironment.com.au
admin@hmcenvironment.com.au

Temporary Waste Storage Areas:

-  1 x 6m³ Skip bin
(Co-mingled recyclables)
-  1 x 6m³ Skip bin
(General waste)
-  1 x 6m³ Skip bin
(Heavy recyclables)

Scale:

0 50 100m

APPENDIX 4 - TEMPORARY WASTE STORAGE AREA - CONSTRUCTION

**SITE WASTE
MINIMISATION AND
MANAGEMENT
PLAN**

**TEMPORARY WASTE
STORAGE AREA
DURING
CONSTRUCTION**



**Waste Storage Area to
be relocated as
development progresses**

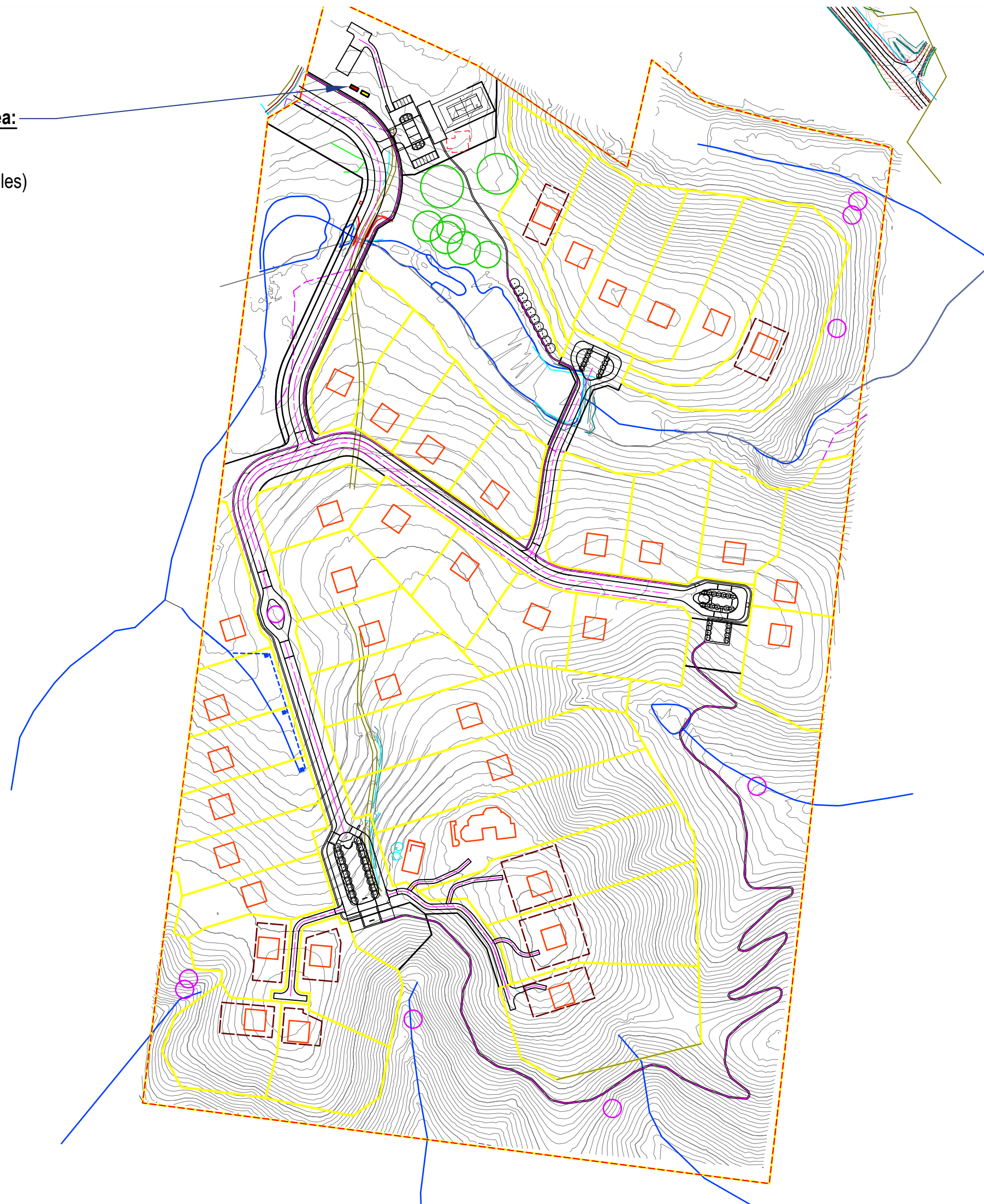
Lot 8 DP 589795
53 McAuleys Lane
Myocum NSW

HMC2023.320.02
Date: October 2023
VERSION: 05/10/2023
DRAWN: MF
BASE: Nearmap 2023

**PROPOSED LAYOUT
OF WASTE STORAGE
AREA IS GENERAL
ONLY AND IS TO BE
CONFIRMED ON SITE
BY SITE MANAGER**

Temporary Waste Storage Area:

-  1 x 10-15m³ Skip bin
(Co-mingled recyclables)
-  1 x 10-15m³ Skip bin
(General waste)



APPENDIX 5 - TYPICAL BIN SIZES



CONTAINER SPECIFICATIONS

Plastic (polyethelene)

Capacity	120L	240L	660L	1100L
Height	0.92m	1.075m	1.235m	1.485m
Width	0.54m	0.58m	1.36m	1.36m
Length	0.62m	0.715m	0.765m	1.07m
Weight	9.5kg	13.5kg	45kg	65kg

**Availability of the complete suite of bin sizes varies across states. Sizes are approximate measurements and may vary by location.*



Figure 3 Typical Rear Lift Collection Receptacle Sizes (SUEZ Environment)

BIN SIZES

2m³ Skip Bin

Height: 0.86m
Length: 1.8m
Width: 1.4m

Safe working load: 2 tonne



4m³ Skip Bin

Height: 1m
Length: 3.1m
Width: 1.75m

Safe working load: 4 tonne

7m³ Skip Bin

Height: 1.2m
Length: 4.1m
Width: 1.85m

Safe working load: 7 tonne



10m³ Skip Bin

Height: 1.6m
Length: 4.5m
Width: 1.85m

Safe working load: 10 tonne

16m Hook Lift

Height: 1.2m
Length: 6m
Width: 2m

Safe working load: 13 tonne



*16m bins have an opening at one end of the skip for easy access
e.g. wheelbarrows, labourers etc.

Figure 4 Typical Skip Bin Sizes (ProSkips)

APPENDIX 6 - SAFEWORK NSW ASBESTOS DEMOLITION CHECKLIST

Asbestos and demolition checklist

Completed by		Date		Time	
Company name		Nominated supervisor			
Site address		Contact number			

On completion of the asbestos removal work, a clearance inspection will be performed by:

Name		Contact number	
-------------	--	-----------------------	--

Checklist	WHS Regulation	Yes	No	N/A	Notes/comments
Will fencing stop unauthorised entry?	298				
Does site signage show an after hours contact number?	308 and 469				
Are adequate facilities available for workers (toilets, meal area, drinking water, means to wash hands)?	41				
Is there an adequate first aid kit available?	42				
Is someone trained in first aid?	42				
Is there a readily available competent supervisor on-site?	459 and 529				
Does the contractor hold the correct licence for the work being undertaken?	485 and 487				
Has the work been notified to WorkCover NSW?	142 and 466				
Are work surfaces and access ways clear of debris and trip hazards?	40				
Is there an asbestos removal control plan prepared (if needed)?	464				
Are there arrangements (eg health and safety representative, health and safety committee or other agreed arrangements) to consult with workers on safety matters?	Sections 47 – 49 of the WHS Act				

Checklist	WHS Regulation	Yes	No	N/A	Notes/comments
Have safe work method statements been prepared?	299				
Has asbestos been identified and noted in the workplace asbestos register?	450 – 453 and 463				
Do all persons working with asbestos have correct training/qualifications?	460				
Do all workers have construction induction cards?	316				
Is plant inspected on a regular basis?	213				
Do plant operators have high risk work licences (if required)?	81				
Is correct personal protective equipment provided and used?	44				
Have all services been disconnected?	163				
Is dust generated by demolition activity controlled?	35				
Are workers prevented from falling through penetrations?	78				
Are exclusion zones or overhead protection in place to stop building debris from falling on workers below?	54				
Is a compliant scaffold provided?	225				
Has the handover certificate been provided for the scaffold?	225				
Are there arrangements for an inspection to be carried out, after asbestos is removed, by an independent licensed assessor or competent person?	473				
Has notification of asbestos removal been given to the neighbours?	467				
Has health monitoring for workers been undertaken by a licensed medical practitioner? NB: A transitional period has been implemented for this requirement. Must be completed within 12 months from 1 January 2012.	435				

Notes:

APPENDIX 7 - PROSKIPS CONSTRUCTION AND DEMOLITION RESOURCE RECOVERY

Environmental Policy

Proskips is one of the Gold Coasts leading waste management and recycling companies. We specialise in construction and demolition waste. The company is locally owned and operates it's own waste transfer station. As a responsible corporate citizen we have chosen to work closely with the Environmental protection agency to adopt it's best business practice methods of dealing with all our C&D waste.

The EPA classify all waste transfer stations with a capacity of 20,000t or more a year to be an ERA-82 (environmentally relevant activity) and as such are required to be licensed by the EPA. Proskips engaged a national environmental planning agency "Planit Consulting" to lodge both the development application to the Gold Coast City Council and the ERA-82 (waste transfer station) to the EPA

The reason we have chosen to go to the expense and time of operating our own waste transfer station is one of economics, which at the same time is good for the environment. We have taken what we believe are the best methods from both European and Australia companies to develop our methods of dealing with C&D waste.

Our goal is to recycle 95% of all waste that comes into the transfer station, with only 5% going to landfill. The break up of our waste is as follows:-

20%	Concrete and Hardcore
20%	Wood
20%	Soil
10%	Green waste
10%	Metal
10%	Plastic
4%	Cardboard & Paper
3%	Gyprock
3%	Other

Recycling Methods

Concrete: All concrete and hardcore is crushed through an impact crusher and screened to several small aggregates and roadbase and is sold back to the building industry for drainage, walls, under slabs etc.

Wood/Green waste: The wood is transported to Rocky Point power station which is then used to generate power for the sugar mill with the excess power being sold to the national grid.

Soil: The soil is screen through a 10mm trommel and sold to landscape gardeners and builders.



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ABN:
89 114 580 308

Metal: The metal is separated into copper, aluminium, heavy gauge steel and pig metal then sold to One Steel to be melted down.

Cardboard: All cardboard is transported to Amcor recycling at Molendinar.

Gyprock: The gyprock is transported to Marlyn Compost at Jacobs Well where it is grinded down and added to garden soil and mulches.

Plastic: Landfill

Other: Landfill

This has been a brief outline of our recycling practices, as you can see when using the services of Pro Skips you can be confident of an environmentally conscious business.

These methods of collecting and recycling C&D waste will be adopted for all Constructions jobs on the Gold Coast. I have read through all the criteria for the Green Star rating system, where they are looking for 80% recycling by weight. We can easily achieve this for you as we currently recycle 80-90% by volume – in real terms this would amount to 95% recycling by weight as the only waste we send to landfill is very light after we have taken sand, soil, metal & concrete out of the equation.

To comply with the green star rating system we can give you a monthly environmental report to show the breakdown of waste generated from each job and percentage of waste recycled.

I trust this meets with your approval and assuring you of our best attention at all times

Yours sincerely

John Sheerin
Director