

# **WASTE MINIMISATION & MANAGEMENT PLAN**

## **APPERLY VILLAGE**



## Document Control

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Address: 4A Vardon Road, Fern Bay  
Prepared by: Principle Living Pty Ltd

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# Table of Contents

## Contents

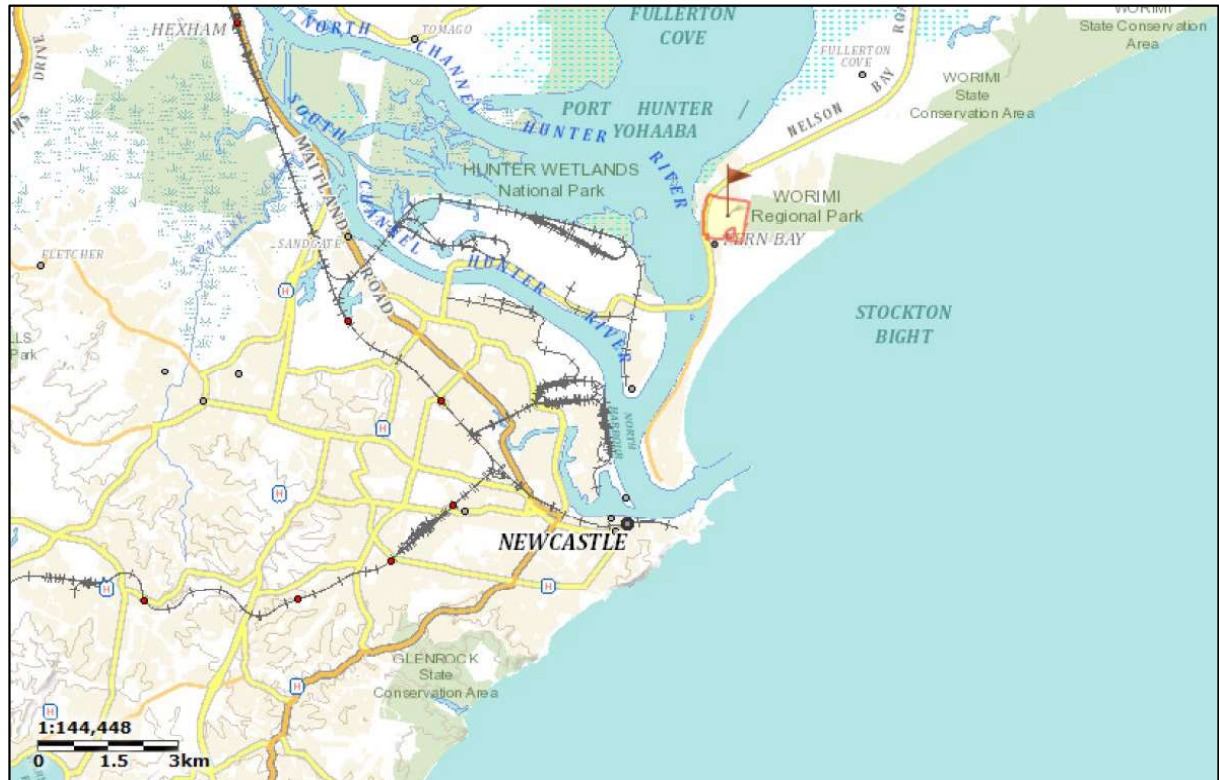
- 1. INTRODUCTION.....5
- 2. THE PROPOSED DEVELOPMENT .....7
- 3. SUPPORTING DOCUMENTATION.....8
- 4. CONSENT AUTHORITY .....8
- 5. CONTRACT ARRANGEMENT.....8
- 6. WASTE MANAGEMENT .....8
  - 6.1 Potential Waste Sources .....8
  - 6.2 Potential Impacts.....9
    - 6.2.1 Demolition Phase.....9
    - 6.2.2 Clearance Phase .....9
    - 6.2.3 Construction Phase .....9
- 7. WASTE SERVICING REQUIREMENTS.....12
- 8. MITIGATION MEASURES .....12
  - 8.1 Waste Management Procedures .....12
  - 8.2 Waste Tracking.....12
    - 8.2.1 Waste Management Guidelines.....12
    - 8.2.2 Waste Register .....13
- 9. OPERATIONAL PHASE.....13
  - 9.1 Waste Collection Services for Dwellings: .....13
  - 9.2 Community Centre and Recreational Facilities:.....13
  - 9.3 Collection Scheduling: .....13
  - 9.4 Education and Training: .....14
  - 9.5 Monitoring and Reporting: .....14
  - 9.6 Waste Reduction Initiatives: .....14
  - 9.7 Health and Safety:.....14
- 10. CONCLUSION .....14



## 1. INTRODUCTION

This report constitutes a Waste Minimisation and Management Plan (WM&MP) to accompany a Development Application (DA) to Port Stephens Council. The DA is seeking consent for development of the Apperly Village located on the Newcastle Golf Course, 4A Vardon Road Fern Bay NSW.

*Figure 1: Location Plan*



This report details the proposed measures for the management and minimisation of waste during the upgrade and refurbishment works. It is noted that the site is developed and operating as a championship golf course with associated support infrastructure. The proposed works encompass earthworks and building construction to complete the new retirement village. Including

- Bulk earthworks to the existing course
- The construction of community centre;
- 3 apartment buildings;
- 47 villas;
- Roadways and paths; and
- Landscape areas.

Practical and feasible management options have been identified and are detailed. Effective waste management is essential for the course upgrade, partial redesign and refurbishment works.

The waste management priorities for this project include:

- Wastes are reduced at the source.
- Materials are reused where possible.
- Wastes are recycled where practical.
- All non-usable waste is removed from the site.
- All waste is appropriately and responsibly disposed of.

The objectives of this WM&MP are to:

- a) Create a management structure that enables successful waste minimisation and management for all waste generated during the retirement village development works; and
- b) Effectively reduce the resource demands and construction waste generation through targeted programs of material re-use, reduction and recycling.

***Figure 2: Site Masterplan***



## 2. THE PROPOSED DEVELOPMENT

The proposed development comprises of a Seniors Living Development located within the Newcastle Golf Club. The Summary is provided below:

1. Site preparation & establishment activities – clearing existing vegetation, demolition of existing golf course via earthworks, bulk earthworks.
2. Establishment of vehicular access from Nelson Bay Road
3. Construction and occupancy of a seniors living development comprising:
  1. Three (3) apartment buildings containing 125 serviced self-care dwellings
  2. Forty seven (47) single storey (villas) serviced self-care dwellings
4. Carparking - 295 spaces across the site with each villa being provided with a double garage (94 spaces) and 201 basement carparking spaces within the three apartment buildings
5. Provision of pedestrian and vehicular access to and from the site
6. Establishment of a Community centre & administration building
7. Pickle ball courts, lawn bowls facility, open space, landscaping, picnic shelter, public art, open lawn area for passive recreational activities and formal striking planting
8. Civil works including internal access roads, pedestrian linkages to Nelson Bay Road and the golf club
9. Connection to Country 'Keeping Place'
10. Extension and enhancement of physical infrastructure utilities as needed



**Figure 3: Masterplan detailing development mix.**

### **3. SUPPORTING DOCUMENTATION**

This report, which accompanies the proposal, provides a summary of the waste management measures for works during the construction phase. This report should be read in conjunction with the following documentation:

- Statement of Environmental Effects (Incite Planning - 2023)
- Civil Engineering Report (Northrop - 2023)
- Architectural Design (EJE – 2023)
- Biodiversity & Bushfire (AEP - 2023)
- Preliminary Site Contamination Report (Cardno - 2023)
- Geotechnical Investigation (RCA – 2023)
- Landscaping Plans (Studio 26 – 2023)

### **4. CONSENT AUTHORITY**

The consent authority for the proposed development is Port Stephens Council. This WM&MP has been prepared to encourage the:

- Avoiding unnecessary resource consumption
- *Recovering resources for reuse*
- *Recovering resources for recycling or reprocessing*
- *Disposing of residual waste as a last resort*

### **5. CONTRACT ARRANGEMENT**

Waste management services during the construction phase will be provided under a commercial contract arrangement which will include services managing:

- ✓ General Waste and recycling
- ✓ Construction waste
- ✓ Organic waste

### **6. WASTE MANAGEMENT**

#### **6.1 Potential Waste Sources**

The NSW *EPA Waste Classification Guidelines (2014)* classifies wastes into the following streams:

- Special Waste (*e.g.* clinical and related waste, asbestos, waste tyres)
- Liquid Waste (*e.g.* fuels, oils, chemicals, and pesticides)
- Hazardous Waste (*e.g.* lead-acid cell batteries and lead paint)
- Restricted Waste (currently no wastes pre-classified as restricted by EPA)
- General Solid Waste (putrescible)(*e.g.* general litter and food waste); and



- General Solid Waste (non-putrescible) (*e.g.* glass, paper, plastic, building demolition waste, concrete)

These waste streams and potential impacts associated with the construction works are discussed below.

## **6.2 Potential Impacts**

### **6.2.1 Demolition Phase**

The site is currently developed as a golf course with associated support infrastructure including clubhouse, maintenance workshop and infrastructure services. The proposed Seniors Living Development works will not necessitate any demolition works and limited soil or spoil material will need to be imported or exported from the site.

### **6.2.2 Clearance Phase**

An Erosion and Sediment Control Plan ('ESCP') has been prepared by Northrop Consulting that details the specific site controls to mitigate and minimise the impact of the proposed development within the existing locality.

### **6.2.3 Construction Phase**

The construction component will comprise two main elements:

- Earthworks to prepare the site for roads, footpaths and building pads; and
- Internal road and footpath network
- Construction of residential villa's.
- Construction 3 x apartment buildings.
- Construction of Community Centre, Bowling green, pickle ball courts and swimming pool.
- Landscape areas including external BBQ areas and footpaths.

For all components, waste will be separated on site by builder's contractors and tradespeople during the construction stage. The site will be checked on a regular basis to make sure no recyclable materials are mixed with non-recyclable materials, and to set aside on site an area to store the recyclable materials for transportation to local recycling plants.

The construction site manager/supervisor will erect signs on site designating the waste storage and pick-up areas and will inform all contractors of the relevant procedures and processes.

Table 1 below sets out proposed methods of handling and disposing of construction waste.

**TABLE 1**

<b>Materials on Site</b>		<b>Destination</b>		
<b>Type of Waste Generated</b>	<b>Estimates Volume (m<sup>3</sup>)</b>	<b>Reuse and Recycling</b>		<b>Disposal</b>
		<b>On-Site</b>	<b>Off-Site</b>	
Excavation Material	< 5,000m <sup>3</sup>	Reuse of all excavated soil for backfilling and landscaping purposes	N/A	N/A
Topsoil	< 14,000m <sup>3</sup>	Reuse of all topsoil for revegetation and landscaping purposes	N/A	N/A

Green Waste	< 1,000m <sup>3</sup>	All cleared vegetation will be mulched and reused on site	N/A	N/A
Packaging (used pallets and pallet wrap, etc.)	< 300m <sup>3</sup>	N/A	Pallets reused where possible	Disposed of off-site at recycling facility by contractor.
Other waste (e.g. PVC's, plastics, paint, paper & cardboard)	< 100m <sup>3</sup>	N/A	Disposed of off-site at recycling facility by contractor.	Disposed of off-site at recycling facility by contractor.
Domestic debris (paper, alum cans and other materials generated by construction workers)	< 250m <sup>3</sup>	N/A	Disposed of off-site at recycling facility by contractor.	Separate bins will be provided to meet the needs of the contractors. Recyclable, putrescible and green waste materials will be stored separately and appropriately recycled.
Cigarettes	< 0.0001m <sup>3</sup>	N/A	N/A	A cigarette butt collection point will be provided for construction workers
Contaminants, oils & sludge's	< 5m <sup>3</sup>	N/A	N/A	Should unexpected materials be discovered during excavations, work will cease immediately and plans for the safe handling, storage and disposal in accordance with relevant statutory guidelines will be developed.

Notes:

- Any waste oils accumulated during maintenance of heavy machinery will be disposed offsite by the contractor as part of their own licence agreements. Waste oil contractors and maintenance and refuelling contractors will be required to have spill response procedures in place when working on-site.
- Refuelling will be carried out at designated areas to control potential spill and maintenance issues. Spill response equipment will be stored at the construction sites in the event of unforeseen spills due to hose breaks, etc. Minor waste oil spills will be contained, and impacted soils disposed of according to NSW legislation.
- No other hazardous wastes are anticipated on site.
- The work site area will be securely fenced-off during the construction phase, with controlled access to minimise unauthorised dumping of waste and limit possible incidents of waste material blowing off the site during periods of high winds.

## **7. WASTE SERVICING REQUIREMENTS**

As part of the early discussions and subsequent negotiations with the preferred waste contractor, their waste servicing equipment requirements were taken into consideration in the preparation of this plan.

The preferred waste contractor has advised that they can service the development using a modern fleet of vehicles that can manoeuvre around the site. This includes rear and side lift waste management vehicles with overall dimensions of 8.0m length, 2.5m width, 4.3m (operational) height, and 22.5-ton (full operational) weight.

As part of the contractual arrangements with the preferred waste contractor, we have also negotiated flexible pick-up and delivery times taking into account the need for after normal business hour emergency spills response service during the construction phase.

## **8. MITIGATION MEASURES**

### **8.1 Waste Management Procedures**

Detailed waste management procedures will be developed once a building contractor has been engaged to undertake the works and will form part of a construction management plan. The procedures would guide the every-day management of:

- Designated stockpiles, recycling areas and bins
- Stripped topsoil and green waste
- Protection measures for waste storage areas
- Waste handling, management, and storage protocols
- Clear signage to designated waste areas
- Regular servicing of the waste areas to ensure capacity is not exhausted during works
- Disposal procedures for each waste stream
- Training for on-site staff on the contents of the WM&MP
- Emergency protocols and contingency plans.

### **8.2 Waste Tracking**

#### **8.2.1 Waste Management Guidelines**

In accordance with the *Protection of the Environment Operations Act 1997*, and the EPA's *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non – liquid Wastes*, waste tracking requirements apply to the generation, storage, transport, treatment or disposal of certain types of wastes. Potential wastes which could be generated on-site during the construction phase that will require tracking include:

- Waste oils
- Oil and fuel filters
- Oily water

### **8.2.2 Waste Register**

A register of wastes will be kept throughout the construction project. The register will contain details pertaining to:

- The types and quantity of wastes for each load taken off site.
- The place to which the waste was taken for treatment or disposal.
- The waste contractor used for each waste load.

## **9. OPERATIONAL PHASE**

### **9.1 Waste Collection Services for Dwellings:**

The 172 two and three-bedroom villas and apartments will be serviced by a private contractor. The selected contractor will provide:

- Each dwelling with a 240-litre general waste garbage bin.
- Each dwelling with a commingled recycling bin and a green waste bin.
- A rear lift truck for servicing the site.

Collection services will follow this schedule:

- Weekly for general waste.
- Fortnightly for commingled recycling.
- Monthly for green waste.

### **9.2 Community Centre and Recreational Facilities:**

- The Village Manager will oversee the ongoing management of waste generated within the community centre and associated recreational facilities, adhering to this plan.
- Each facility will have an independent waste storage/management area, screened or suitably located as necessary.
- Contractors will be engaged to perform on-site maintenance on an as-needed basis.
- Staff and facility users are expected to separate general waste and recyclables within the designated waste storage/management areas for each facility.
- Each facility will have at least two separate bulk bins, clearly labelled and identifiable for waste and recycling.
- Staff will clean the bins and waste storage areas while wearing protective gloves.

### **9.3 Collection Scheduling:**

- The frequency of rubbish collection will be based on the demand for each facility.
- Rubbish collection will be scheduled to occur outside peak hours. These details will be finalised when a private waste collector is engaged.

#### **9.4 Education and Training:**

- **Staff and Resident Training:** Training sessions will be conducted for staff and residents to ensure proper waste segregation and handling procedures.
- **Educational Materials:** Distribution of informational materials such as brochures, posters, and guidelines on proper waste management practices.

#### **9.5 Monitoring and Reporting:**

- **Regular Audits:** Scheduled audits to monitor the effectiveness of the waste management plan and ensure compliance.
- **Reporting Mechanism:** A system for reporting issues related to waste management, such as missed collections or contamination in recycling bins.

#### **9.6 Waste Reduction Initiatives:**

- **Waste Minimisation Programs:** Initiatives to reduce overall waste generation, such as composting programs or bulk purchasing to reduce packaging waste.
- **Recycling Incentives:** Programs to encourage recycling, such as competitions or rewards for residents who effectively segregate their waste.

#### **9.7 Health and Safety:**

- **Safety Protocols:** Detailed safety protocols for staff handling waste, including the use of personal protective equipment (PPE) and proper hygiene practices.

### **10. CONCLUSION**

This Waste Minimisation and Management Plan has been prepared to assist Port Stephens Council in the assessment of the Seniors Living Development works at the Newcastle Golf Club.

All waste generated during construction and operation of the proposed development will be managed in accordance with this management plan and in accordance with the relevant planning provisions and Australian standards.