

VEGETATION MANAGEMENT PLAN

for

THE ROBERTSON HOTEL

1 FOUNTAINDALE RD

ROBERTSON NSW



MARCH 2020



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1 Background

1.1 Purpose of this report

This Vegetation Management Plan (VMP) provides strategies, actions and a works schedule to protect the native vegetation communities during the development construction and to restore the structure, function, integrity and dynamics of the native vegetation communities at The Robertson Hotel both after construction and on an ongoing basis. The management of the existing heritage garden does not form part of this report.

1.2 Proposed Development

The proposed development includes upgrading the existing hotel facilities, adding a new wing to the hotel building and accommodation facilities of eco cabins, ancillary facilities and infrastructure. The impact of the proposed development on the ecological communities on the site is generally limited to the new road access to the east and west of the site. The critically endangered Robertson Tall Open Forest is not impacted by the development.

When completed the revegetated ecological communities will be an asset to the site and an attraction for visitors and guests to the hotel.

2 Site extent and description

2.1 The Site

The study site, referred to as The Robertson Hotel, is located at 1 Fountaindale Rd, ROBERTSON, Lot 2 DP 610676. The site comprises approximately 5 hectares. The property is bounded by the Illawarra Highway, Fountaindale Road and the Illawarra Rail line.

The gently undulating land slopes to the south-east, with 2 man-made dams.

The property is identified as an item of heritage significance on the local level, both for its building and surrounding introduced landscape. The heritage building is bounded by remnant rainforest and scattered woodland, which extends beyond the property lines to the south east. These two areas are identified as remnant Endangered Ecological Communities.

2.2 Zoning

The site is zoned E3 – Environmental Management, objectives of which include:

- To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
- To provide for a limited range of development that does not have an adverse effect on those values.
- To encourage the retention of the remaining evidence of significant historic and social values expressed in existing landscape and land use patterns.
- To minimise the proliferation of buildings and other structures in these sensitive landscape areas.



- To provide for a restricted range of development and land use activities that provide for rural settlement, sustainable agriculture, other types of economic and employment development, recreation and community amenity in identified drinking water catchment areas.
- To protect significant agricultural resources (soil, water and vegetation) in recognition of their value to Wingecarribee's longer term economic sustainability.

The site is included in the Wingecarribee Local Environment Plan 2010 Schedule 5 Environmental Heritage Item number I601 listed as Fountaindale Manor, Grounds and Railway Siding.

2.3 Sensitive Environmental Features

Two plant community types have been identified on the site¹, including:

- Robertson Basalt Tall Open forest in the Sydney Basin and South Eastern Highlands Bioregions, listed as Critically Endangered Ecological Community in NSW. Described in the Biodiversity Report as "PCT743 Brown barrel – Mountain Grey Gum tall moist forest on basalts of the Southern highlands Bioregion and Sydney Basin Bioregion"
- Robertson Rainforest in the Sydney Basin Bioregion, listed as Endangered Ecological Community in NSW. Described in the Biodiversity report as "PCT1129 Sassafras – Blackwood – Lilly Pilly temperate rainforest on basalt soils in the Robertson area, southern Sydney Basin Bioregion"

No threatened flora species for the local area, as listed under Schedule 1 of the Threatened Species Conservation Act, were identified on the site.

3 Objectives of this VMP

- Identification of management zones, with consideration to areas impacted during construction
- Vegetation clearing protocols
- Weed management strategies
- Rehabilitation and regeneration plan with recommendations for the sequential restoration of the vegetation communities ie the critically endangered Robertson Tall Forest ecological community in the centre of the site and the endangered Robertson Rainforest community.
- Monitoring strategies and reporting requirements
- Performance and completion criteria

4 Methods

4.1 Literature Review

NSW Scientific Committee Final Determinations

¹ Biodiversity Development Assessment Report for Robertson Hotel 2019



- Robertson Rainforest in the Sydney Basin Bioregion – endangered ecological community listing (NSW Scientific Committee 2011a)
- Robertson Basalt Tall Open-forest in the Sydney Basin and South Eastern Highlands Bioregions (NSW Scientific Committee 2017)
- Robertson Basalt Tall Open-forest in the Sydney Basin Bioregion – Determination to make a minor amendment to Part 3 of Schedule 1 of the Threatened Species Conservation Act (NSW Scientific Committee 2011b)

Commonwealth Approved Conservation Advice

- Upland Basalt Eucalypt Forest of the Sydney Basin Bioregion ecological community (DoEE 2011)

Council Documents

- Wingecarribee Local Environmental Plan (WLEP) 2010
- Robertson Village Development Control Plan (DCP) 2017
- Wingecarribee Shire Council Local Planning Strategy 2015-2031
- Wingecarribee Shire Council - Private land conservation strategic plan.
- Weeds declared in the South East (Wingecarribee Shire Council) (DPI 2019)

Other

Narla Environmental 'Biodiversity Development Assessment Report' May 2019

Allied Tree Consultancy 'Arboricultural Impact Assessment Report' December 2019

NSW DPI Management Guide, Fifth Edition 'Noxious and environmental weed control handbook a guide to weed control in non-crop, aquatic and bushland situations'

4.2 Flora & Fauna Survey

This report is ancillary to, and to be read with, the Biodiversity Development Assessment Report prepared by Narla Environmental May 2019, which details the flora and fauna on the site.

5 Management Zones

The site has been divided into four broad management zones based on the community of remnant vegetation and the specific management objectives required for each area. These zones are:

Zone 1: Existing PCT1129 Sassafras – Blackwood – Lilly Pilly temperate rainforest

Zone 2: Blended Robertson Rainforest with exotic garden plantings

Zone 3: Robertson Rainforest managed

Zone 4: Existing PCT743 Brown barrel – Mountain Grey Gum tall moist forest

These zones are overlaid on the site plan, attached in Appendix 1



5.1 Management Zone Objectives

5.1.1 Zone 1: Existing PCT1129 Sassafras – Blackwood – Lilly Pilly temperate rainforest

Zone 1 consists of remnant area of PCT1129, containing with canopy species, native understorey and ground layer species. The mid and ground layers however suffer in areas from significant infestation with exotic weeds.

Construction in this area will include the service driveway from Fountaindale Road, bus parking near the railway station, and installation of services including sewerage. Some native trees will be removed, however the majority of the area will remain undisturbed.

The objectives of this management zone are:

- Protect existing native vegetation adjacent to construction areas
- Limit access to the zone by means of a physical barrier, being highly visible tape or metal fencing.
- Protection of trees to be retained adjacent to construction zones according to tree protection guidelines.
- Retain and rehabilitate existing vegetation
- Control exotic weed species and
- Supplement natural regeneration with native vegetation as required.

5.1.2 Zone 2: Protection of blended native and exotic areas

Zone 2 consists of an area of PCT1129, containing remnant/regrowth canopy and ground layer species blended with existing exotic garden trees and shrubs. The area is located adjacent to the driveway to the west of the house.

A second area of Zone 2 is located adjacent to the eco cabins in the east of the site. The area will be extensively compromised with the construction of the eco cabins. To extend the character of the garden, the area will be planted to a blend of exotic plants and Robertson Rainforest species.

The objectives of this management zone are:

- To manage the existing remnant growth in good health
- Revegetate where appropriate to keep and enhance the blend of natives and exotics
- Control weed species.

5.1.3 Zone 3: Robertson Rainforest Managed

Zone 3 consists predominantly of two areas. The northern boundary which comprises regrowth PCT1129, with a large quantity of environmental weeds, specifically *Prunus laurocerasus* as a boundary planting. As the construction of the driveways to the eco cabins will impact on a significant portion of this managed area, the opportunity exists to enhance the remnant plantings.

A second area with only sparse remnant vegetation exists in the centre of the eco cabins around the dam. Some construction will be undertaken within this area for the linking paths.



- Revegetate and rehabilitate the areas with appropriate selection of species to re-establish the PCT1129.
- Control weed species, including environmental or noxious weeds such as *Ligustrum*, *Prunus laurocerasus*, *Rubus* (Blackberry)
- Provide continuous native corridor as a corridor for fauna along Illawarra Highway

5.1.4 Zone 4: Existing PCT743 Brown barrel – Mountain Grey Gum tall moist forest

Zone 4 consists of an area of PCT743, containing predominantly remnant/regrowth canopy species. The mid stratum and ground layer are sparse due to historical grazing of the area. No construction for the development will be undertaken within this area.

The objectives of this management zone are:

- Retain and protect existing native vegetation
- Supplement existing and revegetate the area with appropriate PCT743 species as required
- Control exotic weed species

5.1.5 Existing and proposed landscaped garden areas

The existing landscaped garden consists of the established heritage area, along with proposed landscaped areas to accommodate the new facilities in the development. The majority of vegetation in this zone is exotic, including the identified heritage gardens.

The requirements of this specific area is dependent on final landscape design and the layout for each precinct and therefore are outside the scope of this VMP.

5.1.6 Actions

All identified Zones are to be planted with appropriate selection of plant species listed in Appendix 3 for PCT743 Appendix 2 for PCT 1129. These species are characteristic of each of the endangered ecological communities which remain on the site to some extent. The species selection and planting densities for the different management zones are addressed further in Section 8 Regeneration and Revegetation Plan

The remaining unmapped zones are within the ornamental garden and not part of this report.

6 Vegetation Clearing Protocols

6.1 Marking of limits of Vegetation Clearing

Prior to vegetation being cleared on the site, the edge of the vegetation to be cleared will be clearly delineated with either high visibility tape, temporary fencing, or other appropriate boundary markers. To avoid unnecessary damage to vegetation or inadvertent habitat removal, disturbance is to be restricted to the delineated areas. No stockpiling of equipment, soils, building materials or machinery will occur beyond the boundary.



Individual trees approved for removal may be marked with paint or bright tape. No trees to be retained are to be marked.

6.2 Fencing of Native Vegetation to be Retained

All vegetation to be retained on site, identified as Management Zones 1 & 2, will be enclosed with metal temporary exclusion fencing to prevent inadvertent damage to vegetation, in particular by machinery. This fencing will remain in place until all works have been finished in the area. No vehicles or machinery will be permitted to enter these areas.

Areas adjacent to the proposed new driveways in Management Zone 3 to be protected with temporary fencing. Where services are to be constructed within the vegetation areas, such as drainage and sewer, high visibility tape is to be erected on either side of service corridor.

6.3 Pre-clearing survey

6.3.1 Fauna

The week prior to the planned tree removal, all trees to be inspected by a qualified ecologist to identify habitat trees which may have fauna sheltering in them. All habitat trees to be removed under the direct supervision of an ecologist to ensure any injured fauna can be rescued and transferred to a care agency.

6.3.2 Weeds

Pre-clearance survey will be conducted to determine locations of any infestations of noxious weeds as listed under the Noxious Weeds Act 1993, including Rubus (Blackberry) and Senecio (Fireweed). The locations of any infestations will be recorded and measures for appropriate disposal to minimise the risk of spread of weeds during clearing will be specified prior to clearing. Weed control measures will be species specific, conducted by a Bushland regeneration contractor.

6.4 Salvage of Hollow-bearing trees and Logs

Wherever feasible, hollow trees and logs are to be salvaged during clearing and stockpiled for future use in restoration of the PCT743 and PCT1129 within the site. The placement of salvaged items within the site will increase habitat complexity as such items are used by a variety of invertebrate and vertebrate species as microhabitat areas.

Habitat features are to be stored until such time as restoration of the reconstruction of the identified vegetation communities commences. Storage should be undertaken within designated stockpile areas within the subject site, with onsite contractors made aware material is to be retained. Placement of the stored hollow logs within the reconstructed areas will be undertaken in co-ordination with the ecologist or bush regeneration contractor.



7 Weed Management Plan

7.1 Species list

Under the NSW Biosecurity Act 2015, State listed Priority Weeds have specific legal requirements and have higher management priorities. State listed priority weeds and Weeds of National Significance (WoNS) recorded within the site are listed in Table 1

Botanic Name	Common Name	Status
Genista monspessulana	Cape Broom	Priority weed & WoNS
Ligustrum lucidum	Broad leafed Privet	Priority
Ligustrum sinense	Chinese privet	Priority
Rubus fruticosus	Blackberry	Priority weed & WoNS
Salix spp.	Willow	WoNS

Table 1 Significant weeds on the site

7.2 Best Management Practices

Contractors for weed removal within the subject site will have regard to the following to minimise impacts on existing vegetation and habitats:

- The main principles of the Bradley Method of bush regeneration, including not over clearing, minimal disturbance techniques and replacement of disturbed mulch/leaf-litter.
- Removal of fruiting/seeding parts of weeds carefully to minimise spread of plant propagules
- Use of chemicals and sprays only during suitable weather conditions and appropriate seasons
- All equipment must be thoroughly cleaned prior to entering the site to minimise contamination
- Proximity to swampy areas and dams
- Presence of native fauna or nesting/breeding sites.

7.3 Weed Control Methods

Bush reconstruction weed control is to be implemented for all management zones. All weed removal works will be approached using the strategies outlined below.

7.3.1 Manual Weed removal

An effective form of weed control when all viable parts of the weed are removed including roots and fruiting material.



7.3.2 Use of Herbicides

all herbicides will be used in accordance with the manufacturer's directions. Appropriate Personal Protective Equipment will be worn.

In areas near water or swamp, an appropriate form of herbicide must be used to minimise impact to aquatic life and amphibians. Examples of appropriate herbicide forms are Roundup Biactive and Clearup Bio 360 which have surfactants that are formulated to minimise harm to amphibians. As runoff is a likely way for residue to enter watercourses and water bodies, chemical treatment will be avoided prior to or directly after rain.

Legal restrictions and permit requirements may be required for use of specific herbicides for specific plants, which must be researched prior to herbicide application. The relevant permit numbers are PER9907 and PER11916, which need to be obtained from the Australian Pesticides and Veterinary Management Authority.

Planting will not occur within 10 days of herbicide application.

7.4 Types of Weed Control

7.4.1 Primary Weeding

Primary weeding is the first stage of bushland regeneration and is recommended for all zones.

Primary weeding should commence within the first month of establishment of work sites for reconstruction and will involve techniques such as:

- The selective spraying of weeds, with selective and non-selective herbicides with a particular focus on targeting weeds listed in Table 1;
- Cutting/scraping and painting deep rooted woody weeds and climbers with hand tools, chainsaws and brush cutters and painting cut stumps with herbicides containing Glyphosate or Picloram;
- Target drilling and injecting certain large tree weeds such as willow with herbicides such as Glyphosate and a Garlon/diesel mix; and
- Selective hand removal of weeds and wicker wiping of tall herbaceous weeds in situations where damage to proximate, low growing native plants can be avoided.

7.4.2 Maintenance Weeding

Maintenance weeding will be undertaken in all management zones on a monthly basis for the life of the VMP following reconstruction works or primary weeding, to treat any establishment or regrowth of weeds.

Maintenance weeding involves the selective removal or treatment of weeds, whilst allowing planted native plants to increase in size, abundance and percentage cover. Weed control should prioritise WoNS, Priority Weeds and then infestations of any weed species within reconstruction areas becoming established to the extent they threaten the viability of the native plantings.

Woody weeds, climbers and key herbaceous weeds identified during reconstruction will be subject to a program of intense follow up weeding on a monthly basis around any patches of native herbaceous plants to encourage the spread of the native plant species.



7.5 Weed Management in the Site

The directions under the following headings will be undertaken sequentially during site preparation of bushland reconstruction and regeneration areas.

7.5.1 Tree Guards

Prior to commencing the initial weed management, the area to be revegetated will be searched for significant trees that may need protection during the re-establishment period. Of particular concern are trees close or adjacent to walking tracks which may not have the protection of temporary fencing.

7.5.2 Initial Weed Treatment

After installation of the sediment fencing and any individual tree guards the initial weed treatment will commence.

Noxious Weeds

The first priority for weed treatment in regeneration areas will be targeting mature individuals of the three WoNS species recorded on the site, *Rubus fruticosus*, *Genista monspessulana* and *Salix*. These species are perennial and take several years to reach reproductive maturity so are easily controlled providing juveniles are continuously eradicated before they reach maturity.

Primary Weeding

Following control of mature individuals, primary weeding will be undertaken throughout the regeneration area. The aims of the primary weeding are:

- Eliminating any woody species;
- Eliminating mature 'Priority' weeds, including *Ligustrum*
- Targeting and eliminating any large, dominant infestations of exotic herbs and grasses. Prior to any chemical treatment any seed on mature exotic plants will be bagged to prevent seed fall.

In areas where remnant native herbs and grasses occur sporadically amongst dominant infestations of exotic weeds, plastic tree guards will be installed around them to protect them from herbicide drift during spraying.

The goal of primary weeding for the regeneration areas will be to eliminate all the larger weed infestations to allow planting to take place to fill gaps in the understorey and canopy without competition from weed species.

Spot spraying with herbicide will be used in any areas where there is negligible risk to collateral damage of native vegetation as it is more cost and time effective than hand weeding.

7.5.3 Ongoing Weed Maintenance in Regeneration Areas

Ongoing maintenance of the regeneration areas will occur for a five year period following commencement of works. Each zone will be covered once every month to diminish the soil seed bank of exotic weed species present on the site.



During site visits for weed control, WoNS and Priority weeds will be prioritised for control. Individual plants of these species on the site must not be allowed to achieve a reproductive stage in their life cycle.

7.6 Pest Species Management

Rabbits can potentially devastate planted tubestock. Impacts from rabbits can be mitigated by using tree guards for planted tubestock.

8 Regeneration and Revegetation Plan

8.1 Aim

This section details restoration specific to the PCT743 & PCT 1129 areas as well as guidelines for ongoing maintenance of the ecological areas, including weed control.

The aim for the vegetation to be retained/revegetated is to achieve the following performance based outcomes:

- Control threats affecting the health of native vegetation or inhibiting its future regeneration potential;
- Increase species diversity and percentage cover of planted native vegetation
- Improve resistance of native vegetation to future weed colonisation and establishment and related threats, by initiating the two above aims; and
- Use measurable indicators to monitor planting success and regeneration responses, and to assist in prioritising regeneration works during the proposed works program.

8.1.1 Species Selection

For Zones 1, 3 and 4, It is recommended that a mix of local native trees, shrubs and ground layer plants are replanted at the specified densities outlined below. A list of suitable species for Zones 1 and 3, PCT1129, is provided in Appendix 2 and Species for Zone 4, PCT743, is provided in Appendix 3.

Plants to be sourced from local provenance as required. All plants to be disease and pest-free, hardened off and well-watered at the time of planting. A good root system with a sturdy shoot system is essential.

Final species selection will be based on:

- Availability of seed/plant material
- Exclusion of plants likely to naturally regenerate on the site and
- Previous experience with species re-vegetation performance

As many species as are able to be sourced should be planted to maximise diversity within the revegetation areas.

For Zone 4, the minimum number of species to be used in the initial establishment phase of the revegetation are 3 trees, 5 shrubs and 12 ground layer/ scrambler species.



8.1.2 Planting Densities

For Zone 1 planting density and species selection will reflect the size of areas revealed following tree removal and weed clearing.

For Zones 3 and 4 typical density would be:

Canopy tree, 1 unit per 16sqm

Shrubs, 1unit per 3sqm

Groundcovers, 4units per 1sqm

8.1.3 Characteristic Planting Units

It is recommended that that species should be planted in characteristic planting units which correspond to aspect, topology, soil type and proximity to water.

In particular grasses should be planted in groups of at least 3 (200-250mm apart) to assist with support and structural stability of groups while enhancing the development of microclimate. For some wind pollinated species this can also assist in fertilisation to encourage the establishment of, or contribution to, the development of a grassland understory.

8.1.4 Plant Supply

Seeds and material for vegetative reproduction should be of local provenance and come from within a 10km range if possible. Plant material should be propagated in a local nursery and only when suitably established should the trees, shrubs and ground layer be planted.

Where deemed suitable direct sowing via hydroseeding or other seeding methods of grasses and forbs can be undertaken but this will require the sourcing of much larger quantities of locally provenanced seed.

All plants which are nursery grown should be grown in tubes such as Hiko, Viro tube, maxi cells or Forestry tubes.

8.1.5 Revegetation Objectives to Maximise Fauna Utilisation

To improve habitat on site for fauna, plant species will be selected to provide food, shelter and refuge opportunities. Plant selection criteria have taken into consideration flowering, foraging opportunities and habitat.

8.2 Revegetation Preparation

Replanting from seed or tube stock will require the treatment of soils, installation of guards or fencing and ongoing maintenance (watering and weeding).

Recommended revegetation strategies should include:

- Initial and ongoing weed control using bushland regenerative techniques and conventional best practice chemical and physical methods
- Selection of local plant seed and its subsequent propagation in cell grown seedling containers



- Treatment of each tube stock planting hole with a plant establishment aid which contains slow release fertilizer, water holding crystals and wetting agents.
- Planting suitable cell grown seedlings using specified techniques, species composition schedules and rates, using hand or mechanical planting techniques
- Stabilising soils and suppressing weeds around individual plantings using products such as jute fibre matting or woodchip leaf mulch to a 500mm diameter and depth of 75mm
- Protect individual trees and shrubs from feral animals and reduce frost and ongoing maintenance by using tree guards. These can be supported by bamboo stakes 3x 10-12mm x 750mm and 1x 350mm x 450mm plastic tree guard.
- Maintaining an ongoing maintenance programme to ensure regular watering, weeding, mulching and replacement of dead material

8.3 Maintenance of Revegetation Area

Following planting the area should be maintained by suitably qualified personnel which ensures weed control, replacement of dead plants and watering takes place.

Provision should be made, if feasible, to irrigate the new plantings for the first 3 months after installation or at least 3-5 times depending in rainfall.

Regrowing environmental weeds, invasive grasses and weeds should be carefully monitored and appropriate weeding both within tree guards and around them should be carried out using ecologically sensitive bushland hand weeding and spot spraying techniques.

Plant that have died should be replaced by the same species and at the end of the maintenance period the density as prescribed earlier should be observed.

9 Monitoring and Reporting

The Bush regeneration contractor, along with a project manager, should be assigned to coordinate, supervise and manage all works with respect to the revegetation and regeneration of the native vegetation on the site.

9.1 Monitoring Program

The following activities are to be conducted as part of the monitoring program:

- Establish a series of fixed monitoring points on the site
- Photographically record from these points on a regular basis for comparison of growth and general progress
- Note any weeds as well as projective foliage cover of native species in each strata.
Identify failed plantings

Monitoring should be conducted prior to commencement of weed control, then monthly during landscape works. Once initial plantings are complete monitoring should be conducted each season for the next two years.



9.2 Reporting

A concise report should be prepared annually for the life of the Vegetation Management Plan, including progress photographs. Report should include results and analysis of the performance of the revegetated and regenerated areas and provide recommended adaptations or actions to be taken to improve success of the works.

9.3 Communications

As The Robertson Hotel is open to the public, consideration should be given to providing information to guests and patrons about the revegetation programs and the two Ecological Communities on the site. The yearly reporting can be added to the communication package to show progress of the works.

10 Timing and Responsibility

The timing of the project will generally depend in the timing for the overall development of the site. Some zones may be commenced regardless of the building schedule for the hotel.

- Phase 1 – Site preparation
- Phase 2 - Restoration and Rehabilitation of the existing zones commence
- Phase 3 – Maintenance
- Phase 4 – Monitoring and Reporting

See Table 2 Timing and Responsibility



Table 2 Timing and Responsibility

Site Preparation	Action	Performance Criteria	Timing
	Seed collection	Seed collected and germinated	Immediate
	Delineate boundaries to each zone	Using high visibility tape or fencing	Before construction commences
	Flora pre-clearing surveys by ecologist	Assess threatened flora or fauna in each zone	Prior to any vegetation clearing
	Salvage hollow logs and trees	Salvage and stockpile for future use	2-4 weeks after clearing

Works Commence	Action	Performance Criteria	Timing
	Initial weeding	Noxious weeds and WoNS removed	Initial restoration works
	Revegetate areas	Plants appropriate to the zone have been planted	Immediately after establishment of revegetation area
	Maintenance weeding	Remove reproductively mature plants and large infestations	Continue monthly
	Photograph	Photograph before and after plantings	Continue every 3 months

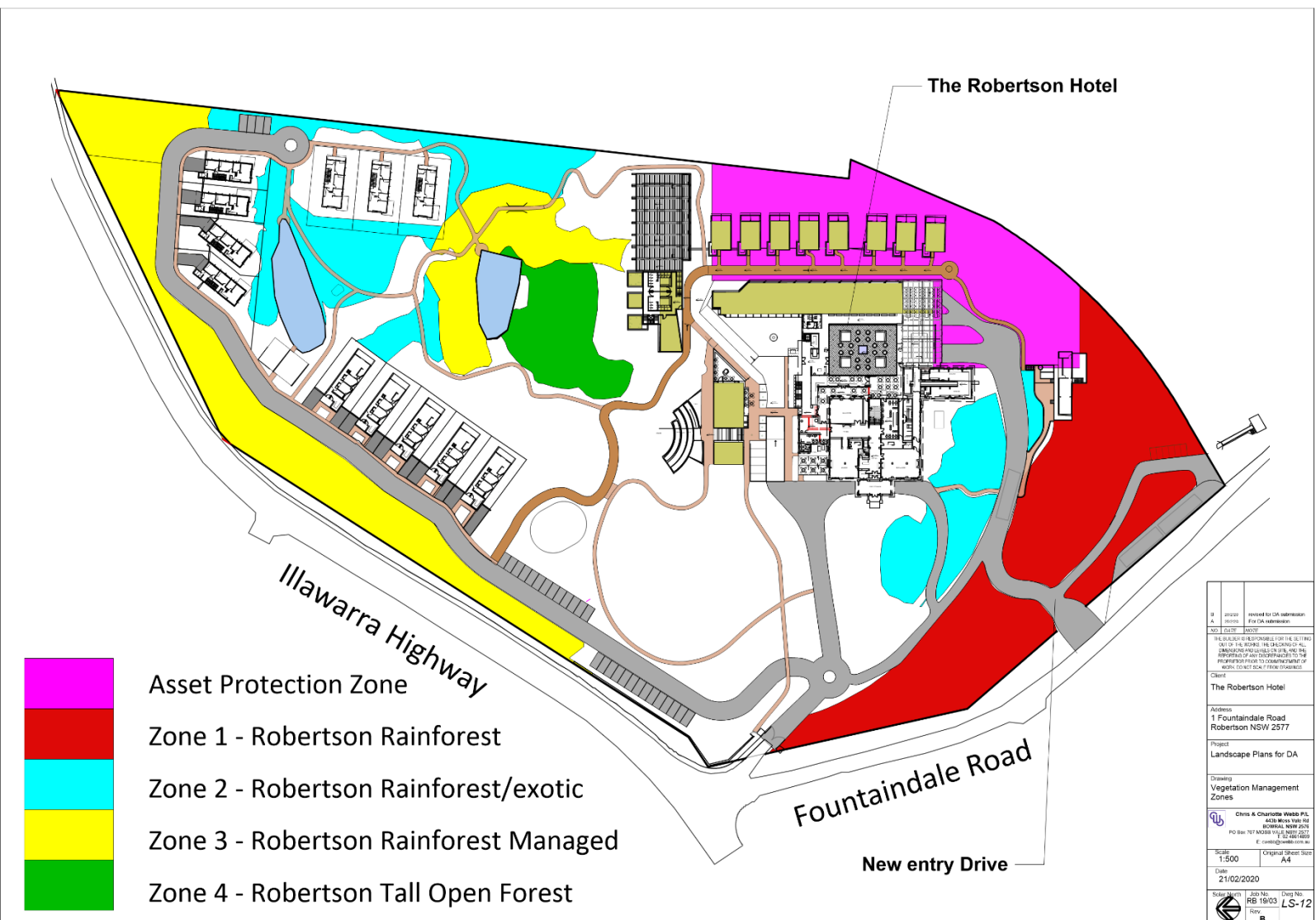
Maintenance	Action	Performance Criteria	Timing
	Weeding	Ensure no major outbreaks of Noxious or WoNS. No weeds encroaching from outside	Monthly for the duration of the VMP
	Maintenance of plantings	Survival rate to be 100%. Replace any dead plants	Ongoing

Monitoring & Reporting	Action	Performance Criteria	Timing
	Site inspections	Survival rate of plantings 100%, Noxious weeds less than 2% No weeds encroaching from outside Tree guards removed	Every 6 months for duration of the VMP
	Progress Reports	Photographs and data collection	Annually for the length of VMP



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Appendix 1 Plan of Management Zones



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Appendix 2 Species Planting List – Robertson Rainforest

in the Sydney Basin Bioregion

PCT1129 Sassafras – Blackwood – Lilly Pilly temperate rainforest on basalt soils in the Robertson area, southern Sydney Basin Bioregion

Category	Botanic Name	Common Name
Trees	Acacia melanoxylon	
Trees	Acmena smithii	
Trees	Acronychia oblongifolia	
Trees	Alectryon subcinereus	
Trees	Alphitonia excelsa	
Trees	Ceratopetalum apetalum	Coachwood
Trees	Cryptocarya glaucescens	Jackwood
Trees	Diospyros australis	Black Plum
Trees	Doryphora sassafras	Sassafras
Trees	Elaeocarpus holopetalus	
Trees	Elaeocarpus kirtonii	
Trees	Elaeocarpus reticulatus	
Trees	Elatostema reticulatum	
Trees	Eucalyptus fastigata	Brown Barrel
Trees	Eucryphia moorei	Eastern Leatherwood
Trees	Ficus coronata	
Trees	Guioa semiglauc	Wild Quince
Trees	Hedycarya angustifolia	native mulberry
Trees	Helicia glabrifolia	Pale oak
Trees	Pennantia cunninghamii	Brown Beech
Trees	Polyosma cunninghamii	Featherwood
Trees	Polyscias murrayi	Pencil cedar
Trees	Polyscias sambucifolia	
Trees	Quintinia sieberi	Possum Wood
Trees	Schizomeria ovata	White Cherry
Trees	Stenocarpus salignus	Scrub Beefwood
Trees	Symplocos thwaitesii	Buff Hazelwood
Trees	Synoum glandulosum	Scentless Rosewood
Trees	Tristaniopsis collina	Hill water gum
Scrambler	Aphanopetalum resinosum	
Scrambler	Clematis aristata	old mans beard
Scrambler	Clematis glycinoides	
Scrambler	Celastrus australis	Staff climber
Scrambler	Cissus hypoglauca	Water Vine
Scrambler	Fieldia australis	Fieldia
Scrambler	Geitonoplesium cymosum	Scrambling Vine



Category	Botanic Name	Common Name
Scrambler	Gymnostachys anceps	Settler's Twine
Scrambler	Hibbertia scandens	Snake vine
Scrambler	Marsdenia rostrata	Milk Vine
Scrambler	Morinda jasminoides	Sweet morinda
Scrambler	Muellerina eucalyptoides	Creeping mistletoe
Scrambler	Palmeria scandens	Anchor Vine
Scrambler	Pandorea pandorana	
Scrambler	Parsonsia brownii	mountain silkpod
Scrambler	Parsonsia straminea	
Scrambler	Rubus Moluccanus var. trilobus	Molucca bramblw
Scrambler	Ripogonum album	White supplejack
Scrambler	Sarcopetalum harveyanum	Pearl Vine
Scrambler	Smilax australis	Barbed Wire Vine
Scrambler	Tylophora barbata	Bearded tylophora
Shrubs	Citriobatus pauciflorus	Wallaby Apple
Shrubs	Coprosma quadrifida	prickly currant bush
Shrubs	Hymenanchera dentata	Tree violet
Shrubs	Notelaea venosa	Smooth mock olive
Shrubs	Pittosporum revolutum	
Shrubs	Pittosporum undulatum	
Shrubs	Prostanthera lasianthos	Victorian Christmas bush
Shrubs	Rapanea howittiana	Mutton Wood
Shrubs	Rubus nebulosus	Green leafed bramble
Shrubs	Rubus rosifolius	
Shrubs	Sambucus australasica	
Shrubs	Tasmannia insipida	brush pepperbush
Understorey	Arthropteris tenella	
Understorey	Asplenium attenuatum	
Understorey	Asplenium australasicum	
Understorey	Asplenium flabellifolium	Necklace Fern
Understorey	Asplenium flaccidum	Weeping Spleenwort
Understorey	Australina pusilla	
Understorey	Austrocynoglossum latifolium	
Understorey	Blechnum nudum	
Understorey	Blechnum patersonii	
Understorey	Blechnum wattsi	Hard Water Fern
Understorey	Carex appressa	Tall Sedge
Understorey	Cassinia trinerva	3-veined cassinia
Understorey	Cyathea australis	Rough Tree Fern
Understorey	Cyathea leichhardtiana	Prickly Tree Fern
Understorey	Dendrobium pugioniforme	
Understorey	Dennstaedtia davallioides	Lacy ground fern



Category	Botanic Name	Common Name
Understorey	Dicksonia antarctica	Soft treefern
Understorey	Diplazium australe	Austral Lady Fern
Understorey	Doodia aspera	Prickly Rasp Fern
Understorey	Eustrephus latifolius	Wombat Berry
Understorey	Galium propinquum	Maori bedstraw
Understorey	Geranium homeanum	
Understorey	Grammitis billardierei	Common Finger fern
Understorey	Histiopteris incisa	Bat's wing fern
Understorey	Hydrocotyle laxiflora	Striking Pennywort
Understorey	Hymenophyllum cupressiforme	Common Filmy Fern
Understorey	Hymenophyllum flabellatum	
Understorey	Lastreopsis acuminata	Shiny Shield Fern
Understorey	Lastreopsis decomposita	
Understorey	Lastreopsis microsora	
Understorey	Livistona australis	
Understorey	Lomandra longifolia	Mother shield fern
Understorey	Microsorium pustulatum subsp. pustulatum	Kangaroo Fern
Understorey	Microsorium scandens	
Understorey	Olearia argophylla	native musk
Understorey	Ozothamnus diosmifolius	Rice flower
Understorey	Ozothamnus ferrugineus	
Understorey	Pellaea falcata	Sickle Fern
Understorey	Pimelea ligustrina	
Understorey	Plantago debilis	
Understorey	Plectorrhiza tridentata	Common tangle orchid
Understorey	Polyphlebium venosa	Veined Bristle fern
Understorey	Polystichum proliferum	Mother shield fern
Understorey	Pteris umbrosa	Jungle Brake Fern
Understorey	Pyrrosia rupestris	Rock Felt Fern
Understorey	Ranunculus lappaceus	
Understorey	Ranunculus plebeius	
Understorey	Sarcochilus falcatus	Orange Blossom Orchid
Understorey	Solanum aviculare	Kangaroo Apple
Understorey	Solanum pungetium	
Understorey	Stellaria flaccida	Forest Starwort
Understorey	Sticherus lobatus	Spreading Fan Fern
Understorey	Urtica incisa	Stinging nettle
Understorey	Veronica plebeia	
Understorey	Viola hederacea	ivy-leaved violet



Appendix 3 Species Planting List Robertson Basalt Tall Open Forest

in the Sydney Basin and South Eastern Highlands Bioregions – PCT743

Conservation status in NSW: Critically Endangered Ecological Community

Trees	<i>Eucalyptus cypellocarpa</i>	Monkey gum
Trees	<i>Eucalyptus fastigata</i>	Brown barrel
Trees	<i>Eucalyptus nitens</i>	Shining gum
Trees	<i>Eucalyptus obliqua</i>	Messmate gum
Trees	<i>Eucalyptus viminalis</i>	Ribbon gum.
Shrubs	<i>Acacia dealbata</i>	silver wattle
Shrubs	<i>Bedfordia arborescens</i>	blanket bush
Shrubs	<i>Olearia argophylla</i>	native musk
Shrubs	<i>Pomaderris aspera</i>	hazel pomaderris.
Shrubs	<i>Coprosma quadrifida</i>	prickly currant bush
Shrubs	<i>Hedycarya angustifolia</i>	native mulberry
Shrubs	<i>Leucopogon lanceolatus</i> ,	
Shrubs	<i>Prostanthera lasianthos</i>	Victorian Christmas bush
Shrubs	<i>Tasmannia insipida</i>	brush pepperbush
Shrubs	<i>Telopea oreades</i>	Gippsland waratah
Shrubs	<i>Telopea mongaensis</i>	Monga waratah.
Scramblers	<i>Clematis aristata</i>	old mans beard
Scramblers	<i>Parsonsia brownii</i>	mountain silkpod
Understorey	<i>Dianella tasmanica</i>	Blue Flax lily
Understorey	<i>Geranium potentilloides</i> ,	
Understorey	<i>Hydrocotyle 'acutiloba'</i> ,	
Understorey	<i>Lagenifera stipitata</i>	Blue bottle-daisy
Understorey	<i>Poranthera microphylla</i> ,	
Understorey	<i>Viola hederacea</i>	ivy-leaved violet
Understorey	<i>Blechnum nudum</i>	fishbone Water fern
Understorey	<i>Calochlaena dubia</i>	common ground fern
Understorey	<i>Dicksonia antarctica</i>	Soft treefern
Understorey	<i>Polystichum proliferum</i>	Mother shield fern
Understorey	<i>Pteridium esculentum</i>	bracken
Understorey	<i>Hierochloe rariflora</i>	scented holygrass
Understorey	<i>Lomandra longifolia</i>	spiny-headed mat-rush
Understorey	<i>Poa meionectes</i> .	