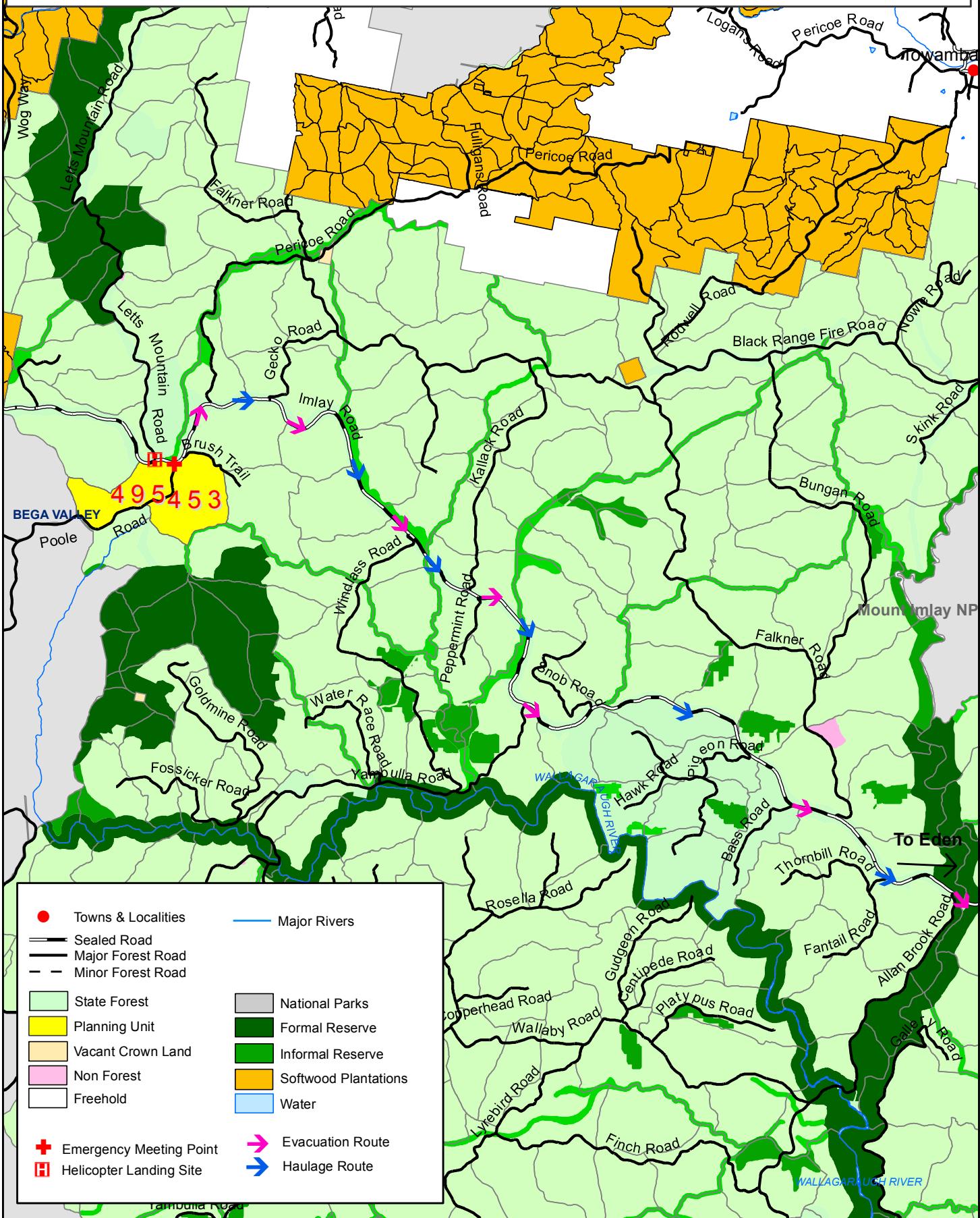


LOCALITY MAP

Compartments 453 & 495

Yambulla State Forest No.126

EDEN IFOA : EDEN MANAGEMENT AREA
Scale: 1:100,000





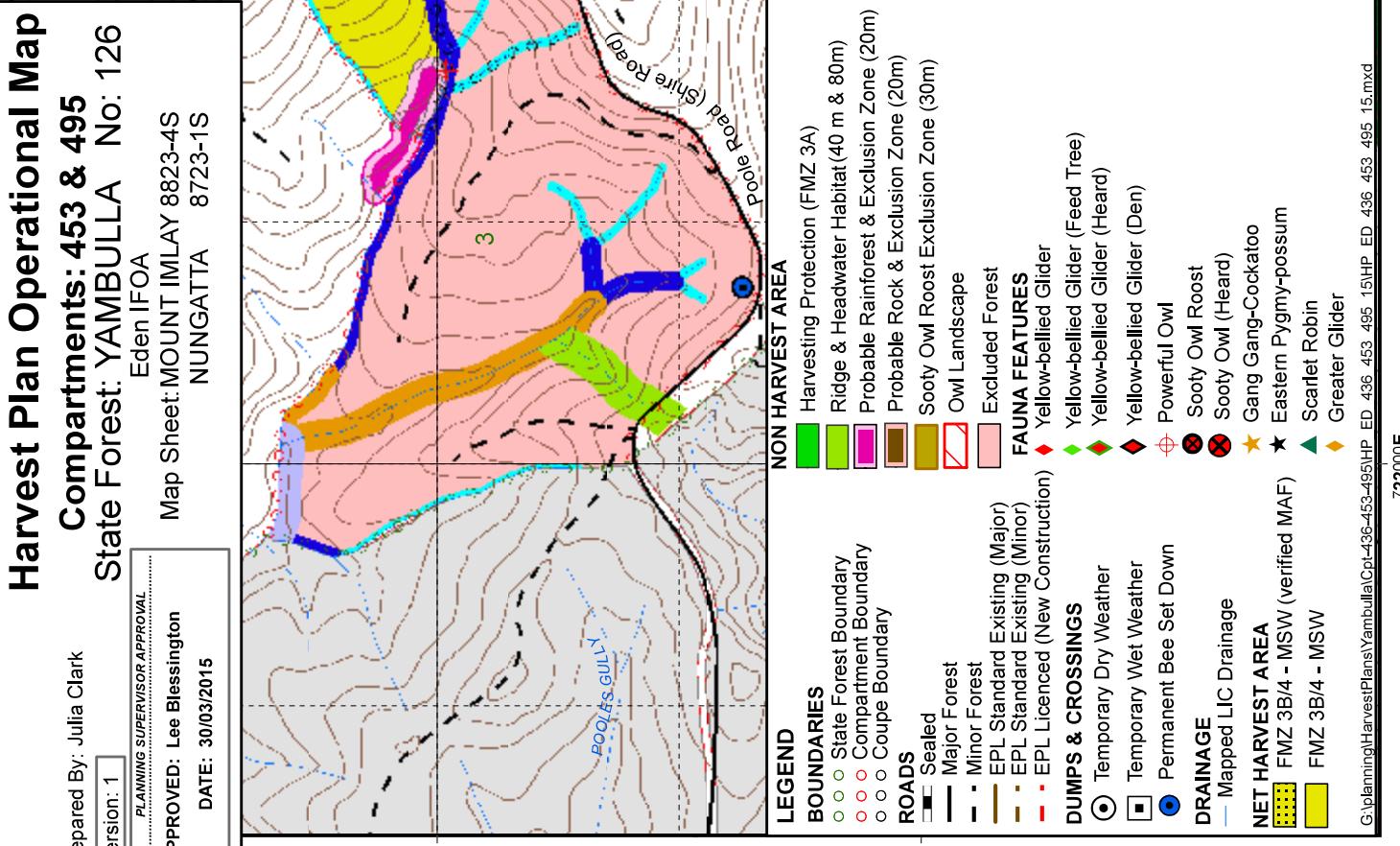
SPEED LIMIT
60
On FCNSW
unsealed
gravel roads

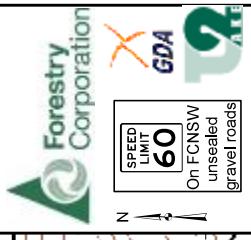
Harvest Plan Operational Map

Compartments: 453 & 495
State Forest: YAMBULLA No: 126

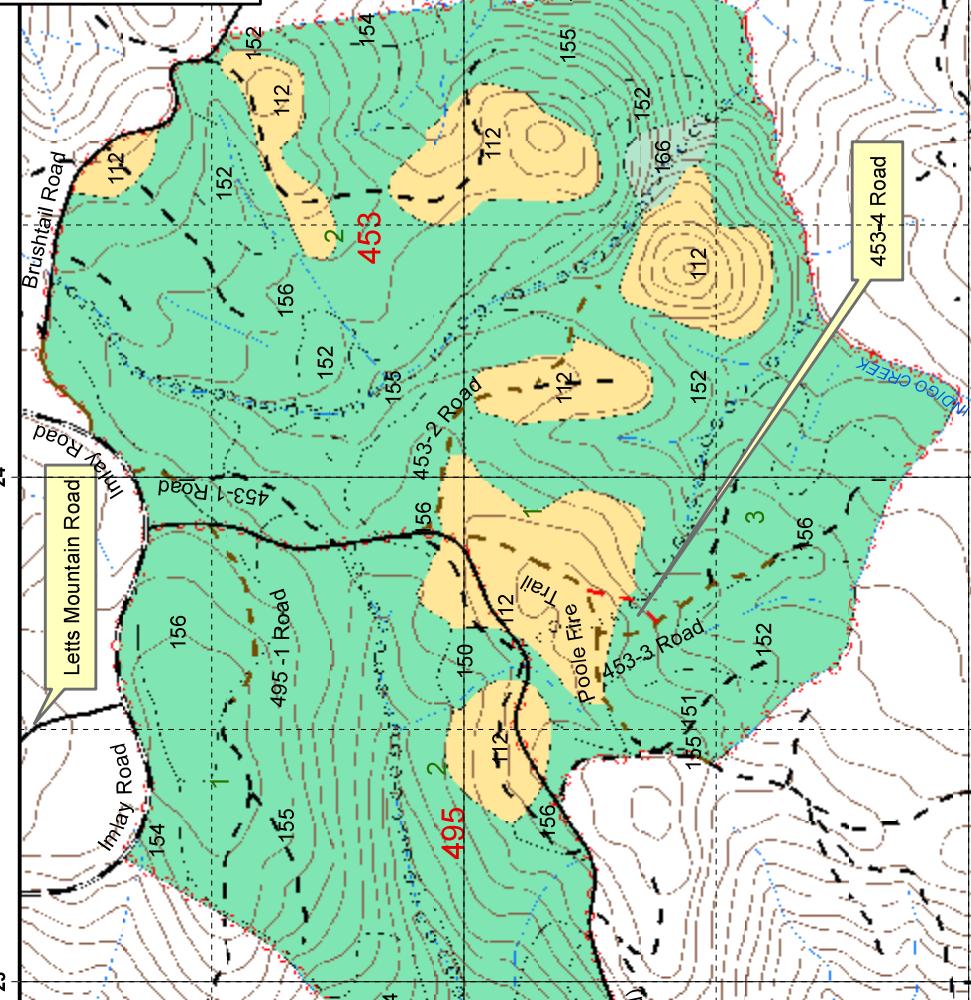
Eden IFOA
Map Sheet: MOUNT IMLAY 8823-4S
NUNGATTA 8723-1S

PLANNING SUPERVISOR APPROVAL
Version: 1
APPROVED: Lee Blessington
DATE: 30/03/2015





SPEED LIMIT 60
On FCNSW
unsealed
gravel roads



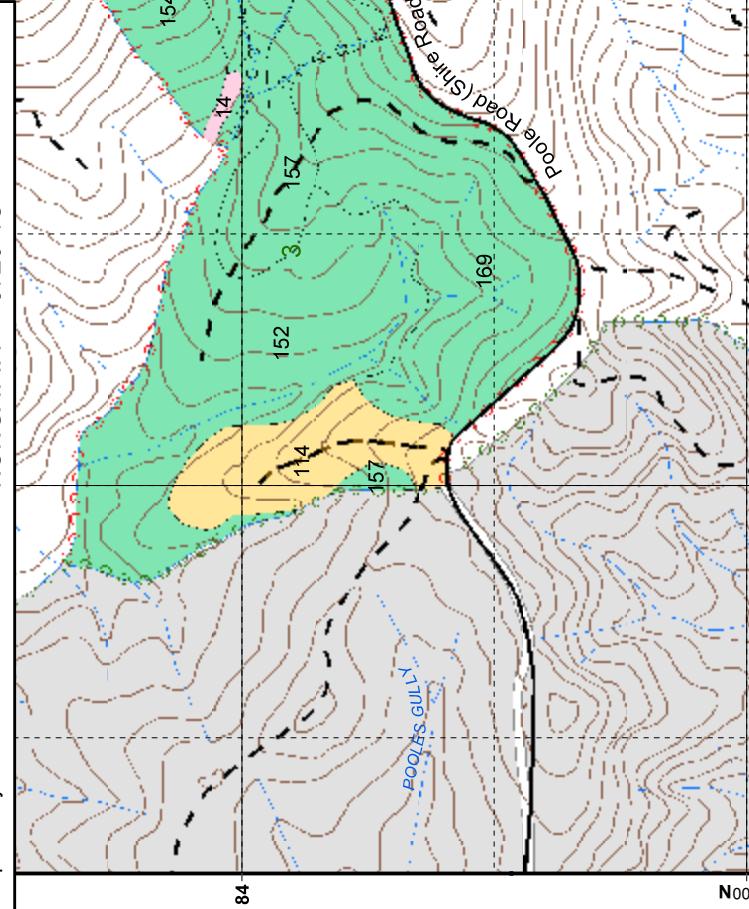
Harvest Plan Forest Type Map

Compartments: 453 & 495

State Forest: YAMBULLA No: 126
Eden IFOA

Map Sheet: MOUNT IMLAY 8823-4S
NUNGATTA 8723-1S

Prepared By: Julia Clark



LEGEND

BOUNDARIES

- State Forest Boundary
- Compartment Boundary
- Coupe Boundary

ROADS

- Sealed
- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)
- EPL Licenced (New Construction)

DRAINAGE

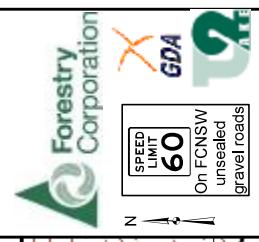
- Mapped LIC Drainage
- National Park Estate (Waillimma Section)

TENURE

FOREST TYPES RN17

Forest Types RN17	No.	Hectares
Lilly Pilly	14	0.51
Silvertop Ash	112	40.62
Silvertop Ash - Stringybark	114	8.60
Messmate	150	3.46
Brown Barrel - Messmate	151	4.45
Messmate - Gum	152	99.78
Brown Barrel	154	10.24
Brown Barrel - Gum	155	47.94
Brown Barrel / Messmate - Ash	156	70.57
Yellow Stringybark - Gum	157	9.18
River Peppermint	166	2.07
Yellow Stringybark	169	24.23
	125	500

Scale: 1:15,000
1,000 Meters Contour Interval 10m



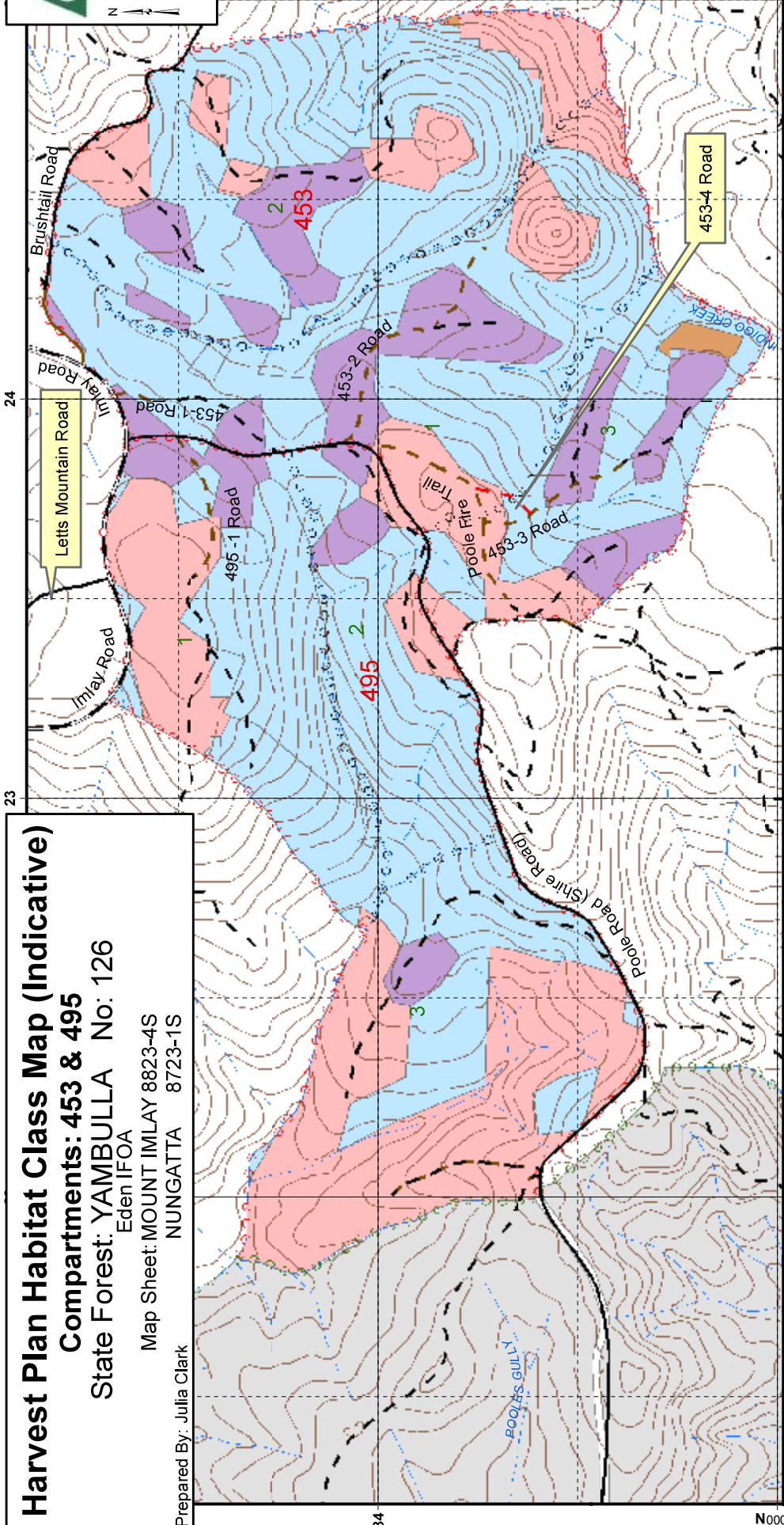
SPEED
LIMIT
60
On FCNSW
unsealed
gravel roads

Harvest Plan Habitat Class Map (Indicative)

Compartments: 453 & 495
State Forest: YAMBULLA No: 126

Eden IFOA
Map Sheet: MOUNT IMLAY 8823-4S
NUNGATTA 8723-1S

Prepared By: Julia Clark



LEGEND

BOUNDARIES

- Sealed
- Major Forest
- Minor Forest
- EPL Standard Existing (Major)
- EPL Standard Existing (Minor)
- EPL Coupe Boundary
- EPL Licensed (New Construction)

HABITAT CLASS

- Unknown
- High
- Moderate
- Low

83

583000

84

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583000

100

583000

SPEED LIMIT 60
On FCNSW
unsealed
gravel roads

Scale: 1:15,000
1,000 Meters Contour Interval 10m

750
500
250
0

125

Map Sheet: MOUNT IMLAY 8823-4S
NUNGATTA 8723-1S
Prepared By: Julia Clark
Eden IFOA
National Park Estate
(Naalimma Section)
G:\Planning\HarvestPlans\Yambulla\Cpt-453-495\HP_ED_436_453-495_15\HP_ED_436_453-495_15.mxd



HARDWOOD FORESTS- EDEN IFOA HARVESTING PLAN

Yambulla State Forest - Compartments 453 and 495

Certification

This plan has been prepared in accordance with the Integrated Forestry Operations Approval issued under the Forestry and National Park Estate Act 1998. The Standard Harvest Plan Conditions for Hardwood Forest Operations in the Eden IFOA area apply to this operation.

Prepared By: Harvest Planner	Julia Clark	Approved By: Planning Supervisor	Lee Blessington
Signature	Julia Clark	Signature	Lee Blessington
Date	30.03.2015	Date	30.03.2015

Note: Approval includes the Harvest Plan Operational Map (HPOM) with the corresponding approval date displayed on the map, verifying final approved version.

Other maps included with this plan are Locality, Forest type, Habitat quality class (Production Assistant and indicative), and Cultural heritage (limited distribution).

Description of Proposal

Harvesting of hardwood forest

(a) Integrated Harvesting of Hardwood Forest:

Mixed-age stands dominated by a commercially mature overstorey will be harvested to create regeneration opportunities through integrated harvesting of sawlogs and pulpwood with the retention of trees for future sawlogs, fauna habitat, seed trees, visual maintenance and soil and water protection.

(b) Roadside Vegetation Control of Native Forest

Imlay Road is classed as Strategic Fire Advantage Zone (SFAZ) in accordance with the Bega Valley Bush Fire Management Committee, Bush Fire Risk Management Plan. For the net harvest area immediately adjacent to Imlay Road within these compartments, roadside vegetation control will occur up to a maximum of 10m along the southern side of Imlay Road in accordance with the values of the SFAZ. In addition, the vegetation control will improve the safety conditions of Imlay Road by improving sight distances of road intersections and the removal of hazardous trees overhanging Imlay Road.

The operation will be licensed under the EPL with notification sent to the regulatory authorities as per clause 23 of Integrated Forestry Operations Approval (IFOA).

Attachment 1: Site Safety Plan prescribes safety requirements and Medical Emergency Evacuation Plan for this harvesting operation.

Attachment 2: Roading plan prescribes roading requirements for this harvesting operation.

Abbreviations used in this plan

PA = Production Assistant, PtS= Protection Supervisor, PS = Production Supervisor, RC = Roading Coordinator, IFOA = Integrated Forestry Operations Approval, EPL = Environment Protection Licence, OEH = Office of Environment and Heritage.

Area Identification and Yield Estimates

State Forest	Compartments	Coups	IFOA Region	Management Area	Certification
Yambulla	453	1, 3	Eden	Eden	AS4708:2007 ISO 14001
Yambulla	495	1	Eden	Eden	AS4708:2007 ISO 14001

	Cpt 453	Cpt 495	Total
Plan Compartment ID	22025	22026	NA
Gross Area (ha)	179.6	142.1	321.7
Net Harvest Area (ha)	81.9	44.3	126.2
Estimated Yield Pulp (t)	3,646 t	2,259 t	5,905 t
Estimated Yield Sawlog (m3)	1,381 m3	678 m3	2,059 m3

Slope Classes (percent of harvest area)

Slope Class	Cpt 453 % of harvest area	Cpt 495 % of harvest area
0-20°	100.0	95.7
20-25 °	0.0	4.3
25-30 °	0.0	0.0



ATTACHMENT 1: SITE SAFETY PLAN

SITE HAZARD & RISK ASSESSMENT NO.	CONTROL	WHO	IMPLEMENTED
1. Vehicle collision at adjoining roads of various traffic levels	Warning signs at FCNSW and Poole Road (shire road) intersections, road closure on FCNSW roads and Poole Road (shire road). Implement Traffic Control plans (where specified in this harvest plan). 60km/hr speed limit on all State Forest natural surface/gravel roads and Poole Road (shire road) unless otherwise signposted. Compliance with FCNSW lights on policy.		
2. Cliff lines & rocky steep terrain	Operators to assess work site within two tree lengths to identify immediate hazards. Communicate to other operators and mark sites.		
3. Hazardous or dead trees	Refer to FCNSW operational safety standard OSS010. Assess area within two tree lengths of work site. Assess risk, mark any Distinctly Dangerous Trees with the symbol Ø & if necessary remove hazard or move work site. Use machinery to assist with hazard removal if possible Contractor is responsible for implementing control strategies during harvesting. Traffic Controllers on Imlay Road are to wear hard hats at all times.		
4. Overhead hazards associated with dumps	Refer to FCNSW operational safety standard OSS010. Assess overhead hazard within two tree lengths of the dump. Assess risk, & if necessary remove hazard or relocate dump site. Contractor is responsible for implementing control strategies during harvesting.		
5. Increased risk of trees falling onto Imlay Road after harvest due to increased wind exposure and physical disturbance.	Minimised damage to all retained trees to avoid destabilisation. Inspect area adjacent to Imlay Road for hazardous trees and remove as required.		
6.			
7.			

- **All** visitors, contractors and employees **must** be fully **inducted** onto the worksite by the workplace supervisor e.g. the Principal Contractor or the Forestry Corporation supervisor. This must be recorded on the attached induction sheet.
- Relevant **Safe Work Procedures** are available and understood for the type of work to be undertaken.
- A **Risk and Hazard Assessment Worksheet** must be completed if site specific hazards are identified that are not covered by a **Safe Work Procedure**. The top (pink sheet) is to be attached to this site safety plan.
- Operators in training must be supervised by the site supervisor.
- All appropriate Personal Protective Equipment (PPE) must be worn on the worksite at all times

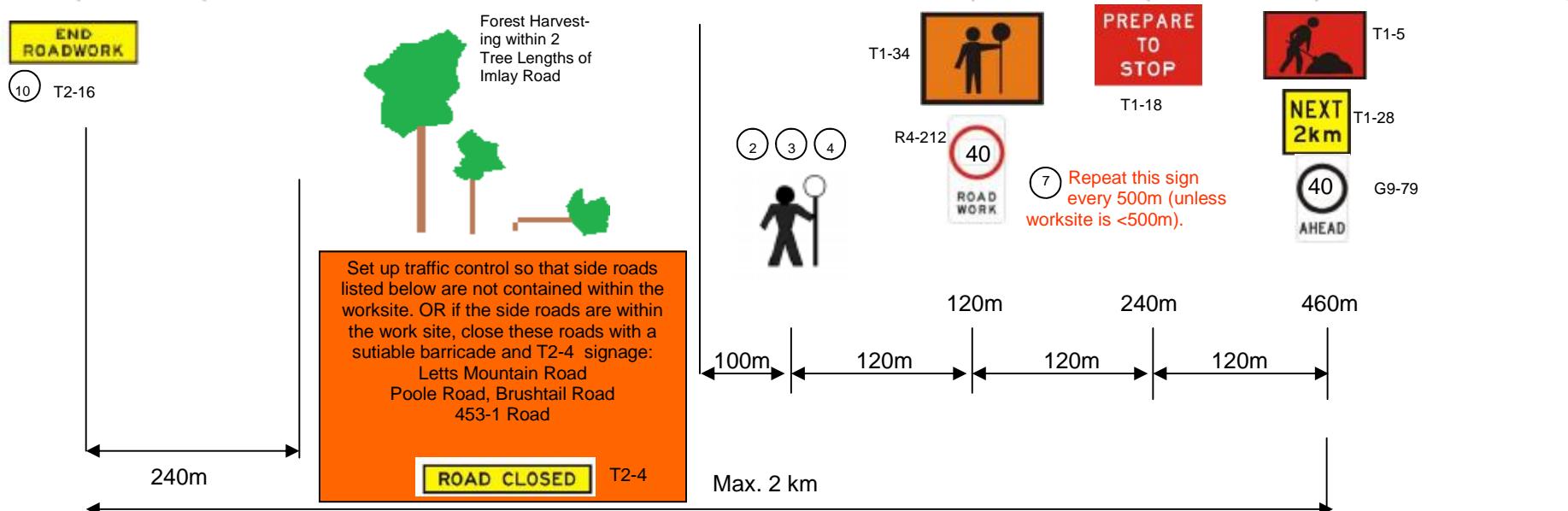
Forestry Corporation NSW Hardwood Forests Traffic Control Plan 78: Harvesting within 2 Tree Lengths of Imlay Road
Yambulla State Forest Compartments 453 & 495
(modified from RTA Traffic Control at Work Site TCP 78)



7 Repeat this sign every 500m (unless worksite is <500m).
 R4-212

5

Imlay Road



Notes:

1. Each stoppage less than 5 minutes.
2. Traffic controllers to stop traffic for duration of work and then direct traffic past work area, once tree falling has ceased and any debris has been cleared from road.
3. Traffic controllers and tree faller to maintain radio contact so that no tree felling is occurring while traffic is let through. Traffic controller to be located at least two tree length from falling operation at all times.
4. Traffic controller must have sight distance to oncoming traffic of at least 150m. Traffic controller must wear hardhat at all times.
5. Traffic control plan must be mirrored for traffic approaching from the opposite direction.
6. Where possible the worksite should be less than 500m to minimise the distance traffic is required to travel 40km/hr through the worksite. The worksite MAY be longer than 500m but only if this is the only way to set the traffic control up with adequate sight distances for the traffic controller.
7. Where worksite is more than 500m, repeater R4 212 (40km speed limit) signs are required every 500m.
8. Roadwork signs are to be covered when not in use (meal breaks and shift breaks).
9. Permanent road signs which contradict this TCP must be covered whilst TCP is in operation.

FREQUENTLY CHANGING WORK AREA
 2 LANE/2 WAY
 ADT < 3000
 Prepared by Julia Clark ,
 Reviewed & Approved by Robert Young Red Card Certificate No.5192053861 on 25/02/2015



MEDICAL EMERGENCY EVACUATION PLAN

Nearest reliable mobile phone reception (describe location)			
Next G Network: Poor	GSM: N/A		Satellite: N/A
GPS Lat/Long: 37° 9' 53" S / 149° 30' 59" E	MGA: 723445E 5883872N	Datum: GDA 94	Zone: 55
Location description: Poole Road just before the western boundary of Coupe 3 of Compartment 453.			
Emergency meeting point for ambulance / police (refer to attached safety map)			
GPS Lat/Long: 37° 9' 28" S / 149° 31' 16" E	MGA: 723896E 5884631N	Datum: GDA 94	Zone: 55
Location description: Intersection of Poole Road and Imlay Road.			
Helicopter landing place (refer to attached safety map)			
GPS Lat/Long: 37° 9' 28" S / 149° 31' 3" E			
Location description: Intersection of Letts Mountain Road and Imlay Road.			
Procedures to obtain ambulance assistance			
1. Dial 000 2. If there is no mobile coverage, dial 112 (which will work on any mobile phone system). 3. If no response on 112: <ul style="list-style-type: none"> • use a radio link (TARA, be discrete with personal information) • move to an area with mobile coverage • find a landline • use another network (e.g. a contractor's VHF radio) 		Contact nearest Forestry Corporation office on: Channel: 247 Telephone: 1300 880 548 Give details of the situation and ask for a 000 call to be placed.	
000 operator question:		Response:	
1. Police, Fire, Ambulance?		NSW Ambulance,	
2. Suburb?		State Forest name:	Yambulla
		Nearest town or locality:	Bombala
		Nearest ambulance station:	Bombala
3. Address?		Poole Road	
4. Nearest road junction/cross street?		Poole Road and Imlay Road	
5. Local government area?		Bega Valley	
6. Nature of the problem?		Describe the accident, number and condition of casualties	
7. Where is the accident?		Refer to safety meeting point above	
Directions to navigate from nearest ambulance station to the emergency meeting point. From Bombala head south on the Monaro Highway for approx. 1.5 km to Cann Valley Highway. Turn left onto Cann Valley Highway and travel for approx. 26.4 km to the junction of Cann Valley Highway and Imlay Road. Turn left onto Imlay Road and travel for approx. 21.8 km to junction of Imlay Road and Poole Road.			
8. 4WD ambulance required Y / N		CB radio channel to use:	
9. Injuries?		Give detailed information about the condition of the casualty (do not mention names over radio system)	
10. Your name and call back number:			

Silviculture and Harvesting Prescriptions

Compartment 453

Year	1988	1993	1997	2004
TSI	X	X	X	X
HR Burning	X	X	Ö	X
Wildfires	X	X	X	X
Logging m³	22,635	2,299	X	6,593

Ö - applies, X – not applicable

Compartment 495

Year	1990	1997	2001
TSI	X	Ö	X
HR Burning	X	X	X
Wildfires	X	X	X
Logging m³	26,388	X	7,145

Ö - applies, X – not applicable

Silvicultural Planning

The stands to be harvested consist primarily of mature to over-mature Silvertop Ash (*E. siberi*) on ridgetops and Yellow Stringybark (*E. muelleriana*), Messmate (*E. obliqua*) and Mountain Grey Gum (*E. cypellocarpa*) and some Brown Barrel (*E. fastigata*) on the ridges, slopes and gullies with areas of regrowth from previous harvesting operations in late 1980s and early 2000s.

Mixed-age stands described above will be harvested in a modified shelter-wood silvicultural system in accordance with the Eden IFOA. It is proposed that the mixed-aged stands will next be available for commercial thinning operations in approximately 15-20 years time.

Harvesting Prescription

Stand type	% of net area	Area (refer to HPOM for details)	Treatment (% INT, THIN)
Mature (even aged/mixed aged)	95%	Majority of NHA of Compartments 453 and 495. (FMZ 3/4)	<ul style="list-style-type: none"> • 100% Integrated (modified shelter-wood) • Target sawlogs, pulpwood and other miscellaneous products as markets allow in line with TSL and EPL requirements. • Retain potential sawlog growers. • Refer to Standard Harvest Planning Conditions for more detail.
Mature (mixed age)	~5%	Up to max. of 10 m strip along Imlay Road. (FMZ 3B)	<p>Roadside vegetation control:</p> <ul style="list-style-type: none"> • The 10 m roadside vegetation control distance is to be measured from the edge of the road prism (road prism as defined in EPL definitions). Any merchantable timber located within the road prism is also to be removed. • Retain Habitat and Recruitment trees and stags as per TSL. Note these trees do not have to occur within the vegetation control area provided sufficient additional trees are retained in the net harvest area outside the 10 m strip along Imlay Road. • Indicative spacings between retained stems within this strip are for: <ul style="list-style-type: none"> 4 Retained Trees/ha - 50 m 8 Retained Trees/ha - 35 m 12 Retained Trees/ha - 29 m 14 Retained Trees/ha – 27 m • Remove all stems not required to be retained under the TSL. • Where possible and safe to do so, trees are to be pushed, rather than cut, in order to remove the root ball. This will facilitate future grooming of road edges and enable maintenance of breaks with slashing. • All stems are to be assessed for future hazard potential. Any tree that is deemed to be a potential safety risk or overhanging Imlay Road should be removed. • Where operationally possible all harvesting debris (root balls, tree heads and unmerchantable stems) is to be windrowed in the area outside of this strip. • To facilitate the burning of the windrow, tree heads are to be compacted with the windrow height and width not exceeding 3 m and the pushing of mineral earth into the windrow is to be minimised as far as operationally practical. Windrows must not be within 5 m of retained trees.

			<ul style="list-style-type: none">• To achieve a minimum of 70% ground cover, seed area within 5 days of the completion of the operation.• Note within this vegetation control strip conditions and exclusion zones specified within the following sections of this plan must apply: "Tree retention non-regrowth area", "General exclusion zone", "General Threatened Flora and Fauna Prescriptions", "Species and Site-Specific Threatened Flora and Fauna Prescriptions", "Fisheries Licence Conditions" and "Site-specific EPL Conditions".
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Note: The area of each silvicultural treatment must be mapped and recorded in the Post logging information section of this plan.

IFOA Limits

The integrated harvesting operation is in accordance with IFOA Part 1 Condition 5 (11).

No more than 60% of the net harvestable area within these compartments will be harvested during this operation. The next integrated harvesting operation is not permitted within 5 years from the completion of this harvesting event. (integrated)

The PA (Production Assistant) will ensure that TSL tree retention prescriptions are met concurrent with harvesting operations.

Special Requirements

Non-harvest areas

The HPOM indicates the non-harvest areas in the compartments, as detailed in the legend. Harvesting disturbance is not permitted in non-harvest areas unless authorised by the Planning Supervisor.

Noxious Weeds/Disease/Pests Hygiene Requirements

Compartments 453 & 495 are within Bega Valley Shire Council which is a designated red zone for Myrtle Rust. In order to prevent the spread of Myrtle Rust all harvesting machinery, equipment and vehicles heading west from Bega Valley Shire or south into Victoria must be inspected for vegetation containing Myrtle Rust. If present, the vegetation must be removed from the harvesting machinery, equipment or vehicle prior to leaving the compartments.

Permanent Growth and Research Plots

Any inventory plots located during the harvesting operation are to be treated the same as the surrounding area.

Occupation Permits

Apiary

2 apiary sites provided in the table below are located within the planning unit as detailed in the table below. Contact details are available from the Batemans Bay office.

Name	Site Number	Contact number	Pre burn notification complete?
James Kershaw	AB14	02 6236 9206	
Paul Manns	AB13	0417 257 767	

- The PA must provide the apiary permittees with at least two weeks advance notice when bee boxes need to be removed or relocated.
- If the permanent apiary set down site located to the south-west of Dump H in Coupe 3 of Compartment 453 (see HPOM) is disturbed, it must be levelled and be free of debris at the completion of logging.
- Permanent sites must not be ripped.

National Parks and Nature Reserves

National Park (Waalimma section) forms the western boundary of Compartment 495. The net harvest areas are not directly adjacent to the National Park. No harvest disturbance is permitted within National Park.

- Boundaries do not have to be marked in the field.

Rocky Terrain

Rocky terrain occurs within the net planned area. A rocky outcrop is located within Coupe 1 of Compartment 453 as shown on the HPOM. PA will continue to conduct on the ground mark-up and searches and report back to the supervising foresters/ecologist any features requiring further investigation.

Forest Management Zoning

FMZ 3A - Harvesting Excluded, FMZ 3B - Special Prescription (visual) and FMZ 4 - General Management (normal harvesting prescriptions apply) occur within the compartments. Refer to HPOM for more detail.

FMZ 3B (Visual) – The FMZ 3B harvest area is not visible at a landscape level, therefore, normal integrated harvesting prescriptions (as per harvesting prescription section) will apply to this operation.

FMZ 3A – Harvesting and harvesting machinery are not permitted in these areas. Prescribed burning is only permitted in these areas where fire does not conflict with underlying protection zones e.g. rainforest, cultural heritage etc. (Refer to cultural heritage flora and fauna sections of this plan and the standard harvest plan conditions for more detail).

IFOA Required Approval of Forestry Activities

Approvals have not been obtained for snig track construction and/or use, road construction, road re-opening, routine road maintenance and log haulage in FMZ 3A. If the PA identifies the need for harvesting related activities to occur within FMZ 3A during the operation, the Harvest Planner must be contacted to seek Planning Supervisor approval.

All areas of Rainforests require prior OEH approval and Stream Exclusion Zones require prior Planning Supervisor approval before forest harvesting related activities (eg: road or snig track construction and reopening) can be undertaken. It is the responsibility of the PA to identify any exclusion areas which will need to be crossed during harvesting. The PA should then contact the Harvest Planner to obtain the necessary approval.

Cultural Heritage

Cultural Heritage -

Flora and Fauna

Refer to TSL Booklet for Conditions

Mark-Up Conditions

During the pre-harvest mark up the PA must search for and record threatened species habitat features consistent with Conditions 5.2 and 8.6 of the TSL. Searches for threatened species features must be conducted within that portion of the net planned area where harvesting will occur, and within 50 metres outside this area (eg HCVOG, etc) (conditions 5.1, 5.2 of the TSL).

Where any of these features are found, the feature must be recorded within the Harvesting Plan and the HPOM, must be amended accordingly and the appropriate conditions applied.

Species adequately covered by general prescriptions:

The following species have been recorded in or around the compartments and are adequately covered by the general prescriptions. No further protection measures are required for these species: **Olive Whistler** (*Pachycephala olivacea*), **Glossy Black-Cockatoo** (*Calyptorhynchus lathami*), **White-footed Dunnart** (*Sminthopsis leucopus*), **Varied Sittella** (*Daphoenositta chrysopera*), **Flame Robin** (*Petroica phoenicea*), **Scarlet Robin** (*Petroica boodang*), **Gang Gang Cockatoo** (*Callocephalon fimbriatum*).

Tree Retention-Non-Regrowth Zone

The non-regrowth zone applies to the entire net harvest area. The PA is to mark as per Condition 5.6 of the TSL, in conjunction with the indicative Habitat Quality Class Map and on ground assessment. Where the density of habitat trees specified in the table are not available, retain the existing habitat trees plus additional trees of the largest dbhob to meet the required retention rate.

Habitat Quality	Hollow Bearing Tree/ 2ha	Recruitment Trees/ 2ha	TSL Condition	Dead Standing Tree (only if safe)	TSL Condition	Protection of Retained Trees	TSL Condition	Significant Food Resource*	TSL Condition	
High	12	5.6g(i)	12	5.6h(i)	Ø	5.6l	Ø	5.6j	Ø	5.6k
Medium	8	5.6g(ii)	8	5.6 h(ii)	Ø	5.6l	Ø	5.6j	Ø	5.6k
Low	4	5.6g(iii)	4	5.6 h(iii)	Ø	5.6l	Ø	5.6j	Ø	5.6k

Ø - Condition applies

General exclusion zones

General exclusions as listed below are shown on the HPOM.

Feature/Condition	TSL condition	Occurs within Planning Unit
Rainforest	5.4	Rainforest (RF) is mapped within the compartments(s). Following verification of forest structure and species composition the extent of mapped RF has been changed on the HPOM. PA's must mark the exclusion zone as mapped. Unmapped RF must also be protected. (#)
Riparian Protection Zones	5.7	Yes
Ridge & Headwater Habitat	5.8	Yes
Wetlands	5.9	Has been assessed and is unlikely to occur in the field. May require further investigation. (#)
Heath and Scrub	5.10	Has been assessed and is unlikely to occur in the field. May require further investigation. (#)
Rocky Outcrops and Cliffs	5.11	Has been assessed as a risk that it may occur in the field. May require further investigation. (#)
Endangered Ecological Community	NA	Has been assessed and is unlikely to occur in the field. May require further investigation. (#) Harvesting operations, harvesting machinery and post harvest burning must be excluded from all areas of EEC.

#PA will continue to conduct on the ground mark-up and searches and report back to supervising forester and ecologists any features requiring further investigation.

General Threatened Flora and Fauna Prescriptions

Feature	Records in 453 & 495	Licence conditions under the TSC Act
Threatened Frog General Protection Measures	No	5.12
Bird Nest and Roost Site Protection	Yes (This site is within rainforests in excluded forests)	5.13
Tree Bat Roost Protection	No	5.14.1
Subterranean Roost Protection	No	5.14.2
Protection of flying-fox Camps	No	5.14.3
Burning	Net planned area	5.16
Ground Habitat Protection	Net planned area	5.17

Species and Site-Specific Threatened Flora and Fauna Prescriptions

Contractors and supervisory staff must immediately report any sightings of Schedule 1 and 2 species to the PS. The Harvesting Plan must be amended to include additional prescriptions if necessary. If any species requiring a site specific prescription in accordance with condition 1.2 of the TSL are detected in or within 100m of the compartment boundaries cease operations immediately and inform the PS.

The following species have been recorded within or nearby the area and the associated prescriptions must be implemented:

Threatened species and habitat features within trigger distance	Records in 453 & 495	Licence conditions under the TSC Act or relevant Site-specific prescription
Powerful Owl <i>Ninox strenua</i>, Sooty Owl <i>Tyto tenebricosa</i>	Yes	6.3 Owl Landscape Exclusion Zones occur in Compartment 453. (Refer to HPOM).
Yellow-bellied Glider <i>Petaurus australis</i>	Yes	6.13
Eastern Pygmy Possum <i>Cercartetus nanus</i>	Yes	Not required for consideration under the TSL due to age of the record.

Fisheries Licence Conditions

There are no known records of threatened fish species or class 1 or 2 aquatic habitat relevant to this operation. The conditions of the fisheries licence are not triggered for this operation.

Soils and Water Protection

Refer to EPL Booklet & Standard Plan Conditions

Site-specific EPL Conditions

Elements	Conditions
Unmapped Drainage Lines	EPL applies
Drainage Feature Protection	See HPOM for widths
Inherent Hazard Class	1 (Compartment 453) and 2 (Compartment 495)
Dispersible Soils	No
Seasonality Harvesting Exclusions	No
Seasonality Burning Exclusions	No
Log Dumps	Refer relevant conditions for IHL
Roads	See Schedule 5 of EPL Booklet
Slope limits for harvesting	<p>Special prescription for Pericoe Adamellite R2 soils in Compartment 453: No harvesting on slopes greater than 25 degrees.</p> <p>Note: EPL conditions relating no harvesting on IHL 4 also still apply (Schedule 4- B-Maximum Slope Limits).</p> <p>For Granitic soils in Compartment 495: REFER TO SCHEDULE 4B.3 OF EPL</p>
Slope limits for snig tracks	<p>Special prescription for Pericoe Adamellite R2 soils in Compartment 453: Where practicable grade of snig track must not exceed 20 degrees.</p> <p>Snig track grades 20-25 degrees are permitted in accordance with EPL Schedule 4. Clause 41 a) and b) but not 41. c)*, if:</p> <ul style="list-style-type: none"> • There is no other practical alternative route and • PA approval has been granted. <p>*The highly erodible nature of the R2 soil, means it is not appropriate to implement condition 41.c) in these compartments.</p> <p>For Granitic soils in Compartment 495: REFER RELEVANT CONDITIONS, SCHEDULE 4H FOR SNIG TRACKS</p>
Snig Drainage Spacing	<p>For snig track grades less than 20 degrees apply EPL spacing.</p> <p>Special prescription for Pericoe Adamellite R2 soils in Compartment 453: For snig track grades greater than 20 degrees, install snig track drainage at half the EPL recommended spacing.</p>

	For Granitic soils in Compartment 495: REFER RELEVANT CONDITIONS, SCHEDULE 4H FOR SNIG TRACKS
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Log Dump Location

9 log dumps are indicated on the HPOM. Field location of log dumps must utilise the most level site available consistent with the location indicated on the HPOM. Inherent hazard level 1 Conditions 26, 27, 30, and 33 of Schedule 4 of the EPL must apply.

Expected Felling/ Extraction and Loading Method

The expected felling method is mechanical, extraction method by dozer, and loading method is by excavator.

Drainage Feature Crossings

No crossing is approved for use on drainage features. (Refer to HPOM).

Mass Movement

Compartments 453 & 495 are not in an area identified as having a potential for mass movement. No specific prescriptions relating to mass movement/snigging are required.

Suitability of existing log dams and gully stuffers

There are no known log dams or gully stuffers on snig track crossings or road crossing in the compartments.

Condition 47 of Schedule 4 of the EPL must apply.

Road Works

The roading and crossing works must be undertaken, by contractor or FCNSW staff, prior to the commencement of harvesting activity in the area served by the road or crossing. The roading plan specifies who is responsible for supervising and paying for the maintenance works.

Within the compartment boundaries only roads that are shown on the HPOM as EPL standard or sealed may be used for haulage. **Refer to EPL Schedule 5 – Operating Conditions for Roads.**

Roads within the compartment boundaries may be used with PA approval for snigging or extraction provided they are drained to EPL specifications.

Post Log Burning Control Lines

To assist the post log burning crews prevent fire from entering areas to be excluded from burning, control line construction must be undertaken concurrently with harvesting. Where possible snig tracks patterns should be designed to double as control lines. Control lines must be located as close as reasonably practical to the feature to be excluded from burning. The PA must assess the areas harvested, snig track network and existing roads to determine if there are sufficient control lines in place and where required instruct the contractor to construct additional mineral earth control lines to supplement these. The PA must record instances where it was not possible to construct a suitable control line close to the feature to be excluded

and recommend harvest areas which should be excluded from the post log burning operation due to inadequate control lines.

The table below lists critical boundaries in Compartments 453 and 495. Where possible design snig track patterns so they double as bare earth containment lines as close as possible to these boundaries. Where this is not practical, it is NOT necessary to construct a bare earth break along boundary of the exclusion; the practice of no direct ignition will be followed.

Critical boundary	Completed Yes /No
FMZ 3A/ Owl Landscape	
Probable Rocky Outcrop and exclusion zone.	
Excluded forest	

Legal Conditions

In 1999, the Commonwealth and NSW Governments signed a Eden Regional Forest Agreement which, among other things, allows for the supply of timber for 20 years from public lands under the following NSW legislation:

- Forestry Act 2012, and
- Forestry & National Park Estate Act 1998

The latter Act provides for the Eden Forest Agreement and Eden Integrated Forest Operations Approval (IFOA), both approved by NSW Government Ministers. This harvest plan is issued under the authority provided within the IFOA.

The IFOA also contains three licences issued under:

- Section 55 of the Protection of the Environment Act 1997 (EPL)
- Threatened Species Conservation Act 1995 (TSL).
- Section 220ZW of the Fisheries Management Act 1994 (FL).

This harvest plan will be managed in the field under:

- Licences issued under the Forestry Act (2012)
- Forest Practices Code part 2 (Timber Harvesting in Native Forests - 1999) and part 4 (Forest Roads and Fire Trails - 1999)
- Standard Harvest Plan Conditions for Hardwood Forest Operations under the IFOA
- FCNSW Corporate Fuel Management Plan 2008.

Harvesting operations must comply with all of the above Licences and the Code.

Further information is available from <http://www.environment.nsw.gov.au/>

Pre Operational Briefing

I acknowledge that I have received a copy of the Harvesting Plan for Compartments 453 and 495 in Yambulla State Forest and that I have been briefed on the conditions of the Plan and understand the supervision and operational control requirements as explained to me by the PS or his/her delegate.

Position	Name	Signature	Date

Details to Record in PA Notes

- Dates of commencement and cessation of logging
- Record the commencement and completion of harvesting at each dump
- Record the occurrence of temporary cessation of harvesting at each dump.
- Situations where drainage could not be completed due to saturated soils must be recorded in PA Notes.
- Record the commencement and completion of each construction, upgrading or maintenance of drainage feature crossings by snig tracks or extraction tracks.
- Bi-weekly checks of road drainage structures during haulage operations.
- Record the date of checks, drainage structure compliance and any repairs required within the specified time period.
- Records of Threatened Flora and Fauna identified during compartment markup.
- Minor variations associated with moving or adding dumps.
- Daily events of importance eg. Instructions to crew, work activity.

Post Harvest Mapping Features Confirmation Checklist

Feature	Planning Updates	Reason (Error/New)	GIS update tool completed?	Harvesting Updates	Comments
Soil Regolith	Yes	Error			
Mapped Drainage	No				
Rainforest	No				
Rocky outcrops	Yes	New	Yes		
Wetlands	No				
Cultural Heritage	No				
Existing Roads	No				
New Roads	Yes	New	Yes		
Heath	No				
Powerlines etc	No				
Other -	No				

PA Feature Usage Record

Dates of commencement and cessation of logging

Date of commencement of logging: _____

Date of cessation of logging: _____

DUMP USAGE RECORD

- Record the commencement and completion of harvesting at each dump.
- Record the occurrence of temporary cessation of harvesting at each dump.

*At completion of snig track/dump, track drainage must be completed within **2** days unless soil is saturated.

*At temporary cessation of snig track use, track drainage must be completed within **5** days unless soil is saturated.

Situations where drainage could not be completed due to saturated soils must be recorded in PA Notes.

Snig/Extraction Track Crossing Record

Record the commencement and completion of each construction, upgrading or maintenance of watercourse/drainage line crossings by snig tracks or extraction tracks.

* If soil is not stabilised within 5 days it must be recorded as a non-compliance including the reason why.

If soil is saturated, temporary stabilisation must be put in place, and the instance entered into the compartment diary.

**** If track edge clearing exceeds 3 metres, document the reason for field approval in the compartment diary.**

Weekly and Bi-weekly inspection

Item Inspected	Insert dates of inspection											
	Week 1		Week 2		Week 3		Week 4		Week 5		Week 6	
	1st	2 nd	1st	2nd	1 st	2nd	1 st	2nd	1st	2nd	1st	2nd
Road drainage												
Road sediment controls												
Road causeways												
Road gully stuffers												
Snig gully stuffers												
PA initial												
PA presence												

Comments: record the item number in a box above and comment as required.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

Weekly and Bi-weekly inspection

Item Inspected	Insert dates of inspection											
	Week 7		Week 8		Week 9		Week 10		Week 11		Week 12	
	1st	2 nd	1st	2nd	1 st	2nd	1 st	2nd	1st	2nd	1st	2nd
Road drainage												
Road sediment controls												
Road causeways												
Road gully stuffers												
Snig gully stuffers												
PA initial												
PA presence												

Comments: record the item number in a box above and comment as required.

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

Weekly and Bi-weekly inspection

Item Inspected	Insert dates of inspection											
	Week 13		Week 14		Week 15		Week 16		Week 17		Week 18	
	1st	2 nd	1st	2nd	1 st	2nd	1 st	2nd	1st	2nd	1st	2nd
Road drainage												
Road sediment controls												
Road causeways												
Road gully stuffers												
Snig gully stuffers												
PA initial												
PA presence												

Comments: record the item number in a box above and comment as required.

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

Weekly and Bi-weekly inspection

Item Inspected	Insert dates of inspection											
	Week 19		Week 20		Week 21		Week 22		Week 23		Week 24	
	1st	2 nd	1st	2nd	1 st	2nd	1 st	2nd	1st	2nd	1st	2nd
Road drainage												
Road sediment controls												
Road causeways												
Road gully stuffers												
Snig gully stuffers												
PA initial												
PA presence												

Comments: record the item number in a box above and comment as required.

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

PA Notes

PA Notes (continued)

PA Notes (continued)

PA Notes (continued)

PA Notes (continued)

Clearance Certificate

COMPARTMENTS: 453 & 495

YAMBULLA STATE FOREST, EDEN IFOA

ToProduction Assistant

I request approval for me to move my logging crew and all associated machinery from the above-mentioned area to the next compartment in accordance with Section 3.5 of the Forest Practices Code.

I certify that:

- (a) all permanent roads, trails and mitre drains have been cleared of harvesting debris;
- (b) butt damage to retained trees has been kept to acceptable limits;
- (c) all trees marked for removal have been felled;
- (d) utilisation limits have been satisfactorily met;
- (e) stump heights conform to requirements;
- (f) all hanging trees have been felled and brought down;
- (g) all log dumpsites have been satisfactorily restored as required;
- (h) harvesting debris is not accumulated around retained trees;
- (i) all accumulated litter has been disposed of properly;
- (j) all filter and buffer strip requirements have been complied with;
- (k) all snig track, extraction track and temporary logging road drainage has been installed satisfactorily and other required rehabilitation work has been completed;
- (l) all necessary repairs to damaged roads, signs, fences and other structures have been carried out.
- (m) **_____ (insert quantity) rubber flaps have been recovered in a satisfactory condition and reported to Operations Branch for collection.**
- (n) all machinery, equipment and vehicles have been checked and are free of noxious weeds, diseases and pests.

I believe that I have met all my obligations under the conditions of the Contractors Licence, the EPL and TSL which apply to the compartments just completed, as stated in this Harvesting Plan.

Signature.....Name.....Date

Contractor

As a result of inspections of the logging operations made in accordance with this Harvesting Plan, I am satisfied that, to the best of my knowledge, the contractor responsible for this harvesting operation has satisfactorily completed all work and approval is given for her/him to remove her/his machinery and equipment and leave the area/commence operations in another compartment.

This clearance does not release the contractor from any obligation to undertake any remedial work if subsequent deficiencies are shown to result from inadequate practices during the harvesting operation, which are found during any inspections of the area made within 12 months of the date of this post-harvesting inspection.

Last inspection was made on(Date)

Signed(Date).....

Production Assistant

Post Logging Information

Record any circumstances of significance relating to the harvesting of these compartments. Please draw or include any annotations on the attached operation scale map.

Summary of silvicultural treatment

Treatment type	Area (ha) subject to treatment (SFO estimate)	Number of AGS gaps created	Comments
Integrated/Modified shelterwood			
Thinning			
Post Harvest Silviculture			

Actual area harvested (record on attached HPOM)

Give reasons for harvestable areas that were not harvested (eg. Too steep, defective timber). Make reference to map.

Possible next cut (tick appropriate boxes)

Main product type	Anticipated volume		
	H	M	L
Girders			
Veneer			
Poles/piles			
Quota			
Smalls/Thinnings			
Salvage			
Pulpwood/chipwood			

Time to next harvest	
0 to 5 years	
5 to 10 years	
10 to 20 years	
20 to 30 years	
30 plus years	

ATTACHMENT 2**ROADING PLAN****Summary of Roading Requirements**

Feature	Details	Works Required
Existing roads to be used.	3010 m/7	Yes
New roads to be constructed	160 m/1	Yes
Existing crossings used	0	No
New crossings to be constructed	0	No
Length of road >10°	0	NA
Borrow pits and gravel pits	0	NA
Mass movement prescriptions apply	No	NA
Dispersible soil conditions apply	No	NA
Seasonality provisions apply	No	NA

Note: Maintenance works not completed by RC must be recorded and passed onto the PA Harvesting for completion and documentation.

The start and finish dates of all maintenance and construction must be recorded on the individual roading sheets along with other relevant changes or explanations.

All rubber flaps on minor forest roads must be removed and replaced with trafficable rollover banks on completion of operation.

CHECKLIST OF WORKS REQUIRED ON ROADS & CROSSINGS

Road/Crossing Name	Works Required	Date Started	Date finished	Signature
Poole Road (620 m) <i>Shire Road/Bundian Way</i>	Grade road where rilling has occurred. Reshape mitres. Minor and minimum brushing off encroaching saplings and branches to allow for truck passage and also at junctions of 453-2 Road, Poole Fire Trail Road and 495-1 Road to allow for better sight distance. PS to notify BVSC when work has commenced. RC/PA Comments:			
Brushtail Road (220 m) <i>FCNSW Responsibility</i>	Minor roadside clearing for the entire length. RC (Roading Coordinator)/PA Comments:			
Poole Fire Trail (600 m) <i>Contractor Responsibility</i>	Brush off overhanging dead branches. Install additional drainage structures according to EPL specifications. RC (Roading Coordinator)/PA Comments:			

453-1 Road (100 m) <i>Contractor Responsibility</i>	Install additional drainage structures according to EPL specifications. RC (Roading Coordinator)/PA Comments:			
453-2 Road (680 m) <i>Contractor Responsibility</i>	Grade and reshape road as required. Clear up to 3 m on either side to facilitate truck movement. Replace rollovers with rubberflap drains for ease of truck movement. Install additional drainage structures according to EPL specifications. RC (Roading Coordinator)/PA Comments:			
453-3 Road (400 m) <i>Contractor Responsibility</i>	Grade and reshape road as required. Clear up to 3 m on either side to facilitate truck movement. Replace rollovers with rubberflap drains for ease of truck movement. Install additional drainage structures according to EPL specifications. RC (Roading Coordinator)/PA Comments:			

NEW ROAD CONSTRUCTION

Road Specific Conditions:

Road Name	Road Length (m)	Max. width of road prism (m)	Max. road grade (length road >10 degrees?)	Max. ground slope (length road >30 degrees?)	Estimated Max. height of cut / fill batters (m)	Estimated Max length of batters (m)	Mass movement / dispersible soils	Final road use	Responsibility	Start Date	Finish Date
453-4 Rd	160	7	9°	20°	<1	160	No	Retain	Contractor		

General Instructions for road construction:

Features	Road Specifications	Additional instructions / Materials
Type of sediment trapping / soil erosion/ sediment control device to be used during construction	Natural surrounding vegetation supplemented with silt fencing, seed and mulch as required.	PA to monitor during road construction and assess requirements.
Recommended road drainage type	Recommend rubber flaps if >5 degrees. Rollovers or mitres if < or = 5 degrees. SFO to measure & mark in the field in accordance to Sch. 5 Table 1 of the EPL. Trafficable rollovers to be installed upon harvest completion	Rubber flaps during operation. Permanent trafficable rollovers to be installed upon completion of use.
Spacing of road structures to be installed	As per EPL Sch. 5, Section C, Table 1	
Soil erosion / sediment control techniques	Drainage outlets must drain onto stable surface which provides efficient sediment trapping & energy dissipation. Upon harvest completion, logging debris is to be removed from table and mitre drains so they are left in effective working order	Seed & mulch as required
Stabilisation assessment intervals	As per EPL Sch. 5, Clauses 15, 17, 19 & 20	
Drop down & dissipater required	Required where fill batter >1m as per EPL Schedule 5 Clause 36	PA to monitor. Mitres with rock dissipater recommended.
Soil stabilisation techniques of disturbed areas	Seed & mulch as required	

Note: Maintenance works not completed by RC must be recorded and passed on to the PA.