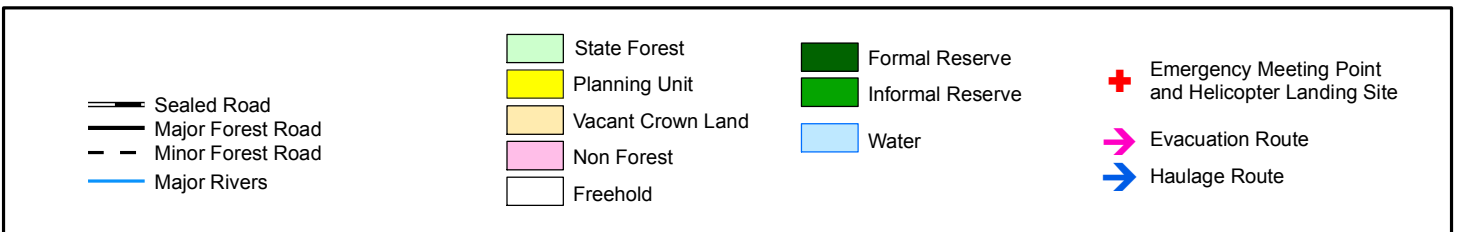
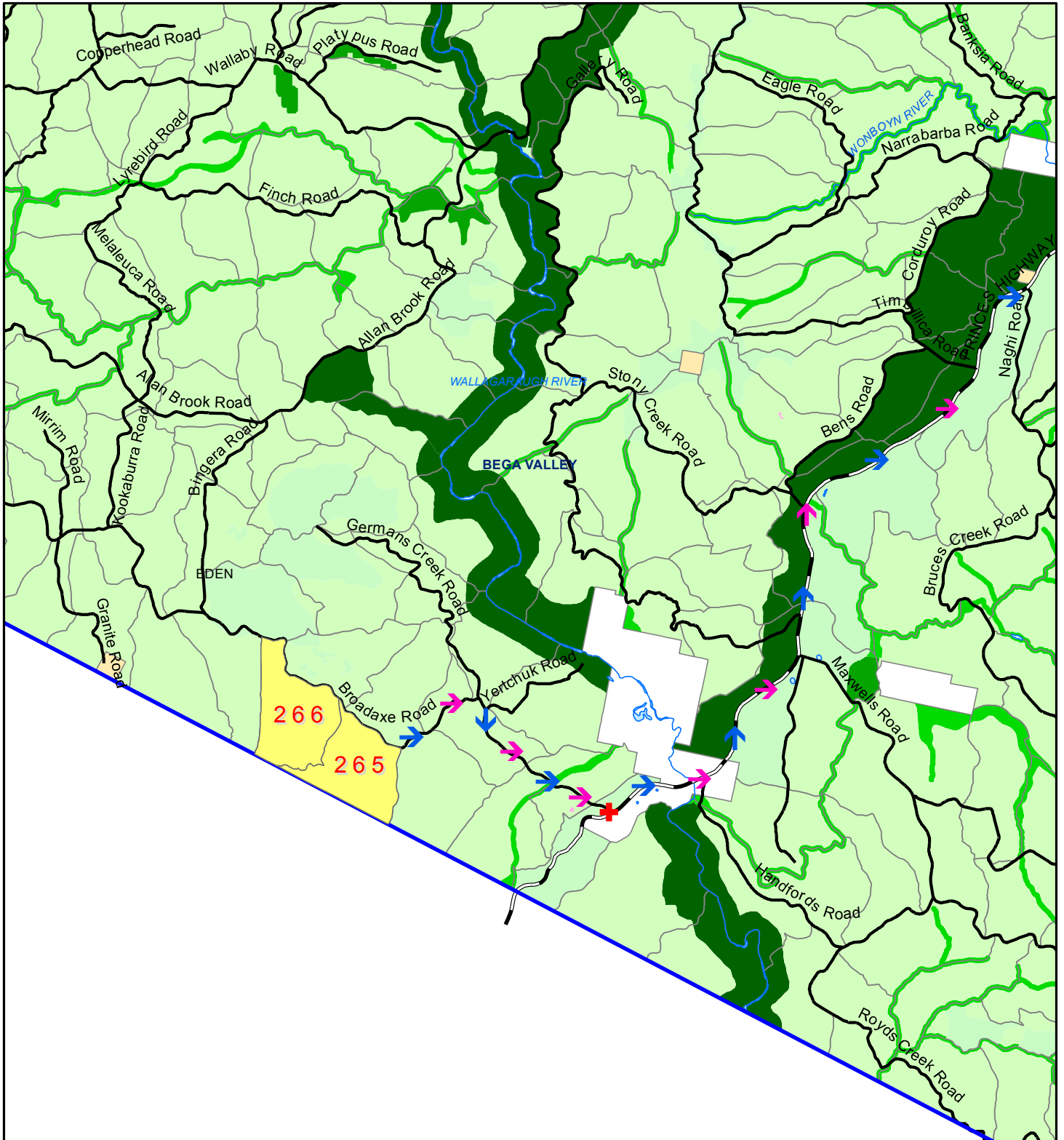


LOCALITY MAP

Compartments 265 & 266
State Forest: Yambulla No:126
 EDEN IFOA EDEN MANAGEMENT AREA



Scale: 1:100,000



Prepared By:
Megan Costello

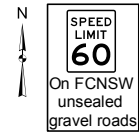
Harvest Plan Operational Map

Compartments: 265 & 266

State Forest: YAMBULLA No: 126

Eden IFOA - Hardwood Forests

Map Sheet: TIMBILLICA 8823-3N, GENOA 8823-3S



Version: 1

PLANNING SUPERVISOR APPROVAL

APPROVED: Lee Blessington

DATE: 23 / 12 / 14

LEGEND

BOUNDARIES

- ○ State Forest Boundary
- ○ Compartment Boundary
- ○ Coupe Boundary

ROADS

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

MAP FEATURES

- △ Rocky Terrain

DRAINAGE

- Mapped LIC Drainage

DUMPS & CROSSINGS

- ⊕ Loading Bay/Turning Circle
- Existing Crossing
- New Crossing

NON HARVEST AREA

- Probable Rock & Exclusion Zone (20m)
- Probable Heath & Exclusion Zone (10m)
- Ridge & Headwater Habitat (40m width)
- Excluded Forest
- Southern Brown Bandicoot Habitat (Indicative)

NET HARVEST AREA

- Thinning

0 125 250 500 750 1,000 Meters Scale: 1:15,000 Contour Interval 10m

DRAINAGE FEATURE PROTECTION (EPL IHL 1 & TSL). NOTE: THE GREATER OF THE WIDTHS (BOLD) MUST APPLY

Feature	Filter Strip (EPL)	Stream Exclusion Zone (TSL)
Unmapped	10m	Nil
1st Order	10m	10m
2nd order	15m	20m
3rd order	20m	30m
4th order	20m	50m

FAUNA FEATURES

- ★ Glossy Black Cockatoo (Feed Tree)
- ★ Glossy Black-Cockatoo
- ◆ Yellow-bellied Glider
- ◆ Yellow-bellied Glider (Heard)
- ◆ Yellow-bellied Glider (Feed Tree)

N0000985

733000E

34

35

Prepared By:
Megan Costello

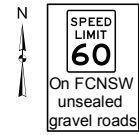
Harvest Plan Forest Type Map

Compartments: 265 & 266

State Forest: YAMBULLA No: 126

Eden IFOA - Hardwood Forests

Map Sheet: TIMBILLICA 8823-3N, GENOA 8823-3S



LEGEND

BOUNDARIES

- State Forest Boundary
- Compartment Boundary
- Coupe Boundary

ROADS

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

MAP FEATURES

- △ Rocky Terrain

DRAINAGE

- Mapped LIC Drainage

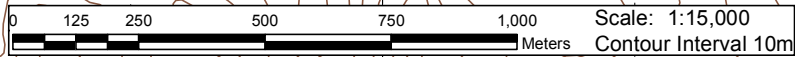
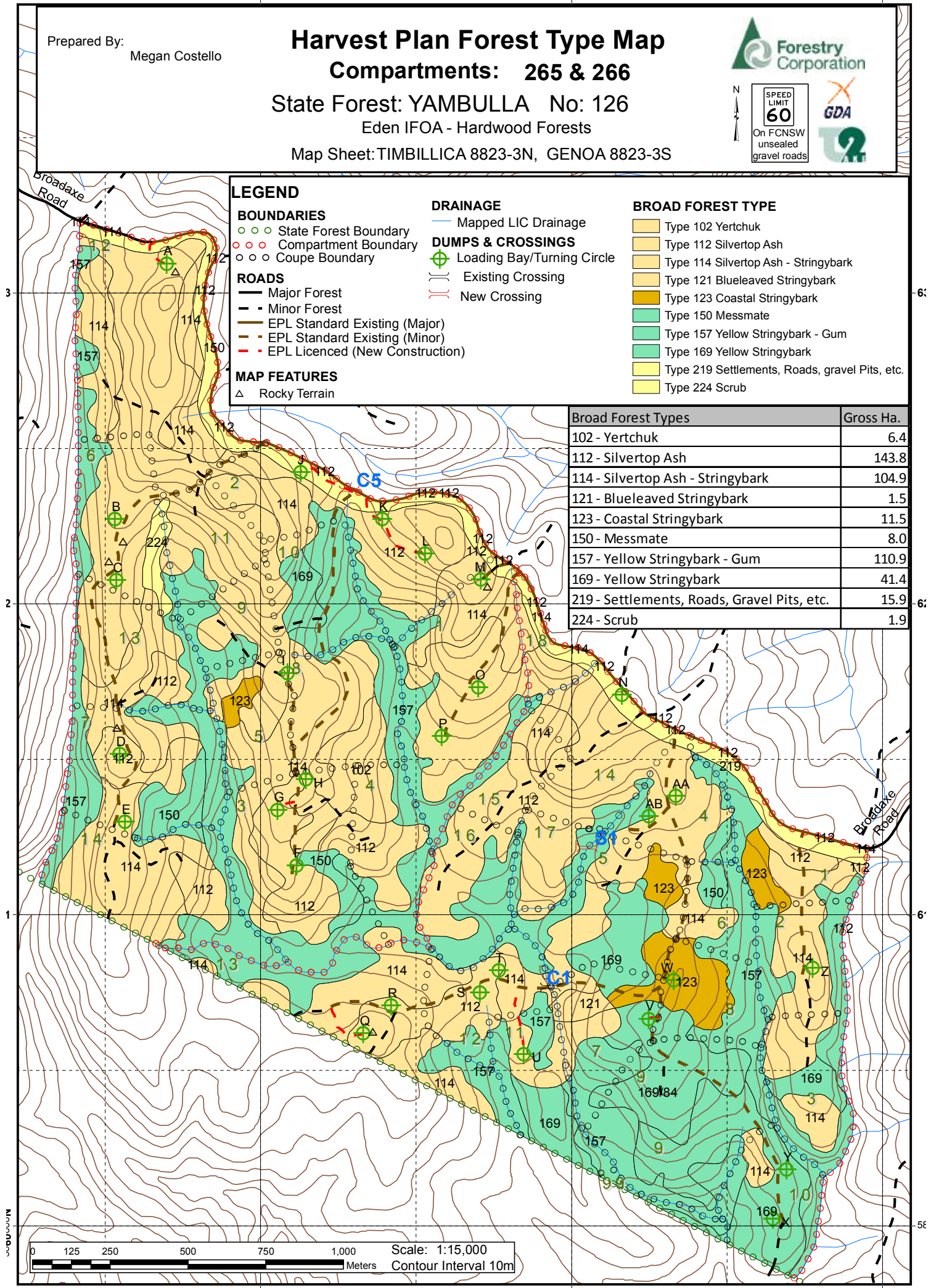
DUMPS & CROSSINGS

- ⊕ Loading Bay/Turning Circle
- Existing Crossing
- New Crossing

BROAD FOREST TYPE

- Type 102 Yertchuk
- Type 112 Silvertop Ash
- Type 114 Silvertop Ash - Stringybark
- Type 121 Blueleaved Stringybark
- Type 123 Coastal Stringybark
- Type 150 Messmate
- Type 157 Yellow Stringybark - Gum
- Type 169 Yellow Stringybark
- Type 219 Settlements, Roads, gravel Pits, etc.
- Type 224 Scrub

Broad Forest Types	Gross Ha.
102 - Yertchuk	6.4
112 - Silvertop Ash	143.8
114 - Silvertop Ash - Stringybark	104.9
121 - Blueleaved Stringybark	1.5
123 - Coastal Stringybark	11.5
150 - Messmate	8.0
157 - Yellow Stringybark - Gum	110.9
169 - Yellow Stringybark	41.4
219 - Settlements, Roads, Gravel Pits, etc.	15.9
224 - Scrub	1.9



733000E

34

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**HARDWOOD FORESTS- EDEN IFOA
HARVESTING PLAN**

Yambulla State Forest - Compartments 265 & 266

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 Harvest Plan Standard Conditions for Hardwood Forest Operations in Eden apply to this operation.

Prepared By: Harvest Planner	Megan Costello	Approved By: Planning Supervisor	Lee Blessington
Signature	Megan Costello	Signature	Lee Blessington
Date	6/1/15	Date	23/12/14

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, and Forest Type.

Description of Proposal

Harvesting of hardwood forest

Thinning of Regrowth Hardwood Forest:

Overstocked advanced regrowth stands originating from past logging activities and wildfire events will be mechanically thinned under site specific silvicultural regimes aimed at retaining the highest quality future sawlogs. Thinning reduces the number of competing stems in a stand and concentrates the growth potential onto the remaining crop trees. This process will maintain the uniform age structure that characterises regrowth forests.

This 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 = Rooding Coordinator, IFOA = Integrated Forestry Operations Approval.

Area Identification and Yield Estimates

State Forest	Compartment/s	Coupe/s	IFOA Region	Management Area	Certification
Yambulla	265	2,4,7,8, 10,11,12, 13 (part) 17,18	Eden	Eden	AS4708:2007 ISO 14001
Yambulla	266	1,2,3, 6,7,8, 12 (part)	Eden	Eden	AS4708:2007 ISO 14001

	Cpt 265	Cpt 266	Total
Plan Compartment ID	265	266	NA
Gross Area (ha)	211.3	234.8	446.1
Net Harvest Area (ha)	89.7	120.0	209.7
Estimated Yield Pulp (t)	4,300 t	8,000 t	12,300 t
Estimated Yield Sawlog (m ³)	27 m ³	120 m ³	147 m ³

Slope Classes (percent of harvest area)

Slope Class	Cpt 265	Cpt 266
	% of harvest area	% of harvest area
0-20°	98.4	96.9
20-25 °	0.2	2.6
25-30 °	0.3	0.5



ATTACHMENT 1: SITE SAFETY PLAN

Worksite Information			
Is this Declared Hunting Area: Yes		Comments: Exclusion zone in place	
Have Exclusion Zone signs been erected or checked prior to starting work daily.		NA	
Comments: No signage required – hunting exclusion zone implemented			
Description of Work to be undertaken on site: - Refer to description of proposal above.			
Site Supervisor			
Name:		Contact number:	
Communication			
Radio channel number	VHF:	UHF	
Other (e.g. hand signals):			
Traffic management (describe) e.g. Signage, Road closure, Traffic control			
<p>This plan identifies haulage from the compartment will be west via Broadaxe Road turning left onto Princes Hwy heading North before turning right onto Edrom Road (100km/hr Road). The intersection of Broadaxe Road and Princes Hwy has been assessed as achieving a minimum of 200m sight distance on both approaches. Therefore at this intersection additional signage in accordance with a Traffic Control Plan is not required.</p> <p>Road intersections outside the control of FCNSW are not covered by this plan or any FCNSW Traffic Control Plan. Haulage contractors must abide by RTA road laws and standard operating procedures in relation to haulage routes outside the control of FCNSW.</p> <p>Dust and noise – Where log haulage routes pass close to rural housing along natural surface/gravel roads dust and noise must be minimised to the greatest extent practicable. Trucks should reduce speed, restrict use to daylight hours and minimise the use of engine brakes through these areas.</p>			
Name of on-site safety first-aiders/s			
Location of first-aid kit			
SITE HAZARD & RISK ASSESSMENT NO.			
CONTROL	WHO	IMPLEMENTED	
1. Vehicle collision at adjoining roads of various traffic levels	Warning signs at FCNSW intersections, road closure on FCNSW roads. 60km/hr speed limit on all State Forest gravel roads unless otherwise signposted. Compliance with FCNSW lights on policy.		
2. 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.		
3. 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.		
4. Dust from passing vehicles along dirt haulage routes	Restrict speed to minimise dust generation, slow down when passing vehicles. Turn on driving and hazard lights to increase visibility.		
5.			

- **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



MEDICAL EMERGENCY EVACUATION PLAN

Nearest reliable mobile phone reception (describe location)			
Next G Network: Good	GSM: Telstra	Satellite: N/A	
GPS Lat/Long: 37° 21' 21.84" S / 149° 38' 2.52" E	MGA: 733305 5862363	Datum: GDA 94	Zone: 55
Location description: Junction Broadaxe Road and compartment roads 266_2 & 266_7			
Emergency meeting point for ambulance / police (refer to attached safety map)			
GPS Lat/Long: 37° 22' 31.82" S / 149° 41' 49.05" E	MGA: 738763E 5860021N	Datum: GDA 94	Zone: 55
Location description: Intersection of Broadaxe Road and Princes Highway			
Helicopter landing place (refer to attached safety map)			
GPS Lat/Long: 37° 22' 31.82" S / 149° 41' 49.05" E			
Location description: Intersection of Broadaxe Road and Princes Highway			
Procedures to obtain ambulance assistance			
<ol style="list-style-type: none"> Dial 000 If there is no mobile coverage, dial 112 (which will work on any mobile phone system). 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: Kiah Nearest ambulance station: Eden	
3. Address?		Broadaxe Road	
4. Nearest road junction/cross street?		Broadaxe Road and Princes Highway	
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 Eden head south on the Princes Highway travel approx. 45.5km to intersection with Broadaxe Road (on right).			
8. 4WD ambulance required 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
--

CPT 265

Year	1977	1979	1996
TSI	X	X	X
HR Burning	X	X	X
Wildfires	X	0	X
Logging m ³	11,475	0	9,478

0 - applies, X – not applicable

CPT 266

Year	1977	1979	1980	1996
TSI	X	X	X	X
HR Burning	X	X	X	X
Wildfires	X	0	X	X
Logging m ³	15,525	0	1,571	11,788

0 - applies, X – not applicable

Cmpt No.	Indicative Thinnable Area (ha)	Pre-thinning			Removed			Post-thinning	
		Stock (stems/ha)	B.A. (m ² /ha)	Vol/Ha (m ³ /ha)	Stock (stems/ha)	B.A. (m ² /ha)	Vol/Ha (m ³ /ha)	Stock (stems/ha)	B.A. (m ² /ha)
265	89.7	650	27.8	155.2	500	14.4	67	150	13.3
266	126.6	641	27.9	169.9	491	13.3	77.5	150	14.6

Source: Based on Operational Inventory Data 1997 [Reden].

Silvicultural Planning

The compartments contain a multi-aged forest consisting of a mosaic of wildfire burned, logged, thinned, and unlogged areas. Most recently, alternate coupe harvesting was conducted in these compartments in 1995/96. Logging was conducted in these compartments in 1977 in small alternate coupes and 50% of the compartments were burnt by wildfire in 1979. In the coupes proposed for thinning are regenerated Silvertop Ash-Stringybarks from logging in 1977 and the fires in 1979. The resultant regeneration from these events ranges from 100 to a maximum of 660mm in diameter, 9-28m in height and is moderately stocked. Compartment 266 contains the more productive coupes for diameter and height. Wildfire has created a multi-aged forest with a high proportion of regrowth mixed with scattered mature and overmature elements.

The stands described above will be harvested by thinning from below. Due to high site productivity in some coupes, a small volume of sawlogs may be harvested while retaining potential sawlog growers.

Harvesting Prescription

Stand type	% of net area	Area (refer to HPOM for details)	Treatment (% INT, THIN)
Regrowth (even aged)	100%	Area indicated as net harvest area	<ul style="list-style-type: none"> • Thinning from below. • Refer to Standard Harvest Planning Conditions for more detail.

Note: The area of each silvicultural treatment must be mapped and recorded in the Post logging information section of this plan.

IFOA Limits

The thinning harvesting operation is in accordance with IFOA Part 1 Condition 5 (6) and Part 5 (1).

The PA 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 265 and 266 are within Bega Valley/Cooma-Monaro 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/Cooma-Monaro Shire Council 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 compartment.

Rocky Terrain

Rocky terrain occurs within the net planned area. All rocky terrain shown on the HPOM was assessed at the planning stage and is unlikely to meet the definition of a rocky outcrop or cliff. PA will continue to conduct on the ground mark-up and searches and report back to foresters/ecologist any feature requiring further investigation.

Forest Management Zoning

FMZ 4- General Management (normal harvesting prescriptions apply) occur within the compartments. Refer to HPOM for more detail.

IFOA Required Approval of Forestry Activities

All areas of Stream Exclusion Zones require prior Planning Supervisor approval before forest harvesting related activities (e.g.: road or snig track construction & 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 - All relevant representatives have been consulted. Due to the confidentiality of the Cultural Heritage sites, a Cultural Heritage site map will only be attached to the specific copies of the plan. All 10 metre radius exclusion buffers are to be marked in the field as **hard exclusion zones (i.e. pink tape)** where logging and/or road works are scheduled to be undertaken. **All operators must be taken to each site within the planned area before any activities are commenced.**

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 (e.g. HCVOG, etc) (conditions 5.1, 5.2 of the TSL).

Where any of these features are found, the feature must be recorded, the Harvesting Plan, including the HPOM, must be amended accordingly and the appropriate condition 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: **Glossy Black-Cockatoo** (*Calyptorhynchus lathami*).

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 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	TSL Condition	Recruitment Trees/ 2ha	TSL Condition	Protection of Retained Trees	TSL Condition	Dead Standing Tree (only if safe)	TSL Condition	Significant Food Resource*	TSL Condition
High	12	5.6g)i	12	5.6h)i	0	5.6l	0	5.6j	0	5.6 k
Medium	8	5.6g)ii	8	5.6 h)ii	0	5.6 l	0	5.6j	0	5.6 k
Low	4	5.6g)iii	4	5.6 h)iii	0	5.6 l	0	5.6j	0	5.6 k

0 - Condition applies

*11 Glossy black cockatoo feed trees occur within compartments 265 and 266 at locations shown in the table below. Note all of these are within the excluded forest area.

Species	Feature	Zone	GDA Easting	GDA Northing	Comments
Glossy Black-Cockatoo	Feed tree	55	733507	5860560	Marked with orange tape
Glossy Black-Cockatoo	Feed tree	55	733944	5860723	Marked with orange tape
Glossy Black-Cockatoo	Feed tree	55	733939	5860736	Marked with orange tape
Glossy Black-Cockatoo	Feed tree	55	733526	5860709	Marked with orange tape
Glossy Black-Cockatoo	Feed tree	55	733200	5860789	Marked with orange tape
Glossy Black-Cockatoo	Feed tree	55	733110	5861143	Marked with orange tape
Glossy Black-Cockatoo	Feed tree	55	733136	5860955	Marked with orange tape
Glossy Black-Cockatoo	Feed tree	55	733164	5860927	Marked with orange tape
Glossy Black-Cockatoo	Feed tree	55	733304	5861689	Marked with orange tape
Glossy Black-Cockatoo	Feed tree	55	733319	5861723	Marked with orange tape
Glossy Black-Cockatoo	Feed tree	55	733976	5860692	Marked with orange tape

General exclusion zones

General exclusions as listed below are shown on the HPOM.

Feature/Condition	TSL cond'n	Occurs within Planning Unit
Rainforest	5.4	Rainforest is not mapped within the compartments#.
Riparian Protection Zones	5.7	Yes
Ridge & Headwater Habitat	5.8	Yes (40m total width)
Wetlands	5.9	Has been assessed & is unlikely to occur in the field. May require further investigation#
Heath and Scrub	5.10	Has been assessed as a risk that it may 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 & is unlikely to occur

		<p>in the field. May require further investigation#</p> <p>Removal of timber, harvesting machinery and post harvest burning must be excluded from all areas of EEC.</p>
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#PA will continue to conduct on the ground mark-up & searches and report back to foresters/ecologists any features requiring further investigation.

General Threatened Flora and Fauna Prescriptions

Feature	Records in CPT 265 & 266	Licence conditions under the TSC Act
Threatened Frog General Protection Measures	No	5.12
Bird Nest and Roost Site Protection	No	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	NA	5.16
Ground Habitat Protection	Net planned area	5.17

Species & 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 & Inform 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 CPT 265 & 266	Licence conditions under the TSC Act or relevant Site-specific prescription
Powerful Owl <i>Ninox strenua</i> , Barking Owl <i>Ninox connivens</i> Masked Owl <i>Tyto novaehollandie</i> , Sooty Owl <i>Tyto tenebricosa</i>	No	6.3
Southern Brown Bandicoot <i>Isodon obesulus</i>	No	6.5A & Species Management Plan
Long-nosed Potoroo <i>Potorous tridactylus</i>	No	6.7
Yellow-bellied Glider <i>Petaurus australis</i>	Yes	6.13

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

The harvest area is situated on low coherence (but non dispersible) Devonian Wallagaraugh Adamellite soils which have been verified as soil regolith 2. For this harvest plan, special conditions for harvesting and snagging apply (details in table below).

Elements	Conditions
Unmapped Drainage Lines	EPL applies
Drainage Feature Protection	See HPOM for widths
Inherent Hazard Class	1
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	Special prescription for Wallagaraugh Adamellite R2 soils: No harvesting on slopes greater than 25 degrees. Note: EPL conditions relating no harvesting on IHL 4 also still apply (Schedule 4- B-Maximum Slope Limits).

<p>Slope limits for snig tracks</p>	<p>Special prescription for Wallagaraugh Adamellite R2 soils: 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>Snig Drainage Spacing</p>	<p>For snig track grades less than 20 degrees apply EPL spacing.</p> <p>Special prescription for Wallagaraugh Adamellite R2 soils: For snig track grades greater than 20 degrees, install snig track drainage at half the EPL recommended spacing.</p>

Loading Bay/Turning Circle Location

28 loading bays/turning circles are indicated on the HPOM. Field location of loading bays/turning circles 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.

Loading bay/turning circle N (Compartment 265, adjacent to coupe 18) is located in the firebreak section of a non-harvest coupe. The alternative location within coupe 18 was unsuitable as it is located downhill from a mitre drain outlet off of Broadaxe Road. Snigging will be conducted along the grassy verge of Broadaxe Road and the fire break is to be restored to original condition upon completion of operations.

Expected Felling/ Extraction & Loading Method

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

Drainage Feature Crossings

One snig track crossing (S1) and two road crossings (C1 and C5) are approved for use on drainage features. (Refer to HPOM). Crossing details are contained in Attachment 2 of this Plan. Snig track crossing details are provided below:

Crossing Name & Coordinates	Crossing details	Required Works
S1-new Easting 734048 Northing 5861221	Mapped 1 st order drainage line, occurs as a drainage depression in the field. Temporary corduroy crossing. Not class 1 or 2 Fisheries Licence aquatic habitat. Class 4 fish passage class: unlikely fish habitat.	Construct temporary corduroy crossing as per EPL. Crossing must comply with FCNSW document " <i>Operating Conditions - Temporary Snig/Extraction Track Slash Crossings of Drainage Features in Native Forest Logging Operations</i> " (attached to this plan). Construction should minimise disturbance and clearing and be at right angles to the flow unless an angled approach results in reduced disturbance. Postpone operations if wet conditions arise. Install cross banks/rollovers on completion of use within timeframes and spacing's specified in EPL. Remove corduroy upon completion of operations and apply hay and seed to disturbed areas as required.
C1 - existing Easting 733938 Northing 5860768	Mapped 3 rd order drainage line, occurs as a drainage line in the field. Permanent log bridge crossing. Not class 1 or 2 Fisheries Licence aquatic habitat. Class 4 fish passage class: unlikely fish habitat.	Construct new log bridge crossing as per EPL. Construction should minimise disturbance and clearing and be at right angles to the flow unless an angled approach results in reduced disturbance.
C5 – new Easting 733288 Northing 5862370	Mapped 1 st order drainage line. There is no drainage feature in the field as defined by the EPL.	No crossing required.

Mass Movement

Compartments 265 & 266 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 boundary 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 boundary may be used with PA approval for snigging or extraction provided they are drained to EPL specifications.

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 265 and 266 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 stopping 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 the 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					
Mapped Drainage					
Rainforest					
Rocky outcrops					
Wetlands					
Cultural Heritage					
Existing Roads					
New Roads	Yes	New			
Heath					
Powerlines etc					
Other (state what it					

is)					
-----	--	--	--	--	--

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. _____

Clearance Certificate

COMPARTMENTS: 265 & 266

YAMBULLA STATE FOREST, SOUTHERN REGION

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 Roding Coordinator 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 compartment 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)

ATTACHMENT 2	ROADING PLAN
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Summary of Roding Requirements

Feature	Details	Works Required
Existing roads to be used.	7,607m/8	Yes
New roads to be constructed	1,053m/7	Yes
Existing crossings used	1	Yes
New crossings to be constructed	0	NA
Length of road >10°	160m	Yes
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 Roding Coordinator must be recorded and passed onto the PA 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
Border Trail Link 2	<p>Re-shape entire length. Crown road, remove roll-overs, re-establish table drains, and install drainage as per EPL requirements. Replace roll over drains with rubber flaps or mitre drains as required.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
C1	<p>Remove remaining deck and stringers. Retain mud logs for fill stabilization. Install one new mud log on either side of crossing approximately 1.4m back from drainage feature. Apply rock between mudlogs to support fill. Install new deck with geotextile, new kerb and wing logs. Apply mulch, hay and seed on recently scoured area downstream of crossing. Install rubber flaps either side of crossing and maintain existing mitre drains.</p> <p>RC/PA Comments:</p>			
265_1	<p>Remove vegetation. Re-shape entire length. Crown road, remove roll-overs, re-establish table drains, and install drainage as per EPL</p>			

	<p>requirements. Replace roll over drains with rubber flaps or mitre drains as required.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
265_3	<p>Refer to New Road Construction form.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
265_4	<p>Refer to New Road Construction form.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
265_5	<p>Refer to New Road Construction form.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
265_6	<p>Remove vegetation. Re-shape entire length. Crown road, remove roll-overs, re-establish table drains, and install drainage as per EPL requirements. Replace roll over drains with rubber flaps or mitre drains as required.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
266_1	<p>Refer to New Road Construction form.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
Border Trail	<p>Re-shape entire length. Crown road, remove roll-overs, re-establish table drains, and install drainage as per EPL requirements. Replace roll over drains with rubber flaps or mitre drains as required.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
266_2	<p>Re-shape entire length. Crown road, re-establish table drains, and install drainage as per EPL requirements.</p> <p>Clear vegetation up to 3m either side of</p>			

	<p>pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
266_2a	<p>Refer to New Road Construction form.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
266_3	<p>Re-shape entire length. Crown road, re-establish table drains, and install drainage as per EPL requirements.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
266_4	<p>Refer to New Road Construction form.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
266_5	<p>Remove vegetation. Re-shape entire length. Crown road, remove roll-overs, re-establish table drains, and install drainage as per EPL requirements. Replace roll over drains with rubber flaps or mitre drains as required.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
266_6	<p>Remove vegetation. Re-shape entire length. Crown road, remove roll-overs, re-establish table drains, and install drainage as per EPL requirements. Replace roll over drains with rubber flaps or mitre drains as required.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>RC/PA Comments:</p>			
266_7	<p>Refer to New Road Construction form.</p> <p>Clear vegetation up to 3m either side of pavement to facilitate truck movements.</p> <p>Restore fire break to original condition upon completion of operations.</p> <p>RC/PA Comments:</p>			

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
265_3	217m	5m	4°	2°	NA	NA	No	Retain	Contractor		
265_4	158m	5m	7°	3°	NA	NA	No	Retain	Contractor		
265_5	34m	5m	0°	0°	NA	NA	No	Retain	Contractor		
266_1	103m	5m	8°	6°	NA	NA	No	Retain	Contractor		
266_2a	58m	5m	2°	4°	NA	NA	No	Retain	Contractor		
266_4	289m	6m	10°	16°	0.4m	134m	No	Retain	Contractor		
266_7	194m	5m	7°	3°	NA	NA	No	Temp	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. PA 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	

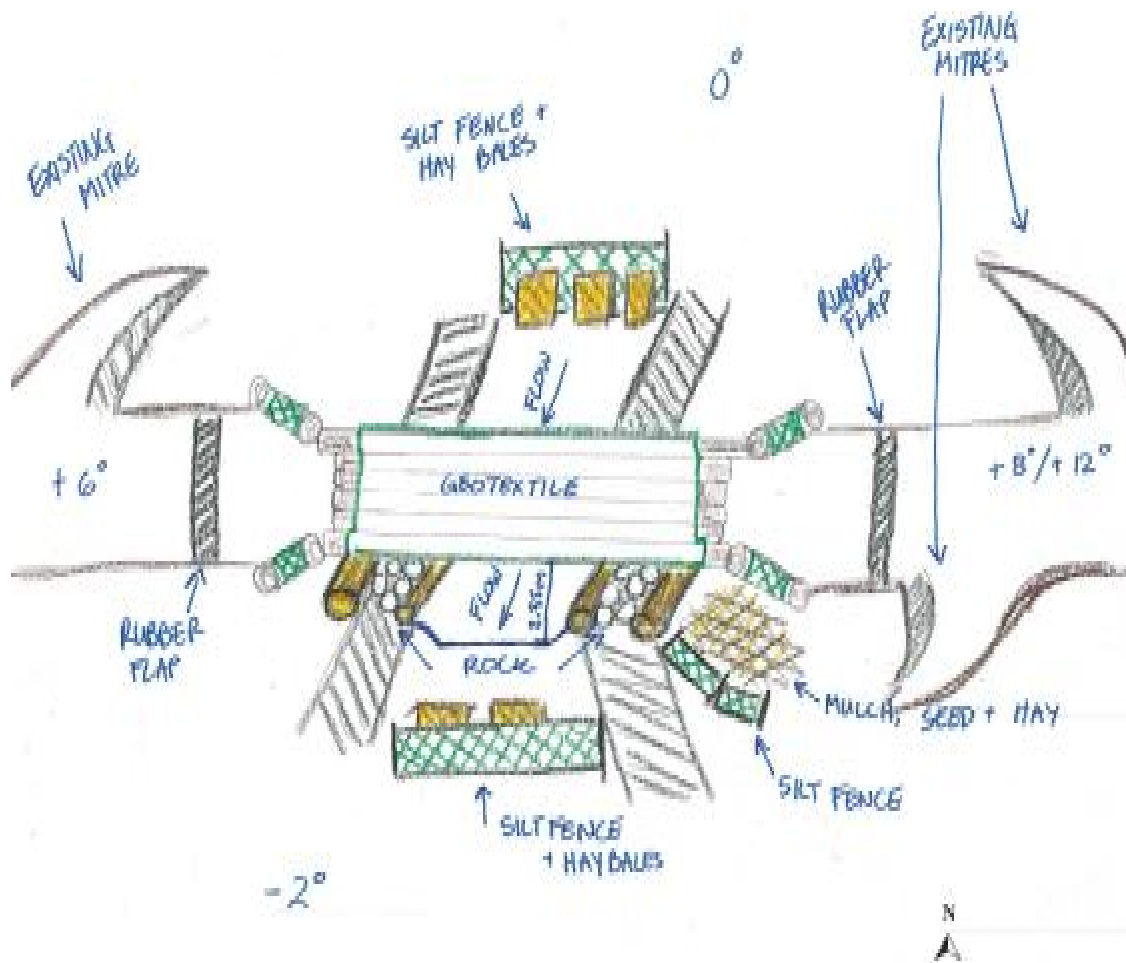
Note: Maintenance works not completed by Roding Coordinator must be recorded and passed on to the PA.

Forest: Yambulla **Cpt:** 265 **Date:** 11/12/14 **Photo:** Yes

CROSSING NAME: C1 DL, (mapped DL)
 Waterway Classification: Fish Passage Class 2-Moderate Fish habitat
 Fisheries Licence Aquatic Not class 1 or 2

Assessors Name: Megan Costello **Crossing Type:** Existing Bridge - Retain

Features	Works (As per EPL Schedule 5)	Plant/Materials
Structure	Remove remnants of old structure and debris. Retain existing bedlogs. Install new bedlogs approximately 1.4m back from old bedlogs. Install rock between bedlogs to stabilize fill. New deck to be installed so that it is raised 0.65m higher than old bridge. Earth surface	6-8 stringers (10.5m) 2 mud logs (5m) Excavator, supervision & labour
Bed and Banks	Downstream bank recently scoured out due to eddies. Established vegetation uprooted due to flood event. Install silt fence if required and spread seed and mulch over disturbed area.	Silt fence (as required) Mulch, seed, and hay.
Erosion and Sediment Control	Install kerb logs and wing logs on both sides of the bridge. Cover bridge deck with geo-textile and secure to kerb logs. Install silt fences on either side with hay bales.	2 kerb logs – 9m length 2 wing logs – 4m in length Geotextile 2 Silt fences Hay bales as required Excavator, labour
Disposal of excess spoil	Outside Stream Exclusion Zone. Flat area uphill on west side of crossing suitable for spoil and old deck logs and stringers	Excavator
Soil Stabilisation within 20m	NA.	NA.
Road drainage within 5-30m <ul style="list-style-type: none"> • Type • outlet control • table drain checking devices 	Mitre drains and rubber flaps Vegetation Vegetation and hay bales if required	2 x rubber flaps Excavator



Date Work Started: _____

Date Work Finished: _____

Soil stabilisation must be completed within 5 days

Record implementation date here: _____

Key

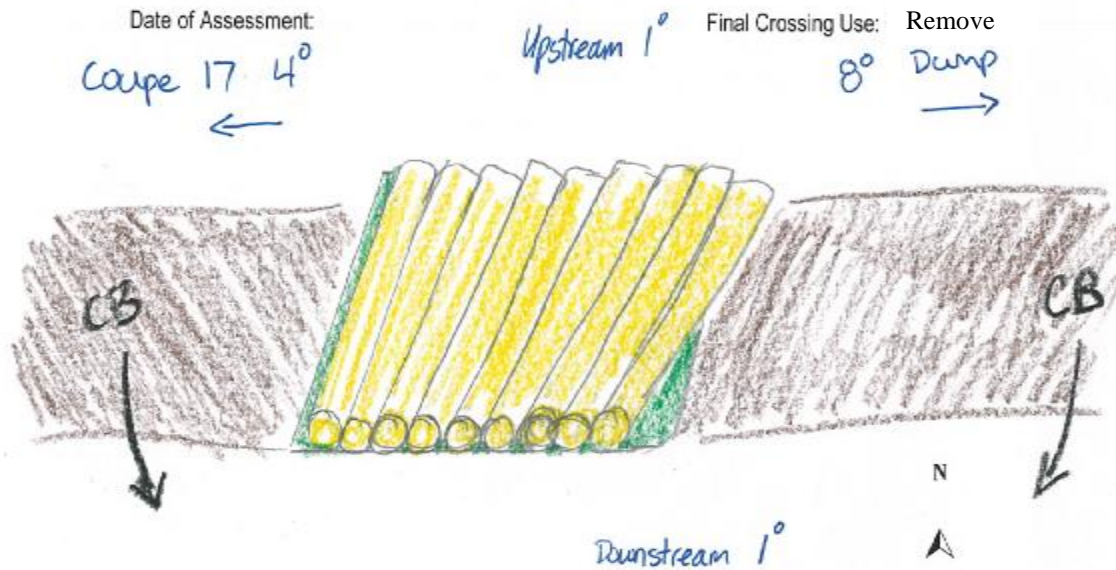
→Ru	Rubber strip
→M	Mitre drain
xxx	Roadside clearing
→Ho	Hollover drain
I	Sill Log
*****	Rock
∩	Seeding
V	Sediment control
::	Gravel

Forest: Yambulla **Cpt:** 265 **Date:** 4/12/2014 **Photo:** Yes

Crossing Name: S1 DD (mapped)
 Waterway Classification: Fish Passage Class 4- Unlikely fish habitat
 Fisheries Licence Aquatic Habitat: Not class 1 or 2

Assessors Name: Megan Costello **Crossing Type:** New Causeway

Features	Works (As per EPL Schedule 5)	Plant/Materials
Structure	Install geotextile and corduroy along bed of drainage depression	forwarder corduroy geotextile
Bed and Banks	Stable at time of assessment? Y	NA.
Erosion and Sediment Control	Remove once operations are complete. Apply seed and hay to affected area.	Seed Hay forwarder
Disposal of excess spoil	Outside Stream Exclusion Zone.	
Soil Stabilisation within 20m	NA.	NA.
Track drainage within 5-20m <ul style="list-style-type: none"> • Type • outlet control • table drain checking devices 	Install crossbank drainage either side of crossing within 5-20m Existing vegetation NA	



Date Work Started: _____

Date Work Finished: _____

Soil stabilisation must be completed within 5 days

Record implementation date here: _____

Key

→Ru	Rubber strip
→M	Mitre drain
xxx	Roadside clearing
→Ro	Rollover drain
I	Sill Log
oooo	Rock
v	Seeding
V	Sediment control
::	Gravel

→CB = crossbank