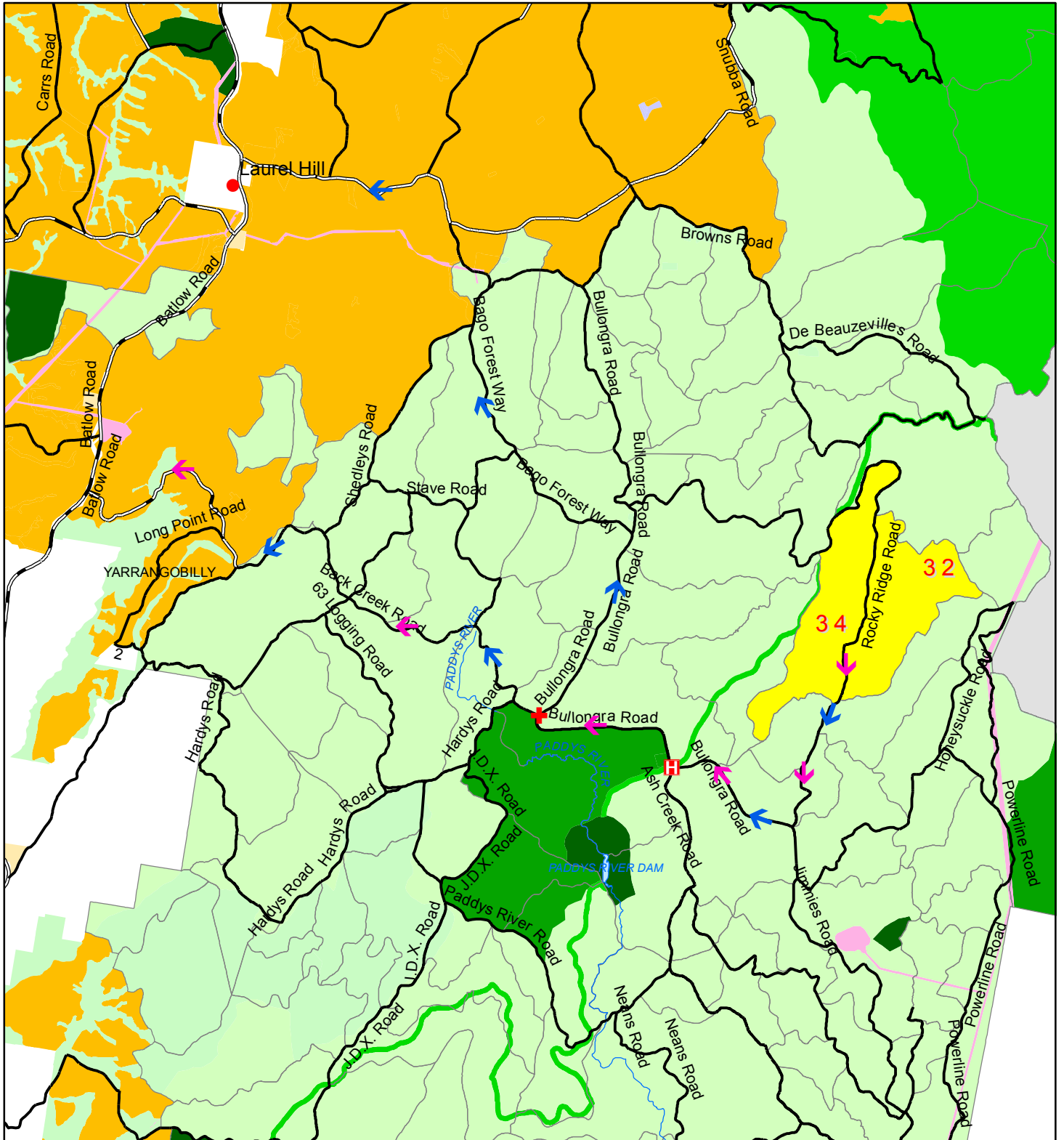


LOCALITY MAP

Compartments: 32 & 34
 State Forest: BAGO No: 560
 SOUTHERN IFOA TUMUT MANAGEMENT AREA
 Scale: 1:100,000



Towns & Localities	State Forest	National Parks	Emergency Meeting Point
Sealed Road	Planning Unit	Formal Reserve	Helicopter Landing Area
Major Forest Road	Vacant Crown Land	Informal Reserve	Evacuation Route
Minor Forest Road	Non Forest	Softwood Plantations	Haulage Route
Major Rivers	Freehold	Water	

Harvest Plan Operational Map

Compartments: 32 & 34

State Forest: BAGO No. 560

Southern IFOA - Tumut

Map Sheet: COURABYRA 8526-4S

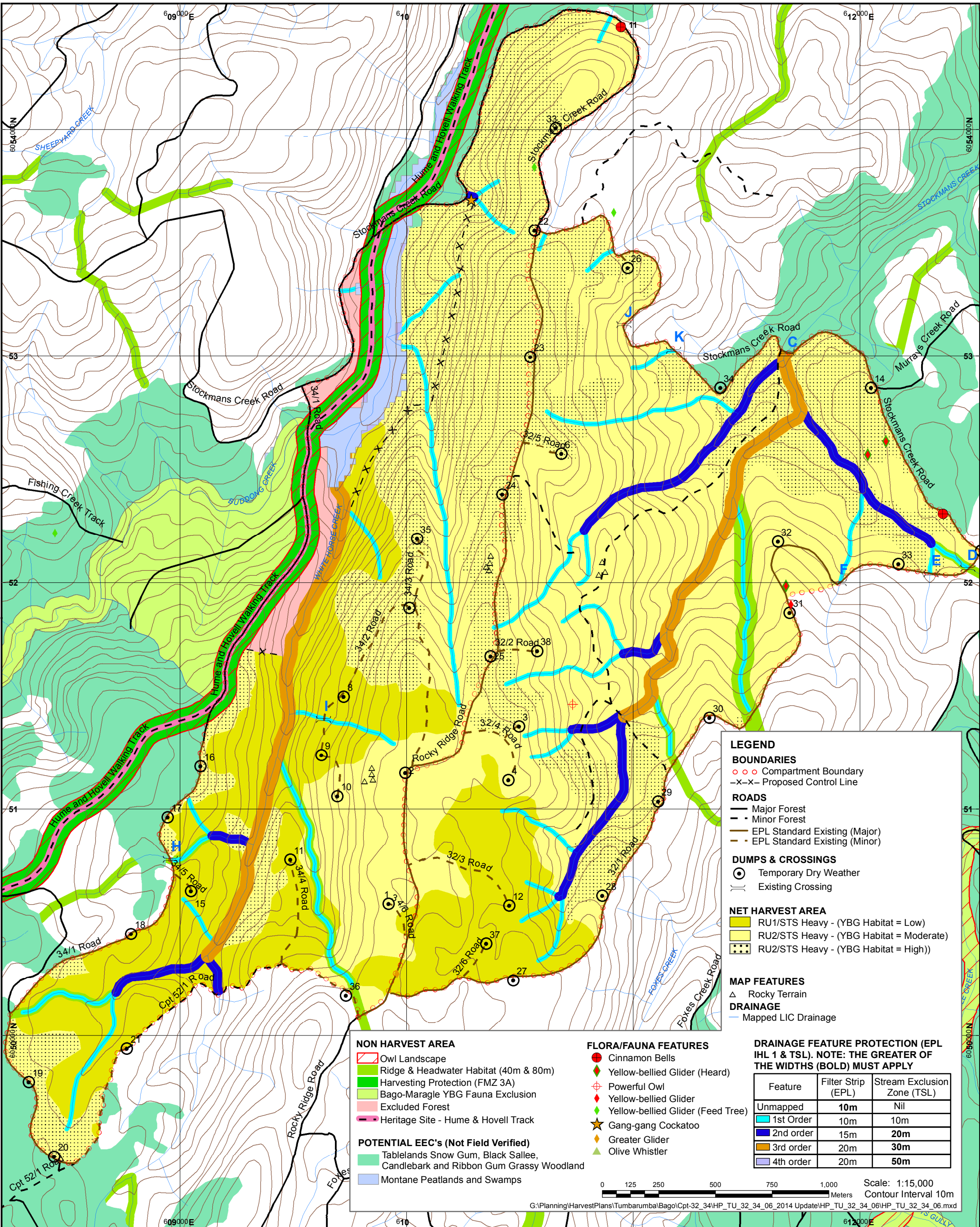


Version: 2

PLANNING SUPERVISOR APPROVAL

APPROVED: LEE BLESSINGTON

DATE: 01/06/2015



LEGEND

BOUNDARIES
 ○ ○ ○ ○ Compartment Boundary
 -x-x- Proposed Control Line

ROADS
 — Major Forest
 - - Minor Forest
 — EPL Standard Existing (Major)
 - - EPL Standard Existing (Minor)

DUMPS & CROSSINGS
 ⊙ Temporary Dry Weather
 ≡ Existing Crossing

NET HARVEST AREA
 ■ RU1/STS Heavy - (YBG Habitat = Low)
 ■ RU2/STS Heavy - (YBG Habitat = Moderate)
 ■ RU2/STS Heavy - (YBG Habitat = High)

MAP FEATURES
 △ Rocky Terrain

DRAINAGE
 — Mapped LIC Drainage

NON HARVEST AREA

- Owl Landscape
- Ridge & Headwater Habitat (40m & 80m)
- Harvesting Protection (FMZ 3A)
- Bago-Maragle YBG Fauna Exclusion
- Excluded Forest
- Heritage Site - Hume & Hovell Track

POTENTIAL EEC's (Not Field Verified)

- Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland
- Montane Peatlands and Swamps

FLORA/FAUNA FEATURES

- Cinnamon Bells
- ◆ Yellow-bellied Glider (Heard)
- ⊕ Powerful Owl
- ◆ Yellow-bellied Glider
- ◆ Yellow-bellied Glider (Feed Tree)
- ★ Gang-gang Cockatoo
- ◆ Greater Glider
- ◆ Olive Whistler

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

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

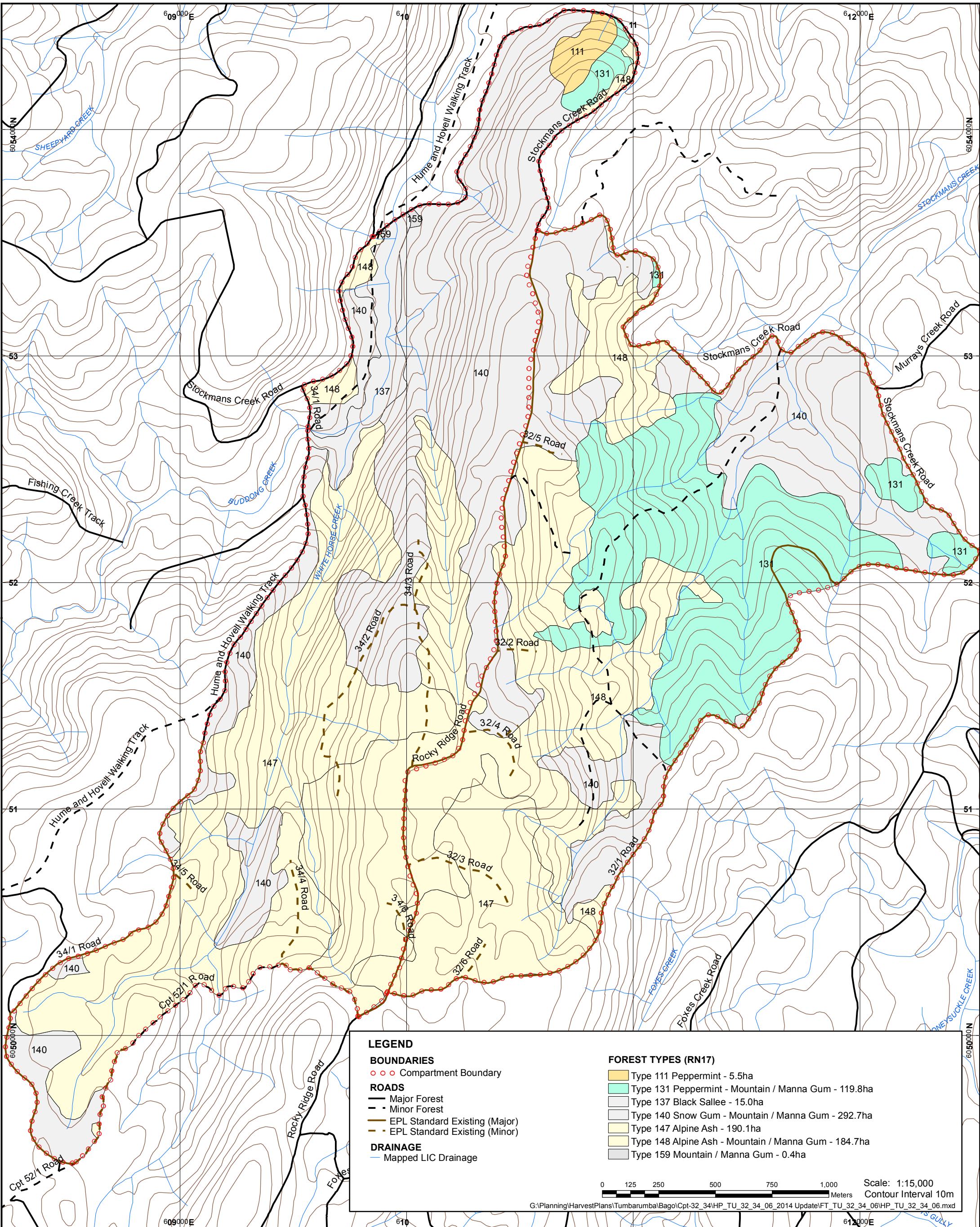
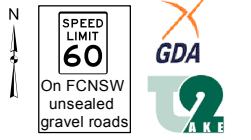
Harvest Plan Forest Type Map

Compartments: 32 & 34

State Forest: BAGO No. 560

Southern IFOA - Tumut

Map Sheet: COURABYRA 8526-43



LEGEND

BOUNDARIES

○ ○ ○ Compartment Boundary

ROADS

— Major Forest

- - Minor Forest

— EPL Standard Existing (Major)

- - EPL Standard Existing (Minor)

DRAINAGE

— Mapped LIC Drainage

FOREST TYPES (RN17)

Type 111 Peppermint - 5.5ha

Type 131 Peppermint - Mountain / Manna Gum - 119.8ha

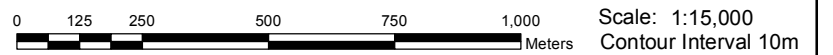
Type 137 Black Sallee - 15.0ha

Type 140 Snow Gum - Mountain / Manna Gum - 292.7ha

Type 147 Alpine Ash - 190.1ha

Type 148 Alpine Ash - Mountain / Manna Gum - 184.7ha

Type 159 Mountain / Manna Gum - 0.4ha





**HARDWOOD FORESTS- SOUTHERN IFOA
TUMUT HARVESTING PLAN**

Bago State Forest - Compartments 32 & 34

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 Tumut apply to this operation.

Prepared By: Planner	Lee Blessington	Updated and Approved By: Planning Supervisor	Lee Blessington
Signature	Lee Blessington	Signature	
Date	04/09/2006	Date	01/06/2015

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.

Description of Proposal

Harvesting of Hardwood forest

Harvesting of Hardwood forest using Single Tree Selection Silviculture subject to the Southern IFOA requirements will be undertaken within this planning unit. **Timber harvesting will not be licensed under the EPL.**

The primary product of the harvesting is high quality large sawlogs (quota logs), small high quality sawlogs, veneer logs, girders, poles & piles where timber markets are available. Parts of felled logs that do not meet high quality log specifications are segregated and graded into other classifications such as salvage sawlogs, pulp logs & miscellaneous timbers e.g. split & round posts, firewood, mining timbers & craftwood. The availability of miscellaneous timbers depends mainly on forest types, log defectiveness & market conditions at the time of harvesting.

Clause 22 – Integrated Forestry Operations Approval (IFOA) Consideration

All relevant factors have been reviewed taking into account the volume and monetary value of each forest product to supply Term Agreement Holders. The harvesting operation also complies with Clause 22 of the 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, HC= Harvesting Coordinator, PtS= Protection Supervisor, P & SS = Production & Stewardship Supervisor, RC = Rooding Coordinator, IFOA = Integrated Forestry Operations Approval.

Area Identification and Yield Estimates

State Forest	Compartment/s	IFOA Region	Management Area	Certification
Bago	32 & 34	Southern	Tumut	AS4708:2007 ISO 14001

	Cpt	Cpt	Total
Plan Compartment ID	12100	12101	NA
Gross Area (ha)	393	413	806
Net Harvestable Area (ha)	345	338	683
Harvest Area (ha)	345	338	683
Quota Logs (HQL)	5000 m ³	4300 m ³	9300 m ³
High Quality Small	1400 m ³	1250 m ³	2650 m ³
Salvage	4500 t	4050 m ³	8550 m ³
Residue/Firewood/Misc	6000 t	5000 t	11000 t

Note: The yield estimates in the table above are derived from the Plan of Operations.

Slope Classes (percent of harvest area)

Slope Class	Cpt 32	Cpt 34
	% of harvest area	% of harvest area
0-20°	99.9	93.1
20-25 °	0.1	6.1
25-30 °	0	0.8



ATTACHMENT 1: SITE SAFETY PLAN

Worksite Information			
Is this Declared Hunting Area: Yes		Comments: Cpt 32 is open for hunting, cpt 34 is covered by a hunting exclusion zone.	
Have Exclusion Zone signs been erected or checked prior to starting work daily.		Yes / No	
Comments: If any works conducted in compartment 32, signage must be erected.			
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			
This plan identifies haulage will be south from the compartments along Rocky Ridge Road turning right onto Bullongra Road) then either left onto Back Creek Road or Bago Forest Way (then left onto Kopsens Road) to Batlow Road. The intersections of Back Creek Road and Kopsens Road with Batlow Road have 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.			
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. Implement Traffic Control plans (where specified in this harvest plan). 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. Brumbies: May pose a threat when isolated or with foal.	Cease work until brumbies have moved on; Maintain awareness of animal movements when hauling.		

- **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: Poor	GSM: N/A	Satellite: N/A	
GPS Lat/Long: 35° 40' 38" S / 148° 12' 54" E	MGA: 609972E / 6051156N	Datum: GDA 94	Zone: 55
Location description: Dump 2, Compartment 34, Rocky Ridge Road			
Emergency meeting point for ambulance / police (refer to attached locality map)			
GPS Lat/Long: 35° 41' 21" S / 148° 09' 14" E	MGA: 604417E 6049897N	Datum: GDA 94	Zone: 55
Location description: Intersection of Bullongra Road and Back Creek Road.			
Helicopter landing place (refer to attached locality map)			
GPS Lat/Long: 35° 41' 50" S 148° 10' 51" E			
Location description: Intersection of Bullongra Road and Ash Creek Road.			
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: 101 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: Bago Nearest town or locality: Laurel Hill Nearest ambulance station: Tumbarumba	
3. Address?		Bullongra Road	
4. Nearest road junction/cross street?		Bullongra Road and Back Creek Road	
5. Local government area?		Tumbarumba	
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. Take Batlow Rd north out of Tumbarumba for approximately 15.7km to Back Creek Road. Turn right onto Back Creek Road and travel for approximately 13.5km until arriving at the intersection of Bullongra Road. Turn right onto Bullongra Road and travel for approximately 3.2km to the intersection with Ash Creek Road.			
8. 4WD ambulance required No		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
--

Year	1965	1973	1984
TSI	X	√	X
HR Burning	X	X	X
Wildfires	X	X	X
Logging m³	8000	0	5100

√ - applies, X – not applicable

Compartment	No. of Sweeps	BA Average (m ² /ha)	BA Range (m ² /ha)
32	21	30	16 - 46
34	21	28	14 - 46

Silviculture Prescription

Forest stands of mixed age cover 100% of the compartment and will be harvested under a heavy single tree selection (STS) regime with the objective of removing approx 35% of mature trees and defective trees containing a sawlog, while minimising damage to young regenerating stems, and creating canopy openings where appropriate for regeneration.

It is envisaged that the next harvesting operation in these compartment would be in approximately 20 years time.

The STS tract for IFOA purposes includes the part of compartments 32 & 34 as indicated on the HPOM.

Single tree selection (STS) must remove no more than 35% of the basal area (BA), while retaining a minimum BA of 10m² within the tract.

Resource Unit (Refer to HPOM for detail)	Species Composition	Stand Structure and Condition
1	Overstorey dominated by Alpine Ash (<i>E. delegatensis</i>). Other species include Mountain Gum (<i>E. dalrympleana</i>) and Manna Gum (<i>E. viminalis</i>).	Predominantly even-aged and fully stocked, although some scattered regeneration from past operations exists, forming several age classes. Mostly mature overstorey but with scattered advanced regrowth.
2	Overstorey dominated by Mountain Gum (<i>E. dalrympleana</i>) and Manna Gum (<i>E. viminalis</i>). Other species include Snow Gum (<i>E. pauciflora</i>).	Uneven-aged, typically over-mature, degenerating overstorey. Generally large diameter, high defect logs. Some larger patches of advanced Mountain Gum regrowth exists, which is of good form and vigour. Unmerchantable Snow Gum dominates the lower stratum with

Resource Unit (Refer to HPOM for detail)	Species Composition	Stand Structure and Condition
		small, scattered patches of pure Snow Gum.

Harvesting Prescription

Resource Unit (Refer to HPOM for detail)	% of NHA	Silvicultural Treatment
1	25%	<p>STS heavy:</p> <ul style="list-style-type: none"> • Retain and protect from harvesting/fire damage: <ul style="list-style-type: none"> -poles/advanced growth (<40cm DBHOB) with good form and vigour, -habitat and recruitment trees as per TSL. • Retained trees should be evenly spaced. • Ensure no more than 35% of the BA is removed, while retaining a minimum BA of 10m² within the tract. • All other products should be removed markets permitting. If this objective cannot be achieved the following options should be considered: <ul style="list-style-type: none"> -reject tree felling (PA must first obtain approval from P & SS), -defer harvesting until ideal market conditions prevail, -consider harvesting under a light or medium STS regime
2	75%	<p>STS heavy:</p> <ul style="list-style-type: none"> • Retain and protect from harvesting/fire damage: <ul style="list-style-type: none"> -poles/advanced growth (<40cm DBHOB) with good form and vigour, -habitat and recruitment trees as per TSL. • Retained trees should be evenly spaced. • Ensure no more than 35% of the BA is removed, while retaining a minimum BA of 10m² within the tract. • All other products should be removed markets permitting. If this objective cannot be achieved the following options should be considered: <ul style="list-style-type: none"> -reject tree felling (PA must first obtain approval from P & SS), -defer harvesting until ideal market conditions prevail, -consider harvesting under a light or medium STS regime

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

Special Requirements

Permanent Growth and Research Plots

Permanent Growth Plots – A PGP (PAB 111) is located in south western portion of compartment 34 (see HPOM). The PGP is to be treated the same as the surrounding harvested area. The PA must collect all metal measurement tags from trees fallen during harvesting and return them to the Resources and Tactical Planning Manager.

Research Plots – An ESFM (ESM BM107) plot is located in the eastern portion of compartment 32 (see HPOM). Standard harvesting prescriptions apply.

Any other inventory plots located during the harvesting operation which are not shown on the HPOM or described above are to be treated the same as the surrounding area.

Road Works

Within the compartment boundaries only roads that are shown on the HPOM as EPL standard or sealed may be used for haulage.

Occupation Permits

Apiary

[Redacted text]

[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]
[Redacted]	[Redacted]	[Redacted]	[Redacted]

[Redacted text]

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 Planner/Field Ecologist any feature requiring further investigation.

Forest Management Zoning

FMZ 3A Harvesting Excluded and FMZ 4- General Management (normal harvesting prescriptions apply) occur within the compartment. Refer to HPOM for more detail.

FMZ 3A — Logging operations are restricted as per condition 18(b) of the IFOA. Refer to Harvest Plan Standard Conditions for Hardwood Forest Operations in Tumut for detail of what logging operations are permitted in this zone.

FMZ 3A – 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 Planner must be contacted to seek Planning Supervisor approval.

Stream Exclusion Zones require prior Planning Supervisor approval before forest harvesting related activities (eg: 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 must then contact the Planner to obtain the necessary approval.

Cultural Heritage



Flora and Fauna

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*), **Eastern False Pipistrelle** (*Falsistrellus tasmaniensis*), **Pink Robin** (*Petroica rodinogaster*), **Varied Sittella** (*Daphoenositta chrysoptera*), **Flame Robin** (*Petroica phoenicea*), **Scarlet Robin** (*Petroica boodang*), **Gang Gang Cockatoo** (*Callocephalon fimbriatum*)

8.2 Tree Retention

Zone	Hollow bearing Trees/ha	Recruitment Trees /ha	Protection of Retained Trees	Dead Standing Trees (only if safe)	Significant Food Resource*	High Quality Habitat	YPG PMP additional hollow bearing tree retention/ha (in addition to TSL requirements): Moderate Quality Habitat
Regrowth	Up to 5	1 for every tree retained under 5.3d	√	√	√	√ +5	√ +3
TSL condition	5.3d	5.3e	5.3h	5.3f	5.3 g	N/A refer to PMP	N/A refer to PMP

√ = condition applies to planning unit.
 X = condition does not apply to planning unit.

*A Yellow Bellied Glider sap feed tree, occurs within compartment 34 at the location shown in the table below.

Species	Feature	Zone	GDA Easting	GDA Northing	Comments
Yellow Bellied Glider	Feed tree	55	610563	6053834	Record from 2003

General exclusion zones

General exclusions as listed below are shown on the HPOM.

Feature/Condition	TSL cond'n	Occurs within Planning Unit
Stream Exclusion Zones	5.4	Yes
Ridge & Headwater Habitat	5.5	Yes
Wetlands	5.6	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Heath and Scrub	5.7	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Rocky Outcrops and Cliffs	5.8	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Endangered Ecological Community	NA	Has been assessed as a risk that EEC may occur in the field. May require further investigation#. Harvesting, harvesting machinery and post harvest burning must be excluded from all areas of mapped EEC. Field verification and a plan amendment must be done before removing any mapped EEC.

#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 32 & 34	Licence conditions under the TSC Act
Threatened Frog General Protection Measures	no	5.9
Bird Nest and Roost Site Protection	no	5.10
Tree Bat Roost Protection	no	5.11.1
Subterranean Roost Protection	no	5.11.2
Protection of Flying-fox camps	no	5.11.3
Burning	Net planned area	5.13
Ground Habitat Protection	Net planned area	5.14

Species & Site-Specific Threatened Flora and Fauna Prescriptions

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 32 & 34	Licence conditions under the TSC Act or relevant Site-specific prescription
Powerful Owl <i>Ninox strenua</i>	Yes	6.1
Yellow-bellied Glider <i>Petaurus australis</i>	Yes	6.8 Population Management Plan Bago Plateau applies to these compartments. In addition to conditions specified in the TSL, the following conditions from the Population Management apply (refer to HPOM for detail): -High quality habitat (additional tree retention conditions apply) -Moderate quality habitat (additional tree retention conditions apply) -Forest types not considered suitable for YBG habitat (no additional tree retention conditions apply).

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	Not licenced: refer to Drainage Feature Protection below.
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
Snig Tracks	Refer relevant conditions for IHL
Roads	See Schedule 5 of EPL Booklet

Drainage Feature Protection

Filter strips (EPL) and Stream Exclusion Zones (TSL) must be retained along all drainage lines, prescribed streams and watercourses within the net planned area of the compartments at minimum widths as stated in the Table below.

(**Bold** indicates widest zone (metres) to apply)

Stream Order	Inherent Hazard <u>Level 1</u> Filter Strip (EPL)	Stream Exclusion Zone (TSL)
Unmapped drainage lines	10	0
1st order	10	10
2nd order	15	20
3rd order	20	30
4th order or greater	20	50

Log Dump Location

38 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.

Mass Movement

Compartments 32 & 34 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 or road crossings in the compartments.

Condition 47 of Schedule 4 of the EPL must apply.

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 32 & 34. 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 2, FMZ3A	

The table below lists critical boundaries in compartments 32 & 34. 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, PA must instruct contractor to construct a bare earth break (drained as per EPL snig track conditions) as close as possible to the critical boundary.

Critical boundary	Completed Yes /No
EEC	

Pre-Operational Briefing

I acknowledge that I have received a copy of the Harvesting Plan for Compartments 32 & 34 in Bago 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 P & SS or his/her delegate.

Position	Name	Signature	Date

Post Harvest Mapping Features Confirmation Checklist

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

Clearance Certificate

COMPARTMENTS: 32 & 34, BAGO STATE FOREST

ToPA

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)

Signed(Date).....
PA

Post Logging Information

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

Summary of silvicultural treatment

Treatment type	Area (ha) subject to treatment (Contract Coordinator estimate)	Number of AGS gaps created	Comments
Australian Group Selection			
Single Tree Selection			
Thinning/Spacing			
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.

Post Logging Basal Area sweeps

Sample point	GPS (GDA 94)	Pre-harvest (B) BA m ² /ha	Post-harvest(A) BA m ² /ha	Difference (D) (B – A) m ² /ha	% BA removed D/B x100	Comments
1	xxxxxxE xxxxxx N					
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
Total Averages						

Comply with maximum STS BA removal of 35% or Thinning BA removal of 60% Y/N

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
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Summary of Roding Requirements

Feature	Details	Works Required
Existing roads to be used.	20262m/16	Yes
New roads to be constructed	0	NA
Existing crossings used	8	Yes
New crossings to be constructed	0	NA
Length of road >10°	78m	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 prior to harvesting must be recorded and passed onto the PA for completion during harvesting and documented.

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
Stockmans Creek	Grade road surface, maintain existing mitre & pipe culvert drainage, install road drainage as stated below (and marked in the field). <ul style="list-style-type: none"> • Grader (19 hours) • 15 Rubber Flaps + Machine Hire (7.5 Hours) 			
32/1 Road	Grade road surface, maintain existing mitre & pipe culvert drainage, install road drainage as stated below (and marked in the field). <ul style="list-style-type: none"> • Grader (20 hours) • 4 Rubber Flaps + Machine Hire (2 Hours) 			
32/2 Road	Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field). <ul style="list-style-type: none"> • Dozer (2 hours) + Grader (1 hour) • Drainage structures as required 			
32/3 Road	Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field). <ul style="list-style-type: none"> • Dozer (3 hours) + Grader (3 hours) • Drainage structures as required 			
32/4 Road	Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field). <ul style="list-style-type: none"> • Dozer (3 hours) + Grader (3 hours) • Drainage structures as required 			
32/5 Road	Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field). <ul style="list-style-type: none"> • Dozer (1 hours) + Grader (2 hours) • Drainage structures as required 			
32/6 Road	Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field). <ul style="list-style-type: none"> • Dozer (1 hours) + Grader (2 hours) • Drainage structures as required 			
32/6 Road	Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field). <ul style="list-style-type: none"> • Dozer (0.5 hour) + Grader (1 hour) • Drainage structures as required 			
Rocky Ridge Road	Grade road surface, maintain existing mitre & pipe culvert drainage, install road drainage as stated below (and marked in the field). <ul style="list-style-type: none"> • Grader (18 hours) 			
34/1 Road	Grade road surface, maintain existing mitre & pipe culvert drainage, install road drainage as stated below (and marked in the field).			

	<ul style="list-style-type: none"> • Grader (11 hours) • 4 Rubber Flaps + Machine Hire (2 Hours) 			
34/2 Road	<p>Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field).</p> <ul style="list-style-type: none"> • Dozer (10 hours) + Grader (7 hours) • Drainage structures as required 			
34/3 Road	<p>Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field).</p> <ul style="list-style-type: none"> • Dozer (3 hours) + Grader (2 hours) • Drainage structures as required 			
34/4 Road	<p>Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field).</p> <ul style="list-style-type: none"> • Dozer (4 hours) + Grader (4 hours) • Drainage structures as required 			
34/5 Road	<p>Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field).</p> <ul style="list-style-type: none"> • Dozer (1 hour) + Grader (1 hour) • Drainage structures as required 			
34/6 Road	<p>Brush-off road, ensure windrows are open, install road drainage as stated below (and marked in the field).</p> <ul style="list-style-type: none"> • Dozer (2 hours) + Grader (3 hours) • Drainage structures as required 			
52/1 Road	<p>Grade road surface, maintain existing mitre & pipe culvert drainage, install road drainage as stated below (and marked in the field).</p> <ul style="list-style-type: none"> • Grader (18 hours) 			
Crossing C	Remove existing pipes and install 2 new pipes. Install approach drainage.			
Crossing D	Install rock aggregate causeway in existing crossing. Install approach drainage.			
Crossing E	Crossing stable. Install approach drainage.			
Crossing F	Install rock aggregate causeway in existing crossing. Install approach drainage.			
Crossing H	Maintain existing gully stuffer. (NOTE: stability must be inspected twice weekly. If the structure becomes unstable consult P & SS) . Install approach drainage			
Crossing I	Remove gully stuffer and install pipe. Install approach drainage.			
Crossing J	Install pipe. Construct drop down structure + dissipater. Install approach drainage.			
Crossing K	Install rock aggregate causeway in existing crossing. Install approach drainage.			