Map Sheets:

1:25,000 WOOLGOOLGA 9537-4N 1:100,000 Coffs Harbour 9537

Scale: 1:100,000

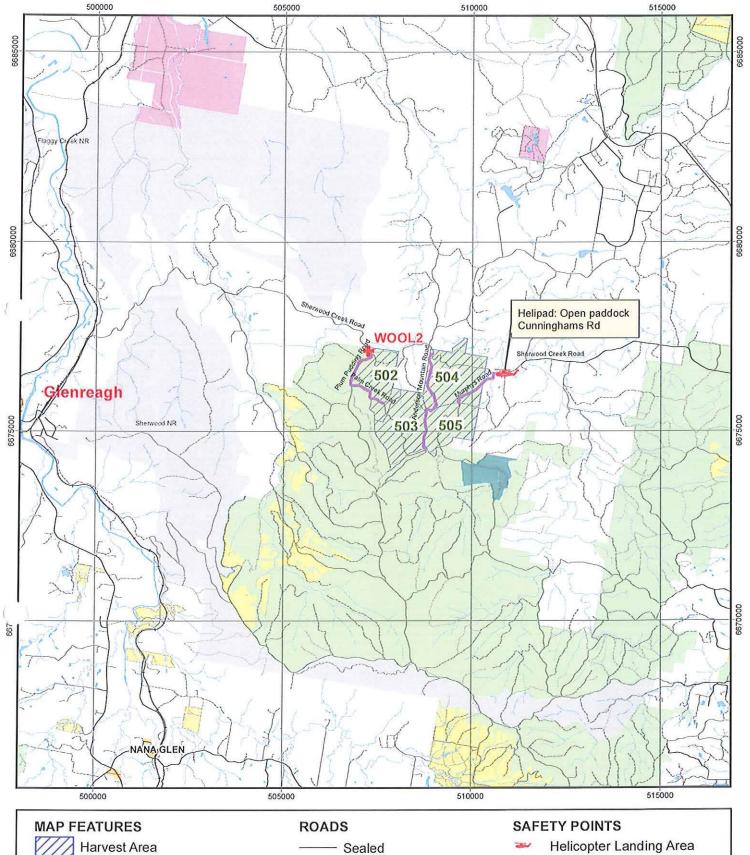
North East Region - Coffs Harbour MA Locality Map

Compartment(s): 502, 503, 504 & 505

Conglomerate SF No. 349



Datum: GCS\_GDA\_1994
Projection: GDA\_1994\_MGA\_Zone\_56





Dry Weather, Unsealed Non Haulage Roads

## North ast Region - Coffs Harbour Man ement Area Harvest Plan Operational Map Compartments 502, 503, 504 & 505 Conglomerate State Forest



Prepared by... Flavio Bugno Date:30/07/13

Scale 1:15,000 Large dam No UDL harvesting permitted 504 in Cpts 502 & 503 504/5 Trail 505 THREATENED SPECIES LOCATIONS Wompoo Fruit-Dove Large-footed Myotis (Bat) Powerful Owl Cpt 7 Logging Road Sooty Owl Glossy Black\_Cockatoo Feed Tree Grey-headed Flying-fox Glossy Black-Cockatoo Regent Honeyeater Spotted-tailed Quoll Yellow-bellied Glider Squirrel Glider TSL PRESCRIPTIONS / ZONES Niemeyera whitei Moonee Quassia (20m protection) YBG Tree Retention Zone (200m) Boronia umbellata Squirrel Glider Protection 1,500 250 500 1,000 Allocasuarina defungens (20m protection) Myotis Protection (30m either side) Meters Marsdenia longiloba (20m protection) 509000 508000 MAP FEATURES HARVESTING PROTECTION HARVESTING PRESCRIPTIONS Quarry (TSCL, EPL & FL) State Forest Boundary General Management (FMZ 4) Safety Meeting Point Areas for Further Assessment Visual Protection - 50% retention (FMZ 3B) Riparian (IHC 1 & 2) Compartment Boundary Helipad 1 Km Grid Filter 5m either side Dam 10 / 100 m Contour Protection 5m either side Premerchantable Protection 15m either side State Forest House FOREST MANAGEMENT PROTECTION Protection 25m either side Drainage Line Non Aboriginal Cultural Heritage Special Management (FMZ 2) Protection 45m either side Needlebark Stringybark Forest Type Protection (FMZ 3A) Powerline ----- Indicative Drainage Feature (Lidar) Operational zone 10m either side High Conservation Value Old Growth RIDGE & HEADWATER HABITAT Rainforest - Crafti + RN17
Indicative Slopes > 30 degrees (Lidar derived) **DUMPS & CROSSINGS** ROADS 40m wide exclusion Log Dump Shire Road Approved Crossing All Weather, Unsealed

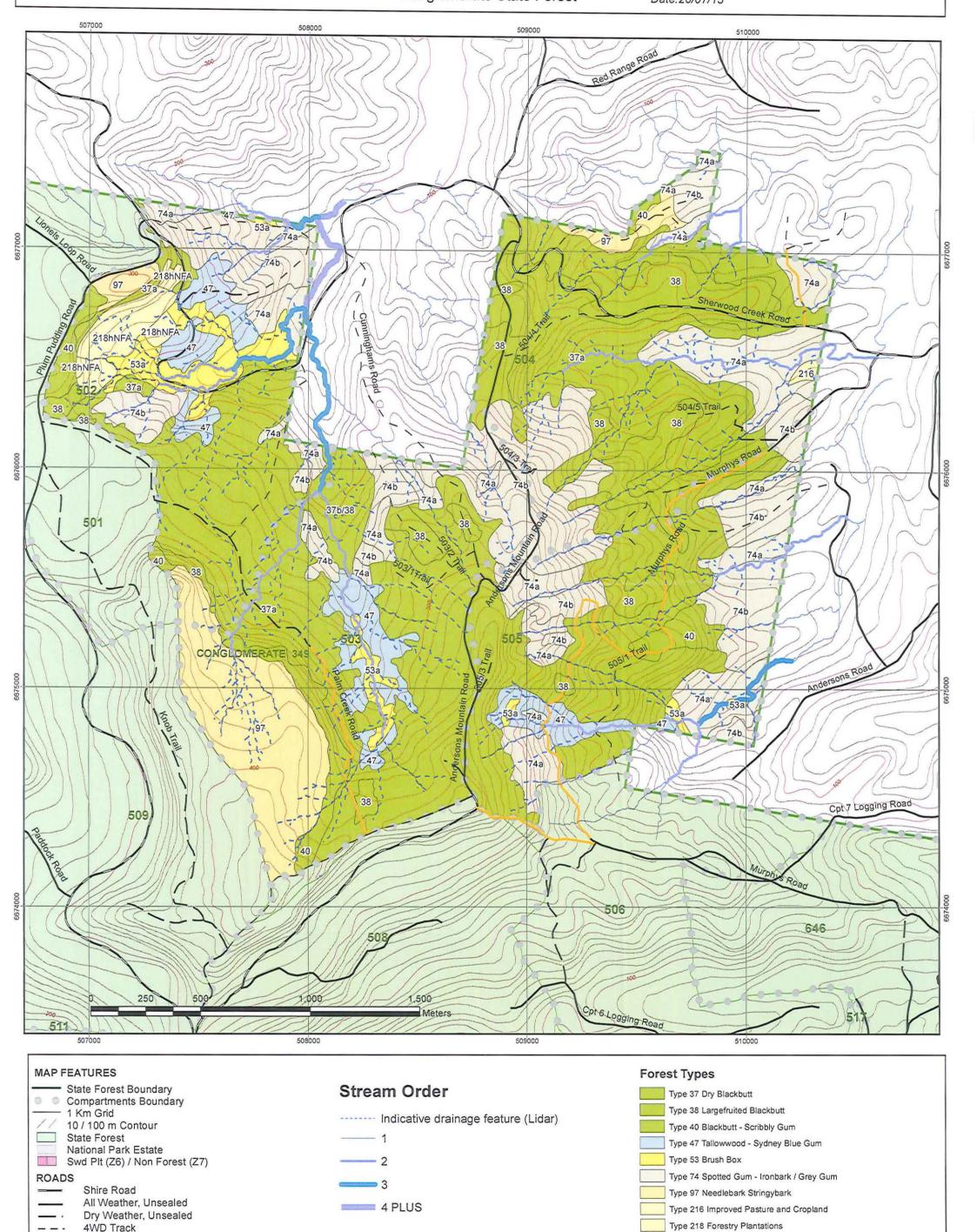
Scale 1:15,000

4WD Track

North East Region - Coffs Hr MA Harvest Plan Forest Type Map Compartments 502-505 Conglomerate State Forest



Prepared by... Flavio Bugno Date: 26/07/13



## FORESTRY CORPORATION of NEW SOUTH WALES

## NORTH EAST REGION

## HARVESTING PLAN No. 10435

## Conglomerate State Forest - Compartments 502, 503, 504 & 505

## 1. Certification

This plan has been prepared in accordance with the Integrated Forestry Operations Approval issued under the Forestry and National Park Estate Act 1998 and addresses significant aspects and impacts in the planning process. The **Standard Harvest Plan Conditions for Native Forest Operations in North East Region** apply to this operation.

Prepared by:		
Harvest Planner	.1.2	
Flavio Bugno	Bujno	Date: 30/7/13
Endorsed by:		
Harvest Planning Team		
Leader		5
		Date:
Endorsed by:		
Regional Planning		
Manager	N	Date: 07/08/13
MATT HOWAT		Date. 0 1/08/13
Approved by:		
Regional Manager	$\Omega$	
Craig Busby	Cica	Date: 7/8/13

Note: Approval includes the Harvest Plan Operational Map (HPOM) version 1.

Approval is valid until 04 March 2023.

## 2. Description of Proposal

Selective harvesting of regrowth native forest stands, using Single Tree Selection.

## Other

	Proposed	Details
Roadworks	Yes	Roadworks Plan (attached)
Post harvest Burning	No	
Rehabilitation	No	

#### 3. Area Identification and Yield Estimates

Region	North East Region	
Management Area	Coffs Harbour	
State Forest	Conglomerate	
State Forest No.	349	
Pricing area	Coffs Harbour	
Other Tenure Details (if applicable) For Lease & other non State Forest tenure (Lot/DP)	State forest only	

	Cpt 502	Cpt 503	Cpt 504	Cpt 505	Total
Gross Area (ha)	148	200	186	159	693
Net Harvest Area (ha)	113	85	142	61	401
Estimated Yield (m3/ha)	11.4	11.4	11.4	11.4	11.4
Volume (m3) All Product	1288	969	1619	695	4571

Products	Total (m3)
High Quality Large	1604
High Quality Small	521
Veneer	80
Poles	481
Low Quality	1885
Total	4571

## 4. Forest Description

## Forest Type: (See Forest type map)

- Dry Blackbutt types 37/38 are the predominant types located on mid to upper ridges. Spotted Gum dominates within this type on poorer upper slopes.
- · Spotted Gum types occur on mid to lower slopes where soils are less sandy.
- Moist Coastal Hardwood types dominating on shaded aspects and lower slopes consisting of moist shade tolerant Turpentine, Grey Gum, Blue Gum, Tallowood and Mahogany species.

 Plantation (type 218) consisting of Blackbutt and Flooded Gum will be treated as native forest in this plan.

#### Harvest History:

- These compts have been harvested several times since 1941. Sections of the Cpts were heavily TSI'd during 1978-81. A small area of BBT & FG plantation was established in the northern end of Cpt 502 in 1988.
- Last harvests for Cpts 502 & 503 in 2002, Cpt 504 in 1983 and Cpt 505 in 1996 were carried out using STS silviculture.

#### Stand Description:

#### Even Aged BBT

Advanced sapling 20-30cm dbhob regrowth resulting from heavy harvest and TSI event.

## Mixed Age BBT/SG consisting of:

- Sapling: 0-30cm dbhob regrowth from later harvests makes up 20%. And
- Pole 30-50cm dbhob component resulting from previous earlier harvest events (30%). And
- Mature 50-80cm dbhob component resulting from previous earlier harvest events (50%).

#### Site Quality

- · Generally good site quality with site height 25-35m in the south and west.
- Poorer forest type and quality progressively heading to the north or east into poorer sandy soils.

## Stand health

- Good few old defective trees in better quality TSI'd stands in southern sections of Cpts.
- · Poorer crowns and overmature defective stems in lower site quality stands in the north & east.

## 5. Silviculture and Harvesting Prescriptions

Notwithstanding the prescriptions detailed below, all conditions of the IFOA, including General and Species Specific conditions of the Threatened Species Licence and the Environment Protection Licence are to be applied, where they are described in this plan or in the respective licences.

#### Objectives:

- Maximise the recovery of merchantable timber from the mature age/size cohort within the constraints of the harvest plan
- Create suitable conditions for a regeneration event.

		Stand Description	
	Mixed age Blackbutt and Mixed aged Mixed Species	Even-aged pole sized Blackbutt	Premerchantable Areas Even-aged BBT spar regrowth, low quality stands
Treatment – current ops	Moderate STS	Thinning (see footnote below)	Exclude from harvesting
Est. % of NHA	92%	8%	0%
Expected BA Removal (%)	31% (based on tactical inventory)	Up to 50%	nil
Future Ops 10- 15 years	Thinning/STS	STS	Thinning
Other treatments	<ul> <li>Retain seed trees</li> </ul>		
	<ul> <li>Mechanical disturbance</li> </ul>		

Patches of even aged BBT are located in southern end of Cpts 503 & 505 off Andersons Mountain Road. Note tree retention conditions for visual zone in section 7.

#### Single Tree Selection prescription:

- Tree removal and ground disturbance must also maximise regeneration opportunities.
- Single Tree Selection must remove no more than 40% of the basal area across the net harvest area.
- Trees with dbhob <20cm must not be selected for harvesting under STS (1.5.10 IFOA).</li>
- BA removal may exceed 40% in some localized areas, but will be balanced by offset areas, non harvest areas and tree retention across the tract.

## Thinning Prescription:

- Harvesting will be managed with the objective of removed sub-dominant and occasional co-dominant mature trees to concentrate growth on the best form dominant and codominant trees.
- Thinning may be carried out only in even aged regrowth stands.
- No more than 60% of the sum of the basal areas of trees in the stand may be removed in any one operation.

In areas of heavy lantana/wattle off Palm Creek Road; seed tree retention, mechanical disturbance and enrichment planting may be required. The SFO must assess these areas after pre-harvest mark up and mark additional seed trees for retention where general tree retention does not retain sufficient seed trees in accordance with the spacing shown below.

The Harvesting Forester must assess these areas after harvest and is responsible for ensuring that additional mechanical disturbance to achieve satisfactory regeneration is achieved

#### Seed Tree Selection:

#### Seed trees should be

- as tall as possible (~30-40m),
- have good form,
- be in the size range 40-70cm dbhob and
- generally be spaced at 11/2 x tree height but not more than 2 x tree height. (trunk to trunk).
- Trees in retention areas may also serve as seed trees.
- Seed trees may also fulfill tree retention requirements of the TSL.

#### Mechanical Distrubance

- Ensure ground disturbance is sufficient to create suitable seedbed for regeneration
- SFO to map and recommend any areas requiring additional disturbance
- Encourage knocking over of as much non-vigourous unmerchantable material as possible.

Major variations from this intent require the approval of the Harvesting Team Leader

The SFO must monitor basal area retention under STS.

The area of each type of silvicultural treatment must be mapped and recorded in the Postlogging Information section of this plan.

### 6. Special Conditions

#### 6.1 EPL Licensing (if applicable)

## NOTE: This operation is <u>not</u> licensed.

#### 6.2 Seasonal Harvesting and Burning Restrictions

No.

## 6.3 Leases, Permits, Plots

	Occurs	Details	Conditions
Crown Leases	No		
Occupation Permits (grazing)	No		
Occupation Permits (apiary)	Yes	Sites 7, 8 & 15 (see contact details)	Harvesting should aim to minimise impact on any occupied apiary site. If the presence of hives is unduly constraining harvesting, the Harvesting Forester will consult with the permitee to ensure that the impact on harvesting is minimised.
Occupation Permits (other)	No		
PGP's	No		
Research Plots/Plus Trees	No		
Special Purpose Permits	Yes	Horse riding	Harvesting Forester to consult with permittee to ensure riding route does not impact harvesting.

#### 6.4 Noise

There are residents in close proximity to an operation that are likely to be affected by noise near Sherwood Creek Road (as shown on the operational map). Site specific operational conditions to mitigate the impact of noise on residents must be developed by the SFO and contractor in conjunction with the residents. These conditions must be approved by the Harvesting Team Leader prior to operations commencing in this area.

#### 6.5 Dust

There are residents in close proximity to an operation that are likely to be affected by dust off Murphy's Road (as shown on the operational map). Site specific operational conditions to mitigate the impact of dust on residents must be developed by the SFO and contractor and approved by the Harvesting Team Leader prior to operations commencing in this area.

## 6.6 Transmission Lines

- A transmission line traverses the northern end of Cpt502, as shown on the operational map.
- The transmission line is a 33Kv line, operated by Essential Energy.
- Appropriate safety procedures must be in place before any work is undertaken in proximity to this
  power line (see safety supplement, attached).

#### 6.7 Critical Boundaries

**Private Property**: adjoins compartments 502, 503 & 504 to the north, and compartments 504 &505 to the east. Only part of eastern boundary near Murphys Road is fenced. The remaining boundaries with PP may need to be precision surveyed. Refer to Estates Officer for assistance.

Road Reserve: Sherwood Creek Road is a Shire maintained road and dedicated road reserve. Forestry Corporation does not have timber rights to trees contained within the 20m wide road reserve. Refer to Estates Officer for assistance in locating the reserve boundaries.

Other critical boundaries: The FMZ 2 and adjacent Cpt 508 boundary is delineated by Palm Creek Road (see Condition 7 for boundaries of other FMZ zones). Compartment boundaries are delineated by

drainage lines, ridgelines and use road as boundary near sections of Anderson Mountain Road and Palm Creek Road.

- If there is any doubt about the location of a critical boundary, clarification must be sought form the Harvest Team Leader to determine the requirements for boundary mark-up.
- · Harvesting must not impact on private property or any fence line.
- · Any damage to a functional fence must be immediately repaired by the contractor.

## 6.8 Haulage Considerations

- Haulage is planned to access the Pacific Highway to the east and Glenreagh to the west via Sherwood Creek Road. This route is not to be used by B-doubles.
- School buses operate on Sherwood Creek Road. Contractors and hauliers should note school
  bus times on signage of this road and take care to avoid hauling on this road during these times.
- Additional signage should be used on Sherwood Creek Road to notify traffic of turning trucks.

#### 6.9 IFOA Required Approval Of Forestry Activities

Nil approvals required.

- NOTE: Any additional crossings of Rainforest, HCVOG and Riparian Protection Zones require prior Regional Manager (or Office of the Environment and Heritage) approval before can be undertaken.
- It is the responsibility of the SFO to identify any additional areas that need to be crossed, the location of any such crossings without approval and to contact the Planning Unit to obtain the necessary approval.

#### 6.10 Unmapped Rainforest

 Unmapped rainforest is to be identified and marked for retention in accordance with Forest Practices Circular 2005/02.

#### 6.11 Endangered Ecological Communities

Endangered Ecological Community (EEC) 'Lowland Rainforest in the NSW North Coast and Sydney
Basin Bioregions' is potentially present within the compartment outside the mapped rainforest extent.
Areas of this forest community should be identified as described in the FNSW EEC Identification
Guide, and if present within the operation area, excluded from harvesting.

## 6.12 LiDAR Corrected Drainage

- The locations of drainage lines shown on the HPOM have been altered using information available from LiDAR. This should more accurately reflect the location of mapped drainage lines.
- Also shown are Indicative Drainage Features these may be drainage lines, drainage depressions
  or neither. The location of these features is indicative only and their status should be confirmed in
  the field before the appropriate prescriptions (if any) are applied.

#### 7. Forest Management Zoning Conditions

The following Forest Management Zones and conditions apply:

FMZ	Туре	Notes
Zone 2	Special Management	High Conservation Old Growth (HCVOG). Reserves a section of Cpt 503 west of Palm Creek Road. There are also fragments adjacent to the HCVOG patch in the southern end of Cpt 502 across to Palm Creek Road which forms the eastern FMZ boundary starting just south of crossing C). These areas must be protected as marked on the map.

Zone 3A	Harvesting Protection	High Conservation Old Growth Forest (HCVOG), Rainforest and Needlebark Stringybark Forest Type Protection. These areas must be protected as marked on the map.		
Zone 3B	Special prescription	Visual protection along eastern slopes off upper end of Andersons Mountain Road. Harvesting operations must aim at retaining the visual amenity of the forest viewed from afar as shown on map.  • Minimise snig tracks within visible forest areas.  • Retain understorey as much as practicable to provide a visual screening  • Limit removals to a maximum of 50% of canopy.		
Zone 4	General Management	Available for harvesting in accordance with the conditions of this harvest plan.		
Zone 5	Hardwood Plantation	Small area in cpt 502 east of Plum Pudding Road (not shown on HPOM). Treat and manage as Zone 4 native forest, available for harvesting under this harvest plan.		
Zone 7	Non forest Use	A FNSW Quarry is located along Andersons Mountain Road. This site can be used as a harvesting dump. All debris must be removed from the pit.		
Zone 8	Further Assessment	These areas are to be rezoned FMZ 4 with management by prescription (Standard Harvest Plan Conditions for Native Forest Operations in North East Region apply)		
		These areas include:		
		<ul> <li>Modelled IHC 4 areas – assess actual slope in the field and exclude areas &gt;30 degrees in accordance with condition 3 of schedule 4 of the EPL.</li> </ul>		
		<ul> <li>Mapped drainage features – identify in the field and apply EPL and TSL conditions based on actual field location,</li> </ul>		
		<ul> <li>modelled drainage features - modelled streams are to be inspected by the SFO. Appropriate prescriptions (Schedule 4 of the EPL) are to be applied if required and noted on the harvesting operational map.</li> </ul>		
		<ul> <li>Cleared/semi cleared forest types (eastern end of Cpt 504) on Forest Type Map have been assessed as forested areas during planning and are available for harvest.</li> </ul>		

## 8. Cultural Heritage Conditions

## **Aboriginal Cultural Heritage**

No special conditions apply.

## Non Aboriginal Cultural Heritage

Site named Andersons in Cpt 503. This site is contained within a non harvest area. No special conditions apply.

#### 9. Flora and Fauna Conditions

Refer to Technical Guidance Note 2005-3A March 2005 for conditions (TSL Booklet)

## **Mark-up Conditions**

The SFO must search for threatened species and mark-up the block as per Conditions 5.1 (General), and 5.2 (Koala) of the TSL. The Tree Marking code is shown in the Standard Harvest Plan Conditions for Native Forest Operations in North East Region.

## Tree retention Conditions applying:

Prescription	TSL Condition	
Hollow bearing and recruit trees	(Regrowth Zone) 5.6c,d	
Greater Glider density > 1 per	No – 6.9 d does not apply	
ha?		
Stag Retention	5.6e	
Significant Food Resources	5.6f	
Protection of Retained Trees	5.6g	

Note: Swift Parrot/Regent Honeyeater default condition applies – retain 10 eucalypt feed trees/2ha (See Table 3)

## Species Known or Likely to Occur

 Recent and reliable records exist within, or within close proximity of the compartments for the following threatened species. These species require species-specific or site-specific prescriptions if further records or habitat features are identified during mark-up.

SPECIES GROUP	COMMON NAME	SCIENTIFIC NAME
Amphibians	Giant Barred Frog	Mixopheys iteratus
Mammals	Spotted-tailed Quoll	Dasyurus maculatus
	Large Footed Myotis	Myotis adversus
	Yellow-bellied Glider	Petaurus australis
	Squirrel Glider	Petaurus norfolcensis
	Koala	Phascolarctos cinereus
	Long-nosed Potoroo	Potorous tridactylus
	Grey-headed Flying Fox	Pteropus poliocephalus
Birds	Glossy-black Cockatoo	Calyptorhynchus lathami
	Little Lorikeet	Glossopsitta pusilla
	Square-tailed Kite	Lophoictinia isura
	Powerful Owl	Ninox strenua
	Masked Owl	Tyto novaehollandiae
	Sooty Owl	Tyto tenebricosa
	Regent Honeyeater	Xanthomyza phrygia
Flora		Allocasuarina defungens
		Angophora robur
		Boronia umbellata
		Marsdenia longiloba
	Hairy Melichrus	Melichrus hirsutus
	Rusty Plum	Niemeyera whitei
	Milky Silkpod	Parsonsia dorrigoensis
	Moonee Quassia	Quassia sp. B (Moonee Creek)
	Stinking Lily	Typhonium sp. aff. brownii

## Site-Specific Conditions, Exclusion Zones & Modified Harvest Areas

Table 1: General Prescriptions

TSL Condition	TSL Condition No.	Record Details	Prescription Summary
Koala Mark-up Searches	5.2.2	Nil Records – continue search	These compartments contain preferred forest types, marking-up must be conducted at least 300m in advance of harvesting operations.  In the event that a koala or scats (as noted in 5.2.2(i)) are found, a koala star search will be conducted to determine koala use area/s.
Tree Retention	5.6 (f)	3 GLBC feed trees in cpt C_503, 504	Retain and protect glossy black cockatoo feed trees.
	5.6 (g)	Nil Records – continue search	Retain all yellow-bellied glider and squirrel glider sap feed trees.
Burning	5.16	Threatened species have been recorded in these cpts.	The habitat requirement of threatened species must be taken into account when instigating hazard reduction burns to promote and maintain an understorey mosaic, significant areas of dense understorey vegetation and to minimise impact on large fallen logs.
Ground Habitat Protection	5.17 (a)	Nil Records – continue search	To the greatest extent practical, protect ground habitat from SFA. Ground habitat includes understorey vegetation, ground cover vegetation, leaf litter and fallen timber.
	5.17 (b)	CWRV + small mammals reptiles	Commercial Firewood collection is not permitted
	5.17 (d)	Larger CWRV	Firewood licences state that timber with hollows and/or over 40 cm diameter must not be collected or damaged.

Table 2: Species Specific Prescriptions (record and survey based)

TSL Condition	TSL Condition No.	Record Details	Prescription Summary
Powerful Owl (Ninox strenua)	6.9	1 POWL record	Landscape approach as specified in 6.9.2 will be used.
		within 2km of cpt boundaries	Condition 5.13 may be applicable to protect any roosts or nests found.

TSL Condition	TSL Condition No.	Record Details	Prescription Summary
Masked Owl (Tyto novaehollandiae)		1 MOWL record within 2km of cpt boundaries	Search gully lines and heads of gullies for roost and nest sites.
Spotted-tailed Quoll (Dasyurus maculatus)	6.15	1 TIQU recorded within 200m of cpt boundaries	Search for maternal dens, permanent dens and latrine sites. If found, stop all SFA immediately and notify Harvest Planner and/or Ecologist.
Squirrel Glider (Petaurus norfolcensis)	6.16	1 SQGL recorded in cpt C_504	Exclusion zone of 8ha to be retained as mapped. Den records must be contained within exclusion zones.
Yellow-bellied Glider (Petaurus australis)	6.17	4 YEBG call detection records in and within 200m of cpt boundaries	Exclusion of 50m on dens. Retention of all sap feed trees. Within 100m of dens, sap feed trees and observation records, 15 mature / late mature feed trees must be retained. Within 200m of call detection site, 15 feed trees must be retained. Retained trees must be of same species as tree with den, feed marks or observation or should be species that shed their bark in long strips.
Large-footed Myotis (Myotis macropus)	6.21	1 LFMB recorded in cpt C_502	Exclusion zones of 30m on all dams and permanent water bodies of still water. Exclusion zones of 30m of all permanent streams within 100m of all records as mapped.
Marsdenia longiloba	6.23	1 MARS LONG records in cpt C_502	20m Exclusion Zones, all individuals
Allocasuarina defungens	6.25	3 ALLO DEFU records in cpts C_503	20m Exclusion Zone, 90% of individuals
<i>Quassia</i> <b>sp.</b> Moonee Creek		3 QUASSIA records in cpt C_502, 504	
Boronia umbellata	6.28	2	Exclusion zones are not required for this

TSL Condition	TSL Condition No.	Record Details	Prescription Summary
		BORO UMBE records in and within 100m of cpt C_502	species, a species management plan has been implemented in Conglomerate SF.
Niemeyera whitei	6.27	5 NIEM WHIT records in cpts C_502	Harvesting is permitted in populated areas. This species is managed under a threatened flora monitoring program.  No burning in areas with records

Table 3: Species Specific Prescriptions (default IFOA condition)

TSL Condition	TSL Conditio n No.	Record Details	Prescription Summary
Swift Parrot (Lathamus discolor) Regent Honeyeater (Xanthomyza phrygia)	7. b) x	Nil records	Retain 10 eucalypt feed trees (which may include habitat and recruitment feed tree species) within every 2ha of NLA. All trees where species were observed feeding must be retained.

In addition to Forest Management Zone Exclusions, the following exclusion zones occur and are shown on the operational map

Riparian Protection (TSL Condition 5.7) Ridge and Headwater Habitat (TSL Condition 5.8)

Boundary marking conditions for each exclusion zone are described in the tree marking code (see Standard Harvest Plan Conditions for Native Forest Harvesting in North East Region).

#### 10. Fisheries Licence Conditions

Refer to Technical Guidance Note 2005- 02 March 2005 (Fisheries Licence Booklet)

Class 2 Aquatic Habitat (Eastern Freshwater Cod) has been identified as occurring within Compartments 502 & 503 only. Conditions of the Fisheries Licence apply.

Condition 7 of the Fisheries Licence applies.

Condition 7.9 of the Fisheries Licence apply to snig track crossings of mapped and unmapped drainage lines.

- Crossings must be approved and marked in the field prior to use
- Crossings may only be used where it is not reasonably practicable to use another route or site.
- Conditions 8.3 and 8.4 of the Fisheries Licence apply to crossings.

#### 11. Soils and Water Protection Conditions

Refer to Technical Guidance Note 2005- 1C (Environment Protection Licence Booklet) & Standard Harvest Plan Conditions for Native Forest Harvesting in North East Region

Site-specific EPL conditions -

Elements	Conditions		
Unmapped Drainage Lines	EPL applies for Cpts 502 & 503.  Best Management Practices for UDL apply for Cpts 504 & 505.		
Drainage Feature Protection	See HPOM for widths		
Inherent Hazard Class	2		
Dispersible Soils	Yes for Cpts 504 & 505. See EPL Schedule 4 condition 69.		
Mass Movement	NO		
Log Dumps	Refer relevant conditions for IHL		
Snig Tracks	Refer relevant conditions for IHL		
Roads	See schedule 5 of EPL Booklet		
Non-Haulage Roads	May be used for extraction within net harvest area or as otherwise approved. Note: Due to eroded nature of the non haulage section of Palm Creek Road this road must be assessed for suitability by the SFO <a href="mailto:prior">prior</a> to snig use. EPL applies. Remove debris on completion of operations.		

### 12. Legal Conditions

This operation must comply with:

- Standard Harvest Plan Condition for Native Forest Operations in North East Region
- Licence Conditions issued by Forests NSW under the Forestry Act (1916)
- State Forests of NSW Forest Practices Code Part 2 Timber Harvesting in Native Forests February 1999 and Forest Practices Code Part 4 Forest Roads and Fire Trails (February 1999).
- Integrated Forestry Operations Approval issued under part 5B of the Forestry Act 2012 (IFOA) including the associated licences:
  - Threatened Species Conservation Licence (TSL) issued under the Threatened Species Conservation Act (1995)
  - Licence issued under section 220ZW of the Fisheries Management Act 1994 (FL)
- This operation is a non-scheduled operation under the Environment Protection Licence issued under section 55 of the Protection of the Environment Operations Act 1997. Roading and harvesting operations are not licenced. All EPL conditions will apply to harvesting and roading operations except for schedule 4 condition 6 relating to filter strips, protection zones and operational zones (for Compartments 504 & 505 only).

#### 13. Attachments

- Attachment 1: Locality map
- Attachment 2: Harvest Plan Operational Map
- Attachment 3: Forest Type Map
- Attachment 4: Site Safety Plan prescribes describes safety requirements and Medical Emergency Evacuation Plan for this harvesting operation.
- Attachment 5: Roading plan prescribes roading requirements for this harvesting operation.

## 14. Operational Control

## Contractor Team Leader to sign here

I acknowledge that I have received a copy of the plan documents and that I have been briefed on the conditions of the Plan. I understand the operational control requirements as outlined in the plan and take responsibility for the implementation of plan conditions as the principle controller of the operation. I will brief any other operators not present at this briefing prior to them starting any work on site and ensure that risk assessment for the Safety Management Plan is completed for this area prior to operations commencing.

Name	Signat	Signature	
Position	Data	From	
Company	Date	То	
Principal SFO to sign be recorded)	here (handovers	between prin	cipal SFOs also to

I acknowledge that I have received a copy of the plan documents and that I have been briefed on the conditions of the Plan. I understand the operational control requirements as outlined in the plan and take responsibility as the principle SFO.

Name	Signat	ure	
Position	D-1-	From	
Company	Date	То	
Name	Signat	ure	
Position		From	
Company	Date	То	
Name	Signature		
Position	Date	From	
Company		То	
		·	
Name	Signature		
Position	Doto	From	
Company	Date	То	

## 15. Handover Briefing

I acknowledge that I have received a copy of the plan documents and that I have been briefed on the conditions of the Plan. I understand the operational control requirements as outlined in the plan.

Company	Name	Signature	Date

#### **Induction Questionnaire**

- 1. What silviculture will be applied and in which areas.
- How will noise and dust issues be managed with local residents.
- 3. How is private property boundary marked.
- 4. How is FMZ 2 boundary defined.
- What threatened flora measures apply.
- What soil and water protection measures apply for the compartments.

Appendix 1 - SFO Notes

Appendix 1 of 6 Notes				
State Forest	Compartments			

This diary should record general daily events, SFO movements, and operations visited which are not otherwise recorded in detail elsewhere.

Date	Event	Initial

## FORESTRY CORPORATION of NEW SOUTH WALES

## NORTH EAST REGION

## **ROAD WORKS PLAN**

## **State Forest Conglomerate; Compartments 502-505**

## Certification

Prepared By:	Flavio Bugno	Approved By:	Craig Busby
Harvest Planner		Regional Manager	
Signature	Allenovo.	Signature	Calre
Date	30/1/13	Date	78/13

## **Duration of Approval**

The above approval is valid until 04 March 2023.

## Contents

- 1. Cover Page
- 2. Operational Map
- 3. Costings
- 4. Roadworks Plan Text/Prescriptions
- 5. Locality Map
- 6. Safety Plan HAMEEP
- 7. Harvesting Plan
- 8. Harvesting Notification List (Operations Team Leader Only)

ROADING PLAN – Conglomerate State Forest, Compartments 502-505

### 1. Objectives

Roadworks are required to service harvesting operations within the above compartments.

The operational map shows the location of the proposed works.

Attachments: Financial Analysis Spreadsheet gives full details of costs, benefits, material & plant requirements

## 2. Specifications and Legal Conditions

This operation must comply with:

- Standard Harvest Plan Conditions for Native Forest Operations in North East Region
- Licence Conditions issued by Forests NSW under the Forestry Act (1916)
- State Forests of NSW Forest Practices Code Part 2 Timber Harvesting in Native Forests February 1999 and Forest Practices Code Part 4 Forest Roads and Fire Trails (February 1999).
- Integrated Forestry Operations Approval issued under part 4 of the Forestry and National Parks Estate Act 1998 (IFOA) as amended May 2003 including the associated licences:
- Threatened Species Conservation Licence (TSCL) issued under the Threatened Species Conservation Act (1995) as amended May 2003
- Licence issued under section 220ZW of the Fisheries Management Act 1994 (FL) as amended May 2003
- This operation is a non-scheduled operation under the Environment Protection Licence issued under section 55 of the Protection of the Environment Operations Act 1997. Roading and harvesting operations are not licensed. All EPL conditions will apply to harvesting and roading operations.
- Technical Guidance Notes for Roadworks.

## 3. Special Conditions

Feature	Conditions
Cultural Heritage	No
Threatened Species	See harvesting plan. Minimise disturbance within protection zones.
Dispersible Soils Hazard	Yes – Dispersible soils contained within areas of R3 soils. No crossings contained within these areas.
Mass Movement Hazard	No
Seasonality	No
Engineering Design	No

Environmental impacts ie Dust, Noise, Water, Visual	Yes – There are residents in close proximity to an operation that are likely to be affected by noise near Murphys Road (as shown on the operational map). Site specific operational conditions to mitigate the impact of noise on residents must be developed by the SFO and contractor in conjunction with the residents. These conditions must be approved by the Operations Team Leader prior to operations commencing in this area.
Haulage Standards	Yes
National Park	No
Private Property	No
Permit To Enter required	No
Shire Road	Sherwood Creek Road is a Shire maintained road and dedicated road reserve. Approval has been obtained to do roadworks for road exits onto Sherwood Road. See attached Shire approval letter for special conditions. Contact Council's Asset Inspector (see contact list) prior to works commencing to confirm site arrangements.
Quarries and Gravel Pits	No – Andersons Mountain Rd pit not proposed for use.
Underground/Overhead Utilities	No
Safety Issues (includes hazards, public use of roads)	Yes – Operations Team Leader to obtain a Traffic Control Plan (or alternate traffic control measures as decided) for road works on exits onto Sherwood Creek Road. See Hazard Assessment in the Site Safety Pack.

## 4. General Conditions

Remove trees in accordance with FNSW Safety Standard 1.3.9; and

Remove vegetation within 3m of the road prism **only where required** to maintain safe sight distance and passage of trucks.

**Note:** Clearing is generally permitted within 3m of the road prism for all roads. Ground disturbance and tree debris may impact outside this 3m either side of the road prism as is required to effect clearing within 3m of the road prism. Conditions 5, 6 and 47 Schedule 5 of the EPL must apply.

## 5. Works Schedule

See attached ipaq worksheets.

## Road Maintainence/Upgrade

	Roa	nd Name 504/3 Trai	I	Category Temporary	
	Loc	cation From Ande	erson I	Mountain Road to dump 19 Length (m) 26	00
	W	ORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Wo	rks >30 Slopes			
	Ma	ss Movement			
	Dis	persible			
Pavement	api	Widening		Location NA Upgrade Length (m) 0 Formation Width (m) NA Upgrade Spoil Curve Widening NA	
	Upgrade	Grade Lowering		NA NA	
	_	Realignment		NA NA	
		Reopening		NA NA	
		Clear veg/debris	V	All road Maintenance Length (m) 200	
	Maintenance	Repair surface	V	All road	
	ainte	Crown/Crossfall	V	All road	
	M	Gravel		NA Gravel Length (m)	0
Roadside/Batters	Remove trees >20 cm				
	Remove trees <20 cm		V	In accordance with general condition 4	
Roadside	Batter Repair/Upgrade			NA	
	Cul	lverts		NA Size: Sets:	
	Mit	res	V		٦
lage	RO	D/Spoon	V	Sets: 1	
Drainage	Bel	ts/Channels		Sets:	
	Dro	p Downs		Sets:	
	Silt	Trapping			
	Cor	nments: Nil			
	Sta	art Date:		Finish Date: Soil Stabilisation Date (must be within 5 days):	
		ate		Event Initial	
					1
	-				4
	-				$\dashv$
	$\vdash$				$\dashv$
	_				

	Roa	d Name 504/4 Trai	l	Category Temporary	
	Loc	ation From Shen	wood (	Creek Road to dump 21 Lengti	h (m) 50
	W	ORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
0	Wo	rks >30 Slopes			
Site Info	Mas	ss Movement			
Sit	Dis	persible			
nt		Widening		Location NA Upgrade Length (n	n) 0
100				Formation Width (m) NA Upgrade Spoil	
Pavement	ade			Curve Widening NA	
	Upgrade	Grade Lowering		NA	
	-	Realignment		NA	
		Reopening		NA	
		Clear veg/debris	V	50m Maintenance Length	(m) 50
	ance	Repair surface		NA	
	Maintenance	Crown/Crossfall	V	50m	
	M	Gravel		NA Gravel Lengt	h (m) 0
Batters	Remove trees >20 cm				
	Remove trees <20 cm		V	In accordance with general condition 4	
Roadside/Batters	Batter Repair/Upgrade			NA	
	Cul	verts		NA Size: Sets	s:
	Mitr	res	V		
Drainage	ROI	D/Spoon	V	Sets: 1	
Drair	Belt	s/Channels		Sets:	
	Dro	p Downs		Sets:	
	Silt	Trapping			
	Con	nments: Nil			
	Sta	art Date:		Finish Date: Soil Stabilisation Date (must be within 5 days):	
	_	ate		Event	Initial
	-				
	-				
	-				

	Roa	d Name 504/5 Trail		Category Temporary		
	Loc	ation From Murp	hys Ro	pad to dump 26 Length	(m)	350
	W	ORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS		
0	Wo	rks >30 Slopes				
Drainage Roadside/Batters Pavement Site Info	Mas	ss Movement				
Drainage Roadside/Batters Pavement Site Info	Dis	persible				
		Widening		Location NA Upgrade Length (m)	0	
Drainage Roadside/Batters Pavement Site Info				Formation Width (m) NA Upgrade Spoil		
	rade			Curve Widening NA		
еше	J G	Grade Lowering	Ш	NA		
Pav		Realignment		NA		
Roadside/Batters Pavement		Reopening		NA		
	٥	Clear veg/debris	V	All road Maintenance Length (n	n) 35	0
	nanc	Repair surface	V	All road		
	ainte	Crown/Crossfall	V	All road		
	Ĭ	Gravel		NA Gravel Length	(m)	0
Roadside/Batters	Rem	ove trees >20 cm				
	Rem	ove trees <20 cm	V	In accordance with general condition 4		
	Batter Repair/Upgrade			NA		
	Cul	verts		NA Size: Sets:	:	
(	Mitr	es	V			
	ROI	O/Spoon	V	Sets: 4		
Drai	Belt	s/Channels		Sets:		
	Dro	p Downs		Sets:		
	Silt	Trapping				
	Con	nments: Nil				
,	Sta	rt Date:		Finish Date: Soil Stabilisation Date (must be within 5 days):		
	D	ate		Event	Initi	al

	Road Name 505/3 Trail Category Temporary					
	Loc	ation From Ande	rson N	Mountain Road to dump 14 Length	(m) 150	
	W	ORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	AND TO	
.0	Wor	rks >30 Slopes				
Site Info	Mas	ss Movement				
Site Ir	Dis	persible				
		Widening		Location NA Upgrade Length (m)	0	
				Formation Width (m) NA Upgrade Spoil		
	Upgrade			Curve Widening NA		
	Upg	Grade Lowering		NA		
		Realignment		NA		
		Reopening	V	All road		
	o l	Clear veg/debris	V	All road Maintenance Length (n	1) 150	
	anc	Repair surface		NA		
	inte	Crown/Crossfall	V	All road		
	M	Gravel		NA Gravel Length	(m) 0	
e/Batt	Remove trees >20 cm					
	Rem	nove trees <20 cm	V	In accordance with general condition 4		
				NA		
	Cul	verts		NA Size: Sets:		
	Mitr	res	V			
age	ROI	D/Spoon	V	Sets: 2		
Drair	Belt	s/Channels		Sets:		
	Dro	p Downs		Sets:		
	Silt	Trapping				
		nments: Nil				
Drainage C	Sta	art Date:		Finish Date: Soil Stabilisation Date (must be within 5 days):		
	_	ate		Event	Initial	
Drainage Roadside/Batters Pavement Site Info	-	the state of				
	-					
	$\vdash$	_				
	$\vdash$	-				
Drainage Roadside/Batters Pave	-					
	$\vdash$					

	Roa	d Name 505/4 Trai	1	Category Temporary		
	Loc	ation From Ande	erson N	Mountain Road to dump 13 Length	(m)	100
	W	ORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	-	
0	Wo	rks >30 Slopes				
Site Info	Mas	ss Movement				
	Dis	persible				
		Widening		Location NA Upgrade Length (m	) 0	
Pavement				Formation Width (m) NA Upgrade Spoil		
	age			Curve Widening NA		
	Upgrade	Grade Lowering		NA		
		Realignment		NA		
		Reopening		NA		
	6)	Clear veg/debris	V	All road Maintenance Length (	m) 100	)
	Janci	Repair surface		NA		
	ainte	Crown/Crossfall	V	All road		
	ŭ	Gravel		NA Gravel Length	ı (m)	0
de/Batters	Remove trees >20 cm					
	Remove trees <20 cm		V	In accordance with general condition 4		
Roadside	Batter Repair/Upgrade			NA		
	Cul	verts		NA Size: Sets	:	
	Mitr	es	V			
nage	ROI	O/Spoon	V	Sets: 1		
Draii	Belt	s/Channels		Sets:		
	Dro	p Downs		Sets:		
	Silt	Trapping				
	Con	nments: Nil				
	Sta	rt Date:	- Andrews	Finish Date: Soil Stabilisation Date (must be within 5 days):		
Drainage Roadside/Batters Pave	D	ate		Event	Initia	al
	_					_
	1	1				- 1

	Roa	d Name Andersons	Mour	ntain Road Category Permanent
	Loca	ation From Sher	wood (	Creek Road to Palm Creek Road Length (m) 3000
	wo	ORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
0	Wor	ks >30 Slopes		
te le	Mass Movement			
Site Ir	Dispersible			
		Widening		Location NA Upgrade Length (m) 0
Drainage Roadside/Batters Pavement Site Info	Ш			Formation Width (m) NA Upgrade Spoil
	Upgrade			Curve Widening NA
	Upgi	Grade Lowering		NA
		Realignment		NA
		Reopening		NA
	Maintenance	Clear veg/debris		NA Maintenance Length (m) 3000
		Repair surface	V	Eroding sections
		Crown/Crossfall		All road
	Gravel			NA Gravel Length (m) (
Roadside/Batters	Remove trees >20 cm			
	Remove trees <20 cm		V	In accordance with general condition 4
	Batter Repair/Upgrade			NA
Roa	Cul	verts	V	Clean existing Size: Sets:
	Mitr	es	V	
nage	ROI	O/Spoon		Sets:
Drai	Belt	s/Channels		Sets:
	Dro	p Downs		Sets:
	Silt	Trapping		
	Con	nments: Nil		
ŗ	Sta	rt Date:		Finish Date: Soil Stabilisation Date (must be within 5 days):
Drainage Roadside/Batters Pavement Site Info	D	ate		Event Initial
	H			
Drainage				

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	Roa	d Name Cpt 2/4 Ro	oad	Category Temporary
	Loc	ation From Shen	wood (	Creek Road to dump 1 Length (m) 350
	W	ORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
0	Wo	rks >30 Slopes		
유	Mas	ss Movement		
	Dis	persible		
		Widening		Location NA Upgrade Length (m) 0
Pave				Formation Width (m) NA Upgrade Spoil
	ade	•		Curve Widening NA
	Upgr	Grade Lowering		NA
	132	Realignment		NA
		Reopening		NA
	4	Clear veg/debris	V	All road Maintenance Length (m) 350
	ance	Repair surface		NA
	inter	Crown/Crossfall	V	All road
	Ma	Gravel		NA Gravel Length (m) (
Roadside/Batters	Remove trees >20 cm			
	_	nove trees <20 cm	V	In accordance with general condition 4
	Batter Repair/Upgrade			NA
Road	Cul	Culverts		NA Size: Sets:
	Mite	res	V	
nage	RO	D/Spoon	V	Sets: 4
Drai	Bell	ts/Channels		Sets:
	Dro	p Downs		Sets:
	Silt	Trapping		
	Con	nments: Nil		
	Sta	ırt Date:		Finish Date: Soil Stabilisation Date (must be within 5 days):
	D	ate		Event Initial
Mass Mode Dispersi Wide Rea Reo Clear Rep Gran Remove Remove Batter Res Mitres ROD/Spot Belts/Ch Drop Doo Silt Trap Comment				

	Roa	d Name Cunningha	ms Ro	oad Category Temporary	
	Loc	ation From Ande	rson N	Mountain Road to dump 16 Length (m	) 150
	W	ORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
0	Wo	rks >30 Slopes			
Site Info	Mas	ss Movement			
	Dis	persible			
Pavement		Widening		Location NA Upgrade Length (m) 0	)
				Formation Width (m) NA Upgrade Spoil	
	Upgrade			Curve Widening NA	
	Upg	Grade Lowering	Ш	NA	
		Realignment		NA	
		Reopening		NA	
	۵	Clear veg/debris	V	All road Maintenance Length (m)	150
	nanc	Repair surface	V	All road	
	Maintenance	Crown/Crossfall	V	All road	
	Ě	Gravel		NA Gravel Length (m	1) 0
e/Batters	Remove trees >20 cm				
	Remove trees <20 cm			In accordance with general condition 4	
Roadside/Batters	Batter Repair/Upgrade			NA	
4	Cul	verts		NA Size: Sets:	
	Mite	res	V		
Drainage	RO	D/Spoon	V	Sets: 2	
Drain	Bel	ts/Channels		Sets:	
	Dro	p Downs		Sets:	
	Silt	Trapping			
	Con	nments: Nil	,		
,	Sta	art Date:		Finish Date: Soil Stabilisation Date (must be within 5 days):	
		ate		Comment of the Commen	Initial
				Charles and the second of the	
	-				
	-				-
					-

	Roa	id Name Murphys F	Road	Category Permanent	
	Loc	ation From boun	dary g	rid to dump 25 Length (m)	300
	W	ORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Works >30 Slopes				
	Mas	ss Movement			
Sit	Dis	persible			
	e	Widening		Location NA Upgrade Length (m) 0 Formation Width (m) NA Upgrade Spoil Curve Widening NA	
Pavement	Upgrade	Grade Lowering		NA	-
	בֿן	Realignment	П	NA	
		Reopening		NA NA	
		Clear veg/debris		NA Maintenance Length (m) 300	
	ance	Repair surface	V	Wet spot & eroding sections	
	Maintenance	Crown/Crossfall	V	All road	
	M	Gravel		NA Gravel Length (m)	0
보	Remove trees >20 cm				
	Remove trees <20 cm		V	In accordance with general condition 4	
Roadside	Batter Repair/Upgrade			NA	
	Culverts			NA Size: Sets:	
	Mitr	es	V		
Drainage	ROI	D/Spoon		Sets:	
Drail	Belt	s/Channels		Sets:	
	Dro	p Downs		Sets:	
	Silt	Trapping			
	Con	nments: Nil			
	Sta	rt Date:		Finish Date: Soil Stabilisation Date (must be within 5 days):	
	D	ate	v	Event Initia	ıl
	r				

Road Name Palm Creek Road	Category Permanent

	Loc	ation	From Plum	Puddi	ing Rd to Andersons Mountain Rd Non haulage between dumps 11 & 12 Length (m)	3250
	W	ORKS	3	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	B
0	Wo	rks >3	0 Slopes			
Site Info	Mas	s Mov	rement			
	Dis	persib	le			
	de	Wide	ning		Location NA Upgrade Length (m) 0 Formation Width (m) NA Upgrade Spoil Curve Widening NA	
men	Upgrade	Grad	e Lowering		NA NA	
Pavement	٦	Reali	gnment		NA	
1		Reop	ening		NA	
		Clear	r veg/debris		NA Maintenance Length (m)	3250
	Maintenance	Repa	ir surface	V	NA	
	ainter	Crow	n/Crossfall	V	NA	
	M	Grav	el		NA Gravel Length (m)	0
Roadside/Batters	Remove trees >20 cm					
	Remove trees <20 cm		V	In accordance with general condition 4		
	Batter Repair/Upgrade			NA		
8	Culverts		V	Clean existing Size: Sets:		
	Mit	res		V		
Drainage	RO	D/Spo	on	V	Sets: 12	
Drair	Bel	ts/Cha	innels		Sets:	
	Dro	p Dov	<i>i</i> ns		Sets:	
	Silt	Trapp	oing			
	Cor	nment	ts: Nil			
	Sta	art Da	ite:		Finish Date: Soil Stabilisation Date (must be within 5 days):	
	Date			Event Ir	nitial	

	Roa	d Name Plum Pudd	ling R	oad Category Permanent		
	Loc	ation From Sherv	Mood (	Creek Road to Palm Creek Road Length	(m)	1300
	W	ORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS		
0	Works >30 Slopes					
Site Info	Mass Movement Dispersible					
Sit	Dis	persible				
	Widening			Location NA Upgrade Length (m	1) 0	
				Formation Width (m) NA Upgrade Spoil		
ıt	Upgrade			Curve Widening NA		
Pavement	Upg	Grade Lowering		NA .		
Pav		Realignment		NA .		
	Ц	Reopening		NA		
	Clear veg/debris			NA Maintenance Length (	m) 13	300
	nanc	Repair surface		NA		
	Maintenance	Crown/Crossfall	V	Patch grade		
	Ě	Gravel		NA Gravel Length	h (m)	0
ers	Rem	nove trees >20 cm				
Batt	Remove trees <20 cm			In accordance with general condition 4		
0		er Repair/Upgrade		NA		
ij	Cul	verts	V	Clean existing Size: Sets	s:	
	Mitr	res	V			
Drainage	ROI	D/Spoon		Sets:		
Orain	Belf	ts/Channels		Sets:		
	Dro	p Downs		Sets:		
	_	Trapping				
		nments: Nil				
ļ	Sta	art Date:		Finish Date: Soil Stabilisation Date (must be within 5 days):		
	-	art bate.	712	Event	Init	ial
	_					
	-					
	-					
	-					

	Road Name 505/2 Trail				Category Temporary	
	Loc	ation	From Ande	rson N	Mountain Road to dump 17 Length (m	100
	W	ORKS		YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
0	Wo	rks >3(	) Slopes			
Site Info	Dispersion					
Sit			le			
ıt	de	Widen	ing		Location NA Upgrade Length (m) (c) Formation Width (m) NA Upgrade Spoil Curve Widening NA	)
ment	Upgrade	Grad	e Lowering		NA	
Pavement		Reali	gnment		NA	
		Reop	ening		NA	
		Clear	veg/debris	V	All road Maintenance Length (m)	100
	Maintenance	Repai	ir surface		NA	
	ainte	Crow	n/Crossfall	V	All road	
	M	Grave	el		NA Gravel Length (n	n) 0
ters	Ren	nove tr	ees >20 cm			
/Bat	Remove trees <20 cm		V	In accordance with general condition 4		
Roadside/Batters	Batt	er Rep	air/Upgrade		NA	
	Cul	verts			NA Size: Sets:	
	Mit	Mitres		V		
Drainage	RO	D/Spoo	on	V	Sets: 2	
Drair	Bel	ts/Cha	nnels		Sets:	
	Dro	p Dow	ns		Sets:	
	Silt	Trappi	ing			
	Cor	nments	s: Nil			
	Sta	art Dat	te:		Finish Date: Soil Stabilisation Date (must be within 5 days):	
	C	Pate			Event	Initial

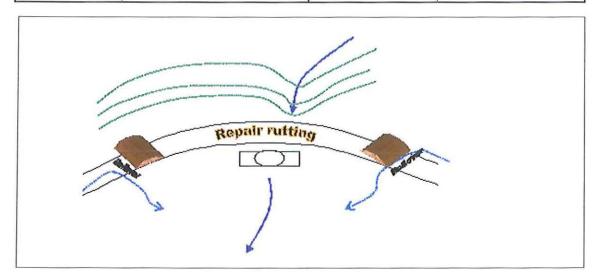
## **Crossing Works**

Crossing Name A Road Name Palm Creek Road Location 0.7km

Drainage Feature Unmapped Drainage line Stream Permanency Intermittent

Existing Crossing	Size	Stability Status	Crossing Required	Size (mm.	m Future
Pipe Culvert	750	Stable (maintainance)	Existing	NA	Permanent

	The second second	/		
Cross	ing Works	Approaches and Road Drainage		
Pavement/Structure	Repair natural surface	Approaches	Nil	
Reshape Bed/banks	Nil	Temporary Drainage	Nil	
Disposal of Spoil	NA	5-30m Upstream Left	Install Rollover	
Inlet	Nil	5-30m Upstream Right	Install Rollover	
Outlet	Nil	Practices where no 5-30	NA	
Stabilisation	Nil	OutletControl	Natural vegetation	
ErosionControl	Nil	TableDrain	Natural vegetation	



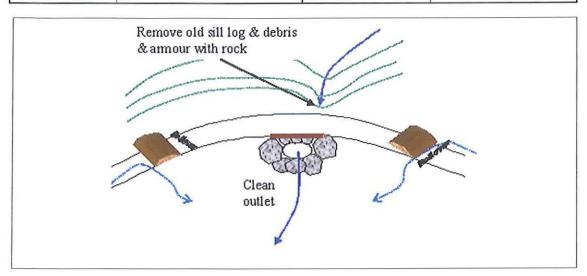
Start Date:	Finish Date:	Soil Stabilisation Date (must b	e within 5 days):
Date		Event	Initial

Crossing Name B Road Name Palm Creek Road Location 0.9km

Drainage Feature Unmapped Drainage line Stream Permanency Intermittent

Stability Status	Crossing Required	Size (III	m/m Future
Stable (maintainance)	Existing	NA	Permanent
	- Stateman States	Stable (maintainance) Existing	

Cross	ing Works	Approaches and Road Drainage		
Pavement/Structure	Existing natural surface	Approaches	Nil	
Reshape Bed/banks	Nil	Temporary Drainage	Nil	
Disposal of Spoil	NA	5-30m Upstream Left	Reshape Existing Rollover	
Inlet	Reshape & rock	5-30m Upstream Right	Existing Rollover	
Outlet	Clean	Practices where no 5-30	NA	
Stabilisation	Nil	OutletControl	Natural vegetation	
ErosionControl	Nil	TableDrain	Natural vegetation	



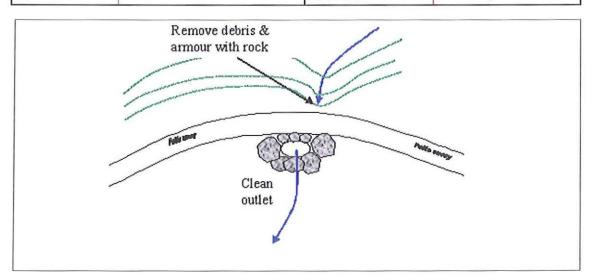
Start Date: Finish Date: Soil Stabilisation Date (must be within 5 days):

Date Event Initial

Crossing Name C Road Name Palm Creek Road Location 1.3km

Drainage Feature Depression Stream Permanency Intermittent

Existing Crossing	Size	Stability Status	Crossing Required	Size (mm/m	Future	
Pipe Culvert	450	Stable (maintainance)	Existing	NA	Permanent	
Cross	ing Works		Approaches and Road Drainage			
Pavement/Structure	Existing n	atural surface	Approaches	Nil		
Reshape Bed/banks	Nil		Temporary Drainage	Nil		
Disposal of Spoil	NA		5-30m Upstream Left	Falls away		
Inlet	Clean & ro	ck	5-30m Upstream Right	Falls away		
Outlet	Clean & rep	air headwall	Practices where no 5-30	NA		
Stabilisation	Nil		OutletControl	Natural vegetati	on	
ErosionControl	Nil		TableDrain	Natural vegetati	on	



Start Date:	Finish Date:	Soil Stabilisation Date (must b	e within 5 days):
Date		Event	Initial

Crossing Name D

Road Name Palm Creek Road

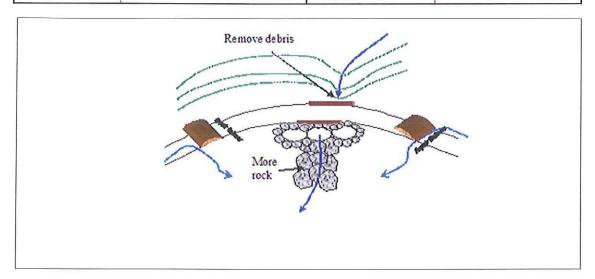
Location 1.4km

Drainage Feature 2nd order DL

Stream Permanency Intermittent

Existing Crossing	Size	Stability Status	Crossing Required	Size (mm	/m Future
Pipe Culvert	3 x 900	Stable (maintainance)	Existing	NA	Permanent

Cross	ing Works	Approaches and Road Drainage		
Pavement/Structure	Existing natural surface	Approaches	Nil	
Reshape Bed/banks	Nil	Temporary Drainage	Nil	
Disposal of Spoil	NA	5-30m Upstream Left	Repair Existing Rollover	
Inlet	Clean	5-30m Upstream Right	Repair Existing Rollover	
Outlet	Armour with rock	Practices where no 5-30	NA	
Stabilisation	Nil	OutletControl	Natural vegetation	
ErosionControl	Nil	TableDrain	Natural vegetation	



Start Date:

Finish Date:

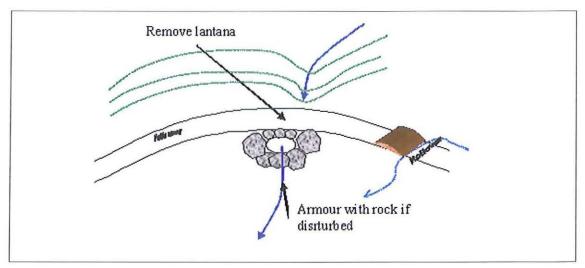
Soil Stabilisation Date (must be within 5 days):

	 con otasmoanon sato (mast so	
Date	Event	Initial

Crossing Name E **Road Name** Palm Creek Road Location 1.7km

<b>Drainage Feature</b>	Unmapped D	rainage line	<b>Stream Permanency</b>	Intermittent
<b>Existing Crossing</b>	Size	Stability Status	Crossing Required	Size (r

Existing Crossing	Size	Stability Status	Crossing Required	Size (mm/m) Future	
Pipe Culvert	900	Stable (maintainance)		NA Perma	nent
Cross	ing Works		Approaches and Road Drainage		
Pavement/Structure Clear lantana. Maintain Existing natural surface.			Approaches Nil		
Reshape Bed/banks	Nil		Temporary Drainage	Nil	
Disposal of Spoil	NA		5-30m Upstream Left	Falls away	
Inlet	Nil		5-30m Upstream Right	Install Rollover	
Outlet	Armour with	rock if required	Practices where no 5-30	NA	
Stabilisation	Nil		OutletControl	Natural vegetation	
ErosionControl	Nil		TableDrain	Natural vegetation	



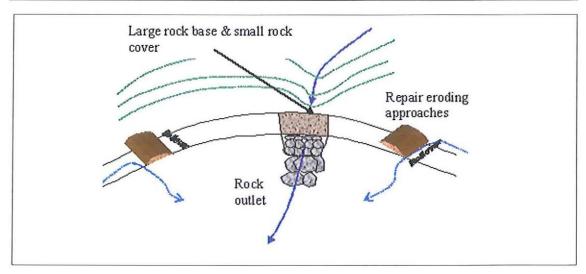
Start Date:	Finish Date:	Soil Stabilisation Date (must b	e within 5 days):
Date		Event	Initial

 Crossing Name
 F
 Road Name
 504/5 Trail
 Location
 0.2km

 Drainage Feature
 1st order DL
 Stream Permanency
 Intermittent

Existing Crossing	Size	Stability Status	Crossing Required	Size (mn	n/m Future
Causeway	NA	Unstable (upgrade)	Existing	NA	Permanent

Crossing Works		Approaches and Road Drainage		
Pavement/Structure	Armour existing natural surface with rock	Approaches	Nil	
Reshape Bed/banks	Nil	Temporary Drainage	Nil	
Disposal of Spoil	NA	5-30m Upstream Left	Install Rollover	
Inlet	Armour with rock	5-30m Upstream Right	Install Rollover	
Outlet	Armour with rock	Practices where no 5-30	NA	
Stabilisation	Nil	OutletControl	Natural vegetation	
ErosionControl	Nil	TableDrain	Natural vegetation	



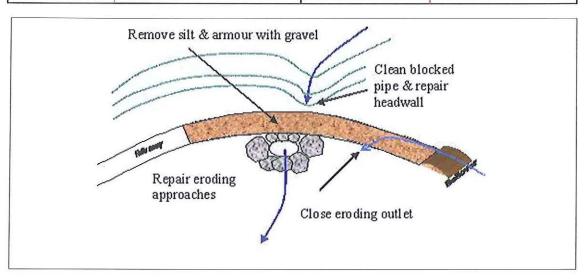
Start Date:	Finish Date:	Soil Stabilisation Date (must b	e within 5 days):
Date		Event	Initial

Crossing Name G Road Name Andersons Mountain Location 1.9km from Sherwood Ck Rd

 Drainage Feature
 Unmapped Drainage line
 Stream Permanency
 Intermittent

 Existing Crossing
 Size
 Stability Status
 Crossing Required
 Size

Existing Crossing	Size	Stability Status	Crossing Required	Size (mm/m Fu	ture	
Pipe Culvert	750	Unstable (upgrade)	Existing	NA Pe	manent	
Cross	ing Works		Approaches and Road Drainage			
Pavement/Structure Repair existing natural surface & gravel		Approaches Armour with gravel				
Reshape Bed/banks	Nil		Temporary Drainage	Nil		
Disposal of Spoil	NA		5-30m Upstream Left	Falls away		
Inlet	Clean &rep	air headwall	5-30m Upstream Right	Install Rollover		
Outlet	Existing roc	k headwall	Practices where no 5-30	Amour approach with	gravel	
Stabilisation	Nil		OutletControl	Block old eroding ou	ıtlet	
ErosionControl	Nil		TableDrain	Natural vegetation		



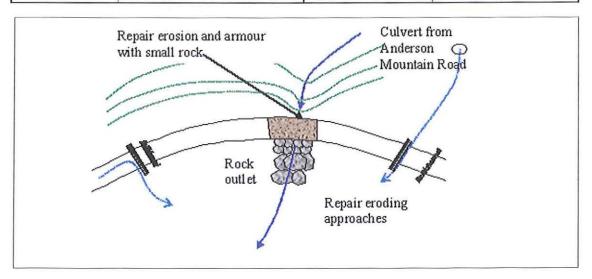
Start Date:	Finish Date:	Soil Stabilisation Date (must b	e within 5 days):
Date		Event	Initial

Crossing Name H Road Name 504/3 Trail Location 0.1km

Drainage Feature Unmapped Drainage line Stream Permanency Intermittent

Existing Crossing | Size | Stability Status | Crossing Required | Size (mm.

Existing Crossing	Size	Stability Status	Crossing Required	Size (mm/m) Futu	re	
Causeway	NA	Unstable (upgrade)	Existing	NA Pem	anen	
Cross	ing Works		Approaches and Road Drainage			
Pavement/Structure Armour existing natural surface with rock		Approaches Repair erosion				
Reshape Bed/banks	Nil		Temporary Drainage Nil			
Disposal of Spoil	NA		5-30m Upstream Left	Upstream Left Install Belt/channel		
Inlet	Repair & ar	mour with rock	5-30m Upstream Right	Install Belt/channel		
Outlet	Armour with	rock if required	Practices where no 5-30	NA		
Stabilisation	Nil		OutletControl	Natural vegetation		
ErosionControl	Nil		TableDrain	Natural vegetation		



Start Date:	Finish Date:	Soil Stabilisation Date (must be	within 5 days):
Date		Event	Initial

## 6. Operational Control

## Roading Supervisor to sign here

I acknowledge that I have received a copy of the plan documents and that I have been briefed on the conditions of the Plan. I understand the operational control requirements as outlined in the plan and take responsibility for the implementation of plan conditions as the principle controller of the operation.

I will brief any other operators not present at this briefing prior to them starting any work on site and ensure that risk assessment for the Safety Management Plan is completed for this area prior to operations commencing

Name:	Signatu	ire:	
Position:	Date:	From	
Company:		То	
Name:	Signatu	re:	
Position:	Date:	From	
Company:		То	
Name:	Signatu	re:	
Position:	Date:	From	
Company:		То	
Name:	Signatu	re:	
Position:	Date:	From	
Company:		То	
Name:	Signatur	re:	
Position:	Date:	From	
Company:		То	

## 7. Handover Briefing

I acknowledge that I have received a copy of the plan documents and that I have been briefed on the conditions of the Plan. I understand the operational control requirements as outlined in the plan.

Position - Company	Name	Signature	Date

## Induction Questionnaire

- 1 What dispersible prescription applies?
- Which residents may be affected by dust and noise?
- 3 Is Sherwood Creek Road a State Forest road?
- 4 What prescriptions apply for exits onto this road?

# COFFS HARBOUR CITY COUNCIL

Our Ref:

3334616

4 March 2013

Flavio Bugno Senior Planner State Forests FlavioB@sf.nsw.gov.au

Dear Flavio

Application to Undertake Works on Public Road Sherwood Creek Road

Reference is made to your application received to undertake works on a public road with the following details:

Location:

Sherwood Creek Road

Commencement:

As soon as practicable.

**Duration:** 

2 to 3 months.

Activity:

Carry out roadworks on Sherwood Creek Road to entry points into

Conglomerate State Forest to enable access by log trucks for logging

activities.

I am pleased to advise you that your application for the above works has been approved and this letter constitutes your permit for occupancy at this location. Please ensure you keep a copy of this permit on site at all times.

Further to the conditions of your application it is requested that the following special conditions are adhered to:

- 1. Pedestrian access is to be maintained at all times.
- Contact Council's Asset Inspector, Mr Trevor Campbell prior to the works commencing to confirm site arrangements.
- 3. Council may direct alterations to the site arrangements in the interest of public safety. These alterations shall be carried out under the direction of Council's Asset Inspector.

For further information please contact Council's Asset Inspector, Trevor Campbell on 6648 4503 or 0438 471 989.

Yours faithfully

Terry Thorn

Manager Asset Maintenance (Acting)

TFT:tmw

- Communications to: The General Manager, Locked Bag 155, Coffs Harbour 2450 Administration Building,
   Castle Street, Coffs Harbour Tel: (02) 6648 4000
- · Fax: (02) 6648 4199 · DX: 7559 · ABN 79 126 214 487
- · Email: coffs.council@chcc.nsw.gov.au
- · Website: www.coffsharbour.nsw.gov.au

