N

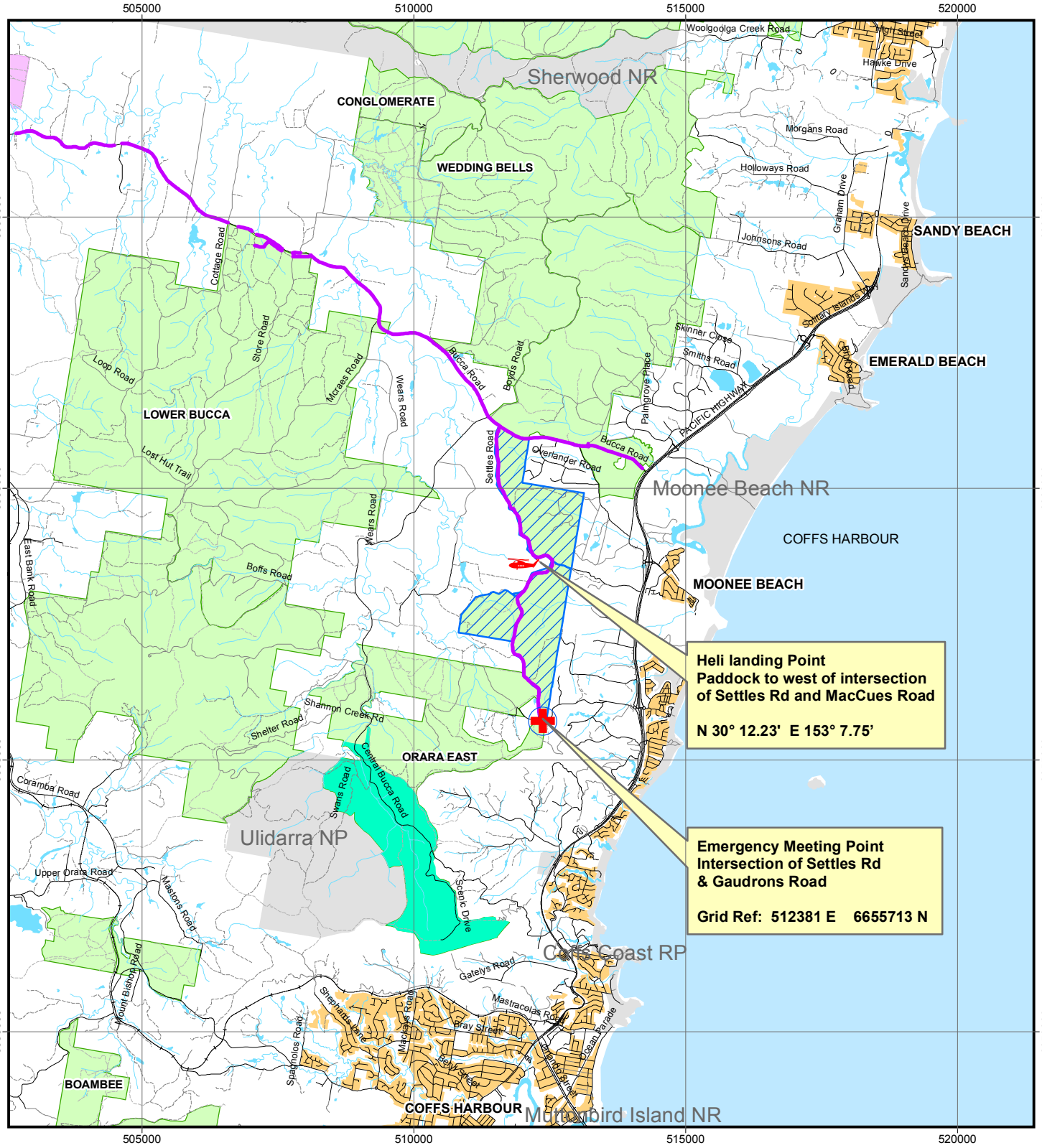
Map Sheets:
1:100,000 Coffs Harbour 9537
1:25,000 Moonee Beach 9537-4S

Scale: 100,000

Locality Map
Compartments 565 & 566
Orara East State Forest
Coffs Harbour Management Area

Forestry Corporation GDA

Datum: GCS_GDA_1994
Projection: GDA_1994_MGA_Zone_56



MAP FEATURES

- Harvest Area
- Private Plantations
- State Forest
- National Park & Nature Reserve

ROADS

- Sealed
- All Weather, Unsealed
- Dry Weather, Unsealed
- Four Wheel Drive
- Proposed Haulage
- Drainage Feature

SAFETY POINTS

- Helicopter Landing Area
- Safety Points

0 625 1,250 2,500 3,750 5,000 Meters

Created By: Bob Aspden
Created: 29/5/2017

Forestry Corporation

1:14,999

Contour Interval 10m

GDA_1994_NSW_Lambert

ORARA EAST Forest
NO. 536
Cpt No:565,566
Management Area:COFFS HARBOUR
Mapsheet

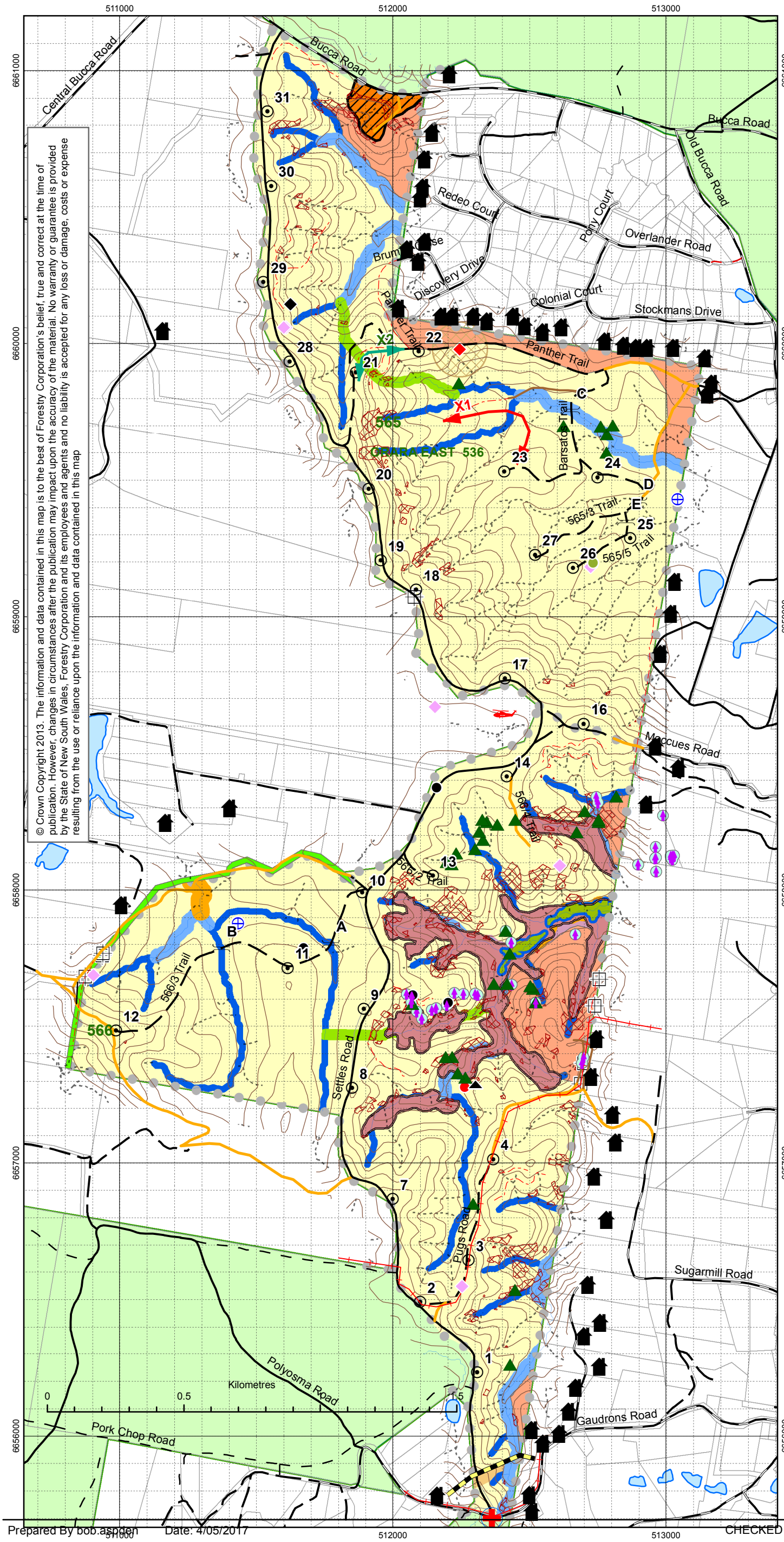
FORESTRY CORPORATION OF NSW, HARDWOOD FORESTS DIVISION
HARVEST PLAN OPERATIONAL MAP

Plan Name:ORARA EAST_565_566

Plan No:58805

VERSION: 1

Date Printed: 24/11/2017



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Map Features

- State Forest Boundary (Line)
- Compartments (Line)
- MGA Grid 100m
- 10m Contour
- State Forest
- Drainage Line
- Indicative Drainage Feature
- IFOA Crossing
- Ridge & Headwater Crossing
- Indicative Snig Track
- Temporary Log Dump
- Approved Crossing
- Blaze Trees
- Houses
- Powerline
- Telstra Cable
- Heli Landing Point
- Safety Meeting Point
- Slope >30 degrees (LiDar)
- Bell Bird Quarry
- Crown Road Reserve
- WaterBodies
- Cadastral (LPI Property Bdys)

Harvesting Prescriptions

- General Management (FMZ 4 and 8)
- Non-Harvest Areas
- Non-forestry Use (FMZ 7)

Forest Management Protection

4 Bar Exclusions

- Lowland Rainforest TEC
- Lowland Rainforest on Floodplain TEC
- TEC Buffers
- Rainforest

3 Bar Limited Falling

- Ridge and Headwater Habitat EZ

Drainage features

- Stream PZ 1st Order (10m)
- Stream PZ 2nd Order (20m)
- Stream PZ 3rd Order (30m)

Roads

- Sealed
- All Weather, Unsealed
- Dry Weather, Unsealed
- Four Wheel Drive
- Non Haulage Roads
- Roads not to be used

Threatened Species Locations

- Osprey
- Powerful Owl
- Masked Owl
- Glossy Black-Cockatoo
- Yellow-bellied Glider
- Koala
- Little Bent-wing Bat
- Niemeyera whitei
- Moonee Quassia
- Marsdenia longiloba (Protect 90% of Individuals)

TSL Prescription / Zones

- Yellow-Bellied Glider Modified Harvest Area
- Moonee Quassia (Protect 90% of Individuals) 20m Exclusion
- Glossy Black-Cockatoo feed tree

Prepared By bob.aspden Date: 4/05/2017

CHECKED BY.....DATE.....

Forestry Corporation

1:15,000

Contour Interval 10m

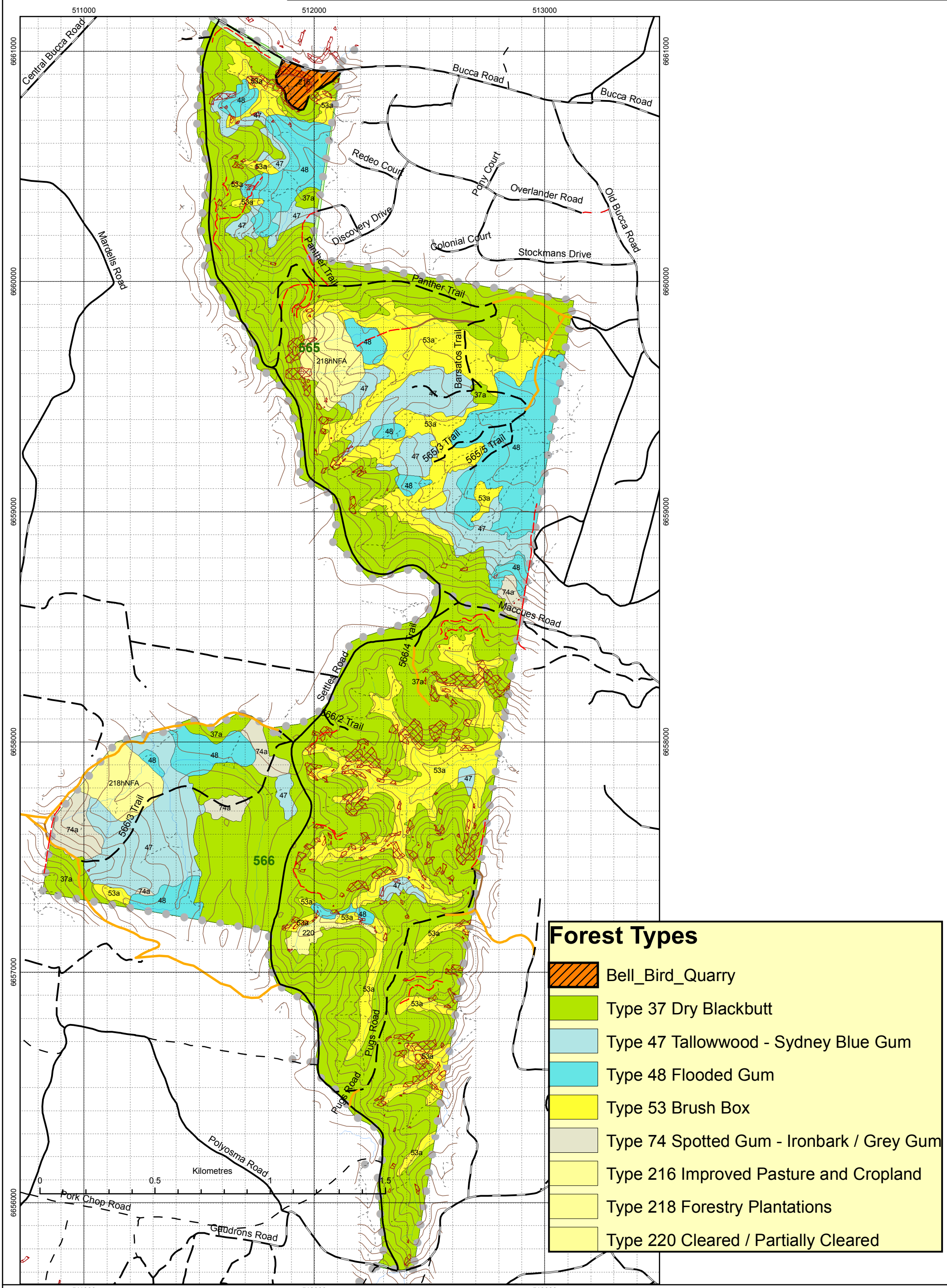
GDA_1994_NSW_Lambert

ORARA EAST Forest
NO. 536
Cpt No:565,566
Management Area:COFFS HARBOUR
Mapsheet

FORESTRY CORPORATION OF NSW, HARDWOOD FORESTS DIVISION
FOREST TYPE MAP

Plan Name:ORARA EAST_565_566

Plan No:58805



Prepared By bob.aspden Date: 4/05/2017

CHECKED BY.....DATE.....

Forestry Corporation

1:15,000

Contour Interval 10m

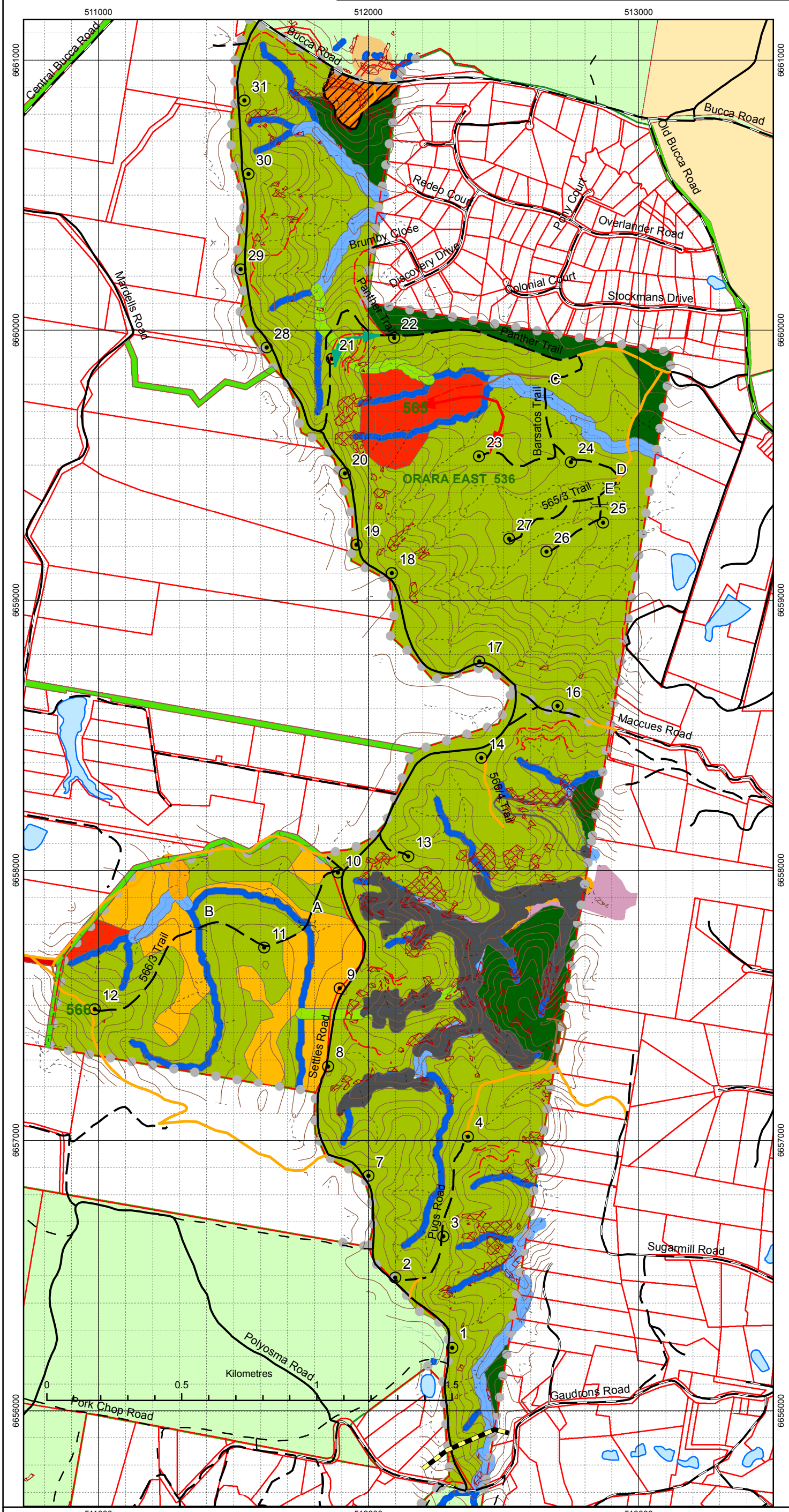
GDA_1994_NSW_Lambert

ORARA EAST Forest
NO. 536
Cpt No:565,566
Management Area:COFFS HARBOUR
Mapsheet

FORESTRY CORPORATION OF NSW, HARDWOOD FORESTS DIVISION
INDICATIVE SILVICULTURAL MAP

Plan Name:ORARA EAST_565_566

Plan No:58805



Indicative Silviculture

- Light STS
- Regeneration STS
- Pre-Merchantable Or Innacessible
- Thinning

Prepared By bob.aspden Date: 4/05/2017 CHECKED BY.....DATE.....

Hardwood Forests Division

Harvest and Haul Plan

State Forest	Orara East	Compartments	565 & 566
Management Area	Coffs Harbour	IFOA Region	Upper North East
Harvest Plan No.	58805	Price Zone	Coffs Harbour/2
Legal Conditions	Native Forest Harvesting under the UNE IFOA. Survey expiry date for this plan is **10/1/2027**		
Certification	Timber products removed from the plan area are within the Defined Forest Area covered by Australian Forestry Standard and ISO14001 Certificate 13761		
Prepared by	Senior Planner Bob Aspden	SIGNATURE ON FILE	Date: 24/11/2017
Reviewed by	Senior Planner Dan Cook	SIGNATURE ON FILE	Date: 24/11/2017
Approved by	Planning Supervisor Matt Kinny	SIGNATURE ON FILE	Date: 25/11/2017
Abbreviations	FT = Forest Technician, HC = Harvesting Coordinator, PtS= Protection Supervisor, HS = Harvesting Supervisor, RC = Roading Coordinator, Crew = Harvest Contractor/Forest Operators, IFOA = Integrated Forestry Operations Approval, TSL = Threatened Species Licence, EPL = Environment Protection Licence, FL = Fisheries Licence, CH = Cultural Heritage, SOP = Standard Operating Procedure, HPOM=Harvest Plan Operational Map, PP = Private Property		

1. Harvest Area Details (all Slope info is LiDAR derived)

	Cpt 565	Cpt 566	Total
PlanCpt ID	**128232**	**128233**	
Gross Area (ha)	205	255	460
Harvest Area*	160	185	**345**
Estimated Yield	2400	2800	**5200**
Yield/ha	15	15	
Slope (% 0-15 degrees)	60	48	
Slope (% 15-30 degrees)	40	52	
Slope (% 0-20 degrees)	77	65	
Slope (% 20-25 degrees)	15	20	
Slope (% 25-30 degrees)	8	15	

*Harvest Area is an estimate and does not include area predicted to be inaccessible or otherwise unavailable.

Contractor must ensure timber removed is allocated to the correct compartment when entered into Electronic Delivery Docket.

2. Management Conditions on Boundaries

Boundary	Conditions
SMZ / FMZ	**FMZ 3 a** – occurs and is mapped on HPOM as exclusion zones and are embedded within mapped areas of Rainforest. **FMZ 4** – Available for harvesting under the conditions of this plan and displayed on the HPOM as net harvest area. **FMZ 7** – Non-Forestry Use – See HPOM for Bellbird Quarry site. This area is to be excluded from all operational activities.
Cultural Heritage	Surveys have been conducted during May 2017 and previously in April 2005. No sites have been identified within the operational area. If any potential heritage sites are identified an interim 100m exclusion buffer must be applied and Planning Supervisor notified immediately.
Neighbours	The operational area is bounded by numerous private properties (approximately 90 separate lots). These boundaries are often fenced but many boundaries are not fenced. Many of the boundaries have been precision surveyed in the past. Several blaze (boundary) trees have been identified (see operational map). Where no blaze trees can be identified the FT's are to mark private property boundaries conservatively using a GPS.
Crown Road Reserve (north and west of Dumps 11 & 12)	Consent has been given from Dept. of Crown Lands to use the crown road reserve north and west of Dumps 11 & 12 (green easement on HPOM) for snigging. A boundary track occurs within the crown road reserve. The crown road reserve is 20m in width and is to be measured from the state forest boundary (where precision survey pegs and blaze trees occur).
Private Property access to the west of Dump 12	A permit to enter has been granted by the PP neighbour to the west of Dump 12. The harvesting contractor is to use existing tracks within the PP to provide access to the ridgeline north of Dump 12. The HC is responsible for the installation of an additional boundary gate to allow access. HC is to consult with neighbour prior to snigging.

3. Expected Yields

Product Estimates	Volume (m3)
HQ Large Sawlog (Quota)	1,700
HQ Small Sawlog	700
Poles, Piles and Girders	500
LQ Sawlog (Salvage)	2,100
Export Poles	200
Total	5,200

Species	Species Mix (Sawlog)
BBT	70%
TWD	5%
IBK	5%
GG	5%
BG	5%
Other Species	10%

4. Haulage Route and Contractor Travel Route

Haul Route	The haulage route will be from internal state forest roads north onto the Settles Road and onto the Bucca Road. Kilometer markers are to be placed along Settles Road to help operational traffic communicate their relative location along the haulage route via UHF. Settles Road must be **closed to the public** if B-double haulage is initiated. **BEWARE** – This haulage route is frequently used by the local community and recreational drivers/riders. Note: **Gaudrons Road** is not to be used by log trucks.
Traffic Control Plan	The crew and HC must develop a Traffic Management Plan for managing traffic when Settles Road is closed due to tree felling adjacent to the road.
Settles Road and Bucca Road Intersection	Signage is to be erected on the southern approach of this intersection to warn drivers of the on-coming intersection. Signage is to be RMS approved (T-intersection (symbolic) straight (code: W2-3)). All drivers exiting Settles Road onto Bucca Road must be vigilant to passing traffic (80km/hr zone).

5. Community

Issue	Conditions
Private property neighbours and local traffic	The operational area is surrounded by numerous private property neighbours. Some of these neighbours and the local community use state forest roads within the operational area for commuting and recreational activities such as bushwalking and horse riding. Sections of the operational area will be closed to the public during roading and harvesting operations to ensure a safe work environment. Harvesting and roading contractors are to ensure that the operational area is closed to all public. Sections of Settles Road will be closed to the public while adjacent harvesting operations are underway. Advisory signs must be placed at strategic points along Settles Road to advise the public of this temporary closure. **Harvesting must notify neighbours of harvesting timeline/ location progressively.** Neighbours may request a permit to access the operational area to access adjoining properties (Eg. Blueberry farmers along Settles Road).
Noise	A number of residences exist in close proximity to the harvest area and may be impacted by noise. Harvesting and haulage operations must be restricted to within the hours of: ♦ 7am to 6pm on weekdays ♦ 8am to 1pm on Saturdays ♦ No noise generating activities on Sundays

6. Infrastructure

Infrastructure	Conditions
All Mapped Fire Trails	Mapped trails must be reinstated to similar or better condition for access to that prior to harvesting/snigging and comply with the EPL.

7. Harvesting Conditions

Silviculture Type	Harvesting Objectives and Condition for each stand condition
Light STS Location: Throughout the majority of NHA	In these stands dominated by regrowth Blackbutt, the objective is to remove the mature and commercial component of the stand whilst promoting advanced regeneration (of commercial potential) to grow on into a vigorous mixed species stands. The crew must minimise disturbance to the patches of quality advanced regeneration where they occur. Crew to retain seed trees of preferred species at ~40 m spacing
Regeneration STS Location: Throughout NHA	In stands dominated by mature regrowth mixed species, the objective is to implement a regeneration harvesting treatment to establish a new, vigorous mixed species stand. Crew to retain seed trees of preferred species at ~40 m spacing Crew to remove all merchantable stems not marked for retention and ensure mechanical disturbance creates a suitable seed bed for regeneration. The crew is responsible for selecting retained seed trees and retaining patches of advanced regeneration.
Thinning	Thinning will be required in areas that have either had supplemental planting or were originally established as plantation. These areas are to be treated as native forest. Harvesting will be managed with the objective of removing sub-dominant and occasional co-dominant trees to concentrate growth on the best form dominant and co-dominant trees. Thinning may be carried out only in even aged stands. No more than 60% of the sum of the basal areas of trees in the stand may be removed.
Inaccessible and Pre-Merchantable Areas (Offset areas)	The Indicative Silvicultural Map indicates areas presumed to be inaccessible or pre-merchantable. It is likely that more of the net harvestable area will also be deemed inaccessible or pre-merchantable. The FT's must make a record of these areas.
Monitoring	Due to basal area offset design no basal area monitoring is required. Any changes to treatment and offset areas need to be endorsed by the Planning Supervisor.

IFOA Limits	Light STS	Thinning	Regen STS	Offset (Inaccessible & Pre-merchantable)	Total
STS Tract	300 ha	30 ha	15 ha	38 ha	383 ha
Pre-harvest BA (m2)	35	35	35	35	24,545 m2
Post harvest Ba (m2)	28	14	10.5	35	16,086 m2
Planned Removal (%)	20	60	70	0	35%

8. Tree Retention - refer to TSL booklet for full conditions

Prescription	Condition/Responsibility
Mark-Up – the FT is responsible for marking up the forest ahead of harvesting operations consistent with SOP 2 Exclusion Zone Boundary Mark Up - and SOP 3 - Forest Mark Up	
Compartment Mark-Up Survey (5.1, 5.2, 5.13)	Compartment mark-up surveys must be conducted at least 300m in advance of operations. The survey must search for threatened and protected species features listed in conditions 5.1 and 5.2 of the TSL. *One Koala star search trigger was identified during pre- harvest surveys.*
Hollow-bearing and Recruitment tree retention (H and R)	**Regrowth Zone** - 5.6 d), e) and f) conditions apply.
Significant Food Resources (5.6 g)	FT must mark for retention - 6 Eucalypt feed trees/2 ha where they occur, glider sap feed trees, stands of forest oak and forest oak feed trees. White Mahogany, Bloodwood and Ironbark are suitable E tree species present in these compartments. Glossy Black Cockatoo feed trees – 5.6 g) (iii)
Harvesting - Crew and HC responsibilities	
Protection of Retained Trees (5.6h)	Trees marked or selected for retention must not be felled. The crew must minimise damage to H, R and E trees by using directional felling. Harvesting debris should not accumulate within 5 m of retained trees. Where debris does accumulate, the crew must remove or flatten to < 1m high. The HC must be notified of any badly damaged retained trees and they must assess and record if a replacement retained tree is required.
Stag Retention (Dead standing trees 5.6f)	The crew should retain stags where safe to do so. The crew must record the date, DBH, risk and location of unsafe stags removed
Significant food resources	The crew should avoid damaging flowering or fruiting banksias or grass trees.
Impenetrable Understory	Areas identified as Impenetrable Understory by the FT must be managed as per the requirements of SOP3.

9. Site-Specific Flora and Fauna (see SOP 1, 2 and 3)

Present in Compartment

Condition	Boundary Type	Prescription
Riparian Habitat Protection (5.7) (The HPOM indicates LIC drainage order corrected by LiDAR)	2 bars	Implement filter strip (hard) and protection zone (soft) around drainage features as shown on the HPOM. Refer to SOP1. FT must mark unmapped drainage lines and 1st order protection zone boundary with 2 bars. The crew will locate and protect all 2nd order and above streams with GPS.
Ground Habitat (5.17)	N/A	Commercial firewood collection in these compartments is **permitted.**
TEC Exclusion	4 bars	Mapped Exclusion zone to be marked by FT using GPS (no additional buffer required as this has been built into layer).
Rainforest (5.4)	Accidental	Mapped Exclusion zone to be located by GPS in harvester.
Ridge & Headwater Habitat (5.8)	Limited	Mapped Exclusion zone to be located by GPS in harvester.
FMZ 3A	Limited	Mapped Exclusion zone to be located by GPS in harvester (surrounded by TEC).
Yellow-bellied Glider (6.17g) ii)	Modified Harvest	Tree retention requirements to be implemented by FT. Observed YBG east of Dump 22. Feed trees in 100 m radius to be retained.
Swift Parrot and Regent Honeyeater (5.6 g)	Modified Harvest	Retain 6 Eucalypt feed trees/2 ha where they occur
Fish	N/A	Class 1 Aquatic Habitat. Fisheries licence conditions apply.
Marsdenia longiloba	Machinery	Protect 90% of individuals: *Marsdenia longiloba*
Moonee Quassia sp	Machinery	Mark 20 m exclusion on 90% of individuals: *Quassia sp. Moonee Creek (syn. Q. sp. B)*
Rusty Plum	N/A	Managed under monitoring program. No conditions apply.

Not mapped as occurring in compartment, however markup searches should target these potential exclusions.

Condition	Boundary Type	Prescription
Powerful Owl (5.13)	3, Machinery	Mark 50m exclusion from nest site

Condition	Boundary Type	Prescription
Powerful Owl (5.13)	3, Machinery	Mark 30m exclusion from roost site
Giant-barred Frog (6.03)	3, Machinery	Mark 30 m exclusion on mapped streams within 200 m of a record.
Rocky Outcrop and Cliffs (5.11)	4, Limited	To be assessed and marked by FT during mark-up. 20m buffer on outcrops >0.1 ha or cliffs >3m high
Glossy Black-cockatoo nest (5.13)	4, Limited	Mark 50m exclusion from nest site
Powerful Owl, Masked Owl, Barking Owl (7bv)	4, Limited	Mark landscape exclusions as mapped

10. Soil & Water – Refer to EPL Booklet for full conditions

Issue	Assessment	Conditions
EPL Scheduled Activity	No	
EPL Licenced	Yes	Harvesting Supervisor and Roading Supervisor must update IFOA Report for commencement, suspension and completion of operations.
Unmapped drainage Line harvesting	Not - Permitted	Apply UMDL BMP's and SOP's.
Inherent hazard level	2	**Refer SOP 1**
Fisheries Aquatic Habitat	Class 1 Purple Spotted Gudgeon	**Relevant Fisheries Licence Conditions**
Harvesting Slope Limits	30 degrees	EPL – Sch 4 Condition 3.
Dispersible Soils	No	
Mass Movement / Instability	No	Nil
Acid Sulphate Soils	No	Nil
Seasonality Conditions	No	Nil
Historical or existing erosion	No	Nil

Ground cover	>70%	Nil
Burning conditions	Yes	Burning during March must use a ground burning (top disposal) method only. See EPL schedule 4, condition G37.
Log Dumps		**Refer to SOP 5** HC is responsible for authorising moving the location of a log dump.
Roading management during harvesting		**Refer to SOP 6.** HC is responsible for monitoring road and crossing drainage during haulage.
Wet Weather and Rutting		**Refer to SOP 6.** Crew is responsible for implementing automatic closures and following notified closures. HC is responsible for ensuring crew notified when notified closure is lifted.
Snigging		**Refer to SOP 8** Crew is responsible for progressive drainage of snig tracks
Snig Track Crossings		**Refer to SOP 8** HC is responsible to ensure snig track crossings are approved prior to use and rehabilitated upon completion.

11. Crossing Approvals

All crossing approvals are shown on the operational map – any other feature crossings must be assessed, recorded below and approved by the Planning Supervisor before use.

Crossing	EPA Approval	Conditions
IFOA X1 (Riparian Habitat Protection)	NA	Existing piped snig track crossing. Minimise size of snig track, remove debris outside filter strip and drain to EPL on completion of snigging.
Ridge & Headwater X2	NA	Existing snig track. Minimise size of snig track and drain to EPL on completion of snigging. No removal of vegetation ≥20cm permitted.

12. Operational Plan Briefing: A briefing of this operational plan was conducted by

Person	Role	Nature of Briefing	Date

Induction Questionnaire

1. Where are the safety meeting points and helicopter landing points?
2. What silviculture has been prescribed within the NHA?
3. What is the requirement for tree retention?
4. What signage is specified for Settles Road?
5. What TEC occurs within the NHA?
6. Is unmapped drainage line harvesting permitted in this operation?
7. What conditions must be followed with regard to neighbours?
8. What conditions exist for IFOA XA?
9. Where does access need to be maintained for neighbours?
10. What conditions exist for the use snig tracks through PP? Do the PP owners need to be consulted?

13. Acknowledgement of 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 and take responsibility for the implementation of plan conditions relevant to my responsibilities

Name	Role	Signature	Date

14. Standard Operating Procedures: The following SOP's apply to this plan. FCNSW staff and the crew must hold a copy on site whilst operating and comply with the conditions set out in each SOP.

Procedure Number	Title
1	Drainage Feature Protection
2	Exclusion Zone Boundary Management
3	Forest Mark-Up
4	Operating in Inherent Hazard Level 3 Areas
5	Log Dump Operation and Use
6	Road and Crossing Management and Wet Weather Controls
7	Safety Requirements
8	Snig Tracks and Extraction Tracks
9	Tree Felling and Servicing Logs
10	Fire Precautions and miscellaneous requirements

Operational Diary:

Date	Issue	Action Required	Action Completed	Initials
Record: Daily activities (eg tree marking, dump 2); Condition 5.2 of TSL items - EEC locations, rocky outcrops, koala scats, feed tree identification etc), discussions with stakeholders/neighbours/ site visitors; areas of impenetrable understorey; unviable areas not marked, non-conformances; harvesting issues identified, twice weekly road and crossing drainage checks				

FORESTRY CORPORATION OF NSW – NORTH EAST REGION

ROADWORKS PLAN

OraraEast State Forest;
Compartments 565 & 566

ASSOCIATED HARVEST PLAN NO. 58805

Certification

Prepared by:

Senior Planner Bob Aspden	SIGNATURE ON FILE	Date: 6/6/2017

Reviewed by:

Senior Planner Dan Cook	SIGNATURE ON FILE	Date: 3/10/2017

Reviewed by:

Planning Supervisor Matt Kinny	SIGNATURE ON FILE	Date: 25/11/2017

Road Works and Operational Expenditure Approved by:

Regional Manager Craig Busby	SIGNATURE ON FILE	Date: 6/6/2017

Duration of Approval:

The above approval is valid until 12 months from date of signature.

Contents

1. Cover Page
2. Operational Map
3. Costings
4. Roadworks Plan Text/Prescriptions/Road and crossings work sheets
5. Locality Map
6. Safety Plan HAMEEP
7. Harvesting Plan
8. Harvesting Notification List (Operations Team Leader and Roading Supervisor Only)

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1. Objectives

- Roadworks are required to service native forest harvesting operations within the above compartments. These compartments are scheduled for harvest in mid 2018.
- 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 Operating Procedures for Native Forest Operations on the North Coast.
- Licence Conditions issued by Forestry Corporation of NSW under the Forestry Act (2012).
- 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 Licence issued under the Threatened Species Conservation Act (1995).
  - Fisheries Licence issued under section 220ZW of the Fisheries Management Act 1994.
  - 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 licensed. All EPL conditions will apply to roading operations.
- Technical Guidance Notes for Roadworks.

3. Special Conditions

Feature	*Conditions*
Private Property	Yes – Some private property (PP) is accessed only through the operational area (E.g. Settles Road). If this PP is to be accessed, PP owners are required to obtain a permit for access through the operational area.
Safety Issues (includes hazards, public use of roads)	Yes - Settles Road acts as a thorough fare and carries an intermittent volume of public traffic. All operators are to remain vigilant to the presence of other road users. Signage is to be erected on the southern approach of the Settles Road and Bucca Road intersection ito warn drivers of the on-coming intersection. Signage is to be RMS approved (T-intersection (symbolic) straight (code: W2-3)). All drivers exiting Settles Road onto Bucca Road must be vigilant to passing traffic (80km/hr zone).

4. General Conditions

- Tree removal should be undertaken mechanically where possible. Refer to Safety Procedures 4.25 “Manual Tree Felling” and 4.26 “Management of Hazardous Trees & Overhead Hazards”.
- 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

Road Name: Settles Road **Road Category**: Permanent **Road Length** 6600 m from Gaudrons Road to the south to the Bucca Road in the north.

	WORKS	REQUIRED	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Telstra Cable	☑	Telstra cable to be located prior to roadworks
	Mass movement conditions	☐	
	Dispersible Soils Conditions	☐	
Pavement	Widening		
	Minor Realignment	☐	
	Re-opening	☐	
	Remove vegetation / debris	☑	
	Repair surface	☑	
	Crown / Crossfall	☑	
	Gravel	☑	Some light gravelling on steeper sections where required
Roadside & Batters	Remove trees >20 cm dbhob	☑	Remove Dangerous trees/stags only
	Remove trees <20 cm dbhob	☑	
	Repair/upgrade of Batters	☐	
Drainage	Culverts	☑	Clean
	Mitre Drains	☑	Clean
	ROD / Spoon	☑	Remove ROD's and replace with Crown & Mitre
	Belts/Channels	☐	
	Drop Downs	☐	
	Silt Trapping	☐	

1. Start Date: Finish Date:

Date	Event	Initial

Road Name: Pugs Road **Road Category**: Temporary **Road Length** 700 m from Settles Road to Dump 4

	WORKS	REQUIRED	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Telstra Cable	☑	Telstra cable to be located prior to roadworks
	Mass movement conditions	☐	
	Dispersible Soils Conditions	☐	
Pavement	Widening	☐	
	Minor Realignment	☐	
	Re-opening	☐	
	Remove vegetation / debris	☑	
	Repair surface	☐	
	Crown / Crossfall	☑	
	Gravel	☐	
Roadside & Batters	Remove trees >20 cm dbhob	☑	Remove Dangerous trees/stags only
	Remove trees <20 cm dbhob	☑	
	Repair/upgrade of Batters	☐	
Drainage	Culverts	☐	
	Mitre Drains	☑	Clean
	ROD / Spoon	☑	Maintain and install as per EPL spacing
	Belts/Channels	☐	
	Drop Downs	☐	
	Silt Trapping	☐	

2. Start Date: Finish Date:

Date	Event	Initial

Road Name: 566/2 Trail **Road Category**: Temporary **Road Length** 150 m from Settles Road to Dump 13

	WORKS	REQUIRED	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Works on >30° slopes	☐	
	Mass movement conditions	☐	
	Dispersible Soils Conditions	☐	
Pavement	Widening	☐	
	Minor Realignment	☐	
	Re-opening	☑	
	Remove vegetation / debris	☑	
	Repair surface	☑	
	Crown / Crossfall	☑	
	Gravel	☐	
Roadside & Batters	Remove trees >20 cm dbhob	☑	Remove Dangerous trees/stags only
	Remove trees <20 cm dbhob	☑	
	Repair/upgrade of Batters	☐	
Drainage	Culverts	☐	
	Mitre Drains	☑	Clean
	ROD / Spoon	☑	Maintain and install as per EPL spacing
	Belts/Channels	☐	
	Drop Downs	☐	
	Silt Trapping	☐	

3. Start Date: Finish Date:

Date	Event	Initial

Road Name: 566/3 Trail **Road Category**: Temporary **Road Length** 1300 m from Settles Road to Dump 12

	WORKS	REQUIRED	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Works on >30° slopes	☐	
	Mass movement conditions	☐	
	Dispersible Soils Conditions	☐	
Pavement	Widening	☐	
	Minor Realignment	☐	
	Re-opening	☐	
	Remove vegetation / debris	☑	
	Repair surface	☑	
	Crown / Crossfall	☑	
	Gravel	☑	(approach on Crossing A – see Crossing A diagram)
Roadside & Batters	Remove trees >20 cm dbhob	☑	Remove Dangerous trees/stags only
	Remove trees <20 cm dbhob	☑	
	Repair/upgrade of Batters	☐	
Drainage	Culverts	☐	
	Mitre Drains	☑	Clean
	ROD / Spoon	☑	Maintain and install as per EPL spacing
	Belts/Channels	☐	
	Drop Downs	☐	
	Silt Trapping	☐	

4. Start Date: Finish Date:

Date	Event	Initial

Road Name: 566/4 Trail **Road Category**: Temporary **Road Length** 100 m from Settles Road to Dump 14

	WORKS	REQUIRED	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Works on >30° slopes	☐	
	Mass movement conditions	☐	
	Dispersible Soils Conditions	☐	
Pavement	Widening	☐	
	Minor Realignment	☐	
	Re-opening	☐	
	Remove vegetation / debris	☑	
	Repair surface	☑	
	Crown / Crossfall	☑	
	Gravel	☐	
Roadside & Batters	Remove trees >20 cm dbhob	☑	Remove Dangerous trees/stags only
	Remove trees <20 cm dbhob	☑	
	Repair/upgrade of Batters	☐	
Drainage	Culverts	☐	
	Mitre Drains	☑	Clean
	ROD / Spoon	☐	
	Belts/Channels	☐	
	Drop Downs	☐	
	Silt Trapping	☐	

5. Start Date: Finish Date:

Date	Event	Initial

Road Name: MacCues Road **Road Category**: permanent **Road Length** 250 m from Settles Road to Dump 16

	WORKS	REQUIRED	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Works on >30° slopes	☐	
	Mass movement conditions	☐	
	Dispersible Soils Conditions	☐	
Pavement	Widening	☐	
	Minor Realignment	☐	
	Re-opening	☐	
	Remove vegetation / debris	☐	
	Repair surface	☑	
	Crown / Crossfall	☑	
	Gravel	☐	
Roadside & Batters	Remove trees >20 cm dbhob	☑	Remove Dangerous trees/stags only
	Remove trees <20 cm dbhob	☑	
	Repair/upgrade of Batters	☐	
Drainage	Culverts	☐	
	Mitre Drains	☑	Clean
	ROD / Spoon	☑	Maintain and install as per EPL spacing
	Belts/Channels	☐	
	Drop Downs	☐	
	Silt Trapping	☐	

6. Start Date: Finish Date:

Date	Event	Initial

Road Name: Panther Trail **Road Category**: Temporary **Road Length** 1400m from Settles Road to Barsatos Trail

	WORKS	REQUIRED	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Works on >30° slopes	☐	
	Mass movement conditions	☐	
	Dispersible Soils Conditions	☐	
Pavement	Widening		
	Minor Realignment	☐	
	Re-opening	☐	
	Remove vegetation / debris	☑	
	Repair surface	☑	
	Crown / Crossfall	☑	
	Gravel	☐	
Roadside & Batters	Remove trees >20 cm dbhob	☑	Remove Dangerous trees/stags only
	Remove trees <20 cm dbhob	☑	
	Repair/upgrade of Batters	☐	
Drainage	Culverts	☑	Clean
	Mitre Drains	☑	Clean
	ROD / Spoon	☑	Maintain and install as per EPL spacing
	Belts/Channels	☑	Install as per EPL spacing (approx. 4 x sets)
	Drop Downs	☐	
	Silt Trapping	☐	

7. Start Date: Finish Date:

Date	Event	Initial

Road Name: Barsatos Trail **Road Category**: Temporary **Road Length** 800m from Panther Trail to Dump 23

	WORKS	REQUIRED	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Works on >30° slopes	☐	
	Mass movement conditions	☐	
	Dispersible Soils Conditions	☐	
Pavement	Widening		
	Minor Realignment	☐	
	Re-opening	☐	
	Remove vegetation / debris	☑	
	Repair surface	☑	
	Crown / Crossfall	☑	
	Gravel	☑	Approx 6 loads on slippery approaches either side of Crossing C
Roadside & Batters	Remove trees >20 cm dbhob	☑	Remove Dangerous trees/stags only
	Remove trees <20 cm dbhob	☑	
	Repair/upgrade of Batters	☐	
Drainage	Culverts	☐	
	Mitre Drains	☑	Clean
	ROD / Spoon	☑	Maintain and install as per EPL spacing
	Belts/Channels	☐	
	Drop Downs	☐	
	Silt Trapping	☐	

8. Start Date: Finish Date:

Date	Event	Initial

Road Name: 565/3 Trail **Road Category**: Temporary **Road Length** 800m from Barsatos Trail to Dump 27

	WORKS	REQUIRED	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Works on >30° slopes	☐	
	Mass movement conditions	☐	
	Dispersible Soils Conditions	☐	
Pavement	Widening		
	Minor Realignment	☐	
	Re-opening	☐	
	Remove vegetation / debris	☑	
	Repair surface	☑	
	Crown / Crossfall	☑	
	Gravel	☐	
Roadside & Batters	Remove trees >20 cm dbhob	☑	Remove Dangerous trees/stags only
	Remove trees <20 cm dbhob	☑	
	Repair/upgrade of Batters	☐	
Drainage	Culverts	☐	
	Mitre Drains	☑	Clean
	ROD / Spoon	☑	Maintain and install as per EPL spacing
	Belts/Channels	☐	
	Drop Downs	☐	
	Silt Trapping	☐	

9. Start Date: Finish Date:

Date	Event	Initial

Road Name: 565/5 Trail **Road Category**: Temporary **Road Length** 300m from 565/3 Trail to Dump 26

	WORKS	REQUIRED	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Works on >30° slopes	☐	
	Mass movement conditions	☐	
	Dispersible Soils Conditions	☐	
Pavement	Widening		
	Minor Realignment	☐	
	Re-opening	☐	
	Remove vegetation / debris	☑	
	Repair surface	☑	
	Crown / Crossfall	☑	
	Gravel	☐	
Roadside & Batters	Remove trees >20 cm dbhob	☑	Remove Dangerous trees/stags only
	Remove trees <20 cm dbhob	☑	
	Repair/upgrade of Batters	☐	
Drainage	Culverts	☐	
	Mitre Drains	☑	Clean
	ROD / Spoon	☑	Maintain and install as per EPL spacing
	Belts/Channels	☐	
	Drop Downs	☐	
	Silt Trapping	☐	

10. Start Date: Finish Date:

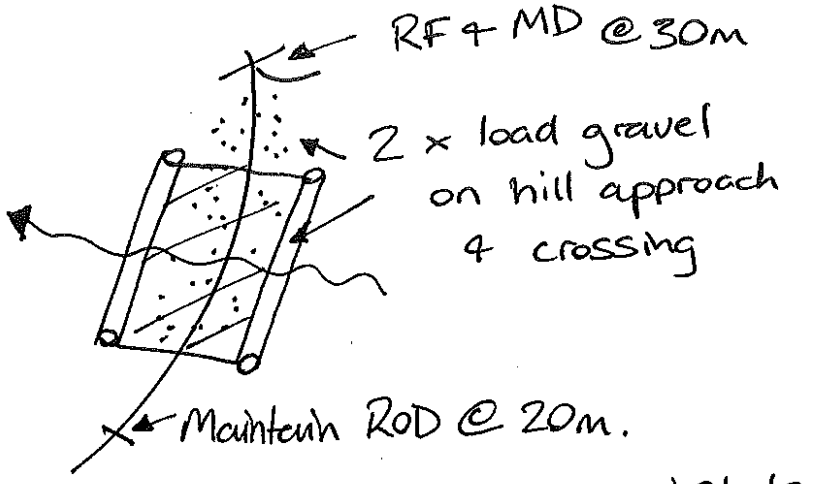
Date	Event	Initial

Crossing Name: A – 566/3 Trail.

Crossing Type	Existing / New	Future of Crossing	Drainage Feature Type	Stream Permanency
Timber Bridge	Existing	Permanent	1st Order DL	Intermittent

Crossing		Approaches & Road Drainage	
Reshaping Bed & Banks	Nil	Approach Works	2 x load gravel on northern approach and bridge crossing
Pavement/structure	Remove silt and gravel and install guide logs either side of the bridge	5-30m Upstream left	RF & MD
Disposal of spoil	Work into road prism	5-30m Upstream right	ROD
Inlet/Outlet	Nil	Practices where no 5-30m	NA
Soil Stabilisation within 20m	Seed/Mulch disturbed soil	Outlet control	Existing Vege or use Silt Trapping e.g. siltmesh, haybale or siltpond if <5m vege
Soil erosion/sediment control	Existing Vegetation	Table drain silt control	Nil

Crossing A
(Bridge)



* Remove silt from bridge suface & reinstate bumper logs on side of Bridge.

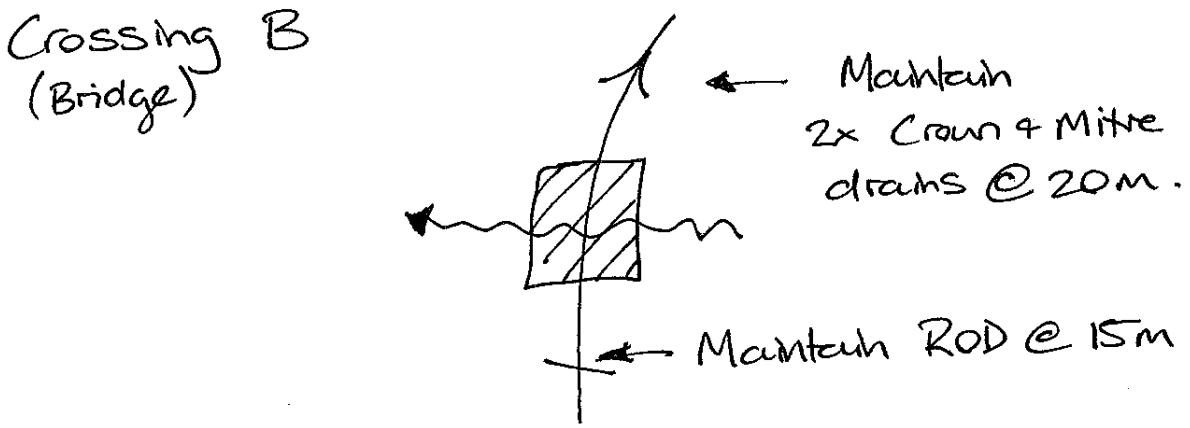
Start Date: Finish Date: Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Crossing Name: B – 566/3 Trail.

Crossing Type	Existing / New	Future of Crossing	Drainage Feature Type	Stream Permanency
Timber Bridge	Existing -	Permanent	1st Order DL	Intermittent

Crossing		Approaches & Road Drainage	
Reshaping Bed & Banks	Nil	Approach Works	Maintain road surface
Pavement/structure	Natural surface	5-30m Upstream left	Maintain ROD
Disposal of spoil	NA	5-30m Upstream right	Crown and Mitre
Inlet/Outlet	Nil	Practices where no 5-30m	NA
Soil Stabilisation within 20m	Seed/Mulch disturbed soil	Outlet control	Existing Vege or use Silt Trapping e.g. siltmesh, haybale or siltpond if <5m vege
Soil erosion/sediment control	Existing Vegetation	Table drain silt control	Nil



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

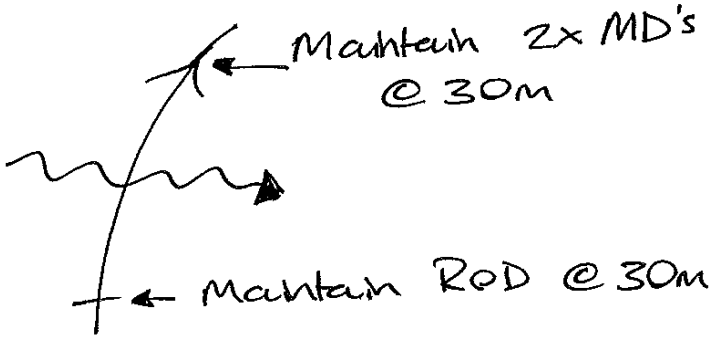
Date	Event	Initial

Crossing Name: C – Barsatos Trail.

Crossing Type	Existing / New	Future of Crossing	Drainage Feature Type	Stream Permanency
Rock causeway	Existing -	Permanent	2nd Order DL	Intermittent

Crossing		Approaches & Road Drainage	
Reshaping Bed & Banks	Nil	Approach Works	Maintain road surface and gravel steep section to the north
Pavement/structure	Rock	5-30m Upstream left	Maintain ROD
Disposal of spoil	NA	5-30m Upstream right	Crown and Mitre
Inlet/Outlet	Nil	Practices where no 5-30m	NA
Soil Stabilisation within 20m	Seed/Mulch disturbed soil	Outlet control	Existing Vege or use Silt Trapping e.g. siltmesh, haybale or siltpond if <5m vege
Soil erosion/sediment control	Existing Vegetation	Table drain silt control	Nil

Crossing C
(Rock Causeway)



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

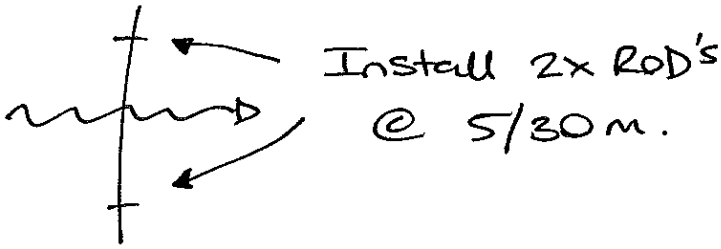
Date	Event	Initial

Crossing Name: D – 565/3 Trail.

Crossing Type	Existing / New	Future of Crossing	Drainage Feature Type	Stream Permanency
600mm Pipe	Existing	Permanent	Un-mapped DL	Intermittent

Crossing		Approaches & Road Drainage	
Reshaping Bed & Banks	Nil	Approach Works	Maintain road surface
Pavement/structure	Natural surface	5-30m Upstream left	Install ROD @5/30m
Disposal of spoil	NA	5-30m Upstream right	Install ROD @5/30m
Inlet/Outlet	Nil	Practices where no 5-30m	NA
Soil Stabilisation within 20m	Seed/Mulch disturbed soil	Outlet control	Existing Vege or use Silt Trapping e.g. siltmesh, haybale or siltpond if <5m vege
Soil erosion/sediment control	Existing Vegetation	Table drain silt control	Nil

Crossing D
(600mm Pipe)



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

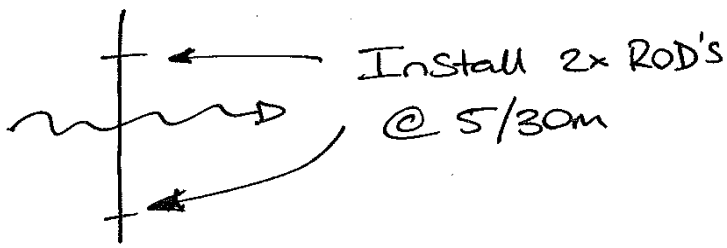
Date	Event	Initial

Crossing Name: E – 565/5 Trail.

Crossing Type	Existing / New	Future of Crossing	Drainage Feature Type	Stream Permanency
2 x 450mm Pipe	Existing	Permanent	Un-mapped DL	Intermittent

Crossing		Approaches & Road Drainage	
Reshaping Bed & Banks	Nil	Approach Works	Maintain road surface
Pavement/structure	Natural surface	5-30m Upstream left	Install ROD @5/30m
Disposal of spoil	NA	5-30m Upstream right	Install ROD @5/30m
Inlet/Outlet	Nil	Practices where no 5-30m	NA
Soil Stabilisation within 20m	Seed/Mulch disturbed soil	Outlet control	Existing Vege or use Silt Trapping e.g. siltmesh, haybale or siltpond if <5m vege
Soil erosion/sediment control	Existing Vegetation	Table drain silt control	Nil

Crossing E
(2x450mm Pipe)



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:		Signature:		
Position:		Date:	From	
Company:			To	

Name:		Signature:		
Position:		Date:	From	
Company:			To	

Name:		Signature:		
Position:		Date:	From	
Company:			To	

Name:		Signature:		
Position:		Date:	From	
Company:			To	

Name:		Signature:		
Position:		Date:	From	
Company:			To	

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*