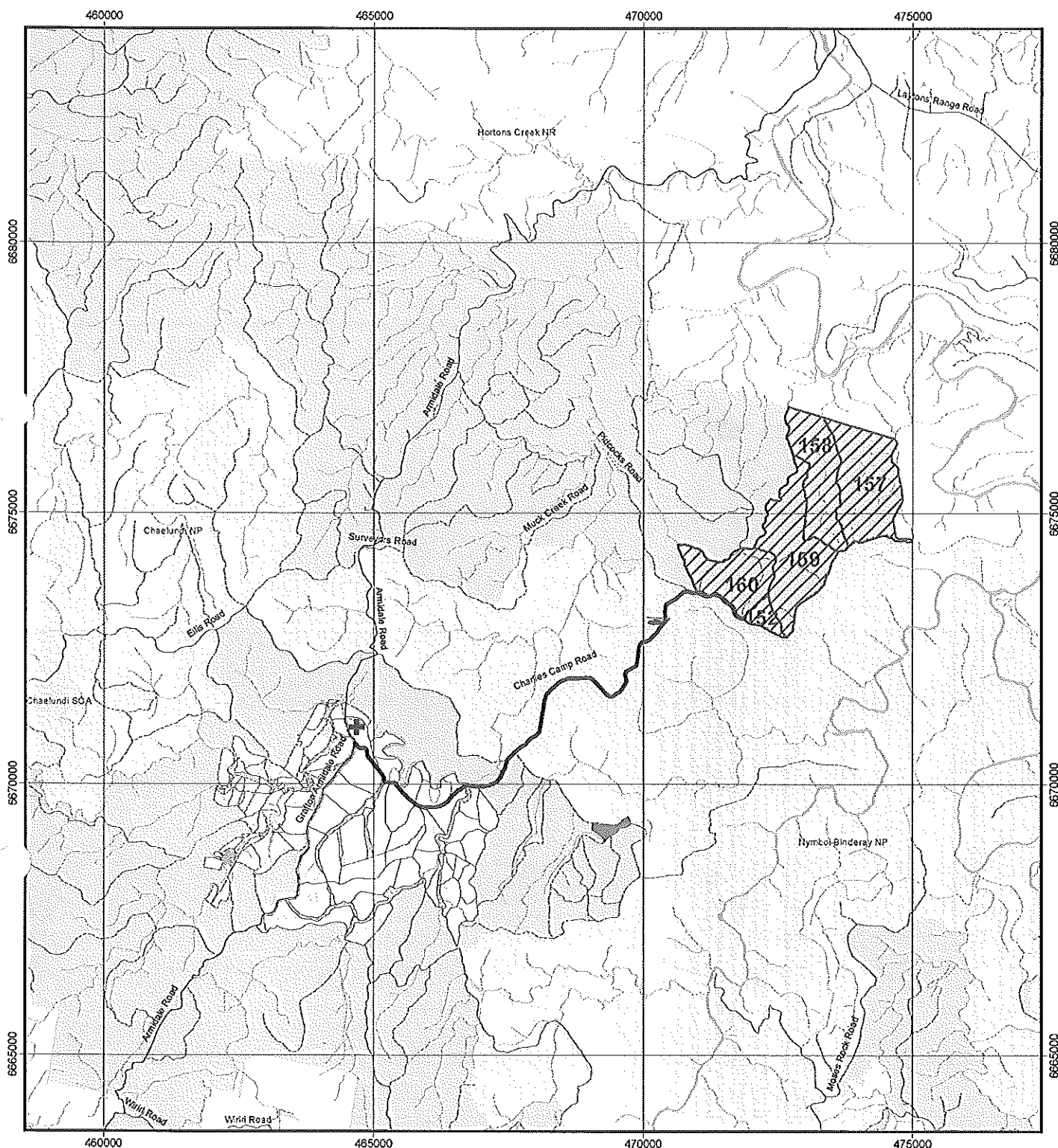


Map Sheets:
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 1:100,000 Dorrigo 9437
 Scale: 1:100,000






North East Region - Grafton MA
 Locality Map
 Compartments: 152, 157 158, 159 & 160
 Clouds Creek SF - SF No. 111








Datum: GCS_GDA_1994
 Projection: GDA_1994_MGA_Zone_56





MAP FEATURES

-  Harvest Area
-  Plantation
-  Flora Reserves
-  State Forest
-  National Park & Nature Reserve

ROADS

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

SAFETY POINTS

-  Helicopter Landing Area
-  Safety Points



Created By: Philip McKenzie
 Created: 21/08/2012
 Printed: 21/08/2012



Map Sheets:

1:100000 Dorrigo 9437

1:25000 Clouds Creek 9437 - 4N

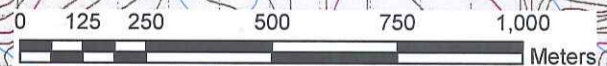
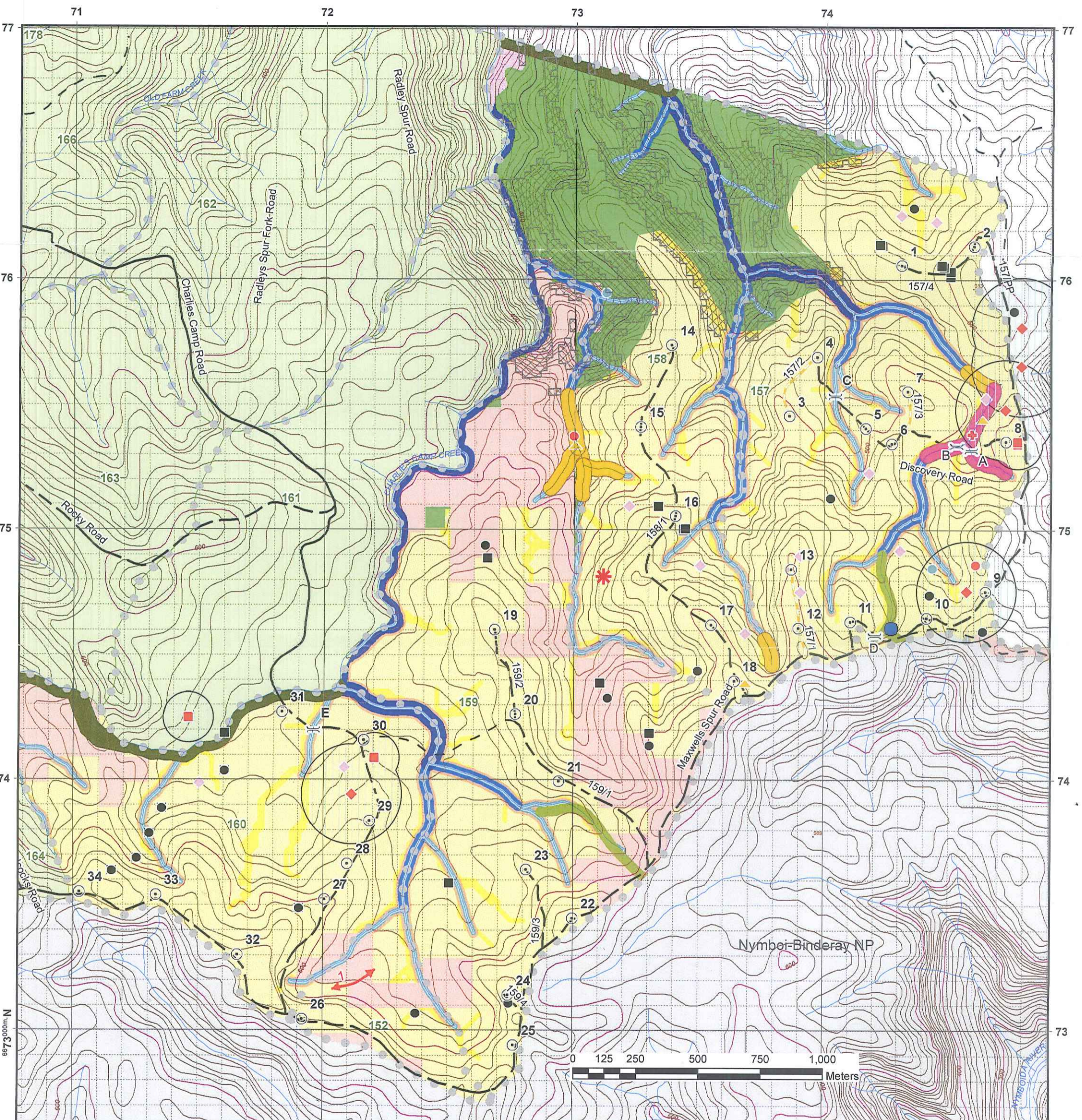
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North East Region - Grafton MA
Harvest Plan Operational Map
Compartments 152, 157, 158, 159, 160
Clouds Creek State Forest - SF No. 111



Datum: GCS_GDA_1994

Projection: GDA_1994_MGA_Zone_56



MAP FEATURES

- State Forest Boundary
- Compartments Boundary
- 1 Km Grid
- 10 / 100 m Contour
- State Forest
- National Park Estate
- Slopes > 30 degrees

ROADS

- Sealed
- All Weather, Unsealed
- Dry Weather, Unsealed
- 4WD Track
- Short Term Haulage
- Road not to be used

DUMPS & CROSSINGS

- Temporary Dry
- Approved Crossing
- Approved IFOA exclusion crossing

HARVESTING PRESCRIPTIONS

- General Management (FMZ 4)
- Areas for Further Assessment (FMZ 8)

FOREST MANAGEMENT PROTECTION

- Special Management (FMZ 2)
- High Conservation Value Old Growth
- Rainforest - Crafti + RN17

RIDGE & HEADWATER HABITAT

- 40m wide exclusion
- 80m wide exclusion

HARVESTING PROTECTION (TSCL, EPL & FL)

- Riparian (IHC 1 & 2)
 - Filter 5m either side
 - Protection 5m either side
 - Protection 15m either side
 - Protection 25m either side
 - Protection 45m either side
 - Operational zone 10m either side
 - Dam - 10m buffer
 - Rocky Outcrop - 20m buffer

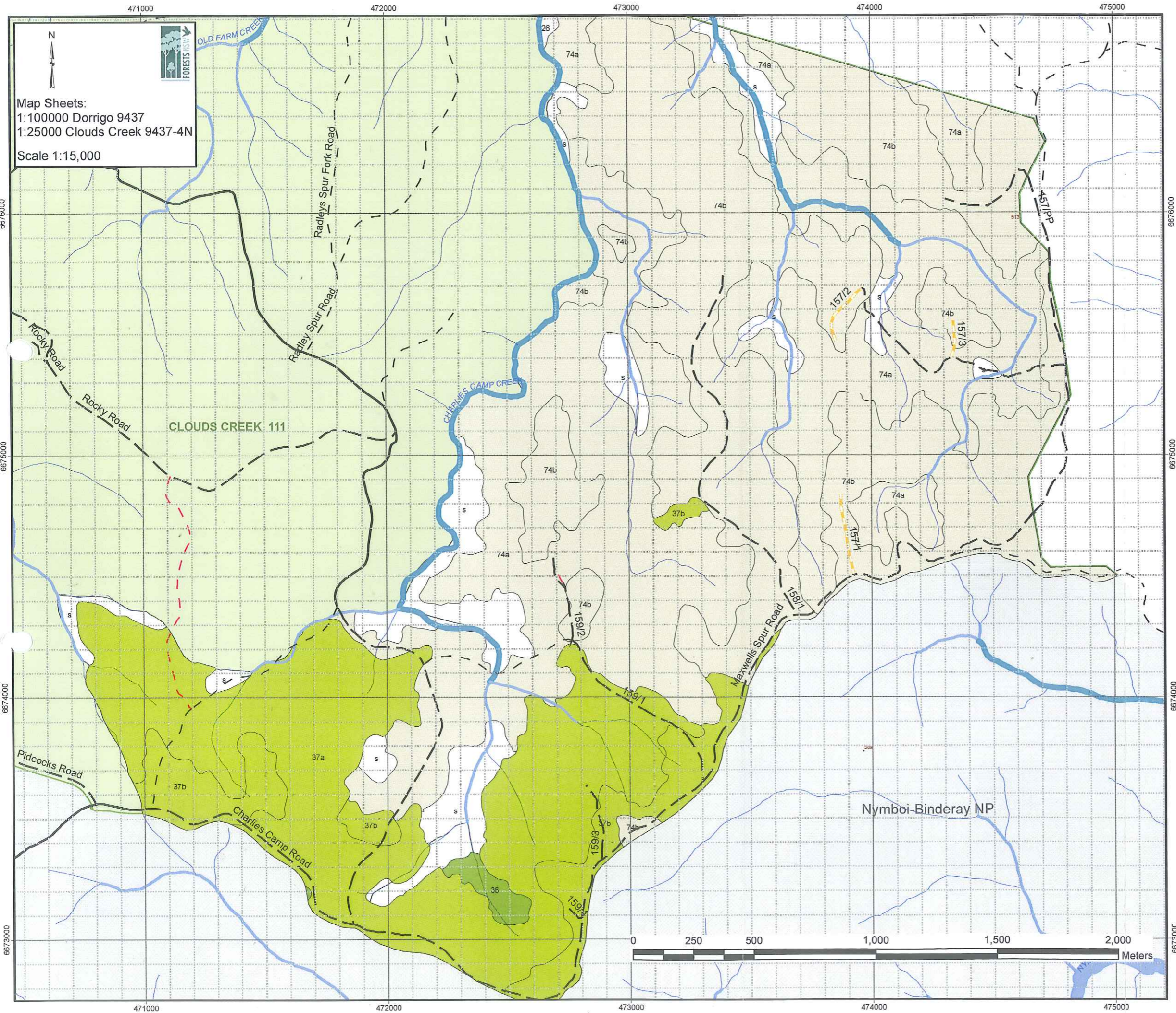
TSL PRESCRIPTIONS / ZONES

- Giant Barred Frog 30m
- Golden Tipped Bat 30m
- YBG Modified Harvest Area

THREATENED SPECIES LOCATIONS

- Rufous Bettong
- Powerful Owl
- Sooty Owl
- Glossy Black-Cockatoo
- Glossy Black-Cockatoo feed tree
- Yellow-bellied Glider
- Yellow-bellied Glider feed tree
- Koala
- Golden-tipped Bat
- Giant Barred Frog

Created By: Philip McKenzie
Created: 30/08/2012
Printed: 30/08/2012



Map Sheets:
 1:100000 Dorrigo 9437
 1:25000 Clouds Creek 9437-4N
 Scale 1:15,000

North East Region - Grafton MA
 Forest Type Map
 Compartments 152, 157, 158, 159, 160
 Clouds Creek State Forest - SF No. 111

- MAP FEATURES**
- State Forest Boundary
 - Compartments Boundary
 - 1 Km Grid
 - 10 / 100 m Contour
 - State Forest
- ROADS**
- Sealed
 - All Weather, Unsealed
 - Dry Weather, Unsealed
 - 4WD Track
 - Short Term Haulage
- FOREST TYPES**
- Type 26 Viney Scrub
 - Type 36 Moist Blackbutt
 - Type 37 Dry Blackbutt
 - Type 74 Spotted Gum - Ironbark / Grey Gum
 - Type S - Moist Hardwood
- DRAINAGE - LIC ORDERED**
- 1
 - 2
 - 3
 - 4 PLUS

Created By: Philip McKenzie
 Created: 30/08/2012
 Printed: 30/08/2012


FORESTS NEW SOUTH WALES - NORTH EAST REGION
HARVESTING PLAN No. HP_003861

Clouds Creek State Forest - Compartments 152, 157-160

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		
Philip McKenzie		Date: 09/09/12


Endorsed by:

Harvest Planning Team Leader		
Steve Pickering		Date: 10/9/12

Endorsed by:

Regional Planning Manager		
DEAN KEARNEY John Murray		Date: 2/1/13

Approved by:

Regional Manager		
Craig Busby		Date: 9/1/13

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

2. Description of Proposal

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

Other

	Proposed	Details
Roadworks	Yes	Roadworks Plan (attached)
Post harvest Burning	Yes	Plan to be prepared separately
Rehabilitation	No	Plan to be prepared separately

3. Area Identification and Yield Estimates

Region	North East Region
Management Area	Grafton
State Forest	Clouds Creek SF
State Forest No.	111
Pricing area	Dorrigo Central
Other Tenure Details	State forest only

Compartment	152	157	158	159	160	Total
Gross (Ha)	26	222	171	223	145	788
Net (Ha)	18	173	85	127	116	519
Yield (m3/ha)	70	12.9	14.2	39.5	32.8	
Volume (m3)	1260	2232	1207	5017	3805	13520

Products	Total (m3)
High Quality Large	5814
High Quality Small	1622
Veneer	135
Girders	270
Poles	270
Low Quality	5408
Total	13520

4. Forest Description

Forest Type: (See Forest type map)

Two main forest types can be identified in the harvest unit area:

- Spotted Gum type 74 which dominates approximately 2/3 of the area and consists of Spotted Gum and associates of Grey Gum, Grey Ironbark and White Mahogany.
- Blackbutt type 37 dominates the southern 1/3 of the planning unit where soils are sandier.
- Type S is a moist hardwood forest type consisting of mahogany, grey ironbark and brushbox and dominates moist drainage lines.

Harvest History:

- These compartments have a long harvest history, with periodic harvesting events having occurred in all the compartments for sawlogs, poles, girders and fencing timbers.
- The most recent harvesting event was conducted in 2000/2001 using AGS silviculture

Stand Description:

- Cpts 157 & 158 consist of mixed aged stands dominated by Spotted gum comprising a higher proportion of mature 40-70cm dbhob component amongst advanced sapling and pole 20-40cm dbhob regrowth.
- Cpts 159, 160 & 152 most stands consist of even aged sapling and pole 40-60cm dbhob regrowth dominated by Blackbutt, with only small scattered patches of mature/overmature trees. This area can further be subdivided into Blackbutt & Spotted gum dominated stands.

- The northern end of Cpt 159 most stands consist of even aged advanced sapling and pole 40-60cm dbhob regrowth dominated by Spotted gum, with only small scattered patches of mature/overmature trees.

Site Quality

- Generally good site quality with site height 30-40m on moister aspects.
- Poorer forest types dominate on the drier aspects and ridges with a site height of 25-30m.

Stand health

- On the whole, the stand health is of good quality with relatively little defect, although there are some areas where regeneration has been hampered by the presence of lantana.

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.
- Thin pole & sapling component of stands to promote growth.

	Stand Description		
	Mixed age BBT (Cpts 152, 159 &160)	Mixed age SPG dominated regrowth of varying quality (Cpt 159)	Mixed age SPG mature growth with patches of varying quality
Treatment – current ops	Heavy STS	Moderate STS	Light STS
Est. % of NHA	30%	30%	40%
Expected BA Removal (%)	45%	35%	15%
Future Ops 15-20 years	Estimated return 15-25 yrs.	Estimated return 15-25 yrs.	Estimated return 15-25 yrs.
Other treatments	<ul style="list-style-type: none"> • Retain seed trees • Mechanical disturbance 		

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).
- In areas designated for STS it is expected that the basal area removal across the tract will fall below 40 %. BA removal will exceed 40% in some localized areas, but will be balanced by offset areas, non harvest areas and tree retention across the tract.

In areas where heavy STS is implemented, seed tree retention, mechanical disturbance and enrichment planting may be required:

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 1 1/2 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 Disturbance

- 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.

The SFO must monitor basal area retention under STS.

6. Special Conditions

6.1 Leases, Permits, Plots

	Occurs	Details	Conditions
Occupation Permits (apiary)	Yes	S2012 S2077 S2078 S2079 S2099 S2100 S2101 S2103	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 permittee to ensure that the impact on harvesting is minimised.

6.2 Critical Boundaries

Private Property: adjoins compartments 157 from the east and the north. The boundaries are fenced.

National Park: Nimboi-Binderay NP adjoins the whole planning unit to the south. The boundary is offset 20m from the centreline of Charlies Camp Road and Maxwells Spur Road.

Other critical boundaries: are generally formed by roads and drainage lines as shown on the operational map.

- If there is any doubt about the location of a critical boundary, clarification must be sought from 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.

6.3 Haulage Considerations

- Haulage is planned to access the Armidale Road via Maxwells Spur Road and Charlies Camp Road. This route may be used by mini B-doubles.
- All forest roads must be closed for B-double use. Provide NPWS (Scott Filmer) with a minimum of two weeks notice prior to road closure
- Additional signage should be used on Armidale Road to notify traffic of turning trucks.

6.4 IFOA Required Approval Of Forestry Activities

Approvals have been obtained for the following activities / locations as shown on the operational map.

Crossing No.	Activity	Type	Conditions
1	Snigging	FMZ 3A – HCVOG	Use existing snig track, clear debris with dozer / skidder. Repair snig track and drain to EPL on completion. No debris is to be placed near trees. Standard EPL conditions to be applied.

- NOTE: Any additional crossings of Rainforest, HCVOG and Riparian Protection Zones require prior Regional Manager (or OEH) approval before they 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.

6.5 Unmapped Rainforest

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

6.6 Short Term Haulage Roads

- Short term Haulage Roads are shown on the operational map. Conditions relating to the use of these roads are contained within the Roadworks Plan

7. Forest Management Zoning Conditions

The following Forest Management Zones and conditions apply:

FMZ	Type	Notes
Zone 2	Special Management	Rainforest. Protects sections of steep topography and pockets of forest isolated due to other protection zones. These areas must be protected as marked on the map.
Zone 3A	Harvesting Protection	HCVOG – these areas must be protected as marked on the map.
Zone 4	General Management	Available for harvesting in accordance with the conditions of this harvest plan.
Zone 8	Further Assessment	<p>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)</p> <p>These areas include:</p> <ul style="list-style-type: none"> • Modelled IHC 4 areas – assess actual slope in the field and exclude areas >30 degrees in accordance with condition 3 of schedule 4 of the EPL. • Mapped drainage features – identify in the field and apply EPL, TSL and FL conditions based on actual field location, • Modelled drainage features. SFO to identify areas requiring protective measures and apply appropriate EPL & FL prescriptions and note on the harvesting operational map.

8. Cultural Heritage Conditions

Aboriginal Cultural Heritage

No special conditions apply.

Non Aboriginal Cultural Heritage

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 ha?	No – 6.9 d does not apply
Stag Retention	5.6e
Significant Food Resources	5.6f
Protection of Retained Trees	5.6g
Swift parrot	Retain 10 Eucalypt feed trees/2ha (see table 3)
Koala intermediate use	Retain ten primary browse trees/2ha see table 2

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	<i>Mixophyes iteratus</i>
Mammals	Golden-tipped Bat	<i>Kerivoula papuensis</i>
	Koala	<i>Phascolarctos cinereus</i>
	Rufous Bettong	<i>Aepyprymnus rufescens</i>
Birds	Yellow-bellied Glider	<i>Petaurus australis</i>
	Powerful Owl	<i>Ninox strenua</i>
	Sooty Owl	<i>Tyto tenebricosa</i>
	Barking Owl	<i>Ninox connivens</i>
	Glossy-black Cockatoo	<i>Calyptorhynchus lathami</i>

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	15 KOAL records in cpts G_157, 158, 160	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),(g)	23 GLBC feed trees in cpt G_158, 159, 160 3 YEBG/SQGL feed trees in G_157, 160	Retain and protect glossy black cockatoo feed trees. Retain all yellow-bellied glider and squirrel glider sap feed trees.
Rocky Outcrops and Cliffs	5.11	Rock outcrop 30X40m recorded in cpt G_158	SFA prohibited from feature, 20m exclusion buffer if > 0.1ha (approx. 30m x 30m).
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 (b) 5.17 (d)	CWRV + small mammals reptiles Larger CWRV	Commercial Firewood collection is not permitted 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
Giant barred Frog (<i>Mixophyes iteratus</i>)	6.3	1 MIX ITE record in cpt G_157	Exclusion zone of 30m on both sides of all streams within 200m of record as mapped.
Powerful Owl (<i>Ninox strenua</i>)	6.9	9 POWL records in and within 2km of cpt boundaries	Landscape approach as specified in 6.9.2 will be used. Condition 5.13 may be applicable to protect any roosts or nests found.
Barking Owl (<i>Ninox connivens</i>)		1 BOWL record in cpt G_152	Search gully lines and heads of gullies for roost and nest sites.
Koala (<i>Phascolarctos cinereus</i>)	6.14	15 KOAL records in cpts G_157, 158, 160	Evidence of koalas was found in the compartment. Pre-logging surveys did not detect intermediate or high use areas. However, due to the number of records in the general vicinity, intermediate use conditions must be applied within the compartments. Compartment mark-up 5.2.2 must be completed.

TSL Condition	TSL Condition No.	Record Details	Prescription Summary
Yellow-bellied Glider (<i>Petaurus australis</i>)	6.17	3 YEBG V-notch trees in G_157, 160 4 YEBG call detection records in cpt G_157	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.
Golden-tipped Bat (<i>Kerivoula papuensis</i>)	6.20	2 GOTB records in cpt G_158, 159	Exclusion zones of 30m on all 1 st and 2 nd order streams within 200m of all records as mapped.

Table 3: Species Specific Prescriptions (default IFOA condition)

TSL Condition	TSL Condition No.	Record Details	Prescription Summary
Swift Parrot (<i>Lathamus discolor</i>) Regent Honeyeater (<i>Xanthomyza phrygia</i>)	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. Boundary marking conditions for each exclusion zone are described on the HPOM and in the tree marking code.

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

Boundary marking conditions for each exclusion zone are described on the HPOM and 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 1 Aquatic Habitat (Eastern Freshwater Cod) has been identified as occurring within these compartments. Conditions of the Fisheries Licence apply.

- A pre-logging aquatic habitat assessment of the site of each proposed crossing is required prior to use. Consultation with the harvest planner is required prior to construction and use.

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
Drainage Feature Protection	See HPOM for widths
Inherent Hazard Class	2
Dispersible Soils	No
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 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 4 of the Forestry and National Parks Estate Act 1998 (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. Roding and harvesting operations are not licenced. All EPL conditions will apply to harvesting and roding operations.

14. 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: Roding plan prescribes roding requirements for this harvesting operation.

15. Pre-Operational Briefing

I acknowledge that I have received a copy of the Harvesting Plan for Compartments 152, 157-160 in Clouds Creek State Forest and that I have been briefed on the conditions of the Plan. I understand the supervision and operational control requirements as outlined in the plan.


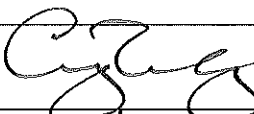
Position	Name	Signature	Date

FORESTS NEW SOUTH WALES – NORTH EAST REGION

ROAD WORKS PLAN

State Forest Clouds Creek; Compartments 152, 157-160

Certification

Prepared By: Harvest Planner	Philip McKenzie	Approved By: Regional Manager	Craig Busby
Signature		Signature	
Date	13/12/2011	Date	9/1/12

1. Objectives

Roadworks are required to service native forest harvesting operations within the above compartments. These compartments are scheduled for harvest in mid 2012.

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).
- Threatened Species Conservation Licence (TSCL) 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 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	No
Mass Movement Hazard	No
Seasonality	No
Engineering Design	No
Environmental impacts ie Dust, Noise, Water, Visual	No
National Park	Yes. Charlies Camp Road and Maxwells Spur Road form the boundary with Nimboy-Binderai National Park. The boundary is 20m to the south of the centreline of these roads. Roadworks must not impact on N.P. Inform Scott Filmer of NPWS prior to commencing works.
Private Property	Yes 157PP Road traverses PP.
Permit To Enter required	Yes. <ul style="list-style-type: none"> Robert Borchardt has given verbal approval to use the trail on his land it, however a Permit to Enter has yet to be obtained. No works to commence prior to receiving Permit to Enter. Advise landowner prior to commencing operation, keep informed of the progress and on completion. Contact details are held on file.
Quarries and Gravel Pits	No
Underground/Overhead Utilities	None identified during planning process.
Safety Issues (includes hazards, public use of roads)	Yes, see Hazard Assessment in the Site Safety Pack

3.1 Short Term Haulage Roads

Short Term haulage Roads are shown on the operational map. They are currently vegetated and stable. These roads may be used for haulage, subject to the following conditions:

- Roads must be left vegetated until immediately prior to use
- drainage is installed to EPL specifications within 5 days of completion of haulage operations (crossbanks)
- rollovers or other EPL compliant drainage are installed where road grade is less than 3 degrees
- EPL compliant drainage is installed 5-30m either side of any drainage line crossing
- Minimise disturbance to vegetated, working table drains

- Temporary drainage is installed in the event of ongoing rainfall or cessation of operations for more than 2 days.
- Road Drainage spacings may exceed those specified in Schedule 5 of the EPL where:
 - mitre drains cannot be constructed (eg side cut road);
 - road grade exceeds 3 degrees

Consideration to be given to implementation of additional site specific conditions as appropriate such as:

- Utilising outfall and other forms of drainage (modified rollovers)
- Installing energy dissipaters in table drains; and
- Installing silt mesh /trapping on drain outlets if native vegetation filtering is inadequate

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 worksheets.

Road Maintenance/Upgrade

Road Name 157/1

Category Short Term Haulage

Location Off Maxwells Spur Rd to dump 13.

Length (m) 350

WORKS		YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS		
Site Info	Works >30 Slopes	<input type="checkbox"/>			
	Mass Movement	<input type="checkbox"/>			
	Dispersible	<input type="checkbox"/>			
Pavement	Upgrade	Widening	<input type="checkbox"/>	Location NA Formation Width (m) NA Curve Widening NA Upgrade Length (m) 0 Upgrade Spoil	
		Grade Lowering	<input type="checkbox"/>	NA	
		Realignment	<input type="checkbox"/>	NA	
		Reopening	<input type="checkbox"/>	NA	
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length	Maintenance Length (m) 350
		Repair surface	<input checked="" type="checkbox"/>	Various along road length	
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.	
Gravel		<input type="checkbox"/>	NA	Gravel Length (m) 0	
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only		
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No		
	Batter Repair/Upgrade	<input type="checkbox"/>	NA		
Drainage	Culverts	<input type="checkbox"/>	NA	Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>			
	ROD/Spoon	<input type="checkbox"/>	Sets:		
	Belts/Channels	<input type="checkbox"/>	Sets:		
	Drop Downs	<input type="checkbox"/>	Sets:		
	Silt Trapping	<input type="checkbox"/>			
Comments: Contractor optional, we need to encourage contractor to do it.					

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Road Name 157/2

Category Short Term Haulage

Location From Discovery Rd to dump 3.

Length (m) 250

		WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Works >30 Slopes		<input type="checkbox"/>	
	Mass Movement		<input type="checkbox"/>	
	Dispersible		<input type="checkbox"/>	
Pavement	Upgrade	Widening	<input type="checkbox"/>	Location NA Formation Width (m) NA Curve Widening NA Upgrade Length (m) 0 Upgrade Spoil
		Grade Lowering	<input type="checkbox"/>	NA
		Realignment	<input type="checkbox"/>	NA
		Reopening	<input checked="" type="checkbox"/>	Various
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length Maintenance Length (m) 250
		Repair surface	<input checked="" type="checkbox"/>	Various along road length
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.
	Gravel	<input type="checkbox"/>	NA Gravel Length (m) 0	
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only	
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No	
	Batter Repair/Upgrade	<input type="checkbox"/>	NA	
Drainage	Culverts	<input type="checkbox"/>	NA Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>		
	ROD/Spoon	<input type="checkbox"/>	Sets:	
	Belts/Channels	<input type="checkbox"/>	Sets:	
	Drop Downs	<input type="checkbox"/>	Sets:	
	Silt Trapping	<input type="checkbox"/>		
Comments: Contractor optional				

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Road Name 157/3

Category Short Term Haulage

Location Off Discovery Rd to dump 7.

Length (m) 150

		WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Works >30 Slopes		<input type="checkbox"/>		
	Mass Movement		<input type="checkbox"/>		
	Dispersible		<input type="checkbox"/>		
Pavement	Upgrade	Widening	<input type="checkbox"/>	Location NA Formation Width (m) NA Curve Widening NA Upgrade Length (m) 0 Upgrade Spoil	
		Grade Lowering	<input type="checkbox"/>	NA	
		Realignment	<input type="checkbox"/>	NA	
		Reopening	<input type="checkbox"/>	NA	
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length	Maintenance Length (m) 150
		Repair surface	<input checked="" type="checkbox"/>	Various along road length	
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.	
	Gravel	<input type="checkbox"/>	NA	Gravel Length (m) 0	
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only		
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No		
	Batter Repair/Upgrade	<input type="checkbox"/>	NA		
Drainage	Culverts	<input type="checkbox"/>	NA	Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>			
	ROD/Spoon	<input checked="" type="checkbox"/>	Sets: 1		
	Belts/Channels	<input type="checkbox"/>	Sets:		
	Drop Downs	<input type="checkbox"/>	Sets:		
	Silt Trapping	<input type="checkbox"/>			
Comments: Contractor optional					

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Road Name 157/4

Category Temporary

Location Off PP to dump 1.

Length (m) 350

		WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Works >30 Slopes		<input type="checkbox"/>		
	Mass Movement		<input type="checkbox"/>		
	Dispersible		<input type="checkbox"/>		
Pavement	Upgrade	Widening	<input type="checkbox"/>	Location NA Formation Width (m) NA Curve Widening NA Upgrade Length (m) 0 Upgrade Spoil	
		Grade Lowering	<input type="checkbox"/>	NA	
		Realignment	<input type="checkbox"/>	NA	
		Reopening	<input type="checkbox"/>	NA	
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length	Maintenance Length (m) 350
		Repair surface	<input checked="" type="checkbox"/>	Various along road length	
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.	
		Gravel	<input type="checkbox"/>	NA	Gravel Length (m) 0
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only		
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No		
	Batter Repair/Upgrade	<input type="checkbox"/>	NA		
Drainage	Culverts	<input type="checkbox"/>	NA	Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>			
	ROD/Spoon	<input type="checkbox"/>	Sets:		
	Belts/Channels	<input type="checkbox"/>	Sets:		
	Drop Downs	<input type="checkbox"/>	Sets:		
	Silt Trapping	<input type="checkbox"/>			
Comments: Nil					

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Road Name 157-PP

Category Temporary

Location Runs through PP to Northern end cpt 157.

Length (m) 1450

		WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Works >30 Slopes		<input type="checkbox"/>		
	Mass Movement		<input type="checkbox"/>		
	Dispersible		<input type="checkbox"/>		
Pavement	Upgrade	Widening	<input checked="" type="checkbox"/>	Location NA Formation Width (m) 4.2 Curve Widening Various along road length Upgrade Length (m) 0 Upgrade Spoil Incorporated into road surface	
		Grade Lowering	<input type="checkbox"/>	NA	
		Realignment	<input type="checkbox"/>	NA	
		Reopening	<input type="checkbox"/>	NA	
	Maintenance	Clear veg/debrls	<input checked="" type="checkbox"/>	Various along road length	Maintenance Length (m) 1450
		Repair surface	<input checked="" type="checkbox"/>	Various along road length	
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.	
	Gravel	<input type="checkbox"/>	NA	Gravel Length (m) 0	
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only		
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No		
	Batter Repair/Upgrade	<input type="checkbox"/>	NA		
Drainage	Culverts	<input type="checkbox"/>	NA	Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>			
	ROD/Spoon	<input type="checkbox"/>	Sets:		
	Belts/Channels	<input type="checkbox"/>	Sets:		
	Drop Downs	<input type="checkbox"/>	Sets:		
	Silt Trapping	<input type="checkbox"/>			
Comments: Nil					

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Road Name 158/1

Category Temporary

Location Off Maxwells Spur Rd through to dump 14.

Length (m) 1700

		WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Works >30 Slopes	<input type="checkbox"/>			
	Mass Movement	<input type="checkbox"/>			
	Dispersible	<input type="checkbox"/>			
Pavement	Upgrade	Widening	<input type="checkbox"/>	Location NA Formation Width (m) NA Curve Widening NA Upgrade Length (m) 0 Upgrade Spoil	
		Grade Lowering	<input type="checkbox"/>	NA	
		Realignment	<input type="checkbox"/>	NA	
		Reopening	<input type="checkbox"/>	NA	
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length	Maintenance Length (m) 1700
		Repair surface	<input checked="" type="checkbox"/>	Various along road length	
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.	
Gravel		<input type="checkbox"/>	NA	Gravel Length (m) 0	
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only		
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No		
	Batter Repair/Upgrade	<input type="checkbox"/>	NA		
Drainage	Culverts	<input type="checkbox"/>	NA	Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>			
	ROD/Spoon	<input type="checkbox"/>	Sets:		
	Belts/Channels	<input type="checkbox"/>	Sets:		
	Drop Downs	<input type="checkbox"/>	Sets:		
	Silt Trapping	<input type="checkbox"/>			
Comments: Nil					

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Road Name 159/1

Category Temporary

Location Off Maxwells Spur Rd through to dump 20.

Length (m) 850

		WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Works >30 Slopes		<input type="checkbox"/>		
	Mass Movement		<input type="checkbox"/>		
	Dispersible		<input type="checkbox"/>		
Pavement	Upgrade	Widening	<input type="checkbox"/>	Location NA Formation Width (m) NA Curve Widening NA Upgrade Length (m) 0 Upgrade Spoil	
		Grade Lowering	<input type="checkbox"/>	NA	
		Realignment	<input type="checkbox"/>	NA	
		Reopening	<input type="checkbox"/>	NA	
	Maintenance	Clear veg/debrls	<input checked="" type="checkbox"/>	Various along road length	Maintenance Length (m) 850
		Repair surface	<input checked="" type="checkbox"/>	Various along road length	
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.	
		Gravel	<input type="checkbox"/>	NA	Gravel Length (m) 0
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only		
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No		
	Batter Repair/Upgrade	<input type="checkbox"/>	NA		
Drainage	Culverts	<input type="checkbox"/>	NA	Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>			
	ROD/Spoon	<input checked="" type="checkbox"/>	Sets: 2		
	Belts/Channels	<input type="checkbox"/>	Sets:		
	Drop Downs	<input type="checkbox"/>	Sets:		
	Silt Trapping	<input type="checkbox"/>			
Comments: Nil					

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Road Name 159/2

Category Temporary

Location Off 159/1 Rd to dump 19.

Length (m) 450

		WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS
Site Info	Works >30 Slopes		<input type="checkbox"/>	
	Mass Movement		<input type="checkbox"/>	
	Dispersible		<input type="checkbox"/>	
Pavement	Upgrade	Widening	<input type="checkbox"/>	Location NA Formation Width (m) NA Curve Widening NA Upgrade Length (m) 0 Upgrade Spoil
		Grade Lowering	<input type="checkbox"/>	NA
		Realignment	<input checked="" type="checkbox"/>	Various along road length
		Reopening	<input checked="" type="checkbox"/>	See map
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length Maintenance Length (m) 450
		Repair surface	<input checked="" type="checkbox"/>	Various along road length
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.
	Gravel	<input type="checkbox"/>	NA Gravel Length (m) 0	
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only	
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No	
	Batter Repair/Upgrade	<input type="checkbox"/>	NA	
Drainage	Culverts	<input type="checkbox"/>	NA Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>		
	ROD/Spoon	<input type="checkbox"/>	Sets:	
	Belts/Channels	<input type="checkbox"/>	Sets:	
	Drop Downs	<input type="checkbox"/>	Sets:	
	Silt Trapping	<input type="checkbox"/>		
Comments: Road needs to be realigned to avoid HCVOG. See map.				

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Road Name 159/4

Category Temporary

Location Off Maxwells Spur Rd to dump 24.

Length (m) 100

WORKS		YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS		
Site Info	Works >30 Slopes	<input type="checkbox"/>			
	Mass Movement	<input type="checkbox"/>			
	Dispersible	<input type="checkbox"/>			
Pavement	Upgrade	Widening	<input type="checkbox"/>	Location NA Formation Width (m) NA Curve Widening NA Upgrade Length (m) 0 Upgrade Spoil	
		Grade Lowering	<input type="checkbox"/>	NA	
		Realignment	<input type="checkbox"/>	NA	
		Reopening	<input type="checkbox"/>	NA	
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length	Maintenance Length (m) 100
		Repair surface	<input checked="" type="checkbox"/>	Various along road length	
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.	
Gravel		<input type="checkbox"/>	NA	Gravel Length (m) 0	
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only		
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No		
	Batter Repair/Upgrade	<input type="checkbox"/>	NA		
Drainage	Culverts	<input type="checkbox"/>	NA	Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>			
	ROD/Spoon	<input type="checkbox"/>	Sets:		
	Belts/Channels	<input type="checkbox"/>	Sets:		
	Drop Downs	<input type="checkbox"/>	Sets:		
	Silt Trapping	<input type="checkbox"/>			
Comments: Nil					

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Road Name Charlies Camp Rd

Category Permanent

Location From intersection with Maxwells Spur Road.

Length (m) 1650

		WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Works >30 Slopes	<input type="checkbox"/>			
	Mass Movement	<input type="checkbox"/>			
	Dispersible	<input type="checkbox"/>			
Pavement	Upgrade	Widening	<input type="checkbox"/>	Location NA Formation Width (m) NA Curve Widening NA Upgrade Length (m) 0 Upgrade Spoil	
		Grade Lowering	<input type="checkbox"/>	NA	
		Realignment	<input type="checkbox"/>	NA	
		Reopening	<input type="checkbox"/>	NA	
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length	Maintenance Length (m) 1650
		Repair surface	<input checked="" type="checkbox"/>	Various along road length	
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.	
		Gravel	<input type="checkbox"/>	NA	Gravel Length (m) 0
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only		
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No		
	Batter Repair/Upgrade	<input type="checkbox"/>	NA		
Drainage	Culverts	<input type="checkbox"/>	NA	Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>			
	ROD/Spoon	<input checked="" type="checkbox"/>	Sets: 3		
	Belts/Channels	<input type="checkbox"/>	Sets:		
	Drop Downs	<input type="checkbox"/>	Sets:		
	Silt Trapping	<input type="checkbox"/>			
Comments: Nil					

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

Road Name Discovery Road

Category Temporary

Location Off PP to Dump 4.

Length (m) 1100

	WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Works >30 Slopes	<input type="checkbox"/>		
	Mass Movement	<input type="checkbox"/>		
	Dispersible	<input type="checkbox"/>		
Pavement	Upgrade	Widening	<input checked="" type="checkbox"/> Location NA Upgrade Length (m) 0 Formation Width (m) NA Upgrade Spoil incorporated into road surface Curve Widening Various along road length	
		Grade Lowering	<input type="checkbox"/> NA	
		Realignment	<input type="checkbox"/> NA	
		Reopening	<input type="checkbox"/> NA	
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length Maintenance Length (m) 1100
		Repair surface	<input checked="" type="checkbox"/>	Various along road length
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.
		Gravel	<input type="checkbox"/>	NA Gravel Length (m) 0
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only	
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No	
	Batter Repair/Upgrade	<input type="checkbox"/>	NA	
Drainage	Culverts	<input type="checkbox"/>	NA Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>		
	ROD/Spoon	<input type="checkbox"/>	Sets:	
	Belts/Channels	<input type="checkbox"/>	Sets:	
	Drop Downs	<input type="checkbox"/>	Sets:	
	Silt Trapping	<input type="checkbox"/>		
Comments: Nil				

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

Date	Event	Initial

Road Name Maxwells Spur Rd

Category Permanent

Location From intersection with Charlies Camp Road through to PP.

Length (m) 4200

		WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Works >30 Slopes		<input type="checkbox"/>		
	Mass Movement		<input type="checkbox"/>		
	Dispersible		<input type="checkbox"/>		
Pavement	Upgrade	Widening	<input checked="" type="checkbox"/>	Location NA Formation Width (m) 4.2 Curve Widening Various along road length Upgrade Length (m) 0 Upgrade Spoil Incorporated into road surface	
		Grade Lowering	<input type="checkbox"/>	NA	
		Realignment	<input type="checkbox"/>	NA	
		Reopening	<input type="checkbox"/>	NA	
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length	Maintenance Length (m) 4200
		Repair surface	<input checked="" type="checkbox"/>	Various along road length	
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.	
	Gravel	<input type="checkbox"/>	Various hills along road length	Gravel Length (m) 200	
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only		
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No		
	Batter Repair/Upgrade	<input type="checkbox"/>	NA		
Drainage	Culverts	<input type="checkbox"/>	NA	Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>			
	ROD/Spoon	<input checked="" type="checkbox"/>	Sets: 5		
	Belts/Channels	<input type="checkbox"/>	Sets:		
	Drop Downs	<input type="checkbox"/>	Sets:		
	Silt Trapping	<input type="checkbox"/>			
Comments: Shared road with NPWS. Rdng to be discussed with NPWS.					

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

Date	Event	Initial

Road Name 159/3

Category Temporary

Location Off Maxwells Spur Rd to dump 23.

Length (m) 300

		WORKS	YES	INSTRUCTIONS/SITE SPECIFIC CONDITIONS	
Site Info	Works >30 Slopes		<input type="checkbox"/>		
	Mass Movement		<input type="checkbox"/>		
	Dispersible		<input type="checkbox"/>		
Pavement	Upgrade	Widening	<input checked="" type="checkbox"/>	Location NA Formation Width (m) 4.2 Curve Widening Various along road length Upgrade Length (m) 0 Upgrade Spoil Incorporated into road surface	
		Grade Lowering	<input type="checkbox"/>	NA	
		Realignment	<input type="checkbox"/>	NA	
		Reopening	<input type="checkbox"/>	NA	
	Maintenance	Clear veg/debris	<input checked="" type="checkbox"/>	Various along road length	Maintenance Length (m) 300
		Repair surface	<input checked="" type="checkbox"/>	Various along road length	
		Crown/Crossfall	<input checked="" type="checkbox"/>	Where required.	
	Gravel	<input type="checkbox"/>	NA	Gravel Length (m) 0	
Roadside/Batters	Remove trees >20 cm	<input checked="" type="checkbox"/>	Remove Dangerous trees/stags only		
	Remove trees <20 cm	<input checked="" type="checkbox"/>	Clearing outside the road prism: No		
	Batter Repair/Upgrade	<input type="checkbox"/>	NA		
Drainage	Culverts	<input type="checkbox"/>	NA	Size: Sets:	
	Mitres	<input checked="" type="checkbox"/>			
	ROD/Spoon	<input checked="" type="checkbox"/>	Sets: 4		
	Belts/Channels	<input type="checkbox"/>	Sets:		
	Drop Downs	<input type="checkbox"/>	Sets:		
	Silt Trapping	<input type="checkbox"/>			
Comments:					

Start Date:

Finish Date:

Soil Stabilisation Date (must be within 5 days):

Date	Event	Initial

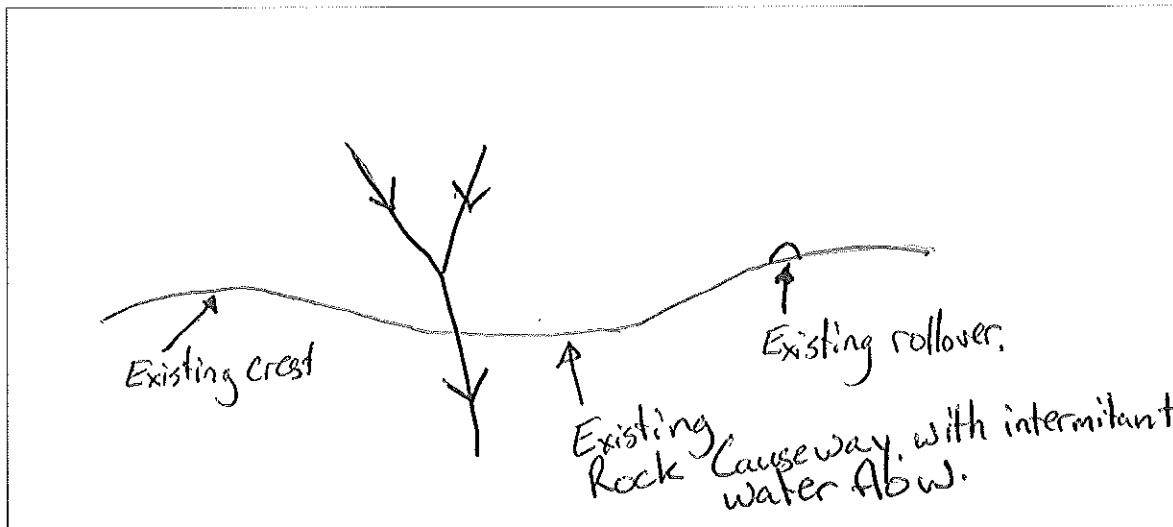
Crossing Works

Crossing Name X-A Road Name Discovery Road Location See map

Drainage Feature 1st order DL Stream Permanency Intermittent

Existing Crossing	Size	Stability Status	Crossing Required	Size (mm/m)	Future
Causeway	NA	Stable (maintainance)	Existing	NA	Permanent

Crossing Works		Approaches and Road Drainage	
Pavement/Structure	Nil Clean & ensure drainage	Approaches	Gravel within 20m
Reshape Bed/banks	Nil	Temporary Drainage	Nil
Disposal of Spoil	NA	5-30m Upstream Left	Existing crest
Inlet	Nil	5-30m Upstream Right	Existing crest
Outlet	Nil	Practices where no 5-30	NA
Stabilisation	Nil	OutletControl	Natural vegetation
ErosionControl	Natural vegetation	TableDrain	Natural vegetation



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

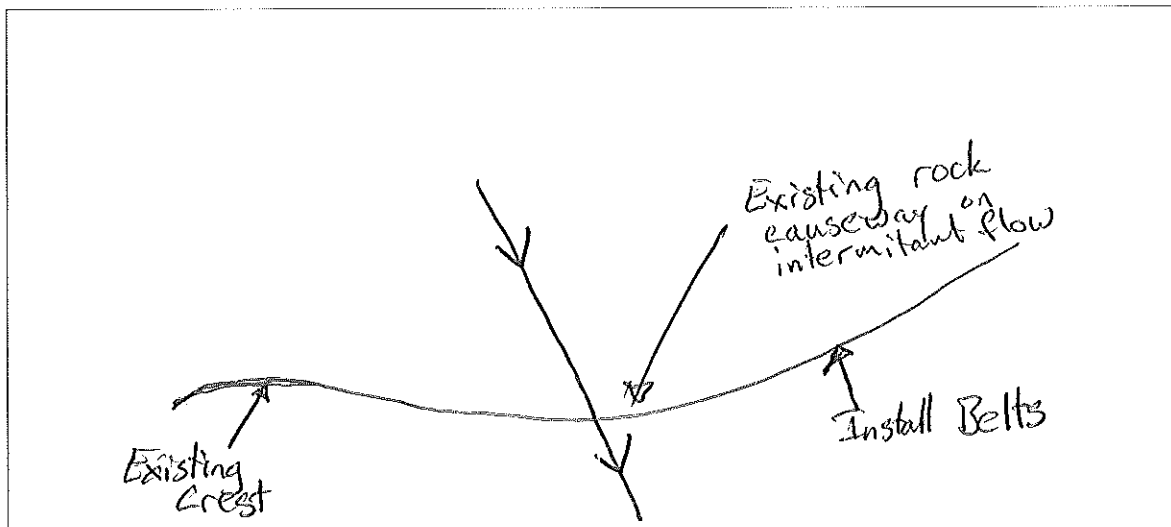
Date	Event	Initial

Crossing Name X-B Road Name Discovery Road Location See map

Drainage Feature Unmapped Drainage line Stream Permanency Intermittent

Existing Crossing	Size	Stability Status	Crossing Required	Size (mm/m)	Future
Causeway	NA	Stable (maintainance)	Existing	NA	Permanent

Crossing Works		Approaches and Road Drainage	
Pavement/Structure	Nil Nil	Approaches	Gravel within 20m
Reshape Bed/banks	Nil	Temporary Drainage	Nil
Disposal of Spoil	NA	5-30m Upstream Left	Existing crest
Inlet	Nil	5-30m Upstream Right	Belt/channel
Outlet	Nil	Practices where no 5-30	NA
Stabilisation	Nil	OutletControl	Natural vegetation
ErosionControl	Natural vegetation	TableDrain	Natural vegetation



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

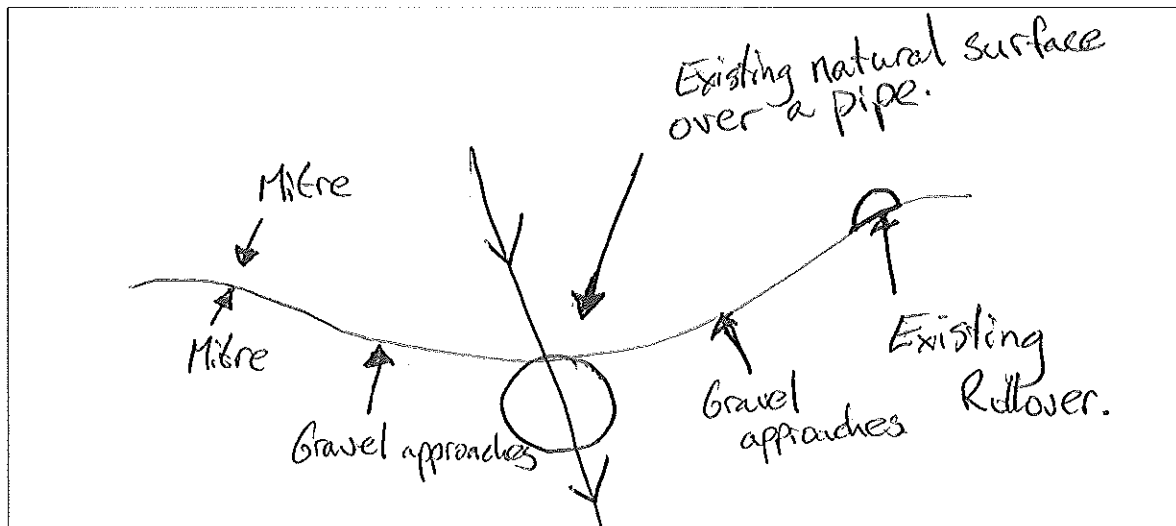
Date	Event	Initial

Crossing Name X-C Road Name Discovery Road Location See map

Drainage Feature 1st order DL Stream Permanency Intermittent

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

Crossing Works		Approaches and Road Drainage	
Pavement/Structure	Nil Nil	Approaches	Gravel within 20m
Reshape Bed/banks	Nil	Temporary Drainage	Nil
Disposal of Spoil	NA	5-30m Upstream Left	Mitre
Inlet	Nil	5-30m Upstream Right	Rollover
Outlet	Nil	Practices where no 5-30	NA
Stabllisation	Nil	OutletControl	Natural vegetation
ErosionControl	Silt fence	TableDrain	Natural vegetation



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

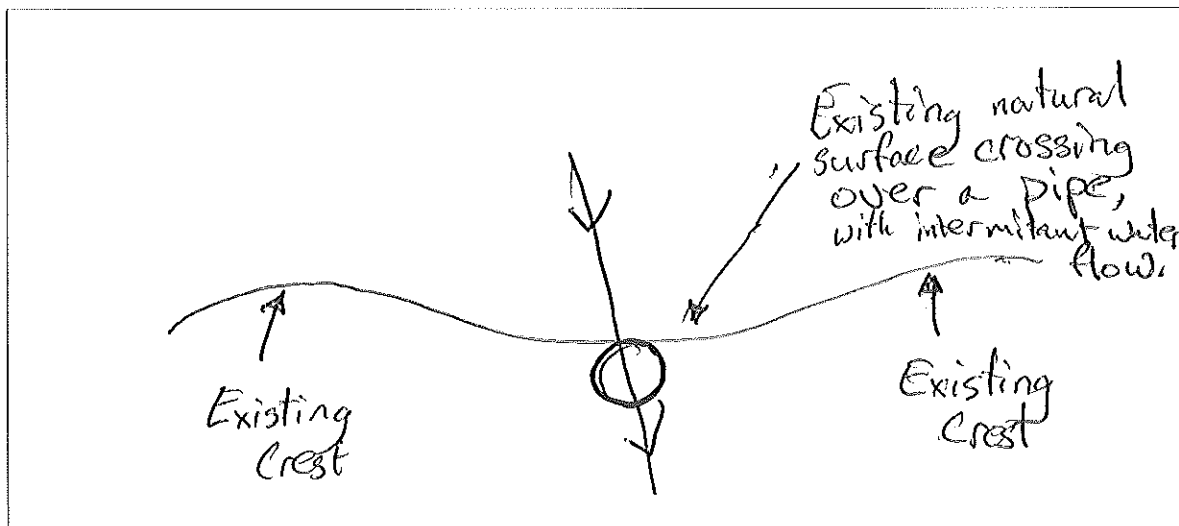
Date	Event	Initial

Crossing Name X-D Road Name Maxwells spur Location Refer to map

Drainage Feature Unmapped Drainage line Stream Permanency Intermittent

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

Crossing Works		Approaches and Road Drainage	
Pavement/Structure	Nil Nil	Approaches	Gravel within 20m
Reshape Bed/banks	Nil	Temporary Drainage	Nil
Disposal of Spoil	NA	5-30m Upstream Left	Existing crest
Inlet	Nil	5-30m Upstream Right	Crown & mitre
Outlet	Nil	Practices where no 5-30	NA
Stabilisation	Nil	OutletControl	Natural vegetation
ErosionControl	Natural vegetation	TableDrain	Natural vegetation



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

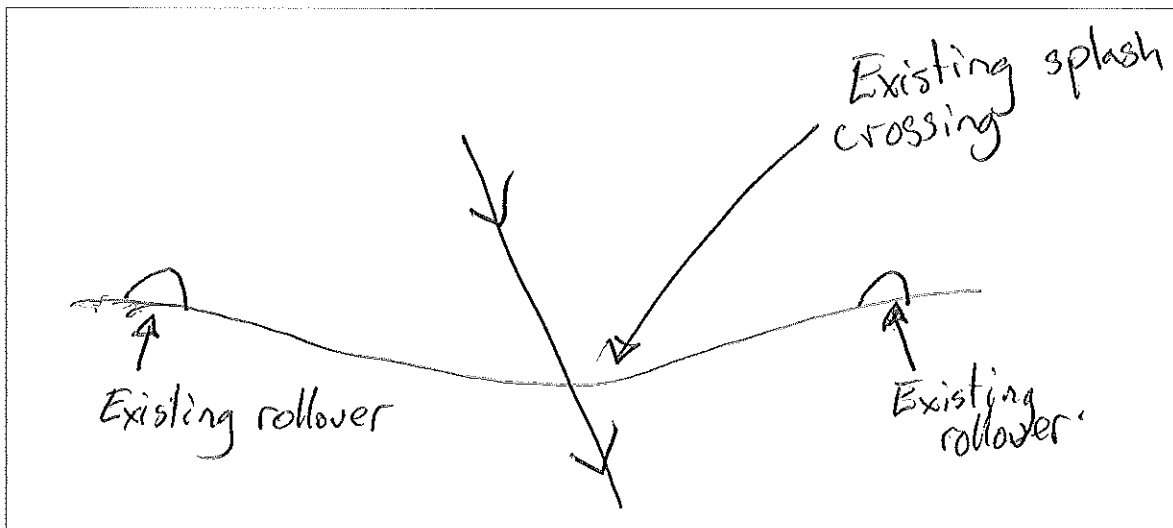
Date	Event	Initial

Crossing Name X-E Road Name Charles Camp Road Location See map

Drainage Feature 1st order DL Stream Permanency Permanent

Existing Crossing	Size	Stability Status	Crossing Required	Size (mm/m)	Future
Causeway	NA	Stable (maintainance)	Existing	NA	Permanent

Crossing Works		Approaches and Road Drainage	
Pavement/Structure	Nil Clean & maintain drains	Approaches	Nil
Reshape Bed/banks	Nil	Temporary Drainage	Nil
Disposal of Spoil	NA	5-30m Upstream Left	Existing rollover
Inlet	Nil	5-30m Upstream Right	Existing 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 be within 5 days):

Date	Event	Initial

