



FORESTRY CORPORATION OF NEW SOUTH WALES - SOUTHERN REGION HARVESTING PLAN NATIVE FOREST

Bago State Forest - Compartment 45

Certification

This plan has been prepared in accordance with the Integrated Forestry Operations Approval issued under the Forestry and National Park Estate Act 1998. The Standard Harvest Plan Conditions for Native Forest Operations in Southern Region Tumut apply to this operation.

Prepared By: Harvest Planner	Kate Halton	Endorsed By: Planning Manager	Kevin Petty	Approved By: Regional Manager	Daniel Tuan
Signature	Kate Halton	Signature	Kevin Petty	Signature	Daniel Tuan
Date	25/01/2013	Date	31/01/2013	Date	01/02/2013

Note: Approval includes the Harvest Plan Operational Map (HPOM) with the corresponding approval date displayed on the map, verifying final approved version.

Other maps included with this plan are locality, forest type, roading and cultural heritage (limited distribution).

Description of Proposal

Harvesting of native forest

Harvesting of native forest, using Single Tree Selection, Silviculture subject to the Southern Region, Tumut sub-region IFOA requirements will be undertaken within this planning unit. The primary product of the harvesting is high quality large sawlogs (quota logs), small high quality sawlogs, veneer logs, girders, poles & piles where timber markets are available. Parts of felled logs that do not meet high quality log specifications are segregated and graded into other classifications such as salvage sawlogs, pulp logs & miscellaneous timbers e.g. split & round posts, firewood, mining timbers & craftwood. The availability of miscellaneous timbers depends mainly on forest types, log defectiveness & market conditions at the time of harvesting.

Clause 22 (IFOA) Consideration

All relevant factors have been reviewed taking into account the volume and monetary value of each forest product to supply Term Agreement Holders. The harvesting operation also complies with Clause 22 of the Integrated Forestry Operations Approval (IFOA).

Attachment 1: Site Safety Plan prescribes describes safety requirements and Medical Emergency Evacuation Plan for this harvesting operation.

Attachment 2: Roading plan prescribes roading requirements for this harvesting operation.

Area Identification and Yield Estimates

State Forest	Compartment/s	Region	Management Area	Certification
Bago	45	Southern	Bago-Maragle	AS4708:2007 ISO 14001

	45
Plan Compartment ID	20095
Gross Area (ha)	421
Net Harvestable Area (ha)	371
Net Harvest Area (ha)	371
Quota Logs (HQL)	6500 m ³
High Quality Small	2240 m ³
Salvage	2900 m ³
Estimated Total Volume (m3)	11640 m ³
Pulp	1930t (1650m ³)

Forestry Corporation of NSW – Southern Region

Harvesting Plan HP_TU_45_08

Compartment 45

Attachment 1 – Site Safety Plan

SAFETY CONSIDERATIONS

Emergency Plan Information

- (a) **Mobile Phone reception on work site:**
☒ Good ☐ Poor ☐ Nil
 Nearest reliable reception: High points along Quartzville Track & Back Creek Road.
- (b) **FCNSW Radio from work site:** Channel No: 101
 Call to: Tumbarumba
 Call sign from: Your name
- Contractor Radio at work site:** UHF Channel No:
 Contractor Radio No:
 Call to Bush Boss
- (c) **Emergency meeting point for ambulance:**
 Intersection of Back Creek & Sugarloaf Logging Roads
 1:100000 map sheet: Yarrangobilly 8526
 MGA zone: 55
 MGA Grid reference: E600995 N6052027.
 Lat/Long for GPS: 35° 40' 13" S 148° 06' 57" E.
- (d) **Closest Helicopter Landing Place:**
 Intersection of Back Creek & Bullongra Roads "The Triangle".
 1:100000 map sheet: Yarrangobilly 8526
 MGA zone: 55
 MGA Grid reference: E604425 N6049902.
 Lat/Long for GPS: 35° 41' 21" S 148° 09' 14" E.
- (e) **Procedure for obtaining Ambulance assistance:**
 Dial "000" OR Call Batemans Bay Forestry Office 1300 880 548 for Ambulance assistance.
 Dial "112" only as an alternative to "000" if you have a GSM digital mobile phone and you are outside your own provider's GSM network coverage area.

"000" Operator Question. Response

1. Police , Fire , Ambulance? Ambulance.
2. Suburb (State Forest name): Bago
 (Nearest town or named locality): Tumbarumba
 (Nearest Ambulance station): Tumbarumba
3. Address: (Nearest named State forest road): Back Creek Road.
4. Nearest Road Junction: Batlow Road/Back Creek Road.
- 5 Local Government Area: Tumbarumba Shire Council

6. Nature of the problem: Give details of accident, number and condition of casualties.

7. Where is the accident: Work site location – (Centre of Compartments).

MGA Grid reference: Zone 55 E602114 N6050390.

Lat/long for GPS: 35° 41' 7" S 148° 07' 42 " E.

8. Directions to navigate from Ambulance Station to meeting point:

Directions from Tumbarumba:

- Head north on Batlow-Adelong Road for approximately 15.8km.
- Turn right onto Back Creek Road and travel for approximately 8.1km to intersection with Sugar Loaf Road.

9. Injuries?: Give detailed information about the condition of the casualty.

10. Call back No.: Give your Mobile Number.
or Batemans Bay Office:1300 880 548.

11. Name of Reporter: Give own name.

Site Specific Identified Hazards

Assessment of existing hazards was undertaken at the time of planning. These hazards are in the attached table and where appropriate, control strategies have been applied. Where no control strategy has been described, the contractor must develop appropriate strategies as part of the contractors Safety Management Plan. A copy of the hazard assessment and control strategies is provided to assist in the development of the contractors Safety Management Plan for this harvesting area.

All additional site hazards identified during harvesting must be assessed and documented in the Contract Coordinator, SFO and Contractor copies of the site specific plan.

Identified hazards requiring risk assessment and control strategy in Safety Management Plan

IDENTIFIED HAZARD	RISK RATING	SUGGESTED CONTROL STRATEGY
1. Adjoining roads of various traffic levels	1	Warning signs at FCNSW intersections, road closure on FCNSW roads. Implement Traffic Control plans (where specified in this harvest plan). 60km/hr speed limit on all State Forest gravel roads unless otherwise signposted. Compliance with FCNSW lights on policy.
2. Hazardous or dead trees	1	Refer to FCNSW safety standard 1.3.9. Assess area within two tree lengths of work site. Assess risk, mark any Distinctly Dangerous Trees with the symbol Ø & if necessary remove hazard or move work site. Use machinery to assist with hazard removal if possible Contractor is responsible for implementing control strategies during harvesting.
3. Overhead hazards associated with dumps	1	Refer to FCNSW safety standard 1.3.9. Assess overhead hazard within two tree lengths of the dump. Assess risk, & if necessary remove hazard or relocate dump site. Contractor is responsible for implementing control strategies during harvesting.
4. Brumbies: May pose a threat if groups isolated and unable to regroup. Horses moving onto haulage roads, into harvesting areas.	2	Cease work until brumbies have moved on; Maintain awareness of animal movements when hauling.
5. Other		
6. Other.		

Hazard Nos. 1 and 3 are shown on the attached HPOM

Traffic management/road closures

The logging contractor is responsible for traffic control on all roads when felling is within two tree lengths of the tallest tree to be felled of the road or snagging on roads or loading is occurring within 10 metres of a road. Warning of trucks entering must be **displayed 200 metres either side** of all State Forest road approaches leading to areas where harvesting operations are in progress.

Warning of timber harvesting operations must be **displayed 200 metres either side** of all thoroughfare State Forest road approaches leading to areas where harvesting operations are in progress.

In addition to the above, Back Creek Road is frequently used by public vehicles. When harvesting within two tree lengths of Back Creek Road this road must be temporarily closed in accordance with "TCP78_BackCreekRoad_Cpt45" which is attached to this plan. Forests NSW will provide suitably accredited traffic controllers to implement this Traffic Control Plan.

This plan identifies haulage from the compartment will be west Back Creek Road (FCNSW Road) then left or right onto Batlow-Adelong Rd (Shire Owned 100km/hr Rd). This intersection has been assessed as achieving a minimum of 200m sight distance on both approaches. Therefore at this intersection additional signage in accordance with a Traffic Control Plan is not required.

Road intersections outside the control of FCNSW are not covered by this plan or any FCNSW Traffic Control Plan. Haulage contractors must abide by RTA road laws and standard operating procedures in relation to haulage routes outside the control of FCNSW.

Silviculture and Harvesting Prescriptions

Year	1920's	1940	1950/60	1970	1980's	1990
TSI	√	√	√	√	X	X
HR Burning	√	X	X	X	√	√
Wildfires	X	X	X	X	X	X
Logging	X	√	√	√	√	√

Compartment	No. of Samples	BA Average (m ² /ha)	BA Range (m ² /ha)
45	20	32	12-48

Silviculture Prescription

Stand Structure and Condition

Resource Unit (Refer to HPOM for detail)	Species Composition	Stand History	Stand Structure and Condition
1	Dominated by Alpine Ash.	In various stages between the 1920's to the 1980's and between the 1940's to the 1990's the entire compartment has undergone TSI and STS harvesting. Hazard reduction burning has taken place in the compartment from the 1920's to the 1990's. There are no records of wildfire within the compartment.	The stand is comprised predominately of an even aged fully stocked mature forest. There are occasional patches of scattered advanced regrowth from operations in the 50's/60's. The mature forest has good form but is displaying signs of cessation. The advanced regrowth has good form and signs of good growth potential.
2	Dominated by Snow Gum, Mountain Gum and	As above for RU1	The stand is primarily uneven-aged, over-mature, degenerating overstorey. Generally large diameter, high defect logs. Some larger patches of advanced Mountain Gum regrowth exists, which is of good form and vigour.

Resource Unit (Refer to HPOM for detail)	Species Composition	Stand History	Stand Structure and Condition
	Manna Gum.		Unmerchantable Snow Gum dominates the lower stratum with small, scattered patches of pure Snow Gum. Poor to fair timber condition with scattered patches of very-high quality Mountain Gum regrowth.

Harvesting Prescription

Resource Unit (Refer to HPOM for detail)	% of NHA	Aim of the operation	Silvicultural Treatment
1	67%	<ul style="list-style-type: none"> Removing approximately 35% of mature and defective trees containing a sawlog, while minimising damage to young regenerating stems, and creating canopy openings where appropriate for regeneration. It is envisaged that the next harvesting operation in this compartment would be in approximately 30 years time. The STS tract is nha/RU1 & 2 of cpt 45. 	<p>STS Heavy:</p> <ul style="list-style-type: none"> Retain and protect from harvesting/fire damage: <ul style="list-style-type: none"> poles/advanced growth (<40cm DBHOB) with good form and vigour, habitat and recruitment trees as per TSL. Retained trees should be evenly spaced. Ensure no more than 35% of the BA is removed, while retaining a minimum BA of 10m² within the tract. All other products should be removed markets permitting. If this objective cannot be achieved the following options should be considered: <ul style="list-style-type: none"> reject tree felling (Contract Coordinator must first obtain approval from harvesting team leader), defer harvesting until ideal market conditions prevail, consider harvesting under a light or medium STS regime
2	33%	<ul style="list-style-type: none"> Removing approximately 25-35% of mature and defective Mountain Gum Trees containing a sawlog, while minimising damage to young regenerating stems, and creating canopy openings where appropriate for regeneration. It is envisaged that the next 	<p>STS medium:</p> <ul style="list-style-type: none"> Retain and protect from fire/harvesting damage: <ul style="list-style-type: none"> poles/advanced growth (<40cm DBHOB) with good form and vigour, habitat and recruitment trees as per TSL and appropriate YPB PMP habitat class, Retained trees should be evenly spaced.

		harvesting operation in this compartment would be in approximately 30 years time. • The STS tract is nha/RU1 & 2 of cpt 45.	• Ensure no more than 35% of the BA is removed, while retaining a minimum BA of 10m ² within the tract. All other products should be removed.
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Note: The area of each silvicultural treatment must be mapped and recorded in the Post logging information section of this plan.

Special Requirements

Noxious Weeds/Disease/Pests Hygiene Requirements

There are no known noxious weeds, pathogens or diseases in the compartment. Harvesting Machinery is not required to be washed down prior to leaving the compartment.

Permanent Growth and Research Plots

Permanent Growth Plots – 2 PGPs occur in the compartment (PAB 109 and PAB 113). The plots are to be treated the same as the surrounding harvested area. The Contract Coordinator must collect all metal measurement tags from trees fallen during harvesting and return them to the Resources Team Leader Batemans Bay.

Occupation Permits

Apiary

4 apiary sites provided in the table below are located within the planning unit. Contact details are available from the Batemans Bay office.

Name	Range ID

- The Contract Coordinator must provide the apiary permittees with at least two weeks advance notice when bee boxes need to be removed or relocated.
- 1 permanent set down site occurs in the northern end of the compartment in excluded forest. It will not be affected by the operation.

Grazing

There is a suspended grazing permit within the planning unit. There should be no cattle in the area. If any cattle are found in the area, report to the Harvesting Team Leader.

Specimen Trees

Trees of dbhob greater than 130 cm suitable for retention as specimen trees of outstanding size must be retained.

Forest Management Zoning

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

IFOA Required Approval of Forestry Activities

All areas of Stream Exclusion Zones require prior Regional Manager approval before forest harvesting related activities (eg: road or snig track construction & reopening) can be undertaken. It is the responsibility of the Contract Coordinator to identify any exclusion areas which will need to be crossed during harvesting. The Contract Coordinator should then contact the Harvest Planner to obtain the necessary approval.

Cultural Heritage

Cultural Heritage - There

Flora and Fauna

Species adequately covered by general prescriptions:

The following species have been recorded in or around the compartments and are adequately covered by the general prescriptions. No further protection measures are required for these species:

Olive Whistler (*Pachycephala olivacea*) and **Eastern False Pipistrelle** (*Falsistrellus tasmaniensis*), **Gang-gang Cockatoo** *Callocephalon fimbriatum* and **Flame Robin** (*Petroica phoenicea*).

8.2 Tree Retention

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

√ - Condition applies

General exclusion zones

General exclusions as listed below are shown on the HPOM.

Feature/Condition	TSL cond'n	Occurs within Planning Unit
Stream Exclusion Zones	5.4	Yes
Ridge & Headwater Habitat	5.5	Yes (40m total width)

Wetlands	5.6	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Heath and Scrub	5.7	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Rocky Outcrops and Cliffs	5.8	Has been assessed & is unlikely to occur in the field. May require further investigation#.
Endangered Ecological Community	NA	Has been assessed & is unlikely to occur in the field. May require further investigation#. Harvesting, harvesting machinery and post harvest burning must be excluded from all areas of EEC.

#SFO/Contract coordinators will continue to conduct on the ground mark-up & searches and report back to foresters/ecologists any features requiring further investigation.

General Threatened Flora and Fauna Prescriptions

Feature	Records in 45	Licence conditions under the TSC Act
Threatened Frog General Protection Measures	No	5.9
Bird Nest and Roost Site Protection	No	5.10
Tree Bat Roost Protection	No	5.11.1
Subterranean Roost Protection	No	5.11.2
Protection of Flying-fox camps	No	5.11.3
Burning	Net planned area	5.13
Ground Habitat Protection	Net planned area	5.14

Species & Site-Specific Threatened Flora and Fauna Prescriptions

The following species have been recorded within or nearby the area and the associated prescriptions must be implemented:

Threatened species and habitat features within trigger distance	Records in 45	Licence conditions under the TSC Act or relevant Site-specific prescription
Yellow-bellied Glider <i>Petaurus australis</i>	Yes	6.8 Population Management Plan Bago Plateau applies to this compartment/s. In addition to conditions specified in the TSL, the following conditions from the Population Management apply to this compartments (refer to HPOM for detail): -High quality habitat (additional tree retention conditions apply) -Moderate quality habitat

Threatened species and habitat features within trigger distance	Records in 45	Licence conditions under the TSC Act or relevant Site-specific prescription
		(additional tree retention conditions apply) -Forest types not considered suitable for YBG habitat (no additional tree retention conditions apply).
Bago Leek Orchid <i>Prasophyllum bagoensis</i>	No	6.11.2 10m exclusion zone around individuals (specified forestry activities must be excluded). Plus additional 10m modified buffer zone (selected tree removal and snigging permitted, hazard reduction to be excluded where practicable).

Fisheries Licence Conditions

There are no known records of threatened fish species or class 1 or 2 aquatic habitat relevant to this operation. The conditions of the fisheries licence are not triggered for this operation.

Soils and Water Protection

Refer to EPL Booklet & Standard Plan Conditions

Site-specific EPL Conditions

Elements	Conditions
Unmapped Drainage Lines	Not Licenced: refer to Drainage Feature Protection below.
Drainage Feature Protection	See HPOM for widths
Inherent Hazard Class	1
Dispersible Soils	No
Seasonality Harvesting Exclusions	No
Seasonality Burning Exclusions	No
Log Dumps	Refer relevant conditions for IHL
Snig Tracks	Refer relevant conditions for IHL
Roads	See Schedule 5 of EPL Booklet

Drainage Feature Protection

Filter strips (EPL), Buffer Strips (EPL) and Stream Exclusion Zones (TSL) must be retained along all drainage lines and watercourses within the net planned area of the compartments at minimum widths as stated in the Table below. The width of protection features highlighted in **bold** in the Table below have been shown on the HPOM. The minimum protection feature widths for each side of drainage features is described below.

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

TSL Stream Exclusion zones are contained within the EPL Filter strip, which have the greater level of protection (Bold indicates widest zone (metres) to apply)

NOTE: # For this operation FCNSW has chosen to harvest this area without EPL coverage. All EPL conditions continue to apply **except** for the rules applying to filter strips of the **unmapped drainage lines**. Refer to Best Management Practices for unmapped drainage lines in the standard conditions. Harvesting of unmapped drainage lines, **MUST NOT** occur in unmapped drainage lines which are running or holding water. It is the responsibility of the Contract Coordinator to inspect each unmapped drainage line prior to harvesting it, to determine if it is running or holding water.

Log Dump Location

30 log dumps are indicated on the HPOM. Field location of log dumps must utilise the most level site available consistent with the location indicated on the HPOM. Inherent hazard level 1 Conditions 26, 27, 30, and 33 of Schedule 4 of the EPL must apply.

Expected Felling/ Extraction & Loading Method

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

Drainage Feature Crossings

One snig track crossing (S1) and four road crossings (A, B, C and D) are approved for use. Road crossing details are contained in Attachment 2 of this Plan. Snig track crossing details are provided below:

Crossing Name & Coordinates	Crossing details	Required Works
S1-existing Easting 601805mE Northing 6050062mN	Mapped 1 st order drainage line, however, no depression or drainage line occurs at crossing point as mapped. Existing natural causeway. Not class 1 or 2 Fisheries Licence aquatic habitat. Class 4 fish passage class: unlikely fish habitat.	Within the stream exclusion zone, minimise clearing as far as practicable.

Mass Movement

Compartment 45 is not in an area identified as having a potential for mass movement. No specific prescriptions relating to mass movement/snigging are required.

the maintenance works.

Within the compartment boundary only roads that are shown on the HPOM as EPL standard or sealed may be used for haulage. **Refer to EPL Schedule 5 – Operating Conditions for Roads.**

Roads within the compartment boundary may be used with Contract Coordinator approval for snagging or extraction provided they are drained to EPL specifications.

Pre-Operational Briefing

I acknowledge that I have received a copy of the Harvesting Plan for Compartments 45 in Bago State Forest and that I have been briefed on the conditions of the Plan and understand the supervision and operational control requirements as explained to me by the Harvesting Team Leader or his/her delegate.

Position	Name	Signature	Date

Details to Record in Contract Coordinator/SFO Notes

- Dates of commencement and cessation of logging
- Record the commencement and completion of harvesting at each dump
- Record the occurrence of temporary stopping of harvesting at each dump.
- Situations where drainage could not be completed due to saturated soils must be recorded in Contract Coordinator/SFO Notes.
- Record the commencement and completion of each construction, upgrading or maintenance of drainage feature crossings by snig tracks or extraction tracks.
- Bi-weekly checks of road drainage structures during haulage operations.
- Record the date of checks, drainage structure compliance and the any repairs required within the specified time period.
- Records of Threatened Flora and Fauna identified during compartment markup.
- Minor variations associated with moving or adding dumps.
- Daily events of importance eg. Instructions to crew, work activity.

Post Harvest Mapping Features Confirmation Checklist

Feature	Planning Updates	Reason (Error/New)	GIS update tool completed?	Harvesting Updates	Comments
Soil Regolith	No				
Mapped Drainage	No				
Rainforest	No				

Rocky outcrops	No				
Wetlands	No				
Cultural Heritage	No				
Existing Roads	Yes	Error	Yes		Existing Rds were not mapped.
New Roads	No				
Heath	No				
Powerlines etc	No				
Other	No				

Contract Coordinator Feature Usage Record									
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Dates of commencement and cessation of logging

Date of commencement of logging: _____

Date of cessation of logging: _____

DUMP USAGE RECORD

- Record the commencement and completion of harvesting at each dump
- Record the occurrence of temporary stopping of harvesting at each dump.

[illegible]

*At completion of snig track/dump, track drainage must be completed within **2** days unless soil is saturated.

*At temporary cessation of snig track use, track drainage must be completed within **5** days unless soil is saturated.

Situations where drainage could not be completed due to saturated soils must be recorded in Contract Coordinator/SFO Notes.

Contract Coordinator/SFO Notes

[illegible]

Contract Coordinator/SFO Notes (continued)	

[illegible]

Contract Coordinator/SFO Notes (continued)
<p>1. The contract is for a period of 12 months, starting on 1/1/2024 and ending on 12/31/2025. The contract is subject to renewal for an additional 12 months, provided that the contract is not terminated for cause.</p> <p>2. The contract is for a fixed fee of \$100,000 per year, payable in 12 equal monthly installments of \$8,333.33, starting on 1/1/2024 and ending on 12/31/2025. The fee is subject to adjustment for inflation, as measured by the Consumer Price Index for All Urban Consumers (CPI-U) for the month of January in the year of the contract.</p> <p>3. The contract is for a fixed fee of \$100,000 per year, payable in 12 equal monthly installments of \$8,333.33, starting on 1/1/2024 and ending on 12/31/2025. The fee is subject to adjustment for inflation, as measured by the Consumer Price Index for All Urban Consumers (CPI-U) for the month of January in the year of the contract.</p> <p>4. The contract is for a fixed fee of \$100,000 per year, payable in 12 equal monthly installments of \$8,333.33, starting on 1/1/2024 and ending on 12/31/2025. The fee is subject to adjustment for inflation, as measured by the Consumer Price Index for All Urban Consumers (CPI-U) for the month of January in the year of the contract.</p> <p>5. The contract is for a fixed fee of \$100,000 per year, payable in 12 equal monthly installments of \$8,333.33, starting on 1/1/2024 and ending on 12/31/2025. The fee is subject to adjustment for inflation, as measured by the Consumer Price Index for All Urban Consumers (CPI-U) for the month of January in the year of the contract.</p> <p>6. The contract is for a fixed fee of \$100,000 per year, payable in 12 equal monthly installments of \$8,333.33, starting on 1/1/2024 and ending on 12/31/2025. The fee is subject to adjustment for inflation, as measured by the Consumer Price Index for All Urban Consumers (CPI-U) for the month of January in the year of the contract.</p> <p>7. The contract is for a fixed fee of \$100,000 per year, payable in 12 equal monthly installments of \$8,333.33, starting on 1/1/2024 and ending on 12/31/2025. The fee is subject to adjustment for inflation, as measured by the Consumer Price Index for All Urban Consumers (CPI-U) for the month of January in the year of the contract.</p> <p>8. The contract is for a fixed fee of \$100,000 per year, payable in 12 equal monthly installments of \$8,333.33, starting on 1/1/2024 and ending on 12/31/2025. The fee is subject to adjustment for inflation, as measured by the Consumer Price Index for All Urban Consumers (CPI-U) for the month of January in the year of the contract.</p> <p>9. The contract is for a fixed fee of \$100,000 per year, payable in 12 equal monthly installments of \$8,333.33, starting on 1/1/2024 and ending on 12/31/2025. The fee is subject to adjustment for inflation, as measured by the Consumer Price Index for All Urban Consumers (CPI-U) for the month of January in the year of the contract.</p> <p>10. The contract is for a fixed fee of \$100,000 per year, payable in 12 equal monthly installments of \$8,333.33, starting on 1/1/2024 and ending on 12/31/2025. The fee is subject to adjustment for inflation, as measured by the Consumer Price Index for All Urban Consumers (CPI-U) for the month of January in the year of the contract.</p>

[illegible]

Contract Coordinator/SFO Notes (continued)
<p>1. The contractor shall provide a copy of the contract to the SFO within 10 business days of the date of the contract.</p> <p>2. The contractor shall provide a copy of the contract to the SFO within 10 business days of the date of the contract.</p> <p>3. The contractor shall provide a copy of the contract to the SFO within 10 business days of the date of the contract.</p> <p>4. The contractor shall provide a copy of the contract to the SFO within 10 business days of the date of the contract.</p> <p>5. The contractor shall provide a copy of the contract to the SFO within 10 business days of the date of the contract.</p> <p>6. The contractor shall provide a copy of the contract to the SFO within 10 business days of the date of the contract.</p> <p>7. The contractor shall provide a copy of the contract to the SFO within 10 business days of the date of the contract.</p> <p>8. The contractor shall provide a copy of the contract to the SFO within 10 business days of the date of the contract.</p> <p>9. The contractor shall provide a copy of the contract to the SFO within 10 business days of the date of the contract.</p> <p>10. The contractor shall provide a copy of the contract to the SFO within 10 business days of the date of the contract.</p>

[illegible]

Contract Coordinator/SFO Notes (continued)	
10/1/2018	10/1/2018
10/2/2018	10/2/2018
10/3/2018	10/3/2018
10/4/2018	10/4/2018
10/5/2018	10/5/2018
10/6/2018	10/6/2018
10/7/2018	10/7/2018
10/8/2018	10/8/2018
10/9/2018	10/9/2018
10/10/2018	10/10/2018
10/11/2018	10/11/2018
10/12/2018	10/12/2018
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10/22/2018	10/22/2018
10/23/2018	10/23/2018
10/24/2018	10/24/2018
10/25/2018	10/25/2018
10/26/2018	10/26/2018
10/27/2018	10/27/2018
10/28/2018	10/28/2018
10/29/2018	10/29/2018
10/30/2018	10/30/2018
10/31/2018	10/31/2018
11/1/2018	11/1/2018
11/2/2018	11/2/2018
11/3/2018	11/3/2018
11/4/2018	11/4/2018
11/5/2018	11/5/2018
11/6/2018	11/6/2018
11/7/2018	11/7/2018
11/8/2018	11/8/2018
11/9/2018	11/9/2018
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11/12/2018	11/12/2018
11/13/2018	11/13/2018
11/14/2018	11/14/2018
11/15/2018	11/15/2018
11/16/2018	11/16/2018
11/17/2018	11/17/2018
11/18/2018	11/18/2018
11/19/2018	11/19/2018
11/20/2018	11/20/2018
11/21/2018	11/21/2018
11/22/2018	11/22/2018
11/23/2018	11/23/2018
11/24/2018	11/24/2018
11/25/2018	11/25/2018
11/26/2018	11/26/2018
11/27/2018	11/27/2018
11/28/2018	11/28/2018
11/29/2018	11/29/2018
11/30/2018	11/30/2018
12/1/2018	12/1/2018
12/2/2018	12/2/2018
12/3/2018	12/3/2018
12/4/2018	12/4/2018
12/5/2018	12/5/2018
12/6/2018	12/6/2018
12/7/2018	12/7/2018
12/8/2018	12/8/2018
12/9/2018	12/9/2018
12/10/2018	12/10/2018
12/11/2018	12/11/2018
12/12/2018	12/12/2018
12/13/2018	12/13/2018
12/14/2018	12/14/2018
12/15/2018	12/15/2018
12/16/2018	12/16/2018
12/17/2018	12/17/2018
12/18/2018	12/18/2018
12/19/2018	12/19/2018
12/20/2018	12/20/2018
12/21/2018	12/21/2018
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1/1/2019	1/1/2019
1/2/2019	1/2/2019
1/3/2019	1/3/2019
1/4/2019	1/4/2019
1/5/2019	1/5/2019
1/6/2019	1/6/2019
1/7/2019	1/7/2019
1/8/2019	1/8/2019
1/9/2019	1/9/2019
1/10/2019	1/10/2019
1/11/2019	1/11/2019
1/12/2019	1/12/2019
1/13/2019	1/13/2019
1/14/2019	1/14/2019
1/15/2019	1/1

[illegible]

Clearance Certificate

COMPARTMENTS: 45

Bago STATE FOREST, SOUTHERN REGION

ToContract Coordinator

I request approval for me to move my logging crew and all associated machinery from the above-mentioned area to the next compartment in accordance with Section 3.5 of the Forest Practices Code.

I certify that:

- (a) all permanent roads, trails and mitre drains have been cleared of harvesting debris;
- (b) butt damage to retained trees has been kept to acceptable limits;
- (c) all trees marked for removal have been felled;
- (d) utilisation limits have been satisfactorily met;
- (e) stump heights conform to requirements;
- (f) all hanging trees have been felled and brought down;
- (g) all log dumpsites have been satisfactorily restored as required;
- (h) harvesting debris is not accumulated around retained trees;
- (i) all accumulated litter has been disposed of properly;
- (j) all filter and buffer strip requirements have been complied with;
- (k) all snig track, extraction track and temporary logging road drainage has been installed satisfactorily and other required rehabilitation work has been completed;
- (l) all necessary repairs to damaged roads, signs, fences and other structures have been carried out.
- (m) **_____ (insert quantity) rubber flaps have been recovered in a satisfactory condition and reported to Operations Branch for collection.**
- (n) all machinery, equipment and vehicles have been checked and are free of noxious weeds, diseases and pests.

I believe that I have met all my obligations under the conditions of the Timber Licence, the EPL and TSL which apply to the compartment just completed, as stated in this Harvesting Plan.

Signature.....Name.....Date
Contractor

As a result of inspections of the logging operations made in accordance with this Harvesting Plan, I am satisfied that, to the best of my knowledge, the contractor responsible for this harvesting operation has satisfactorily completed all work and approval is given for her/him to remove her/his machinery and equipment and leave the area/commence operations in another compartment.

This clearance does not release the contractor from any obligation to undertake any remedial work if subsequent deficiencies are shown to result from inadequate practices during the harvesting operation, which are found during any inspections of the area made within 12 months of the date of this post-harvesting inspection.

Last inspection was made on(Date)

Signed(Date).....
Contract Coordinator

Post Logging Information

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

Summary of silvicultural treatment

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

Actual area harvested (record on attached HPOM)

Give reasons for harvestable areas that were not harvested (eg. Too steep, defective timber). Make reference to map.

Post Logging Basal Area sweeps

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

Comply with maximum STS BA removal of 45% or Thinning BA removal of 60%

Y/N

Possible next cut (tick appropriate boxes)

Main product type	Anticipated volume		
	H	M	L
Girders			
Veneer			
Poles/piles			
Quota			
Smalls/Thinnings			
Salvage			
Pulpwood/chipwood			

Time to next harvest	
0 to 5 years	
5 to 10 years	
10 to 20 years	
20 to 30 years	
30 plus years	

ATTACHMENT 2**ROADING PLAN****Summary of Roading Requirements**

Feature	Details	Works Required
Existing roads to be used.	18317m/14	Yes
New roads to be constructed	0	NA
Existing crossings used	4	Yes
New crossings to be constructed	0	NA
Length of road >10°	0m	NA
Borrow pits and gravel pits	0	NA
Mass movement prescriptions apply	No	NA
Dispersible soil conditions apply	No	NA
Seasonality provisions apply	No	NA

Note: Maintenance works not completed by SFO/Roading Contractor must be recorded and passed onto the Contract Coordinator Harvesting for completion and documentation.

The start and finish dates of all maintenance and construction must be recorded on the individual roading sheets along with other relevant changes or explanations.

All rubber flaps on minor forest roads must be removed and replaced with trafficable rollover banks on completion of operation.

CHECKLIST OF WORKS REQUIRED ON ROADS & CROSSINGS

Road/Crossing Name	Works Required	Date Started	Date Finished	Signature
Back Creek Road	Grade road surface, maintain existing mitre drainage, install road drainage as stated below (and marked in the field). • Grader (10 hours) SFO/Roading Contractor/Contract Coordinator Comments:			
Quartzville Track	Grade road surface, maintain existing mitre drainage, install road drainage as stated below (and marked in the field). • Grader (14 hours) • 3 Rubber Flaps + Machine Hire (1.5 Hours) SFO/Roading Contractor/Contract Coordinator Comments:			
Hardy's Road	Grade road surface, maintain existing mitre drainage, install road drainage as stated below (and marked in the field). • Grader (7 hours) • 1 Rubber Flap + Machine Hire (0.5 Hour) SFO/Roading Contractor/Contract Coordinator Comments:			

63 Logging Road	<p>Grade road surface, maintain existing mitre drainage, install road drainage as stated below (and marked in the field).</p> <ul style="list-style-type: none"> • Grader (20 hours) • 10 Rubber Flaps + Machine Hire (5 Hours) <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
Sugarloaf Logging Road	<p>Grade road surface, maintain existing mitre drainage, install road drainage as stated below (and marked in the field).</p> <ul style="list-style-type: none"> • Grader (3 hours) • 2 Rubber Flaps + Machine Hire (1 Hours) <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
45/1 Road	<p>Brush-off road, ensure windrows are open, install road drainage as per EPL Sch. 5 Table 1.</p> <ul style="list-style-type: none"> • Dozer (5 hours) + Grader (8 hours) • Drainage structures as required <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
45/2 Road	<p>Brush-off road, ensure windrows are open, install road drainage as per EPL Sch. 5 Table 1.</p> <ul style="list-style-type: none"> • Dozer (2 hours) + Grader (2 hours) • Drainage structures as required <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
45/3 Road	<p>Brush-off road, ensure windrows are open, install road drainage as per EPL Sch. 5 Table 1.</p> <ul style="list-style-type: none"> • Dozer (3 hours) + Grader (3 hours) • Drainage structures as required <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			

45/4 Road	<p>Brush-off road, ensure windrows are open, install road drainage as per EPL Sch. 5 Table 1.</p> <ul style="list-style-type: none"> • Dozer (3 hours) + Grader (4 hours) • Drainage structures as required <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
45/5 Road	<p>Brush-off road, ensure windrows are open, install road drainage as per EPL Sch. 5 Table 1.</p> <ul style="list-style-type: none"> • Dozer (5 hours) + Grader (6 hours) • Drainage structures as required <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
45/6 Road	<p>Brush-off road, ensure windrows are open, install road drainage as per EPL Sch. 5 Table 1.</p> <ul style="list-style-type: none"> • Dozer (2 hours) + Grader (2 hours) • Drainage structures as required <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
45/7 Road	<p>Brush-off road, ensure windrows are open, install road drainage as per EPL Sch. 5 Table 1.</p> <ul style="list-style-type: none"> • Dozer (3 hours) + Grader (4 hours) • Drainage structures as required <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
45/8 Road	<p>Brush-off road, ensure windrows are open, install road drainage as per EPL Sch. 5 Table 1.</p> <ul style="list-style-type: none"> • Dozer (2 hours) + Grader (2 hours) • Drainage structures as required <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			

45/9 Road	<p>Brush-off road, ensure windrows are open, install road drainage as per EPL Sch. 5 Table 1.</p> <ul style="list-style-type: none"> • Dozer (1 hours) • Drainage structures as required <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
Crossing A	<p>Clear inlet. Install rock dissipater. Gravel crossing & install approach drainage.</p> <p>Refer to Crossing Diagram for more detail.</p> <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
Crossing B	<p>Clear inlet & outlet. Gravel crossing & install approach drainage.</p> <p>Refer to Crossing Diagram for more detail.</p> <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
Crossing C	<p>Remove gully stuffer and install pipe + headwalls. Gravel crossing & install approach drainage.</p> <p>Refer to Crossing Diagram for more detail.</p> <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			
Crossing D	<p>Remove gully stuffer and install pipe + headwalls. Gravel crossing & install approach drainage.</p> <p>Refer to Crossing Diagram for more detail.</p> <p>SFO/Roading Contractor/Contract Coordinator Comments:</p>			

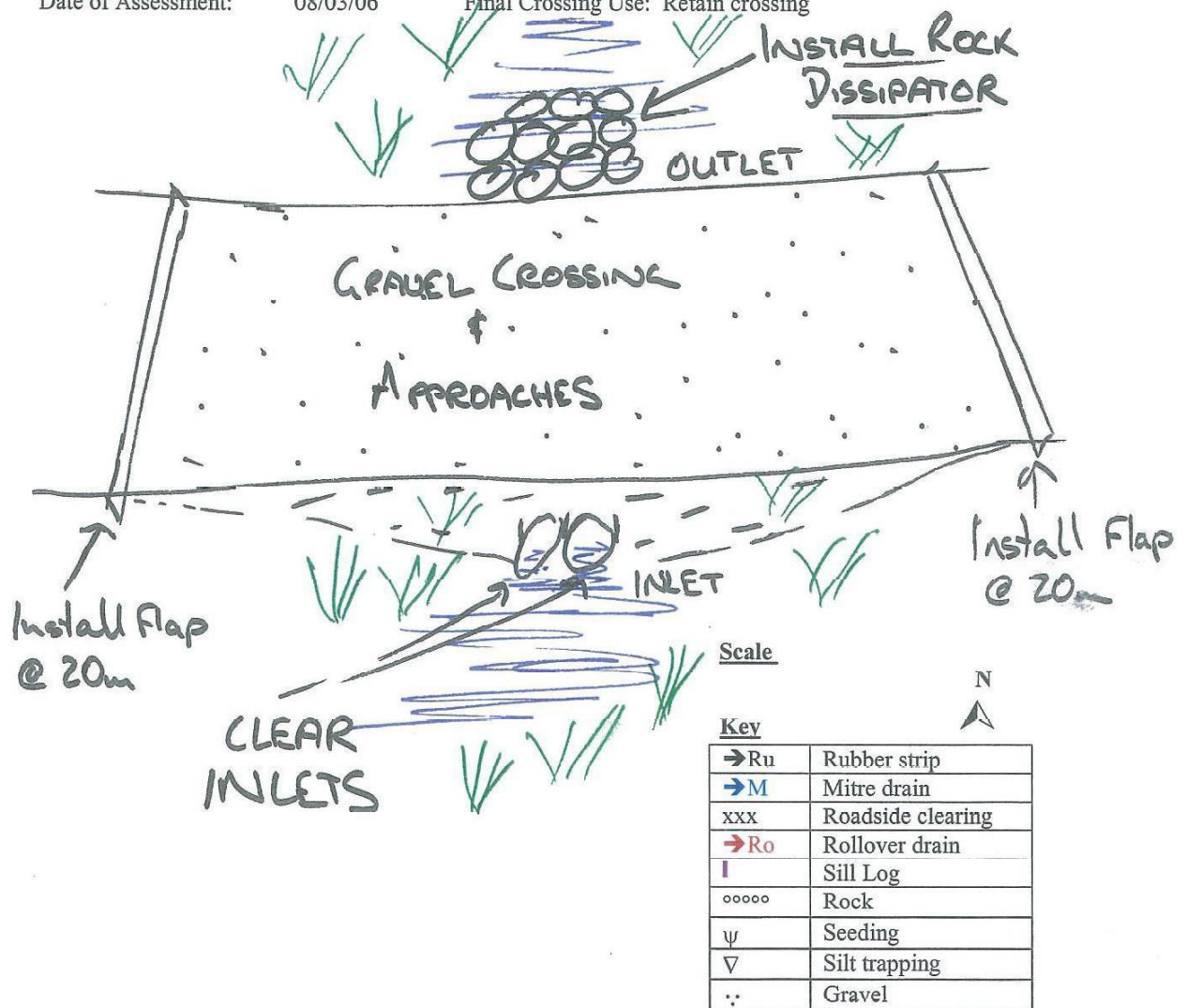
Note: Maintenance works not completed by Operations must be recorded and passed on to the Contract Coordinator.

Class 2 : Moderate Fish Habitat

CROSSING NAME: A **Assessors Name:** L Blessington **Crossing Type:** 2 x 600mm Pipes

Features	Works	Plant/Materials
Structure	Clear inlet Install rock dissipator	2m ³ large rock + Backhoe
Bed and Banks	Stable	Nil
Erosion and Sediment Control	Sow seed and mulch as required	Seed and mulch
Disposal of excess spoil	Remove excess spoil from First Order Stream	Machine/truck
Soil Stabilisation within 20m	As above seed and mulch	Seed and mulch
Road drainage within 5-30m	Rubber flaps Natural veg/slash Veg/Silt trap 5-30m	2 x Rubber flaps + machine, labour 1hr Silt trapping

Date of Assessment: 08/03/06 Final Crossing Use: Retain crossing



Date Work Started: _____

Date Work Finished: _____

Soil stabilisation must be completed within 5 days
Record implementation date here: _____

Class 3: Minimal Fish Habitat

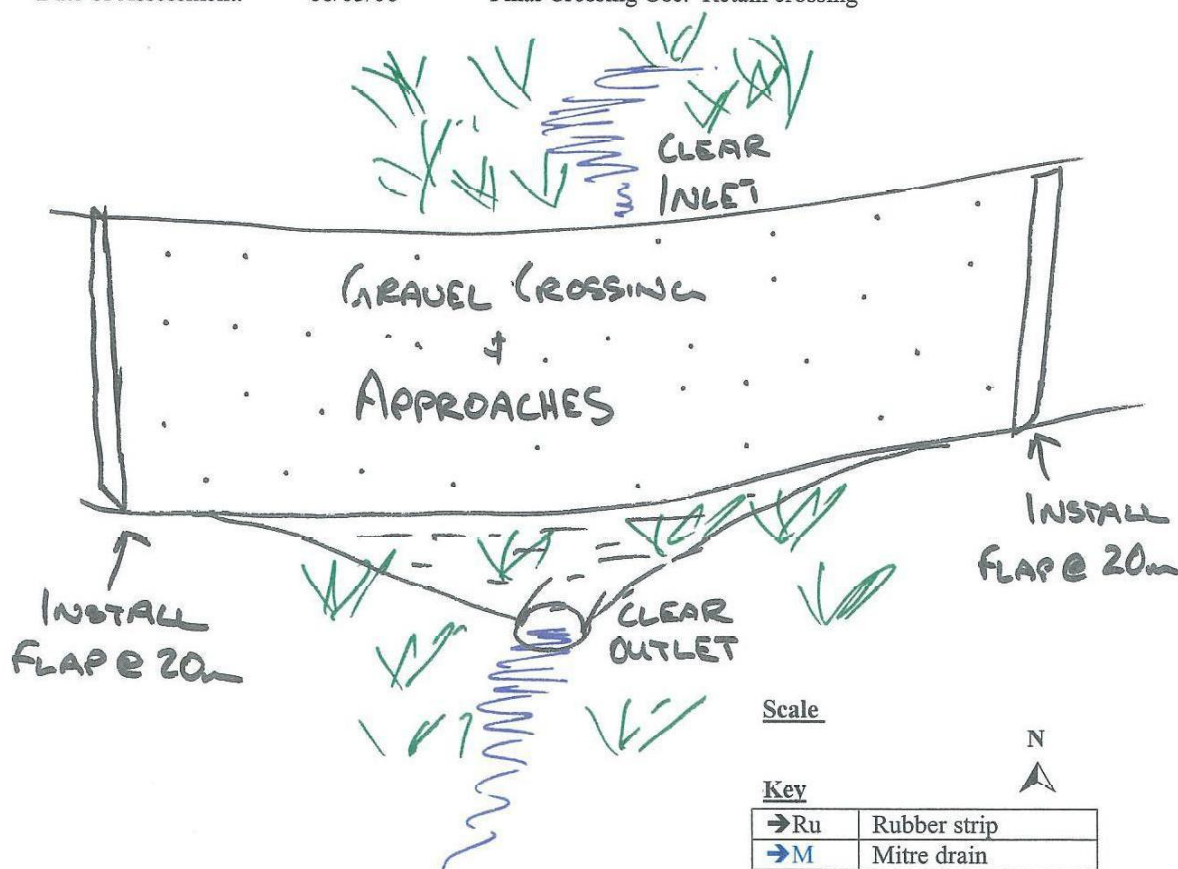
CROSSING NAME: B **Assessors Name:** L Blessington **Crossing Type:** 450mm Pipe

Features	Works	Plant/Materials
Structure	Clear inlet & outlet	labour
Bed and Banks	Stable	Nil
Erosion and Sediment Control	Sow seed and mulch as required	Seed and mulch
Disposal of excess spoil	Remove excess spoil from First Order Stream	Machine/truck
Soil Stabilisation within 20m	As above seed and mulch	Seed and mulch
Road drainage within 5-30m <ul style="list-style-type: none"> Type outlet control table drain checking devices 	Rubber flaps Natural veg/slash Veg/Silt trap 5-30m	2 x Rubber flaps + machine, labour 1hr Silt trapping

Date of Assessment:

08/03/06

Final Crossing Use: Retain crossing



Scale

Key

→Ru	Rubber strip
→M	Mitre drain
xxx	Roadside clearing
→Ro	Rollover drain
I	Sill Log
ooooo	Rock
ψ	Seeding
▽	Silt trapping
∴	Gravel

Date Started: _____

Date Finished: _____

Soil stabilisation must be completed within 5 days

Record implementation date here: _____

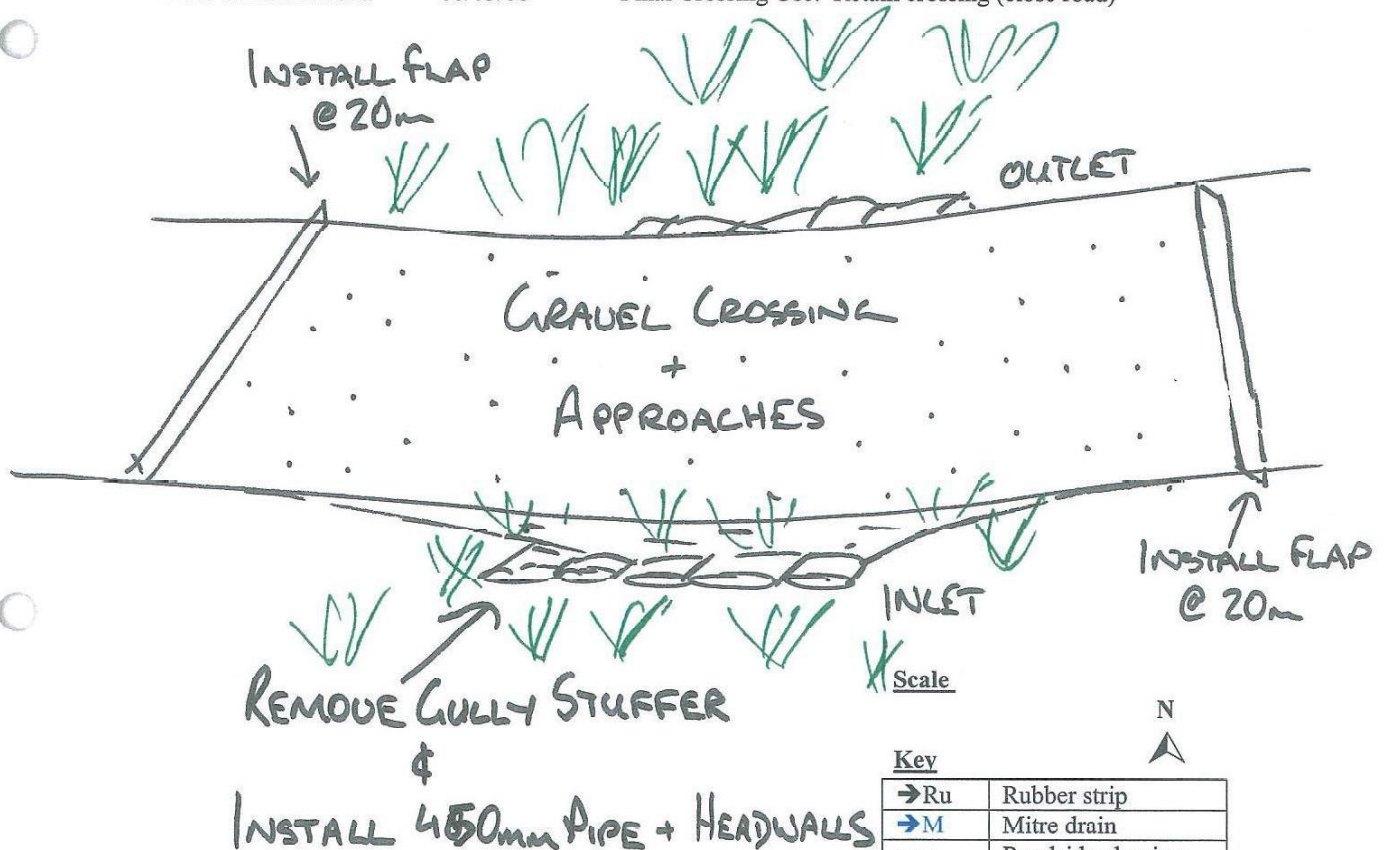
Class 3: Minimal Fish Habitat

CROSSING NAME: C **Assessors Name:** L Blessington **Crossing Type:** Gully Stuffer

Features	Works	Plant/Materials
Structure	Install Pipe/headwall/rock dissipator	Pipe: 450mm. Backhoe. 2 x headwalls plus rock dissipator.
Bed and Banks	Stable	Nil
Erosion and Sediment Control	Sow seed and mulch as required	Seed and mulch
Disposal of excess spoil	Remove excess spoil from First Order Stream	Machine/truck
Soil Stabilisation within 20m	As above seed and mulch	Seed and mulch
Road drainage within 5-30m <ul style="list-style-type: none"> Type outlet control table drain checking devices 	Rubber flaps Natural veg/slash Veg/Silt trap 5-30m	2 x Rubber flaps + machine, labour 1hr Silt trapping

Date of Assessment: 08/03/06

Final Crossing Use: Retain crossing (close road)



Key	
→Ru	Rubber strip
→M	Mitre drain
xxx	Roadside clearing
→Ro	Rollover drain
I	Sill Log
ooooo	Rock
ψ	Seeding
∇	Silt trapping
..	Gravel

Date Started: _____

Date Finished: _____

Soil stabilisation must be completed within 5 days
Record implementation date here:

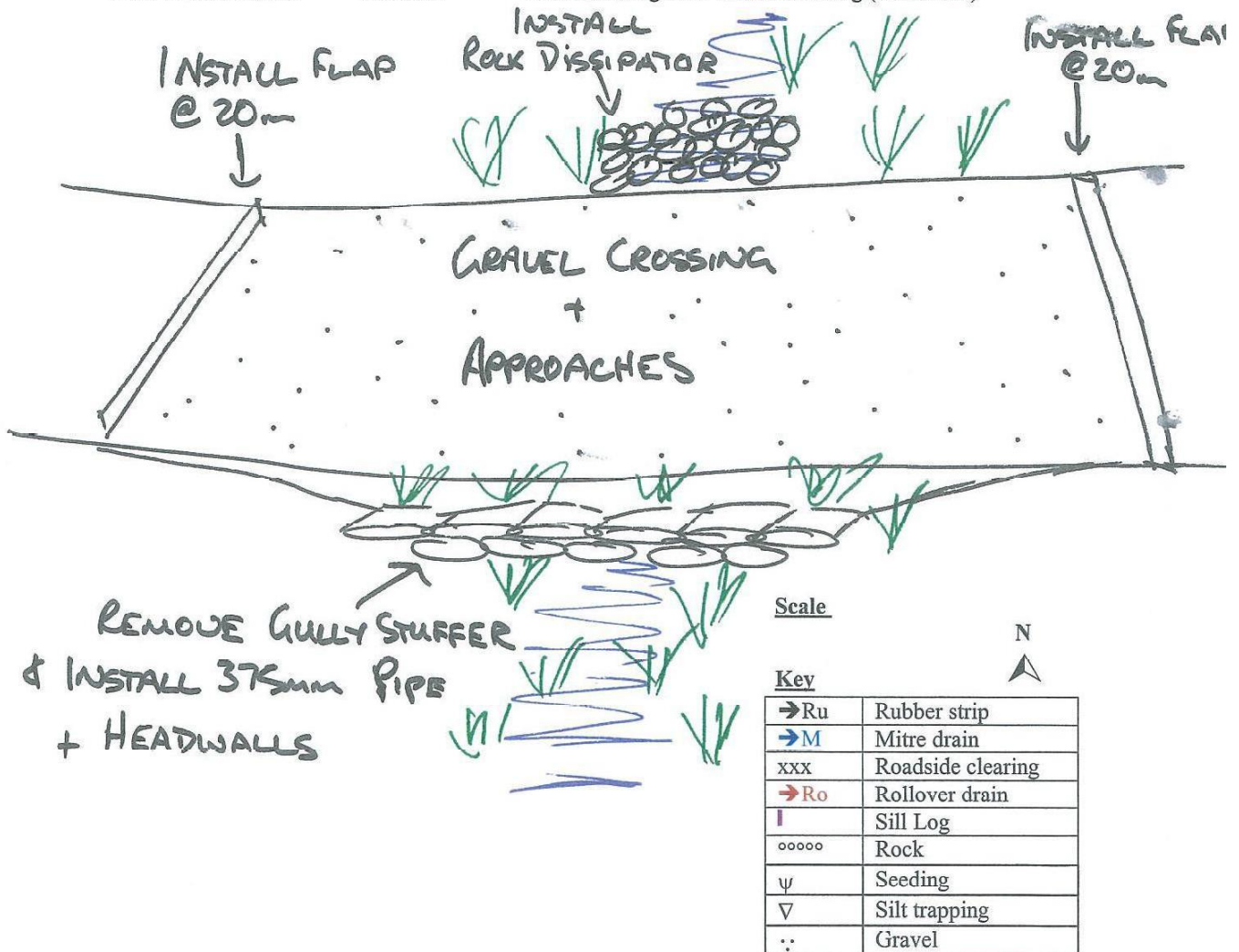
Class 3: Minimal Fish Habitat

CROSSING NAME: D **Assessors Name:** L Blessington **Crossing Type:** Gully Stuffer

Features	Works	Plant/Materials
Structure	Install Pipe/headwall/rock dissipator	Pipe: 375mm. Backhoe. 2 x headwalls plus rock dissipator.
Bed and Banks	Stable	Nil
Erosion and Sediment Control	Sow seed and mulch as required	Seed and mulch
Disposal of excess spoil	Remove excess spoil from First Order Stream	Machine/truck
Soil Stabilisation within 20m	As above seed and mulch	Seed and mulch
Road drainage within 5-30m <ul style="list-style-type: none"> Type outlet control table drain checking devices 	Rubber flaps Natural veg/slash Veg/Silt trap 5-30m	2 x Rubber flaps + machine, labour 1hr Silt trapping

Date of Assessment: 08/03/06

Final Crossing Use: Retain crossing (close road)



Date Started: _____

Date Finished: _____

Soil stabilisation must be completed within 5 days

Record implementation date here: _____

REGION:	MANAGEMENT AREA:	STATE FOREST:	COMPARTMENT	BASE NHA:	Survey Expiry	28/01/2013
SOUTHERN	BAGO-MARAGLE	BAGO	45	371 Ha	Review Date	21/08/2013

THREATENED FLORA PROFILE: PRASOPHYLLUM BAGOENSIS

P. sphacelatum
(uncommon but not
TSC, flowers Dec-Jan)



Photo R. Evans



Photo R. Evans



Photo from Jones 2006



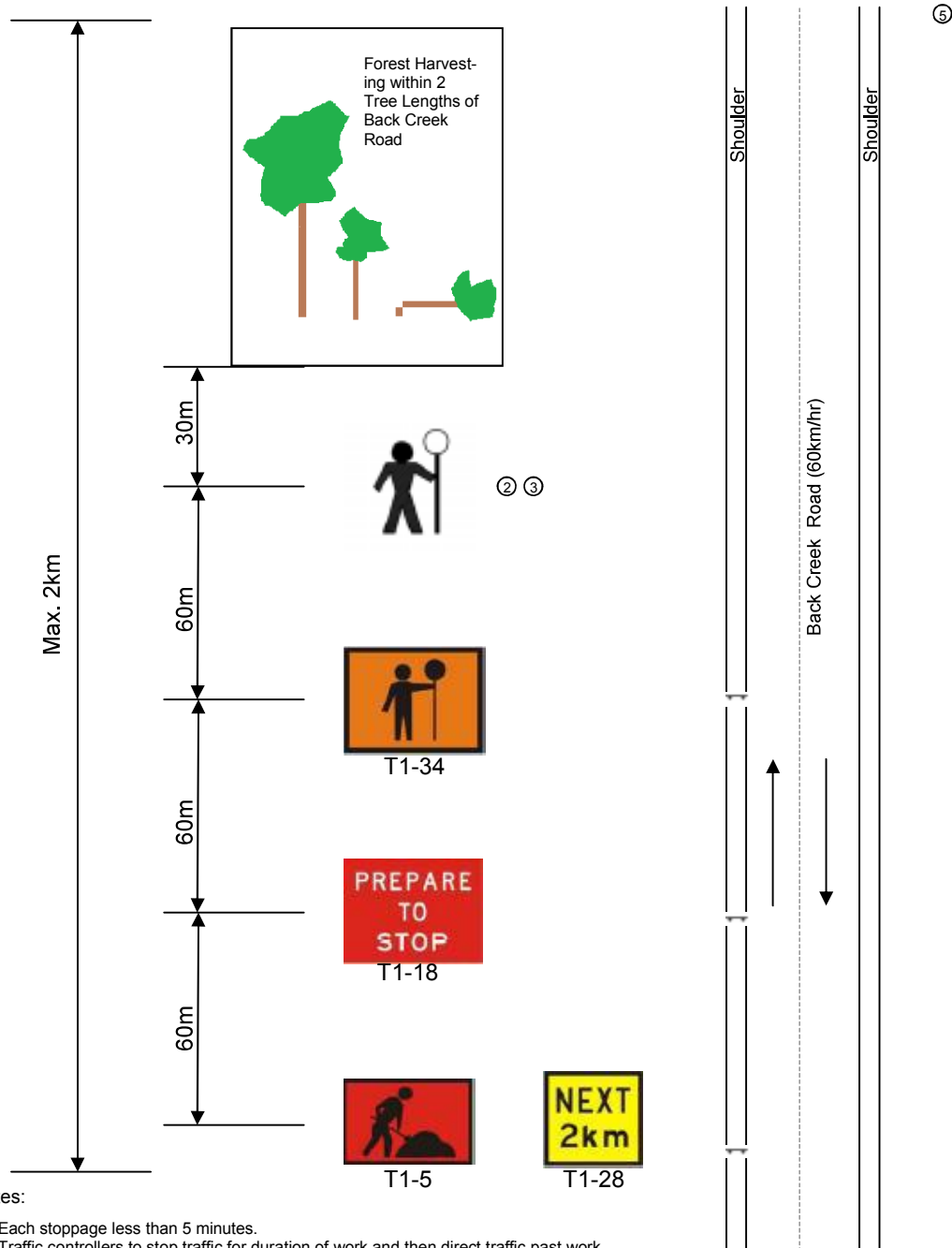
Photo D. Binns

P. alpestre (common swamp
species, flowers Jan-Feb)

Prasophyllum bagoensis (E)

***Prasophyllum bagoensis*:** Flowers mainly in Dec; recorded mainly from swampy grassland; distinguished from similar species within its potential range by widely spreading flowers, dorsal sepal bent backwards (red arrow), separated (not joined) lateral sepals (white arrow) and straight or only slightly curved labellum (yellow arrow).

Forestry Corporation NSW Southern Region Traffic Control Plan 78: Harvesting within 2 Tree Lengths of Back Creek Road (modified from RTA Traffic Control at Work Site TCP 78)



Notes:

- ① Each stoppage less than 5 minutes.
- ② Traffic controllers to stop traffic for duration of work and then direct traffic past work area, once tree falling has ceased and any debris has been cleared from road.
- ③ Traffic controllers and tree faller to maintain radio contact so that no tree falling is occurring while traffic is let through.
- ④ As ADT is less than 300 vehicles per day Traffic Controller, T1-34 & T1-18 are optional.
- ⑤ Traffic control plan must be mirrored for the other direction of traffic.

FREQUENTLY CHANGING WORK AREA
2 LANE/2 WAY
ADT < 300

Prepared by Kate Halton , Red Card Certificate No. 5192033076 on 27/05/2013