Forestry Corporation

GN MN 13°

1:50,000

Contour Interval 10m

GDA_1994_MGA_Zone_56

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

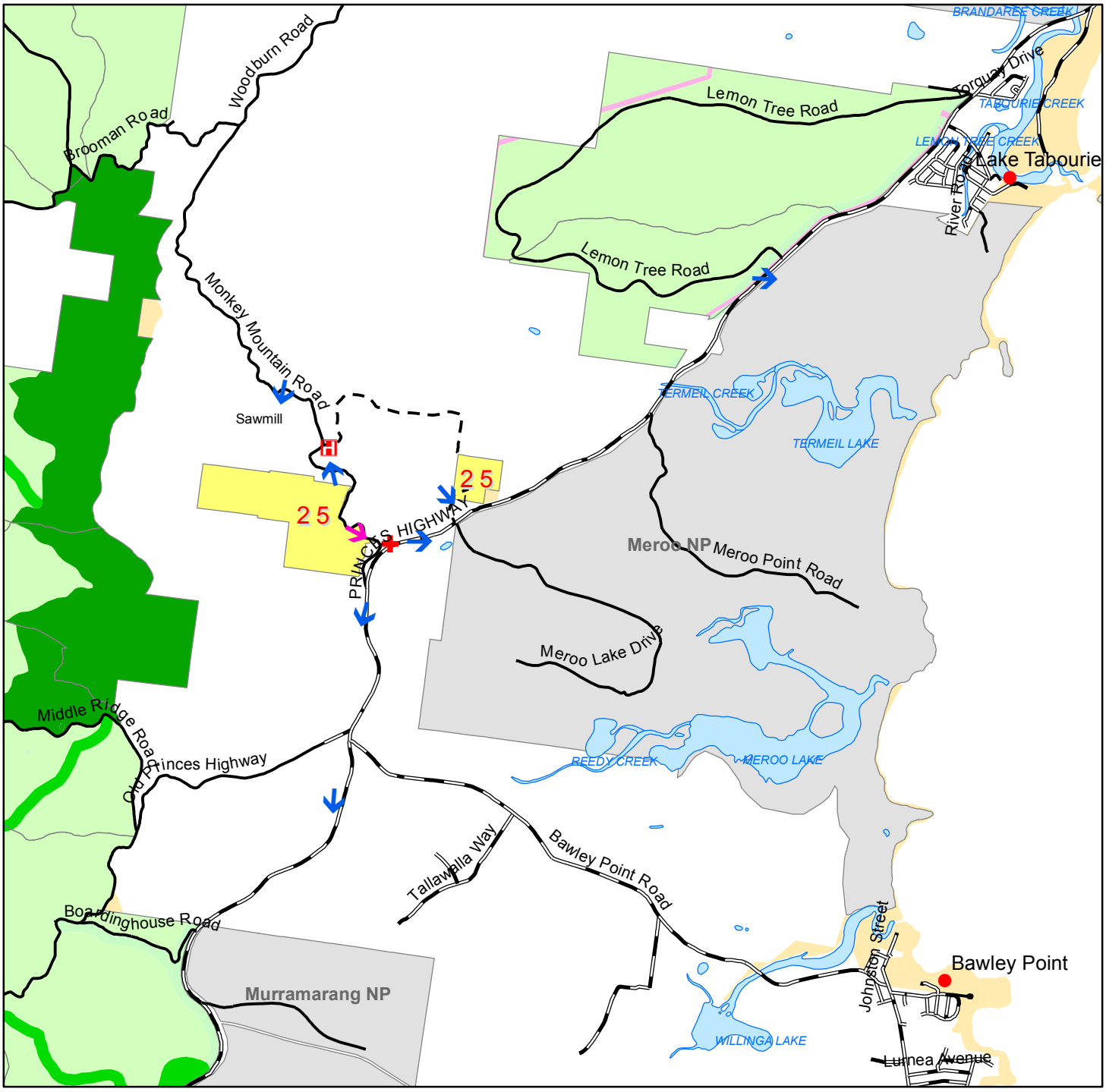
TERMEIL Forest
NO. 427
Cpt No:25
Management Area:BATEMANS BAY
Mapsheet:TABOURIE(8927-2S)

Plan Name:HP_BB_25_17

Plan No:56815

VERSION: 1

Date Printed: 31/10/2017



Emergency Meeting Point	WaterBodies	General Management (Zone 4)
Helicopter Landing Area	Private Property	Non Forestry Use (Zone 7)
Towns	Compartment 25	National Park Estate
Minor Haulage Roads	Special Management (Zone 2)	Vacant Crown Land
Sealed	Harvesting Exclusion (Zone 3A)	Evacuation Route
Major Forest Road	Special Prescription (Zone 3B)	Haluage Route

Kilometres

0 1 2 3

Forestry Corporation

1:15,000
Contour Interval 10m
GDA_1994_MGA_Zone_56

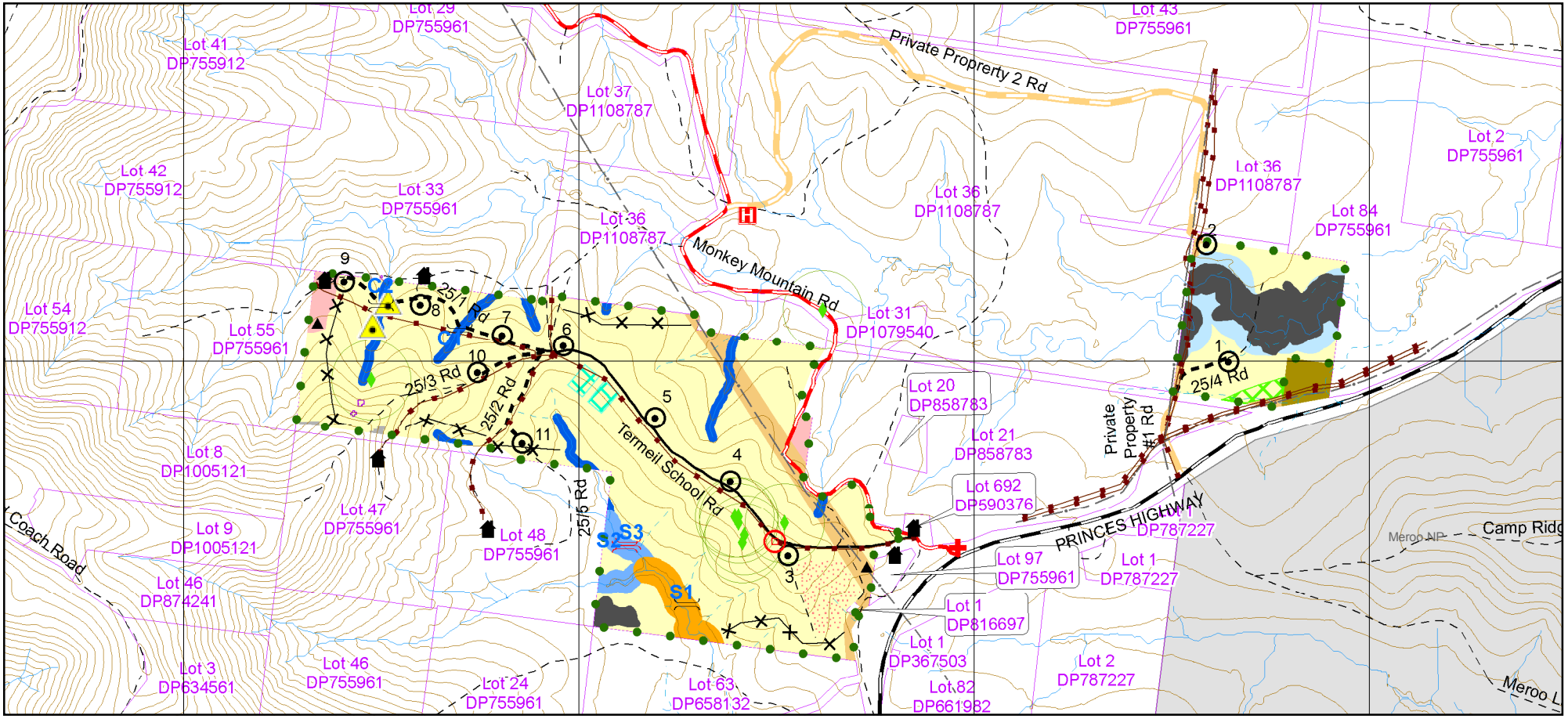
TERMEIL Forest
NO. 427
Cpt No:25
Management Area:BATEMANS BAY
Mapsheet:TABOURIE(8927-2S)

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

Plan Name:HP_BB_25_17
Plan No:56815

VERSION:1

Date Printed: 31/10/2017



- Yellow-bellied Glider (Feed Tree)
- Dam & 10m buffer
- Temporary Dry Weather Dump
- Emergency Meeting Point
- Helicopter Landing Area
- Telecomunications EJ
- New Crossing
- Existing Crossing
- Houses
- Hazard
- State Forest Boundary
- LiDAR Corrected Drainage
- Indicative Unmapped Drainage Features
- Electricity Transmission Line
- Underground Cable
- Proposed Control Line
- Princes Hwy
- Haulage Roads-Private Property
- Haulage Roads (Shire)
- Major Roads (EPL Standard)
- Minor Roads (EPL Standard)
- Other Roads
- 100m YBG feed tree radius
- Lantana
- Mapped IHL4 Exclusion Zone
- LiDAR Slope>30 (<0.25 ha)
- RU1 (FMZ4) STS Heavy
- RU2 (FMZ 3B) STS Heavy (modified)
- TEC (Riverflat Euc. Forest) & buffer (10m)
- Stream PZ 1st Order (10m)
- Stream PZ 2nd Order (20m)
- Stream PZ 3rd Order (30m)
- Stream PZ 4th Order (50m)
- RU1 (FMZ3B) STS Heavy (research plots)
- Non-forestry Use (FMZ 7) (Powerlines)
- FMZ 4 Excluded Forest
- Vacant Crown Land
- Private Property
- National Park Estate

0 0.5 1 Kilometres

Forestry Corporation

1:15,000
Contour Interval 10m
GDA_1994_MGA_Zone_56

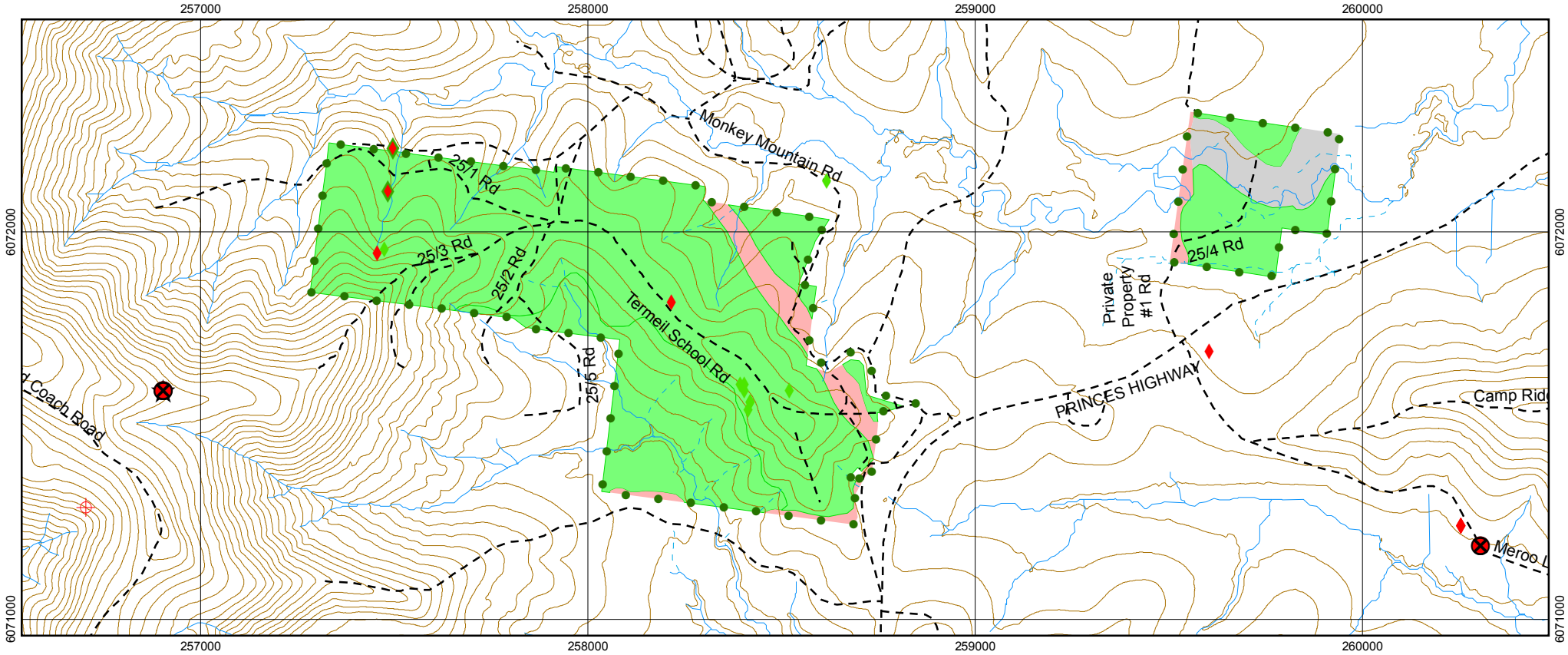
TERMEIL Forest
NO. 427
Cpt No:25
Management Area:BATEMANS BAY
Mapsheet:TABOURIE(8927-2S)

FORESTRY CORPORATION OF NSW, HARDWOOD FORESTS DIVISION
HARVEST PLAN FOREST TYPE MAP

Plan Name:HP_BB_25_17
Plan No:56815

VERSION:1

Date Printed: 31/10/2017



- Sooty Ow
- Yellow-bellied Glider (heard call)
- Powerful Owl
- Yellow-bellied Glider
- Yellow-bellied Glider (Feed Tree)
- Gang-gang Cockatoo
- Barking Owl
- State Forest Line
- LiDAR Corrected Drainage
- Indicative Unmapped Drainage Features
- Roads

Forest Types (YA) & Gross Area (ha)

- Coastal Moist Forest 5.1 ha
- Spotted Gum 80.6 ha
- Non Forest 5.5 ha

0 0.5 1 Kilometres

Hardwood Forests Division

Harvest and Haul Plan

State Forest	Termeil	Compartments	25
Management Area	Batemans Bay	IFOA Region	South Coast
Harvest Plan No.	56815	Supply Zone	Batemans Bay Inner Coastal
Legal Conditions	Native Forest Harvesting in accordance with IFOA conditions. Specified Forestry Activities do not have EPL coverage. To implement this plan you must hold a current Contractors Licence. Standard Harvest Plan Conditions and Operating Procedures apply. Survey expiry date for this plan is 01/02/26.		
Certification	Timber products removed from the plan area are within the Defined Forest Area covered by Australian Forestry Standard AS4708:2013 Certificate 604224		
Prepared by	Planner Kate Halton		Date: 15/06/2016
Approved by	Operations Planning Mgr Lee Blessington		Date: 31/10/2017
Abbreviations	FT = Forest Technician, HC = Harvesting Coordinator, PtS= Protection Supervisor, HS = Harvesting Supervisor, RC = Roading Coordinator, Crew = Harvest Contractor/Forest Operators, IFOA = Integrated Forestry Operations Approval, TSL = Threatened Species Licence, EPL = Environment Protection Licence, FL = Fisheries Licence, CH = Cultural Heritage, SOP = Standard Operating Procedure.		

1. Harvest Area Details

	Cpt 25
Plan Compartment ID	**126237**
Gross Area (ha)	92
Harvest Area	72
Estimated Yield	6,950
Yield/ha	96
Slope (% 0-20 degrees)	92
Slope (% 20-25 degrees)	6
Slope (% 25-30 degrees)	2

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

2. Management Conditions on Boundaries

Boundary	Conditions
FMZ	FMZ 3B (Visual) – A visual protection zone exists 80 metres wide parallel (but not directly adjacent) to the Princes Highway. The FT is not required to mark this boundary but the HC must supervise implementation of modified harvesting prescriptions apply see table 7. FMZ 3B (research)- Two research plots occur in the compartment. Refer to table 7 (STS Heavy) and table 2 (Research) for harvesting prescriptions. FMZ 7 (Powerlines) – Occurs throughout the compartment as indicated on HPOM.
Research	There is a research trial in the compartment (shown on the HPOM). This trial consists of two plots, a control and a treatment plot. Both plots are to be harvested using prescriptions for for RU1. The HC must collect any tags and return them to the Resources and Tactical Planning Supervisor. A pre-harvest measure is planned for both plots. Prior to harvest the HC must consult with the Resources and Tactical Planning Supervisor to ensure the measure has been done. Any other inventory plots located during the harvesting operation which are not shown on the HPOM or described above are to be treated the same as the surrounding area.

3. Expected Yields

Product Estimates	Volume (m3)
HQ Large Sawlog (Quota)	2,500
HQ Small Sawlog	500
Poles, Piles and Girders	0
LQ Sawlog (Salvage)	1,000
Pulp (1m3 = 1.2t)	1700
Firewood/Misc (1m3 = 1.2t)	1250
Total	6,950

Species	Species Mix (Sawlog)
SG	84%
IBK	4%
SBK	0%
BBT	12%

4. Haulage

Haul Route	From Termeil School Road and Private Property 2 Road, right onto Monkey Mountain Road turning left or right onto Princes Hwy or north along Monkey Mountain Road to Baxters Sawmill. From Private Property 1 Road South turning left or right onto Princes Hwy.
Traffic Control Plan (TCP)	Due to sight distance limitations the following traffic control plans and approvals are required for haulage: Intersection | Type of TCP | Approvals

<table>
<tr><td></td><td>
<table>
<tr><td>Termeil School Road/Monkey Mountain Road</td><td>Truck warning signs</td><td>Written approval from Shoalhaven Shire Council has been granted. TCP is attached to this plan.</td></tr>
<tr><td>Private Property #1 Road/Princes Hwy</td><td>Traffic control (stop/go)</td><td>RMS to approve a Road Occupancy Licence (ROL). Planner has not applied for ROL.

Approvals and implementation may be carried out by FCNSW staff or by a Traffic Control Company. HS to coordinate.

Note, allow 14 days for TCP to be prepared and ROL to be approved.</td></tr>
</table>
As Monkey Mountain Road is a Shoalhaven Shire Council Owned Road no signage except for in accordance with an approved TCP may be placed on this road.
</td></tr>
<tr><td>Dust and Mud</td><td>Homes immediately adjacent to Termeil School Road and Monkey Mountain Road may be adversely impacted by noise and dust created by log haulage. Truck drivers should reduce speed and minimise the use of engine brakes near these such homes.

All vehicle operators are responsible for minimising dust on Termeil School and Monkey Mountain Road adjacent to homes.</td></tr>
<tr><td>Operating hours</td><td>Restrictions apply to haulage contractors, refer to table 5 below.</td></tr>
</table>

5. Community

<table>
<tr><th>Issue</th><th>Detail</th><th>Conditions</th></tr>
<tr><td>Noise</td><td>Area used by dumps 3-9.</td><td>When working in areas close to residential properties, machinery (including chainsaws) operating hours will be limited to between 7am and 8pm Monday to Friday, and 8am to 12pm on Saturdays. Machinery must not be operated on Sundays and Public Holidays.</td></tr>
<tr><td>Traffic Control and Harvesting</td><td>Harvesting within 2 tree lengths of Monkey Mountain Road or Princes Hwy requires a TCP for traffic control (stop/go).</td><td>Approval details as below:
<table>
<tr><td>Road</td><td>Approvals</td></tr>
<tr><td>Monkey Mountain Road</td><td>Written approval from Shoalhaven Shire Council has been granted. TCP is attached to this plan.</td></tr>
<tr><td>Princes Hwy</td><td>RMS to approve (ROL). Planner has not applied for ROL.

Approvals and implementation may be carried out by FCNSW staff or by a Traffic Control Company. HS to coordinate.

Note, allow 14 days for TCP to be prepared and ROL to be approved.</td></tr>
</table></td></tr>
</table>

Pests/Weeds	Lantana and Myrtle Rust	Lantana occurs south of Termeil School Road between an unnamed road and the powerlines (shown on HPOM). To assist with access for spraying the PS has requested that snig tracks in this area are drained with trafficable rollovers. Machinery and vehicles working in the Lantana area should be washed down on dump 3 prior to moving out of the area. Myrtle Rust is known to occur in Shoalhaven Shire. To prevent further spread the crew/haulage operators must ensure all harvesting machinery, equipment and vehicles heading west from Shoalhaven Shire or south into Victoria are checked and all infected vegetation removed.

6. Infrastructure

Infrastructure	Conditions
Utilities Underground	Telecommunication cable owned by Telstra (copper cable) and Optus Optic Fibres occurs throughout the operational area for Compartment 25. For dumps 1-2 Telstra copper cable and Optic Fibres run parallel to and cross 25/4 Road, Private Property #1 Road and Private Property #2 Road. They are indicatively mapped on HPOM and markers occur in the field. They have been inspected by an accredited locator, however the HC should engage the cable locator again closer to the operation, if in doubt. Refer to Roading Plan and table 5 “Permit To Enter” for further conditions. For all other dumps Telstra copper cable occurs through the harvest area. Except for the cable which occur parallel to 25/1 Road, the remaining cable has been located by an accredited locator and marked with Orange tape and a yellow painted line. Refer to roading plan for conditions for roads. Snigging over the cable is required. The crew must choose designated crossing points and build a 300 mm ramp (slash and/or fill, or gravel) at each crossing point. The crew must report all damage to underground utilities immediately.
Transmission lines	Transmission lines occur within the compartment and are shown on the HPOM. Safe Work Practice for working near overhead power lines must be implemented by the crew before any work is undertaken within 2 tree lengths.
Access Roads	Termeil School Road, 25/1 Road, 25/2 Road, 25/3 Road and 25/5 Road are used to access private property. During the operation and on completion all roads should be maintained and left in a condition suitable for 2WD vehicles.
Control Lines	Proposed control lines for hazard reduction burning are shown on HPOM and are to be constructed by the crew. The location of control lines are to be determined by the HC and may vary somewhat than the locations on the HPOM. Existing snig track patterns must be utilised wherever possible, rather

	than creating new control lines. The HC should liaise with the Stewardship Protection team throughout the operation.

7. Harvesting Conditions

Silviculture Type	Harvesting Objectives and Condition for each stand condition
STS Heavy RU1 (includes all FMZ4 and the FMZ 3B research plots)	The harvest area is predominately a mature to over mature Spotted Gum, Ironbark, Blackbutt and Turpentine in mixed aged stands. There is scattered and patchy regeneration and regrowth throughout the area. The objective is to harvest all commercially available trees to create canopy openings and ensure mechanical disturbance creates a suitable seed bed for regeneration of the stands. Crew to retain well formed seed trees of preferred species at ~40 m spacing HC to instruct crew to retain patches of quality advanced regeneration where they occur. Crew to remove all merchantable stems not marked for retention and ensure mechanical disturbance creates a suitable seed bed for regeneration. The crew is responsible for protecting retained seed trees and retaining patches of advanced regeneration.
STS Heavy RU2 (FMZ3B visual)	Stand Condition as per RU1. Vegetation within Vacant Crown Land and Princes Hwy Road side reserve acts as a visual screen. The objective is to harvest all trees containing Sawlog to create canopy openings and ensure mechanical disturbance creates a suitable seed bed for regeneration of the stands. Crew to retain well formed seed trees of preferred species at ~40 m spacing HC to instruct crew to retain patches of quality advanced regeneration where they occur. Crew to remove all merchantable sawlog stems not marked for retention and ensure mechanical disturbance creates a suitable seed bed for regeneration. The crew is responsible for protecting retained seed trees and retaining patches of advanced regeneration.
Future Treatment Area	As mapped. To be retained for future harvesting treatments and to manage IFOA basal area limits for this harvesting event.
Monitoring	The HC must conduct Basal Area monitoring in areas treated with STS Heavy and STS medium. Any changes to treatment and offset areas need to be endorsed by the Operations Planning Manager.

IFOA Limits	STS Heavy	Future Treatment	Total
STS Tract	71ha	1 ha	72ha
Pre-harvest BA	22m^2	22m^2	8,750m^2
Post harvest BA	12m^2	35m^2	5,650m^2
Planned Removal	46%	0%	45%

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

<table>
<tr><th>Prescription</th><th>Condition/Responsibility</th></tr>
<tr><td colspan="2">Mark-Up – the FT is responsible for marking up the forest ahead of harvesting operations consistent Forest Mark Up and Tree Retention SOP</td></tr>
<tr><td>Compartment Mark-Up Survey
(5.1, 5.2)</td><td>Compartment mark-up surveys must be conducted at least 100m in advance of operations. The survey must search for threatened and protected species features listed in conditions 5.1 and 5.2 of the TSL.</td></tr>
<tr><td>Hollow-bearing and Recruitment tree retention (H and R)</td><td>Regrowth Zone – TSL 5.6 conditions apply.
Additional H trees for Greater Glider condition does not apply.
FT must select and mark 5 H trees/ha where available and one R for each H retained.</td></tr>
<tr><td>Significant Food Resources
(5.6 g)</td><td>FT must mark for retention:
- 4 Eucalypt feed trees/2 ha (where they occur), noting that Ironbark and Spotted Gum are suitable E tree species present in this compartment.
- All glider sap feed trees.
-Stands of forest oak and forest oak feed trees.
The following are known to occur in the Compartment:
<table>
<tr><th>Species</th><th>Coordinate</th><th>Comments</th></tr>
<tr><td>YBG Feed Tree x1</td><td>257474E 6071954N</td><td rowspan="2">Flagged with orange tape, to be remarked marked by FT</td></tr>
<tr><td>YBG Feed Tree x1</td><td>257455E 6071944N</td></tr>
<tr><td>YBG Feed Tree x1</td><td>258414E 6071541N</td><td rowspan="7">Historic records, not marked at planning stage FT to mark</td></tr>
<tr><td>YBG Feed Tree x1</td><td>258419E 6071561N</td></tr>
<tr><td>YBG Feed Tree x1</td><td>258520E 6071591N</td></tr>
<tr><td>YBG Feed Tree x1</td><td>258404E 6071591N</td></tr>
<tr><td>YBG Feed Tree x1</td><td>258394E 6071606N</td></tr>
<tr><td>YBG Feed Tree x1</td><td>258404E 6071606N</td></tr>
<tr><td>YBG Feed Tree x1</td><td>258419E 6071561N</td></tr>
</table></td></tr>
<tr><td colspan="2">Harvesting - crew and HC responsibilities</td></tr>
<tr><td>Protection of Retained Trees (5.6g)</td><td>Trees marked or selected for retention must not be felled.
The crew must minimise damage to H, R and E trees by using directional felling.
Harvesting debris should not accumulate within 5 m of retained trees. Where debris does accumulate the crew must removed or flatten to < 1m high.
The HC must be notified of any badly damaged retained trees and they must assess and record if a replacement retained tree is required.</td></tr>
</table>

Stag Retention (Dead standing trees 5.6e)	The crew should retain stags where safe to do so. The crew must record the date, DBH, risk and location of unsafe stags removed
Significant food resources	The crew should avoid damaging flowering or fruiting banksias or grass trees.

9. Site-Specific Flora and Fauna

Condition	Boundary Type	Prescription
Riparian Habitat Protection (5.7) (Lidar Corrected)	Pink Tape	Implement filter strip (hard) and protection zone (soft) around drainage features as shown on the HPOM. Refer to SOP1. FT must mark the location of UMDL with red (5m) tape and 1st order protection zone boundary with pink tape. The crew will locate and protect all 2nd order and above streams with GPS.
Threatened Ecological Community (TEC)	Pink and Yellow Tape	TEC and 10m buffer (Riverflat Eucalypt Forest on Coastal Floodplain) occurs in compartment 25. The FT must mark as an exclusion the TEC buffer boundary in the field as shown on the HPOM. The crew must protect all areas of marked TEC
Feed trees for Yellow Bellied Glider	Pink Tape and paint	FT must ensure mapped sap feed trees and their 15 feed trees are marked prior to harvesting. Crew must protect all marked sap feed and feed trees.
Threatened Frog Protection Measures	NA	A 10m buffer zone is to be applied around the two dams which occur in Compartment 25. The buffers are within already excluded forest and do not need to be marked.
Fish	N/A	No fisheries licence conditions apply.

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

Issue	Assessment	Conditions
EPL Scheduled Activity	No	
Unmapped drainage Line harvesting	Permitted	Apply UMDL BMP's. The FT must mark UMDL's using red (5m tape.
Inherent hazard level	2	Nil
Dispersible Soils	No	Nil
Mass Movement / Instability	No	Nil

Seasonality Conditions	No	Nil
Historical or existing erosion	No	Nil
Ground cover	>70%	Nil
Seasonal Burning conditions	No	Nil
Log Dumps	SOP 5	HC is responsible for authorising moving the location of a log dump.
Roading management during harvesting	SOP 6	Refer to SOP 6. HC is responsible for monitoring road and crossing drainage during haulage.
Wet Weather and Rutting	SOP 6	Crew is responsible for implementing automatic closures and following notified closures. HC is responsible for ensuring crew notified when notified closure is lifted.
Snigging	SOP 8	Crew is responsible for progressive drainage of snig tracks
Snig Track Crossings	SOP 9	HC is responsible to ensure snig track crossings are approved prior to use and rehabilitated upon completion.

11. Crossing Approvals

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

Crossing	EPA Approval	Conditions
S1, Mapped 3rd order DL GDA Z56 258274E 6071385N Waterway classification: Class 2 Moderate Fish Habitat (instream works) Not Class 1 or 2 Aquatic Habitat	NA (existing)	Reuse existing natural causeway crossing (no cut) as per EPL. Some clearing either side of crossing and excavation of banks will be required. **Note due to consultation requirements with Fisheries Regulator, this crossing must not be used before 17th November 2017**

S2, Mapped 2nd order DL GDA Z56 258112 6071530N Waterway classification: Class 4 Unlikely Fish Habitat (instream works) Not Class 1 or 2 Aquatic Habitat	Sch. 6 Approved	Construct temporary slash crossing (expected side cut <0.5m) as per EPL. Crossing must comply with FCNSW document *"Operating Conditions - Temporary Snig/Extraction Track Slash Crossings of Drainage Features in Native Forest Logging Operations" (*attached to this plan). Note approval to implement these operating conditions on a second order drainage line has been approved by the Hardwood Forests Soil Specialist.
S3, Unmapped DL GDA Z56 258124E 6071537N Waterway classification: Class 4 Unlikely Fish Habitat (instream works) Not Class 1 or 2 Aquatic Habitat	NA	Construct natural causeway crossing (side cut <0.5m) as per EPL.

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

Person	Role	Nature of Briefing	Date

13. Acknowledgement of Briefing: I acknowledge that I have received a copy of the plan documents and that I have been briefed on the conditions of the Plan. I understand the operational control requirements as outlined in the plan and take responsibility for the implementation of plan conditions relevant to my responsibilities

Name	Role	Signature	Date

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

Procedure Number	Title
1	Drainage Feature Protection
2	Exclusion Zone Boundary Management
3	Forest Mark-Up
4	Operating in Inherent Hazard Level 3 Areas
5	Log Dump Operation and Use
6	Road and Crossing Management and Wet Weather Controls
7	Safety Requirements
8	Snigging and Snig Tract Crossings
9	Tree felling and servicing of logs and products

Operational Diary:

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

15. Roading Plan: Maintenance works not completed by RC must be recorded and passed onto the HC 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.

Summary of roading requirements		
Feature	**Details**	**Works Required**
Existing roads to be used.	2380m/6	Yes
New roads to be constructed	0	NA
Existing crossings used	2	Yes
New crossings to be constructed	0	NA
Length of road >10°	Nil	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

Checklist of works required on roads & crossings				
Road/Crossing Name	**Works Required**	**Date Started**	**Date Finished**	**Initials**
Termeil School Road (FCNSW Responsibility) 1200m	Telstra copper cables run parallel to and under sections of this road. Clear scrub at intersection with Monkey Mountain Road to improve sight distance. Grade Road and clearing as required. Enhance existing or create new cross fall for drainage. Open existing mitres (except where doing so may damage underground cables). Install additional drainage (must be 2WD accessible) to EPL specifications. For the first 100m section of road (from intersection with Monkey Mountain Road), lay 300mm of gravel over the section where cable is under the road. For all other areas where the cable is crossing the road, do not grade. If these sections of road deteriorate during haulage, lay gravel (300mm), rather than grading. Planner has not assessed and specified appropriate drainage spacing, RC to do this. **RC/HC Comments:**			

25/1 Road (FCNSW Responsibility) 600m	Grade Road and clearing as required. Enhance existing or create new cross fall for drainage. Open existing mitres. Install additional drainage (must be 2WD accessible) to EPL specifications. Planner has not assessed and specified appropriate drainage spacing, RC to do this. **RC/HC Comments:**			
25/2 Road (FCNSW Responsibility) 200m	Grade Road and clearing as required. Enhance existing or create new cross fall for drainage. Install drainage, taking care where Telstra copper cable running parallel to the road is close by (must be 2WD accessible) to EPL specifications. Planner has not assessed and specified appropriate drainage spacing, RC to do this. **RC/HC Comments:**			
25/3 Road (FCNSW Responsibility) 150m	Grade Road and clearing as required. Enhance existing or create new cross fall for drainage. Open existing mitres (except where doing so may damage underground Telstra copper cables where they are parallel to this road). Install additional drainage, taking care of underground cables (must be 2WD accessible) to EPL specifications. Planner has not assessed and specified appropriate drainage spacing, RC to do this. **RC/HC Comments:**			

25/4 Road (Contractor Responsibility) 170m	Grade Road and clearing as required. Install drainage to EPL specifications. Do not grade sections where underground cable (Telstra copper and Optic Fibre) is under or crossing road. Build a 300mm gravel/earth ramp over the underground cable crossing points. Seek advice from an accredited cable locator if in doubt of the cable location. Planner has not assessed and specified appropriate drainage spacing, HC to do this. **RC/HC Comments:**			
25/5 Road (Contractor Responsibility) 60m	Grade Road and clearing as required. Install drainage to EPL specifications (can use rubber flaps on this road). Do not grade sections where underground cable (Telstra copper) is under or crossing road. Build a 300mm gravel/earth ramp where the cable crosses under the road. Planner has not assessed and specified appropriate drainage spacing, HC to do this. **RC/HC Comments:**			
C2, 1st Order DL GDA Z56 257701E 6072088N Waterway classification: Class 4 Unlikely Fish Habitat (instream works) Not Class 1 or 2 Aquatic Habitat	Existing Causeway Works: Grade pavement. Roadside Clearing. Install 5-30m drainage (mitres) and silt traps. **RC/HC Comments:**			

C2, 1st Order DL GDA Z56 257499E 6072147N Waterway classification: Class 4 Unlikely Fish Habitat (instream works) Not Class 1 or 2 Aquatic Habitat	Existing Causeway: Grade pavement. Roadside Clearing. Install 5-30m drainage (mitres) and silt traps. Note this crossing also contains a short section of 300mm pipe at the inlet which does not connect to the outlet. While this pipe is ineffective It is not recommended to disturb the road by removing it. **RC/HC Comments:**			