

SPECIFICATION 7 – P. RADIATA THIN TO WASTE

**CONTRACT JOB SPECIFICATIONS
FOR
P. RADIATA THINNING TO WASTE**

Dated 8 March 2002

APPROVED	FORESTRY MANAGER	DATE:
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Agreement made the _____ day of _____ 20 _____

BETWEEN

- 1 PAN PAC FOREST PRODUCTS LIMITED** a duly incorporated company having its registered office at Napier (with its successors and assigns called “the Company”)
- 2 (“The Contractor”)**

RECITALS

- A** The Company and the Contractor have entered into an Agreement relating to the appointment of an Independent Contractor dated

the _____ day of _____ 19 _____

 (“The Contract for Services”)
- B** The Company requires the Contractor to complete a particular class of work or works pursuant to the Contract for Services, the specific terms and conditions of which the parties now wish to record.

IT IS HEREBY AGREED AS FOLLOWS:

1 INTERPRETATION

- 1.1 In this Agreement, words and expressions used shall have the same meanings as ascribed thereto in the Contract for Services unless expressly varied herein.
- 1.2 “Contract for Services” means the Contract for Services referred to in Recital A including any additions, variations or amendments thereto.
- 1.3 “Job Specification” means the job specification(s) as detailed in this Agreement and shall include any Contract Note or Prescription relating to such Job Specification.
- 1.4 “Working Block” means the defined area of forest or forests.
- 1.5 “Stand” means a defined area of forest in which all trees were planted in the same year.

2 EFFECT OF THIS AGREEMENT

The provisions of this Agreement and any Contract Note issued pursuant to this Agreement, shall form part of and shall be read with the Contract for Services and such provisions shall have the same force and effect as if they were set out in the Contract for Services, so that a default under this Agreement or any Contract Note or Prescription issued pursuant to this Agreement shall be deemed to be also a default under the Contract for Services.

3 THE DETAILS OF THE JOB SPECIFICATION ARE AS FOLLOWS

PINUS RADIATA THINNING TO WASTE

This Contract Job Specification applies to thinning to waste operations in any working block allocated to the Contractor by the Company.

1. INTRODUCTION

This Contract Job Specification covers work associated with waste thinning as a means of releasing final crop trees from stand competition.

2. OBJECTIVE

To document the correct procedure to ensure crop trees are selected and unwanted trees culled according to the prescribed tending regime.

3. ALLOCATION OF WORKING BLOCK

The Company shall from time to time during continuance of this agreement allocate to the Contractor a working block to be thinned to waste with the associated Job Prescription, Contract note, appropriate associated FSC documentation (e.g. POAC) and stand map. The Contractor will thereafter proceed in a proper and professional manner when thinning to waste.

4. COMPANY'S RESPONSIBILITIES

The Company will supply to the Contractor the following for each working block:

- a) A map showing the boundary of each stand for thinning to waste.
- b) A Job Prescription showing:
 - i. safety requirements
 - ii. the prescribed final crop stocking
 - iii. selection criteria
 - iv. operational requirements
 - v. any special instructions e.g. additional requirements
 - vi. contract requirements.
- c) A Contract Note
- d) Appropriate associated documentation (e.g. FSC requirements, POAC).
- e) A list of known physical hazards

5. SELECTION CRITERIA FOR CROP TREES

Introduction

It is the Contractor's responsibility to select as crop, the trees, which have the potential to be of most value at clearfell. The selection decision must be made using the criteria (in order of importance):

- Previously pruned acceptable trees
- Vigour and health in unpruned trees
- Form in unpruned trees
- Branching in unpruned trees
- Spacing.

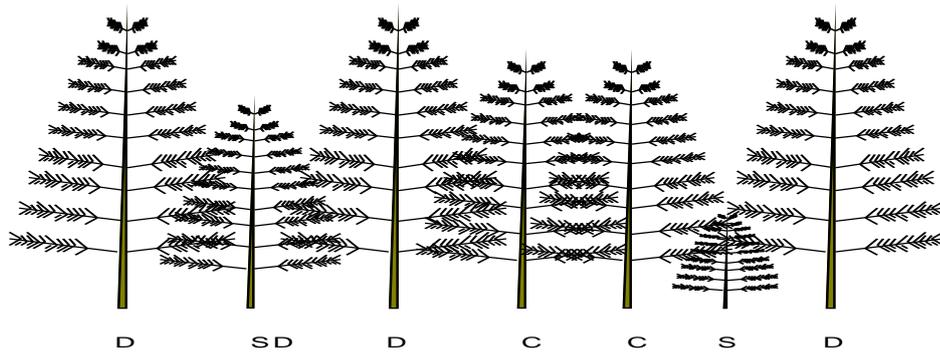
5.1 Previously Pruned Acceptable Trees

This is only important in stands, which have been previously pruned. No acceptable pruned trees shall be thinned by the Contractor unless they exceed the prescribed stocking. The Company may impose a penalty payment if acceptable trees have been thinned by the Contractor (see payments and deduction clause 4 - Schedule 2 Part A)

5.2 Vigour

In assessing vigour the Contractor must consider relative dominance of the tree. No matter where you are in a stand there will be trees that are bigger in height and diameter than their neighbours. These trees are called dominants and it is these dominants which should be selected.

Note that a tree is judged by comparison with its neighbours, not with trees in other stands or other parts of the same stand. In areas with insufficient numbers of dominants to meet the prescribed stocking then more co-dominants will be left (refer diagram):



D = DOMINANTS
Tallest trees above avg.
crown and diameter

C = CO-DOMINANTS
Average height
crown and diameter

SD = SUB-DOMINANTS
Below average height
crown and diameter

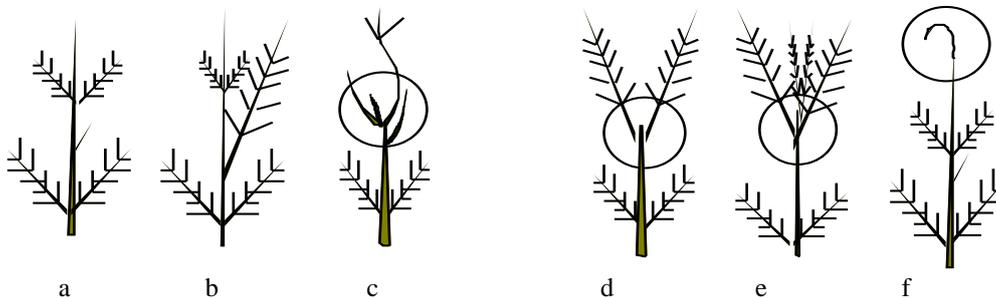
S = SUPPRESSED
Smaller trees in stand

5.3 Form

The crop trees selected by the Contractor must have straight stems and single leaders. The entire height of the tree must be examined. Wherever possible trees with the following defects should not be selected:

- double leaders or multiple headers
- trees with broken or dead tops
- trees with kink or wobble
- trees with excessive lean.

Tree Leaders



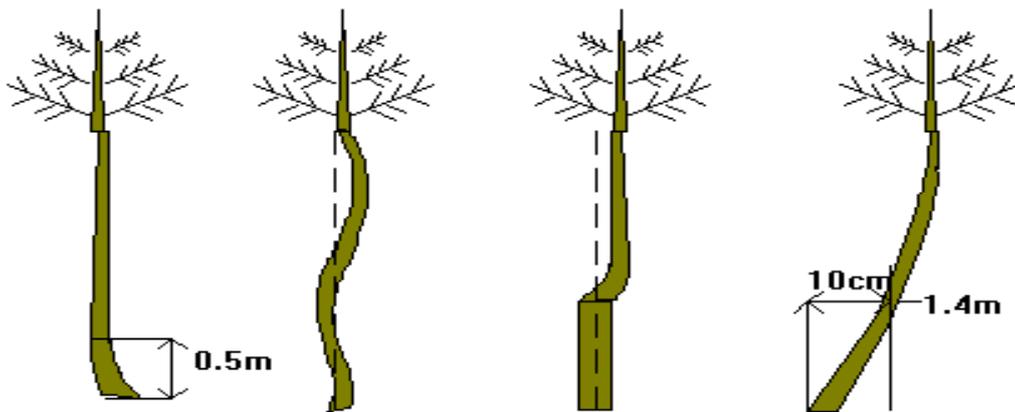
Most Preferred

- a. Single live leader - most desirable
- b. Unequally vigorous forked leader
- c. Single leader developed after death of original acceptable leader

Least Preferred

- d. Equally forked leader
- e. Multiple leaders
- f. Dead leader

Acceptable and Non-acceptable Defects:



- 1. Butt sweep** < 0.5 m is acceptable
2. Wobble > 1 diameter deviation is not acceptable
2. Kink
3. Lean < 10cm at 1.4m is acceptable

5.4 Branching

This is secondary to vigour, health and form. If two trees have similar vigour, and form then the Contractor shall leave the tree with the smallest branches. Assess the first 6m height up the stem and remove the tree with the largest maximum branch.

5.5 Spacing

This is secondary to all the above criteria. Consideration of spacing is only intended to prevent the formation or enlargement of understocked areas.

6. FELLING GUIDELINES

- 6.1** The Contractor shall fell all trees that have not been selected as crop trees. This includes all regeneration pines.
- 6.2** The Contractor will ensure that all felled trees are severed completely from the stump below the lowest green branch, and are left lying flat on the ground. If it is not possible to sever the tree below the lowest green branch then the Contractor must remove all green branches from the stump.
- 6.3** No stumps shall be greater than 20cm in height measured on the uphill side of the stump.
- 6.4** Culled trees are not to be left leaning against selected crop trees (no hang-ups).
- 6.5** 'Posting' (cutting successive lengths off a hung up tree) is not permitted if the tree is greater than 20m in height.
- 6.6** The Contractor shall not fell or damage in any way those trees that have been selected as crop trees.

The Company may impose a penalty payment if avoidable damage continues after the Contractor has been notified of such damage. The Company shall have the right to stand down the Contractor if damage is excessive. (See clause 8).

- 6.7** All trees with a stump diameter greater than 20cm must be scarfed by the Contractor.

- 6.8 The Contractor shall carry a minimum of three wedges (relative to the size of tree being felled) along with a suitable hammer, axe or maul.
- 6.9 Every tree with a DBH greater than 30cm shall be wedged unless it has a definite lean in the intended felling direction.
- 6.10 Wherever possible stand edge trees are to be felled into the crop by the Contractor.

7. RESTRICTIONS

- 7.1 Permanent sample plots and trial areas are **not to be thinned** or marked with paint unless specifically instructed by the Company. PSP's and trials can be identified by posts or pegs, yellow or white paint or the signage \neq . **If in doubt ask first.**
- 7.2 Access tracks into PSP's and trials must be left clear.
- 7.3 All roads, tracks, watertables, fences, firebreaks and streams are to be kept free of thinning slash.
- 7.4 All thinning slash must be placed behind the first row of trees on road edges unless otherwise specified.

8. PAYMENT DEDUCTIONS:

- 8.1 The Company will sample at least 1 plot per 2.5ha of the operation. Bounded plots will be used to calculate the residual stocking (stems/ha), poor quality will also be recorded. The Contractor may witness these plots.

- 8.2 The Company will assign demerit points at its discretion for poor quality on the following basis:

Badly Cut Stems

- Incorrect felling method (viewing stumps)
- Felled stems not completely severed
- Live branches attached to stump
- Stump height greater than 20cm
- Crop tree scarred or damaged
- Crop tree with broken top due to thinning
- Felled tree hung up.

Wrongly Cut Stem

- Tree felled which in terms of selection criteria in clause 5 is a crop tree.

Stem Not Cut

- Tree not felled which in terms of selection criteria in clause 5 is not a crop tree.

All faults shall be recorded per tree. The Company shall assign demerits based on these faults.

Any demerits for incorrect felling method will result in the Contractor being given written instructions to identify the faller responsible and carry out immediate retraining.

If total demerits for wrong stocking (stems not cut), felled stems not completely severed, live branches on stump, stump height greater than 20cm or hang-ups are greater than 2 per plot then the Contractor will be given written instruction by the Company to rework the area at the Contractors cost. The Company will determine the size of the rework area.

The Company may charge the Contractor for replotting the area.

If total demerits for incorrect selection (wrongly cut stems), incorrect felling method, scarring or broken top crop trees are greater than 2 per plot then the Company may deduct payments. Written advice will be given to the Contractor before such deduction is made.

The Company shall have the right to stand down the Contractor and cancel the contract if demerits continue or damage to crop trees becomes excessive.

Lastly, the Company may withhold payment if the appropriate documentation related to the prescription (e.g. FSC documentation, payment requests) are not provided prior to the mark up dates specified for Forestry Contractor Payments.

9. SAFETY

All operations must be carried out in accordance with the Pan Pac Forest Products Safety Rules and Procedures for Forest Operations and the Pan Pac Forest Products Operations Handbook.

It is the responsibility of the Contractor to ensure the operation is carried out in a safe manner. The Contractor shall discontinue the operation if it is felt operating conditions are unsafe. All operators must have appropriate safety equipment:

- Approved Hi Vis clothing
- Approved high visibility yellow or orange hard hat
- Leg protection up to or exceeding the New Zealand standard
- Approved eye protection
- Grade 4 or better earmuffs
- 2 large wound dressings
- Steel capped safety boots.

For thinning to waste operations, spiked safety boots are recommended.

All chainsaws must be fitted with an effective safety mitt and chain brake in working order.

It is the responsibility of the Contractor to ensure all workers must hold, or be under recognised training for the modules listed:

- 1.01 General Requirements (Unit Standard 17769)
- 1.06 Chainsaw Maintenance and Operating (Unit Standards 43, 6916, 6917)
- 2.05 Silvicultural Thinning to Waste Small Trees, if working in operations waste thinning trees smaller than 20 cm (Unit Standards)
- 2.07 Silvicultural Thinning to Waste Large Trees, if working in operations waste thinning trees larger than 20cm (Unit Standards 6960, 6951, 17763, 17766, 17767, 1248).

9.1 Reporting of Accidents

The Contractor must report to the Company any accident as soon as practical after the occurrence or at least within 24 hours of the accident.

Major near misses resulting from exposure to significant hazards must also be reported to the Company as soon as practical or at least within 48 hours of the incident.

IN WITNESS WHEREOF these parties have executed this Job Specification

P. Radiata Thinning to Waste

on the day and in the year written above.

SIGNED for and on behalf of:]
Pan Pac Forest Products Limited]
BY

EXECUTED by the Contractor]
in the presence of:]

_____ **Witness Name**

_____ **Witness' Occupation**

_____ **Witness' Address**