BRITISH COLUMBIA

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Date typed: 2001/09/27 Date last saved: 2001/10/03 10:21 am

File: ORCS 11400-20/R03634/01-01
ORCS 11400-25/R03634 (letter only)

October 3, 2001

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R03634 designated Amendment Number R03634/01-01.

Your application received September 13, 2001 has been reviewed against the 2001-2008 Forest Development Plan approved August 30, 2001 for Woodlot Licence W0046 for the Read Island operating area. You are hereby authorized to proceed with the work on the sections of road shown on the attached Exhibit A Map dated October 3, 2001. The following conditions apply:

1. Approved Road Sections

A200	Station	0+000	to Station	0+313	Accessing Blk.	AN2
A300	Station	0+000	to Station	0+250	Accessing Blk.	AN2
E410	Station	0+000	to Station	0+043	Accessing Blk.	E2
Swamp Main	Station	0+926	to Station	1+700	Accessing Blk.	SW1
SW100	Station	0+000	to Station	0+322	Accessing Blk.	SW1,SW2
SW110	Station	0+000	to Station	0+066	Accessing Blk.	SW2

2. All operations are to conform to the *Forest Practices Code of British Columbia Act.* The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

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Ministry of Forests
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

FNR-2011-00232
Page 1

3. There appears to be inadequate culverting along some road sections and it is recommended that drainage requirements be reviewed to ensure adequacy of water control.

4. The use of 500 millimetre diameter or smaller corrugated metal pipe is not recommended except for ditchline water, cross drainage at appropriately spaced intervals.

5. Wooden log culvert design and construction is to be done in accordance with the Forest Road Engineering Guidebook criteria or equivalent.

6. Inverted stumps and corduroy or puncheon are to be placed in the road subgrade width to support the fill material and the required vehicle loads is indicated in the Certification Schedule. It is assumed that Section 43(6)(d) and 47.2(3) of the Woodlot Licence Forest Management Regulation is applicable. Inverted stumps and corduroy or puncheon are to be placed in the road subgrade width to support the fill material and the required vehicle loads.

The enclosed Schedules A1 and A2, Plans/Profiles, and other attachments form an integral part of Road Permit R03634 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachments

pc: Compliance and Enforcement, Vince Metcalf

BRITISH COLUMBIA

Document name: \\FSDSC-R1\Root\!WorkGrp\ENGINEER\!Trent\Woodlt\rp03634\020807.doc [DH/tp]

File: ORCS 11400-20/R03634/02-01
ORCS 11400-25/R03634 (letter only)

August 14, 2002

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R03634 designated Amendment Number R03634/02-01.

Your application received July 9, 2002 has been reviewed against the 2002 – 2008 Forest Development Plan approved August 30, 2001for Woodlot Licence 046 for the Read Island operating area. You are hereby authorized to proceed with the work on the sections of road shown on the attached Exhibit A Map dated August 14, 2002. The following conditions apply:

1. Approved Road Sections

Main.

Harper Main	Station	0+757	to Station	1+004	Accessing Blk.	To be determined

2. All operations are to conform to the *Forest Practices Code of British Columbia Act*. The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

3. Schedule A1, number 12 indicates N/A for Turnouts. Turnouts should be located at approximately a spacing of 250 – 300 metres.

The enclosed Schedules A1 and A2, Plans/Profiles, terrain reports and other attachments form an integral part of Road Permit R03634 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachments

pc: Compliance and Enforcement, Attention: Vince Metcalf

Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

Ministry of Forests

ROAD PERMIT/ROAD LAYOUT AND DESIGN APPLICATION

FILE NO.: R03634/02-01

DATE: 09 July 2002

Name of Applicant: Harper Logging Ltd.

Address: Box 299, Heriot Bay, BC V0P 1H0

Phone No.: (250) 285-2325 Fax. No. (250) 285-2305

E-mail address: tntcampbell@shaw.ca

Tick appropriate box:

☐ New Road Permit **OR** ☒ Amendment to Existing Permit RO_3634

☒ Build, Modify & Use **OR** ☐ Use & Maintenance only of non-status road

1. Applicant's Tenure Type and No.: W 046
2. Forest Cover Map Reference: 92 K 025
3. Forest Development Plan (name of operating area or geographical location and approval date)
   2001 – 2008 FDP for W 0046, Approved Aug 30, 2001
4. Included documents (refer to Road Layout and Design Submission Procedures):

Tick appropriate boxes

- ☒ map to suitable scale
- ☒ Schedule A1 (FS1178A1)
- ☒ Schedule A2 (FS1178A2)
- ☒ Riparian, Visual, Archaeological and Soil Erosion Assessments Schedule (FS1179(1))
- ☒ Terrain Stability Field Assessment and Measures Schedule (FS1179(2))
- ☒ Road Layout and Design Schedule (FS1179(3))
- ☒ Geometric Road Design

5. ☒ not applicable **OR**

   For a junction with a Forest Service Road, the following specifications apply:
   Location _____ (km) of the _____ Forest Service Road
   minimum sight distance _____ m junction angle _____ °
   road grades _____ culvert size _____

6. Proposed construction date: Month: August Year: 2002
7. In submitting this application, the applicant acknowledges that he/she will be the designated Principal Contractor for the purposes of Occupational Health and Safety Regulation, in accordance with the road permit requirement.
8. The responses to the referrals required by the District Manager accompany this application.

WOODLOT LICENCE ROAD LAYOUT AND DESIGN
SCHEDULE FS 1178(A1)

Road Permit ☒ RO 3634 Amendment Number: 2002-01
Cutting Permit ☐
Special Use Permit ☐

Road Name/Reference: Harper Main 0+757 – 1+004

1. As required by Woodlot Licence Forest Management Regulation (WLFMR) Section43(6)(f), the revegetation specifications shall be: Revegetate inactive burrow pits, waste sites, road fill and cut slopes with appropriate seed and fertilizer mix. Please refer to the attached Harper Logging Ltd. Revegetation Guidelines.

2. Actions for protecting the known non-timber forest resources shall be: Rip Rap culvert inlets and outlets, use geotextile fabric covering on wood culverts. Debris Management Strategy is listed as follows:

S1-S4 streams: All inadvertently introduced debris, will be removed concurrent with road construction. S1-S4 streams: All inadvertently introduced debris, will be removed concurrent with road construction.

S5-S6 streams: Any excessive debris accumulations will be removed concurrent with road construction.

S5 and S6 streams with potential to transport debris: S1-S4 streams: All inadvertently introduced debris will be removed concurrent with road construction.

Definition of excessive: An accumulation of debris that may cause a stream to:

(a) Erode its bank (b) Leave it's channel (c) Impact downstream values (d) Debris torrent

3. The following; geometric road design(s), other drawings, maps and prescription/reports, including measures to maintain slope stability (and any required analysis) in areas of moderate or high likelihood of landslides or measures to maintain water quality in a community watershed where the surface soil erosion hazard is high or very high are submitted with the application and form an integral part of the permit: N/A

4. The following statement is ☐ applicable ☒ not applicable:
There is new road encroachment within a riparian management zone or riparian reserve zone [reference WLFMR, Section 43(3)&(5)] and this is clearly shown on the accompanying map. Rationale for the road location is attached.

5. Road Widening on Curves: the widening required on curves shall be that:
☒ provided in the Guidebook, or ☐ provided in the table below

Radius of Curve (m)	180	90	60	45	35	25	20	15
Minimum Subgrade Width Required								

6. The maximum dimensions and weights of the intended loaded vehicle for use on the road are:
☐ conforms to Ministry of Transportation and Highways regulations

☒ Other. If other, complete the following:

- Length 25 m
- Width 4.9 m
- Height 7.3 m
- Max. log length 20.1 m
- Overhang beyond rear trailer bunk 9.1 m
- Weight Axle (tandem) 376 kg
- GVW 150000 kg

WOODLOT LICENCE ROAD LAYOUT AND DESIGN
SCHEDULE FS 1178(A1)

Complete any or all sections on this page only where plan/profiles are not prepared or where plan/profiles are deficient of necessary information. Sections 8 to 20 must be completed to show whether the item is either a standard specification or a variation from the standard specification.

7.	**ROAD NAME/SECTION NUMBER & LENGTH / MAP AND EXHIBIT A REFERENCE**	Harper Main 0+757 – 1+004					
				[1]**Standard Specification**	**Variation from Standard Specification**		
8.	**ROAD TYPE:** (PERMANENT/SNOW/PLANNED 5-YEAR/ ONE-SEASON WINTER)	Permanent					
9.	**STUMPS/ROOTS/LOGS IN ROAD PRISM** (YES OR NO)	No					
10.	**CORDUROY/PUNCHEON/INVERTED STUMPS IN ROAD PRISM** (YES OR NO)	No					
11.	**ROAD SUBGRADE WIDTH:** (m)	6					
12.	**TURNOUTS:** MAXIMUM DISTANCE BETWEEN (m)	N/A					
13.	**TURNOUTS:** USABLE LENGTH /WIDTH (m/m)	N/A					
14.	**MINIMUM CURVE RADIUS:** (m)	35					
15.	**MAXIMUM SUSTAINED GRADE:** ADVERSE (%)	11					
16.	FAVOURABLE (%)	8					
17.	**MAXIMUM SHORT PITCH GRADE:** ADVERSE (%)	9					
18.	FAVOURABLE (%)	8					
19.	**MINIMUM CROSS-DRAIN CULVERT SIZE:** ROUND PIPE (mm)	500					
20.	**OTHER CULVERT SHAPES – OPENING SIZE** (mm / mm)	N/A					

1 The standard specifications reflect the WL holder's normal design criteria, and will apply to the roads under consideration unless a variation to the standard specification is provided in the remaining columns. There is no need to reproduce previously submitted standard specifications here.

WOODLOT LICENCE ROAD LAYOUT & DESIGN SCHEDULE FS 1178(A2)
BRIDGES, STREAM CULVERTS, AND ENGINEERED STRUCTURES TABLE

Road Permit ☒ RO 3634 Amendment No. 2002-01 Cutting Permit ☐ ____ Special Use Permit ☐ ____

ROAD NAME	CLASS OF STRUCTURE	DESIGN LOAD	STRUCTURE LOCATION. (KM)	STREAM NAME & RIPARIAN CLASS	FISH STREAM IN A COMM-UNITY WATER-SHED? (Y OR N)	STRUCTURE SIZE (Length x height)	GENERAL ARRANGE-MENT DRAWING NO.	COMMENTS
Harper Main	Pipe	L165	0+757	SEEP	N	600mm	N/A	
Harper Main	Pipe	L165	0+845	SEEP	N	500mm	N/A	
Harper Main	Pipe	L165	0+920	SEEP	N	500mm	N/A	

Class of Structures Legend

H (retaining wall <1.5 m)
R (retaining wall >1.5 m)
FD (ford)
CG Cattleguard
Other (e.g. engineered fill with geotextile)

Bridges:
BT (Bridge Temporary)
(life up to 15 years at the specified location)
BP (Bridge Permanent)
(life greater than 15 years at the specified location)

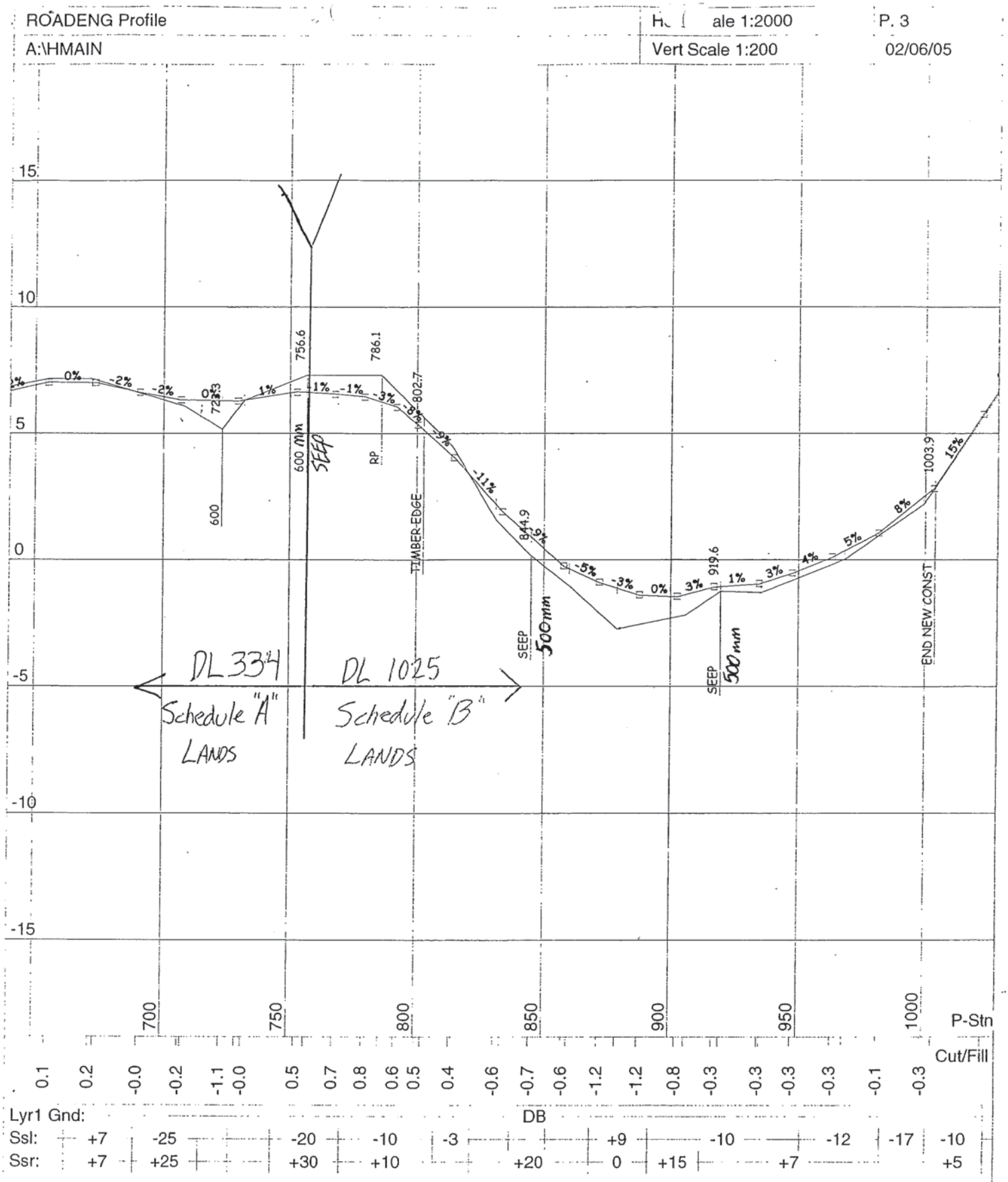
Culverts

Pipe
Log

Notes:

All structures indicated '*' (in structure location column), upon termination or cancellation of the permit (see clause 2.03 in the road permit), may be removed and re-used by the road permit holder

Specify design load of bridge structures (e.g. L75, L100, etc.)
A professional engineer must design retaining walls> 1.5 m.
Structure size - for bridges show length and height of abutment; for culverts show opening dimensions.
Refer to Section 46 of the WLFMR for design responsibility.
Attach a General Arrangement drawing for each bridge/major culvert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10
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-10
-15
756.6
786.1
802.7
844.9
919.6
1003.9
600
600 mm
SEEP
RP
TIMBER EDGE
SEEP
500mm
SEEP
500 mm
END NEW CONST
DL 334
Schedule "A"
LANDS
DL 1025
Schedule "B"
LANDS
700
750
800
850
900
950
1000
P-Stn
Cut/Fill
0.1 0.2 -0.0 -0.2 -1.1 -0.0 0.5 0.7 0.8 0.6 0.5 0.4 -0.6 -0.7 -0.6 -1.2 -1.2 -0.8 -0.3 -0.3 -0.3 -0.3 -0.1 -0.3
Lyr1 Gnd:
DB
Ssl: +7 -25 -20 -10 -3 +9 -10 -12 -17 -10
Ssr: +7 +25 +30 +10 +20 0 +15 +7 +5

Map shown in bold solid line of: W 046; RO 3634 Harper Main

Date: July 5, 2002

Drawn by: Trevor G. Campbell

Revised by:

ZONE	EAST	NORTH
10	351491	5567087

Reg	
Comp	
L	

Ref.Map: 92K025 Area: hectares:

Base map: 92K025 Scale 1: 5000

Forest Region: 1 Shown as:

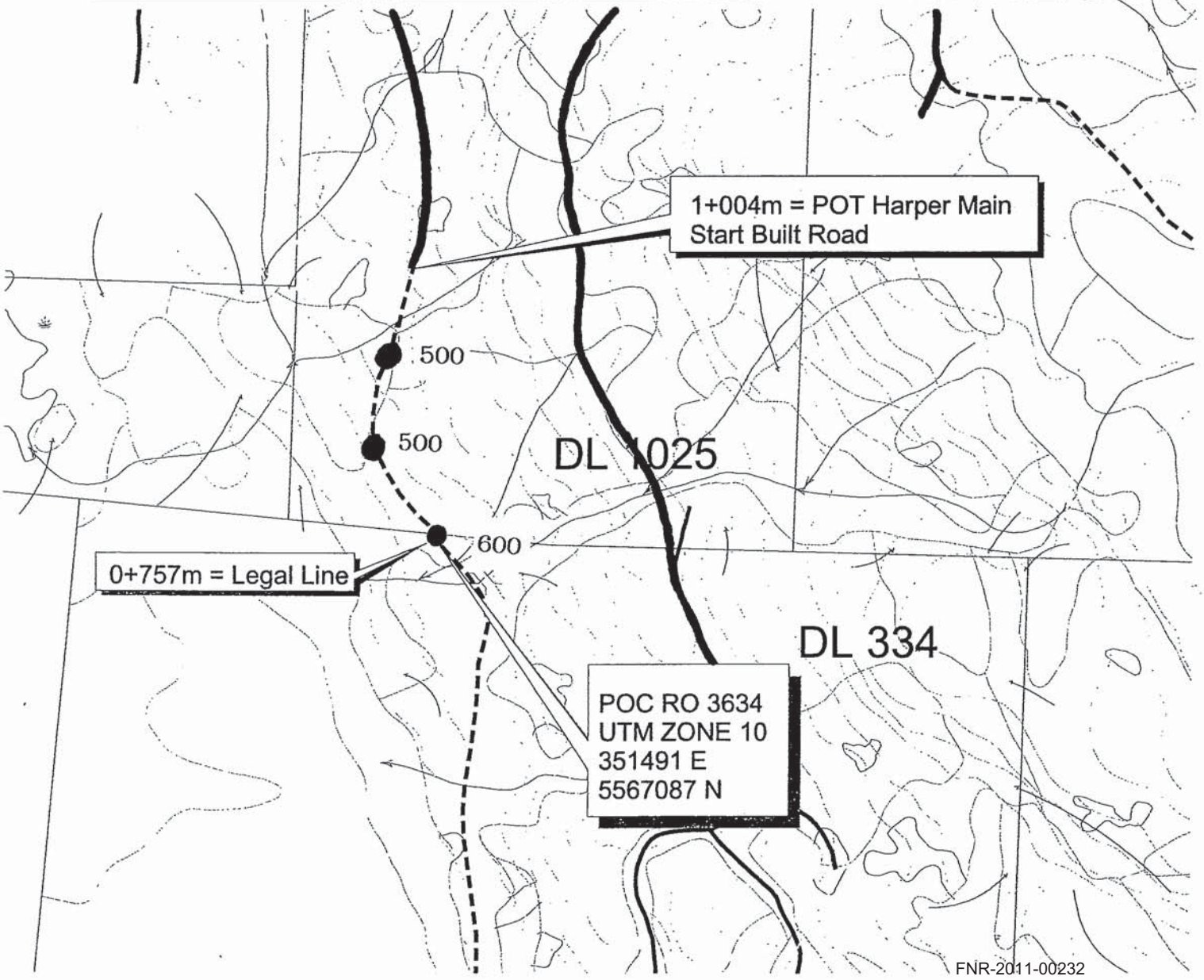
Planning Forest District: 15 ORCS #:

Cell # Land District: 61 MDM ID:

MANAGEMENT UNIT	
TYPE	
NUMBER	

TIMBER SUPPLY AREA	
NUMBER	
BLOCK	
SUB-B	

PULPWOOD AGREEMENT	CASCADES	
N	EAST	
	WEST	X



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File: ORCS 11400-20/R03634/04-01
ORCS 11400-25/R03634 (letter only)

August 12, 2004

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R03634 designated Amendment Number R03634/04-01.

Your application received July 21, 2004 has been reviewed against the 2001-2008 Forest Development Plan approved August 30, 2001 and minor amendment retained by your office for Woodlot Licence W0046 for the Read Island operating area. You are hereby authorized to proceed with the work on the section of road shown on the attached Exhibit A Map August 10, 2004. The following conditions apply:

1. Approved Road Section

Sec. Designation on Exhibit A Map	Road Length In Kms	Licensee Road Name	Station (From)	Station (To)	Accessing Block No.
SWMAIN	0.280	SW-Main	1+700	1+980	SW-03
E-100	0.530	E-100	0+000	0+530	E-1
E-300	0.243	E-300	0+000	0+243	E-1

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Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
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FNR-2011-00232
Page 10

2. All operations are to conform to the *Forest Practices Code of British Columbia Act*. The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

The enclosed attachments form an integral part of Road Permit R03634 and should be attached thereto.

Yours truly,

Mark Anderson, R.P.F.
Acting District Manager
Sunshine Coast Forest District

Attachments

pc: Compliance and Enforcement, Vince Metcalf

BRITISH COLUMBIA
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Distribution: MDAVENPORT,DSC;RBROWNLEE,RCO
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File: ORCS 11400-25/R03634
ORCS 19720-25/W0046

January 16, 2009

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay British Columbia
V0P 1H0

Dear Harper Graham:

Due to the recent provincial road permit policy and procedure changes, current road permit marks will be amended to reflect a new road permit marking convention.

Please be advised that effective February 1, 2009, timber from Road Permit R03634 must be marked with the new timber mark as described in the table below. This change will allow for a single road permit timber mark by District for each tenure.

TENURE	ROAD PERMIT	EXISTING MARK	NEW MARK
W0046	R03634	R03634	**WABER1**

For timber in transit, during the transition to the new road permit marks, the following should apply:

- Timber must not be re-marked and transport documentation must not be altered;
- Timber will be scaled according to the mark on the logs and documentation with the loads;
- Version 1 of the scale data will be signed by the scaler and submitted to the Harvest Billing System (HBS) with the old mark in place;
- For the road permit marks that have changed, Industry Site Administrators will create the second version of the scale data revising the mark and submit this version to HBS;
- Version 1 and 2 can be submitted to HBS in the same batch of scale returns.

Page 1 of 2

Ministry of Forests and Range
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

This process will ensure the integrity of the timber marking practices and will also ensure compliance with requirements of the Timber Marking and Transportation Regulation. This practice will provide a complete audit trail and will also ensure that the ministry and industry business systems are synchronized. Unbilled scale will be minimized through the timely submission of corrected scale returns and allow industry to continue to meet their obligations under Part 6 of the *Forest Act*.

With regard to the conversion of Timber Sale Licence A20495 to Woodlot Licence W0046, Page 1 of the document for Road Permit R03634, issued June 15, 1997, is amended to read:

"PROVINCE OF BRITISH COLUMBIA
ROAD PERMIT NUMBER R03634
WOODLOT LICENCE W0046"

This letter forms in integral part of the Road Permit R03634 and should be attached thereto.

Yours truly,

Brian A. Hawrys, R.P.F.
District Manager
Sunshine Coast Forest District

BRITISH COLUMBIA

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Date typed: 2005/01/24 Date last saved: 2005/02/02 2:34 pm

File: ORCS 11400-20/R03634/04-02
ORCS 11400-25/R03634 (letter only)

February 2, 2005

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R03634 designated Amendment Number R03634/04-02.

Your application received October 19, 2004 and subsequent information received up to January 11, 2005 has been reviewed against the 2001-2005 Forest Development Plan amendment approved January 3, 2002 and minor FDP amendment retained by your office for Timber Sale Licence A20495, for the Read Island operating area. You are hereby authorized to proceed with the work on the section of road shown on the attached Exhibit A Map dated January 28, 2005. The following conditions apply:

1. Approved Road Section

Sec. Designation on Exhibit A Map	Road Length In Kms	Licensee Road Name	Station (From)	Station (To)	Accessing Block No.
MAIN	1.776	Harper Main	1+004	2+780	19

2. All operations are to conform to the *Forest and Range Practices Act* (FRPA). The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.
3. It is understood the original road permit amendment application dated October 18, 2004 to amend road permit R04421 has been combined with the road permit amendment dated

January 10, 2005 to amend road permit R03634. This will ensure the road in question,

Ministry of Forests
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

Harper Main is covered by only a single road permit, that being R03634. The Exhibit A map for R03634 is amended to reflect the changes for Harper Main is identified as **Sec Main.**

4. Chief Ray NobleHarper Main from station 1+738 to station 1+938, station 1+950 to station 2+336 and station 2+548 to station 2+740 is to be located within the Riparian Management Areas (RMA) of several streams. The letter accompanying the application indicates there is no other practicable alternative for the road location. Ministry of Water, Lands and Air Protection personnel have no specific objections to road construction within the RMA, providing all appropriate measures and precautions are taken. This letter constitutes District Manager approval under section 190 of the FRPA and section 5.1 of the Forest Road Regulation.

The enclosed attachments form an integral part of Road Permit R03634 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachment

pc: Compliance and Enforcement, Attention: Hugo Sloos
Tenures, Attention: Brian Kukulies, R.P.F. Tenures Forester

BRITISH COLUMBIA

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File: 11400-25/R03634

September 19, 2003

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This cancels and replaces letter sent to you August 15, 2003.

As you know, commencing September 1, 2003, stumpage rates for road permits will be calculated in accordance with Section 6.3 of the Coast Appraisal Manual. This section outlines a process where by the stumpage rates for road permits will be based on historic rates for the licence for which a road permit was issued.

This section will apply to all existing road permits and any new permits. In order to administer this, it is necessary to amend existing road permits to apply a unique timber mark to them. For those road permits crossing more than one tenure, it is necessary to have a mark unique to each tenure within the road permit. For road permits within Tree Farm Licences it is necessary to have two marks, one for Schedule A Land (TL's) and one for Schedule B land.

The following is the amendment to Road Permit R03634 held by you, in the Sunshine Coast Forest District, showing the applicable mark to be used effective September 1, 2003.

For those roads shown on the applicable Exhibit "A" referred to in clause 2.01 of the Road Permit, the timber mark shall be:

R03
634

This letter forms an integral part of your Road Permit document and should be attached to it.

Yours truly,

Mark Anderson, R.P.F.
Acting District Manager
Sunshine Coast Forest District

Ministry of Forests
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA

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File: 11400-25/R03634

August 15, 2003

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

As you know, commencing September 1, 2003, stumpage rates for road permits will be calculated in accordance with Section 6.3 of the Coast Appraisal Manual. This section outlines a process where-bye the stumpage rates for road permits will be based on historic rates for the licence for which a road permit was issued.

This section will apply to all existing road permits and any new permits. In order to administer this, it is necessary to amend existing road permits to apply a unique timber mark to them. For those road permits crossing more than one tenure, it is necessary to have a mark unique to each tenure within the road permit. For road permits within Tree Farm Licences it is necessary to have two marks, one for Schedule A Land (TL's) and one for Schedule B land.

The following is the amendment to Road Permit R03634 held by you, in the Sunshine Coast Forest District, showing the applicable mark to be used effective September 1, 2003.

For those roads shown on the applicable Exhibit "A" referred to in clause 2.01 of the Road Permit, the timber mark shall be:

R03
634

This letter forms an integral part of your Road Permit document and should be attached to it.

Yours truly,

Brian Kukulies, R.P.F.
Acting Tenures Officer
Sunshine Coast Forest District

Ministry of Forests
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

ROAD PERMIT

***RECORD OF PROCESSING ***

(Region will fill in)

Forest District _____ (Number) _____ (District Code)

Date Received in Region _____

District to Fill In

Road Permit Number : R03634

Effective Date (only for new Road Permits) **SEPTEMBER 1, 2003**

Point of Appraisal (Mark X in one only)

Gambier
X GAMB

TSA SUNSHINE COAST **TSB** POWELL RIVER

List the primary and any associated RP Marks appraised under Section 6.3 of the CAM and listed in the RP schedules. Licence number is the licence which entitles the licensee to apply for the road permit. After September 1, 2003 this form will still be required whenever FTAS is updated for an RP to Mark Issued = "yes".

	RP Mark	Licence #	District	RATE
Primary	R03634	W0046	SUNSHINE COAST	$/m^3 (Region Use Only)
Associated				

District Contact Person **TRENT MEYER** Received by District On _____

Region to Fill In

PRE -KEY CHECK VALUATION PACKAGE (Region to Fill Out below) :

Appraisal Clerk : _____ Date : _____

Keyed by : _____ Date : _____ File Request Submitted _____

Reviewed by: _____ Date : _____

Rate Effective Date: _____ **Rate Expiry Date:** _____

Stumpage Rate Letter Faxcom/mail by : _____ Date : _____

Confirmed : _____ Date : _____

NOTES

BRITISH COLUMBIA

Document name: G:\!WorkGrp\ENGINEER\!Trent\WoodIt\rp03634\030626.doc DH/LW
File: ORCS 11400-20/R03634/03-01
ORCS 11400-25/R03634 (letter only)

July 7, 2003

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R3634 designated Amendment Number R03634/03-01.

Your application received June 6, 2003 has been reviewed against the 2001-2008 Forest Development Plan approved August 30, 2001 and minor amendment received June 27, 2003 for Woodlot Licence W0046 for the Read Island operating area. You are hereby authorized to proceed with the work on the section of road shown on the attached Exhibit A Map July 7, 2003. The following conditions apply:

1. Approved Road Section

Sec. Designation on Exhibit A Map	Road Length In Kms	Licensee Road Name	Station (From)	Station (To)	Accessing Block No.
SW100	1.178	SW100	0+292	1+470	E 1

2. All operations are to conform to the *Forest Practices Code of British Columbia Act*. The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

The enclosed attachments form an integral part of Road Permit R03634 and should be attached thereto.

Yours truly,

Mark Anderson, R.P.F.
Acting District Manager
Sunshine Coast Forest District

Attachments

pc: Compliance and Enforcement, Vince Metcalf

Ministry of Forests
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA

Document name:g:\engineer\trent\rdpermit.doc
Date typed: 99/01/26 Date revised: 99/01/26 03:58 pm

File: ORCS 11400-20/R03634/98-01 11400-25/R03634

January 29, 1999

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R03634 designated Amendment Number R03634/98-01.

Your application dated October 2, 1998 and November 5, 1998 (Development Plan Minor Amendment approved January 14, 1999) has been reviewed against the Forest Development Plan for the Woodlot 046, Read Island operating area. You are hereby authorized to proceed with the work on the sections of road shown on the attached Exhibit A Map dated December 2, 1998. The following conditions apply:

1. Approved Road Sections

East 1 Road	Station	0+000	to Station	1+134	Accessing Blk	WL046
East Road	Station	0+000	to Station	0+957	Accessing Blk	WL046
Spur	Station	0+000	to Station	0+046	Accessing Blk	WL046

2. All operations are to conform to the *Forest Practices Code of British Columbia Act*. The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

3. There appears to be a lack of cross drainage, particularly on the steeper road gradients. It is recommended that drainage requirements be reviewed to ensure water control is adequate on the permanent access roads.

. . .2

Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
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Tel: (604) 485-0700

4. The submitted Schedule A2 indicates a 600 millimetre diameter culvert crossing a S-6 stream on the East Road. No location was indicated. The plan view of the East Road shows a 900 millmetre diameter culvert at Station 0+130 on the East Road. It is assumed that this is the correct location and sizing. The Schedule A2 has been corrected. Adequate culvert sizing is essential to ensure the long term stability of roads. It is recommended that the culvert sizing at Station 0+130 on the East Road be reviewed for adequacy on this permanent road.

5. The District Manager approved a minor amendment to the Woodlot Licence 046 Development Plan on January 14, 1999. This approval requires road construction to follow the revised road location indicated in the Road Permit Amendment Application.

6. Overlanding construction is indicated for all road lengths. It appears that these road sections require conventional cut and fill construction not overlanding (as per cross sections and profiles).

7. Turnouts are indicated as having a usable length of 5 metrss and a width of 3 metres. This would not allow most pickup type vehicles to safely park at roadside. The minimum usable length is generally 10 metres with an 8 metre width (includes road running surface width). This has been changed on the Schedule A1.

8. Insloping is indicated for all road lengths. This does not appear practical or feasible. Please review this design proposal.

9. The East Road crosses a short section of slopes exceeding 60% in the vicinity of Stations 0+438 to 0+475. Conventional cut and fill construction is indicated on the cross sections. There does not appear to be any additional measures to be undertaken to maintain slope stability (should be shown on profile, etc.). Please review and ensure that any recommendations of the terrain stability field assessment shown on the Certification Schedule are incorporated into the road design.

10. This is a very confusing Road Permit Amendment Application. The layout traverse commences from both ends of the road, essentially creating two roads within one. Standard practice is to start the layout traverse from one end and progress from that point. Please ensure this is the practice in all future submissions.

11. Overall Road Permit Amendment submission quality is poor. Future submissions are required to be of a higher standard. A copy of any results of the above reviews for Items 4 and 9 above are to be forwarded to the Forest Officer prior to commencing works.

. . ./3

The enclosed Schedules A1 and A2, Plans/Profiles and other attachments form an integral part of Road Permit R03634 and should be attached thereto.

Yours truly,

"FH"

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachment

pc: Compliance and Enforcement - Attention: Bob Rebantad - Consider above comments when field inspecting.

bpc: ORCS 11400-25/R03634 (letter only)

BRITISH COLUMBIA

Document name: G:\PROGRAMS\RESOURCE\TEMP\TENURES\ROADPERM\R3634AM.DOC AJ

File: ORCS 11400-25/R03634

October 6, 1997

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Reference is made to Road Permit R03634.

It has come to our attention that paragraph 9.07 of replacement document issued under covering letter dated June 13, 1997 contains an incorrect Section reference. Section 70(4) should be Section 56(4).

Paragraph 9.07 now reads:

> "Where this road is the subject of a Road Use Permit and the Permittee and the holder of the Road Use Permit cannot agree on the terms and conditions of a road use agreement, the Permittee may agree to have the matter referred to the District Manager pursuant to Section 56(4) of the *Forest Practices Code of British Columbia Act*."

This letter forms an integral part of your permit document and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River BC V8A 1W1

Location:
7077 Duncan Street
Powell River BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

PROVINCE OF BRITISH COLUMBIA

TIMBER SALE LICENCE NO. A20495

ROAD PERMIT NO. R03634

THIS ROAD PERMIT, ISSUED TO:

HARPER LOGGING LTD.
BOX 299
HERIOT BAY, BRITISH COLUMBIA
VOP 1H0

(the "Permittee")

This Road Permit is issued under Section 115 the *Forest Act*.

1.00 GRANT OF RIGHTS

1.01 Subject to the *Forest Act* and its Regulations, and the *Forest Practices Code of B.C. Act*, and its Regulations and Standards, the District Manager grants to the Permittee the right to either:

(a) construct or modify the road to the standards/specifications described in the attached Schedules and to the extent necessary harvest from the Clearing Area, that Crown timber described in the attached schedules, that must be logged in order to construct or modify the road and use and maintain the road, or
(b) use and maintain the road according to the requirements described in the attached Schedules.

2.00 PERMIT AREA AND TERM

2.01 The Permit Area is that land shown highlighted on the map(s) attached to this Road Permit.

2.02 The term of this Road Permit shall begin on June 15, 1997, and terminate on the date when the District Manager notifies the Permittee in writing that the road has been permanently deactivated to his satisfaction, or that future use of the road by others will preclude the need for permanent deactivation.

3.00 PAYMENTS

3.01 Immediately on receipt of a statement or notice issued on behalf of the Crown in respect of timber harvested under this Road Permit, the Permittee shall pay to the Crown

(a) stumpage at rates determined, redetermined and varied under the *Forest Act*,
(b) a bonus bid in the amount of $ n/a /m3 in respect of timber harvested under this Road Permit; and
(c) any charges made in respect of an assessment under paragraph 6.03 of the Road Permit.

4.00 TIMBER MARKS AND REPORTING

4.01 For purposes of the Forest Act, the timber mark for this Road Permit shall be that mark specified in the Schedule. The Permittee shall not remove timber from the "Clearing Area" unless the timber has been conspicuously marked, in the manner prescribed in the regulations, with the specified timber mark.

4.02 The Permittee shall report promptly information regarding timber harvested under this Road Permit in accordance with the *Forest Act* and the Schedule.

5.00 TIMBER UTILIZATION STANDARDS

5.01 The Permittee shall harvest timber under this Road Permit in accordance with the timber utilization standards set out in the Schedule.

6.00 RESIDUE AND WASTE

6.01 The Permittee, as required by the District Manager, will determine and report to the District Manager, the residue and waste left after harvesting under this Road Permit in accordance with the procedures found in the Ministry of Forests "Provincial Logging Residue and Waste Measurement Procedures Manual", as amended from time to time.

6.02 If the Permittee fails to perform its obligations under paragraph 6.01, then the District Manager may make such a determination.

6.03 Immediately upon receipt of a statement or notice issued by the Crown, the Permittee shall pay to the Crown as liquidated damages, a waste assessment equal to the total of:

(a) the volume of avoidable waste determined under paragraph 6.01 or in its absence, the volume of avoidable wasted determined under paragraph 6.02, multiplied by the Average Billed Stumpage rate for the timber mark, and

(b) if a determination was generated pursuant to paragraph 6.02, the reasonable costs incurred by the Crown in preparing that determination.

7.00 PLANS, SPECIFICATIONS, AND FIELD PRACTICES

7.01 In building, modifying, maintaining and using the road under this Road Permit, the Permittee shall:

(a) comply with the plans and specifications set out in this Road Permit and in the Schedule attached to this Road Permit, where applicable, and with a Forest Development Plan;

(b) obtain the necessary permits or authorization for the crossing of alienated lands including but not limited to powerlines, pipelines, railroads, public roads, mineral claims, A.L.R.'s;

(c) obtain the necessary permits or authorization from other resource agencies.

7.02 The issuance of this permit constitutes approval of the road layout and design required under Section 60 of the *Forest Practices Code of B.C. Act* for the roads shown highlighted on the map(s) attached to the permit.

7.03 The Permittee shall not obstruct or damage this or any other road or recreation trail as a result of timber harvesting or related operations carried on under this Permit.

7.04 The Permittee shall ensure that any gate erected in accordance with Section 55 of the *Forest Practices Code of British Columbia Act* shall not be, or become, a hazard to the users of the road. Subject to the approval of the District Manager, the gate shall be placed in a conspicuous location, adequately marked with permanent reflective material to be clearly visible to the operator of a motor vehicle from a safe stopping distance. Warning signs shall be located to give vehicle operators adequate warning of the obstruction.

8.00 ROAD PERMITS FOR WOODLOT LICENCES - N/A

- Where this road permit is issued to the holder of a Woodlot Licence, the District Manager may require a deposit in the amount of $ n/a in the form of cash or other acceptable security, as security for the Permittee's performance of its obligations under this permit. If the Permittee fails to perform its obligations under this Permit, the District Manager may perform the obligation on the Permittee's behalf.

- If a Permittee's obligation is performed by the District Manager, the District Manager may debit the deposit and require the Permittee, on demand, to replenish the deposit by paying an amount of money equal to the costs incurred by the Ministry in performing the obligation on behalf of the Permittee.

9.00 MISCELLANEOUS

9.01 The Permittee is designated as the principal contractor as described in Section 4.02(4) of the *Industrial Health and Safety Regulations of the Workers' Compensation Board of B.C.* and shall carry out the duties of the principal contractor as described therein.

9.02 In accepting this Road Permit, the Permittee acknowledges that it is bound by the provisions of this Road Permit.

9.03 The Permittee acknowledges that the Schedules form a part of the Road Permit and that the Permittee is bound by the provisions set out in the Schedule. Where the Schedules conflict with this Road Permit, the Schedules shall prevail.

9.04 There is reserved to the Crown:
(a) the right to grant rights-of-way across, through or over the Permit Area to other parties, on such terms and conditions as the District Manager determines; and
(b) the right of employees and agents of the Crown to use and to cross the road and the Permit Area;
but the exercise of the Crown's rights under this paragraph shall not unreasonably impede or obstruct the Permittee's reasonable use of the road.

9.05 Upon termination or cancellation of this permit:

(a) title to all improvements that are fixed to the Crown land under this Road Permit, shall vest in the Crown without compensation to the Permittee
(b) for the purposes of this Road Permit, all bridges are considered to be fixed except those identified in the Schedule(s) as specifically exempted by the District Manager.

9.06 This Road Permit shall enure to the benefit of, and be binding on, the parties and their respective heirs, executors, successors and permitted assigns.

9.07 Where this road is the subject of a Road Use Permit and the Permittee and the holder of the Road Use Permit cannot agree on the terms and conditions of a road use agreement, the Permittee may agree to have the matter referred to the District Manager pursuant to Section 70(4) of the *Forest Practices Code of B.C. Act*.

10.00 INTERPRETATION

10.01 Definitions of terms not defined in this Road Permit shall have the same meaning as that given in the *Forest Act*, its Regulations or the Licence. In cases of conflict, the definition in the Licence shall govern

10.02 In this Road Permit:

(a) "Average Billed Stumpage rate" means the weighted average billed stumpage rate, inclusive of bonus bid, for the twelve months up to and including the calendar month immediately following the completion of primary logging under this Road Permit, for the timber required to be removed under paragraph 5.01;

(b) "Clearing Area" means that area of land bounded by the outer limits of the clearing width as described in the Forest Road Regulation, and the length of road shown highlighted on attached maps;

(c) "Permit Area" means that area of land, bounded by the outer limits of the statused right-of-way and the length of road shown highlighted on attached maps;

(d) "Licence means the (Tree Farm Licence, Forest Licence, or Timber Sale Licence) describe at the beginning of this Road Permit;

(e) "Schedule" means the Schedule attached to the Road Permit;

(f) "waste" means waste as defined in the Ministry of Forests "Provincial Logging Residue Waste Measurement Procedures", as amended from time to time;

(g) "residue" means residue as defined in the Ministry of Forests "Provincial Logging Residue Wastes Measurement Procedures", as amended from time to time.

11.00 NOTICE

11.01 A notice given under this Road Permit must be in writing.

11.02 Where a notice is to be given under this Road Permit, it may be
(a) delivered by hand; or
(b) sent by prepaid registered mail addressed to the address
(i) specified on the first page of this Road Permit; or
(ii) to such other address as is specified in a notice given in accordance with this Part.

ISSUED on June 13, 1997 by)
the District Manager on behalf of)
Her Majesty the Queen in right of)
the Province of British Columbia)
in the presence of:)
Valerie Markle)

Greg Hemphill, District Manager
Sunshine Coast Forest District

F.S. 582A ENG 95/6

SCHEDULE 'B'

Utilization Standards/"Other Timber Requirements"

For Use on the Coast:

- The timber mark shall be a timber mark that is applicable to timber to which the road provides access and so designated by the District Manager.

Timber Utilization Standards, pursuant to paragraph 5.01:

In accordance with applicable cutting permit.

F.S. 582A ENG 95/6

SCHEDULE 'C'

Special Provisions

- Vegetation specifications shall be: Coastal seed reclamation mix.
- If this is a replacement road permit under Section 237 of the *Forest Practices Code of British Columbia Act*, all plans, profiles, cross sections, detailed terrain reports and other attachments, as applicable, contained in the original road permit remain in effect and form an integral part of this permit.

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Province of British Columbia
Ministry of Forests

MAP OF ▸ R03634

EXHIBIT 'A'

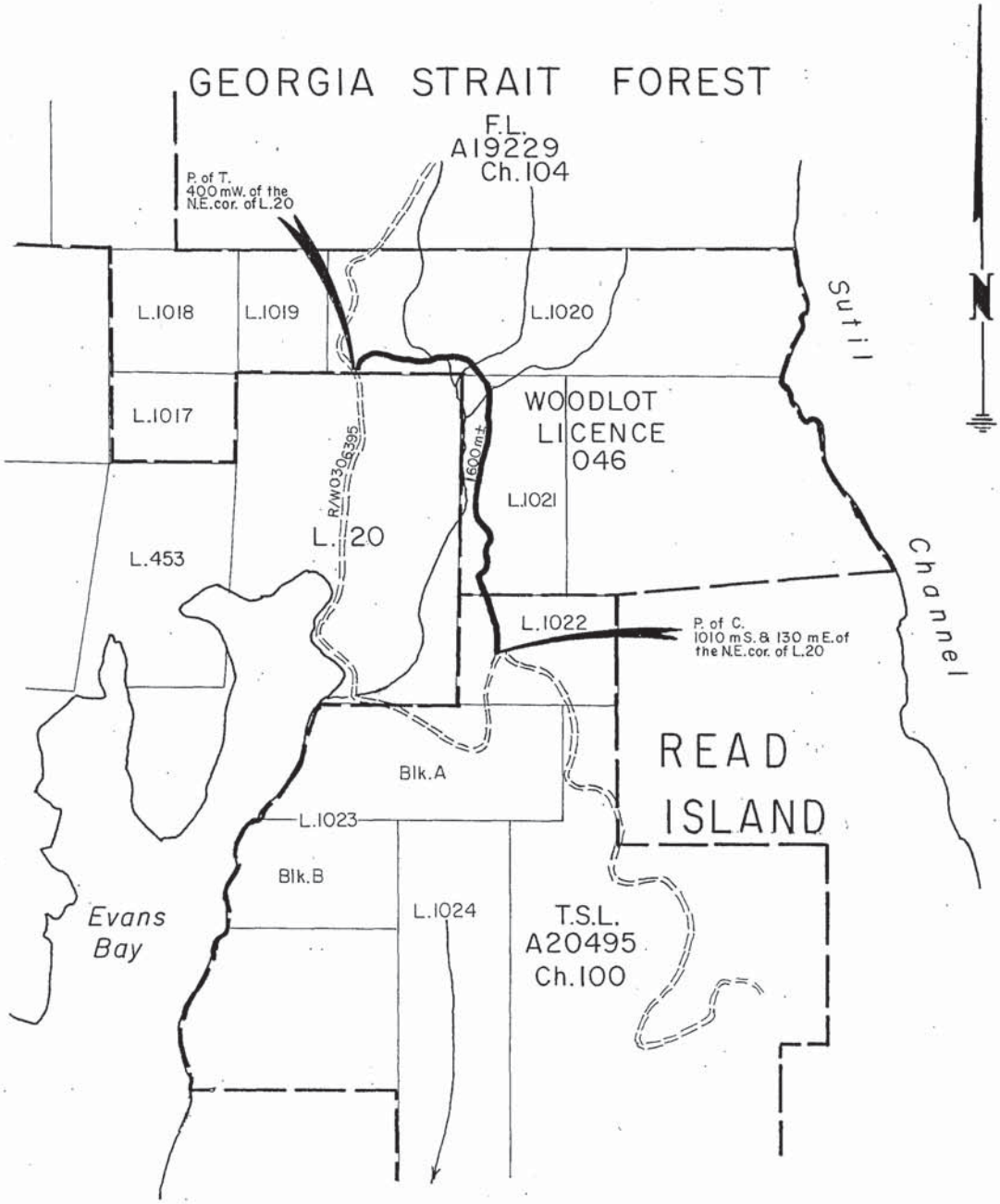
U.T.M.	Zone	East	North	Reg	Compt.	L
Grid	1	0 3 5 3 1 0 0	5 5 6 5 5 0 0	3	0 1 0	

Date 87-12-21
Ref. Map 92K/3h
Base Used 92K.025
Scale 1: 20,000
Area ..... hectares ±

FOREST REGION ▸ 01 VANCOUVER
LAND DISTRICT ▸ 51 SAYWARD
DISTRICT ▸ 15 POWELL RIVER
OUTLINE ▸

MANAGEMENT UNIT	TIMBER SUPPLY AREA	PULPWOOD AGREEMENT	CASCADES
Type 0 P.S.Y.U.	Number 39 SUNSHINE COAST		
Number 64 QUADRA	Block 52 POWELL RIVER		East
Block	Sub-B		West C

Width of R/W 20m



Drawn by P.R.L.

FS 357 T/M 86/3 ∝

Province of British Columbia Ministry of Forests FOREST SERVICE

ROAD PERMIT
(Build, Modify and Use)

No. R03634

May 24, 19 88

Harper Logging Ltd.
("Permittee")

575 Ash Street

Campbell River, B.C.
(address)

V9W 5L8

1.00 *Grant of Rights, Right of Way and Term*

1.01 Subject to this Permit and in consideration of the Permittee's covenants in it, the Regional Manager or the District Manager grants to the Permittee

(a) the right during the term of this Permit to clear the right of way, and to build, modify and use a road on the right of way (the "road"), according to this Permit and to plans and specifications approved under it, and

(b) the right during the term of this Permit to harvest from the right of way timber designated for harvesting under this Permit.

1.02 The right of way is the land shown outlined in bold black line on the map attached to this Permit, except land that is excluded in notations made on the map.

1.03 The term of this Permit shall begin on May 24, 1988, and, unless it is extended by the Regional Manager or the District Manager, shall terminate on XXX the completion of active use for the transportation of forest products.

2.00 *Plans, Specifications, Field Practices and Water Resources*

2.01 In building, modifying, maintaining and using the road under this Permit, the Permittee will comply with the plans and specifications set out in this Permit and in the Schedule attached to this Permit.

2.02 In clearing and grubbing the right of way, the Permittee will,

(a) cut down all trees and brush within
3 m of the tops of cuts and within
3 m of the toes of fills,

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(b) confine all clearing and grubbing work to the right of way unless otherwise authorized in writing by a Forest Officer,

(c) fell all trees onto the right of way prior to any building, fell all trees that are pushed or knocked over or otherwise caused to lean over during the clearing operations, and buck all felled trees into lengths suitable for manufacture into logs or special forest products, deck them within the edge of the right of way and remove and utilize them as soon as road conditions permit,

(d) dispose of slash and debris concurrently or in phase with building or modifying the road, unless a Forest Officer determines otherwise,
  (i) by either piling in the centre of the right of way and burning, or by burying within the right of way in areas designated by the Forest Officer,
  (ii) according to the Schedule attached to this Permit,

(e) yard onto the right of way and buck according to subparagraph (c), all trees that are felled in a manner as to lie outside the right of way, or that hang up on trees adjacent to the right of way, and carry out yarding in a manner that prevents damage to standing trees outside the right of way.

2.03 In respect of operations carried on under this Permit, the Permittee will not permit

(a) a lake, stream or spring that supplies water for any purpose to be rendered unfit for that purpose, or

(b) trees, logs, logging debris or any polluting substance to be deposited into a lake, stream, or spring, unless authorized by a Forest Officer, or

(c) logs to be skidded or equipment to be operated below the high-water mark of a lake or stream, unless authorized by a Forest Officer, or

(d) any obstruction, gravel, or fill to be placed below the high-water mark of a lake or stream, unless authorized by a Forest Officer, or

(e) a landing to be located within 40 m of a lake or stream or in an area that is not designated for harvesting in this Permit, unless authorized by a Forest Officer, or

(f) slash to be burned closer to a lake or stream than the distance specified by a Forest Officer.

2.04 In respect of operations carried on under this Permit, the Permittee will

(a) remove logging, milling and road-building debris deposited in and on banks of lakes and streams,

(b) direct falling and yarding of timber away from lakes and streams and their banks,

(c) protect natural growth in and on the banks of lakes and streams from damage from logging and burning,

(d) build a bridge or install a culvert at every stream crossing, designed to accommodate the maximum flow of the stream and to permit unobstructed fish passage, and

(e) schedule the building of stream crossings,

as directed by a Forest Officer.

2.05 In building, modifying, maintaining and using the road, the Permittee will

(a) build the subgrade to a width, to be at least .....5....m, shoulder to shoulder,

(b) build turnouts, at intervals permitting safe passing of vehicles,

(c) install and maintain culverts of adequate size, type and length, according to accepted culvert and drainage practice, at intervals sufficient to prevent damage to the road and the adjacent lands, or take other measures that provide adequate drainage to prevent erosion,

(d) build water bars or open culverts on the road, according to specifications and locations determined by a Forest Officer,

(i) on or before the expiry of the term of this Permit, and

(ii) on annual termination of logging operations to which the road provides access, and

(iii) on such other times as deemed necessary by a Forest Officer,

(e) build the road in a manner to cause the least damage to the environment, to the satisfaction of the Regional Manager,

(f) maintain the road and right of way in a manner that adequate drainage occurs at all times and comply with the maintenance provisions set out in the Schedule attached to the Permit, and

(g) use the road and right of way in a manner to prevent damage to the road and right of way and comply with the provisions for use set out in the Schedule attached to the Permit.

3.00 *Financial*

3.01 In addition to other money payable by the Permittee under the *Forest Act* and under this Permit, the Permittee will pay to the Crown, immediately on receipt of a statement issued on behalf of the Crown,

(a) in respect of Crown timber cut under this Permit and not used in building or modifying the road, stumpage at the rates provided for under paragraph 3.02 or 3.03,

(b) scaling fees determined under the regulations, and

(c) waste and damage assessments under part 6.00.

3.02 If a timber mark is specified in paragraph 4.01, the stumpage rates payable in respect of timber cut under this Permit shall be as determined by a forest officer and such stumpage rates may be varied according to the Schedule attached to this Permit.

3.03 If the Regional Manager or the District Manager designates a timber mark under subparagraph 4.01(b), the stumpage rates payable in respect of timber cut under this Permit are the stumpage rates applicable, from time to time, to timber required to be marked with the timber mark so designated.

4.00 *Timber Marks and Scaling*

4.01 The Permittee will not permit timber to be removed from the right of way unless the timber has been conspicuously marked, in the manner prescribed in the regulations,

(a) with the timber mark specified opposite this paragraph, or N/A

(b) if no timber mark is specified opposite this paragraph, with a timber mark that is applicable to timber to which the road provides access and that is designated in writing, from time to time, by the Regional Manager or District Manager.

4.02 Timber cut under this Permit shall, subject to the *Forest Act*, be scaled according to the *Forest Act*.

5.00 *Utilization Standards and Forest Practices*

5.01 The Permittee will cause timber harvesting operations carried on under this Permit to conform to the utilization standards set out in the Schedule attached to this Permit.

5.02 The Permittee will cause the cutting specifications set out in the Schedule attached to this Permit to be followed.

5.03 The Permittee will not permit a road or trail to be obstructed or damaged by timber harvesting or related operations carried on under this Permit, unless authorized by the Regional Manager, District Manager or a Forest Officer.

6.00 *Waste and Damage Assessments*

6.01 If

(a) timber that is designated to be cut under this Permit is not cut, or

(b) timber is utilized below the standard of utilization in specifications set out in the Schedule attached to this Permit, or

(c) timber that is required under this Permit to be removed from Crown land is not removed,

the Regional Manager may deliver to the Permittee an estimate of the volume of each species of timber uncut, not utilized or not removed, as the case may be.

6.02 Where the Permittee receives an estimate under paragraph 6.01, it will pay to the Crown, as liquidated damages, a waste assessment equal to the total of

(a) the reasonable costs incurred by the Crown in preparing the estimate, and

(b) the volume of each species estimated under paragraph 6.01, multiplied by the stumpage rate last applicable to the species under this Permit.

6.03 Where the Regional Manager or the District Manager requires it, the Permittee will estimate the volume of each species of timber referred to in paragraph 6.01.

6.04 Damages to timber will be assessed according to the *Forest Act*.

7.00 *Crown Rights*

7.01 There is reserved to the Crown,

(a) the right to grant rights of way across, through or over the right of way to other parties, on such terms and conditions as the Regional Manager or the District Manager determines, and

(b) the right of employees and agents of the Crown to use and to cross the road and the right of way.

but the exercise of the Crown's rights under this paragraph shall not impede or obstruct the Permittee's reasonable use of the road.

8.00 *Liability and Indemnity*

8.01 The Permittee will indemnify the Crown against and will save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses it faces as a result, directly or indirectly, of the condition of the road or the operation of any vehicle on the right of way by the Permittee, his employees or persons who perform work either directly or indirectly under contract with him.

8.02 Paragraph 8.01 does not apply to an act or omission that is a reasonable response to, and complies with, an order made on behalf of the Crown.

8.03 Where the Permittee fails to perform an obligation it is required to perform under this Permit,

(a) the Regional Manager, or the District Manager may perform the obligation on the Permittee's behalf, and

(b) the Permittee will on demand pay the Crown an amount of money equal to the reasonable costs incurred under subparagraph (a) to perform the obligation.

8.04 The Crown will indemnify the Permittee against and will save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses it faces, as a result, directly or indirectly, of wrongful acts or omissions on the right of way of the Crown, its employees, agents and contractors.

9.00 *Termination*

9.01 If this Permit expires or is terminated or is cancelled under the *Forest Act*,

(a) title to all improvements, including bridges, then fixed on Crown land on the right of way shall vest in the Crown, without compensation to the Permittee, and

(b) property in logs and in special forest products as defined in the *Forest Act*, then on Crown land shall pass to the Crown, without compensation to the Permittee.

10.00 *Miscellaneous*

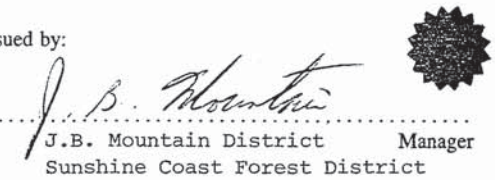
10.01 This Permit will enure to the benefit of, and be binding on, the parties and their respective heirs, executors, successors and permitted assigns.

10.02 The Permittee will perform the covenants, and will observe the conditions, set out in the Schedule attached to this Permit and where the Schedule conflicts with this Permit the Schedule shall prevail.

10.03 This Permit is subject to the *Forest Act*.

10.04 By accepting delivery of this Permit the Permittee agrees to be bound by its provisions and to perform all obligations that are to be performed by the Permittee under this Permit.

Permit issued by:



J.B. Mountain District Manager
Sunshine Coast Forest District

F.S. 582(Page 5) TIM 81/1

Re 2.01 Specifications:

(a) Road construction and maintenance shall be in accordance with the Engineering Guidelines contained in the approved Management and Working Plan for Timber Sale Licence No. A20495.

Re 2.02(d)(ii) Field Practices:

(a) Disposal of slash and snags shall be as provided in Part 10 of the Forest Act.

Re 5.01 Utilization Standards:

(a) Obligatory

(i) Stumps will be cut low enough to minimize waste, and in no case higher than thirty (30) centimetres on the side adjacent to the highest ground except when necessary in the judgment of the Forest Officer.

(ii) In order to minimize waste, all trees will be utilized to a small top diameter fifteen (15) centimetres inside bark.

(iii) All trees and parts of trees three (3) metres and over in length which contain a scale of 50 percent or more of the gross scale shall be removed.

(iv) Logs and/or parts of logs less than three (3) metres in length and broken at both ends are classed as breakage.

(v) Log lengths shall be varied to provide for maximum utilization of timber.

Re 5.02 Cutting Specifications:

(a) Obligatory
All living and dead trees twenty-five (25) centimetres in diameter or larger, measured outside bark at a point thirty (30) centimetres from the ground, must be cut.

All down trees must also be cut and utilized.

Optional
Trees under the diameter limit may be cut at the option of the Licensee.

Re 10.02 Other Conditions:

(a) The Permittee shall remove all logging equipment and fixtures from the lands described in this permit, and shall remove or bury all refuse resulting from occupation of the permit area, and shall leave all areas in an orderly and sanitary condition upon completion of operations or termination of the permit, whichever is the sooner.

In the event the Permittee fails to carry out the above measures the Regional Manager may assess the Permittee the estimated costs to carry out such measures, and the Permittee shall forthwith pay the account.

(b) The Crown reserves the right to revise the conditions of this permit at the end of each one (1) year period during the life of the permit in accordance with existing conditions and development from time to time.

(c) Upon final cessation of operations or at any other time as instructed by the District Manager, the Permittee shall take such measures as directed by the District Manager to prevent erosion and to rehabilitate the site.

In the event the Permittee fails to carry out the above measures the District Manager may assess the Permittee the estimated costs to carry out such measures, and the Permittee shall forthwith pay the account.

(d) The Permittee shall use and maintain the permit area in a manner to cause the least damage to the environment all to the satisfaction of the District Manager.

(e) The Grantor will not be responsible for the establishment of the boundaries of any permits or licences issued under the Water Act. The Permittee covenants to indemnify and save harmless the Grantor from and against all claims for loss or damage arising out of any act or omission done or caused by the Permittee, his servants or workmen in carrying out the terms of this permit. It is incumbent on the Permittee to determine the existence of any permits or licences issued under the Water Act by contacting the office of the local Water Management Branch of the Ministry of Environment.

Re 10.02 Other Conditions Cont'd:

(f) (i) The lands described in this permit are subject to use and occupation by the holders of tenures granted by the Crown to others and the Permittee covenants not to obstruct or impede the use or occupation held under the terms of the tenures.

(ii) The tenures mentioned above are Woodlot Licence 46, 575 Ash Street, Campbell River, B.C. V9W 5L8.
Sketches showing the location of same are attached.

(iii) In consideration of the foregoing the Permittee agrees to indemnify and save harmless the Licensor from and against all claims for loss or damage whether caused by act or omission including losses or damage arising out of the Permittee's interference or obstruction of others having an interest in the use of the lands.

(iv) Provided that the permit shall be deemed to be suspended in the event the Permittee, its contractors, agents, or servants damage any improvements to which this permit is subject as aforesaid, until the said improvements are replaced or repaired to the satisfaction of the Forest Officer.

(g) The granting of this permit does not imply that the construction by the Permittee of the right-of-way gives to the holder of the permit the exclusive use of the road. It must be distinctly understood that the right-of-way will be open for use by the general public as provided for in Subsection 1 of Section 96 of the Forest Act.

(h) The Permittee will be responsible for obtaining permits for crossing of powerlines, pipelines, railroads and public roads.

(i) The Permittee will cause vehicles and equipment used under this Permit to meet the equipment standards set out in the Forest Fire Prevention Regulations made under the Forest Act.

(j) The Regional Manager or District Manager may close the road without notice and, during the period of closure, this Permit will be suspended.

(k) The right-of-way shall not exceed twelve (12) metres unless greater width is required due to terrain conditions and is approved by a Forest Officer.

Re 10.02 Other Conditions Cont'd:

(l) The Permittee shall not place any gate or other obstruction(s) on or over any road constructed and/or maintained under this permit unless otherwise approved in writing by the Permitter.

(m) The Licensee shall have all timber scaled before it is removed from the licence area, unless otherwise authorized in writing by the Forest Officer. A~

(n) In the event that the Permittee causes or permits the discharge into the land or water of a substance that is, or may be, injurious to health, the Permittee shall promptly notify the Medical Health Officer of the location, time, duration, nature and quantity of the discharge of the substance and shall take immediate action to prevent and cease the discharge. 437

Province of British Columbia
Ministry of Forests

MAP OF ▸ R03634

EXHIBIT 'A'

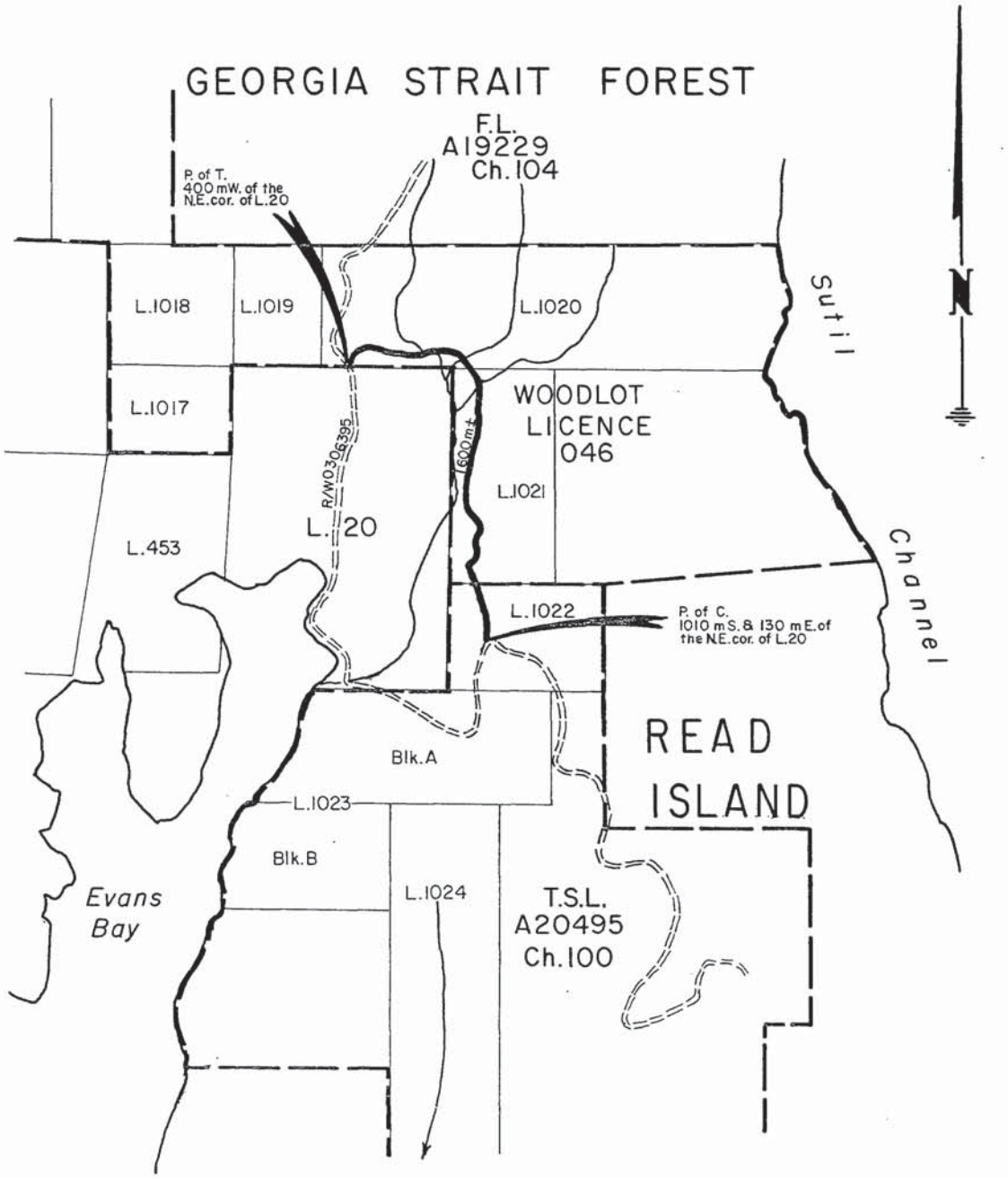
U.T.M.	Zone	East	North	Reg	Compt.	L
Grid	1	0 3 5 3 1 0 0	5 5 6 5 5 0 0	3	0 0 1	0

Date 87-12-21
Ref. Map 92K/3h
Base Used 92K.025
Scale 1: 20,000
Area ..... hectares ±

FOREST REGION ▸ 01 VANCOUVER
LAND DISTRICT ▸ 51 SAYWARD
DISTRICT ▸ 15 POWELL RIVER
OUTLINE ▸

MANAGEMENT UNIT	TIMBER SUPPLY AREA	PULPWOOD AGREEMENT	CASCADES
Type 0 P.S.Y.U.	Number 39 SUNSHINE COAST		
Number 64 QUADRA	Block 52 POWELL RIVER		East
Block	Sub-B		West C

Width of R/W 20m



Drawn by P.R.I.

FS 357 T/M 86/3 ∝

BRITISH COLUMBIA

Document name:g:\engineer\trent\rdpermit.doc
Date typed: 98/11/06 Date revised: 98/11/06 02:11 pm

File: ORCS 11400-20/R04221/98-01

November 9, 1998

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R04221 designated Amendment Number R04221/98-01.

Your application dated September 14, 1998 has been reviewed against the Forest Development Plan for the Woodlot 046 Read Island operating area, and you are hereby authorized to proceed with the work on the section of road shown on the attached Exhibit A Map dated October 21, 1998. The following conditions apply:

1. Approved Road Sections

Sec 1	Station	0+050	to Station	0+352	Accessing Blk	Lot 162

2. All operations are to conform to the *Forest Practices Code of British Columbia Act*. The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

3. Revegetation with a suitable reclamation seed mix and fertilizer is required on all disturbed road sides.

4. Cross drainage requirements (no streams involved) should be reviewed during road reconstruction and construction of new road. Culverts are to be installed to prevent ditch water ponding and excessively long ditch water runs. The Forest Road Engineering Guidebook provides guidance as to adequately install culverts to minimize environmental disturbance.

.../2

Ministry of Forests
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River BC V8A 1W1
Tel: (604) 485-0700

The enclosed Schedules, and other attachments form an integral part of Road Permit R04421 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Enclosure

pc: Bob Rebantad, Compliance and Enforcement - Note: requirement to revegetate and to install cross drains

bpc: ORCS 11400-25/R04221 (letter only)

SCHEDULE "A1"
ROAD SPECIFICATIONS
R04221/98-01

1.01	**ROAD NAME/REFERENCE:**	Sec 1			
1.02	**SECTION (KM - KM)**	0.05-0.358			
1.03	**EXHIBIT 'A' SECTION REFERENCE**	Section 1			
1.04	**PERMIT USE:** CONSTRUCT / MODIFY A ROAD	Yes			
1.05	EXISTING ROAD	Yes			
1.06	**TERRAIN RISK RATING:** (L / M / H / VH)	L			
1.07	**ROAD TYPE:** (SNOW/PLANNED 5-YEAR/ ONE-SEASON WINTER/PERMANENT)	P			
1.08	**ROAD WIDTH:** (m)	5			
1.09	**DITCHES:** Y/N	Yes			
1.10	**ROAD INSLOPED / OUTSLOPED** (I/O)	N/A			
1.11	**TURNOUTS:** MAXIMUM DISTANCE BETWEEN (m)	150			
1.12	USABLE LENGTH / WIDTH (m/m)	10 x 8			
1.13	**MINIMUM CURVE RADIUS:** (m)	35			
1.14	**MAXIMUM SUSTAINED GRADE:** ADVERSE (%)	8%			
1.15	FAVOURABLE (%)	12%			
1.16	**MAXIMUM SHORT PITCH GRADE:** ADVERSE (%)	10%			
1.17	FAVOURABLE (%)	14%			
1.18	**MINIMUM CULVERT SIZE:** ROUND PIPE (mm)	600			
1.19	**OTHER SHAPES - OPENING SIZE** (mm / mm)	500 x 1500			
1.20	**OVERLANDING** (BY STN)				
1.21	**STUMPS/ROOTS/LOGS IN ROAD PRISM** (BY STN)	Burn			
1.22	**CUT/FILL SLOPE ANGLE** (SELECT GUIDEBOOK OR OTHER METHOD)	Forest Road Engineering Guidebook X or Other (Specify) _____			

NOTE: This schedule is for use when plan/profiles are not prepared or where plan/profiles are deficient of necessary information

SCHEDULE "A2"
BRIDGES, STREAM CULVERTS, AND ENGINEERED STRUCTURES TABLE

ROAD NAME	CLASS OF STRUCT.	DESIGN VEHICLE	STRUCT LOC. (KM)	STREAM NAME & RIPARIAN CLASS	STRUCTURE SIZE (Length x height)	DRAWING NO.	COMMENTS
Sec 1							No creeks on this road section

Class of Structures Legend	Bridges:	Culverts:	
• retaining wall H. • retaining wall >1.5 m R. • Other (e.g. engineered fill with geotextile) • Ford FD	**BT** (Bridge Temporary) (life less than 15 years) **BP** (Bridge Permanent) (life greater than 15 years)	discharge > 6 m^3/sec. Mark with 'X'.	**CR** (Culvert Round) **CE** (Culvert Elliptical) **CA** (Culvert Arch) **CL** (Culvert Log) **CO** (Culvert Other, Describe in Comments)

NOTES: All structures indicated '*' (in structure location column) upon termination or cancellation of the permit, may be removed by the Permittee.
See clause 2.03 in the road permit.
Specify design loading of bridge structures in metric tonnes (e.g. L60, L75, L100, etc.)
Retaining walls > 1.5 m require professional design.
Structure size - show length and height of abutment.
Refer to Section 10 of the Forest Road Regulation for professional design requirements.

Province of British Columbia

Ministry of Forests

EXHIBIT 'A'

FILE: **R04221**

SHOWN AS A
BOLD SOLID LINE ━━━━━

Pulpwood Agreement

BCGS Reference Maps:
092K.025

NAD 27/83 27

Reg 30 Compt. 010 L

CASCADES W

Drawn by CJG Date 1998-10-21

Revised by Date

Planning Cell

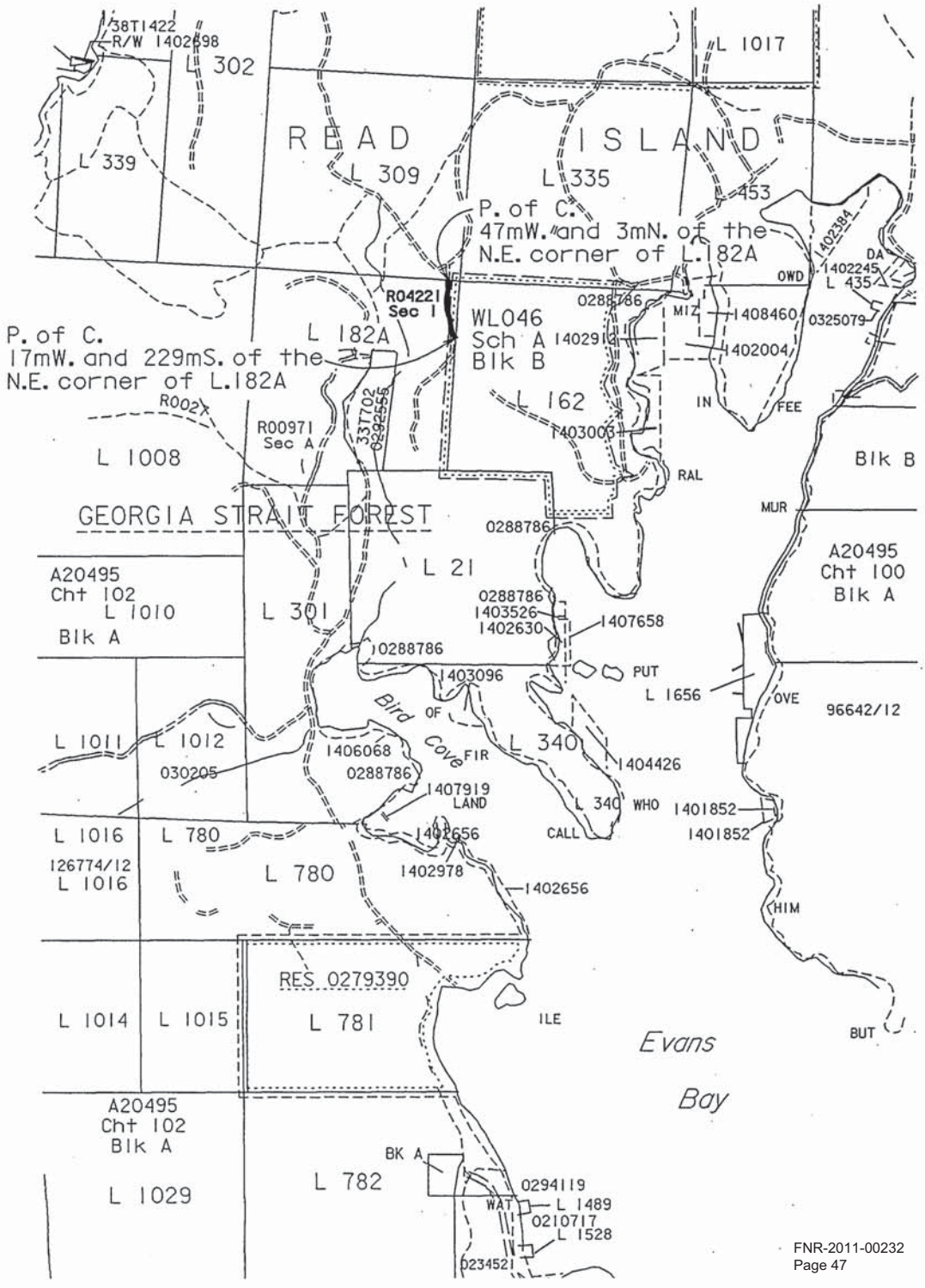
ODM Map ID r04221

ORCS # 11400

Scale 1: 20,000

Area hectares#

Not to encroach upon L.309 and L.162.



BCR

BRITISH COLUMBIA

Document name:g:\engineer\trent\rdpermit.doc
Date typed: 98/11/06 Date revised: 98/11/30 10:10 am

File: ORCS 11400-20/R04421/98-01

November 30, 1998

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This letter cancels and replaces our letter of November 9, 1998 wherein we designated the amendment Road Permit Number R04221/98-01.

This is in regards to your application to amend Road Permit R04421 designated Amendment Number R04421/98-01.

Your application dated September 14, 1998 has been reviewed against the Forest Development Plan for the Woodlot 046 Read Island operating area, and you are hereby authorized to proceed with the work on the section of road shown on the attached Exhibit A Map dated November 18, 1998. The following conditions apply:

1. Approved Road Sections

Sec 1	Station	0+050	to Station	0+352	Accessing Blk	Lot 162

2. All operations are to conform to the *Forest Practices Code of British Columbia Act*. The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

3. Revegetation with a suitable reclamation seed mix and fertilizer is required on all disturbed road sides.

.../2

Ministry of Forests
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River BC V8A 1W1
Tel: (604) 485-0700

4. Cross drainage requirements (no streams involved) should be reviewed during road reconstruction and construction of new road. Culverts are to be installed to prevent ditch water ponding and excessively long ditch water runs. The Forest Road Engineering Guidebook provides guidance as to adequately install culverts to minimize environmental disturbance.

The enclosed Schedules, and other attachments form an integral part of Road Permit R04421 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Enclosure

pc: Bob Rebantad, Compliance and Enforcement - Note: requirement to revegetate and to install cross drains

bpc: ORCS 11400-25/R04421 (letter only)

SCHEDULE "A1"
ROAD SPECIFICATIONS
R04421/98-01

1.01	**ROAD NAME/REFERENCE:**	Sec 1			
1.02	**SECTION (KM - KM)**	0.05-0.358			
1.03	**EXHIBIT 'A' SECTION REFERENCE**	Section 1			
1.04	**PERMIT USE:** CONSTRUCT / MODIFY A ROAD	Yes			
1.05	EXISTING ROAD	Yes			
1.06	**TERRAIN RISK RATING:** (L / M / H / VH)	L			
1.07	**ROAD TYPE:** (SNOW/PLANNED 5-YEAR/ ONE-SEASON WINTER/PERMANENT)	P			
1.08	**ROAD WIDTH:** (m)	5			
1.09	**DITCHES:** Y/N	Yes			
1.10	**ROAD INSLOPED / OUTSLOPED** (I/O)	N/A			
1.11	**TURNOUTS:** MAXIMUM DISTANCE BETWEEN (m)	150			
1.12	USABLE LENGTH / WIDTH (m/m)	10 x 8			
1.13	**MINIMUM CURVE RADIUS:** (m)	35			
1.14	**MAXIMUM SUSTAINED GRADE:** ADVERSE (%)	8%			
1.15	FAVOURABLE (%)	12%			
1.16	**MAXIMUM SHORT PITCH GRADE:** ADVERSE (%)	10%			
1.17	FAVOURABLE (%)	14%			
1.18	**MINIMUM CULVERT SIZE:** ROUND PIPE (mm)	600			
1.19	**OTHER SHAPES - OPENING SIZE** (mm / mm)	500 x 1500			
1.20	**OVERLANDING** (BY STN)				
1.21	**STUMPS/ROOTS/LOGS IN ROAD PRISM** (BY STN)	Burn			
1.22	**CUT/FILL SLOPE ANGLE** (SELECT GUIDEBOOK OR OTHER METHOD)	Forest Road Engineering Guidebook X or Other (Specify) _____			

NOTE: This schedule is for use when plan/profiles are not prepared or where plan/profiles are deficient of necessary information

SCHEDULE "A2"
BRIDGES, STREAM CULVERTS, AND ENGINEERED STRUCTURES TABLE

ROAD NAME	CLASS OF STRUCT.	DESIGN VEHICLE	STRUCT LOC. (KM)	STREAM NAME & RIPARIAN CLASS	STRUCTURE SIZE (Length x height)	DRAWING NO.	COMMENTS
Sec 1							No creeks on this road section

Class of Structures Legend	Bridges:	Culverts:	
• retaining wall H. • retaining wall >1.5 m R. • Other (e.g. engineered fill with geotextile) • Ford FD	**BT** (Bridge Temporary) (life less than 15 years) **BP** (Bridge Permanent) (life greater than 15 years)	discharge > 6 m^3/sec. Mark with 'X'.	**CR** (Culvert Round) **CE** (Culvert Elliptical) **CA** (Culvert Arch) **CL** (Culvert Log) **CO** (Culvert Other, Describe in Comments)

NOTES: All structures indicated '*' (in structure location column) upon termination or cancellation of the permit, may be removed by the Permittee.
See clause 2.03 in the road permit.
Specify design loading of bridge structures in metric tonnes (e.g. L60, L75, L100, etc.)
Retaining walls > 1.5 m require professional design.
Structure size - show length and height of abutment.
Refer to Section 10 of the Forest Road Regulation for professional design requirements.

Province of British Columbia
Ministry of Forests

MAP OF ▸ R04421

EXHIBIT 'A'

U.T.M.	Zone	East	North	Reg	Compt.	L
Grid	10	353000	5564000	30	10	

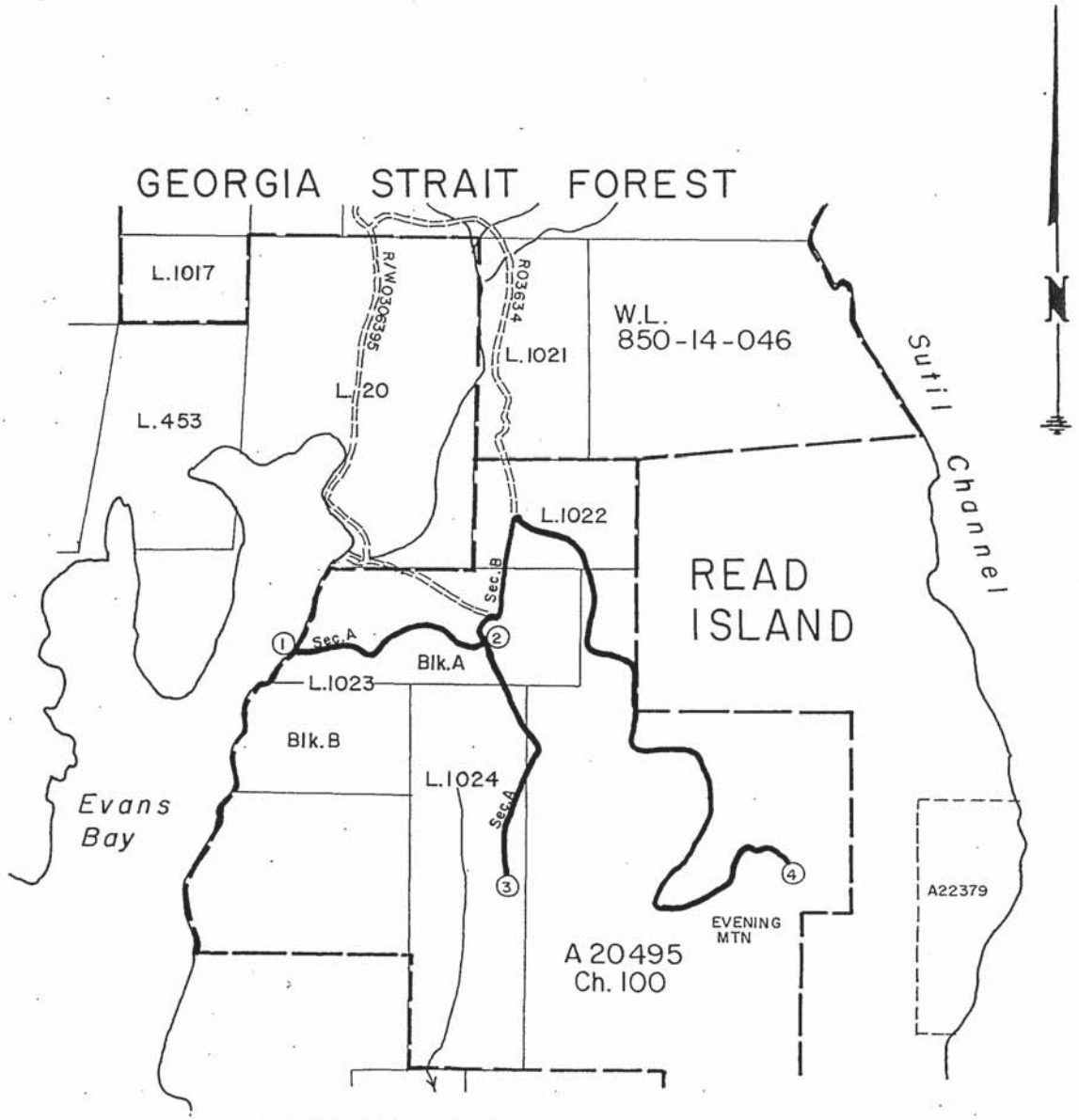
Date 98-11-18
Ref. Map 92K/3h
Base Used 92K.025
Scale 1: 20,000
Area ..... hectares

FOREST REGION ▸ 01 Vancouver
LAND DISTRICT ▸ 50 Sayward
DISTRICT ▸ 15 Sunshine Coast
OUTLINE ▸

MANAGEMENT UNIT		TIMBER SUPPLY AREA		PULPWOOD AGREEMENT	CASCADES
Type	0 P.S.Y.U.	Number	39 Sunshine Coast		
Number	64 Quadra	Block	52 Powell River		East
Block		Sub-B			West C

Width of R/W 20m
Length of R/W approx. 4800m

Map 1 of 3



ALL POINTS TAKEN FROM THE S.W. CORNER OF L.1022

1. 300 mS. & 630 mW.
2. 270 mS. & 60 mE.
3. 1120 mS. & 130 mE
4. 1060 mS. & 1130 mE.

Drawn by P.R.L.

FS 357 T/M 86/3

Province of British Columbia
Ministry of Forests

MAP OF ▸ R04421

EXHIBIT 'A'

U.T.M.	Zone	East	North	Reg	Compt.	L
Grid	10	350200	5563500	30	10	

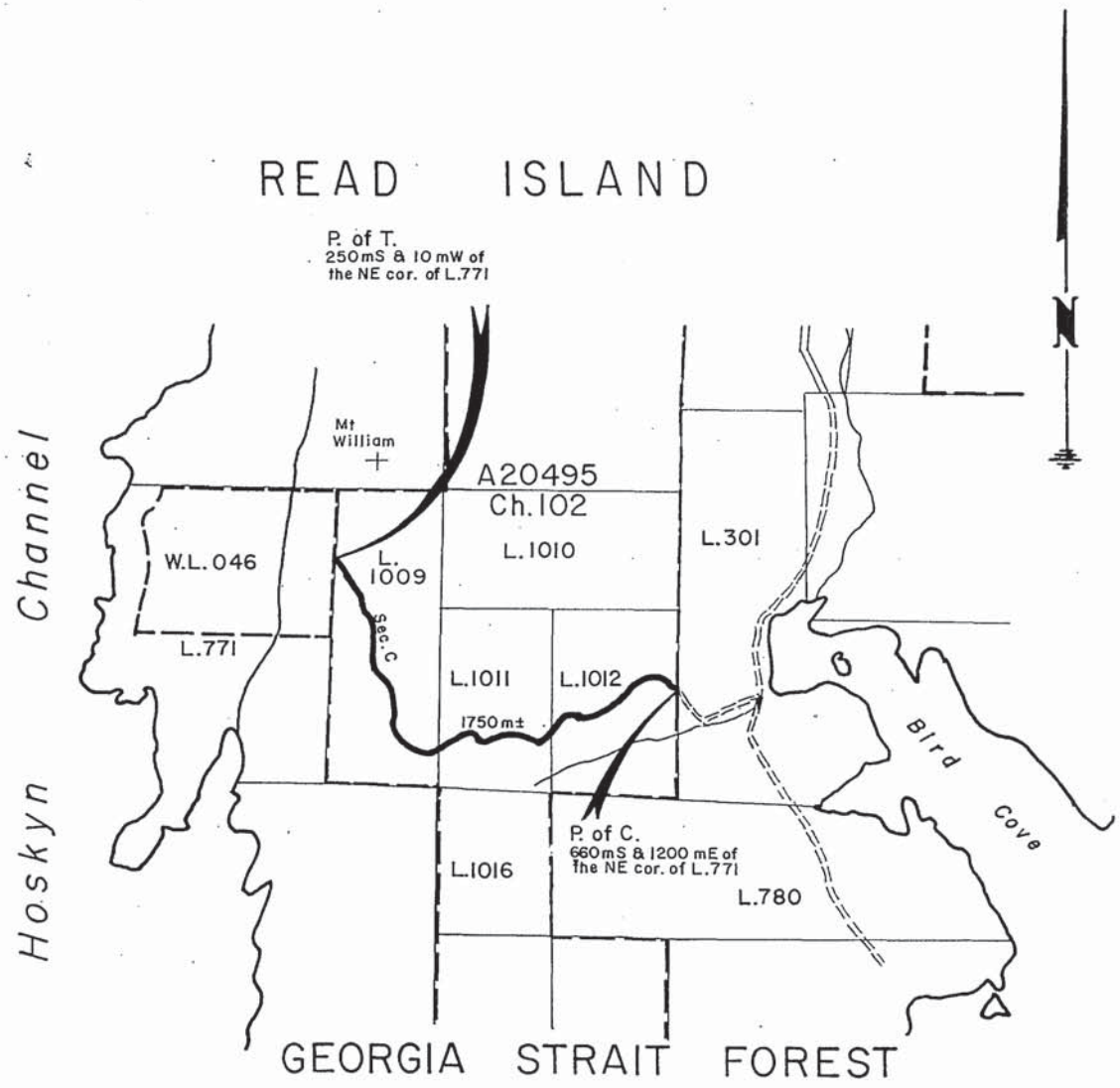
Date 98-11-18
Ref. Map 92K.025
Base Used 92K.015, 025
Scale 1: 20,000
Area ..... hectares †

FOREST REGION ▸ 01 VANCOUVER
LAND DISTRICT ▸ 50 SAYWARD
DISTRICT ▸ 15 SUNSHINE COAST
OUTLINE ▸

MANAGEMENT UNIT	TIMBER SUPPLY AREA	PULPWOOD AGREEMENT	CASCADES
Type 0 P.S.Y.U.	Number 39 SUNSHINE COAST		
Number 64 QUADRA	Block 52 POWELL RIVER		East
Block	Sub-B		West C

Width of R/W 20 m

Map 2 of 3



Drawn by P.R.L.

FS 357 TIM 89/05

Province of British Columbia

Ministry of Forests

EXHIBIT "A"

FILE: R04421

SHOWN AS A BOLD SOLID LINE: ▬▬▬▬

Pulpwood Agreement

BCGS Reference Maps:
92K.025

NAD 27/83 27

Reg 30 Compt. 010 L

CASCADES W

Drawn by CJG Date 1998-11-18

Revised by Date

Planning Cell

ODM Map ID r04421

ORCS • 11400

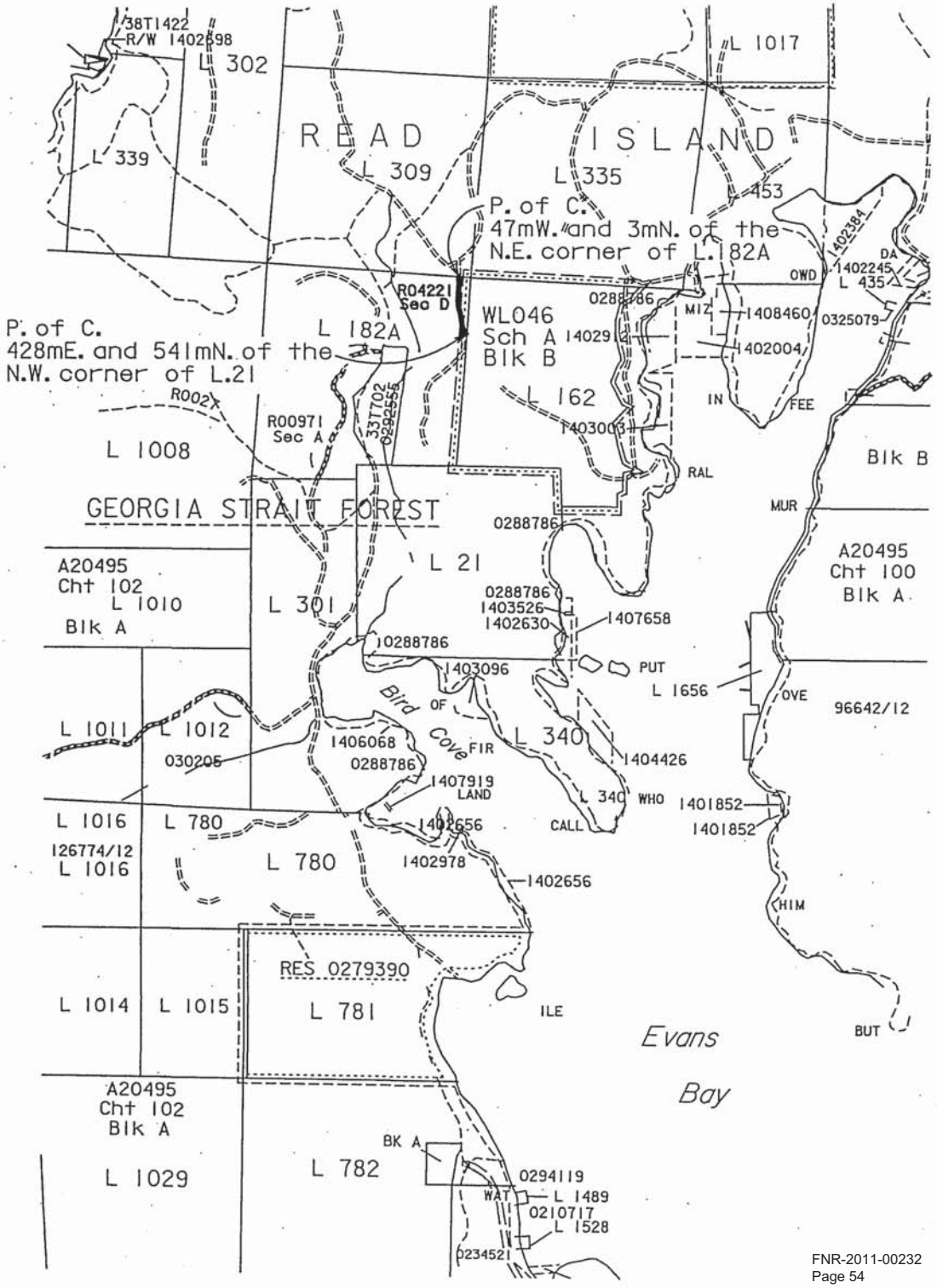
Scale 1: 20,000

Area hectares:

N

Not to encroach upon L.309 and L.162.

Map 3 of 3



BRITISH COLUMBIA

Distribution: Harper Logging
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Contact: Trent Meyer
Date typed: 2000/07/12 Date last saved: 2000/07/12 3:44 pm

11400-25/R04421

File: ORCS 11400-20/R04421-00-01

July 12, 2000

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R04421 designated Amendment Number R04421-00-01.

Your applications dated May 31, 2000 and July 6, 2000 has been reviewed against the Forest Development Plan for the Timber Sale Major A20495 Read Island operating area. You are hereby authorized to proceed with the work on the sections of road shown on the attached Exhibit A Map dated June 13, 2000. The following conditions apply:

1. Approved Road Sections

Spur 7	Station	0+000	to Station	0+173	Accessing Blk.	7
Spur 8	Station	0+000	To Station	0+115	Accessing Blk.	8
Spur 11	Station	0+000	To Station	0+251	Accessing Blk.	11
WW Main	Station	0+141	To Station	0+506	Accessing Blk.	13
Spur 13	Station	0+000	To Station	0+103	Accessing Blk.	13
Spur 14	Station	0+000	To Station	0+504	Accessing Blk.	13

2. All operations are to conform to the *Forest Practices Code of British Columbia Act*. The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

• THE GOVERNMENT OF BRITISH COLUMBIA IS AN *'EMPLOYMENT EQUITY EMPLOYER'* •

Ministry of Forests
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

3. It is assumed that Section 11 (2) of the Forest Road Regulation is applicable where overland road construction is not done. Stumps, roots and embedded logs are left in the road prism outside the road subgrade width on the downhill side.

4. There appears be inadequate cross drain culverting indicated in the submission. It is highly recommended that drainage requirements be reviewed and adjusted to ensure adequate water control.

5. Spur 10 has been excluded from this road permit amendment submission, as requested, in order for a visual impact assessment to be done. The attached exhibit a map outlines spur 10, however, construction of spur **is not authorized at this time**. A separate road permit amendment submission will be required for spur 10.

6. The quality of the maps submitted in this amendment request was poor. Future submissions are expected to be completed to a higher standard (i.e. clear copies, scales indicated, mapsheet identifications, etc.) The Forest Road Engineering Guidebook provides information on what should be included on plan maps.

The enclosed Schedules A1 and A2, Plans/Profiles and other attachments form an integral part of Road Permit R04421 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachments

pc: Compliance and Enforcement – Vince Metcalf – Note above comments, in particular, the apparent lack of cross drainage and no approval of spur 10 construction.

bpc: Letter only - ORCS 11400-25/R04421

BRITISH COLUMBIA

Distribution: [Harper Logging Ltd.]
Document name: G:\!WorkGrp\ENGINEER\!Trent\TSMAJR\RP04421\020320.doc [DH/tp]
Contact: [Harper Graham]
Date typed: 2002/03/20 Date last saved: 2002/03/26 11:44 am

File: ORCS 11400-20/R04421/02-01
ORCS 11400-25/R04421 (letter only)

April 5, 2002

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R04421 designated Amendment Number R04421/02-01.

Your application received March 6, 2002 has been reviewed against the 2001-2005 Forest Development Plan approved January 3, 2002 for Timber Sale Licence A20495 for the Read Island operating area. You are hereby authorized to proceed with the work on the sections of road shown on the attached Exhibit A Map dated April 3, 2002. The following conditions apply:

1. Approved Road Sections

Spur 4	Station	0+000	to Station	0+234	Accessing Blk.	Block 4
Spur 4A	Station	0+000	to Station	0+107	Accessing Blk.	Block 4

2. All operations are to conform to the *Forest Practices Code of British Columbia Act*. The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

3. There appears to be inadequate culverting along some sections of Spur 4A and it is recommended that drainage requirements be reviewed to ensure adequacy of water control.

4. The use of 500 millimetre diameter corrugated metal pipe in not recommended except for ditchline water, cross drainage at appropriately spaced intervals.

• THE GOVERNMENT OF BRITISH COLUMBIA IS AN *'EMPLOYMENT EQUITY EMPLOYER'* •

Ministry of Forests
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

5. Stumps, roots and embedded logs as indicated in the Certification Schedule are to be left or placed in the road prism. It is assumed that Section 11(2) of the Forest Road Regulation is applicable. Stumps, roots and embedded logs may be left or placed in the road prism on the outside of the road subgrade width on the downhill side.

6. It is recommended that Section 11(4.1) of the Forest Road Regulation, Inverted stumps and corduroy or puncheon are used to support the fill material and the required vehicle loads, indicated as applicable on the FS 1179(3) Certification Schedule be **closely reviewed** to ensure that it is applicable to the planned road construction method. Permittee to notify the Forest Officer in writing prior to commencement of construction of any changes. The above certification is not applicable where overland road construction is utilised.

7. Re-vegetation specifications indicated as included with the application amendment were not attached. Please submit revegetation specifications including seed and fertilizer mixtures, timing, method and rate of application to this office by April 30, 2002 to complete the application amendment.

8. It is expected that better quality maps (both 1:20 000 scale and 1:5 000 scale) be included in road permit applications. Future poor submissions will be returned to permittee.

The enclosed Schedules A1 and A2, Plans/Profiles, and other attachments form an integral part of Road Permit R04421 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachments

pc: Misty Mountain Consulting, Attention: Trevor Campbell – letter only

pc: Compliance and Enforcement, Attention: Vince Metcalf

BRITISH COLUMBIA

Ministry of Forests

ROAD PERMIT/ROAD LAYOUT AND DESIGN APPLICATION

FILE NO.: 11400-20/RO 4421/02-01

DATE: 03 March 2002

Name of Applicant: Harper Logging Ltd.

Address: Box 299, Heriot Bay, B.C, V0P 1H0

Phone No.: (250) 285 2325 Fax. No. (250) 285 2305

E-mail address: tntcampbell@aisl.bc.ca

Tick appropriate box:

☐ New Road Permit **OR** ☒ Amendment to Existing Permit RO_4421

☒ Build, Modify & Use **OR** ☐ Use & Maintenance only of non-status road

1. Applicant's Tenure Type and No.: MTSL 20495
2. Forest Cover Map Reference: 92 K 025
3. Forest Development Plan (name of operating area or geographical location and approval date)
   1999 –2003 FDP for MTSL 20495
4. Included documents (refer to Road Layout and Design Submission Procedures):

Tick appropriate boxes

- ☒ map to suitable scale
- ☒ Schedule A1 (FS1178A1)
- ☒ Schedule A2 (FS1178A2)
- ☒ Riparian, Visual, Archaeological and Soil Erosion Assessments Schedule (FS1179(1))
- ☒ Terrain Stability Field Assessment and Measures Schedule (FS1179(2))
- ☒ Road Layout and Design Schedule (FS1179(3))
- ☒ Geometric Road Design

5. ☒ not applicable **OR**

   For a junction with a Forest Service Road, the following specifications apply:

   Location _____ (km) of the _____ Forest Service Road

   minimum sight distance _____ m junction angle _____ °

   road grades _____ culvert size _____

6. Proposed construction date: Month: March Year: 2002
7. In submitting this application, the applicant acknowledges that he/she will be the designated Principal Contractor for the purposes of Occupational Health and Safety Regulation, in accordance with the road permit requirement.
8. The responses to the referrals required by the District Manager accompany this application.

HRT FS581 01/02

SCHEDULE "A1"

ROAD LAYOUT AND DESIGN

Road Permit	☒ R0 4421	Amendment Number	☒ 02-01
TSL	☐ _____	Special Use Permit	☐
FSR	☐ _____	Cutting Permit	☐

Road Name/Reference: Spur 4, Spur 4A

1. Revegetation specifications shall be:Revegetate inactive borrow pits, waste sites, road cut and fill slopes, as per the attached "Harper Logging Ltd. Revegetation and Erosion Control" specifications.

2. Actions for protecting the known non-timber forest resources shall be:
   Rip Rap culvert inlets and outlets, use geotextile fabric covering on wood culverts. Debris Management Strategy is listed as follows:

S1-S4 streams: All inadvertently introduced debris, will be removed concurrent with road construction. S1-S4 streams: All inadvertently introduced debris, will be removed concurrent with road construction.
S5-S6 streams: Any excessive debris accumulations will be removed concurrent with road construction.
S5 and S6 streams with potential to transport debris: S1-S4 streams: All inadvertently introduced debris will be removed concurrent with road construction.
Definition of excessive: An accumulation of debris that may cause a stream to:
(a) Erode its bank (b) Leave it's channel (c) Impact downstream values (d) Debris torrent

3. The following geometric road design(s), other drawings, maps and prescription/reports, including measures to maintain slope stability (and any required analysis) or water quality in areas of moderate or high likelihood of landslides are submitted with the application and form an integral part of the permit.

4. The following statement is ☐ applicable ☒ not applicable
   There is new road encroachment within a Riparian Management Area [reference *Forest Road Regulation,* Section 4(2)] and this is clearly shown on the accompanying map. Rationale for the road location is attached.

5. Road Widening on Curves: the widening required on curves shall be that:
   ☒ provided in the Forest Road Engineering Guidebook, or ☐ provided in the table below

Radius of Curve (m)	180	90	60	45	35	25	20	15
Minimum Subgrade Width Required								

6. The maximum dimensions and weights of the intended loaded vehicle for use on the road are:
   ☐ conforms to MOTH regulations ☒ Other. If other, complete the following:

- Length 25.0 m
- Width 4.9 m
- Height 7.30 m
- Max. log length 20.1 m
- Overhang beyond rear trailer bunk 9.1 m
- Weight Axle (tandem) 376 kg
- GVW 150 000 kg

SCHEDULE "A1"

ROAD LAYOUT AND DESIGN

Complete any or all sections on this page only where plan/profiles are not prepared or where plan/profiles are deficient of necessary information. Sections 8 to 20 must be completed to show whether the item is either a standard specification or a variation from the standard specification.

7.	**ROAD NAME/MAP AND EXHIBIT A REFERENCE (STATIONS):**		Spur 4	Spur 4A		
	STATION * TO STATION *****		0+000 - 0+234	0+000 – 0+107		
8.	**ROAD TYPE:** (PERMANENT/SNOW/PLANNED 5-YEAR/ONE-SEASON WINTER)		Perm	Perm		
9.	**STUMPS/ROOTS/LOGS IN ROAD PRISM:** (YES OR NO)		No	No		
10.	**CORDUROY/PUNCHEON/INVERTED STUMPS:** (YES OR NO)		Yes	Yes		
11.	**ROAD SUBGRADE WIDTH:**	(m)	6	6		
12.	**TURNOUTS:** MAXIMUM DISTANCE BETWEEN	(m)	N/A	N/A		
	USABLE LENGTH /WIDTH	(m/m)	N/A	N/A		
13.	**MINIMUM CURVE RADIUS:**	(m)	35	35		
14.	**MAXIMUM SUSTAINED GRADE:** ADVERSE	(%)	N/A	N/A		
	FAVOURABLE	(%)	16	16		
15.	**MAXIMUM SHORT PITCH GRADE:** ADVERSE	(%)	N/A	9		
	FAVOURABLE	(%)	18	16		
16.	**MINIMUM CROSS-DRAIN CULVERT SIZE:** ROUND PIPE	(mm)	500	500		
17.	**OTHER SHAPES – OPENING SIZE:**	(mm/mm)				

[1] The standard specifications reflect the proponent's normal design criteria, and will apply to the roads under consideration unless a variation to the standard specification is provided in the remaining columns. There is no need to reproduce previously submitted standard specifications here.

ROAD LAYOUT & DESIGN SCHEDULE "A2"

BRIDGES, STREAM CULVERTS, AND ENGINEERED STRUCTURES TABLE

Road Permit ☒ R0 4421 Amendment No. ☒ 02-01 Cutting Permit ☐ _____ Special Use Permit ☐ _____
TSL ☐ _____ Forest Service Road ☐

ROAD NAME	CLASS OF STRUCT.	DESIGN LOAD	STRUCT LOC. (KM)	STREAM NAME & RIPARIAN CLASS	IN COMM. W'SHED, FISH STREAM? (Y OR N)	STRUCTURE SIZE (Length x height)	GENERAL ARRANGE-MENT DRAWING NO.	COMMENTS
Spur 4	CR	L 165	0+039	Ditch drain	N	500mm	N/A	
Spur 4	CR	L 165	0+183	Ditch drain	N	500mm	N/A	
Spur 4A	CR	L165	0+038	Creek 1 S6	N	600mm	N/A	

Class of Structures Legend

H (retaining wall <1.5 m)
R (retaining wall >1.5 m)
FD (ford)
CG (cattleguard)
Other (e.g. engineered fill with geotextile)

Bridges:
BT (Bridge Temporary)
(life less than 15 years)
BP (Bridge Permanent)
(life greater than 15 years)

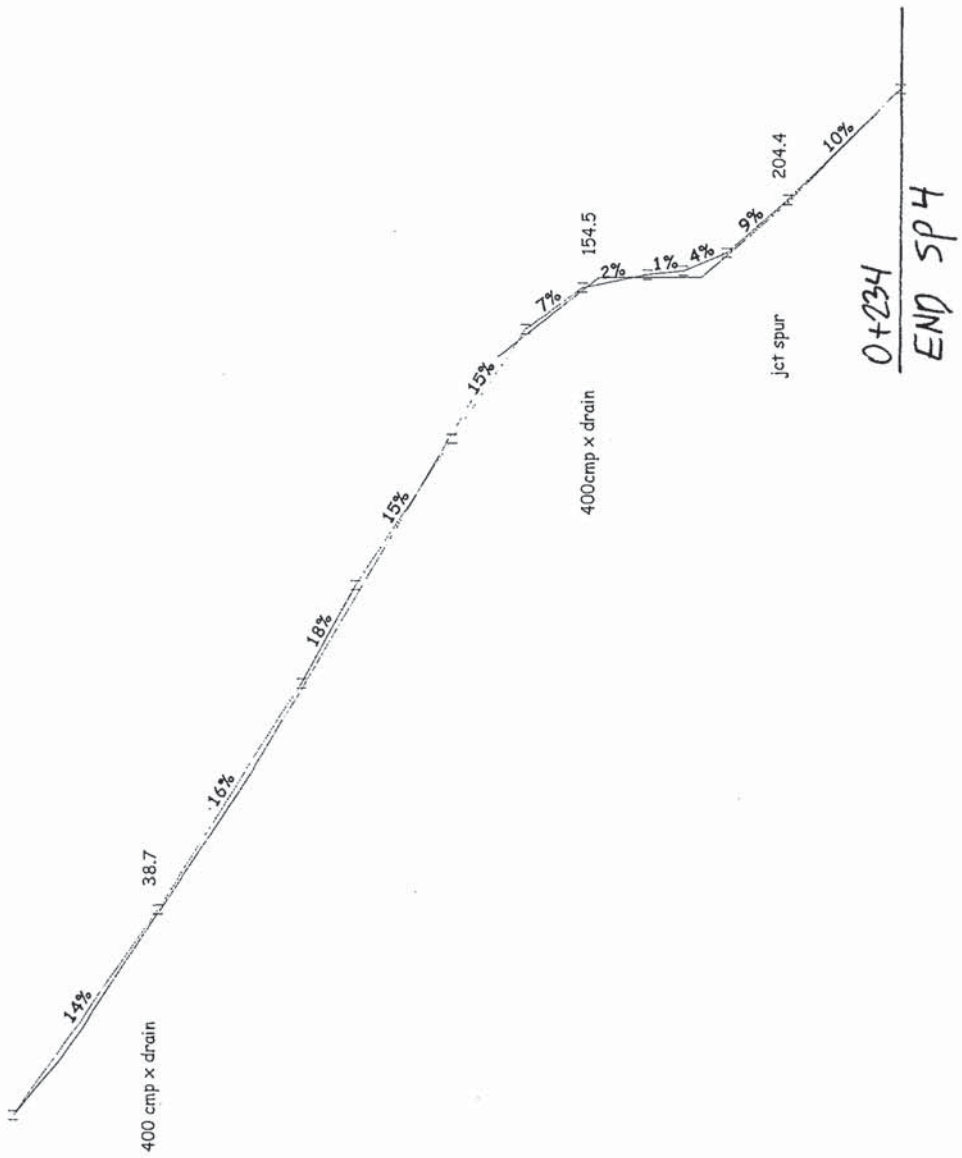
Culverts

Pipe
Log

Notes:

All structures indicated '*' (in structure location column), upon termination or cancellation of the permit (see clause 2.03 in the road permit), may be removed and re-used by the permittee.

Specify design load of bridge structures (e.g. L75, L100, etc.)
Retaining walls > 1.5 m require professional design.
Structure size - for bridges show length and height of abutment; for culverts show opening dimensions.
Refer to Section 10 of the FR Reg. for design responsibility.
Attach a General Arrangement drawing for each bridge/major culvert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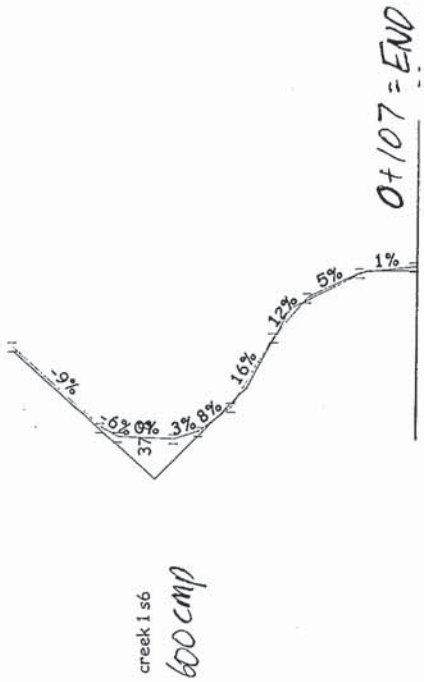
16%
18%
15%
15%
7%
154.5
2%
1%
4%
9%
204.4
10%
0+234
END SP4
400 cmp x drain
400cmp x drain
jct spur

Cut/Fill

| | | |

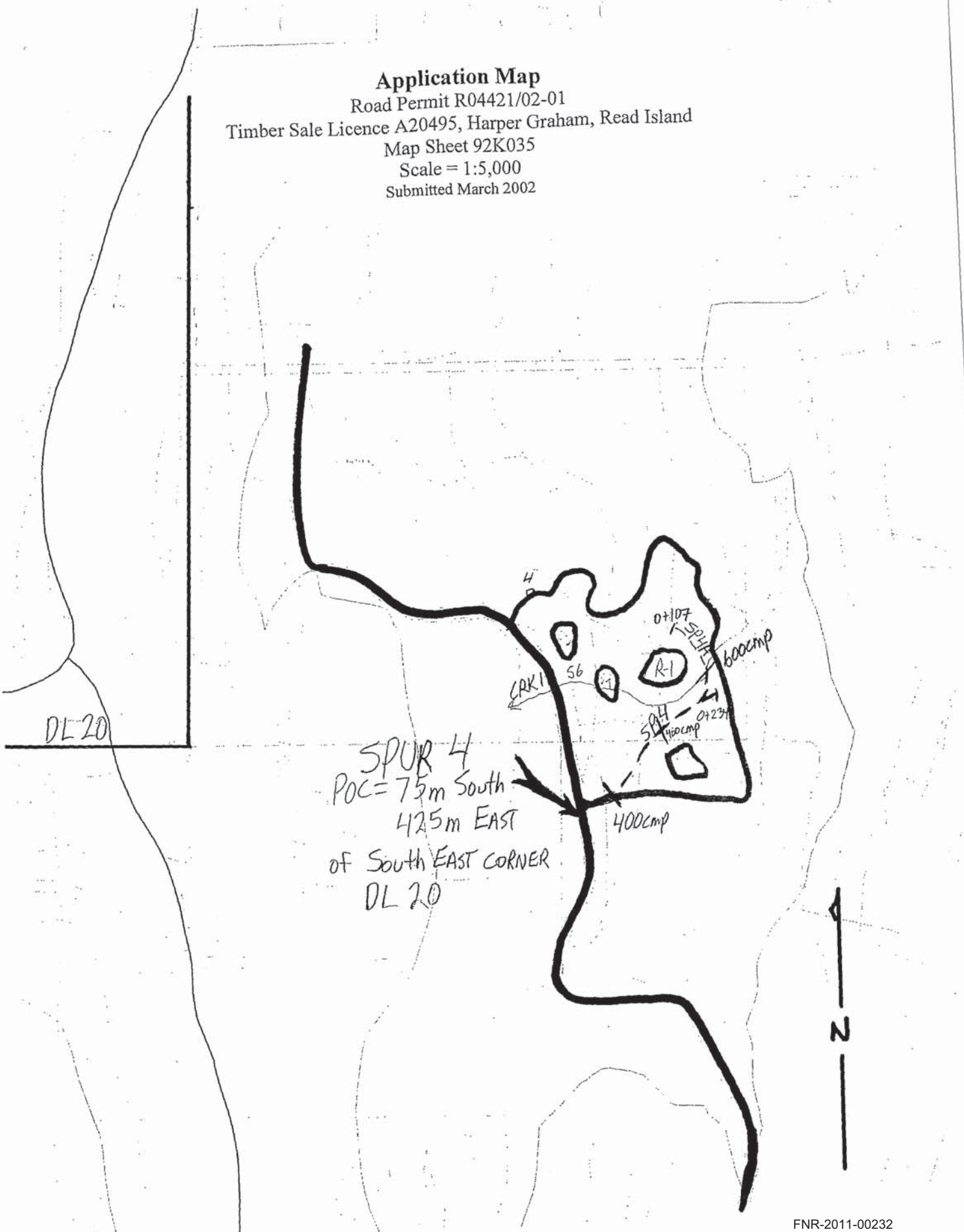


Cut/Fill

	-0.1	-0.1	-1.1	-0.1	0.1	-0.0	-0.1	-0.0	-0.1
Lyr1 Gnd:								OB	
Ssl:	-10		-20				0		-20
Ssr:	+45		+20			+7			0

Application Map

Road Permit R04421/02-01
Timber Sale Licence A20495, Harper Graham, Read Island
Map Sheet 92K035
Scale = 1:5,000
Submitted March 2002



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Document name: G:\!Workgrp\ENGINEER\!Trent\TSMAJR\RPR4421.doc DH/LW
File: ORCS 11400-20/R04421/05-01
ORCS 11400-25/R04521 (letter only)

July 19, 2006

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This letter specifically cancels and replaces our amendment letter dated November 23, 2005.

This is in regards to your application to amend Road Permit R04421 designated Amendment Number R04421/05-01.

Your application received October 27, 2005 has been reviewed against the 2001-2005 Forest Development Plan approved January 3, 2002 for Timber Sale Licence A20495, for the Read Island operating area. You are hereby authorized to proceed with the work on the sections of road shown on the attached Exhibit A Map dated October 25, 2005. The following conditions apply:

1. Approved Road Sections

Sec. Designation on Exhibit A Map	Submission Length In Kms	Licensee Road Name	Field Station (From)	Field Station (To)	Accessing Block No.
A	0.428	Sawmill Bay Main	0+000	0+428	3
D	0.187	SM-100	0+000	0+187	3

2. All operations are to conform to the *Forest and Range Practice Act* (FRPA). The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

3. The following road sections are located within the Riparian Management Area (RMA) of the streams listed below:

Road Name	Stream ID	Riparian Class	Station (From)	Station (To)
Sawmill Bay Main	#3	S-6	0+237	0+274

Ministry of Forests and Range Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

The letter accompanying the application indicates there is no other practicable alternative for the road locations. Ministry of Environment personnel have no specific objections to road construction within the RMA, providing all appropriate measures and precautions are taken. This letter constitutes District Manager approval under section 190 of the FRPA and section 5.1 of the Forest Road Regulation.

The enclosed attachments form an integral part of Road Permit R04421 and should be attached thereto.

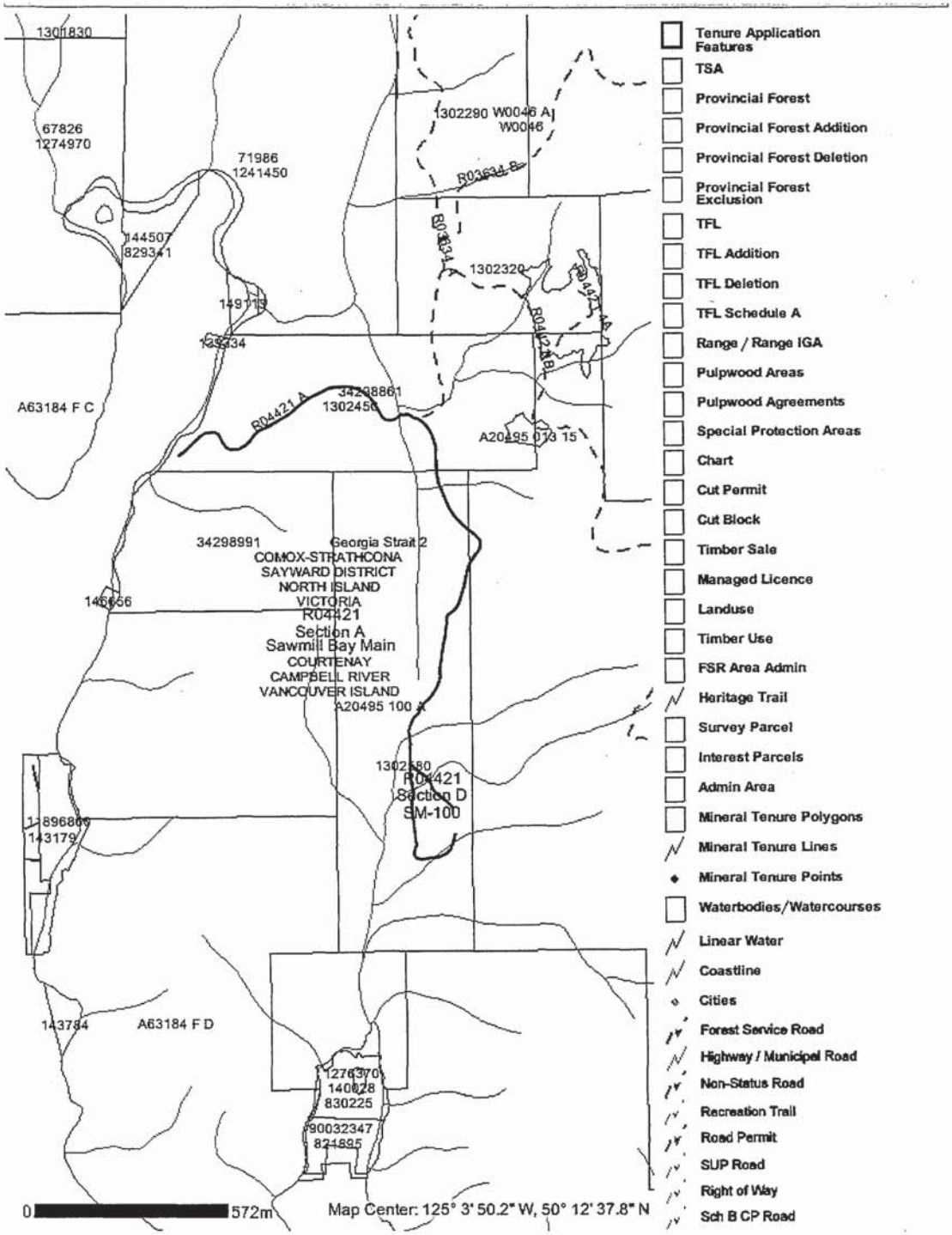
Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachment

FTA304 - Exhibit A - Tenure Map

FILE:	R04421	**Submitted By:**	HARPER LOGGING LTD.
FILE Type:	B01 - Road Permit	**Submission Date:**	2005-10-25
Submission Area:	0.0000	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:15000	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:	W0046 Read Island		
BCGS Reference Maps:	092K025, 092K025		



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BRITISH COLUMBIA

Distribution: Harper Logging Ltd
Document name: \\TILE\S63040\!Workgrp\ENGINEER\!Trent\TSMAJR\RP04421\051123.doc DH/TP
Contact: Paul Kutz
Date typed: 2005/11/23 Date last saved: 2005/11/23 3:10 pm

File: ORCS 11400-20/R04421
ORCS 11400-25/R04421 (letter only

November 23, 2005

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R04421 designated Amendment Number R04421/05-01.

Your application received October 27, 2005 has been reviewed against the 2001-2005 Forest Development Plan approved January 3, 2002 for Timber Sale License A20495, for the Read Island operating area. You are hereby authorized to proceed with the work on the sections of road shown on the attached Exhibit A Map dated [date]. The following conditions apply:

1. Approved Road Sections

Sec. Designation on Exhibit A Map	Submission Length In kms	Licensee Road Name	Field Station (From)	Field Station (To)	Accessing Block No.
A	0.428	Sawmill Bay Main	0+000	0+428	3
D	0.187	SM-100	0+000	0+187	3

2. All operations are to conform to the Forest and Range Practices Act (FRPA). The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

Ministry of Forests and Range and Ministry Responsible for Housing

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

3. The following road sections are located within the Riparian Management Area (RMA) of the streams listed below:

Road Name	Stream ID	Riparian Class	Station (From)	Station (To)
Sawmill Bay Main	#3	S-6	0+237	0+274

The letter accompanying the application indicates there is no other practicable alternative for the road locations. Ministry of Environment personnel have no specific objections to road construction within the RMA, providing all appropriate measures and precautions are taken. This letter constitutes District Manager approval under section 190 of the FRPA and section 5.1 of the Forest Road Regulation.

The enclosed attachments form an integral part of Road Permit R04421 and should be attached thereto.

Yours truly,

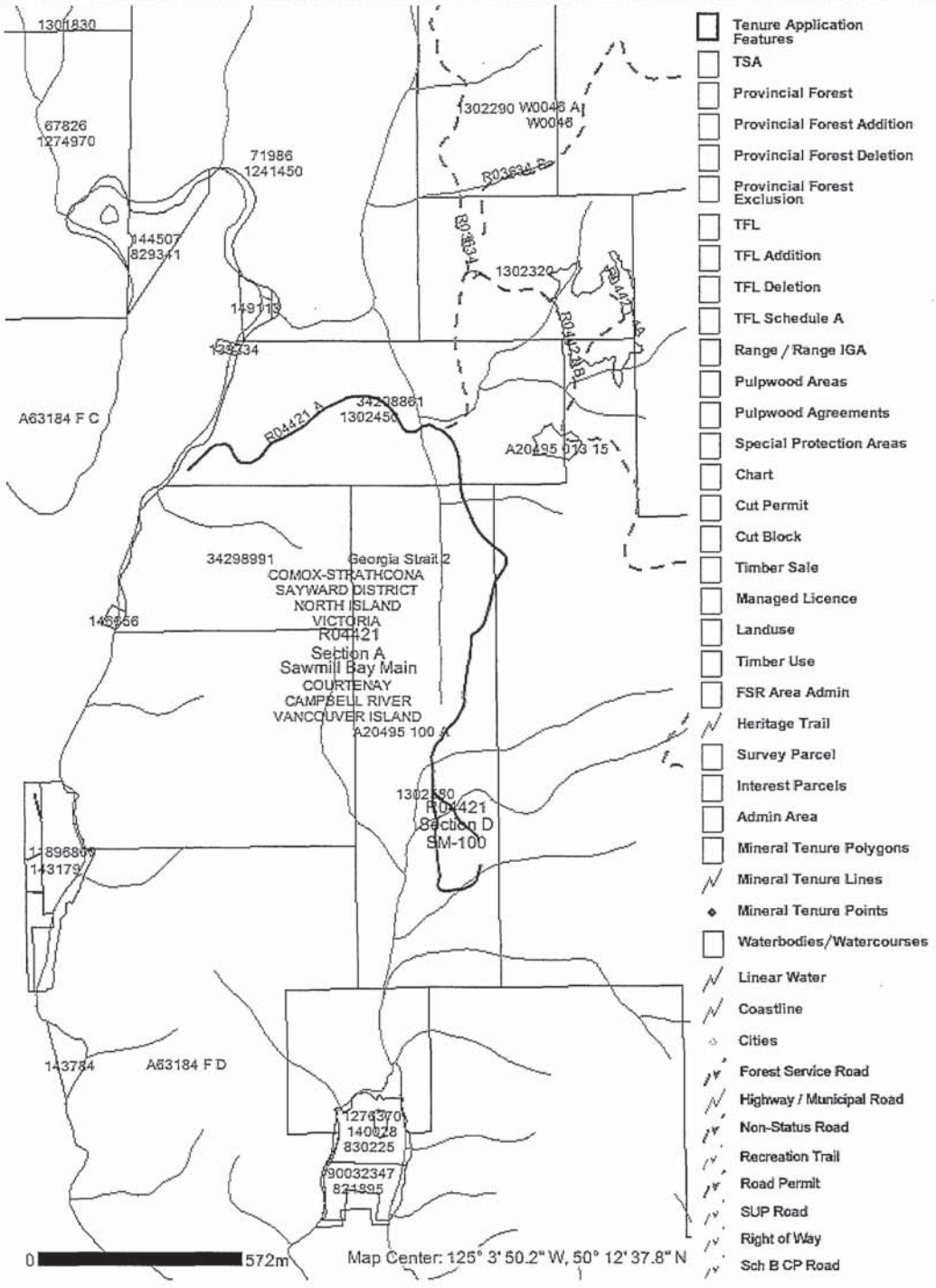
Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachment

pc: Compliance and Enforcement – Attention: Hugo Sloos (letter only)

FTA304 - Exhibit A - Tenure Map

FILE:	R04421	**Submitted By:**	HARPER LOGGING LTD.
FILE Type:	B01 - Road Permit	**Submission Date:**	2005-10-25
Submission Area:	0.0000	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:15000	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:	W0046 Read Island		
BCGS Reference Maps:	092K025, 092K025		



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FNR-2011-00232
Page 2

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Document name: G:\!Workgrp\ENGINEER\!Trent\Woodlt\RP04421\060717.doc DH/LW
File: ORCS 11400-20/R04421/06-01
ORCS 11400-25/R04421 (letter only

July 19, 2006

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R04421 designated Amendment Number R04421/06-01.

Your application received June 16, 2006 has been reviewed against the 2001-2008 Forest Development Plan approved August 30, 2001 for Woodlot License W0046, for the Read Island operating area. You are hereby authorized to proceed with the work on the section of road shown on the attached Exhibit A Map dated June 16, 2006. The following conditions apply:

1. Approved Road Sections

Sec. Designation on Exhibit A Map	Submission Length In kms	Licensee Road Name	Field Station (From)	Field Station (To)	Accessing Block No.
24	0.854	Spur 24	0+000	0+854	24

2. All operations are to conform to the Forest and Range Practices Act (FRPA). The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

The enclosed attachments form an integral part of Road Permit R04421 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

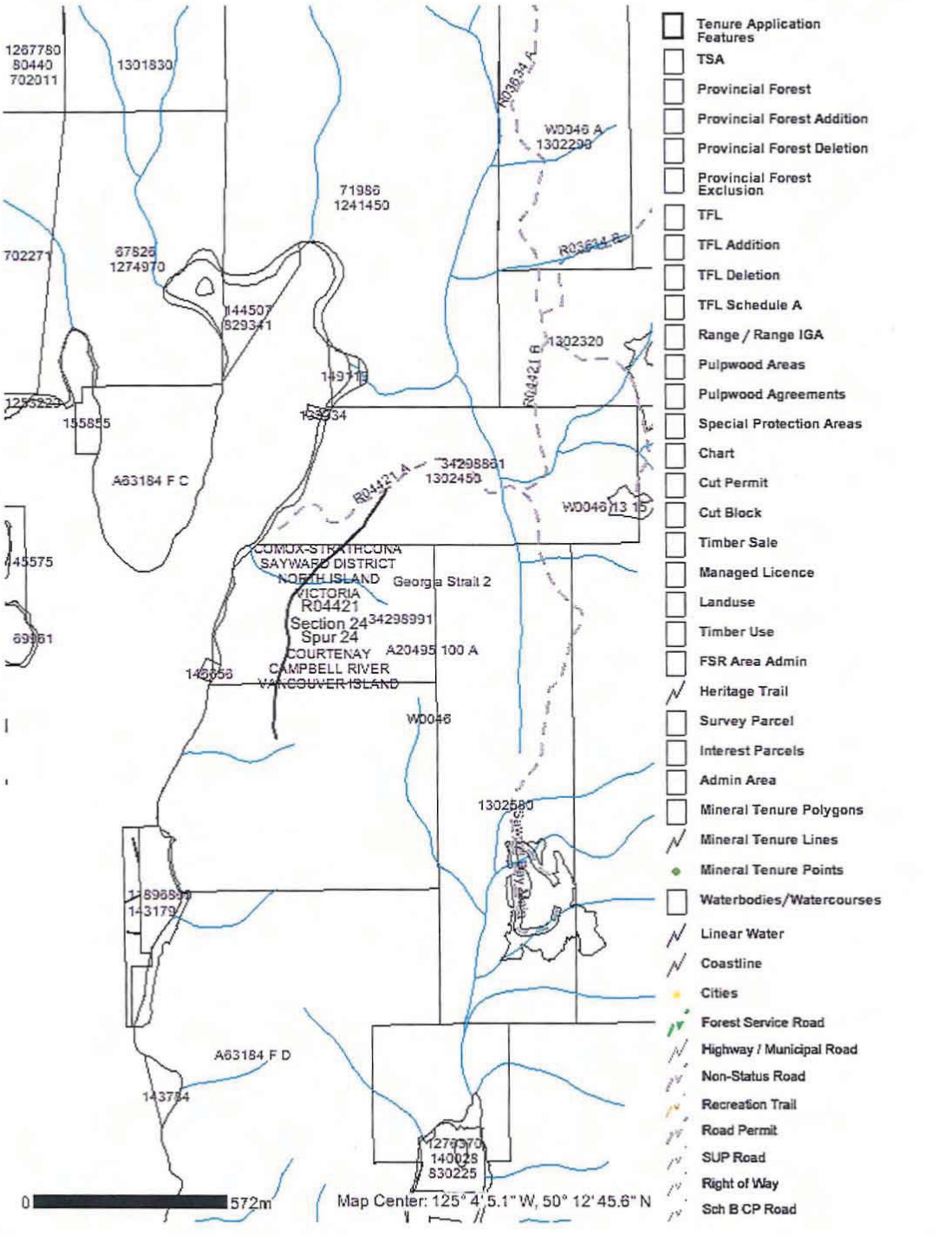
Attachment

pc: Compliance and Enforcement, Hugo Sloos (letter only)

Ministry of Forests and Range
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

FTA304 - Exhibit A - Tenure Map

FILE:	R04421	**Submitted By:**	HARPER LOGGING LTD.
FILE Type:	B01 - Road Permit	**Submission Date:**	2006-06-16
Submission Area:	0.0000	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:15000	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:	Read Island		
BCGS Reference Maps:	092K025		



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File: ORCS 11400-20/R04421/06-02
ORCS 11400-25/R04421 (letter only

November 7, 2006

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R04421 designated Amendment Number R04421/06-02.

Your application received June 16, 2006 has been reviewed against the 2001-2008 Forest Development Plan approved August 30, 2001 and minor amendment of October 2006 for Woodlot License W0046, for the Read Island operating area. You are hereby authorized to proceed with the work on the section of road shown on the attached Exhibit A Map dated October 16, 2006. The following conditions apply:

1. Approved Road Sections

Sec. Designation on Exhibit A Map	Submission Length In kms	Licensee Road Name	Field Station (From)	Field Station (To)	Accessing Block No.
24	1.0958	Spur 24	0+854	1+096	24
24A	0.1027	Spur 24A	0+000	0+103	24
24B	0.6468	Spur 24B	0+000	0+647	24
24C	0.2215	Spur 24C	0+000	0+221	24

2. All operations are to conform to the Forest and Range Practices Act (FRPA). The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

The enclosed attachments form an integral part of Road Permit R04421 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachment

Ministry of Forests and Range

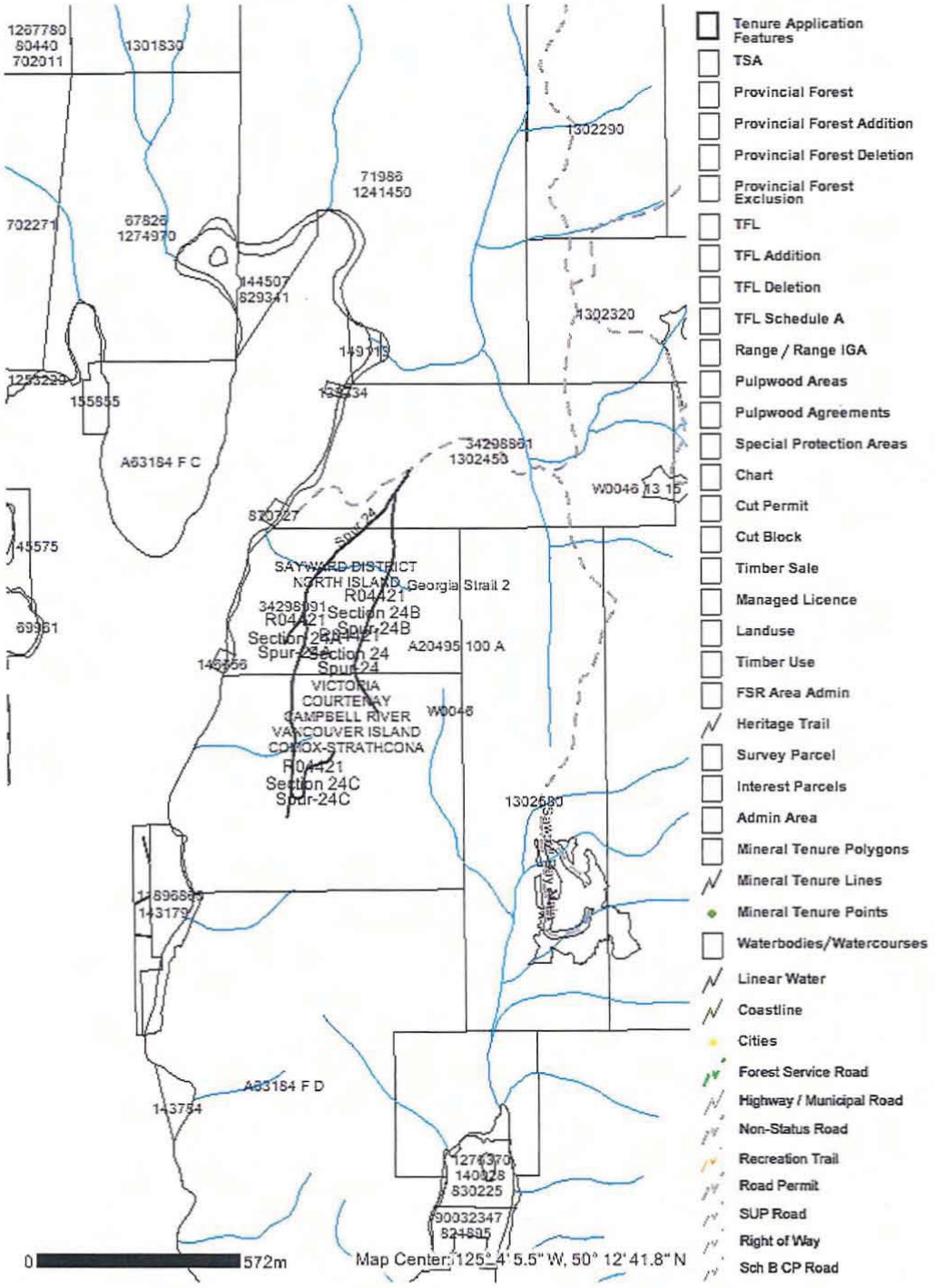
Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

FTA304 - Exhibit A - Tenure Map

FILE:	R04421	**Submitted By:**	HARPER LOGGING LTD.
FILE Type:	B01 - Road Permit	**Submission Date:**	2006-10-16
Submission Area:	0.0000	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:15000	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:	Read Island		
BCGS Reference Maps:	092K025, 092K025, 092K025, 092K025		



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File: ORCS 11400-20/R04421/07-01
ORCS 11400-25/R04421 (letter only

November 21, 2007

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R04421 designated Amendment Number R04421/07-01.

Your application received October 15, 2007 has been reviewed against the 2001-2008 Forest Development Plan approved August 30, 2001 and minor amendment of October 2006 for Woodlot Licence W0046, for the Read Island operating area. You are hereby authorized to proceed with the work on the section of road shown on the attached Exhibit A Map dated November 20, 2007. The following conditions apply:

1. Approved Road Sections

Sec. Designation on Exhibit A Map	Submission Length In kms	Licensee Road Name	Field Station (From)	Field Station (To)	Accessing Block No.
SPUR27	2.253	Spur 27	0+042	0+692	27
SPUR27A	0.177	Spur 27A	0+000	0+177	27
SPUR10A	0.167	Spur 10A	0+000	0+167	10A

2. All operations are to conform to the Forest and Range Practices Act (FRPA). The Forest Road Engineering Guidebook may be used as an aid in achieving code compliance.

Ministry of Forests and Range

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

3. The initial 1653 metres of Spur 27 are located on DL160 and DL161 both owned by Island Timberlands. This road permit amendment does not grant authority for the construction or use of any roads located on private land.

The enclosed attachments form an integral part of Road Permit R04421 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

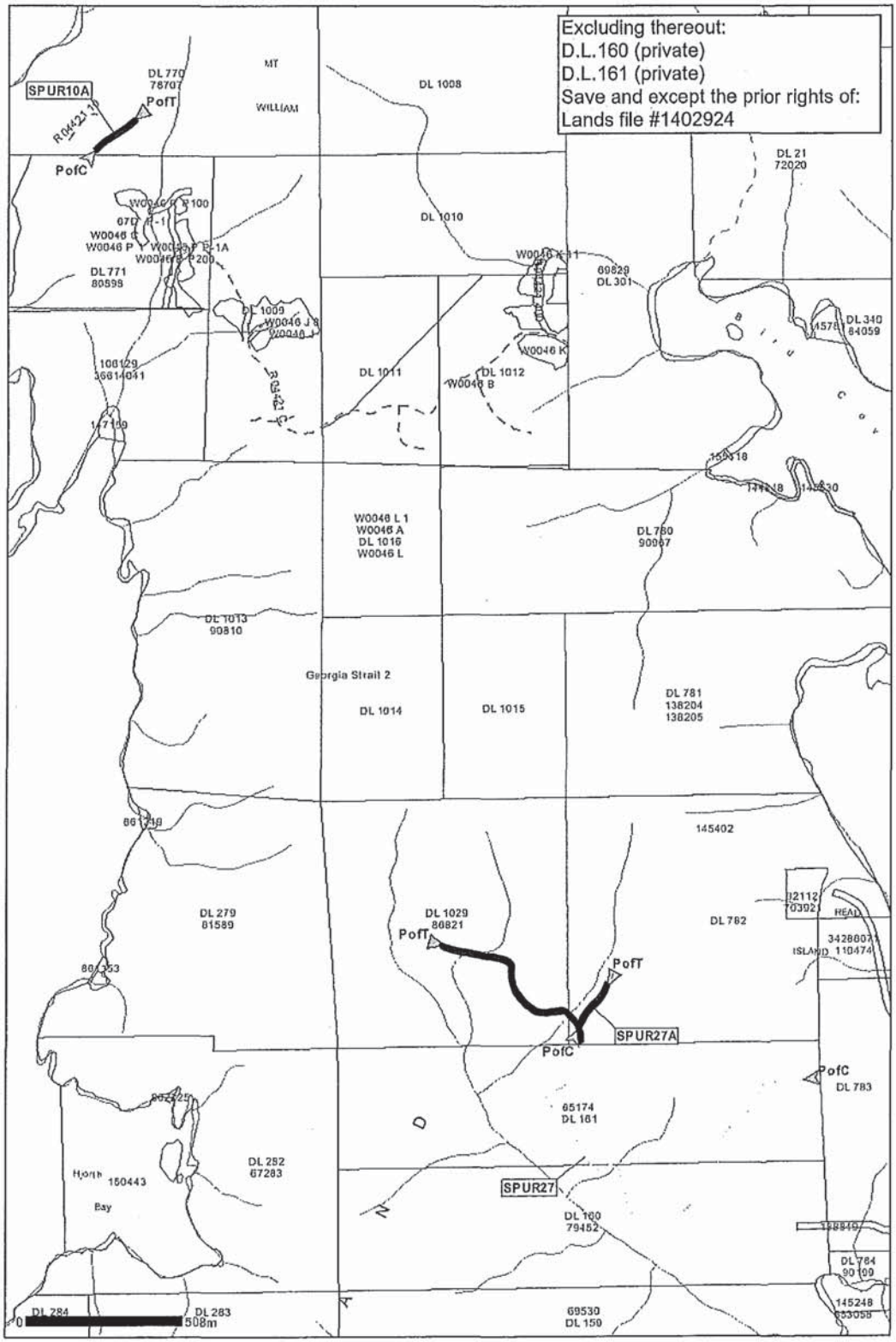
Attachment

BRITISH COLUMBIA

Ministry of Forests and Range

EXHIBIT A

MAP OF : R04421 Amendment # 4 (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : TIMBER SUPPLY AREA MGT UNIT NO : 39
ESF SUBMISSION ID : 379034 BCGS MAPSHEET NO : 92K.015	SCALE : 1:20000 at A Size Length (Km): 2.596	UTM : 10 NAD : NAD83	DRAWN BY : FTA DATE : Nov 20, 2007



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
- Non Status Road
- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

SPUR27 (Length: 2.2527 Km, R/W: 75 m)
PofC UTM10 350575, 5560933
PofT UTM10 349411, 5561426
SPUR27A (Length: 0.1768 Km, R/W: 75 m)
PofC UTM10 349840, 5561132
PofT UTM10 349942, 5561272
SPUR10A (Length: 0.1665 Km, R/W: 75 m)
PofC UTM10 348368, 5564086
PofT UTM10 348501, 5564183

FTA302 - Exhibit A Clearance

Back

ESF Date:	2007-10-09	**ESF ID:**	379034
Tenure Application ID:	123617		
Application Description:	Road Permit Amendment	**Ex A Image:**	Y
Client Number:	00001778 00	**Licensee:**	HARPER LOGGING LTD. 00

Object	Additional Action	Map Conflict	Additional Action Comments	Resol
R04421 SEC SPUR27	Exclude	File: 0000000 Description: DISTRICT LOT 161, SAYWARD DISTRICT (Legal Desc populated from related PIN(s)), (Conflict)	Excluding thereout D.L.161. Harper Logging states in Oct.15, 2007 letter to Greg Hemphill that a road agreement has been made with Island Timberlands to cross the private land.	
R04421 SEC SPUR27	Exclude	PIN: 1253190 Legal Description:DISTRICT LOT 161, SAYWARD DISTRICT (Conflict)	Excluding thereout D.L.161. Harper Logging states in Oct.15, 2007 letter to Greg Hemphill that a road agreement has been made with Island Timberlands to cross the private land.	
R04421 SEC SPUR27	Save and Except	File: 0000000 Description: DISTRICT LOT 160, SAYWARD DISTRICT (Legal Desc populated from related PIN(s)), (Conflict)	Excluding thereout D.L.160. Harper Logging states in Oct.15, 2007 letter to Greg Hemphill that a road agreement has been made with Island Timberlands to cross the private land.	
R04421 SEC SPUR27	Exclude	PIN: 1253060 Legal Description:DISTRICT LOT 160, SAYWARD DISTRICT (Conflict)	Excluding thereout D.L.160. Harper Logging states in Oct.15, 2007 letter to Greg Hemphill that a road agreement has been made with Island Timberlands to cross the private land.	
R04421 SEC SPUR27	Save and Except	File: 1402924 Description: DISTRICT LOT 182A, SAYWARD DISTRICT; DISTRICT LOT 781, SAYWARD DISTRICT; DISTRICT LOT 782, SAYWARD DISTRICT; DISTRICT LOT 783, SAYWARD DISTRICT;, (Conflict)	Save and except the prior rights of Lands file 1402924. Interest Information File #: 1402924 Document #: 71287 OIC/Ministry Order #: Status: Active Status Reason: Disposition In Good Standing Area (Ha) / Method: 6.5 / Converted Received Date: 11-Nov-1111 Effective Date: 23-Sep-1971 Expiry Date: 23-Sep-9999 Type: Reserve/Notation Subtype: Map Reserve Purpose: Transportation Subpurpose: Roadway Region: Vi - Land Mgmnt - Vancouver Island Service Region Location: Vic Read Island Crown Grant Covenants Timber Value: Timber Deferment: Unknown Surface/Under: Surface Resources: Restrictions: Interest Holders MINISTRY OF TRANSPORTATION	
R04421 SEC SPUR27A	Save and Except	File: 1402924 Description: DISTRICT LOT 182A, SAYWARD DISTRICT; DISTRICT LOT 781, SAYWARD DISTRICT; DISTRICT LOT 782, SAYWARD DISTRICT; DISTRICT LOT 783, SAYWARD DISTRICT;, (Conflict)	Save and except the prior rights of Lands file 1402924. Interest Information File #: 1402924 Document #: 71287 OIC/Ministry Order #: Status: Active Status Reason: Disposition In Good Standing Area (Ha) / Method: 6.5 / Converted Received Date: 11-Nov-1111 Effective Date: 23-Sep-1971 Expiry Date: 23-Sep-9999 Type: Reserve/Notation Subtype: Map Reserve Purpose: Transportation Subpurpose: Roadway Region: Vi - Land Mgmnt - Vancouver Island Service Region Location: Vic Read Island Crown Grant Covenants Timber Value: Timber Deferment: Unknown Surface/Under: Surface Resources: Restrictions: Interest Holders MINISTRY OF TRANSPORTATION	

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File: ORCS 11400-20/R04421/07-02
ORCS 11400-25/R04421 (letter only)

May 20, 2008

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

This is in regards to your application to amend Road Permit R04421 designated Amendment Number R04421/07-02.

Your application received March 11, 2008 has been reviewed against the Woodlot Licence Plan 2007-2017 approved December 20, 2007 for Woodlot Licence W0046, for the Read Island operating area. You are hereby authorized to proceed with the work on the section of road shown on the attached Exhibit A Map dated May 2, 2008. The following conditions apply:

1. Approved Road Sections

Sec. Designation on Exhibit A Map	Submission Length In kms	Licensee Road Name	Field Station (From)	Field Station (To)	Accessing Block No.
24	1.328	Spur 24	1+095	1+327	24
PKMAIN	0.720	PK Main	0+000	0+720	Future
SW150	0.189	Spur SW 150	0+000	0+192	Future

2. All operations are to conform to the Forest and Range Practices Act (FRPA). The Forest Road Engineering Guidebook may be used as an aid in achieving act compliance.

Ministry of Forests and Range

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

3. Your new Timber Mark for R04421 is WABER1. This letter cancel and replace Paragraph 4.00 Timber marks and Reporting in Road Permit R04421 document sent to you under cover letter May 1, 1997 and letter sent to you dated September 19, 2003, "For those roads shown highlighted on the applicable Exhibit "A" Map referred to in Paragraph 4.01 of the permit, the timber mark shall be WABER1."

The enclosed attachments form an integral part of Road Permit R04421 and should be attached thereto.

Yours truly,

Brian A. Hawrys R.P.F.,
District Manager
Sunshine Coast Forest District

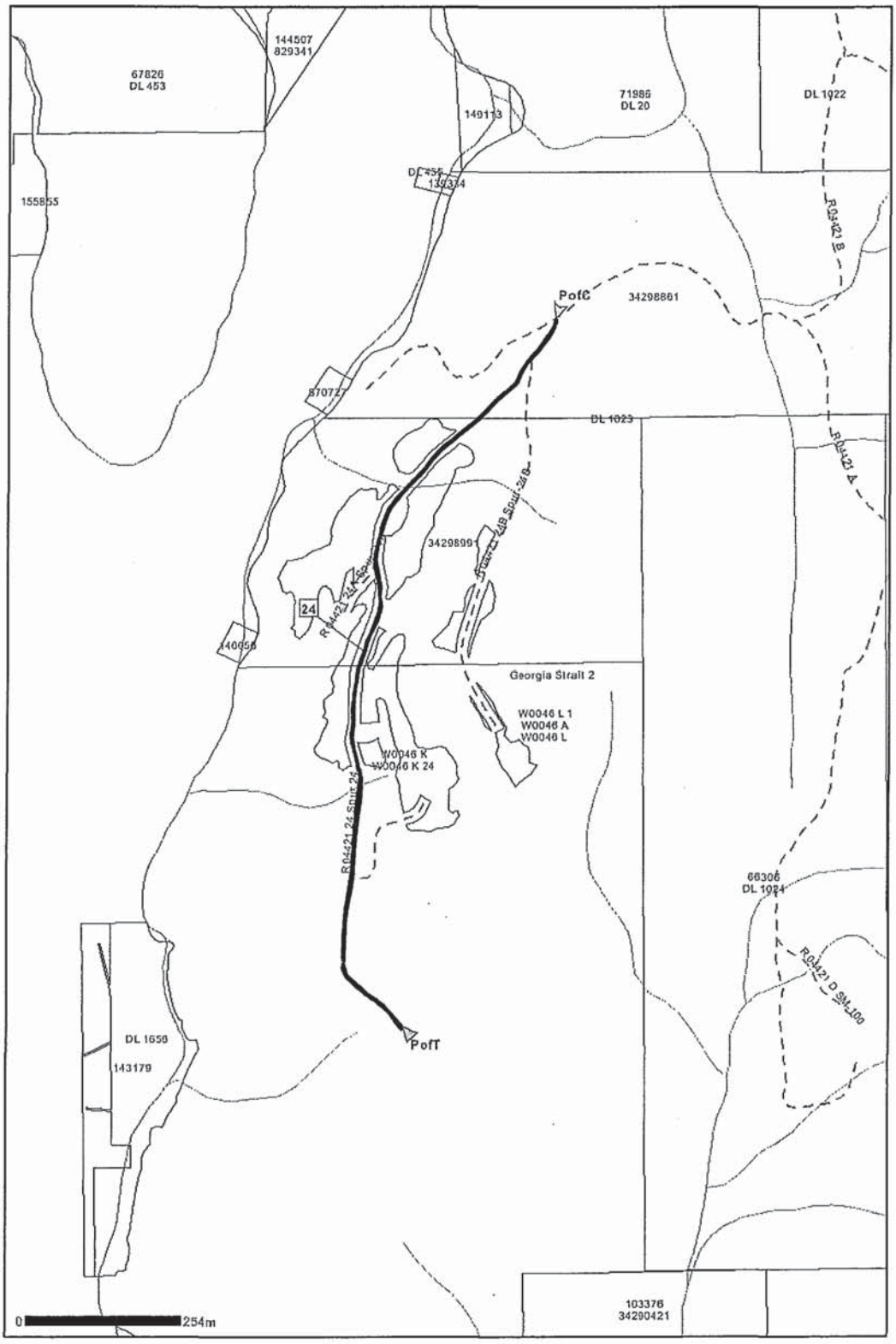
Attachment

BRITISH COLUMBIA

Ministry of Forests and Range

EXHIBIT A

MAP OF : R04421 Amendment # 5 (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : TIMBER SUPPLY AREA MGT UNIT NO : 39
ESF SUBMISSION ID : 447116 BCGS MAPSHEET NO : 92K.025	SCALE : 1:10000 at A Size Length (Km): 1.3276	UTM : 10 NAD : NAD83	DRAWN BY : FTA DATE : May 02, 2008



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
- Non Status Road
- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

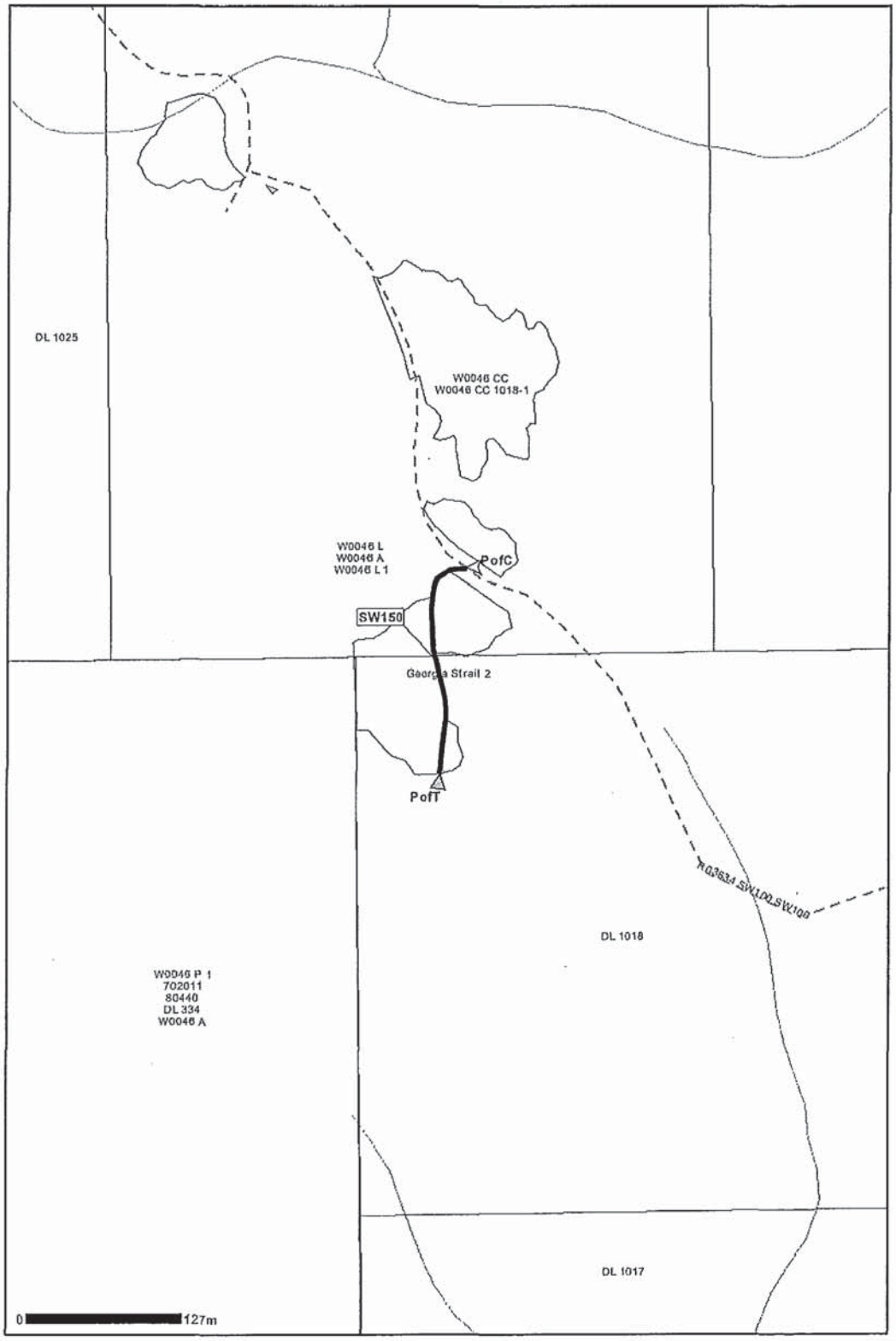
24 (Length: 1.3276 Km, R/W: 75 m)
PofC UTM10 352629, 5564685
PofT UTM10 352331, 5563533

BRITISH COLUMBIA

Ministry of Forests and Range

EXHIBIT A

MAP OF : R04421 Amendment # 5 (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : TIMBER SUPPLY AREA MGT UNIT NO : 39
ESF SUBMISSION ID : 447116 BCGS MAPSHEET NO : 92K.025	SCALE : 1:5000 at A Size Length (Km): 0.1885	UTM : 10 NAD : NAD83	DRAWN BY : FTA DATE : May 02, 2008



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
- Non Status Road
- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

SW150 (Length: 0.1885 Km, R/W: 75 m)
PofC UTM10 351853, 5566696
PofT UTM10 351825, 5566529

BRITISH COLUMBIA

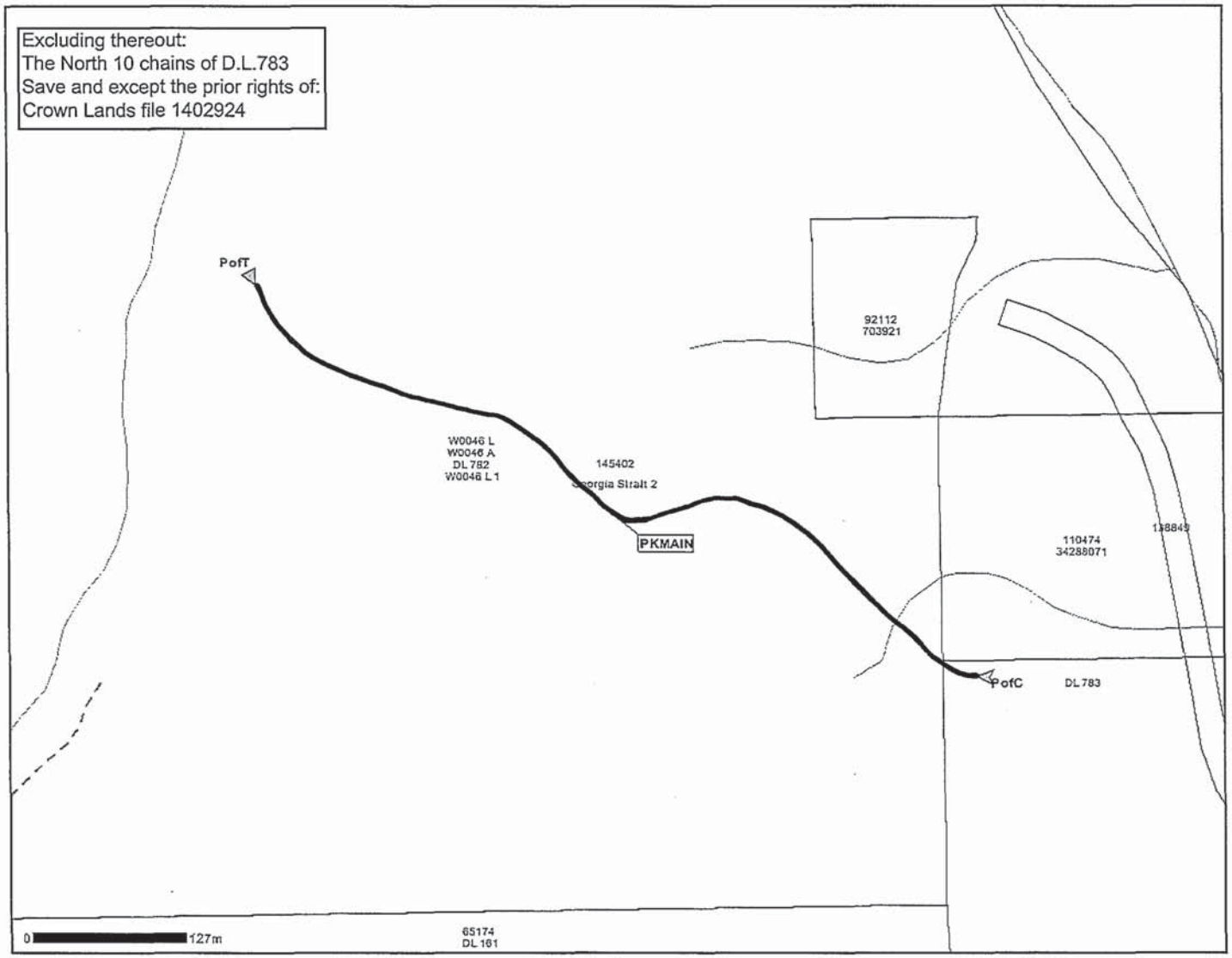
Ministry of Forests and Range

EXHIBIT A

MAP OF : R04421 Amendment # 5 (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : TIMBER SUPPLY AREA MGT UNIT NO : 39
ESF SUBMISSION ID : 447116 BCGS MAPSHEET NO : 92K.015	SCALE : 1:5000 at A Size Length (Km): 0.7203	UTM : 10 NAD : NAD83	DRAWN BY : FTA DATE : May 02, 2008

N W E S

Excluding thereout:
The North 10 chains of D.L.783
Save and except the prior rights of:
Crown Lands file 1402924



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
- Non Status Road
- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

PKMAIN (Length: 0.7203 Km, R/W: 75 m)
PofC UTM10 350663, 5561247
PofT UTM10 350086, 5561593

BRITISH
COLUMBIA

File: ORCS 11400-20/R04421/11-01
ORCS 11400-25/R04421 (letter only)

October 13, 2011

Harper Logging Ltd. and
Evans Bay Contracting Ltd.
PO Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear David and Harper Graham:

You are hereby authorized to proceed with the work, as per your application dated August 1, 2011, on the sections of road shown on the attached Exhibit A Map dated August 23, 2011.

This letter and enclosed Exhibit A Map form an integral part of Road Permit R04421 and should be attached thereto.

Yours truly,

Mark Anderson, R.P.F.
District Manager
Sunshine Coast District

Enclosure

ec: Paul Kutz

Ministry of Forests,, Lands and Natural Resource Operations

Sunshine Coast District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

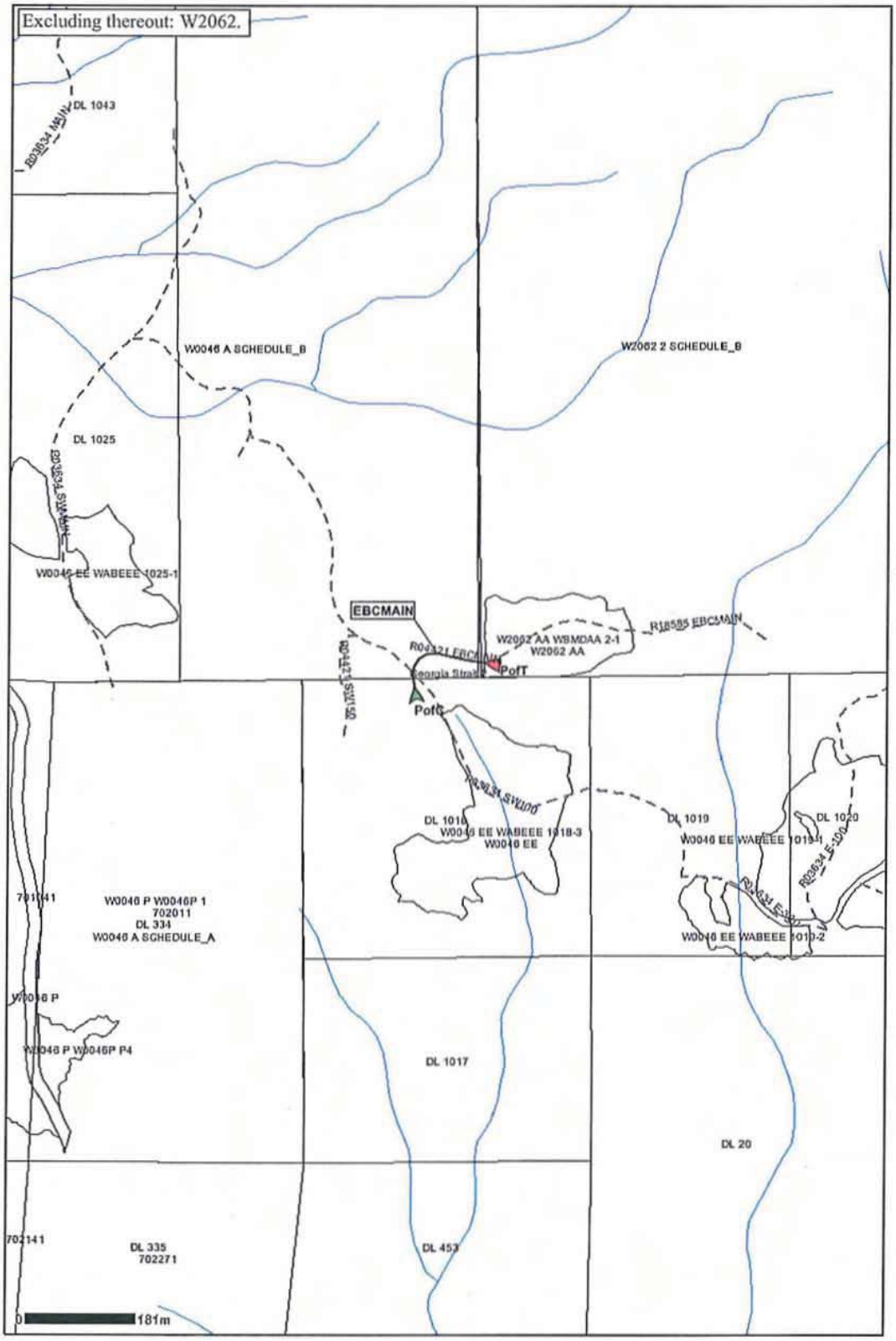
Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA

Ministry of Forests and Range

EXHIBIT A

MAP OF : R04421 Amendment # 7 (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : TIMBER SUPPLY AREA MGT UNIT NO : 39
ESF SUBMISSION ID : 929159 BCGS MAPSHEET NO : 92K.025	SCALE : 1:10000 at A Size Length (Km): 0.162	UTM : 10 NAD : NAD83	DRAWN BY : FTA DATE : Aug 23, 2011



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
- Non Status Road
- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

EBCMAIN (Length: 0.1616 Km, R/W: 75 m)
PofC UTM10 351945, 5566608
PofT UTM10 352062, 5566643

PROVINCE OF BRITISH COLUMBIA

FOREST LICENCE, TREE FARM LICENCE, OR TIMBER SALE LICENCE NO. A20495

ROAD PERMIT NO. R04421

THIS ROAD PERMIT, ISSUED TO:

Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

(the "Permittee")

This Road Permit is issued under Section 115 the *Forest Act*.

1.00 GRANT OF RIGHTS

1.01 Subject to the *Forest Act* and its Regulations, and the *Forest Practices Code of B.C. Act*, and its Regulations and Standards, the District Manager grants to the Permittee the right to either:

(a) construct or modify the road to the standards/specifications described in the attached Schedules and to the extent necessary harvest from the Clearing Area, that Crown timber described in the attached schedules, that must be logged in order to construct or modify the road and use and maintain the road, or
(b) use and maintain the road according to the requirements described in the attached Schedules.

2.00 PERMIT AREA AND TERM

2.01 The Permit Area is that land shown highlighted on the map(s) attached to this Road Permit.

2.02 The term of this Road Permit shall begin on June 15, 1997, and terminate on the date when the District Manager notifies the Permittee in writing that the road has been permanently deactivated to his satisfaction, or that future use of the road by others will preclude the need for permanent deactivation.

3.00 PAYMENTS

3.01 Immediately on receipt of a statement or notice issued on behalf of the Crown in respect of timber harvested under this Road Permit, the Permittee shall pay to the Crown

(a) stumpage at rates determined, redetermined and varied under the *Forest Act*,
(b) a bonus bid in the amount of $ N/A /m3 in respect of timber harvested under this Road Permit; and
(c) any charges made in respect of an assessment under paragraph 6.03 of the Road Permit.

4.00 TIMBER MARKS AND REPORTING

4.01 For purposes of the Forest Act, the timber mark for this Road Permit shall be that mark specified in the Schedule. The Permittee shall not remove timber from the "Clearing Area" unless the timber has been conspicuously marked, in the manner prescribed in the regulations, with the specified timber mark.

4.02 The Permittee shall report promptly information regarding timber harvested under this Road Permit in accordance with the *Forest Act* and the Schedule.

5.00 TIMBER UTILIZATION STANDARDS

5.01 The Permittee shall harvest timber under this Road Permit in accordance with the timber utilization standards set out in the Schedule.

6.00 RESIDUE AND WASTE

6.01 The Permittee, as required by the District Manager, will determine and report to the District Manager, the residue and waste left after harvesting under this Road Permit in accordance with the procedures found in the Ministry of Forests "Provincial Logging Residue and Waste Measurement Procedures Manual", as amended from time to time.

6.02 If the Permittee fails to perform its obligations under paragraph 6.01, then the District Manager may make such a determination.

6.03 Immediately upon receipt of a statement or notice issued by the Crown, the Permittee shall pay to the Crown as liquidated damages, a waste assessment equal to the total of:

(a) the volume of avoidable waste determined under paragraph 6.01 or in its absence, the volume of avoidable wasted determined under paragraph 6.02, multiplied by the Average Billed Stumpage rate for the timber mark, and

(b) if a determination was generated pursuant to paragraph 6.02, the reasonable costs incurred by the Crown in preparing that determination.

7.00 PLANS, SPECIFICATIONS, AND FIELD PRACTICES

7.01 In building, modifying, maintaining and using the road under this Road Permit, the Permittee shall:

(a) comply with the plans and specifications set out in this Road Permit and in the Schedule attached to this Road Permit, where applicable, and with a Forest Development Plan;

(b) obtain the necessary permits or authorization for the crossing of alienated lands including but not limited to powerlines, pipelines, railroads, public roads, mineral claims, A.L.R.'s;

(c) obtain the necessary permits or authorization from other resource agencies.

7.02 The issuance of this permit constitutes approval of the road layout and design required under Section 60 of the *Forest Practices Code of B.C. Act* for the roads shown highlighted on the map(s) attached to the permit.

7.03 The Permittee shall not obstruct or damage this or any other road or recreation trail as a result of timber harvesting or related operations carried on under this Permit.

7.04 The Permittee shall ensure that any gate erected in accordance with Section 55 of the *Forest Practices Code of British Columbia Act* shall not be, or become, a hazard to the users of the road. Subject to the approval of the District Manager, the gate shall be placed in a conspicuous location, adequately marked with permanent reflective material to be clearly visible to the operator of a motor vehicle from a safe stopping distance. Warning signs shall be located to give vehicle operators adequate warning of the obstruction.

8.00 ROAD PERMITS FOR WOODLOT LICENCES

- Where this road permit is issued to the holder of a Woodlot Licence, the District Manager may require a deposit in the amount of $ N/A in the form of cash or other acceptable security, as security for the Permittee's performance of its obligations under this permit. If the Permittee fails to perform its obligations under this Permit, the District Manager may perform the obligation on the Permittee's behalf.

- If a Permittee's obligation is performed by the District Manager, the District Manager may debit the deposit and require the Permittee, on demand, to replenish the deposit by paying an amount of money equal to the costs incurred by the Ministry in performing the obligation on behalf of the Permittee.

9.00 MISCELLANEOUS

9.01 The Permittee is designated as the principal contractor as described in Section 4.02(4) of the *Industrial Health and Safety Regulations of the Workers' Compensation Board of B.C.* and shall carry out the duties of the principal contractor as described therein.

9.02 In accepting this Road Permit, the Permittee acknowledges that it is bound by the provisions of this Road Permit.

9.03 The Permittee acknowledges that the Schedules form a part of the Road Permit and that the Permittee is bound by the provisions set out in the Schedule. Where the Schedules conflict with this Road Permit, the Schedules shall prevail.

9.04 There is reserved to the Crown:
(a) the right to grant rights-of-way across, through or over the Permit Area to other parties, on such terms and conditions as the District Manager determines; and
(b) the right of employees and agents of the Crown to use and to cross the road and the Permit Area;
but the exercise of the Crown's rights under this paragraph shall not unreasonably impede or obstruct the Permittee's reasonable use of the road.

9.05 Upon termination or cancellation of this permit:

(a) title to all improvements that are fixed to the Crown land under this Road Permit, shall vest in the Crown without compensation to the Permittee
(b) for the purposes of this Road Permit, all bridges are considered to be fixed except those identified in the Schedule(s) as specifically exempted by the District Manager.

9.06 This Road Permit shall enure to the benefit of, and be binding on, the parties and their respective heirs, executors, successors and permitted assigns.

9.07 Where this road is the subject of a Road Use Permit and the Permittee and the holder of the Road Use Permit cannot agree on the terms and conditions of a road use agreement, the Permittee may agree to have the matter referred to the District Manager pursuant to Section 70(4) of the *Forest Practices Code of B.C. Act*.

10.00 INTERPRETATION

10.01 Definitions of terms not defined in this Road Permit shall have the same meaning as that given in the *Forest Act*, its Regulations or the Licence. In cases of conflict, the definition in the Licence shall govern

10.02 In this Road Permit:

(a) "Average Billed Stumpage rate" means the weighted average billed stumpage rate, inclusive of bonus bid, for the twelve months up to and including the calendar month immediately following the completion of primary logging under this Road Permit, for the timber required to be removed under paragraph 5.01;

(b) "Clearing Area" means that area of land bounded by the outer limits of the clearing width as described in the Forest Road Regulation, and the length of road shown highlighted on attached maps;

(c) "Permit Area" means that area of land, bounded by the outer limits of the statused right-of-way and the length of road shown highlighted on attached maps;

(d) "Licence means the (Tree Farm Licence, Forest Licence, or Timber Sale Licence) describe at the beginning of this Road Permit;

(e) "Schedule" means the Schedule attached to the Road Permit;

(f) "waste" means waste as defined in the Ministry of Forests "Provincial Logging Residue Waste Measurement Procedures", as amended from time to time;

(g) "residue" means residue as defined in the Ministry of Forests "Provincial Logging Residue Wastes Measurement Procedures", as amended from time to time.

11.00 NOTICE

11.01 A notice given under this Road Permit must be in writing.

11.02 Where a notice is to be given under this Road Permit, it may be
(a) delivered by hand; or
(b) sent by prepaid registered mail addressed to the address
(i) specified on the first page of this Road Permit; or
(ii) to such other address as is specified in a notice given in accordance with this Part.

ISSUED on May 1, 1997 by)
the District Manager on behalf of)
Her Majesty the Queen in right of)
the Province of British Columbia)
in the presence of:)
Valerie Mauka)

Greg Hemphill, District Manager
Sunshine Coast Forest District

F.S. 582A ENG 95/6

SCHEDULE 'B'

Utilization Standards/"Other Timber Requirements"

For Use on the Coast:

- The timber mark shall be a timber mark that is applicable to timber to which the road provides access and so designated by the District Manager.

Timber Utilization Standards, pursuant to paragraph 5.01:

In accordance with applicable cutting permit.

SCHEDULE 'C'

Special Provisions

- Site-specific prescriptions
- Vegetation specifications shall be coastal seed reclamation mix
- If this is a replacement road permit under Section 237 of the *Forest Practices Code of British Columbia Act*, all plans, profiles, cross sections, detailed terrain reports and other attachments, as applicable, contained in the original road permit remain in effect and form an integral part of this permit.

g:\engineer\ghbrowne\rdpermit.doc

Province of British Columbia
Ministry of Forests

MAP OF ▸ R04421

EXHIBIT 'A'

U.T.M.	Zone	East	North	Reg	Compt.	L
Grid	10	350200	5563500	30	10	

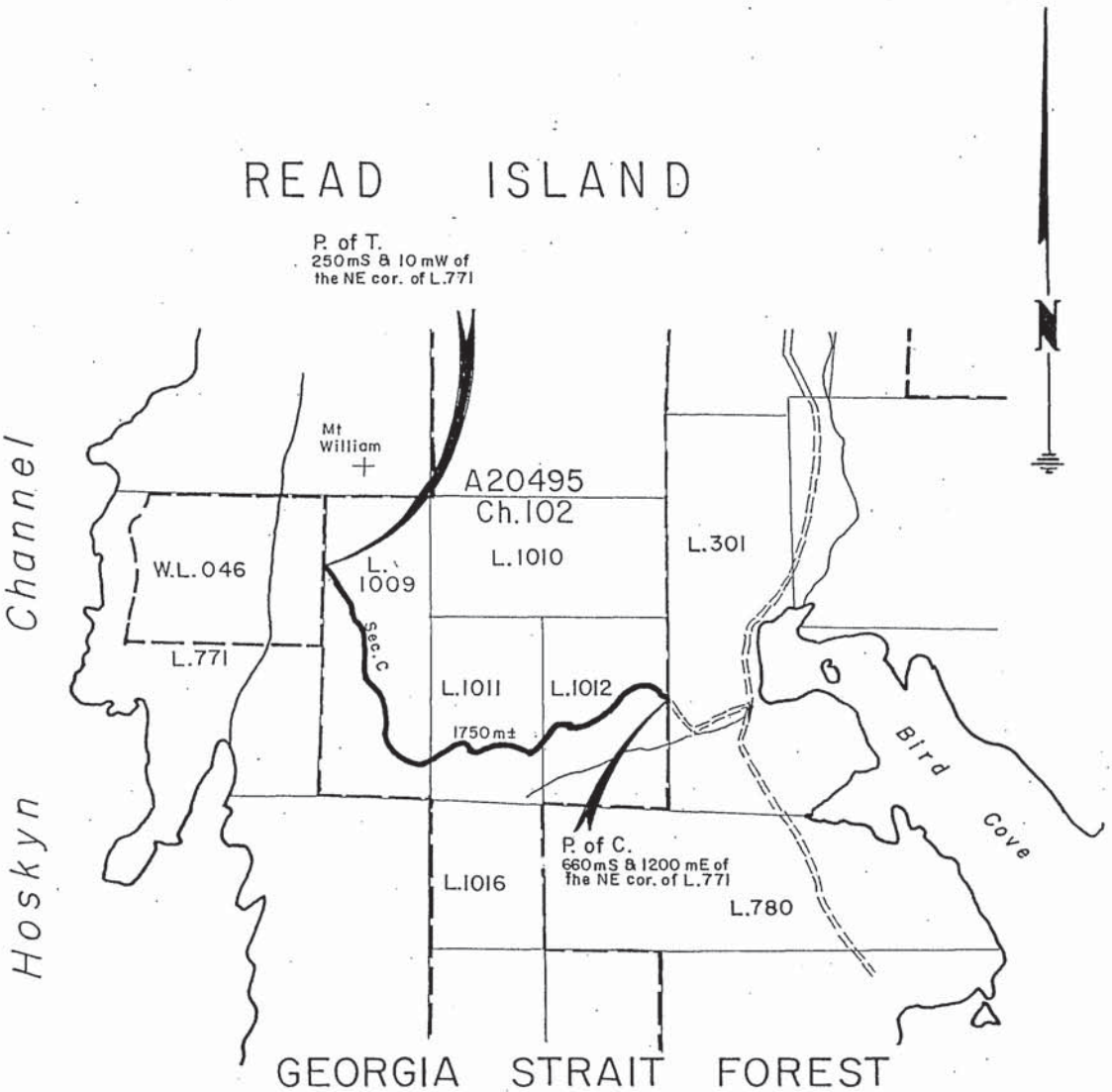
Date 93-02-23.
Ref. Map 92K.025
Base Used 92K.015, 025
Scale 1: 20,000
Area ..... hectares

FOREST REGION ▸ 01 VANCOUVER
LAND DISTRICT ▸ 50 SAYWARD
DISTRICT ▸ 15 SUNSHINE COAST
OUTLINE ▸

MANAGEMENT UNIT	TIMBER SUPPLY AREA	PULPWOOD AGREEMENT	CASCADES
Type 0 P.S.Y.U.	Number 39 SUNSHINE COAST		
Number 64 QUADRA	Block 52 POWELL RIVER		East
Block	Sub-B		West C

Width of R/W 20 m

Map 2 of 2



Drawn by T.M.R.

Ministry of Forests
7077 Duncan Street
Powell River, British Columbia
V8A 1W1
Tel: 485-0700 Fax: 485-0799

Distribution: NP
Document name: g:\temp\timbform\tp004.doc TP
CONTACT: , , , Tel:
Date typed: 93/10/18 Date revised: 93/10/18 09:20 am

File: R04421

October 18, 1993

Mr.Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Mr. Graham:

Road Permit RO4421 is hereby amended as shown in bold black on the attached Exhibit A sketch dated 93-02-23.

This road permit amendment is not to be construed as an actual or tactic approval of proposed harvest blocks. Final approval of harvest blocks will only be completed where cutting permit is issued, after all relevant Pre-harvest Silviculture Prescriptions are approved.

This letter forms an integral part of the document for this road permit and should be attached thereto.

Yours truly,

G Hemphill.

Greg Hemphill
District Manager
Sunshine Coast Forest District

Province of British Columbia
Ministry of Forests

MAP OF ▸ R04421

EXHIBIT 'A'

U.T.M.	Zone	East	North	Reg	Compt.	L
Grid	10	350200	5563500	30	010	

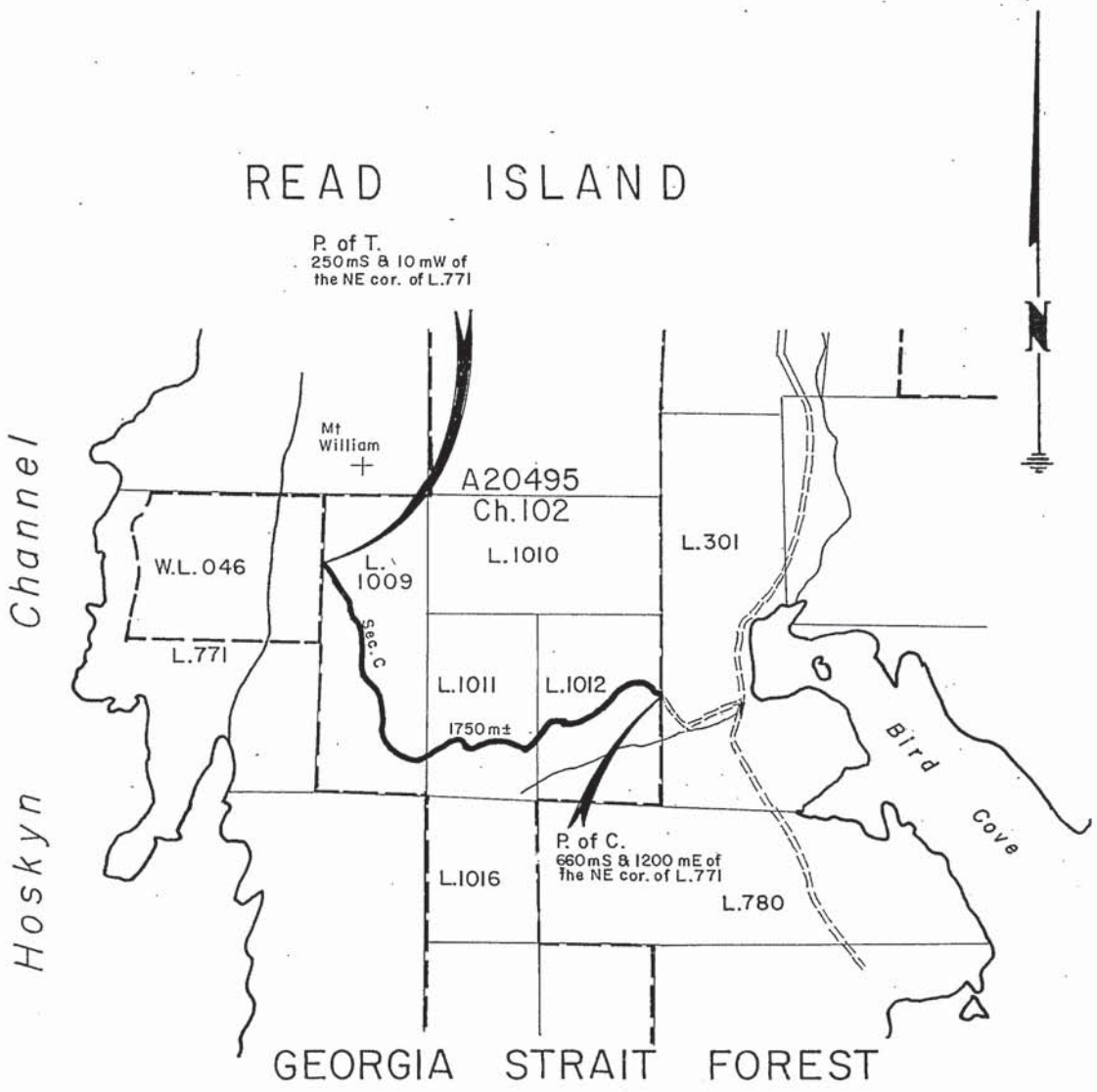
FOREST REGION ▸ 01 VANCOUVER
LAND DISTRICT ▸ 50 SAYWARD
DISTRICT ▸ 15 SUNSHINE COAST
OUTLINE ▸ ——

Date 93-02-23
Ref. Map 92K.025
Base Used 92K.015, 025
Scale 1: 20 000
Area ..... hectares

MANAGEMENT UNIT	TIMBER SUPPLY AREA	PULPWOOD AGREEMENT	CASCADES
Type 0 P.S.Y.U.	Number 39 SUNSHINE COAST		
Number 64 QUADRA	Block 52 POWELL RIVER		East
Block	Sub-B		West C

Width of R/W 20 m

Map 2 of 2



Drawn by C.R.T.

Ministry of Forests
7077 Duncan Street
Powell River, B.C.
V8A 1W1

April 9, 1991

File: RO4421

Harper Logging Ltd.
Box 299
Heriot Bay, B.C.
V0P 1H0

Dear Sirs:

Re: Road Permit RO4421

Pursuant to authority contained in the Permit, extension is hereby granted terminating on December 31, 1992. Upon that date all your rights under this Permit will cease.

This notice forms an integral part of the Permit and should be attached thereto.

Yours truly,

J. B. Mountain

J.B. Mountain
District Manager
Sunshine Coast Forest District

!0003E/tp
!cc: Timber Harvesting Branch Victoria
!cc: Vancouver Forest Region

Ministry of Forests
7077 Duncan Street
Powell River, B.C.
V8A 1W1

June 8, 1989

File: RO4421

Harper Logging Ltd.
575 Ash Street
Campbell River, B.C.
V9W 5L8

Dear Sir(s):

We now enclose Road Permit No. RO4421, issued to cover a logging road right-of-way, located on Read Island, Sayward Land District. Right-of-way timber shall be marked to T.S.L. A20495, and to the cutting permit to which it is appropriate.

As the Road Permit provides access to foreshore, any use of the foreshore must be authorized by lease granted by the Ministry of Crown Lands.

Yours truly,

J. B. Mountain

J.B. Mountain
District Manager
Sunshine Coast Forest District

!cc. Victoria - Timber Management Branch
!cc. Vancouver Regional Office
!cc. Area Assessor - Assessment District #6 - Courtenay
!/ds

NOTE TO AREA ASSESSOR: A DECLARATION OF NON-OWNERSHIP MAY FOLLOW. PLEASE CHECK WITH THIS OFFICE PRIOR TO ASSESSMENT

Barb Ilnicki June 17/89

Province of British Columbia

Ministry of Forests

FOREST SERVICE

ROAD PERMIT
(Build, Modify and Use)

No. R04421

June 6, 19 89

HARPER LOGGING LTD.
("Permittee")

575 Ash Street

Campbell River, B.C
(address)

V9W 5L8

1.00 *Grant of Rights, Right of Way and Term*

1.01 Subject to this Permit and in consideration of the Permittee's covenants in it, the Regional Manager or the District Manager grants to the Permittee

(a) the right during the term of this Permit to clear the right of way, and to build, modify and use a road on the right of way (the "road"), according to this Permit and to plans and specifications approved under it, and

(b) the right during the term of this Permit to harvest from the right of way timber designated for harvesting under this Permit.

1.02 The right of way is the land shown outlined in bold black line on the map attached to this Permit, except land that is excluded in notations made on the map.

1.03 The term of this Permit shall begin on June 6, 19 89, and, unless it is extended by the Regional Manager or the District Manager, shall terminate on ~~XXXXXXXXXXXXXXXXXXX~~ the completion of active use for the transportation of forest products.

2.00 *Plans, Specifications, Field Practices and Water Resources*

2.01 In building, modifying, maintaining and using the road under this Permit, the Permittee will comply with the plans and specifications set out in this Permit and in the Schedule attached to this Permit.

2.02 In clearing and grubbing the right of way, the Permittee will,

(a) cut down all trees and brush within
3 m of the tops of cuts and within
3 m of the toes of fills,

(b) confine all clearing and grubbing work to the right of way unless otherwise authorized in writing by a Forest Officer,

(c) fell all trees onto the right of way prior to any building, fell all trees that are pushed or knocked over or otherwise caused to lean over during the clearing operations, and buck all felled trees into lengths suitable for manufacture into logs or special forest products, deck them within the edge of the right of way and remove and utilize them as soon as road conditions permit,

(d) dispose of slash and debris concurrently or in phase with building or modifying the road, unless a Forest Officer determines otherwise,
  (i) by either piling in the centre of the right of way and burning, or by burying within the right of way in areas designated by the Forest Officer,
  (ii) according to the Schedule attached to this Permit,

(e) yard onto the right of way and buck according to subparagraph (c), all trees that are felled in a manner as to lie outside the right of way, or that hang up on trees adjacent to the right of way, and carry out yarding in a manner that prevents damage to standing trees outside the right of way.

2.03 In respect of operations carried on under this Permit, the Permittee will not permit

(a) a lake, stream or spring that supplies water for any purpose to be rendered unfit for that purpose, or

(b) trees, logs, logging debris or any polluting substance to be deposited into a lake, stream, or spring, unless authorized by a Forest Officer, or

(c) logs to be skidded or equipment to be operated below the high-water mark of a lake or stream, unless authorized by a Forest Officer, or

(d) any obstruction, gravel, or fill to be placed below the high-water mark of a lake or stream, unless authorized by a Forest Officer, or

(e) a landing to be located within 40 m of a lake or stream or in an area that is not designated for harvesting in this Permit, unless authorized by a Forest Officer, or

(f) slash to be burned closer to a lake or stream than the distance specified by a Forest Officer.

2.04 In respect of operations carried on under this Permit, the Permittee will

(a) remove logging, milling and road-building debris deposited in and on banks of lakes and streams.

(b) direct falling and yarding of timber away from lakes and streams and their banks,

(c) protect natural growth in and on the banks of lakes and streams from damage from logging and burning,

(d) build a bridge or install a culvert at every stream crossing, designed to accommodate the maximum flow of the stream and to permit unobstructed fish passage, and

(e) schedule the building of stream crossings,

as directed by a Forest Officer.

2.05 In building, modifying, maintaining and using the road, the Permittee will

(a) build the subgrade to a width, to be at least .....5.....m, shoulder to shoulder,

(b) build turnouts, at intervals permitting safe passing of vehicles,

(c) install and maintain culverts of adequate size, type and length, according to accepted culvert and drainage practice, at intervals sufficient to prevent damage to the road and the adjacent lands, or take other measures that provide adequate drainage to prevent erosion,

(d) build water bars or open culverts on the road, according to specifications and locations determined by a Forest Officer,
(i) on or before the expiry of the term of this Permit, and
(ii) on annual termination of logging operations to which the road provides access, and
(iii) on such other times as deemed necessary by a Forest Officer,

(e) build the road in a manner to cause the least damage to the environment, to the satisfaction of the Regional Manager,

(f) maintain the road and right of way in a manner that adequate drainage occurs at all times and comply with the maintenance provisions set out in the Schedule attached to the Permit, and

(g) use the road and right of way in a manner to prevent damage to the road and right of way and comply with the provisions for use set out in the Schedule attached to the Permit.

3.00 *Financial*

3.01 In addition to other money payable by the Permittee under the *Forest Act* and under this Permit, the Permittee will pay to the Crown, immediately on receipt of a statement issued on behalf of the Crown,

(a) in respect of Crown timber cut under this Permit and not used in building or modifying the road, stumpage at the rates provided for under paragraph 3.02 or 3.03,

(b) scaling fees determined under the regulations, and

(c) waste and damage assessments under part 6.00.

3.02 If a timber mark is specified in paragraph 4.01, the stumpage rates payable in respect of timber cut under this Permit shall be as determined by a forest officer and such stumpage rates may be varied according to the Schedule attached to this Permit.

3.03 If the Regional Manager or the District Manager designates a timber mark under subparagraph 4.01(b), the stumpage rates payable in respect of timber cut under this Permit are the stumpage rates applicable, from time to time, to timber required to be marked with the timber mark so designated.

4.00 *Timber Marks and Scaling*

4.01 The Permittee will not permit timber to be removed from the right of way unless the timber has been conspicuously marked, in the manner prescribed in the regulations,

(a) n/a with the timber mark specified opposite this paragraph, or

(b) if no timber mark is specified opposite this paragraph, with a timber mark that is applicable to timber to which the road provides access and that is designated in writing, from time to time, by the Regional Manager or District Manager.

4.02 Timber cut under this Permit shall, subject to the *Forest Act*, be scaled according to the *Forest Act*.

5.00 *Utilization Standards and Forest Practices*

5.01 The Permittee will cause timber harvesting operations carried on under this Permit to conform to the utilization standards set out in the Schedule attached to this Permit.

5.02 The Permittee will cause the cutting specifications set out in the Schedule attached to this Permit to be followed.

5.03 The Permittee will not permit a road or trail to be obstructed or damaged by timber harvesting or related operations carried on under this Permit, unless authorized by the Regional Manager, District Manager or a Forest Officer.

6.00 *Waste and Damage Assessments*

6.01 If

(a) timber that is designated to be cut under this Permit is not cut, or

(b) timber is utilized below the standard of utilization in specifications set out in the Schedule attached to this Permit, or

(c) timber that is required under this Permit to be removed from Crown land is not removed,

the Regional Manager may deliver to the Permittee an estimate of the volume of each species of timber uncut, not utilized or not removed, as the case may be.

6.02 Where the Permittee receives an estimate under paragraph 6.01, it will pay to the Crown, as liquidated damages, a waste assessment equal to the total of

(a) the reasonable costs incurred by the Crown in preparing the estimate, and

(b) the volume of each species estimated under paragraph 6.01, multiplied by the stumpage rate last applicable to the species under this Permit.

6.03 Where the Regional Manager or the District Manager requires it, the Permittee will estimate the volume of each species of timber referred to in paragraph 6.01.

6.04 Damages to timber will be assessed according to the *Forest Act*.

7.00 *Crown Rights*

7.01 There is reserved to the Crown,

(a) the right to grant rights of way across, through or over the right of way to other parties, on such terms and conditions as the Regional Manager or the District Manager determines, and

(b) the right of employees and agents of the Crown to use and to cross the road and the right of way.

but the exercise of the Crown's rights under this paragraph shall not impede or obstruct the Permittee's reasonable use of the road.

8.00 *Liability and Indemnity*

8.01 The Permittee will indemnify the Crown against and will save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses it faces as a result, directly or indirectly, of the condition of the road or the operation of any vehicle on the right of way by the Permittee, his employees or persons who perform work either directly or indirectly under contract with him.

8.02 Paragraph 8.01 does not apply to an act or omission that is a reasonable response to, and complies with, an order made on behalf of the Crown.

8.03 Where the Permittee fails to perform an obligation it is required to perform under this Permit,

(a) the Regional Manager, or the District Manager may perform the obligation on the Permittee's behalf, and

(b) the Permittee will on demand pay the Crown an amount of money equal to the reasonable costs incurred under subparagraph (a) to perform the obligation.

8.04 The Crown will indemnify the Permittee against and will save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses it faces, as a result, directly or indirectly, of wrongful acts or omissions on the right of way of the Crown, its employees, agents and contractors.

9.00 *Termination*

9.01 If this Permit expires or is terminated or is cancelled under the *Forest Act*,

(a) title to all improvements, including bridges, then fixed on Crown land on the right of way shall vest in the Crown, without compensation to the Permittee, and

(b) property in logs and in special forest products as defined in the *Forest Act*, then on Crown land shall pass to the Crown, without compensation to the Permittee.

10.00 *Miscellaneous*

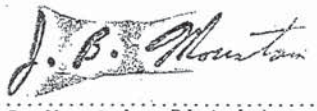
10.01 This Permit will enure to the benefit of, and be binding on, the parties and their respective heirs, executors, successors and permitted assigns.

10.02 The Permittee will perform the covenants, and will observe the conditions, set out in the Schedule attached to this Permit and where the Schedule conflicts with this Permit the Schedule shall prevail.

10.03 This Permit is subject to the *Forest Act*.

10.04 By accepting delivery of this Permit the Permittee agrees to be bound by its provisions and to perform all obligations that are to be performed by the Permittee under this Permit.

Permit issued by:



.....

J.B. Mountain, District Manager
Sunshine Coast Forest District

Re 2.01 Specifications:

(a) Road construction and maintenance shall be in accordance with the Engineering specifications contained in the approved Management and Working Plan for Timber Sale (major) Licence No. A20495.

In the event the Licensee fails to carry out required measures the Regional Manager may assess the Licensee the estimated costs to carry out such measures, and the Licensee shall forthwith pay the account.

Re 2.02(d)(ii) Field Practices:

(a) Disposal of slash and snags shall be as provided in Part 10 of the Forest Act.

Re 5.01 Utilization Standards:

(a) Obligatory

Unless classified as unavoidable waste as defined by current Ministry residue sampling procedures:

(i) stumps will be cut no higher than thirty (30) centimetres on the side adjacent to the highest ground;

(ii) all trees will be utilized to a small top diameter fifteen (15) centimetres inside bark;

(iii) all trees and parts of trees three (3) metres and over in length which contain a scale of 50 percent or more of the gross scale shall be removed; and,

(iv) log lengths shall be varied to provide for maximum utilization of timber.

Logs and/or parts of logs less than three (3) metres in length and broken at both ends are classed as breakage.

Re 5.02 Cutting Specifications:

(a) Obligatory

All living and dead trees twenty-five (25) centimetres in diameter or larger, measured outside bark at a point thirty (30) centimetres from the ground, must be cut.

All down trees must also be cut and utilized.

Optional

Trees under the diameter limit may be cut at the option of the Licensee.

Re .J.02 Other Conditions:

(a) The Licensee shall have all timber scaled before it is removed from the licence area, unless otherwise authorized in writing by the Forest Officer.

(b) The Permittee shall remove all logging equipment and fixtures from the lands described in this permit, and shall remove or bury all refuse resulting from occupation of the permit area, and shall leave all areas in an orderly and sanitary condition upon completion of operations or termination of the permit, whichever is the sooner.

In the event the Permittee fails to carry out the above measures the Regional Manager may assess the Permittee the estimated costs to carry out such measures, and the Permittee shall forthwith pay the account.

(c) The Licensor will not be responsible for the establishment of the boundaries of any permits or licences issued under the Water Act. The Licensee covenants to indemnify and save harmless the Licensor from and against all claims for loss or damage arising out of any act or omission done or caused by the Licensee, his servants or workmen in carrying out the terms of this licence. It is incumbent on the Licensee to determine the existence of any permits or licences issued under the Water Act by contacting the office of the local Water Management Branch of the Ministry of Environment and Parks.

(d) The Licensee shall not place any gate or other obstruction(s) on or over any road constructed and/or maintained under this licence unless otherwise approved in writing by the licensor.

(e) As this Road Permit provides access to foreshore, any use of the foreshore must be authorized by a lease or licence to occupy granted by the Lands Division of the Ministry of Forests and Lands.

(f) The Crown reserves the right to revise the conditions of this Road Permit during the life of the permit in accordance with existing conditions and development from time to time.

(g) Upon final cessation of operations or at any other time as instructed by the Regional Manager, the Permittee shall take such measures as directed by the District Manager to prevent erosion and to rehabilitate the site.

In the event the Permittee fails to carry out the above measures the Regional Manager may assess the Permittee the estimated costs to carry out such measures, and the Permittee shall forthwith pay the account.

(h) The Permittee shall use and maintain the permit area in a manner to cause the least damage to the environment all to the satisfaction of the District Manager.

Re 10.02 Other Conditions Cont'd:

(i) The Grantor will not be responsible for the establishment of the boundaries of any permits or licences issued under the Water Act. The Permittee covenants to indemnify and save harmless the Grantor from and against all claims for loss or damage arising out of any act or omission done or caused by the Permittee, his servants or workmen in carrying out the terms of this permit. It is incumbent on the Permittee to determine the existence of any permits or licences issued under the Water Act by contacting the office of the local Water Management Branch of the Ministry of Environment.

(j) In the event that the Permittee causes or permits the discharge into the land or water of a substance that is, or may be, injurious to health, the Permittee shall promptly notify the Medical Health Officer of the location, time, duration, nature and quantity of the discharge of the substance and shall take immediate action to prevent and cease the discharge.

(k) The granting of this permit does not imply that the construction by the Permittee of the right-of-way gives to the holder of the permit the exclusive use of the road. It must be distinctly understood that the right-of-way will be open for use by the general public during those periods when actual operations are not being conducted, provided that in the opinion of the District Manager no material damage would result from such use, as provided for in Subsection 1 of Section 96 of the Forest Act.

(l) The Permittee will cause vehicles and equipment used under this Permit to meet the equipment standards set out in the Forest Fire Prevention Regulations made under the Forest Act.

(m) The Regional Manager or District Manager may close the road without notice and, during the period of closure, this Permit will be suspended.

(n) The right-of-way shall not exceed twenty (20) metres unless greater width is required due to terrain conditions and is approved by a Forest Officer.

Province of British Columbia
Ministry of Forests

MAP OF ▸ R04421

EXHIBIT 'A'

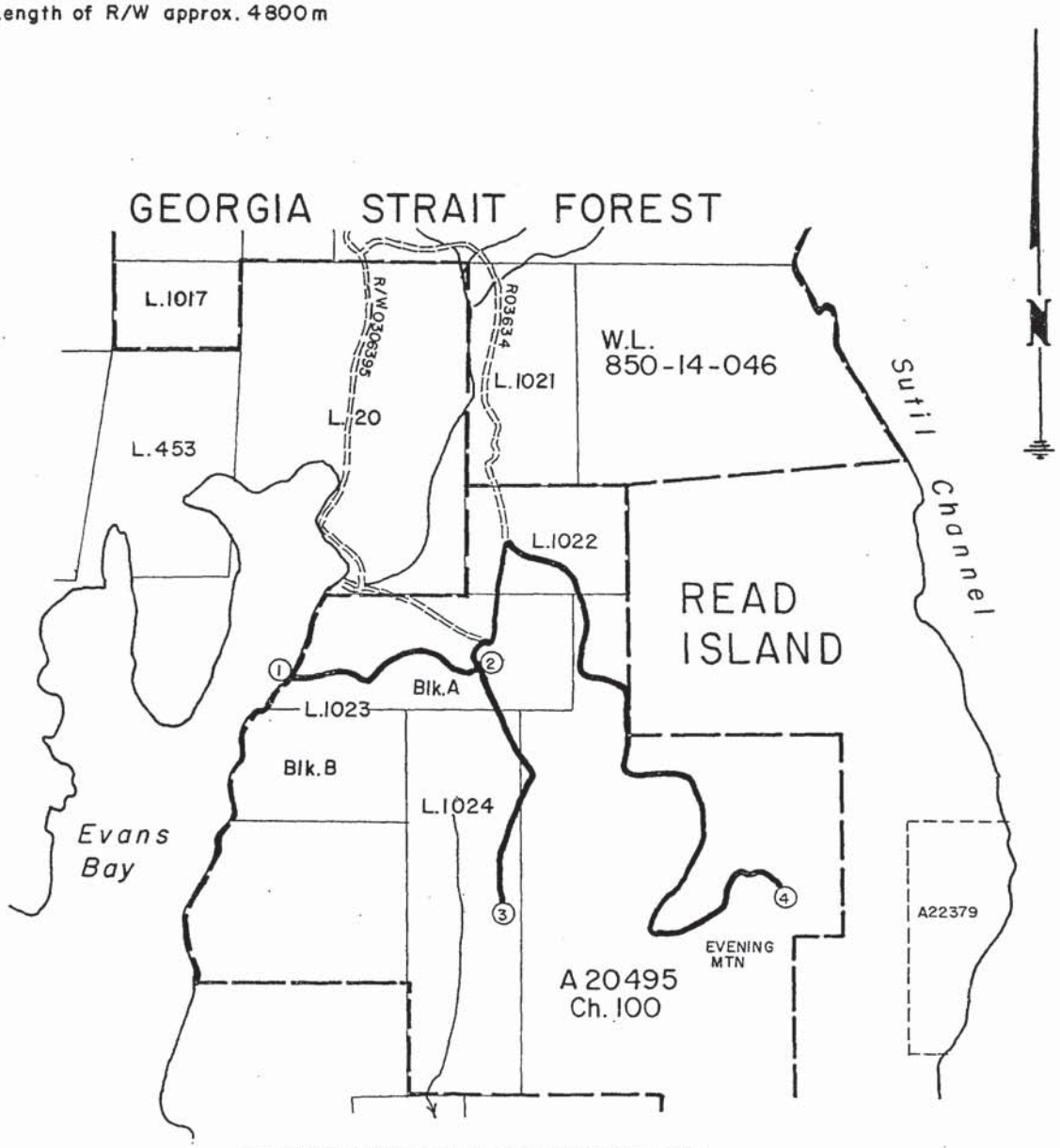
UTM.	Zone	East	North	Reg	Compt	L
Grid	10	353000	5564000	30	10	

FOREST REGION ▸ 01 Vancouver
LAND DISTRICT ▸ 51 Sayward
DISTRICT ▸ 15 Sunshine Coast
OUTLINE ▸

Date 89-02-07
Ref. Map 92K/3h
Base Used 92K.025
Scale 1: 20,000
Area ..... hectares

MANAGEMENT UNIT	TIMBER SUPPLY AREA	PULPWOOD AGREEMENT	CASCADES
Type 0 P.S.Y.U.	Number 39 Sunshine Coast		
Number 64 Quadra	Block 52 Powell River		East
Block	Sub-B		West C

Width of R/W 20m
Length of R/W approx. 4800m



ALL POINS TAKEN FROM THE S.W. CORNER OF L.1022

(1) 300 mS. & 630 mW.
(2) 270 mS. & 60 mE.
(3) 1120 mS. & 130 mE
(4) 1060 mS. & 1130 mE.

Drawn by PRL

FS 357 T/M 86/3

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The Best Place on Earth

G:\!Workgrp\RESOURCE\TEMP\CPDOCS\WOODLOT\W0046\AA May 1 2008 WL CP CL.doc LW

File: ORCS 19720-45/W0046, CP DD

December 4, 2008

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Attached is Cutting Permit DD of Woodlot Licence W0046. Please read the Cutting Permit documents and be prepared to comply with all conditions therein.

You will be advised under separate cover of initial stumpage rates, which are to be determined by the Forest Officer in accordance with the stumpage provision conditions in the Cutting Permit document.

Please notify Kim Meyer, Compliance and Enforcement Supervisor in writing before beginning operations on all cut blocks.

Yours truly,

Linda Wightman
Resource Clerk
Sunshine Coast Forest District

Enclosure

Ministry of Forests and Range Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA

WOODLOT LICENCE W0046

CUTTING PERMIT DD

PURSUANT TO Woodlot Licence W0046 (the "Licence"), this Cutting Permit is issued to:

HARPER LOGGING LTD.
BOX 299
HERIOT BAY, BRITISH COLUMBIA
V0P 1H0
Phone: 250 285-2325 Fax: 250 285-2305
(the "Licensee")

1.00 PERMIT AREA AND TERM

1.01 Subject to the Licence and the forestry legislation, the Licensee is authorized to harvest the Crown timber from the areas of land shown on the attached Exhibit "A" map(s) (the "harvest area").

1.02 The term of this Cutting Permit is **three years**, beginning on **December 4, 2008**.

1.03 The Licensee must make application for extension of this Cutting Permit to the District Manager at least 45 days before the expiry of the Cutting Permit and in a form as required by the District Manager.

2.00 SPECIAL CONDITIONS AND REQUIREMENTS

2.01 The Licensee must comply with the conditions and requirements set out in Schedule "A" to this Cutting Permit.

3.00 TIMBER MARK

3.01 The timber mark(s) for timber removed under this Cutting Permit from land identified as:

(a) Schedule "A" Land in the Agreement is/are: not applicable

(b) Schedule "B" Land in the Agreement is:

WAB
EDD

3.02 All timber must be marked in the prescribed manner prior to being transported from the harvest area.

3.03 If directed to do so by the District Manager, the Licensee must erect signs at all exits from areas of land referred to in paragraph 1.01, clearly showing the timber mark referred to in paragraph 3.01.

4.00 SCALE-BASED STUMPAGE

4.01 For the purpose of determining the amount of stumpage payable in respect of timber removed from:

(a) the areas of Schedule "B" Land; or

(b) the areas of Schedule "A" Land subject to a timber licence;

that are authorized for removal under this Cutting Permit, the volume or quantity of timber removed will be determined using information provided in a scale of the timber.

4.02 The Licensee must ensure that:

(a) all timber removed from the harvest area is scaled; and

(b) the scale of the timber is conducted properly in accordance with the requirements of the *Forest Act* and the regulations made under that Act.

5.00 ROADS

5.01 Subject to the Licence and the forestry legislation, the Licensee may construct or modify roads under the authority of this Cutting Permit on areas of Schedule "B" Land, and Schedule "A" Land subject to a timber licence, that are authorized for primary logging and removal under this Cutting Permit if the roads are:

(a) wholly contained within a cutblock identified on a woodlot licence plan; and

(b) not identified on a woodlot licence plan as providing access to more than one cutblock.

6.00 TIMBER HARVEST AND WASTE ASSESSMENT

6.01 The timber described in Schedule "B" is specified as reserved timber and the Licensee must not fell standing timber, and must not buck or remove felled or dead and down timber, as the case may be, of the species and description set out in Schedule "B".

7.00 MISCELLANEOUS

7.01 The Schedules and Exhibit "A" map(s) are deemed to be part of this Cutting Permit.

7.02 This Cutting Permit is deemed to be part of the Licence.

7.03 The Licence will govern the interpretation of this Cutting Permit.

7.04 The Licensee must notify the District Manager in writing in a form acceptable to the District Manager, when primary logging is complete and again when removal is complete.

7.05 Unless the District Manager specifies otherwise in writing, the Licensee must ensure that all reasonable steps are taken to:

(a) advise the District Manager in writing and in a form acceptable to the District Manager, of the date that operations will commence at least five days before commencement;

(b) complete operations at least **6 weeks** before the expiry date of this Cutting Permit, unless the term of the Cutting Permit is extended in writing by the District Manager; and

DATED **December 4, 2008**

Brian A. Hawrys, R.P.F., District Manager
Sunshine Coast Forest District

FNR-2011-00232
Page 112

SCHEDULE "A"

1.01 The Licensee must not erect or operate a sawmill or wood processing plant on an area of land referred to in paragraph 1.01 of this Cutting Permit.

1.02 The Licensee must not allow the manufacture of special forest products on the area of land described in paragraph 1.01 of this Cutting Permit.

1.03 The Licensee may fell trees outside of the cutblock boundary(s) identified on the attached Exhibit "A" map for the purposes of tree felling to eliminate a safety hazard, if the person conducting tree felling or rigging tail hold/anchor trees determines that the tree is a dangerous tree according to Workers' Compensation Board regulations and it is within 80 metres beyond the cutting authority area.

(a) Trees felled under paragraph 1.03 shall be subject to the waste assessment policy 13.6 found in the Ministry of Forest and Range Policy Manual Volume 1 Chapter 13.

SCHEDULE "B"

1.00 RESERVED TIMBER

1.01 Wild life tree patches, as identified on the appraisal maps, are specified as reserved under this Cutting Permit:

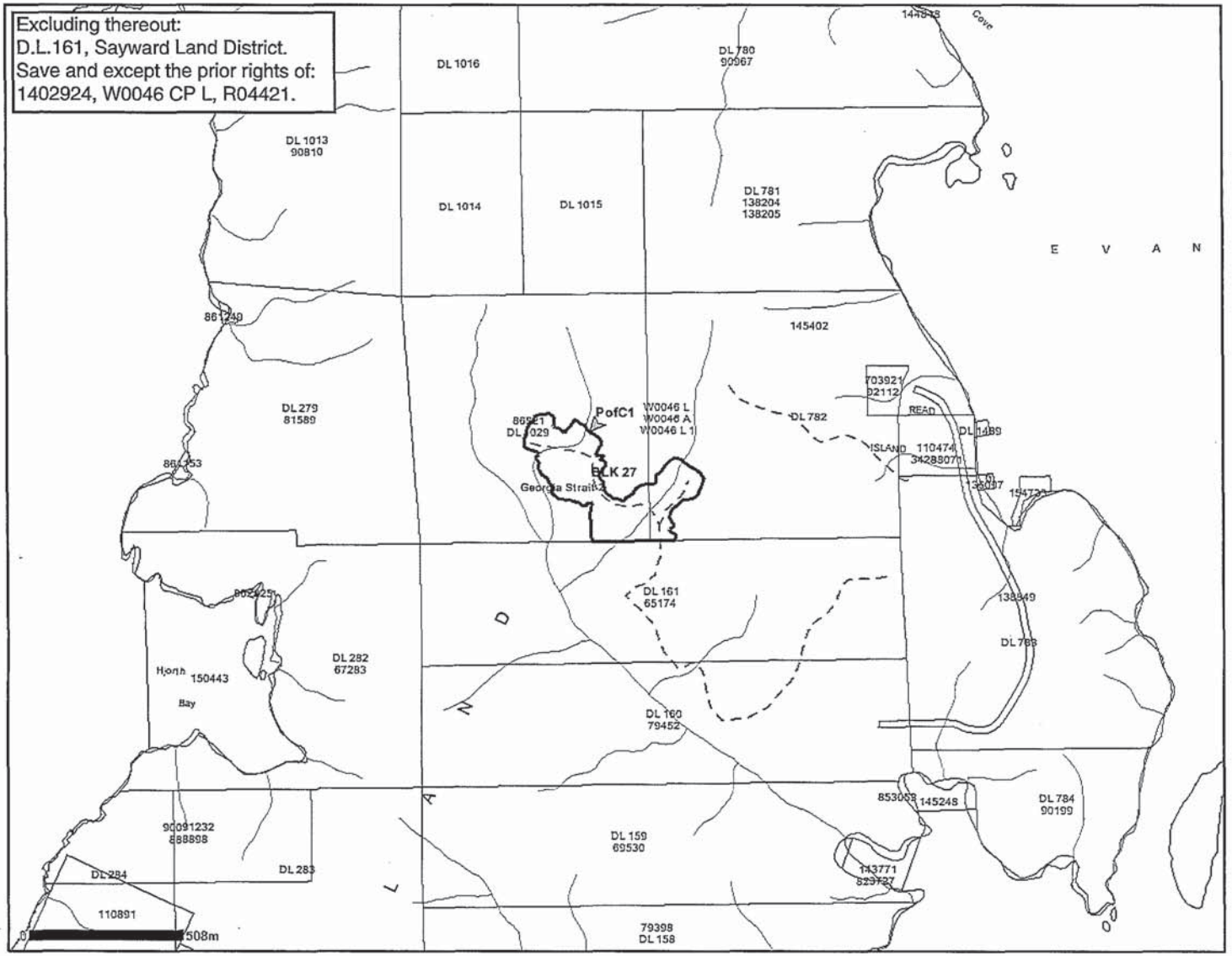
BRITISH COLUMBIA

Ministry of Forests and Range

EXHIBIT A

MAP OF : W0046 CP DD (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : 39 LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : Woodlot MGT UNIT NO :
ESF SUBMISSION ID : 520745 BCGS MAPSHEET NO : 92K.015	SCALE : 1:20000 at A Size Area (Ha): 11.029	UTM : 10 NAD : NAD 83	DRAWN BY : FTA DATE : Dec 4, 2008

N
W E
S



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
- Non Status Road
- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

BLK 27 (11.029 Ha)
PofC1 UTM10 349625, 5561446

FTA302 - Exhibit A Clearance

Back

ESF Date:	2008-08-13	**ESF ID:**	495511
Tenure Application ID:	141997		
Application Description:	Theodosia	**Ex A Image:**	Y
Client Number:	00132185 00	**Licensee:**	TIMBER SALES MGR STRAIT OF GEORGIA 00

Object	Additional Action	Map Conflict	Additional Action Comments	Resol
R16929 SEC NT006-008	Exclude	File: 0000000 Description: DISTRICT LOT 505, GROUP 1, NEW WESTMINSTER DIST. (Legal Desc populated from related PIN(s)), (Conflict)	Excluding thereout-crown granted private land. BCTS states that all survey corners have been established by a BC Land Surveyor and that R16929 does not encroach upon this district lot.	
R16929 SEC NT006-008	Exclude	PIN: 7598930 Legal Description:DISTRICT LOT 505, GROUP 1, NEW WESTMINSTER DIST. (Conflict)	Excluding thereout-crown granted private land. BCTS states that all survey corners have been established by a BC Land Surveyor and that R16929 does not encroach upon this district lot.	
R16929 SEC NT013-004	Exclude	File: 0000000 Description: DISTRICT LOT 525, GROUP 1, NEW WESTMINSTER DIST. (Legal Desc populated from related PIN(s)), (Adjacent)	Excluding thereout-crown granted private land. BCTS states that all survey corners have been established by a BC Land Surveyor and that R16929 does not encroach upon this district lot.	
R16929 SEC NT013-004	Exclude	PIN: 7600760 Legal Description:DISTRICT LOT 525, GROUP 1, NEW WESTMINSTER DIST. (Adjacent)	Excluding thereout-crown granted private land. BCTS states that all survey corners have been established by a BC Land Surveyor and that R16929 does not encroach upon this district lot.	
R16929 SEC MR001	Exclude	File: 0000000 Description: DISTRICT LOT 506, GROUP 1, NEW WESTMINSTER DIST.;, (Adjacent)	Excluding thereout-crown granted private land. BCTS states that all survey corners have been established by a BC Land Surveyor and that R16929 does not encroach upon this district lot.	
R16929 SEC MR001	Exclude	PIN: 7599000 Legal Description:DISTRICT LOT 506, GROUP 1, NEW WESTMINSTER DIST. (Adjacent)	Excluding thereout-crown granted private land. BCTS states that all survey corners have been established by a BC Land Surveyor and that R16929 does not encroach upon this district lot.	

Save | Exhibit A Cleared

•Feedback •Disclaimer •Privacy •Copyright Ministry of Forests &

BRITISH COLUMBIA
The Best Place on Earth

File: ORCS 19720-45/W0046, CP EE

June 25, 2010

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Reference is made to your application for amendment to Woodlot Licence W0046, Cutting Permit EE received June 10, 2010.

Your request to add Block10B into Cutting Permit EE is approved. The attached Exhibit A Map dated June 14, 2010 is in addition to Exhibit A Maps dated February 23, 2010 and November 23, 2009.

Please notify Kim Meyer, Compliance and Enforcement Supervisor (ph 604 485-0733 or e-mail kim.meyer@gov.bc.ca) before beginning operations on cut blocks.

This letter and Exhibit A Map form an integral part of the document for Woodlot Licence W0046, Cutting Permit EE and should be attached thereto.

Yours truly,

Robert van der Zalm, R.P.F.
Acting District Manager
Sunshine Coast Forest District

Enclosure

ecopy: Paul Kutz

Ministry of Forests and Range Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

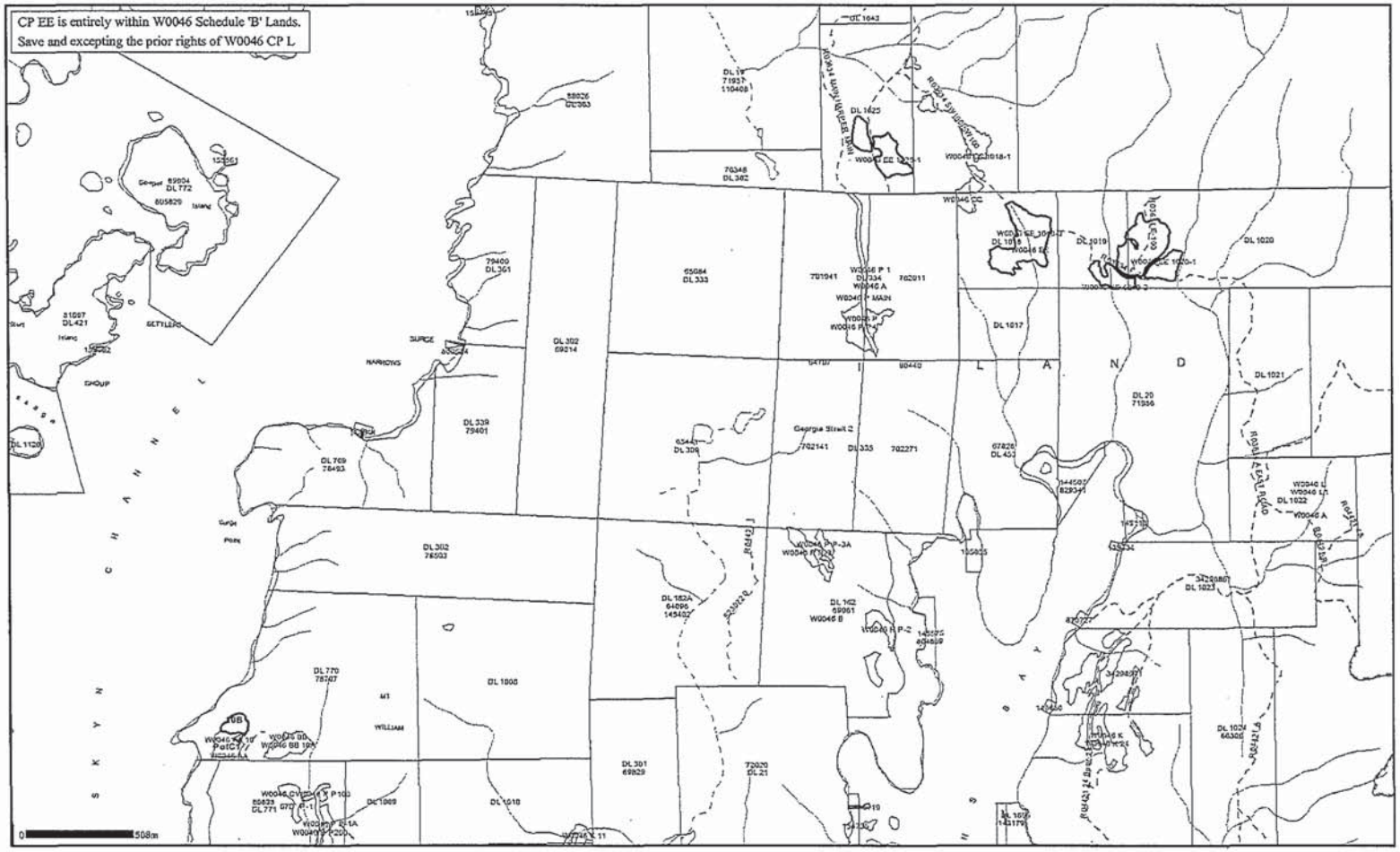
Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA

Ministry of Forests and Range

EXHIBIT A

MAP OF : W0046 CP EE Amendment # 3 (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : 39 LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : Woodlot MGT UNIT NO :
ESF SUBMISSION ID : 829047 BCGS MAPSHEET NO : 92K.025	SCALE : 1:20000 at B Size Area (Ha): 17.193	UTM : 10 NAD : NAD 83	DRAWN BY : FTA DATE : Jun 14, 2010



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
- Non Status Road
- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

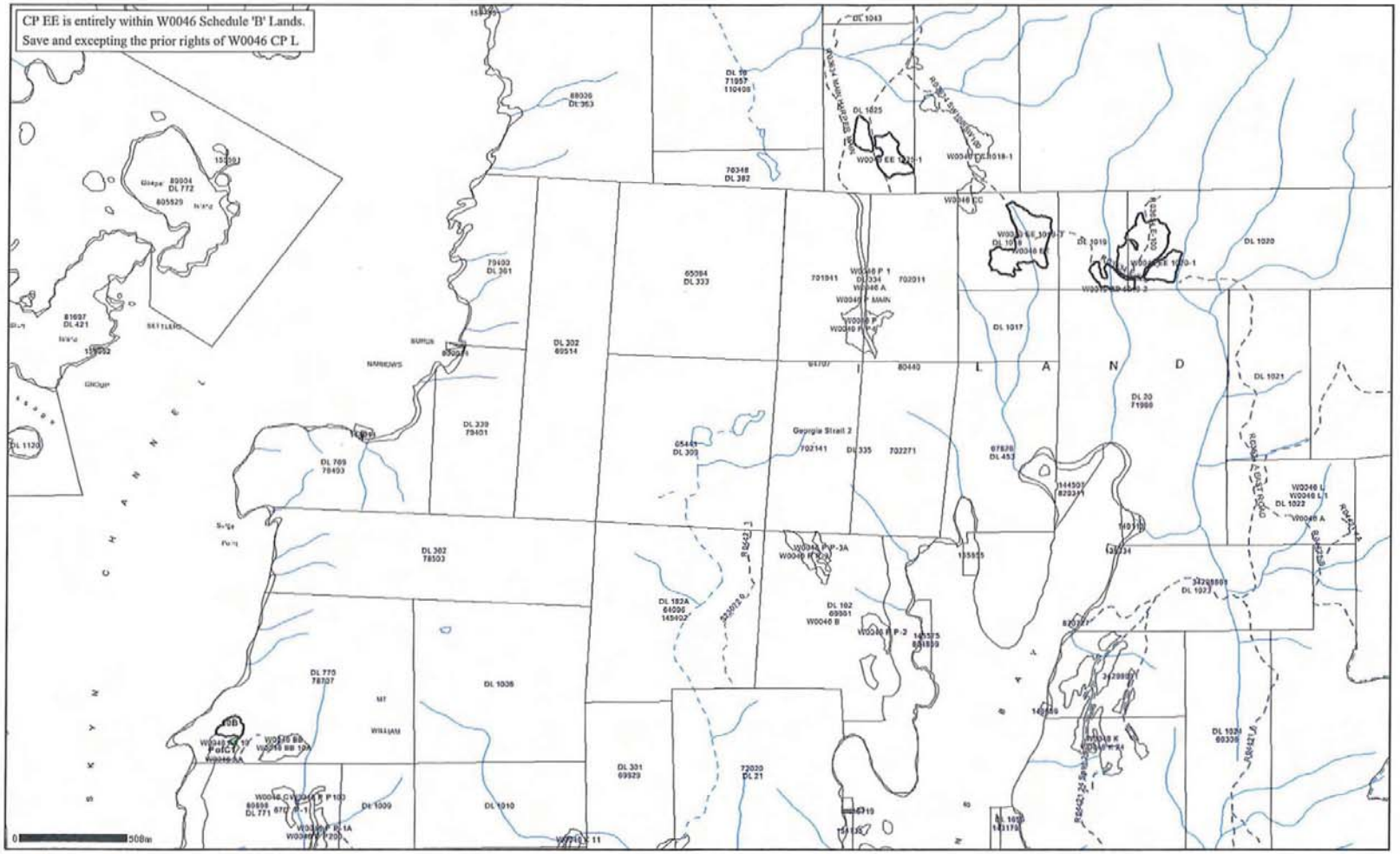
10B (0.912 Ha)
PofC1 UTM10 348271, 5564202

BRITISH COLUMBIA

Ministry of Forests and Range

EXHIBIT A

MAP OF : W0046 CP EE Amendment # 3 (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : 39 LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : Woodlot MGT UNIT NO :
ESF SUBMISSION ID : 829047 BCGS MAPSHEET NO : 92K.025	SCALE : 1:20000 at B Size Area (Ha): 17.193	UTM : 10 NAD : NAD 83	DRAWN BY : FTA DATE : Jun 14, 2010



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
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- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

10B (0.912 Ha)
PofC1 UTM10 348271, 5564202

BRITISH COLUMBIA
The Best Place on Earth

File: ORCS 19720-45/W0046, CP EE

March 3, 2010

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Reference is made to your application for amendment to Woodlot Licence W0046, Cutting Permit EE received February 23, 2010.

Your request to add Blocks 1020-1 and 1025-1 into Cutting Permit EE is approved. The attached Exhibit A Map dated February 23, 2010 is in addition to Exhibit A Map dated November 23, 2009.

Please notify Kim Meyer, Compliance and Enforcement Supervisor in writing before beginning operations on cut blocks.

This letter and Exhibit A Map form an integral part of the document for Woodlot Licence W0046, Cutting Permit EE and should be attached thereto.

Yours truly,

Mark Anderson, R.P.F.
Acting District Manager
Sunshine Coast Forest District

Enclosure

ecopy: Paul Kutz

Ministry of Forests and Range Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

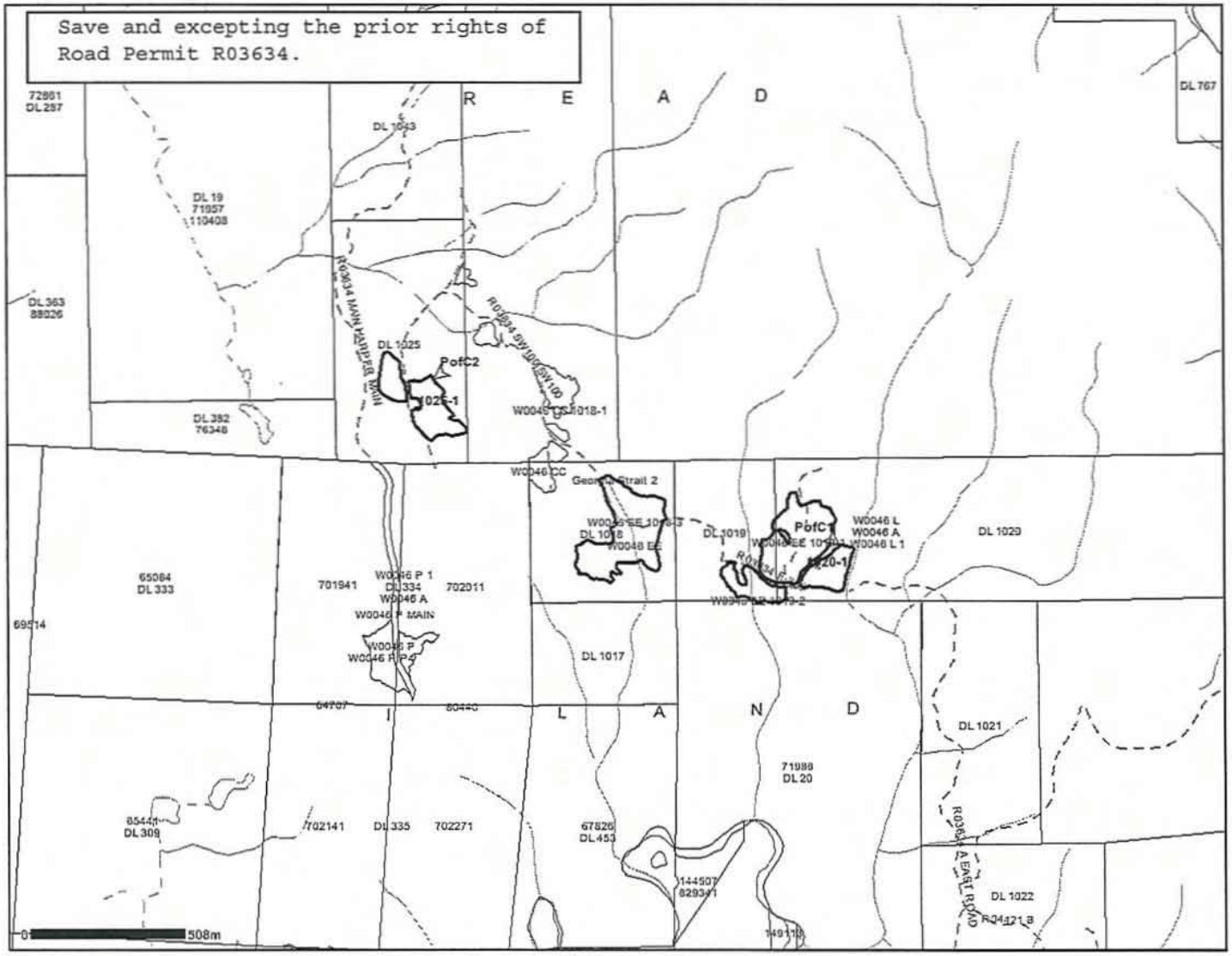
BRITISH COLUMBIA

Ministry of Forests and Range

EXHIBIT A

MAP OF : W0046 CP EE Amendment # 2 (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : 39 LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : Woodlot MGT UNIT NO :
ESF SUBMISSION ID : 796593 BCGS MAPSHEET NO : 92K.025	SCALE : 1:20000 at A Size Area (Ha): 16.281	UTM : 10 NAD : NAD 83	DRAWN BY : FTA DATE : Feb 23, 2010

N W E S



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
- Non Status Road
- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

1020-1 (1.56 Ha)
PofC1 UTM10 352765, 5566313
1025-1 (2.164 Ha)
PofC2 UTM10 351457, 5566912

BRITISH COLUMBIA
The Best Place on Earth

G:\!Workgrp\RESOURCE\TEMP\CPDOC USE TENURES CP DIRECTORY\WOODLOT\W0046\CP EE WL CP CL.docx LW

File: ORCS 19720-45/W0046, CP EE

November 24, 2009

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Attached is Cutting Permit EE of Woodlot Licence W0046. Please read the Cutting Permit documents and be prepared to comply with all conditions therein.

You will be advised under separate cover of initial stumpage rates, which are to be determined by the Forest Officer in accordance with the stumpage provision conditions in the Cutting Permit document.

Please notify Kim Meyer, Compliance and Enforcement Supervisor in writing before beginning operations on all cut blocks.

Yours truly,

Linda Wightman
Resource Clerk
Sunshine Coast Forest District

Enclosure

ecopy: Paul Kutz

Ministry of Forests and Range Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA

WOODLOT LICENCE W0046

CUTTING PERMIT EE

PURSUANT TO Woodlot Licence W0046 (the "Licence"), this Cutting Permit is issued to:

HARPER LOGGING LTD.
BOX 299
HERIOT BAY, BRITISH COLUMBIA
V0P 1H0
PHONE: 250 285-2325 FAX: 250 285-2305
(the "Licensee")

1.00 PERMIT AREA AND TERM

1.01 Subject to the Licence and the forestry legislation, the Licensee is authorized to harvest the Crown timber from the areas of land shown on the attached Exhibit "A" map(s) (the "harvest area").

1.02 The term of this Cutting Permit is **4 years, beginning on November 24, 2009.**

1.03 The Licensee must make application for extension of this Cutting Permit to the District Manager at least 45 days before the expiry of the Cutting Permit and in a form as required by the District Manager.

2.00 SPECIAL CONDITIONS AND REQUIREMENTS

2.01 The Licensee must comply with the conditions and requirements set out in Schedule "A" to this Cutting Permit.

3.00 TIMBER MARK

3.01 The timber mark for timber removed under this Cutting Permit from land identified as:

(a) Schedule "A" Land in the Agreement is not applicable

(b) Schedule "B" Land in the Agreement is:

WAB
EEE

3.02 All timber must be marked in the prescribed manner prior to being transported from the harvest area.

3.03 If directed to do so by the District Manager, the Licensee must erect signs at all exits from areas of land referred to in paragraph 1.01, clearly showing the timber mark referred to in paragraph 3.01.

4.00 SCALE-BASED STUMPAGE

4.01 For the purpose of determining the amount of stumpage payable in respect of timber removed from the areas of Schedule "B" Land that are authorized for removal under this Cutting Permit, the volume or quantity of timber removed will be determined using information provided in a scale of the timber.

4.02 The Licensee must ensure that:

(a) all timber removed from the harvest area is scaled; and

(b) the scale of the timber is conducted properly in accordance with the requirements of the *Forest Act* and the regulations made under that Act.

5.00 ROADS

5.01 Subject to the Licence and the forestry legislation, the Licensee may use, construct, maintain or deactivate roads on the area covered by this Cutting Permit.

6.00 TIMBER HARVEST AND WASTE ASSESSMENT

6.01 The timber described in Schedule "B" is specified as reserved timber and the Licensee must not fell standing timber, and must not buck or remove felled or dead and down timber, as the case may be, of the species and description set out in Schedule "B".

7.00 MISCELLANEOUS

7.01 The Schedules and Exhibit "A" map(s) are deemed to be part of this Cutting Permit.

7.02 This Cutting Permit is deemed to be part of the Licence.

7.03 The Licence will govern the interpretation of this Cutting Permit.

7.04 The Licensee must notify the District Manager in writing in a form acceptable to the District Manager, when primary logging is complete and again when removal is complete.

7.05 Unless the District Manager specifies otherwise in writing, the Licensee must ensure that all reasonable steps are taken to:

(a) advise the District Manager in writing and in a form acceptable to the District Manager, of the date that operations will commence at least five days before commencement;

(b) complete operations at least **6 weeks** before the expiry date of this Cutting Permit, unless the term of the Cutting Permit is extended in writing by the District Manager; and

DATED November 24, 2009

Robert van der Zalm, R.P.F.
Acting District Manager
Sunshine Coast Forest District

SCHEDULE "A"

1.00 SPECIAL CONDITIONS AND REQUIREMENTS

1.01 The Licensee must not erect or operate a sawmill or wood processing plant on an area of land referred to in paragraph 1.01 of this Cutting Permit.

1.02 The Licensee must not allow the manufacture of special forest products on the area of land described in paragraph 1.01 of this Cutting Permit.

1.03 The Licensee may fell trees outside of the cutblock boundary(s) identified on the attached Exhibit "A" map for the purposes of tree felling to eliminate a safety hazard, if the person conducting tree felling or rigging tail hold/anchor trees determines that the tree is a dangerous tree according to Workers' Compensation Board regulations and it is within 80 metres beyond the cutting authority area.

(a) Trees felled under paragraph 1.03 shall be subject to the waste assessment policy 13.6 found in the Ministry of Forest and Range Policy Manual Volume 1 Chapter 13.

SCHEDULE "B"

1.00 RESERVED TIMBER

1.01 Wild life tree patches, as identified on the appraisal maps, are specified as reserved under this Cutting Permit:

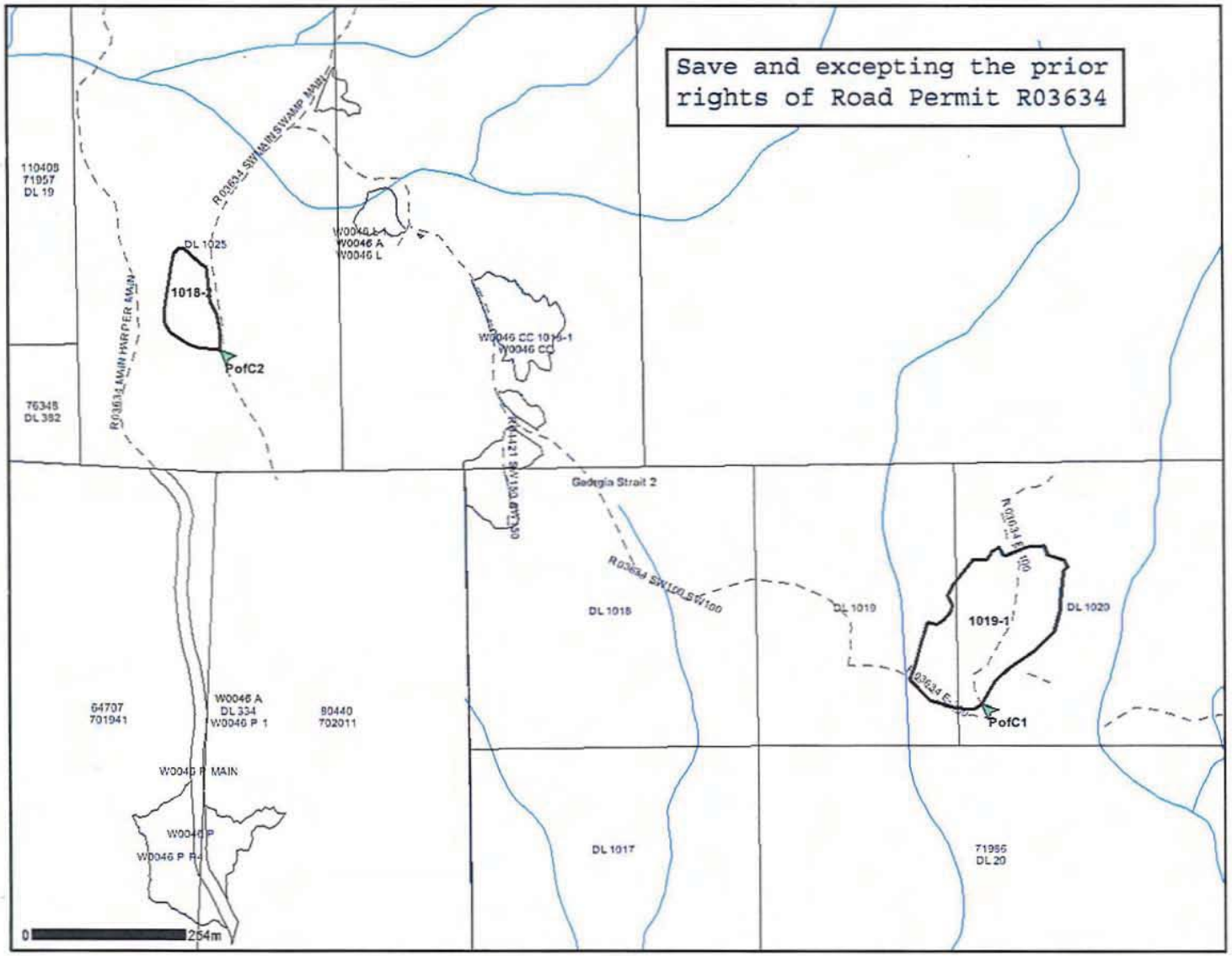
BRITISH COLUMBIA

Ministry of Forests and Range

EXHIBIT A

MAP OF : W0046 CP EE (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : Woodlot MGT UNIT NO :
ESF SUBMISSION ID : 747384 BCGS MAPSHEET NO : 92K.025	SCALE : 1:10000 at A Size Area (Ha): 10.5728	UTM : 10 NAD : NAD83	DRAWN BY : FTA DATE : Nov 23, 2009

N W E S



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
- Non Status Road
- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

1019-1 (4.2156 Ha)
PofC1 UTM10 352592, 5566207
1018-2 (1.0708 Ha)
PofC2 UTM10 351366, 5566841

BRITISH COLUMBIA

WOODLOT LICENCE W0046

CUTTING PERMIT FF

PURSUANT TO Woodlot Licence W0046 (the "Licence"), this Cutting Permit is issued to:

HARPER LOGGING LTD.
BOX 299
HERIOT BAY, BRITISH COLUMBIA
V0P 1H0
PHONE: 250 285-2325 FAX: 250 285-2305
(the "Licensee")

1.00 PERMIT AREA AND TERM

1.01 Subject to the Licence and the forestry legislation, the Licensee is authorized to harvest the Crown timber from the areas of land shown on the attached Exhibit "A" map(s) (the "harvest area").

1.02 The term of this Cutting Permit is **4 years, beginning on May 20, 2010.**

1.03 The Licensee must make application for extension of this Cutting Permit to the District Manager at least 45 days before the expiry of the Cutting Permit and in a form as required by the District Manager.

2.00 SPECIAL CONDITIONS AND REQUIREMENTS

2.01 The Licensee must comply with the conditions and requirements set out in Schedule "A" to this Cutting Permit.

3.00 TIMBER MARK

3.01 The timber mark for timber removed under this Cutting Permit from land identified as:

(a) Schedule "A" Land in the Agreement is not applicable

(b) Schedule "B" Land in the Agreement is:

WAB
EFF

3.02 All timber must be marked in the prescribed manner prior to being transported from the harvest area.

3.03 If directed to do so by the District Manager, the Licensee must erect signs at all exits from areas of land referred to in paragraph 1.01, clearly showing the timber mark referred to in paragraph 3.01.

4.00 SCALE-BASED STUMPAGE

4.01 For the purpose of determining the amount of stumpage payable in respect of timber removed from the areas of Schedule "B" Land that are authorized for removal under this Cutting Permit, the volume or quantity of timber removed will be determined using information provided in a scale of the timber.

4.02 The Licensee must ensure that:

(a) all timber removed from the harvest area is scaled; and

(b) the scale of the timber is conducted properly in accordance with the requirements of the *Forest Act* and the regulations made under that Act.

5.00 ROADS

5.01 Subject to the Licence and the forestry legislation, the Licensee may use, construct, maintain or deactivate roads on the area covered by this Cutting Permit.

6.00 TIMBER HARVEST AND WASTE ASSESSMENT

6.01 The timber described in Schedule "B" is specified as reserved timber and the Licensee must not fell standing timber, and must not buck or remove felled or dead and down timber, as the case may be, of the species and description set out in Schedule "B".

7.00 MISCELLANEOUS

7.01 The Schedules and Exhibit "A" map(s) are deemed to be part of this Cutting Permit.

7.02 This Cutting Permit is deemed to be part of the Licence.

7.03 The Licence will govern the interpretation of this Cutting Permit.

7.04 The Licensee must notify the District Manager in writing in a form acceptable to the District Manager, when primary logging is complete and again when removal is complete.

7.05 Unless the District Manager specifies otherwise in writing, the Licensee must ensure that all reasonable steps are taken to:

(a) advise the District Manager in writing and in a form acceptable to the District Manager, of the date that operations will commence at least five days before commencement;

(b) complete operations at least **6 weeks** before the expiry date of this Cutting Permit, unless the term of the Cutting Permit is extended in writing by the District Manager; and

DATED May 20, 2010

Robert van der Zalm, R.P.F.
Acting District Manager
Sunshine Coast Forest District

SCHEDULE "A"

1.00 SPECIAL CONDITIONS AND REQUIREMENTS

1.01 The Licensee must not erect or operate a sawmill or wood processing plant on an area of land referred to in paragraph 1.01 of this Cutting Permit.

1.02 The Licensee must not allow the manufacture of special forest products on the area of land described in paragraph 1.01 of this Cutting Permit.

1.03 The Licensee may fell trees outside of the cutblock boundary(s) identified on the attached Exhibit "A" map for the purposes of tree felling to eliminate a safety hazard, if the person conducting tree felling or rigging tail hold/anchor trees determines that the tree is a dangerous tree according to Workers' Compensation Board regulations and it is within 80 metres beyond the cutting authority area.

(a) Trees felled under paragraph 1.03 shall be subject to the waste assessment policy 13.6 found in the Ministry of Forest and Range Policy Manual Volume 1 Chapter 13.

SCHEDULE "B"

1.00 RESERVED TIMBER

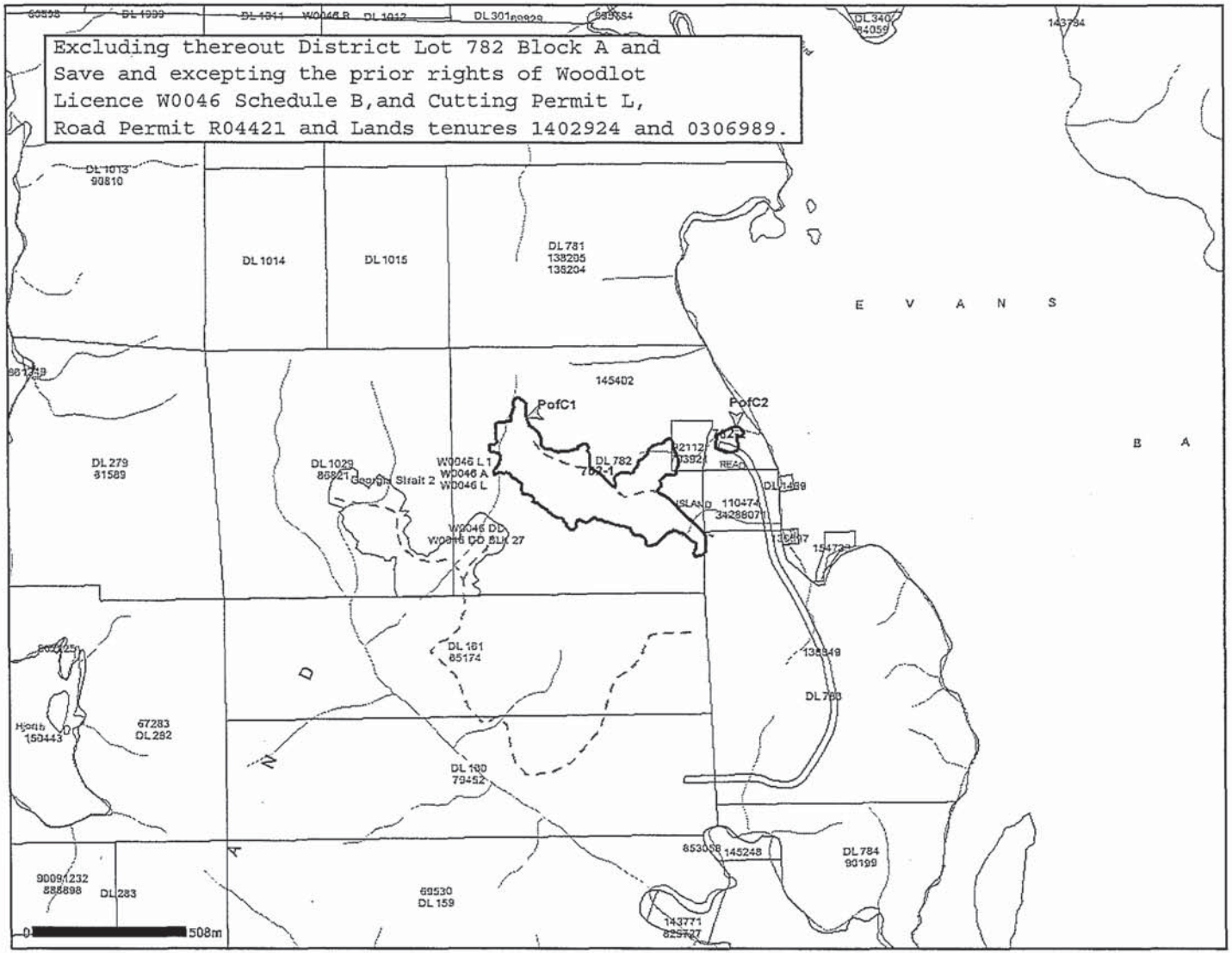
1.01 Wild life tree patches, as identified on the appraisal maps, are specified as reserved under this Cutting Permit:

BRITISH COLUMBIA

Ministry of Forests and Range

EXHIBIT A

MAP OF : W0046 CP FF (shown in bold black)			
FOREST REGION : RCO FOREST DISTRICT : DSC	TSA : 39 LAND DISTRICT : SAYWARD DISTRICT	PULPWOOD AGREEMENT :	MGT UNIT TYPE : Woodlot MGT UNIT NO :
ESF SUBMISSION ID : 822300 BCGS MAPSHEET NO : 92K.015	SCALE : 1:20000 at A Size Area (Ha): 14.165	UTM : 10 NAD : NAD 83	DRAWN BY : FTA DATE : May 17, 2010



Legend

- Tenure Application
- Tenure Road Application
- Retired Tenure Road
- P of C
- P of T
- Tenure Feature
- Range
- TFL
- Provincial Forest
- Forest Service Road
- Highway
- Municipal Road
- Non Status Road
- Recreation Trails
- Road Permit
- SUP Road
- Right of Way
- Schedule B CP Road
- Mineral Tenure Points
- Cities
- Waterbodies
- River/Stream
- Coastline / Island

782-1 (13.627 Ha)
PofC1 UTM10 350071, 5561658
782-2 (0.538 Ha)
PofC2 UTM10 350757, 5561600

BRITISH COLUMBIA
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File: ORCS 19720-45/W0046, CP P

April 6, 2011

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Pursuant to authority contained in the permit, the term of Cutting Permit P of Woodlot Licence 46 is hereby extended to March 31, 2013. Upon that date all your rights under said permit will cease.

This notice forms an integral part of the permit and should be attached to it.

Yours truly,

Brian A. Hawrys, R.P.F.
District Manager
Sunshine Coast District

Ministry of Forests, Lands and Natural Resource Operations

Sunshine Coast District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA
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Document name: G:\!Workgrp\RESOURCE\TEMP\EXTENSIO\CUTPERM\Woodlots\W0046\P.doc LW

File: ORCS 19720-45/W0046, CP P

April 1, 2009

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Pursuant to authority contained in the permit, the term of Cutting Permit P of Woodlot Licence 46 is hereby extended to March 31, 2011. Upon that date all your rights under said permit will cease.

This notice forms an integral part of the permit and should be attached to it.

Yours truly,

Brian A. Hawrys, R.P.F.
District Manager
Sunshine Coast Forest District

Ministry of Forests and Range
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

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Document name: G:\!Workgrp\RESOURCE\TEMP\EXTENSIO\CUTPERM\Woodlots\W0046\P.doc tp

File: ORCS 19720-45/W0046, CP P

November 23, 2007

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Pursuant to authority contained in the permit, the term of Cutting Permit P of Woodlot Licence 46 is hereby extended to March 31, 2009. Upon that date all your rights under said permit will cease.

This notice forms an integral part of the permit and should be attached to it.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Ministry of Forests and Range
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

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Distribution: HSLOOS,C&E
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File: ORCS 19720-45/CP P W0046

July 3, 2007

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Reference is made to your application for amendment to Woodlot Licence W0046, Cutting Permit P of May 31, 2007.

Your application to include Block P4 into the private land portion of your Woodlot Licence is approved. The attached Exhibit A Maps dated May 31, 2007 are in addition to Exhibit A Maps sent to you previously.

You are hereby exempted from the requirement to prepare a site plan for instances of fire-killed, beetle-killed, diseased or blowdown where the total volume is 500m^3 or less.

You are hereby exempted from the requirements of the Forest Development Plan, under Sections 19(1) and 19(1.2) of the *Forest Practices Code of British Columbia Act* as per Section 22.01 of the Woodlot Licence Forest Management Regulation.

Please notify Kim Meyer, Compliance & Enforcement Team Supervisor prior to start up of any operations.

This letter and attachments form an integral part of the document for Woodlot Licence W0046, Cutting Permit P and should be attached thereto.

Yours truly,

J. Hemphill

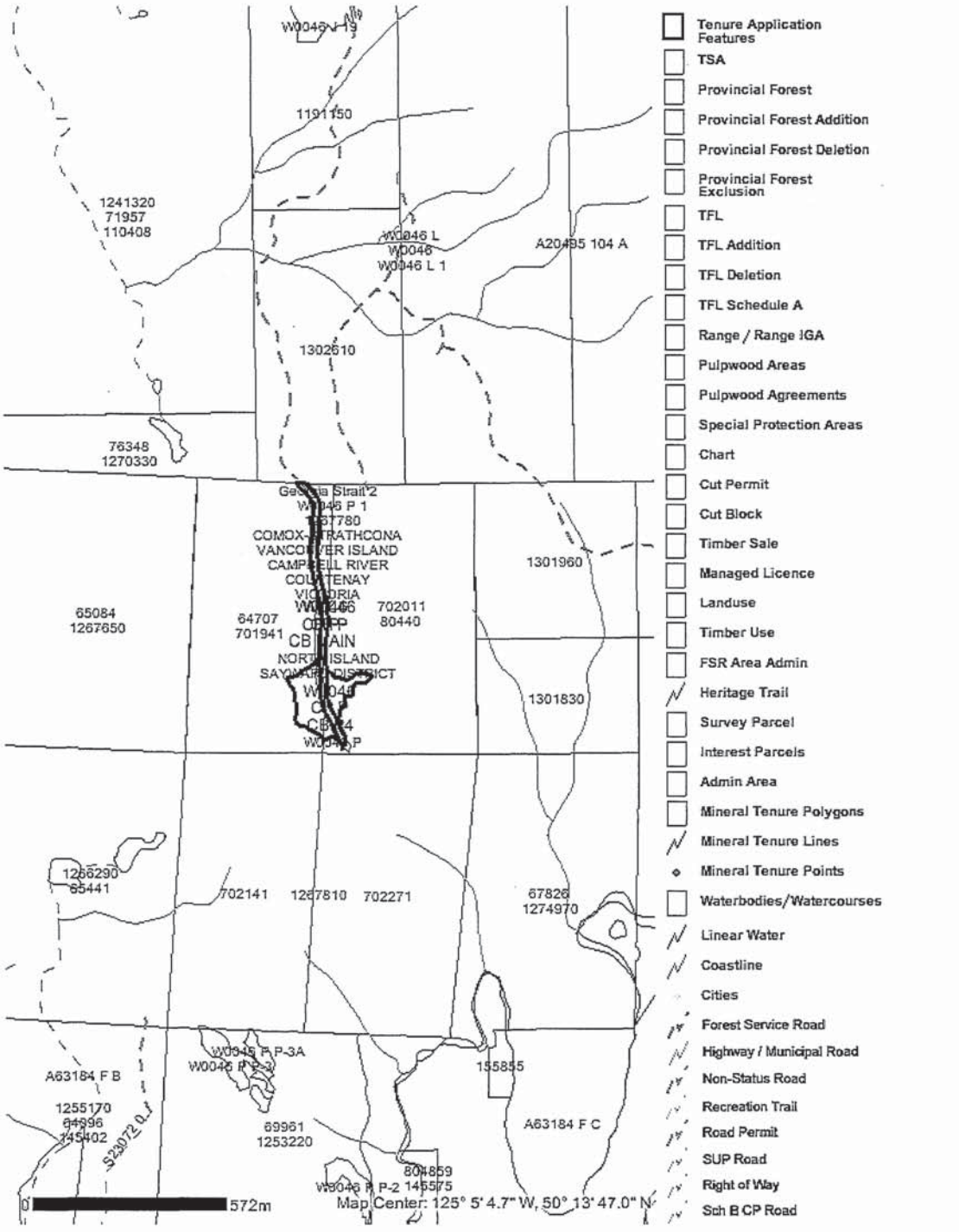
Greg Hemphill
District Manager
Sunshine Coast Forest District

Enclosure

Ministry of Forests and Range Sunshine Coast Forest District
Location: 7077 Duncan Street Powell River BC
Mailing Address: 7077 Duncan Street Powell River BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

FTA304 - Exhibit A - Tenure Map

FILE:	W0046	**Submitted By:**	HARPER LOGGING LTD.
FILE Type:	A04 - Woodlot Licence	**Submission Date:**	2007-05-31
Submission Area:	4.0401	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:15000	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:	Read Island		
BCGS Reference Maps:	092K025		



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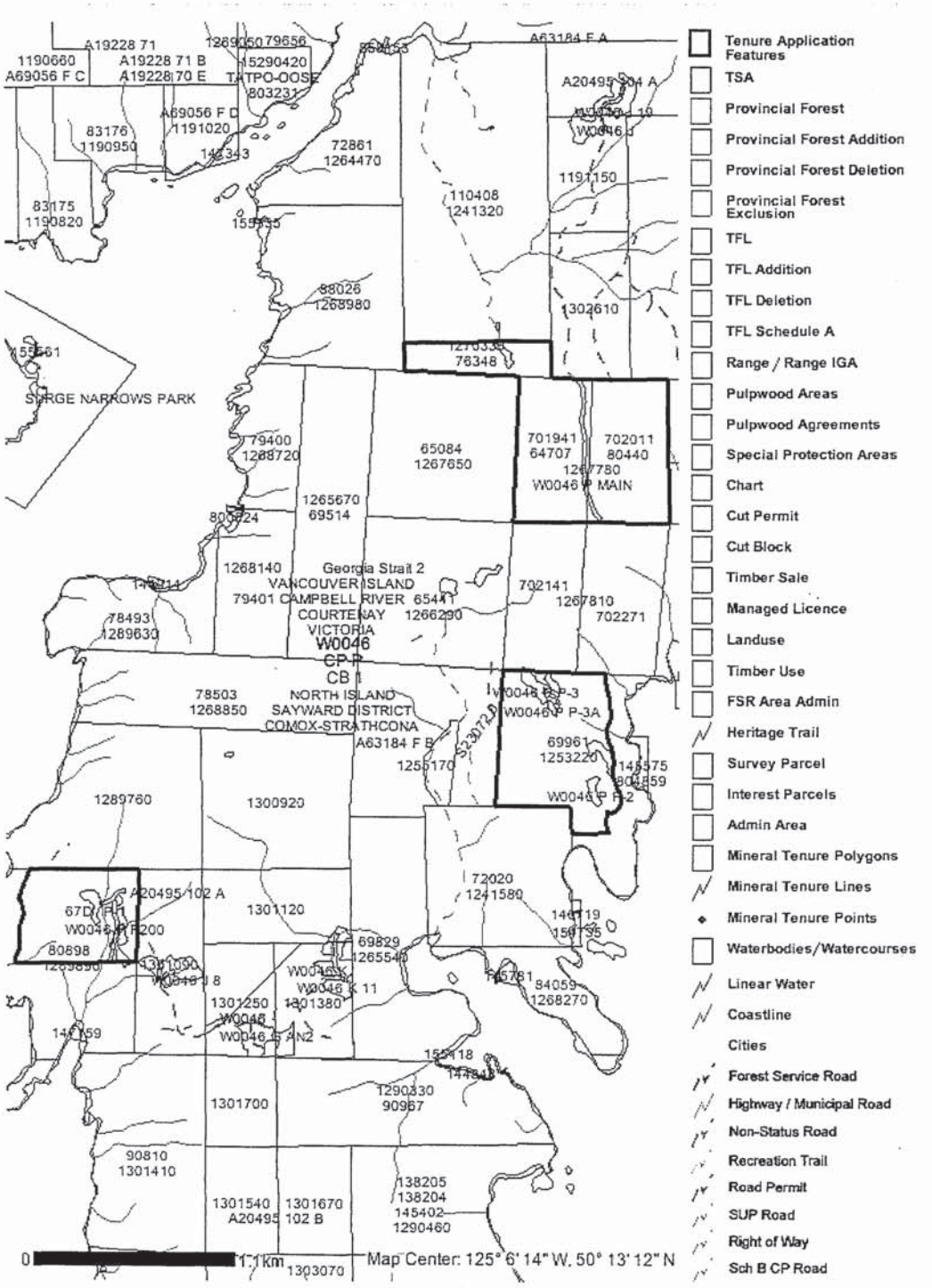
Ministry of Forests & Range

FTA304 - Exhibit A - Tenure Map

FILE:	W0046	**Submitted By:**	HARPER LOGGING LTD.
FILE Type:	A04 - Woodlot Licence	**Submission Date:**	2007-02-26
Submission Area:	161.3527	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:28978	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:	Blowdown salvage for W0046 Schedule A land		
BCGS Reference Maps:	092K025		



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MINISTRY OF FORES

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File: ORCS 19720-45/CP P W0046

April 17, 2007

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Reference is made to your application for amendment to Woodlot Licence W0046, Cutting Permit P of February 14, 2007.

Your application to harvest blowdown within the private land portion of your Woodlot Licence is approved. The attached Exhibit A Maps dated February 26, 2007 are in addition to Exhibit A Maps sent to you previously.

You are hereby exempted from the requirement to prepare a site plan for instances of fire-killed, beetle-killed, diseased or blowdown where the total volume is 500m^3 or less.

You are hereby exempted from the requirements of the Forest Development Plan, under Sections 19(1) and 19(1.2) of the *Forest Practices Code of British Columbia Act* as per Section 22.01 of the Woodlot Licence Forest Management Regulation.

Please notify Kim Meyer, Acting Compliance & Enforcement Team Supervisor prior to start up of any operations.

This letter and attachments form an integral part of the document for Woodlot Licence W0046, Cutting Permit P and should be attached thereto.

Yours truly,

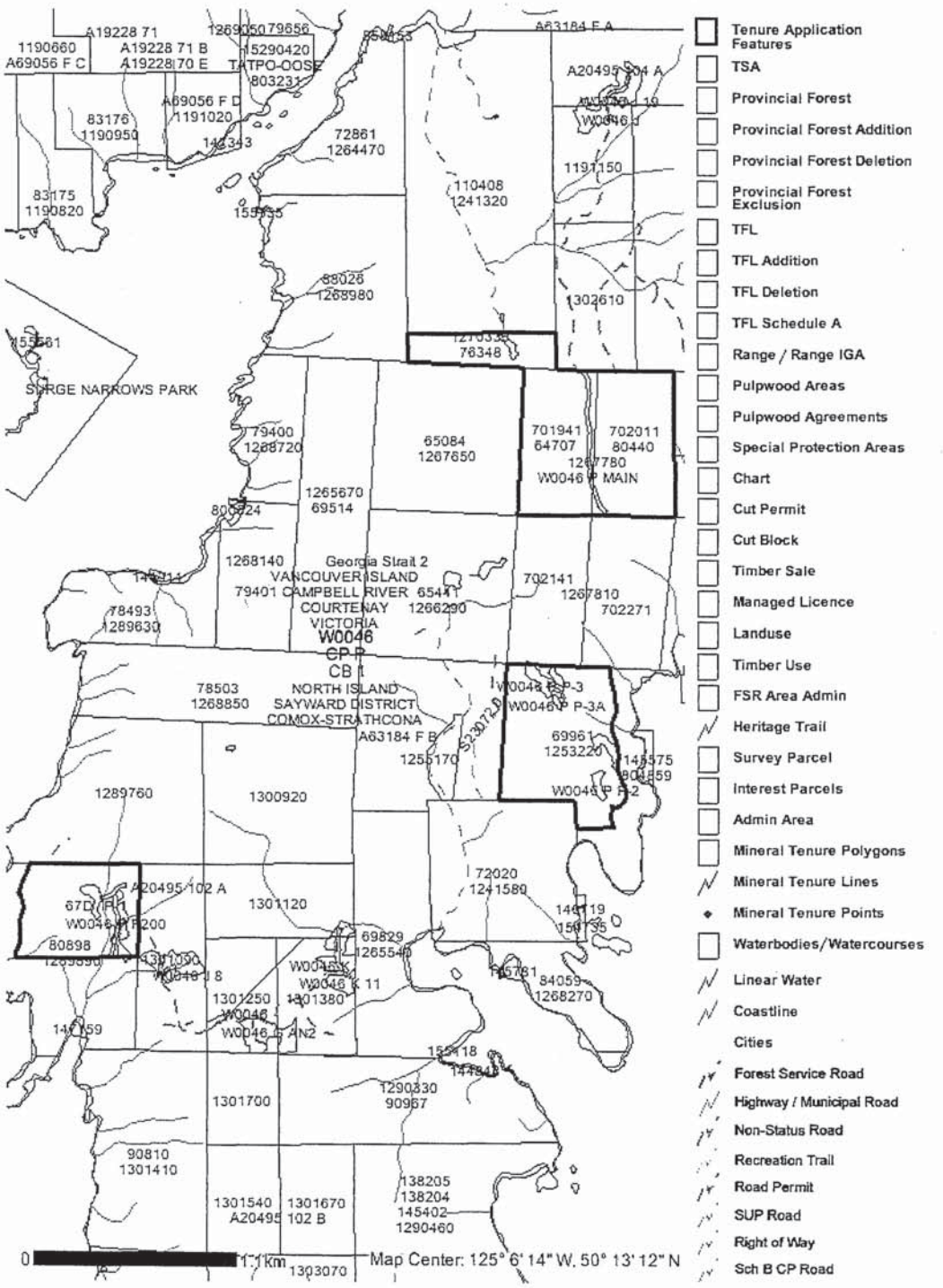
Greg Hemphill
District Manager
Sunshine Coast Forest District

Enclosure

Ministry of Forests and Range
Sunshine Coast Forest District
Location:
7077 Duncan Street
Powell River BC
Mailing Address:
7077 Duncan Street
Powell River BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

FTA304 - Exhibit A - Tenure Map

FILE:	W0046	**Submitted By:**	HARPER LOGGING LTD.
FILE Type:	A04 - Woodlot Licence	**Submission Date:**	2007-02-26
Submission Area:	161.3527	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:28978	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:	Blowdown salvage for W0046 Schedule A land		
BCGS Reference Maps:	092K025		



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MINISTRY OF FORES

BRITISH COLUMBIA

Distribution: HSLOOS,C&E
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File: ORCS 19720-45/W0046, CP P

November 21, 2006

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Reference is made to your application for amendment to Woodlot Licence W0046, Cutting Permit P received October 24, 2006.

Your application is approved. Blocks P-1A and P-2 located on Read Island within the Schedule A Lands of Woodlot W0046 are now included in Cutting Permit P. The attached Exhibit A Map dated November 7, 2006 is in addition to Exhibit A Maps sent to you previously.

Please be advised that timber removed from Blocks P-1A and P-2 will be marked to NNXFX.

Please notify Steve Gordon, Compliance & Enforcement Team Supervisor prior to start up of any operations.

This letter and attachments form an integral part of the document for Woodlot Licence W0046, Cutting Permit P and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachment

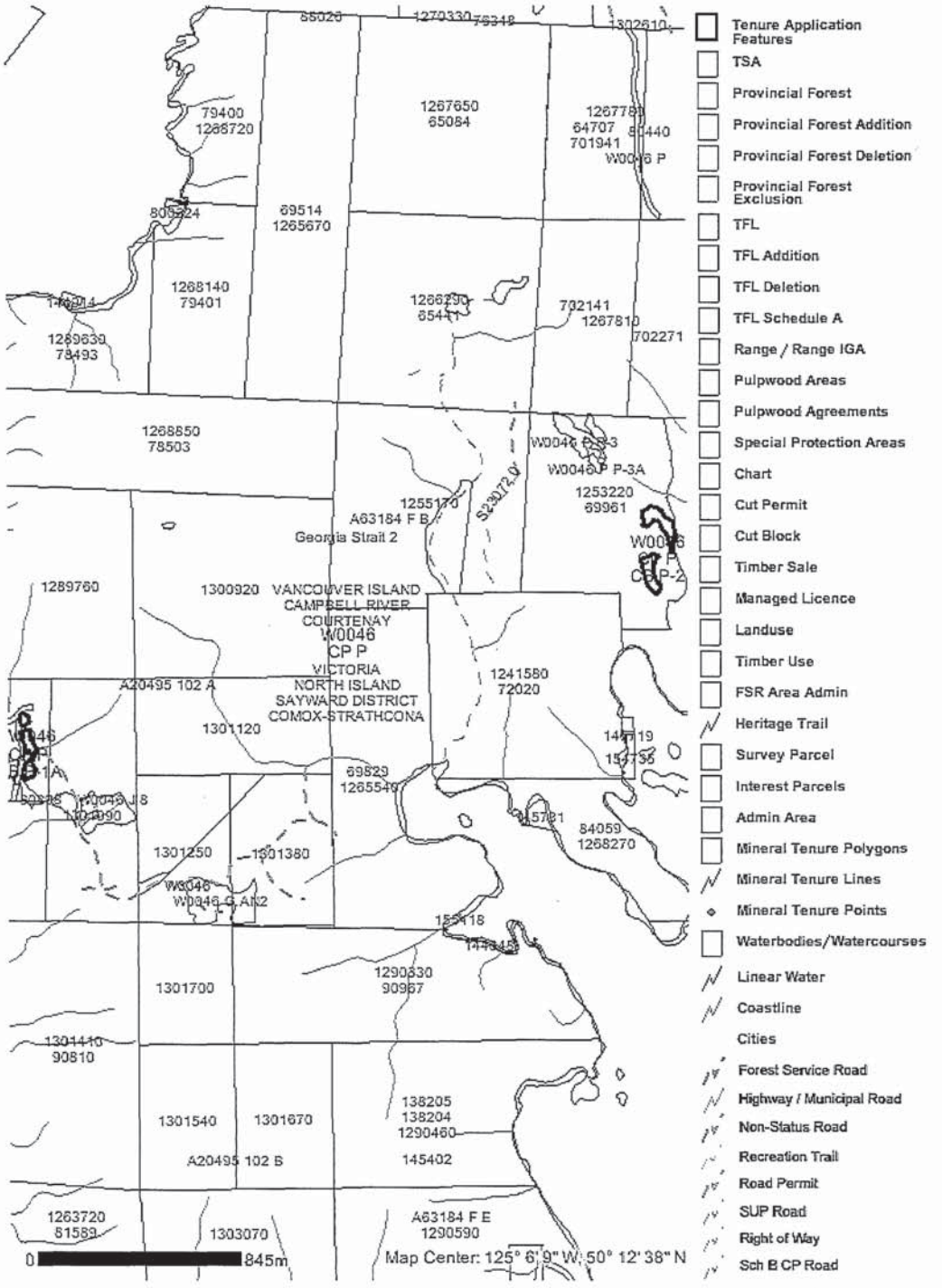
Ministry of Forests and Range Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

FTA304 - Exhibit A - Tenure Map

FILE:	W0046	**Submitted By:**	HARPER LOGGING LTD.
FILE Type:	A04 - Woodlot Licence	**Submission Date:**	2006-11-07
Submission Area:	2.5108	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:22187	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:	Read Island		
BCGS Reference Maps:	092K025		



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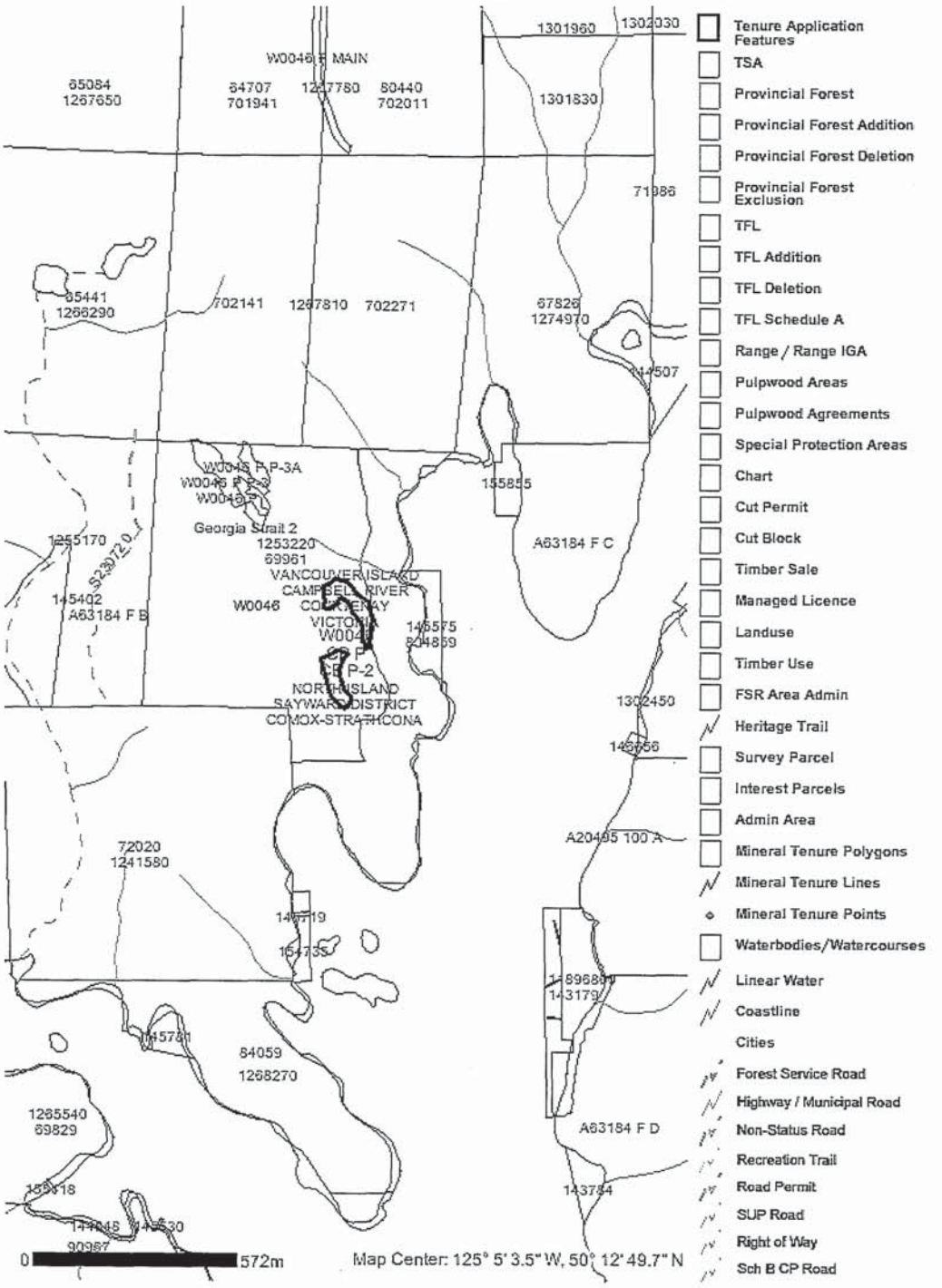
FTA305 - Feature Image

File:	W0046	**Submitted By:**	HARPER LOGGING LTD.
CP:	P	**Cut Block:**	P-2
File Type:	A04 - Woodlot Licence	**Submission Date:**	2006-11-07
Submission Area:	1.6752	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:22187	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:			
BCGS Reference Maps:			



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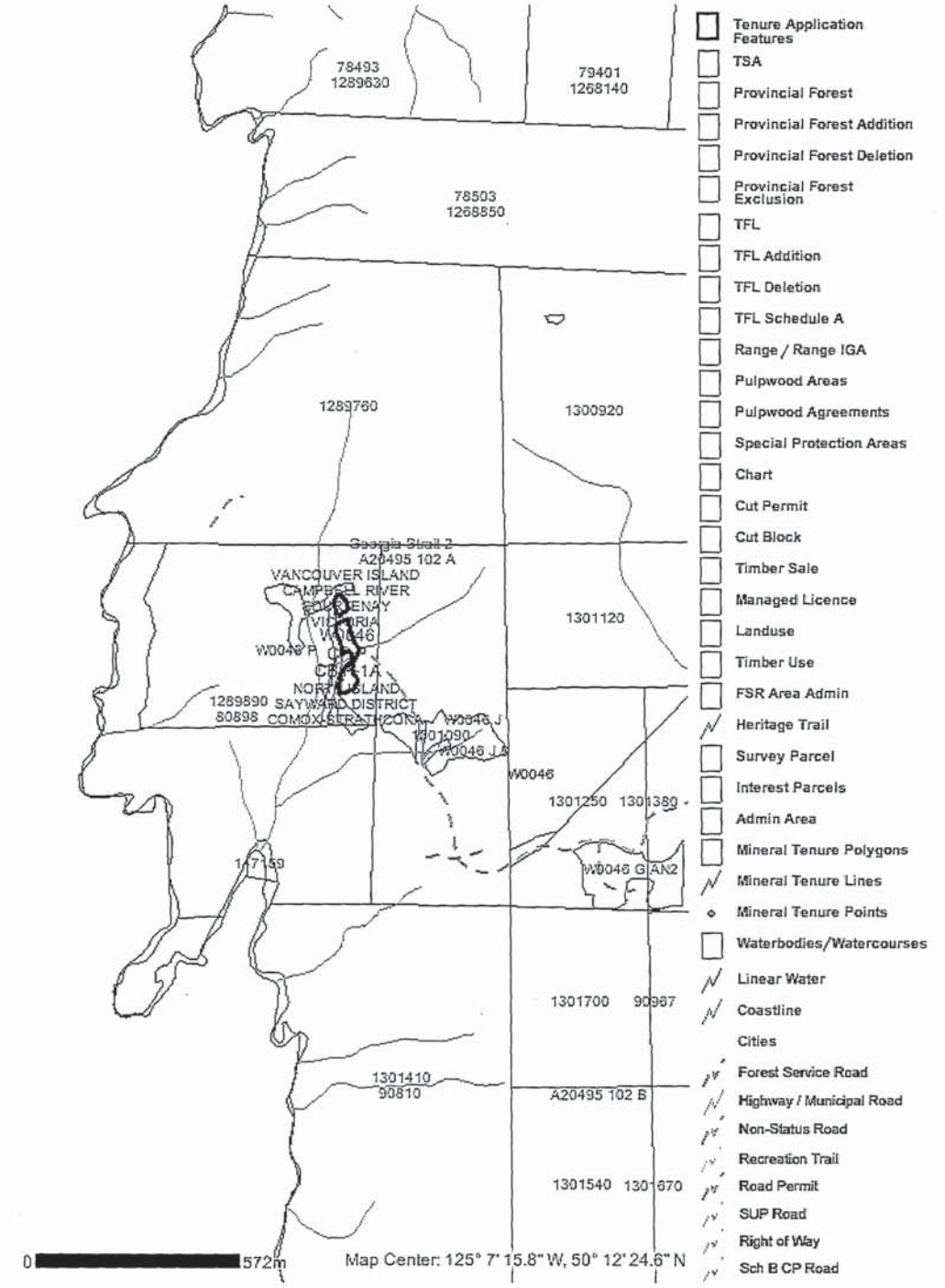
MINISTRY OF FORES

FTA305 - Feature Image

File:	W0046	**Submitted By:**	HARPER LOGGING LTD.
CP:	P	**Cut Block:**	P-1A
File Type:	A04 - Woodlot Licence	**Submission Date:**	2006-11-07
Submission Area:	0.8357	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:22187	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:			
BCGS Reference Maps:			



•Feedback •Disclaimer •Privacy •Copyright MINISTRY OF FORES

BRITISH COLUMBIA

Distribution: HSLOOS,C&E
G:\!Workgrp\RESOURCE\TEMP\CPDOCS\WOODLOT\W0046\CP P amend 061101.doc BK/LW

File: ORCS 19720-45/W0046, CP P

November 1, 2006

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Reference is made to your application for amendment to Woodlot Licence W0046, Cutting Permit P received October 12, 2006.

Your application is approved. Block P-3A located on on Read Island within the Schedule A Lands of Woodlot W0046 in now included in Cutting Permit P. The attached Exhibit A Map dated September 27, 2006 is in addition to Exhibit A Maps sent to you previously.

Please be advised that timber removed from Block P-3 will be marked to NNXFX.

Please notify Steve Gordon, Compliance & Enforcement Team Supervisor prior to start up of any operations.

This letter and attachments form an integral part of the document for Woodlot Licence W0046, Cutting Permit P and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachment

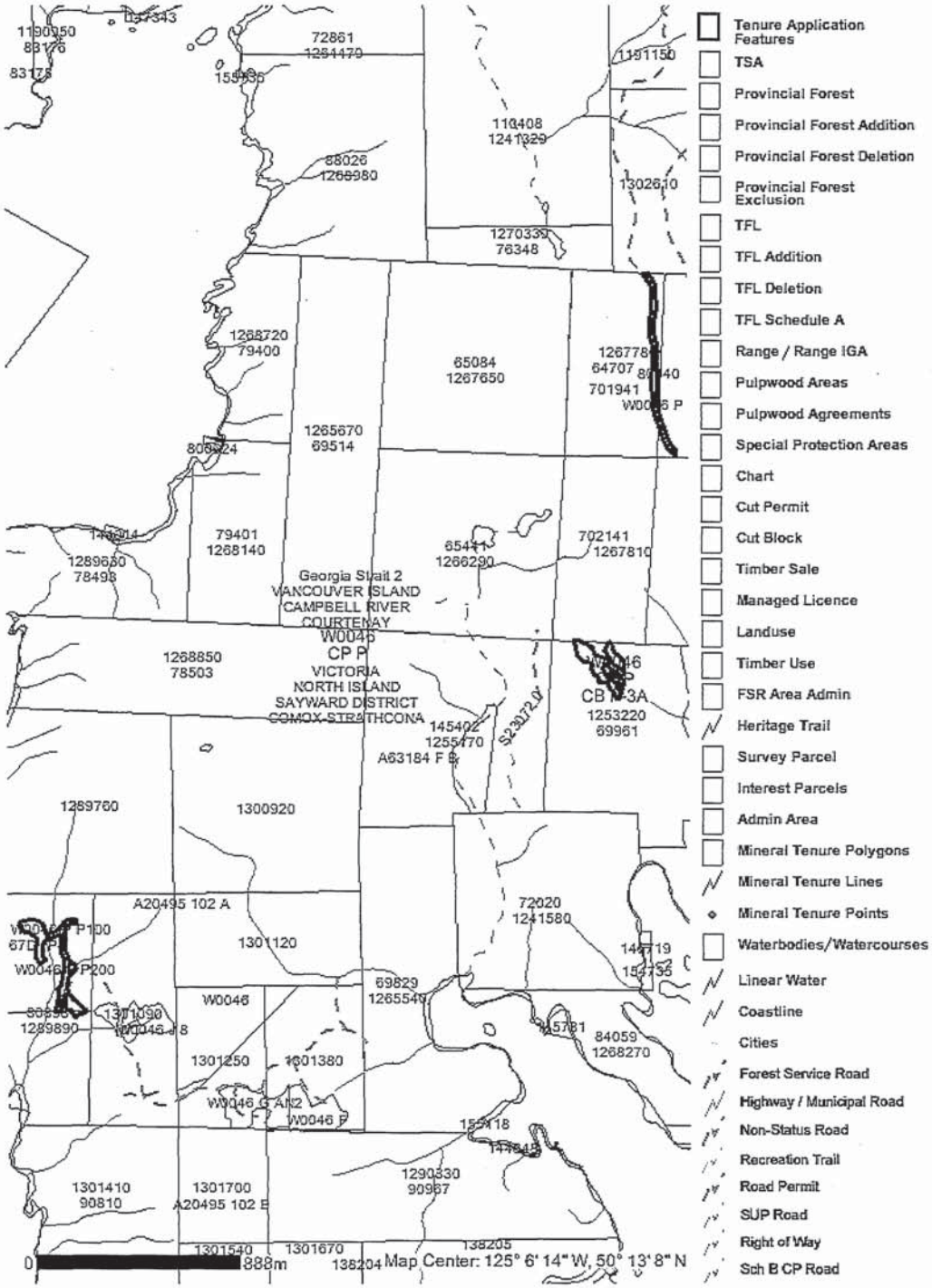
Ministry of Forests and Range Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

FTA304 - Exhibit A - Tenure Map

FILE:	W0046	**Submitted By:**	HARPER LOGGING LTD.
FILE Type:	A04 - Woodlot Licence	**Submission Date:**	2006-09-27
Submission Area:	6.4148	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:23295	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:	Read Island		
BCGS Reference Maps:	092K025		



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BRITISH COLUMBIA

\\!Workgrp\RESOURCE\TEMP\CPDOCS\WOODLOT\W0046\CP P amend 05 08 25.doc BK/tp
File: ORCS 19720-45/W0046, CP P

August 29, 2005

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Reference is made to your June 24, 2005 application for amendment to Woodlot Licence W0046, Cutting Permit P.

Your application is approved. Block P-3 located on District Lot (DL) 162 within the Schedule A Lands of Woodlot W0046 in now included in Cutting Permit P. The attached Exhibit A Map dated August 2, 2005 is in addition to Exhibit A Maps sent to you previously.

Please be advised that timber removed from Block P-3 it to be marked to NNXFX.

Please notify Rob Jones, Compliance & Enforcement Team Supervisor prior to start up of any operations.

This letter and attachments form an integral part of the document for Woodlot Licence W0046, Cutting Permit P and should be attached thereto.

Yours truly;

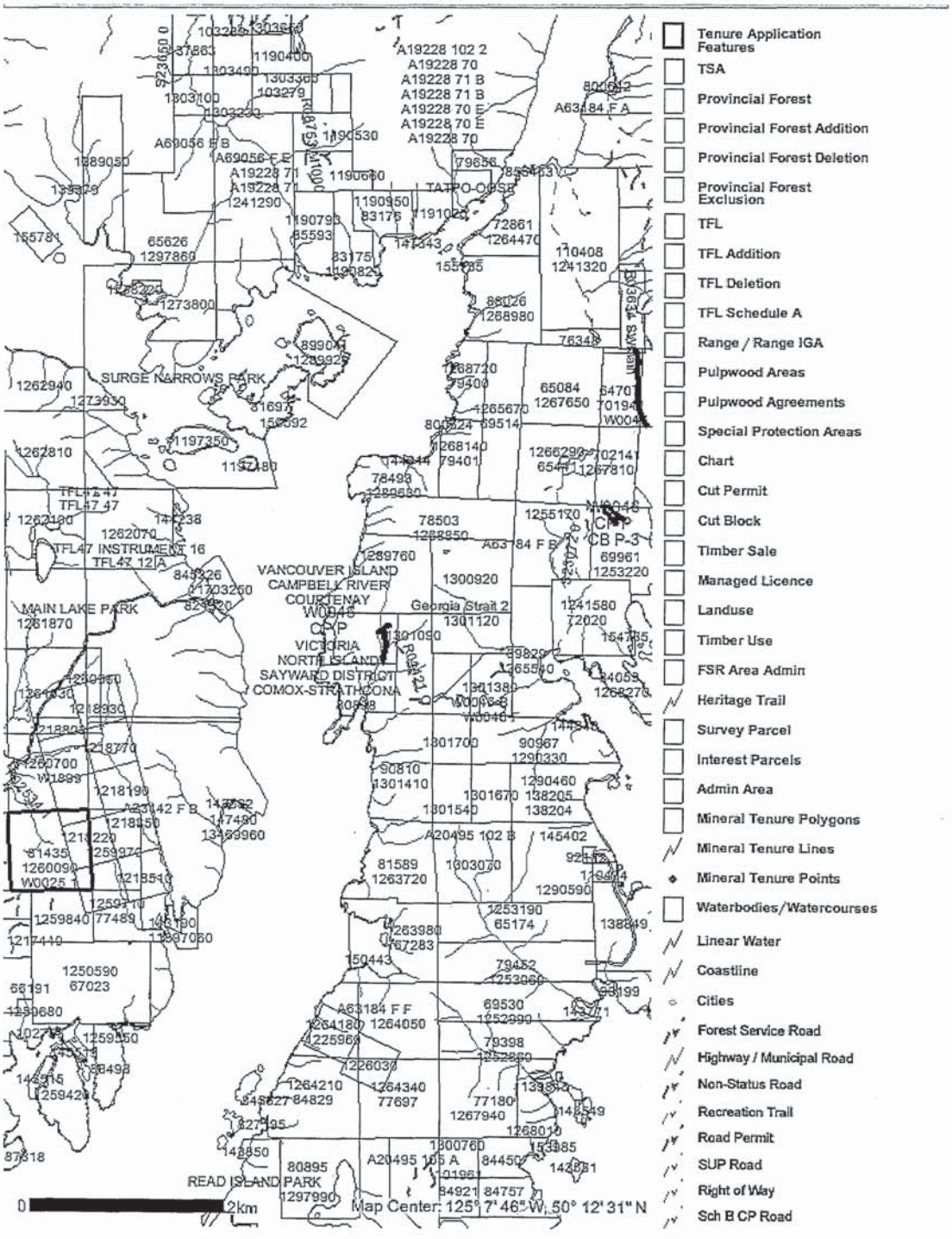
Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachment

Ministry of Forests and Range and Ministry Responsible for Housing
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

FTA304 - Exhibit A - Tenure Map

FILE:	W0046	**Submitted By:**	HARPER LOGGING LTD.
FILE Type:	A04 - Woodlot Licence	**Submission Date:**	2005-08-02
Submission Area:	70.2388	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:51729	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:	Read Island		
BCGS Reference Maps:	092K015		



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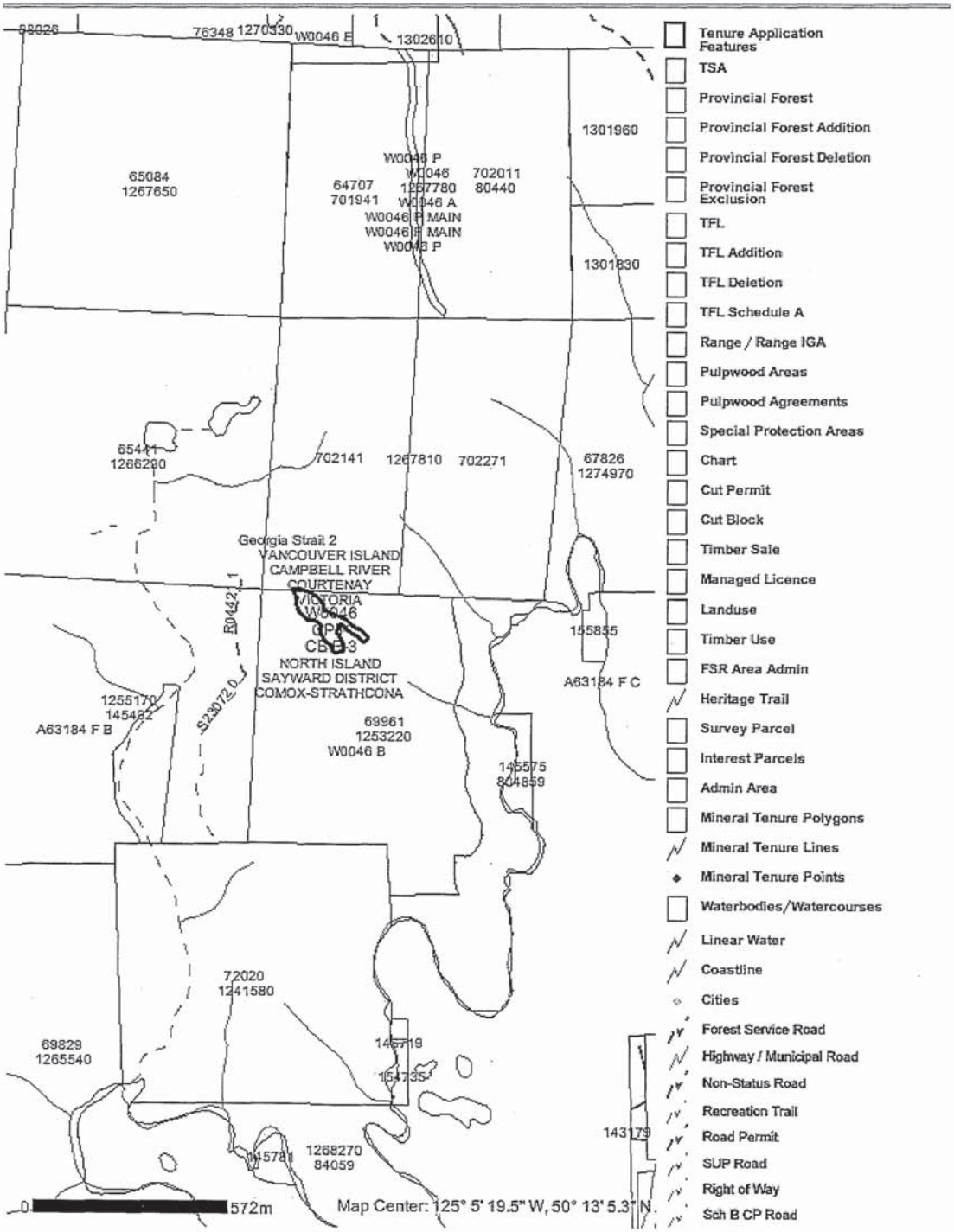
MINISTRY OF FORESTS

FTA305 - Feature Image

File:	W0046	**Submitted By:**	HARPER LOGGING LTD.
CP:	P	**Cut Block:**	P-3
File Type:	A04 - Woodlot Licence	**Submission Date:**	2005-08-02
Submission Area:	1.3028	**Submitted To:**	DSC - Sunshine Coast Forest District
Scale:	1:51729	**Revised By:**	
DATUM:	NAD 83	**Revision Date:**	
UTM Zone:	NOT AVAILABLE	**Cascades:**	W
Description:			
BCGS Reference Maps:			



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MINISTRY OF FORESTS

BRITISH COLUMBIA

Document name: \\FSDSC-R1\Root\!WorkGrp\RESOURCE\TEMP\EXTENSIO\CUTPERM\Woodlots\W0046\P.doc tp

File: ORCS 19720-45/W0046, CP P

October 27, 2004

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

In reply to your application of October 18, 2004 and pursuant to authority contained in the permit, the term of Cutting Permit P of Woodlot Licence W0046 is hereby extended to March 31, 2007. Upon that date all your rights under said permit will cease.

This notice forms an integral part of the permit and should be attached to it.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

VANCOUVER 2010

Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA

Document name: \\\!WorkGrp\RESOURCE\TEMP\CPDOCS\WOODLOT\46\CP P amend 020801.doc TP

File: ORCS 19720-45/W0046, CP P

August 1, 2002

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Harper Graham:

Reference is made to your June 24, 2002 application for amendment to Woodlot Licence W0046, Cutting Permit P.

Woodlot Licence W00469, Cutting Permit P has now been amended to included the cutting of timber within the right-of-ways for the following roads, P-200 and Harper Main.

Please notify the Compliance and Enforcement Technician in writing before beginning operations on all cut blocks.

This letter and attachments form an integral part of the document for Woodlot Licence W0047, Cutting Permit P and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Enclosure

pc: Compliance and Enforcement Technician: Vince letter only FYI

Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA

Document name: \\FSDSC-R1\Root\!WorkGrp\RESOURCE\TEMP\CPDOCS\WOODLOT\46\CPP amend 020821.doc LW

File: ORCS 19720-45/W0046, CP P

August 21, 2002

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Harper Graham:

Reference is made to your August 14, 2002 application for amendment to Woodlot Licence (WL) W0046, Cutting Permit P.

Your appplication is approved. Block P-1 located on DL 771 within the Schedule A Lands of Woodlot W0046 is now included in Cutting Permit P as per your application map dated August 12, 2002. Exhibit A Map to following under separate cover.

The specified timber mark in paragragh 4.01 of the licence document is amended to NNXFX. All timber removed from DL 771 should be marked accordingly.

Please notify the Compliance and Enforcement Technician in writing before beginning operations on all cut blocks.

This letter forms an integral part of the document for Woodlot Licence W0046, Cutting Permit P and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

pc: Compliance and Enforcement Technician, Vince Metcalf

Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

Province of British Columbia

Ministry of Forests

EXHIBIT 'A'

1 OF 1.

MAP OF: **C.P. P WL046 Schedule A**

Date 02-07-24
Drawn by C.J.G.
Revised by Date

FOREST REGION : 01
LAND DISTRICT : SAYW

DISTRICT : 15
SHOWN AS A BOLD SOLID LINE : Planning Cell

U.T.M. Zone Grid 10 East± 348700 North± 5563700

Reg 30 Compt. 010 L

NAD 27 X 83

MANAGEMENT UNIT
Type F
Number

TIMBER SUPPLY AREA
Number 39
Block 39C
Sub-B

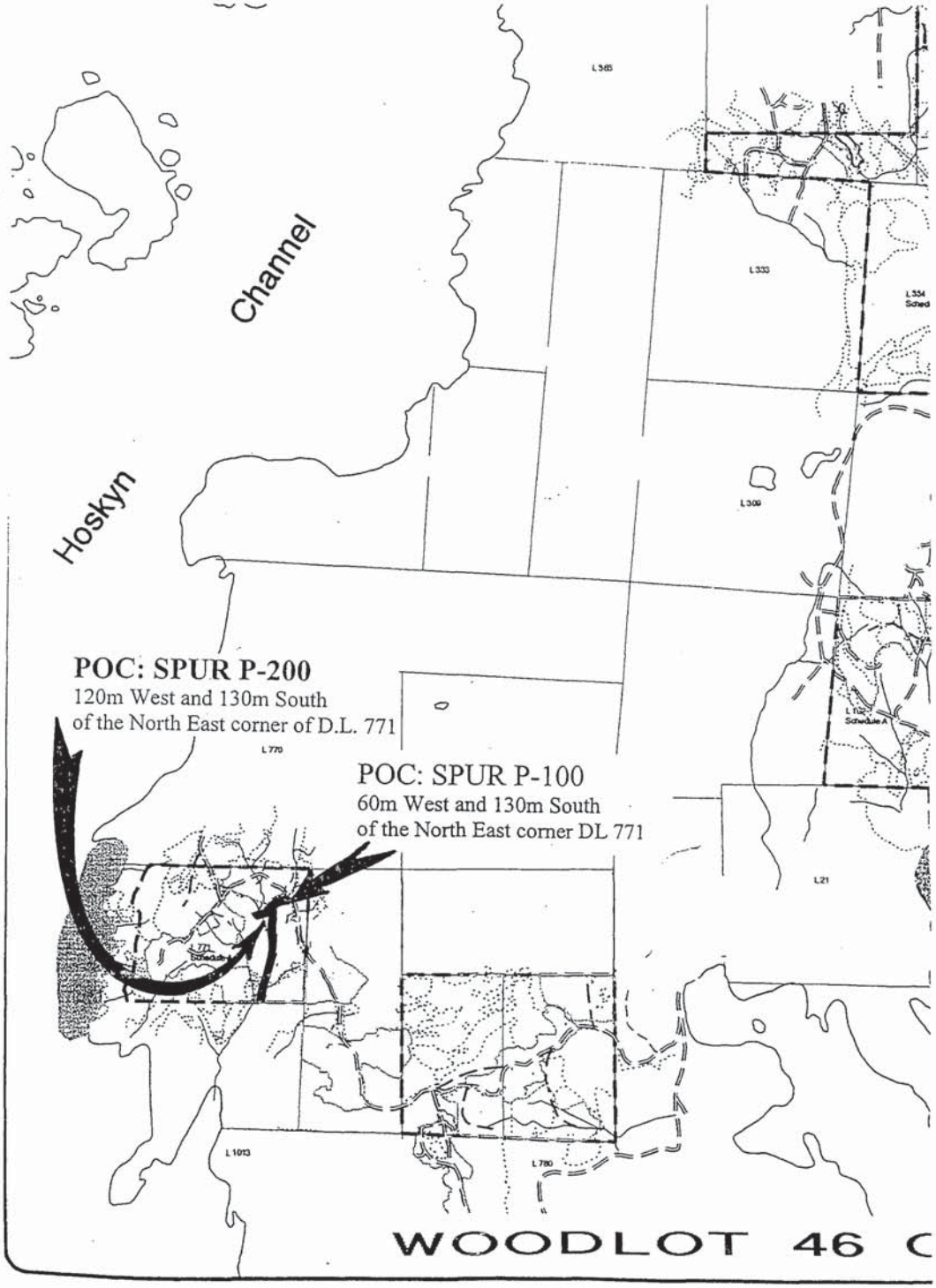
PULPWOOD AGREEMENT CASCADES
East
West C

Base Map 92K.025
Ref. Map 92K.025
ODM Map ID
Scale 1: 20,000

ORCS •

Area hectares±

Not to exceed WL046 Schedule 'A' Land



Province of British Columbia

Ministry of Forests

EXHIBIT 'A'

Map 2 of 2

FILE: **C.P. P WL046**

SHOWN AS A
BOLD SOLID LINE

Pulpwood Agreement

BCGS Reference Maps:
92K.025

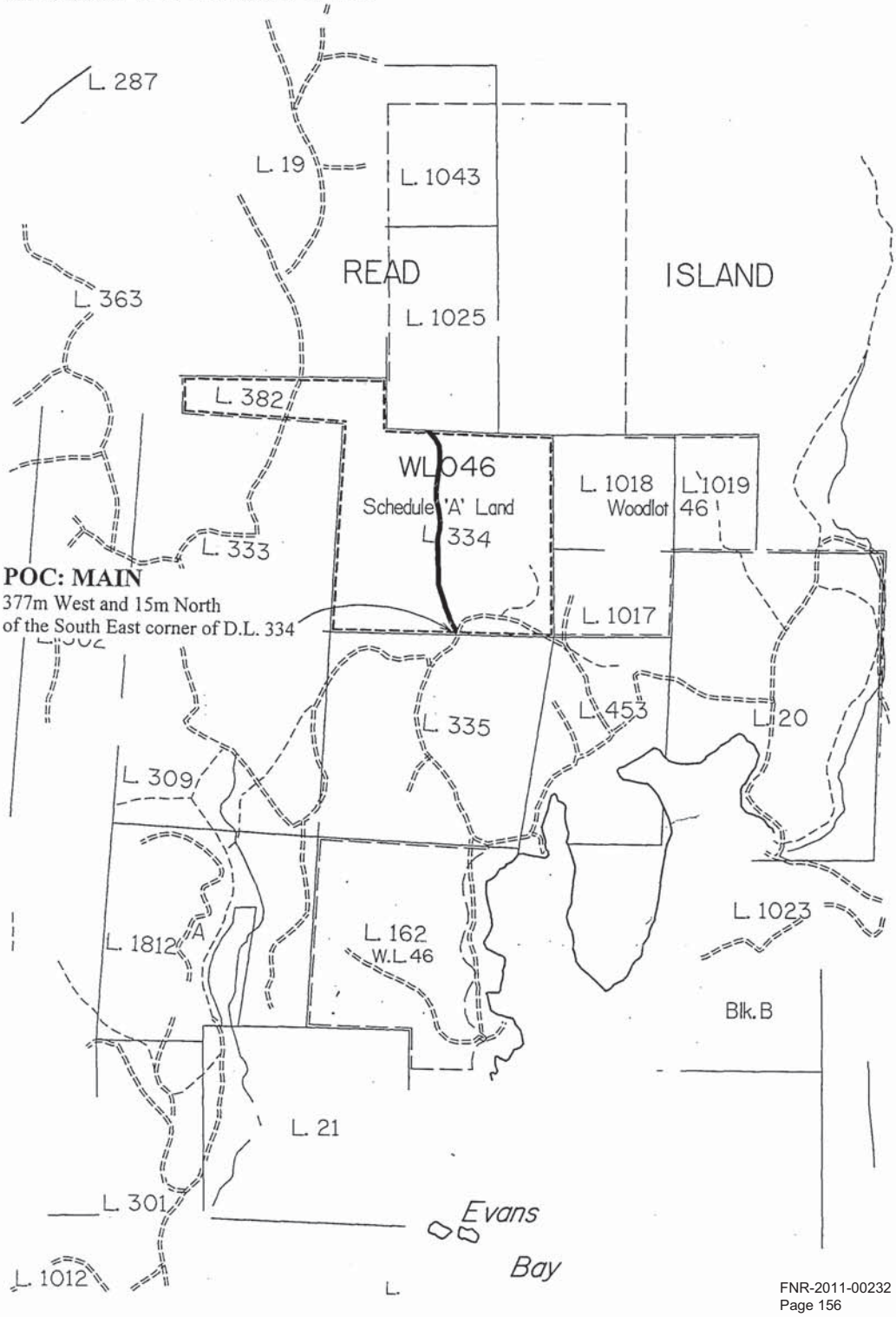
NAD 27/83 27
Reg 30 Compt. 010 L

Drawn by CJG Date 02-07-24
Revised by Date

ODM Map ID wl046p
Planning Cell ORCS •
Scale 1: 20,000
CASCADES W
Area hectares: 1

N

Not to exceed WL046 Schedule 'A' Land



BRITISH COLUMBIA

WOODLOT LICENCE NO. W0046

CUTTING PERMIT NO. P

PURSUANT TO Woodlot Licence No. W0046 (the "Licence"), this Cutting Permit is issued to:

HARPER LOGGING LTD.
BOX 299
HERIOT BAY, BRITISH COLUMBIA
VOP 1H0

(the "Licensee")

1.00 PERMIT AREA AND TERM

1.01 Subject to the Licence and the Acts, regulations and standards referred to in paragraph 10.01 of the Licence, the Licensee is authorized to harvest timber from the lands within the Licence Area that are designated for harvest on the map attached as Exhibit "A" to this Cutting Permit.

1.02 Subject to paragraph 1.03, the term of this Cutting Permit is **3 years**, beginning on **November 10, 2001**, and ending on **November 9, 2004.**

1.03 The District Manager, in a notice given to the Licensee, may

(a) extend the term of this Cutting Permit, and

(b) if he or she does so, amend this Cutting Permit to the extent necessary to ensure it is consistent with the forest development plan in effect at the time this Cutting Permit is extended.

2.00 SPECIAL CONDITIONS AND REQUIREMENTS

2.01 The Licensee must comply with the conditions and requirements set out in Schedule "A" to this Cutting Permit.

3.00 FELLING, BUCKING AND UTILIZATION SPECIFICATIONS

3.01 Subject to paragraph 3.04, the Licensee must

(a) fell standing timber of the species specified in Schedule "B" to this Cutting Permit, in accordance with the felling specifications set out in that Schedule,

(b) buck felled and dead and down timber of the species referred to in subparagraph (a) in accordance with the bucking specifications set out in Schedule "B" to this Cutting Permit, and

(c) utilize all timber of the species and grades specified as obligatory utilization in Schedule "B" to this Cutting Permit if the timber meets the utilization specifications set out in that Schedule.

3.02 Schedule "B" to this Cutting Permit may include a requirement that the Licensee fell other timber in addition to the timber referred to in paragraph 3.01(a), in which case, subject to paragraph 3.04, the Licensee must fell but need not utilize such timber.

3.03 Subject to paragraph 3.04, the Licensee may utilize

(a) timber of the species and grades specified as optional utilization in Schedule "B" to this Cutting Permit, and

(b) timber referred to in paragraph 3.02.

3.04 The Licensee must not fell standing timber, or must not buck or utilize felled or dead and down timber, as the case may be, if

(a) the timber is specified as reserved timber in Schedule "B" to this Cutting Permit, or

(b) under an operational plan or the Acts, regulations or standards referred to in paragraph 10.01 of the Licence, the Licensee is required not to fell the timber, or not to buck or utilize the timber, for any reason, including silviculture, biodiversity or other forest management reasons.

4.00 TIMBER MARK

4.01 The timber mark for timber harvested from Schedule A Land under this Cutting Permit is:

67D

4.02 The timber mark for timber harvested from Schedule B Land under this Cutting Permit is not applicable:

4.03 If directed to do so by the District Manager, the Licensee must erect signs at all exits from the areas of land referred to in paragraph 1.01, clearly showing the timber mark referred to in paragraph 4.01.

5.00 SCALE-BASED STUMPAGE

5.01 For the purpose of determining the amount of stumpage payable in respect of timber harvested from the areas of Schedule B Land authorized for harvest under this Cutting Permit, the volume or quantity of timber harvested will be determined using information provided in a scale of the timber.

5.02 The Licensee must ensure that

(a) all timber harvested from the areas of land referred to in paragraph 1.01 is scaled, and

(b) the scale of the timber is conducted properly in accordance with the requirements of the *Forest Act* and the regulations made under that Act.

6.00 ROADS

6.01 Subject to the Licence and the Acts, regulations and standards referred to in paragraph 10.01 of the Licence, the Licensee may construct or modify roads under the authority of this Cutting Permit on areas of Schedule B Land authorized for harvest under this Cutting Permit if the roads are identified on an operational plan.

7.00 MISCELLANEOUS

7.01 The Exhibit "A" and the Schedules to this Cutting Permit are deemed to be part of this Cutting Permit.

7.02 As provided in the Licence, this Cutting Permit is deemed to be part of the Licence.

7.03 The Licence will govern the interpretation of this Cutting Permit.

DATED November 8, 2001

Greg Hemphill, District Manager
Sunshine Coast Forest District

SCHEDULE "A"
SPECIAL CONDITIONS AND REQUIREMENTS

1.00 TIMING OF OPERATIONS

1.01 The Licensee must ensure that:

(a) all phases of timber harvesting and related operations under or associated with this Cutting Permit are synchronized, and

(b) all harvesting on one area designated for harvest under this Cutting Permit is completed to the satisfaction of the District Manager before harvesting is commenced on another area.

2.00 ORDERLY CONDITION

2.01 The Licensee shall, concurrently with harvesting operations, leave all areas in an orderly and sanitary condition.

3.00 NO MILL ALLOWED

3.01 The Licensee must not erect or operate a sawmill or wood processing plant on an area of land referred to in paragraph 1.01 of this Cutting Permit.

4.00 MANUFACTURE PROHIBITED ON SALE AREA

4.01 The Licensee must not allow the manufacture of special forest products on the area of land described in paragraph 1.01 of this Cutting Permit.

5.00 HAZARD TREES

5.01 The hazard tree felling area surrounding the cutblock boundaries identified on the attached map as Exhibit "A", is subject to an exemption from the requirement for a Forest Development Plan as provided under Section 28 (1)(a)(i) of the *Forest Practices Code of British Columbia Act*, exemption notice dated November 8, 2001, for the purposes of hazard tree felling. The hazard tree felling area extends 80 metres beyond the cutblock boundaries.

5.02 The Licensee may fell trees outside of the cutblock boundaries but within the area described in paragraph 5.01 if the person conducting tree felling or rigging tail hold/anchor trees determines that the tree represents a safety hazard according to the Occupational Health and Safety Regulations of the Workers' Compensation Board of British Columbia.

5.03 Trees felled under paragraph 5.02 shall be bucked and utilized according to the specifications included in the Cutting Permit.

SCHEDULE "B"
FELLING, BUCKING AND UTILIZATION SPECIFICATIONS

1.00 FELLING SPECIFICATIONS

1.01 Subject to paragraph 1.02, standing timber of the species shown on the table attached to this Schedule must be felled in accordance with the following specifications:

(a) unless otherwise authorized in writing by the District Manager, timber must be felled to a stump height that does not exceed the maximum stump height shown for that species in the table attached to this Schedule.

1.02 The Licensee must not fell standing timber if

(a) the timber is specified in Part 6.00 as reserved timber, or

(b) under an operational plan or the Acts, regulations or standards referred to in paragraph 10.01 of the Licence, the Licensee is required not to fell the timber for any reason, including silviculture, biodiversity or other forest management reasons.

2.00 BUCKING SPECIFICATIONS

2.01 Subject to paragraph 2.02, felled and dead and down timber of the species referred to in paragraph 1.01 must be bucked so as to maximize the volume of logs and slabs which

(a) meet the utilization specifications referred to in paragraph 3.01, and

(b) are of the species and grades specified as obligatory utilization under Part 4.00.

2.02 The Licensee must not buck felled or dead and down timber if

(a) the timber is specified in Part 6.00 as reserved timber, or

(b) under an operational plan or the Acts, regulations or standards referred to in paragraph 10.01 of the Licence, the Licensee is required not to buck the timber for any reason, including silviculture, biodiversity or other forest management reasons.

3.00 UTILIZATION SPECIFICATIONS

3.01 Subject to paragraphs 3.02 and 3.03, the following utilization specifications apply to timber authorized for harvest under this Cutting Permit:

(a) all logs meeting

(i) the minimum log length, and
(ii) the minimum top diameter

shown for that species in the table attached to this Schedule must be utilized;

(b) all slabs meeting

(i) the minimum slab length, and
(ii) the minimum slab thickness

shown for that species in the table attached to this Schedule must be utilized.

3.02 The Licensee need not utilize timber of the species and grades specified in Part 5.00 as optional utilization.

3.03 The Licensee must not utilize timber if

(a) the timber is specified in Part 6.00 as reserved timber, or

(b) under an operational plan or the Acts, regulations or standards referred to in paragraph 10.01 of the Licence, the Licensee is required not to utilize the timber for any reason, including silviculture, biodiversity or other forest management reasons.

4.00 OBLIGATORY UTILIZATION

4.01 Timber of the following species and grades is specified as obligatory utilization:

(a) all coniferous species, alder and cottonwood that are Grade X or better.

5.00 OPTIONAL UTILIZATION

5.01 Timber of the following species and grades is specified as optional utilization:

(a) firmwood rejects;

(b) all deciduous species not listed as obligatory; and

(c) all coniferous species, alder and cottonwood that are Grade Y.

6.00 RESERVED TIMBER – Not applicable

7.00 DEFINITIONS

7.01 In this Schedule, as exemplified by the diagrams attached to this Schedule,

(a) "slab" means one of 2 or more parts of a log produced as a result of the log fracturing along its length;

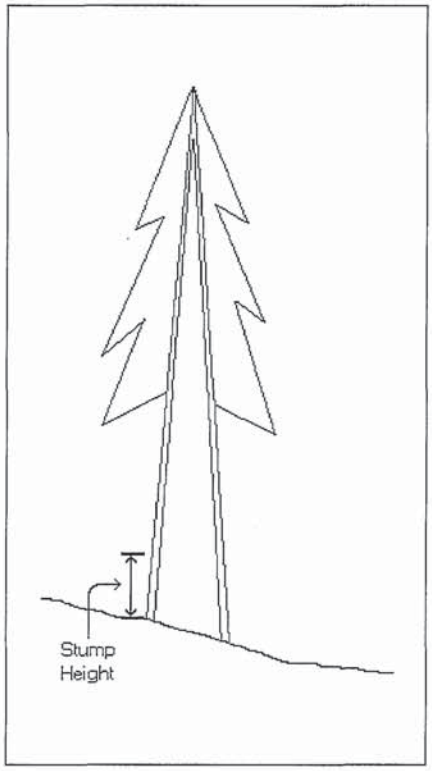
(b) "stump height" means the height of the stump measured on the side of the stump adjacent to the highest ground;

(c) "top diameter" means the diameter (inside bark) at the narrowest end of the log.

SCHEDULE "B" - COAST

Diagrams and Tables for all blocks

1. Falling Specifications

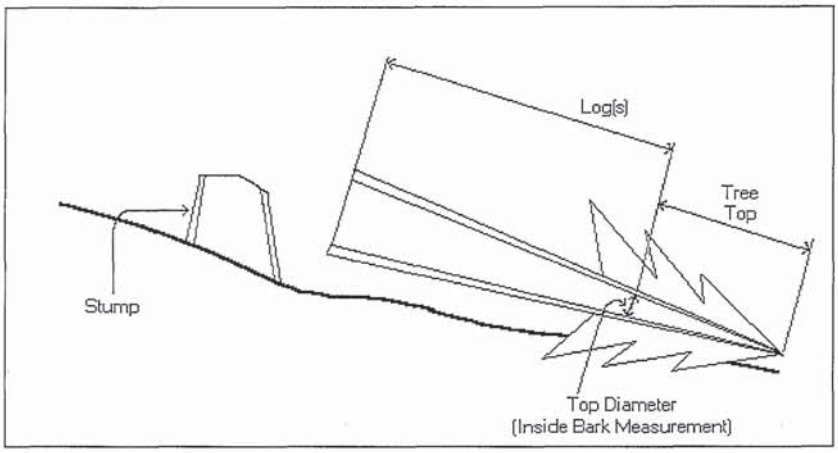


Species	Maximum Stump Height
All	30 centimetres

SCHEDULE "B" - COAST

Diagrams and Tables
for all blocks

2. Utilization Specifications



Species	Minimum Log or Slab Length	Minimum Top Diameter or Slab Thickness
Coniferous	3 metres	10 centimetres
Deciduous	3 metres	15 centimetres

Province of British Columbia

Ministry of Forests

EXHIBIT 'A'

1 OF 1.

MAP OF: C.P. P WL046 Schedule A

Date 01-11-07
Drawn by C.J.G.
Revised by Date

FOREST REGION : 01
LAND DISTRICT : SAYW

DISTRICT : 15
SHOWN AS A BOLD SOLID LINE : Planning Cell

U.T.M. Zone Grid 10 East± 348700 North± 5563700

Reg 30 Compt. 010 L

NAD 27 X 83

MANAGEMENT UNIT
Type F
Number

TIMBER SUPPLY AREA
Number 39
Block 39c
Sub-B

PULPWOOD AGREEMENT

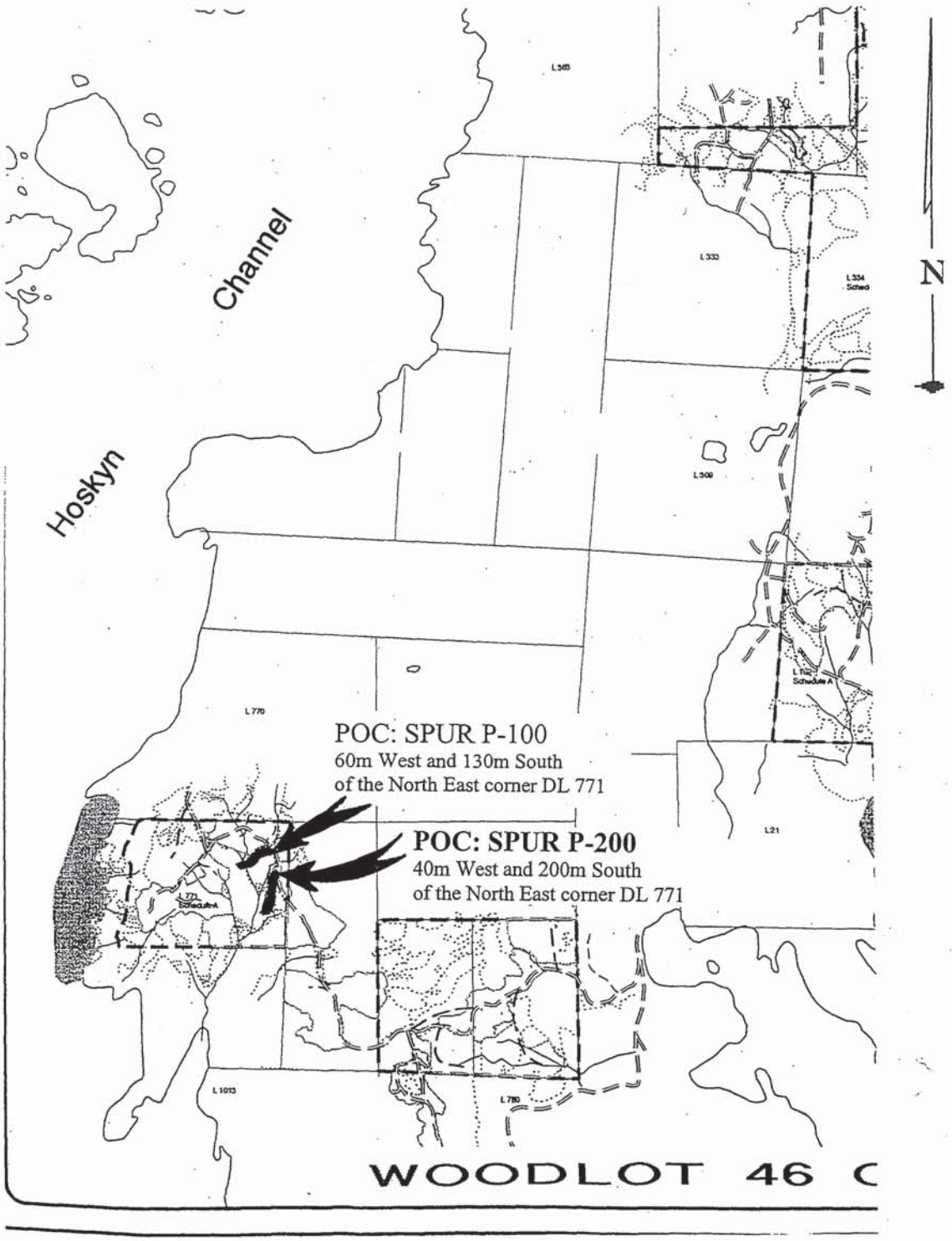
CASCADES
East
West C

Base Map 92K.025
Ref. Map 92K.025

ODM Map ID
Scale 1: 20,000

ORCS •

Area hectares±



BRITISH COLUMBIA

Document name: \\FSDSC-R1\Root\!WorkGrp\RESOURCE\TEMP\CPDOCS\WOODLOT\46\CP P cover letter.doc [Typist Initials]
Date typed: 2001/11/08 Date last saved: 2001/11/08 10:42 am

File: 19720-45/W0046, CP P

November 8, 2001

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Harper Graham:

Attached is Cutting Permit P of Woodlot Licence W0046.

The Licensee shall obtain authorization of the District Manager for a designated place of scaling prior to removing any timber from this Cutting Permit.

You will be advised under separate cover of initial stumpage rates, which are to be determined by the Forest Officer in accordance with the stumpage provision conditions in the Cutting Permit document.

You are hereby exempted from the requirements of Forest Development Plan, under Section 28.(1)(a) of the *Forest Practices Code of British Columbia Act* and for the requirements of a Site Plan under Section 14 (10)(c)(iii) of the Woodlot Licence Forest Management Regulations to allow the falling of danger trees within 80 metres beyond the boundaries of this Cutting Permit.

• THE GOVERNMENT OF BRITISH COLUMBIA IS AN "*EMPLOYMENT EQUITY EMPLOYER*" •

Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

Prior to commencement of operations, there must be an approved logging plan in place for blocks with Site Plans submitted for approval before June 15, 1998. Please read the Cutting Permit document and be prepared to comply with all conditions therein.

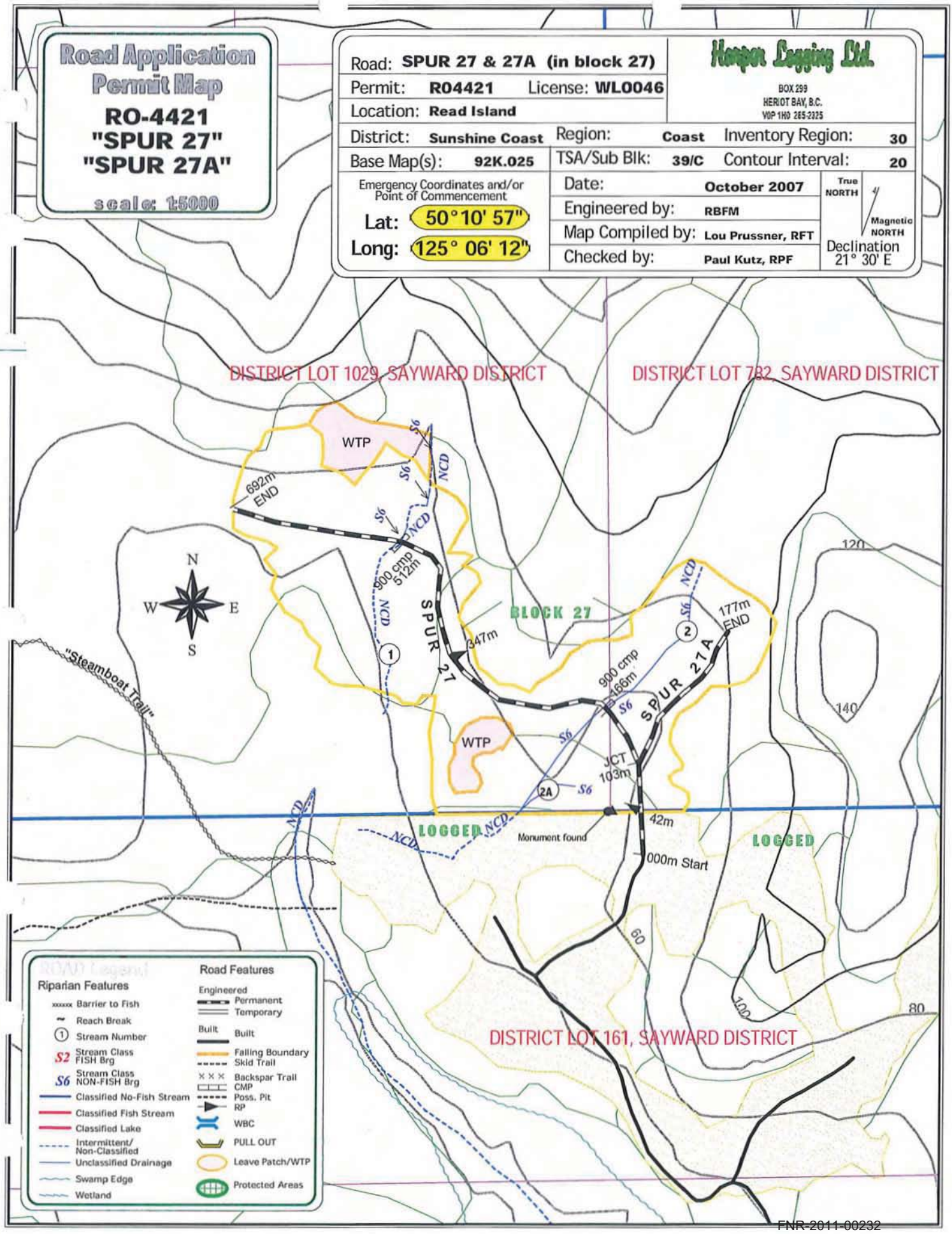
Please notify the Compliance and Enforcement Technician in writing before beginning operations on all cut blocks.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachments

bpc: Resource Tenures and Engineering Branch, Victoria
- Copy of Page 1 of document and Exhibit A attached (for Woodlots only)


Road Application Permit Map
RO-4421
"SPUR 27"
"SPUR 27A"
scale: 1:5000
Road: SPUR 27 & 27A (in block 27)
Permit: R04421 License: WL0046
Location: Read Island
District: Sunshine Coast
Region: Coast
Inventory Region: 30
Base Map(s): 92K.025
TSA/Sub Blk: 39/C
Contour Interval: 20
Emergency Coordinates and/or Point of Commencement
Lat: 50° 10' 57"
Long: 125° 06' 12"
Date: October 2007
Engineered by: RBFM
Map Compiled by: Lou Prussner, RFT
Checked by: Paul Kutz, RPF
Harper Logging Ltd.
BOX 299
HERIOT BAY, B.C.
V0P 1H0 285-2225
True NORTH
Magnetic NORTH
Declination 21° 30' E
DISTRICT LOT 1029, SAYWARD DISTRICT
DISTRICT LOT 782, SAYWARD DISTRICT
DISTRICT LOT 161, SAYWARD DISTRICT
WTP
692m END
900 cmp 512m
SPUR 27
347m
BLOCK 27
177m END
900 cmp 166m
SPUR 27A
JCT 103m
WTP
42m
000m Start
Monument found
LOGGED
LOGGED
"Steamboat Trail"
NCD
S6
120
140
100
80
60
N
S
E
W
Road Legend
Riparian Features
Barrier to Fish
Reach Break
Stream Number
Stream Class FISH Brg
Stream Class NON-FISH Brg
Classified No-Fish Stream
Classified Fish Stream
Classified Lake
Intermittent/ Non-Classified
Unclassified Drainage
Swamp Edge
Wetland
Road Features
Engineered
Permanent
Temporary
Built
Built
Falling Boundary
Skid Trail
Backspar Trail
CMP
Poss. Pit
RP
WBC
PULL OUT
Leave Patch/WTP
Protected Areas

Harper Logging Ltd.

BOX 299
HEROT BAY, B.C.
V0P 1H0 235-2325

October 9, 2007

Ministry of Forests
Sunshine Coast Forest District
7077 Duncan Street
Powell River, B.C.
V8A 1 W1

ATTENTION: Mr. Brian Kukulies, RPF.

RE: **Section 42(1) Minor Amendment to RP R04421**

Dear Sir,

For your information, please find attached a minor amendment to the Road Permit R04421 on behalf of Harper Logging Ltd. This amendment is consistent with section 24.1 of the WLFMR.

This amendment is to illustrate the final road configuration for Spur 27 and Spur 27A which provides accesses the FDP approved block 27 and 28. The final road location continues to meet the requirements of all the Act, regulations and standards; it will adequately provide for managing and conserving the forest resources of BC for the area to which it applies; and it does not materially change the objectives or results of the plan.

I have enclosed a 1:5000 map that depicts the updated road configuration. Should you wish to discuss this further please feel free to contact Harper Graham or myself at your convenience.

Yours truly,

Paul Kutz, R.P.F.
Forester

c.c. Harper Graham

RP R04421 Amendment Spur_27.doc

Kukulies, Brian FOR:EX

From: Paul Kutz s.22
Sent: May 1, 2007 9:35 PM
To: Kukulies, Brian FOR:EX
Subject: Minor Amendment to RP R04421
Attachments: RP R04421Amendment spur_10.pdf; Road Construction Map Spur 10 in Block 10.pdf

Hello Brian,
Please find attached a copy of a Section 42(1) minor amendment to a road permit which covers "Spur 10" located within WL0046. This spur was originally approved in 2003 and never built. The minor amendment is to illustrate the final road configuration. I have included a copy of a map in this e-mail.

If you have any questions or concerns please contact me.

Thanks

Paul Kutz

Harper Logging Ltd.

BOX 299
HEIROT BAY, B.C.
V0P 1H0 285-2325

April 29, 2007

Ministry of Forests
Sunshine Coast Forest District
7077 Duncan Street
Powell River, B.C.
V8A 1 W1

ATTENTION: Mr. Brian Kukulies, RPF.

RE: **Section 42(1) Minor Amendment to RP R04421**

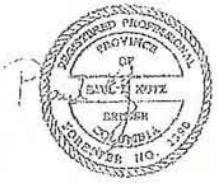
Dear Sir,

For your information, please find attached a minor amendment to the Road Permit R04421 on behalf of Harper Logging Ltd. This amendment is consistent with section 24.1 of the WLFMR.

This amendment is to illustrate the final road configuration for Spur 10, which was previously RP approved in December 2003 and accesses FDP approved block 10. The final road location continues to meet the requirements of all the Act, regulations and standards; it will adequately provide for managing and conserving the forest resources of BC for the area to which it applies; and it does not materially change the objectives or results of the plan.

I have enclosed a 1:5000 map that depicts the updated road configuration. Should you wish to discuss this further please feel free to contact Harper Graham or myself at your convenience.

Yours truly,



Paul Kutz, R.P.F.
Forester

c.c. Harper Graham

RP R04421 Amendment Spur 10.doc

Kukulies, Brian FOR:EX

From: s.22
Sent: April 26, 2007 5:07 PM
To: Kukulies, Brian FOR:EX
Cc: s.22
Subject: Notification of Blowdown Recovery
Attachments: Lang_Crk_BL-001.pdf

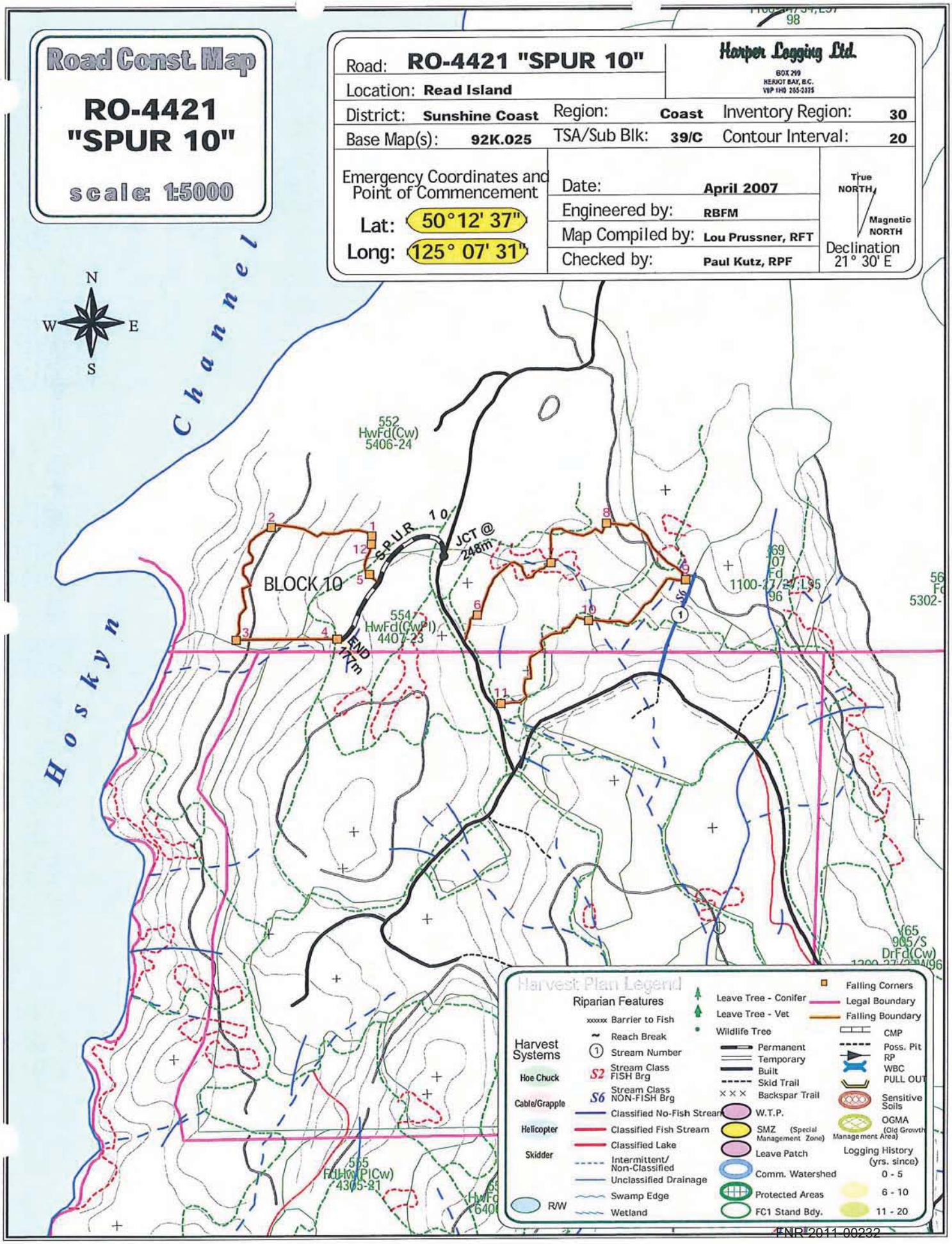
Brian,

Attached is a map as required under CP13 for salvage operations in the Community Forest. This block is exempt from a Site Plan as outlined in the OSPR Section 36.3(1) regulation.

If you have any questions, please call.

Regards,

s.22


Road Const. Map
RO-4421
"SPUR 10"
scale: 1:5000
Road: RO-4421 "SPUR 10"
Location: Read Island
Harper Logging Ltd.
BOX 299
HERIOT BAY, B.C.
VOP 1H0 285-2375
District: Sunshine Coast
Region: Coast
Inventory Region: 30
Base Map(s): 92K.025
TSA/Sub Blk: 39/C
Contour Interval: 20
Emergency Coordinates and Point of Commencement
Lat: 50° 12' 37"
Long: 125° 07' 31"
Date: April 2007
Engineered by: RBFM
Map Compiled by: Lou Prussner, RFT
Checked by: Paul Kutz, RPF
True NORTH
Magnetic NORTH
Declination 21° 30' E
N
W
E
S
Hoskyn Channel
552
HwFd(Cw)
5406-24
SPUR 10
JCT @ 248m
BLOCK 10
554
HwFd(CwPl)
4407-23
END 1Km
565
FdHw(PlCw)
4305-21
Harvest Plan Legend
Riparian Features
xxxxx Barrier to Fish
Reach Break
1 Stream Number
S2 Stream Class FISH Brg
S6 Stream Class NON-FISH Brg
Classified No-Fish Stream
Classified Fish Stream
Classified Lake
Intermittent/ Non-Classified
Unclassified Drainage
Swamp Edge
Wetland
R/W
Harvest Systems
Hoe Chuck
Cable/Grapple
Helicopter
Skidder
Leave Tree - Conifer
Leave Tree - Vet
Wildlife Tree
Permanent
Temporary
Built
Skid Trail
Backspar Trail
W.T.P.
SMZ (Special Management Zone)
Leave Patch
Comm. Watershed
Protected Areas
FC1 Stand Bdy.
Falling Corners
Legal Boundary
Falling Boundary
CMP
Poss. Pit
RP
WBC
PULL OUT
Sensitive Soils
OGMA (Old Growth Management Area)
Logging History (yrs. since)
0 - 5
6 - 10
11 - 20

November 9, 2006

Harper Logging Ltd.
Box 299
Heriot Bay, BC
V0P 1H0

Ministry of Forests
Sunshine Coast Forest District
7077 Duncan Street
Powell River, B.C.
V8A 1 W1

ATTENTION: Mr. Brian Kukulies, RPF.

RE: **Section 42(1) Minor Amendment to the WL 0046 2001 – 2008 FDP**

Dear Sir,

For your information, please find attached a minor amendment to the WL0046's FDP on behalf of Harper Logging Ltd. This amendment is consistent with section 24.1 of the WLFMR.

This amendment is to illustrate the final block configuration for Block 24, which was previously FDP approved. The final block location continues to meet the requirements of all the Act, regulations and standards; it will adequately provide for managing and conserving the forest resources of BC for the area to which it applies; and it does not materially change the objectives or results of the plan.

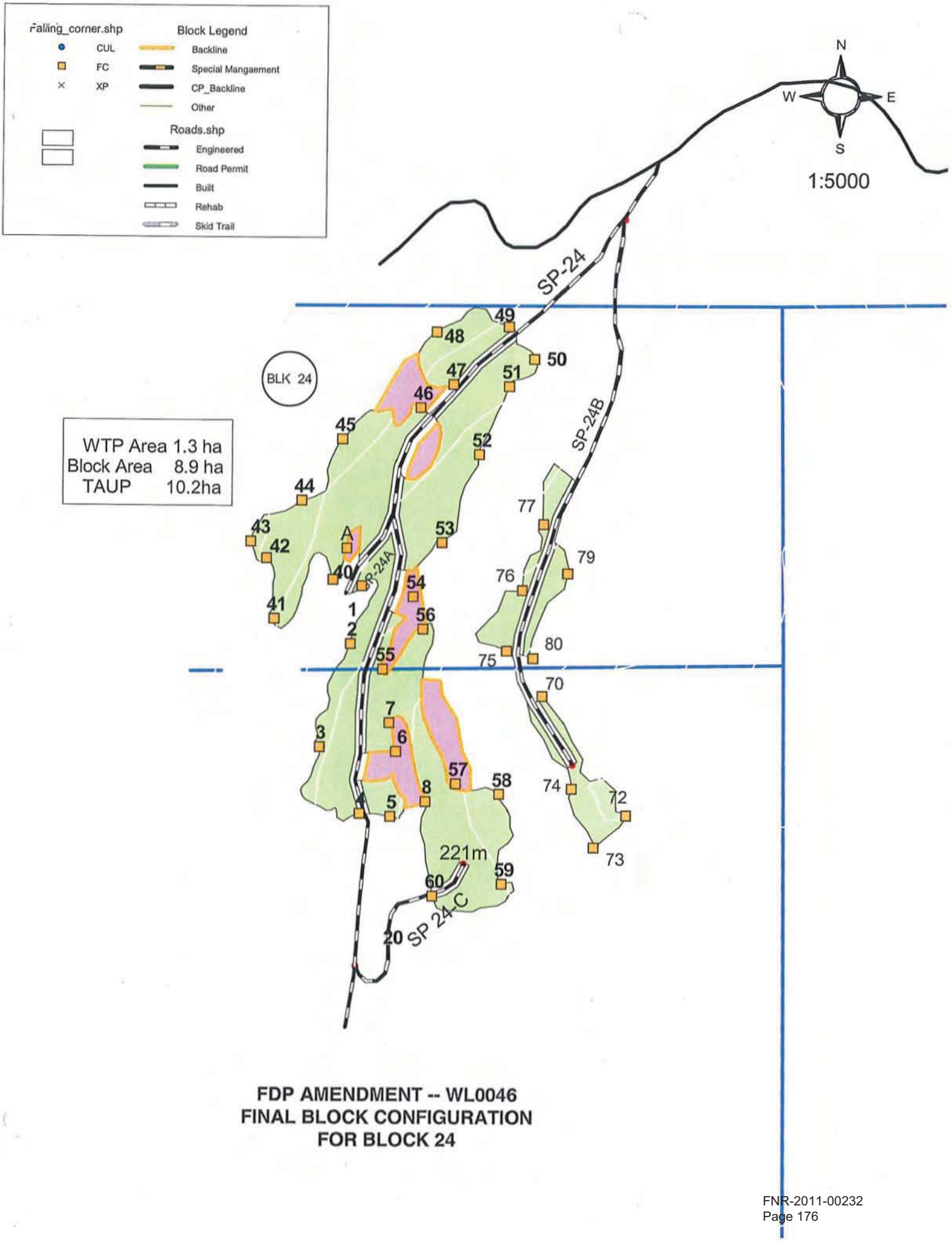
I have enclosed a 1:5000 map that depicts the updated block configuration. Should you wish to discuss this further please feel free to contact Harper Graham or myself at your convenience.

Yours truly,

Paul Kutz, R.P.F.
Forester

c.c. Harper Graham

FDP Amendment Block 24.doc



FDP AMENDMENT -- WL0046
FINAL BLOCK CONFIGURATION
FOR BLOCK 24

File ORCS 19720-55/W0046

October 11, 2006

Harper Logging Ltd.
Box 299
Heriot Bay, BC
V0P 1H0

Ministry of Forests
Sunshine Coast Forest District
7077 Duncan Street
Powell River, B.C.
V8A 1 W1

ATTENTION: Mr. Brian Kukulies, RPF.

RE: **Section 42(1) Minor Amendment to the WL 0046 2001 – 2008 FDP**

Dear Sir,

For your information, please find attached a minor amendment to the WL0046's FDP on behalf of Harper Logging Ltd.

This amendment is to illustrate the final road configuration for Spur 24, Spur 24A, Spur 24B and Spur 24C which leads up into the FDP approved block 24 and beyond. The revised road location continues to meet the requirements of all the Act, regulations and standards; it will adequately provide for managing and conserving the forest resources of BC for the area to which it applies; and it does not materially change the objectives or results of the plan.

I have enclosed a 1:5000 map that depicts the updated road configuration. Should you wish to discuss this further please feel free to contact Harper Graham or myself at your convenience.

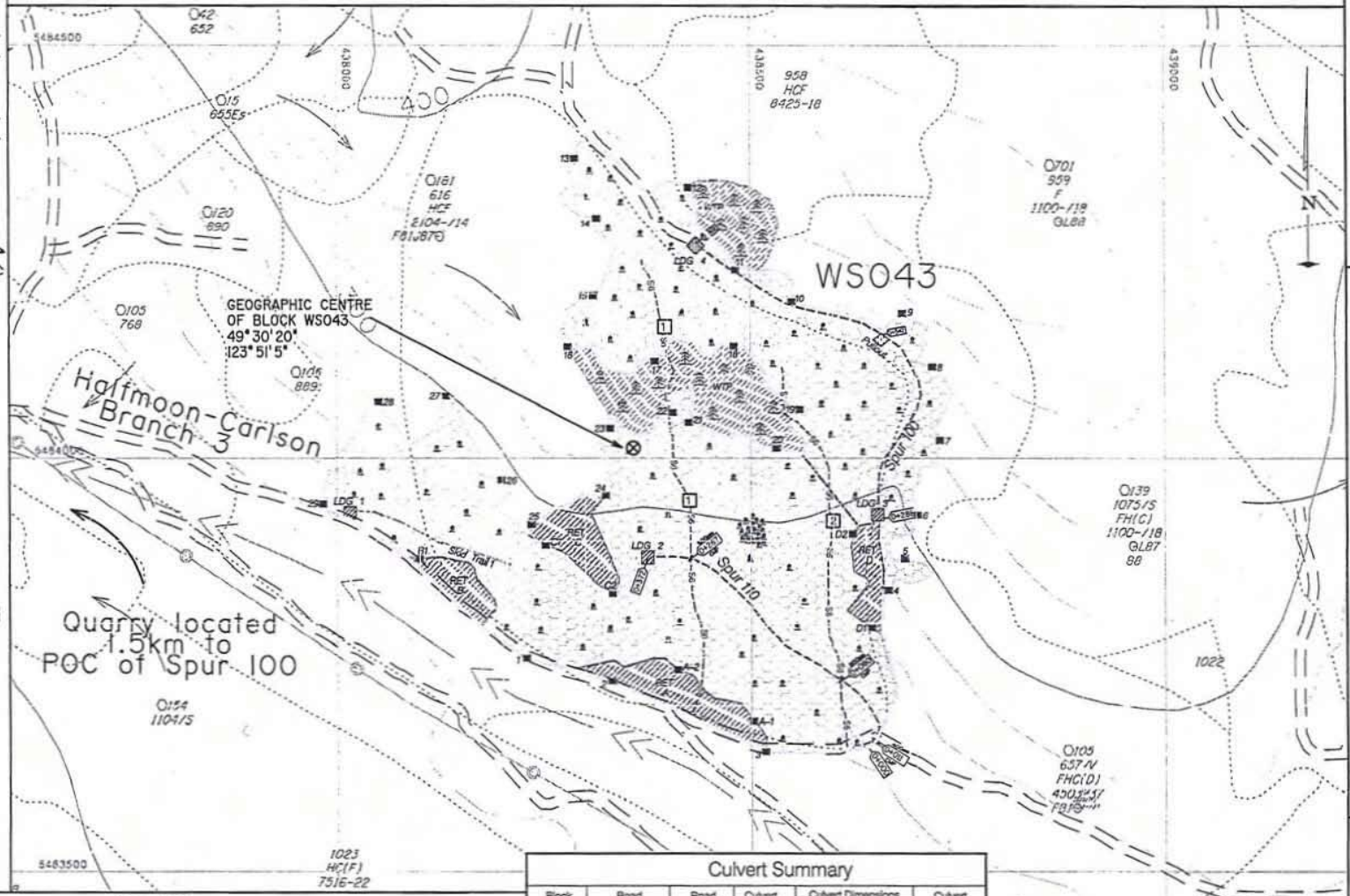
Yours truly,

REGISTERED PROFESSIONAL FORESTER
PROVINCE OF BRITISH COLUMBIA
PAUL J. KUTZ
NO. 2390

Paul Kutz
Forester

c.c. Harper Graham

Appraisal Map CP 1 Block WS043



Management Areas

- Riparian Stream Class-FISH:
  - (S1 /S4) Sampled
  - (S1 /S4) Gradient
  - (Unknown class) Gradient
- Riparian Stream Class-NO FISH:
  - (S5 /S6) Sampled
  - (S5 /S6) Gradient
  - (Unknown class) Gradient
- Non-classified Drainage
- Seepage
- Stream Class, Reach Break
- Riparian Lake Class (L1-L4)
- Riparian Wetland Class (W1-W5)
- V ...dy ID #
- R... Patch (Engineered)
- Retention Patch (Proposed)
- Retention Trees
- Wildlife Tree Patch (WTP)
- Other Reserve
- Riparian Reserve Zone
- Riparian Management Zone (if different than SU prescription)
- Ground-Based Yarding Area
- Windfall
- Windthrow Management Area
- Machine Free Zone
- Special Resource Management Zone
- Legal Lot Boundary
- Park
- Water Supply Intake
- Previous Harvest
- Harvested ROW

Appraisal

Block	Geographic Centre Latitude	Geographic Centre Longitude	Distance to Hillside	Target Basal Area Removal	Area (ha) Skidder Harvest	Cable Harvest	Net Merch	External WTP	Retention	RMZ	Roads	Gross Area
WS043	49° 30' 20"	123° 51' 5"	37.9 km	100%	22.4	0.0	22.4	2.8	2.2	0.0	1.2	28.6

Culvert Summary

Block ID	Road Number	Road Station	Culvert Type	Culvert Dimensions Diameter	Culvert Dimensions Length	Culvert Skew
WS043	Spur 110	0+011	CMP	400 mm	10.0 m	40
WS043	Spur 110	0+080	CMP	600 mm	9.0 m	60
WS043	Spur 110	0+287	CMP	600 mm	10.0 m	60

CFA: K3F
CP 1

Scale: 1 : 10 000
Forest Region: RCO
Forest District: DSC
Location: Sechelt
Map #: 92G.051
UTM Zone: 10

Legend

- Total Area Under Prescription (TAUP):
- Falling Boundary
- External to Falling Bdy
- Falling Corner
- Existing Road
- Existing Trail
- Proposed Roads:
  - Haul Road
  - Designated Skid Trail
  - Reconstruction
  - Backspar Trail
- Road Chainage
- Bridge
- Culvert
- Designated Stream Crossing
- Gravel Pit
- Transmission Line
- Permanent Structures
- Slide
- Gully
- Rock Outcrop
- Windfall, Snag
- Marsh /Swamp
- Index Contour and Label
- Intermediate Contour
- Landing /Temporary Landing
- Dryland Sort, Water Sort
- Log Dump, Helipad
- Helicopter Drop Zone

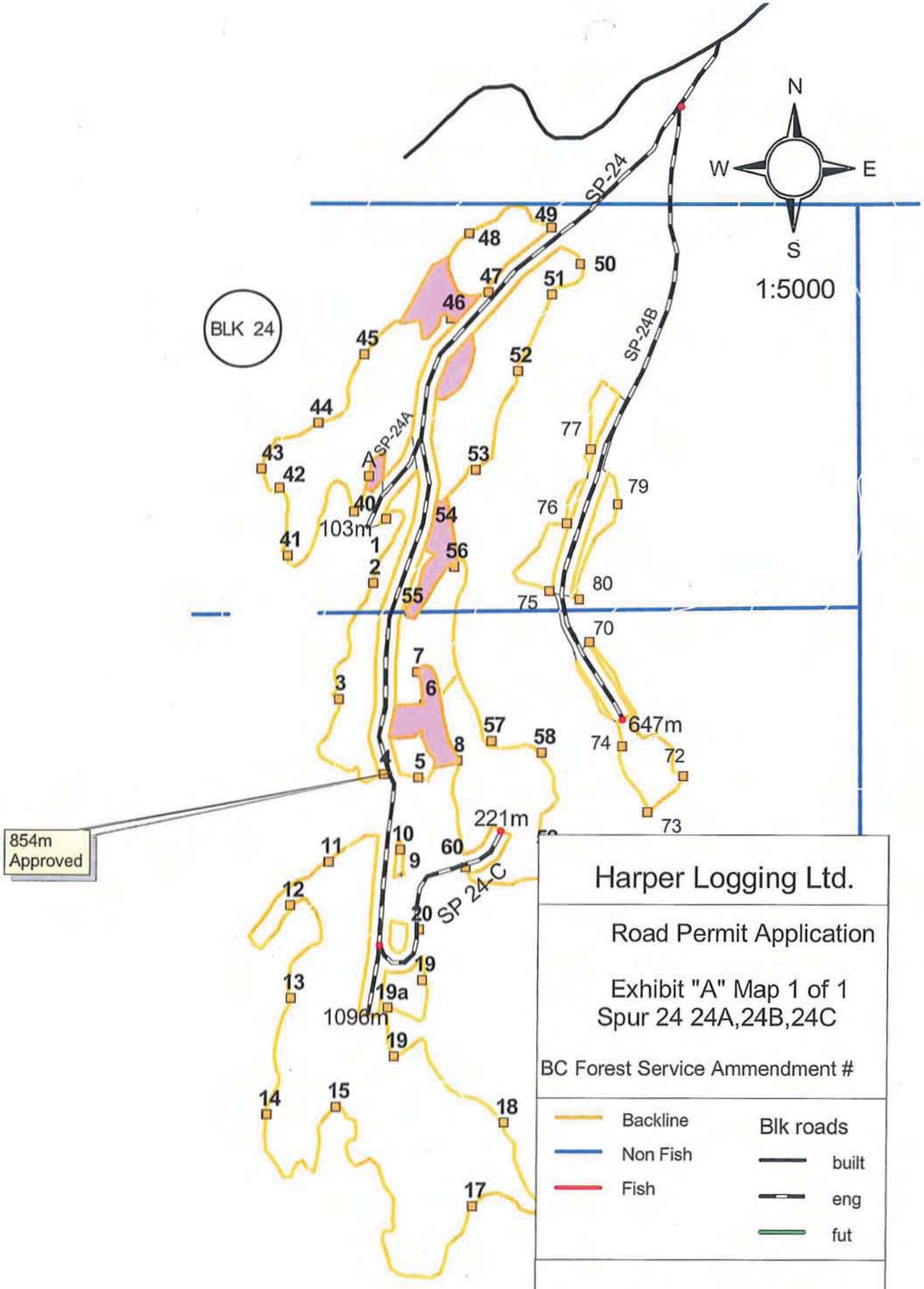
Field Ribboning

Falling Boundary:	Orange
Retention Patch:	Orange Blk Stripe
Road Centre Line:	Pink
Fish Stream:	Red White Stripe
Non Fish Stream:	Blue White Stripe
Deflection Line:	Green
Station Marks:	White

50m 0 50 100 200 300m
Scale 1 : 5,000

Block Layout and Mapping by:
CHARTWELL Consultants Ltd.

Project Number:	06-713
Drawn By:	PF
Date:	September 20, 2006


N
W
E
S
1:5000
SP-24
SP-24A
SP-24B
SP 24-C
BLK 24
854m
Approved
103m
221m
647m
1096m
Harper Logging Ltd.
Road Permit Application
Exhibit "A" Map 1 of 1
Spur 24 24A,24B,24C
BC Forest Service Ammendment #
Backline
Non Fish
Fish
Blk roads
built
eng
fut
Tenure: W0046
R0 3634 4421
Mapsheet 92K025/015
Drawn By: PMFM
Oct 2006

Kukulies, Brian FOR:EX

From: Paul Kutz s.22
Sent: Sun, June 11, 2006 10:37 PM
To: Kukulies, Brian FOR:EX
Subject: WL0046 FDP Amendment
Attachments: Spur-24 BLK24.pdf; FDP amendment spur_24.pdf

Hello Brian,
As per our discussion, please find attached a copy of an amendment to show the updated road configuration in Sawmill Bay -- Spur 24. FYI, I have submitted the RP through the District's Inbox.

Any questions please let me know.
Thanks
Paul Kutz

2006-06-12

June 10, 2006

Harper Logging Ltd.
Box 299
Heriot Bay, BC
V0P 1H0

Ministry of Forests
Sunshine Coast Forest District
7077 Duncan Street
Powell River, B.C.
V8A 1 W1

ATTENTION: Mr. Brian Kukulies, RPF.

RE: **Section 42(1) Minor Amendment to the WL 0046 2001 – 2008 FDP**

Dear Sir,

For your information, please find attached a minor amendment to the WL0046's FDP on behalf of Harper Logging Ltd.

This amendment is to illustrate the final road configuration for Spur 24, which leads up into the FDP approved block 24. The revised road location continues to meet the requirements of all the Act, regulations and standards; it will adequately provide for managing and conserving the forest resources of BC for the area to which it applies; and it does not materially change the objectives or results of the plan.

I have enclosed a 1:5000 map that depicts the updated road configuration. Should you wish to discuss this further please feel free to contact Harper Graham or myself at your convenience.

Yours truly,

Paul Kutz, R.P.F.
Forester

c.c. Harper Graham

RECEIVED
MAR - 6 2006
MINISTRY OF FORESTS
POWELL RIVER, B.C.

File 19720-55/WL0046 Current (1)

March 5, 2006

Harper Logging Ltd.
Box 299
Heriot Bay, BC
V0P 1H0

District Manager
Ministry of Forests
Sunshine Coast Forest District
7077 Duncan Street
Powell River, B.C.
V8A 1 W1

ATTENTION: Mr. Greg Hemphill, District Manager.

RE: **Amendment to the WL 0046 2001 – 2008 Forest Development Plan**

Dear Sir,

Please accept this letter as a request for an Amendment to Harper Logging Ltd.'s 2001-2008 Forest Development Plan. This amendment is required as a result of the January 6, 2006 merging of the majority of the area managed under TSL A20495 into WL046, both located on Read Island.

This amendment hereby transfers all previously approved FDP blocks included under the TSL A20495 (within the January 6, 2006 transfer area) into Harper Logging Ltd.'s 2001-2008 FDP for WL046.

Should you wish to discuss this further please feel free to contact Harper Graham or myself at your convenience.

Yours truly,

REGISTERED PROFESSIONAL PROVINCE OF BRITISH COLUMBIA PAUL J. KUTZ FORESTER NO. 2390

Paul Kutz, R.P.F.
Forester

c.c. Harper Graham

Conversation with Paul Kutz early March regarding this issue
Given that TSL FDP approved and all blocks had undergone Public review & comment that this would allow blocks to be amended into the WL0046 plan as approved. Also, discussed this issue with Dave Hall & Al Shaw and did not see any problem. PM signature not

FDP Amendment-TSL Blocks.doc

06/03/29

Pacific Mountain Forest Management Ltd.
7089 Parksville Street
Powell River, BC
V8A 5H7

RECEIVED
AUG 17 2004
MINISTRY OF FORESTS
POWELL RIVER, B.C.

August 9, 2004

Harper Logging Ltd.
Box 299
Heriot Bay, BC
V0P 1H0

Attention: Harper Graham, President

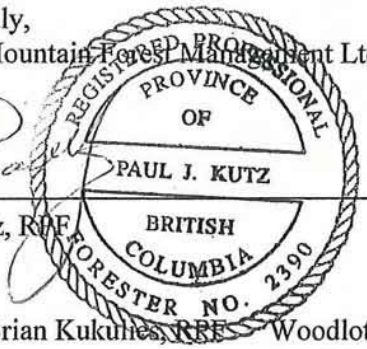
Re: Minor Amendment to 2001 – 2008 Forest Development Plan; W0046, Final Road Location SW MAIN

Dear Sir;

This letter constitutes a minor amendment to the 2001-2008 Forest Development Plan for W0046. This amendment depicts the final road location for SW MAIN. This amendment is consistant with section 24.1 of the Woodlot Licence Forest Management Regulation as this proposed amendment will not increase the adverse impact on forest resources and is consistent with the intent of 24.1(1)B of the WLFMR.

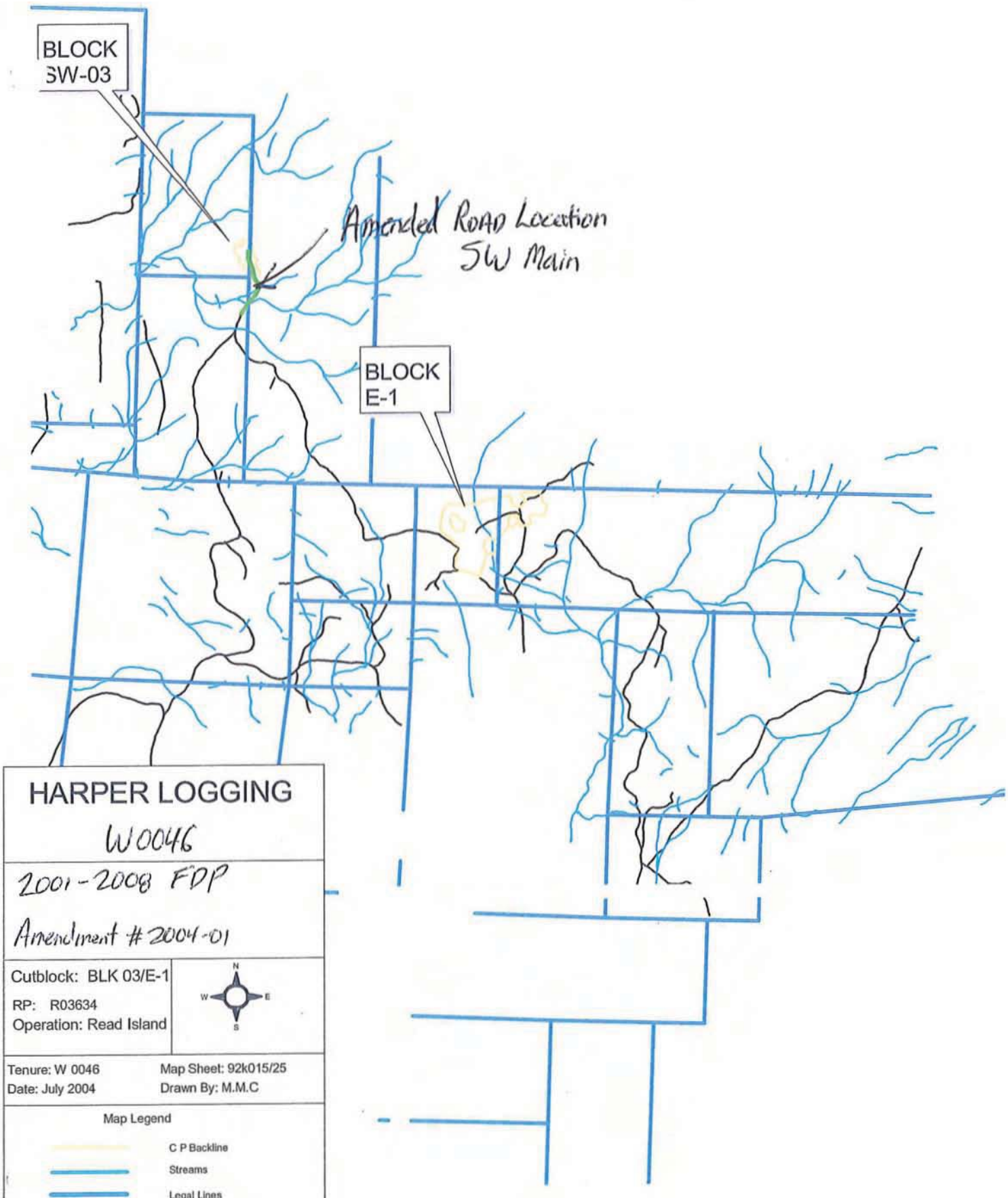
Please find attached a map at 1:20000 scale showing the final location of SW Main as surveyed in the field. If you have any questions with regards to this application please contact me.

Yours truly,
Pacific Mountain Forest Management Ltd.



Paul Kutz, RPF

CC. Brian Kukulies, RPF Woodlot Forester, MoF



HARPER LOGGING

W0046

2001 - 2008 FDP

Amendment # 2004-01

Cutblock: BLK 03/E-1

RP: R03634

Operation: Read Island

N
W
E
S

Tenure: W 0046 Map Sheet: 92k015/25

Date: July 2004 Drawn By: M.M.C

Map Legend

C P Backline

Streams

Legal Lines

Amendment

Misty Mountain Consulting
6285 Chilco Ave.
Powell River, BC
V8A 4Z9

June 26, 2003

SUNSHINE COAST FOREST DISTRICT
7077 DUNCAN STREET
POWELL RIVER, BC V8A 1W1
Ph. (604) 485-0745 Fax: (604) 485-0799

JUN 27 2003

RECEIPT ACKNOWLEDGED

OUR FILE No.: .....

Harper Logging Ltd.
Box 299
Heriot Bay, BC
V0P 1H0

Attention: Harper Graham, President

Re: Minor Amendment to 2001 – 2008 Forest Development Plan; W0046, Final Road Location SW100

Dear Sir;

This letter constitutes a minor amendment to the 2001-2008 Forest Development Plan for W0046. This amendment depicts the final road location for SW-100. This amendment is consistant with section 24.1 of the Woodlot Licence Forest Management Regulation as this proposed amendment will not increase the adverse impact on forest resources and is consistant with the intent of 24.1(1)B of the WLFMR.

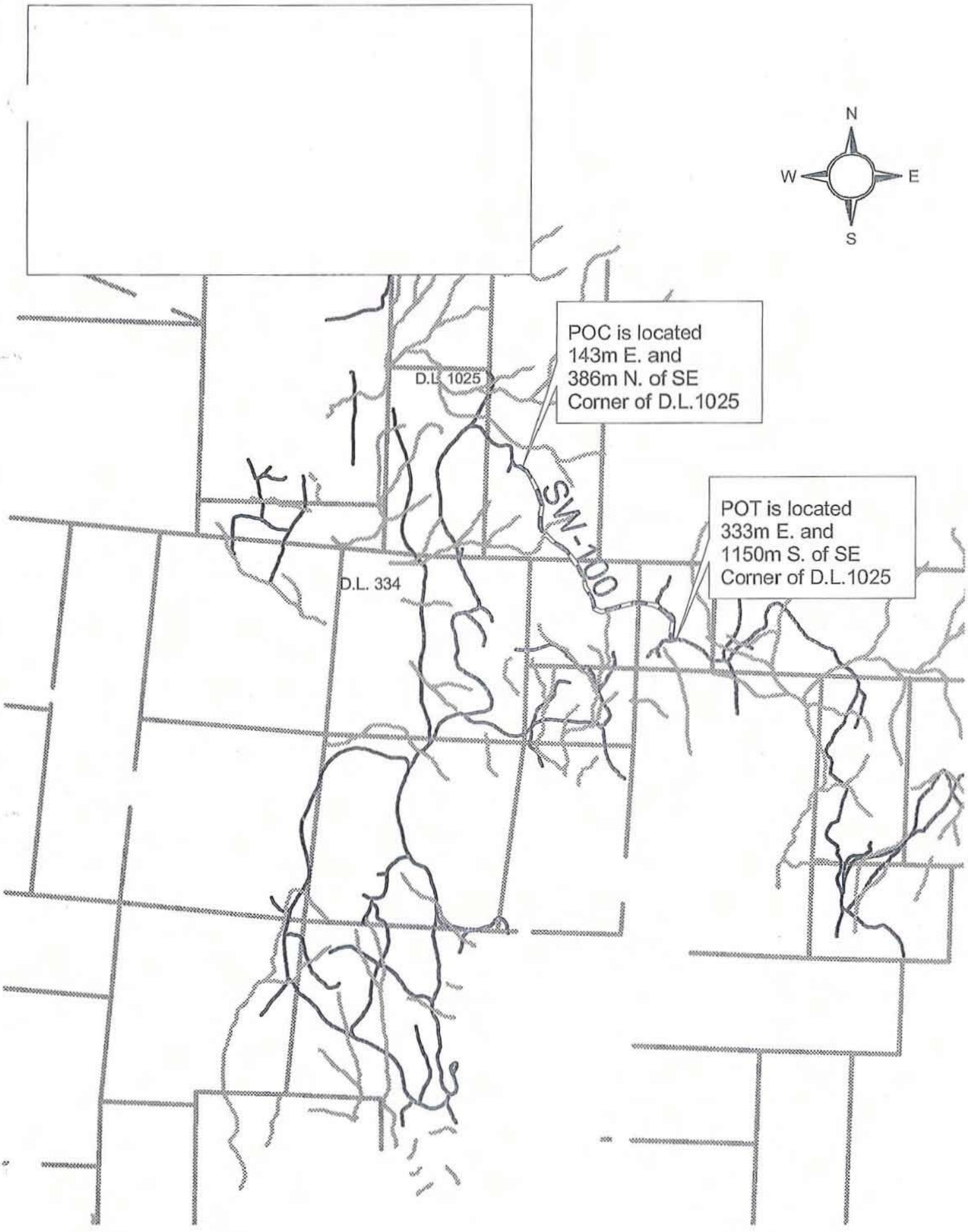
Please find attached a map at 1:20000 scale showing the final location of SW 100 as surveyed in the field. If you have any questions with regards to this application please contact me.

Yours truly,
Misty Mountain Consulting

REGISTERED PROFESSIONAL FORESTER PROVINCE OF BRITISH COLUMBIA PAUL J. KUTZ NO. 2390

Paul Kutz, RPF

CC. Brian Kukulies, RPF Woodlot Forester, MoF


N
W
E
S
POC is located
143m E. and
386m N. of SE
Corner of D.L.1025
D.L. 1025
SW-100
POT is located
333m E. and
1150m S. of SE
Corner of D.L.1025
D.L. 334

SUNSHINE COAST FOREST DISTRICT
7077 DUNCAN STREET
POWELL RIVER, BC V8A 1W1
Ph. (604) 485-0745 Fax: (604) 485-0799

SEP 5 2002
RECEIPT ACKNOWLEDGED
OUR FILE No.: .....

D Blair
Dfile: 19720-55/01-W0046(1) 4

September 5, 2002

Sunshine Coast Forest District
7077 Duncan Street
Powell River, B.C.
V8A 6W1

Attention: Greg Hemphill, District Manager

Re: Minor Amendment 2002-02 to the 2001-2008 Forest Development Plan for W 0046
To Illustrate final Layout Configuration for Cutblock E-4.

Harper Logging Ltd. requests a minor amendment to the 2001-2008 Forest Development Plan for W0046, approved Aug 30, 2001. This amendment is to illustrate final block and road configuration for cutblock E-4. This revised cutblock location now involves logging adjacent to an S6 stream not previously identified on the approved FDP. Harvesting will occur within the RMZ of the S6 creek. Detailed stream management prescriptions will be outlined in the Site Plan for E-4.

This should be considered a minor amendment as it conforms to Section 43(1) of the *Forest Practices Code of British Columbia Act.* This amendment:

(a) otherwise meets the requirements of this Act, the regulations and the standards,

(b) will adequately provide for managing and conserving the forest resources of British Columbia for the area to which it applies, and

(c) does not materially change the objectives or results of the plan.

Enclosed is a 1:5000 map that depicts the updated cutblock and road configuration.
Should you have any question with this application, please contact the undersigned.

Yours truly,

REGISTERED PROFESSIONAL FORESTER
PROVINCE OF BRITISH COLUMBIA
PAUL J. KUTZ
NO. 2390

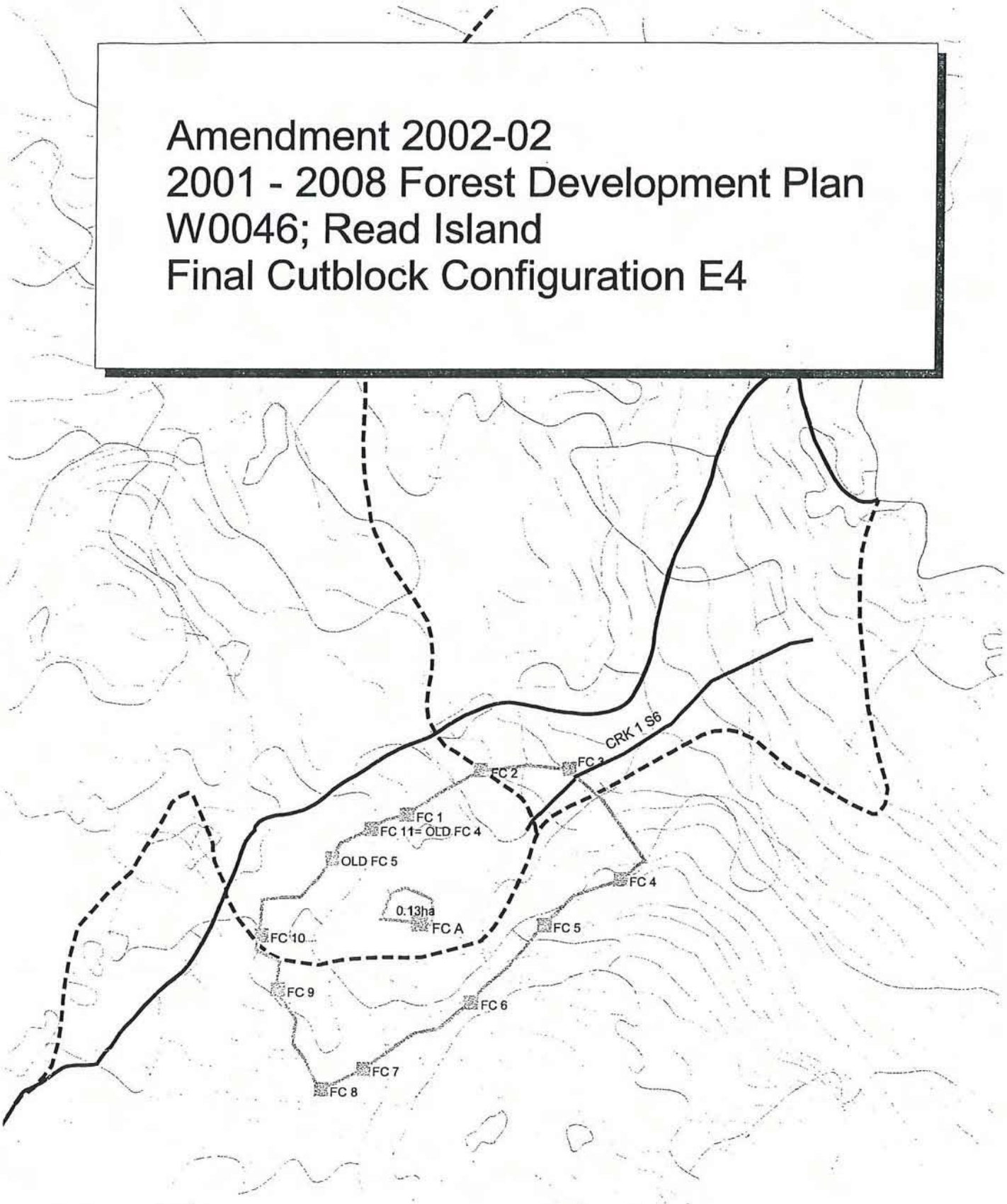
Paul Kutz, RPF

For Harper Graham,
Harper Logging Ltd.

District Manager Approval _____ Date 02/04/04

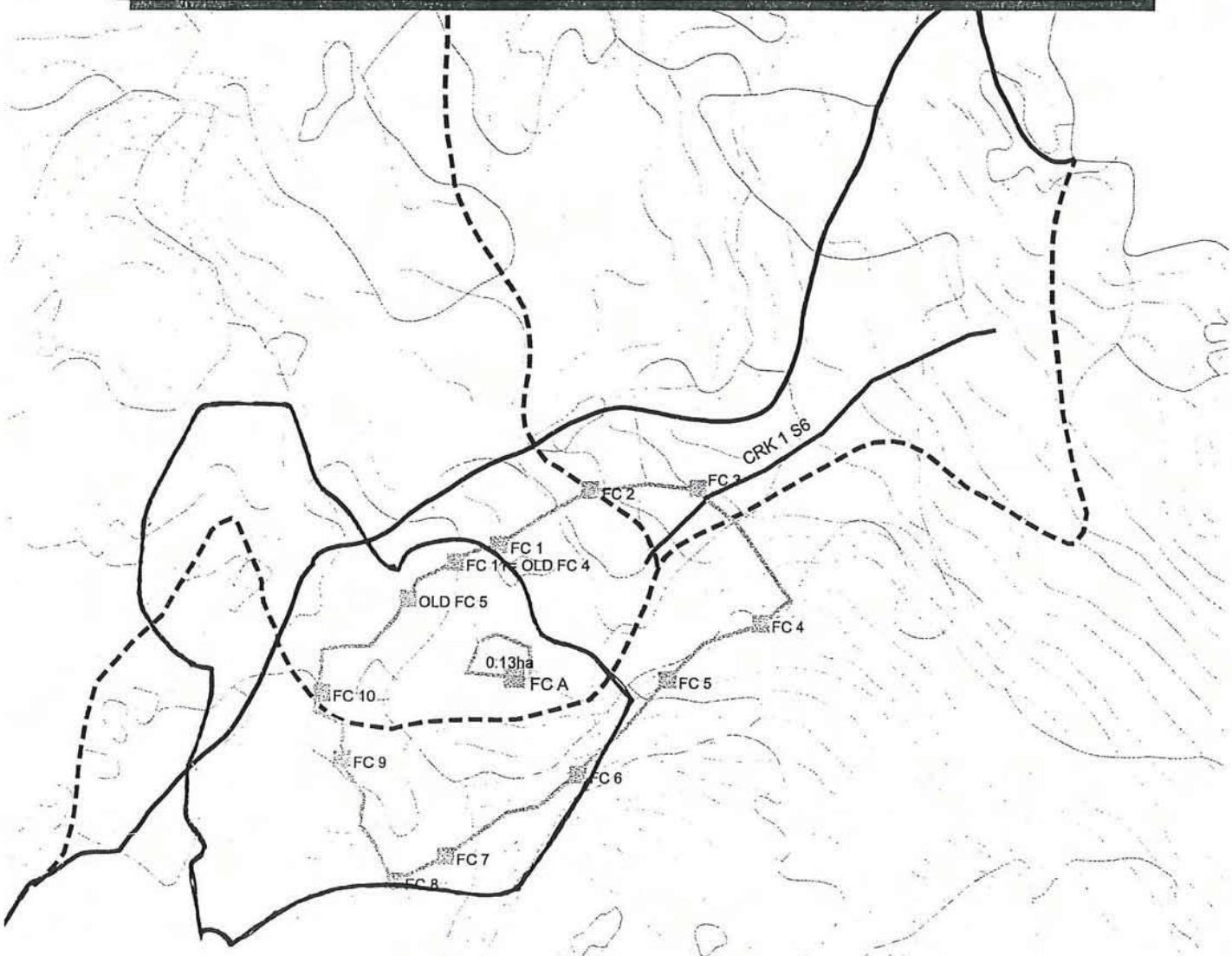
BK 02/10/01 - Recommend Approval.

Amendment 2002-02
2001 - 2008 Forest Development Plan
W0046; Read Island
Final Cutblock Configuration E4



9.3ha

Amendment 2002-02
2001 - 2008 Forest Development Plan
W0046; Read Island
Final Cutblock Configuration E4



——— BLOCK AS SHOWN ON APPROVED FDP.

02/10/01

Greg:

Attached is a proposed minor amendment to the 2001-2008 FOP for Woodlot Licence W0046. It involves shifting location of a block that now incorporates a stream that was not covered by the originally approved block. The licensee shows this as an SS6 creek.

The block has decreased in area from 9.3 ha to 6.0 ha. No comments on this block were received. I believe it meets the requirements of Section 43(1) of the TPC.

Recommend Approval.

RECEIVED
JUL - 9 2002
MINISTRY OF FORESTS
POWELL RIVER, B.C.

July 5, 2002

Sunshine Coast Forest District
7077 Duncan Street
Powell River, B.C.
V8A 6W1

Attention: Greg Hemphill, District Manager

Re: Minor Amendment 02-01 to the 2001-2008 Forest Development Plan for W 0046 to illustrate final road location in DL 771.

Harper Logging Ltd. requests to amend the 2001-2008 Forest Development Plan for Woodlot 046, approved Aug 30, 2001. This amendment is to illustrate the final road configuration of P-200 within DL 771. The revised location of P-200 requires the crossing of an S3 creek not previously shown on this FDP. This road location has been revised for the following reasons:

- Poor road alignment.
- The owners of the lower half of DL 771 have recently approached Harper Logging about extending P-200 into their property. This would allow vehicle access and blowdown salvage on their half of the District Lot. P-200 is therefore planned as a permanent road rather than a short term road as shown on the FDP.
- P-200 crosses poorly drained areas within DL 771. This allows ground based harvesting of areas that previously would have required mobilizing a cable yarder for a very small amount of volume.

This should be considered a minor amendment as it conforms to Section 43(1) of the *Forest Practices Code of British Columbia Act.*

Enclosed is a 1:5000 map that depicts the updated road location.

An amendment to CP "P" of W 046 has been submitted to your office to facilitate construction of P-200. A Site Plan will be submitted shortly. Your immediate attention to all of these matters would be appreciated as timely road construction and harvesting in DL 771 is required to salvage timber damaged by winter winds.

Yours truly,

REGISTERED PROFESSIONAL PROVINCE OF PAUL J. KUTZ BRITISH COLUMBIA FORESTER NO. 2390

Paul Kutz, RPF

for Harper Graham,
Harper Logging Ltd.

District Manager Approval _____ Date 02/07/11

Map shown in bold solid line of: WL 046 / DL 771 P-200 R/W

Date: June 24, 2002

Drawn by: Trevor G. Campbell

Revised by:

ZONE	EAST	NORTH
10	348811	5563805

Reg | Comp | L

Ref.Map: 92K025 Area: hectares:

Base map: 92K025 Scale 1: 5000

Forest Region: 1 Shown as:

Forest District: 15 ORCS #:

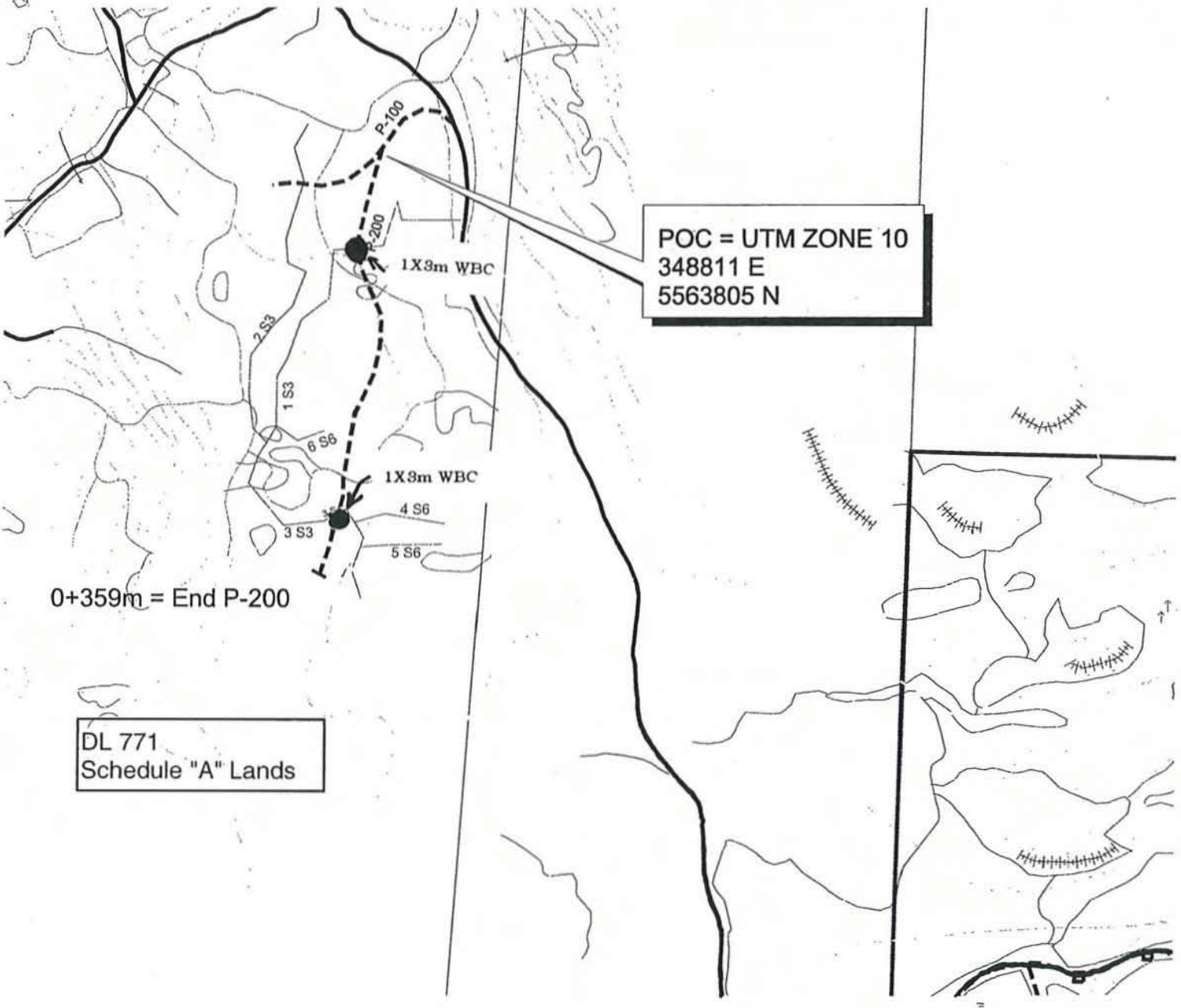
Land District: 61 MDM ID:

Planning Cell #:

MANAGEMENT UNIT	
TYPE	
NUMBER	

TIMBER SUPPLY AREA	
NUMBER	
BLOCK	
SUB-B	

PULPWOOD AGREEMENT	CASCADES	
N	EAST	
	WEST	X



Trevor Campbell
Misty Mountain Consulting
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MINISTRY OF FORESTS
RECEIVED
AUG 15 2001
POWELL RIVER, B.C.

August 15, 2001

Brian Kukulies, R.P.F.
Tenures Forester
Sunshine Coast Forest District

RE: Final Submission: W 0046 Forest Development Plan

Dear Brian :

Please Find enclosed the Final Submission of the Forest Development Plan for Woodlot Licence W0046. I have made the following changes in response to your email of July 26, 2001.

1. The FDP map atlas has been revised to show actual W 0046 boundary location in top up area. Also Schedule A label was added to DL 394.
2. The following wording was added to section 3.1.2 **Hemlock regeneration may be maintained if there is low risk of mistletoe infection and Hw is prescribed as an acceptable species on that site or SU in the site plan.**
3. The date of the letter mentioned in section 3.5.3 has been changed to **December 31, 2001.**
4. In the Cutblock Information Tables, I have added a general objective stating, **Trees to be retained will be Wind firm species such as Cw or Fd (vets where available).** Also 0-50% Basal Area range has been altered to actual **0-25 m^2/ha**.
5. Additions have also been made to the Access Management section 5.1.1 to better justify proposed road construction. The wording is as follows:

   Some roads are being shown on this plan that do not necessarily develop cutblocks shown on the plan. Sutil 100, E 400, SW Main and Harper Main will access blocks to be shown on future MTSL 20495 and W 046 FDPs. Sutil 100 will also develop the western plateau of Read Island to enable small scale wind throw salvage operations to commence.

   Harper Main does not show any development at this time as it will provide access to the west side of Read Island and avoid the condemned bridge on Raven Lumbers private land. The owner of this property is not interested in fixing the bridge and would prefer to remove it as soon as another option was available. Although Harper Main has little wood it directly accesses at this time, it will have large volumes of both Woodlot and TSL wood tributary to it. Harper Main is designed to allow access to crown wood without depending on Raven Lumber's privately owned roads. Harper Main does not encroach on the 10m RRZ of the wetland complex. However, sections of Harper Main will intrude the RMZ.
6. Section 5.1.1 Road Construction, Major Culvert and Bridge Table: **Proposed wood culverts have been deleted from table** as they do not meet definition of major culvert.

The licensee has received favorable comments from the Klahoose First Nations and the one person in attendance at the plan's public viewing. A copy of this correspondence is appended to this plan. No other responses have been received. A correspondence log is attached to record and describe all attempts at agency and First Nations consultation.

We trust this plan meets your satisfaction, and await its approval. Should you have any questions or require clarification please do so by email at

tntcampbell@aisl.bc.ca

or by fax at 604 414 0345

Regards,

Trevor Campbell
Misty Mountain Consulting

For Harper Logging Ltd.

WOODLOT LICENSE 0046

FOREST DEVELOPMENT PLAN # 2

Period

July 1, 2001 to June 30, 2008

Vancouver Forest Region,

Sunshine Coast Forest District,

Sunshine Coast Timber Supply Area

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Authorized Licensee Signature: Name: Harper Graham

[Print Name]

[Signature]

RPF Signature: Name: Paul J. Kutz

[Print Name of RPF]

REGISTERED PROFESSIONAL FORESTER
PROVINCE OF BRITISH COLUMBIA
PAUL J. KUTZ
NO. 2390

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INTRODUCTION

The current holder of the W0046 license is Harper Logging Ltd. Harper Logging Ltd. is a privately owned company based out of Heriot Bay, BC. Harper Logging currently harvests timber from W0046 and MTSL 20495 on Read Island in the Sunshine Coast Forest District. The fiber from these tenures is sold on the Vancouver Log Market to supply local mills or it is exported.

The AAC for the woodlot is 3,267 m^3.

The woodlot is an aggregate of crown (Schedule B) and private (Schedule A) lands. The private land portion is 165 hectares and the crown portion is now 400 hectares.

All lands are found on Read Island of the Sunshine Coast TSA.

The operable forest cover is primarily age class 4 and 5 second growth, Douglas fir leading stands that were restocked by natural regeneration following logging. The terrain is generally gently rolling with pockets of rock outcrops.

The main document used in preparing this plan was The Provincial Woodlot License Forest Development Plan Template. This plan has also been prepared in accordance with the Forest Act, specifically section 64(1) pertaining to cut control, and with the Forest Practices Code of British Columbia Act (FPCBCA) and its associated regulations. Also considered in the preparation of this plan are issues affecting the woodlot licence. These issues include cultural heritage resources, visual quality objectives, windthrow salvage, and biodiversity.

1.1 Referral Summary

Activity	Date (yy/mm/dd)	Location (and media with respect to Public Review)	Comments Received Y/N	Comments Received Date (yy/mm/dd)
Submission of FDP				
MOF	July 3, 2001	MOF, Sunshine Coast Forest District, Powell River	Y	July, 19, 2001
MoELP	July 3, 2001	MoELP, Campbell River	N	
DFO	July 3, 2001	DFO, Campbell River	N	
Homalco First Nations	July 3, 2001	Campbell River	N	
Hamatla Treaty Society	July 3, 2001	Campbell River	N	
Klahoose First Nations	July 3, 2001	Squirrel Cove	Y	July 26, 2001
Other Tenure Referral Letters				
Timber Tenure N/A	[Date]	[Media]		[Date]
Range Tenure N/A	[Date]	[Media]		[Date]
Guide Outfitter N/A	[Date]	[Media]		[Date]
Trapper N/A	[Date]	[Media]		[Date]
Other	[Date]	[Media]		[Date]
Public Review				
Advertising	July 5, 10 2001	Campbell River Courier, Campbell River		[Date]
Public Viewing Forum(s)	July 12, 2001	Harper's Residence, Read Island	Y	July 12, 2001
Others*				
[List]	[Date]	[Location]		[Date]
Proposed Agency Meeting(s)	N/A			
[List]	[Date]	[Location]		[Date]
Comments Deadline	(30 days from the date of the newspaper advertisement, *unless extended by the DM)*			Aug 5, 2001
Submission for approval				Aug 15, 2001
Anticipated Approval Date				Sept 15, 2001

1.2 First Nation Consultation Process

Plans were submitted to all the first nations stated above on July 3, 2001. Plan submissions were followed up by phone calls offering assistance or a meeting to discuss proposed activities. A record of all consultation attempts is attached in the appendix of this plan. Only the Klahoose Band responded to this attempted consultation. Klahoose faxed a response July 26, 2001.

1.3 Referral Process

Plan will be referred to the Hamatla Treaty Society, Klahoose First Nations and Homalco First Nations, Ministry of Forests, Ministry of Environment, and Department of Fisheries and Oceans. The plan will also be made available to local residents for review and comment. A comment log will be recorded.

2. Strategic Plans

2.1 Higher Level Plans

2.1.1 List of Higher Level Plans

There were no higher level plans that covered the Woodlot License area at the known information date. Harper Logging Ltd. is not aware of any new higher level plans taking effect after the known information date.

2.1.2 Measures to Address Higher Level Plan Objectives

None

2.2 Other Plans

There were no other plans that cover the Woodlot License area at the known information date.

3.0 MEASURES TO PROTECT FOREST RESOURCES

The licensee will manage the timber resource of W0046 on a sustained yield basis, following the principles of integrated resource management. The licensee will cooperate fully with all government agencies on matters of environmental protection and resource management.

3.1 Timber

3.1.1 Management Measures

Licensee will manage for and utilize a wide range of major and minor forest products provided coarse woody debris requirements are met. Vancouver Region Utilization standards will be used.

Licensee will maintain or increase the productivity and growth on all forest sites to the greatest extent possible, consistent with all legislation, sound management practices and cost benefit relationships.

Licensee will utilize a variety of silvicultural systems including the retention system and patch cuts to achieve its timber objectives. These systems combined with riparian areas, wildlife tree patches and wildlife trees will provide for stand level biodiversity, and diverse forest stand attributes and structures.

Harvesting Priorities are:

1) Blowdown, fire kill or diseased timber stands.

2) Over mature and mature deciduous stands

3) Stands nearing rotation age

5) Other stands

As mentioned above, mature deciduous stands will be harvested. As deciduous volume contributes to the Sunshine Coast TSA Annual Allowable Cut, the licensee would like to conduct some small scale deciduous regeneration. Site specific conditions within proposed deciduous openings warrant regeneration of deciduous species. Site specific prescriptions for deciduous management must be approved by the District Manager in the site plan.

There are no existing or anticipated major forest health issues. Field crews during layout operations observed no major forest health issues. Endemic levels of root rot have been observed throughout the woodlot. Infection centers will be mapped and post harvest treatments will be prescribed in site plans.

3.1.2 Measures to Protect

The licensee will adhere to all appropriate fire prevention legislation including, the Forest Act Part 10, Forest Practices Code Act Part 5 Division 2 and 3, Forest Practices Code Regulation 169/95. Industry standards will be followed for early shutdown and operations will plan for potential shut downs during high risk periods. Ground patrols will be maintained during periods of high hazard.

Heavy slash accumulations and roadside landings will be piled and burned in late fall when the drought code is less than 200 and the risk of fire is low.

Licensee will conduct all activities related to forest health in accordance with the Forest Act Part 10 Division (5) and (6) and the Forest Practices Code of B.C. Part 5 Division (7). Field staff continuously monitor the incidence and levels of insect pests and disease during the course of normal operational activities. Surveys and control work for pests and insects will be done in co-operation with the Ministry of Forests. Treatments will be based on the best data available, and will be designed to solve the specific problem in the most effective and cost-efficient manner. These may involve biological or manual methods approved for use on Crown Lands.

Site plans will identify root rot pockets. They will be reforested with resistant species or de-stumped post harvest.

Three-meter knockdown of hemlock regeneration will be prescribed in areas of high hemlock mistletoe hazard. Hemlock regeneration may be maintained if there is low risk of mistletoe infection and Hw is prescribed as an acceptable species on that site or SU in the site plan.

Plantations with heavy browse from deer or voles will be protected through mechanical or other means.

Harper Logging is committed to an ecologically and financially suitable windthrow management strategy. The essential components of our windthrow management strategy include the protection of the forest's natural resources, the protection of environmentally sensitive areas, and the economic viability of the salvaged timber. Licensee will manage for blowdown, particularly in wet areas, through the following methods:

- Conduct windthrow assessments when and where necessary, to be determined by field staff at Site Plan stage and incorporated into the SP.
- Strategic boundary orientation.
- Establish management zones to safeguard stands adjacent to harvested areas.
- Timely salvage of merchantable wind-thrown timber to prevent high risk disease and pest outbreak conditions.

In areas where there is low risk to the forest's natural resources, low environmental risk and low economic value wind-thrown timber will not be salvaged. In these instances the wind-thrown trees will enhance the biodiversity, potential wildlife habitat and coarse woody debris component of the existing forest stands.

Salvage will be carried out to the utilization standards set out by the Forest Practices Code for harvest operations. Other protective measures will be followed as dictated by the various regulations that govern these operations.

3.2 Water

3.2.1 Issues

Water management deals with two important issues -- water quantity and quality. With these issues in mind, harvesting is planned so as to minimize increases in water runoff. Over-harvesting in one area can decrease the capacity of the land to absorb water, resulting in an increase in water runoff. This increase can cause soil erosion and, at the same time, the amount of sediment being delivered to streams and rivers to increase. The consequence is a decrease in water quality for aquatic life as well as other users. There are no community watersheds or licensed water intakes currently within W0046.

3.2.2 Measures to Protect

Planning and performing all required assessments continues to be the best way to control sediment delivery into streams. Proper construction, maintenance, and deactivation techniques are also fundamental in maintaining clean waterways. Site Plans for individual cutblocks will highlight any areas of concern and may recommend seasonal harvesting constraints or wet weather shut down. All activities conducted on the woodlot will adhere to the Forest Practices Code of B.C. Act, Regulations, and Standards and the Water Act. Harvest activities within the woodlot will mostly be limited to small openings and partial cut systems. Riparian reserves will meet or exceed code requirements. These activities will protect and enhance the water resource.

3.3 Fisheries

3.3.1 Issues

There are no major fish-bearing drainages within W0046. Some proposed blocks on this plan are adjacent to S3 streams.

3.3.2 Measures to Protect

All watercourses are classified as per the Forest Practices Code and Regulations at the layout and site plan stages. The timing and measures set by the DEO for in-stream operations will be followed when carrying out work associated with in stream works (culverts, bridges, a temporary stream crossing, etc.). The following best practices will also contribute to protection of the fisheries resource.

- Where riparian slopes exceed minimum guidelines, natural breaks will be utilized for riparian boundaries.
- Thorough planning and close supervision will ensure that road construction, harvesting and silvicultural activities protect the fisheries resource.
- Harvesting, road building and silviculture activities will be planned to prevent soil erosion, stream siltation and flooding caused by excessive runoff.
- Road construction will be kept to a minimum, utilizing existing roads where practical and building roads as narrow as possible. Steep roads and long grades will be avoided.
- Ground based harvesting will be closely monitored in wet areas. Puncheon will be used to reduce ground disturbance and ground based yarding will cease during periods of excessive rainfall.

3.4 Riparian Management

3.4.1 Issues

Harper Logging Ltd. will manage riparian areas to maintain their functions in protecting water quality, fisheries habitat, wildlife habitat, and biodiversity. The largest issue surrounding riparian management will be windfirmness and maintenance of the structural integrity of the reserve zone. Classification of Riparian Management Areas (RMAs) will follow Part 7 of the WLFRMR. All creeks not shown on base mapping will be properly identified and classified and will be shown on the Logging Plan or Site Plan maps.

One variance from the general objectives listed below is being requested under this plan. A road construction project is being proposed within Schedule A lands, DL 334. This project would involve building road within the RMA of the Wetland complex located within DL 334. This road is being proposed as the only alternative to access the north-western section of the woodlot. This road has been located along this section due to the topography in the area. A second road is proposed above this development but numerous attempts have failed at connecting the two with a road suitable for hauling. The proposed section to be built within the RMA is approximately 250m long and follows an existing CAT road once used for logging. Ties made to the assumed high water mark of the swamp are approximately 15m from centerline. Although fish presence has not been confirmed, it is being assumed. This assumption is being made regardless of the poor habitat qualities exhibited by this swamp. This road is necessary as it develops crown timber North and West of the proposed location. The proposed location of this road is the only practicable location. Locating the road outside the RMA will create a higher risk of sediment delivery through extensive road cuts and blasting required.

3.4.2 General Objectives

As mentioned above, RMAs will be properly classified with respect to the Act and Regulations. Site specific prescriptions with regards to Basal Area Retention and wind throw potential within respective RMAs will be considered into the Site Plan. Where required, S5 and S6 streams that are located on steeper slopes, with no fisheries values, will have the RMA clearcut. S5 valley bottom streams will retain non-merchantable conifer trees, understory deciduous trees, shrubs, and herbaceous vegetation within 10 meters of the channel where possible. Falling and yarding will be away from the stream and machine stream cleaning of large introduced debris will occur where necessary. Within S5 and S6 streams, bridging of trees during the falling phase may be required across the stream; however, no limbing will be permitted within the streams. Wildlife trees will be retained within the RMZ where values are found. S4 streams do not require a Riparian reserve Zone (RRZ) but will have a 5 meter machine free zone along with some retention of the RMZ in the form of small saplings, non-merchantable conifers and deciduous trees, shrubs and vegetation.

S1 to S3 streams will have a RRZ protected from harvest and the RMZ will have a partial cut retaining 25 to 50 per cent of the basal area. This will depend on site-specific conditions and will be incorporated into the Site Plan. The general prescription will be fall and yard away from the stream. Streams will be hand cleaned of introduced debris post harvest if prescribed in the Site Plan. Safety concerns will be incorporated into all site plans. S1 to S3 streams call for protection of the RRZ other than for safety concerns and falling/yarding away from the RRZ. Feathering edges and leaving wind firm trees and a mixture of the forest stand in the RMZ are a priority.

Wetlands will follow basal area retention as prescribed in the Site Plan. In general, the RRZ will be a no harvest, no work zone except for safety concerns. The RMZ will have a basal area retention ranging from 0 to 25 percent with management prescriptions such as: fall and yard away, remove any debris concurrent with yarding and evaluate after logging to see if additional hand cleaning is required. It is important to retain wind firm trees such as Cw and Fd vets, non-merchantable and deciduous trees and shrubs. No work zones should be established in the RMZ, next to the RRZ.

3.4.3 Measures to Protect

Classification of riparian areas will follow Part 7 of the WLFMR, while Section 10 (2) of the FPC act specifies measures to protect forest resources.

Site specific Riparian Management prescriptions will be incorporated into the Site Plans.

Where riparian slopes exceed minimum guidelines natural breaks will be utilized for riparian boundaries.

Licensee will manage riparian boundaries for blowdown, particularly in wet areas. Wind firm boundaries will be achieved through small opening sizes, use of natural breaks and wind firm edges, strategic orientation of blocks to prevailing winds and wind resistant block shapes. Top pruning may be considered in very high risk situations.

Clear communication of harvesting, road building and silviculture plans and close supervision of operational activities will be key to the protection of the water resource.

Road construction within riparian management zones will be avoided where possible, unless alternate locations would result in a higher risk of environmental damage. Where encroachment is unavoidable, impacts will be minimized through the use of narrow right of ways, silt fencing, grass seeding, etc. Riparian management areas will be protected throughout all phases of forestry operations through careful stream assessments and classifications, applying appropriate prescriptions that meet the general objectives as stated above, and through appropriate supervision of operations in the vicinity of these areas.

Field crews will identify and map stream reaches, confirm the location of reach breaks, measure stream widths and gradients and identify and flag locations of Fisheries Sensitive Zones prior to Site Plan submissions.

The following table summarizes the range of basal area retention for each stream/wetland classification. Note that this table pertains to regular harvesting blocks. For salvage harvesting of areas such as fire or windthrow, site specific prescriptions will be determined within the Site Plan.

STREAMS

FPC Stream Classification	Stream Width (m)	Stream Gradient (%)	Riparian Reserve Zone (m)	Riparian Management Zone (m)	Management Zone Basal Area Retention Objective (%)
S1	>20	< 20	50	20	25-50
S2	> 5 ≤ 20	< 20	30	20	25-50
S3	1.5≤ 5	< 20	20	20	25-50
S4	< 1.5	< 20	0	30	0-50
S5	> 3	> 20	0	30	0-50
S6	≥ 3	> 20	0	20	0-50

WETLANDS

FPC Wetland Classification	Wetland Size (ha)	Riparian Reserve Zone (m)	Riparian Management Zone (m)	Management Zone Basal Area Retention Objective (%)
W1	> 5	10	40	0-25
W3	1 – 5	0	30	0-25
W5	Wetland Complex	10	40	0-25

As stated above, riparian reserve zones will be maintained per Part 7 of the WLFMR. As for the management zones, the harvesting system will play a large part in dictating the strategy. In blocks harvested with ground-based systems, selective harvesting within the management zone is feasible in most instances and will allow us to retain a range of basal area within the management zone as noted in the previous tables. A five-meter machine-free zone will be retained along all streams (except at approved crossings), with falling and skidding away from the stream being the normal practice. As for blocks harvested with cable yarding systems, safety and feasibility preclude selective logging within riparian management areas. In some instances, where there is a sensitive stream/gully traversing through a block, the management zone or potions of it may be incorporated into a wildlife tree patch to allow for a wildlife corridor and stream bank protection. Where management zones have not been incorporated into a WTP, and no other constraints are present, the normal practice will be to clear cut the management zone. Site specific basal area retention in the management zone will be detailed at the site plan stage based on numerous factors as noted above.

3.5 Wildlife

3.5.1 Issues

Wildlife in the area consists of primarily blacktail deer, black bear, cougar, raccoon and other small animals. A variety of bird species are also present on Read Island including eagles and owls.

3.5.2 Objectives for Known Ungulate Winter Ranges

There are no known Ungulate Winter Ranges within W0046.

3.5.3 Measures to Protect

The water bodies within the woodlot and their associate reserve and management zones, plus the retention of wildlife tree patches and wildlife trees will ensure the maintenance and enhancement of habitat for large and small mammals, fish and bird populations.

Large non-operable stands of Douglas Fir leading, rock outcrops will provide excellent raptor nesting opportunities as well as deer bedding and permanent forest cover.

In the absence of a Landscape Unit Designation, W0046 will be managed according to the December 31, 1999 letter or any replacement letter from the Sunshine Coast Forest District regarding stand level biodiversity requirements under the Forest Practices Code and interim wildlife tree patch retention requirements. Non-operable stands will be linked with wildlife tree patches and riparian reserve zones to maintain areas with interior forest conditions.

The inclusion of small clearcuts and alternate harvests within the woodlot landscape will increase foraging opportunities for small mammals and deer. Birds of prey such as owls, hawks and eagles will benefit from larger rodent populations and increased hunting area.

Old growth vets scattered throughout the woodlot will be retained as wildlife trees, providing nesting opportunities and hunting perches for large raptors.

3.6 Recreation

3.6.1 Issues

There are no known recreational features within the Woodlot. Several local trails traverse the island and may from time to time enter W0046. Due to the remote nature of this Woodlot the main recreation features will be limited to hiking, wildlife observation and occasional mountain bike riding.

3.6.2 Measures to Protect

Harvesting operations will be conducted to protect, maintain, and wherever possible, minimize negative impacts on recreation resources.

3.7 Visual Resource Management

3.7.1 Issues

Read Island has known scenic areas as pleasure boats through out the year frequent the waterways surrounding the Island. These scenic areas have established Visual Quality Objectives. These known VQOs are shown on the attached 1:5000 mapping.

3.7.2 Measures to Protect

Approved Visual Quality Objectives will be met through a number of strategies. Block layout will be completed with VQOs in mind. Blocks will be located so as to use existing screens such as topography whenever possible. Small opening sizes utilizing partial harvesting systems such as the retention silvicultural system will also be used whenever ground conditions permit. Also, at the Site Plan stage, visual concerns can be modeled and remedied prior to harvesting if problems are perceived.

3.8 Botanical Forest Products

3.8.1 Issues

Botanical forest products are present in the Woodlot in the form of salal (floral arrangements), cedar saplings (essential oils), mushrooms (primarily chanterelles) and variety of fruit bearing plants.

3.8.2 Measures to Protect

Where the above noted products exist, Harper Logging Ltd. will endeavor to work with members of the community who wish to harvest these products for personal or commercial uses.

3.9 Range

3.9.1 Issues

There are no range management practices required within W0046.

3.9.2 Measures to Protect

Not Applicable

3.10 Biological Diversity

3.10.1 Issues

Biological diversity involves maintaining habitat for a wide range of species. At this time, biodiversity can best be accomplished through the retention of coarse woody debris on logged blocks, utilizing the retention silviculture system, and promoting wildlife tree patches that are dispersed through the harvest area or in corridors for wildlife travel.

3.10.2 General Objectives - Coarse Woody Debris and Wildlife Trees

The general objective for retaining coarse woody debris and wildlife trees is to act as habitat for a wide array of organisms, from fungi to large mammals. Coarse woody debris will be left in various sizes as well as at various stages of decay. Approximately 2-10m3 of coarse woody debris per hectare will be retained post-harvest. Read Island is within the Cortes Landscape Unit (214). The WTP retention rates for this Landscape Unit as per the Dec. 31, 1999 letter or equivalent within the CWH xm is 11% and CWH dm is 12%. Some blocks will also be harvested through a diameter limit cut, where most stems under or over a certain diameter will remain post-harvest.

3.10.3 Measures to Protect

Coarse woody debris will be maintained on site through the assessment of stands prior to harvest and the subsequent establishment of site specific procedures to retain as much debris as possible while still considering other factors such as plantable spots, fuel hazard, economics, and utilization standards.

Wildlife tree patches will be identified on a block by block basis at the Site Plan stage. Priority for WTP selection will be the constrained and non-contributing land base such as inoperable areas, riparian reserves, terrain and visually sensitive areas. The second priority for the establishment of WTPs may incorporate WTPs within the block boundary, with reserve patches ranging in size from single trees to 1.0 ha or greater. Note: for the purposes of this forest development plan, the term clear cutting includes clear cutting with reserves and seed tree silvicultural systems.

3.11 Cultural Heritage Resources and Archaeological Sites

3.11.1 Issues

There are no known Cultural Heritage Resource Features within Woodlot 046. While planning and implementing proposed activities, potential impacts on archaeological resources will be minimized. In order to accomplish this, Harper Logging Ltd. will endeavor to identify objects, sites, or locations of traditional aboriginal societal practices during field layout and site plan stages. Bands with Traditional Territory within W0046 include the Klahoose, Homelco First Nations and Hamatla Treaty Society. Consultation with these bands is ongoing during the planning stages to avoid or minimize impacts on archaeological resources.

3.11.2 Measures to Protect

Ongoing communication, traditional use studies and Archaeology Impact Assessments (AIA) when requested by the District Manager will be conducted to identify areas or objects with traditional values. The objectives regarding cultural heritage resources are:

- Identify and describe known archaeological and historical sites with cultural significance to First Nations.
- Appropriately indicate these features on Forest Development Plan and site plan maps if appropriate.
- Communicate with local First Nation(s) and Ministry of Forests personal on findings. Discuss possible alternatives.
- If any cultural heritage resources are found during harvesting or road building the licensee will immediately stop all activity and notify the District Manager and the local First Nation(s)

Incorporating the knowledge regarding aboriginal sites into the planning process will help ensure that proposed developments do not unjustifiably infringe on aboriginal rights.

3.12 Other

3.12.1 Issues

N/A

3.12.2 Measures to Protect

N/A

4. HARVESTING SECTION

4.1 Cutblock Information Table

Basic Cutblock Information					
Cutting Permit:	Block Number: SW1	Opening #: -		Approximate Cutblock Area (ha):	5.5
Harvesting Method:	CABLE / GROUND				
Silviculture System:	RETENTION				
This cutblock proposes harvesting within a riparian management zone:	NO	Harvesting is proposed within a riparian reserve zone:	NO		

Basic Cutblock Information					
Cutting Permit:	Block Number: SW2	Opening #: -		Approximate Cutblock Area (ha):	1.0
Harvesting Method:	GROUND				
Silviculture System:	RETENTION				
This cutblock proposes harvesting within a riparian management zone:	NO	Harvesting is proposed within a riparian reserve zone:	NO		

Basic Cutblock Information					
Cutting Permit:	Block Number: AN1	Opening #: -		Approximate Cutblock Area (ha):	4.2
Harvesting Method:	GROUND				
Silviculture System:	RETENTION				
This cutblock proposes harvesting within a riparian management zone:	NO	Harvesting is proposed within a riparian reserve zone:	NO		

Basic Cutblock Information

Cutting Permit:		**Block Number:**	AN2	**Opening #:**	-
Approximate Cutblock Area (ha):	8.4				
Harvesting Method:	GROUND / CABLE				
Silviculture System:	RETENTION				
This cutblock proposes harvesting within a riparian management zone:	**YES**	**Harvesting is proposed within a riparian reserve zone:**	**NO**		

General Objectives for Riparian Management Zone

Assumed Riparian Class of Stream, Wetland or Lake: S6 **Designation on Map:** CRKS 1, 2

Harvesting is proposed in a S4 to S6 stream that is a direct tributary to a known S1 to S4 temperature sensitive stream and currently has sufficient numbers and distribution of shade trees:	**NO**
Harvesting is proposed in a S4 to S6 direct stream tributary to a S1 to S3 stream or a marine-sensitive zone with sufficient numbers and distribution of trees for stream bank or channel stability:	**YES**

General Objective for Riparian Mgt. Zone

The RMA Guidebook will offer some direction in terms of Basal Area Retention within the respective RMA, but site specific prescriptions will be incorporated into the Site Plan. Where required, if the S5 and S6 streams are located on steeper slopes with no fisheries values, the RMA will be clearcut. S5 valley bottom streams will retain non-merchantable conifer trees, understory deciduous trees, shrubs, and herbaceous vegetation within 10 meters of the channel when possible. Falling and yarding will be away and stream cleaning will occur where necessary. Wildlife trees will be retained within the RMZ where values are found. Trees to be retained will be Wind firm species such as Cw or Fd vets where available.

Riparian Class:	**S5**	**Basal Area Retention Range (m^2/ha):**	**0 – 25**
Riparian Class:	**S6**	**Basal Area Retention Range (m^2/ha):**	**0 – 25**

Basic Cutblock Information

Cutting Permit:		**Block Number:**	E2	**Opening #:**	-
Approximate Cutblock Area (ha):	1.8				
Harvesting Method:	GROUND / CABLE				
Silviculture System:	RETENTION				
This cutblock proposes harvesting within a riparian management zone:	**NO**	**Harvesting is proposed within a riparian reserve zone:**	**NO**		

Basic Cutblock Information

Cutting Permit:	Block Number: E1	Opening #: -	Approximate Cutblock Area (ha): 12.5
Harvesting Method:	GROUND / CABLE		
Silviculture System:	RETENTION		
This cutblock proposes harvesting within a riparian management zone:	YES	Harvesting is proposed within a riparian reserve zone:	NO

General Objectives for Riparian Management Zone

Assumed Riparian Class of Stream, Wetland or Lake: S6 **Designation on Map:** CRK 1

Harvesting is proposed in a S4 to S6 stream that is a direct tributary to a known S1 to S4 temperature sensitive stream and currently has sufficient numbers and distribution of shade trees:	NO
Harvesting is proposed in a S4 to S6 direct stream tributary to a S1 to S3 stream or a marine-sensitive zone with sufficient numbers and distribution of trees for stream bank or channel stability:	YES

General Objective for Riparian Mgt. Zone: The RMA Guidebook will offer some direction in terms of Basal Area Retention within the respective RMA, but site specific prescriptions will be incorporated into the Site Plan. Where required, if the S5 and S6 streams are located on steeper slopes with no fisheries values, the RMA will be clearcut. S5 valley bottom streams will retain non-merchantable conifer trees, understory deciduous trees, shrubs, and herbaceous vegetation within 10 meters of the channel when possible. Falling and yarding will be away and stream cleaning will occur where necessary. Wildlife trees will be retained within the RMZ where values are found. Trees to be retained will be Wind firm species such as Cw or Fd vets where available.

Riparian Class:	S6	Basal Area Retention Range (m^2/ha):	0 – 25
Riparian Class:		Basal Area Retention Range (m^2/ha):	

Basic Cutblock Information

Cutting Permit:	Block Number: P1	Opening #: -	Approximate Cutblock Area (ha): 10.6
Harvesting Method:	GROUND / CABLE		
Silviculture System:	Intermediate Cutting		
This cutblock proposes harvesting within a riparian management zone:	NO	Harvesting is proposed within a riparian reserve zone:	NO

Basic Cutblock Information					
Cutting Permit:	Block Number: P2	Opening #: -		Approximate Cutblock Area (ha):	2.5
Harvesting Method:	GROUND / CABLE				
Silviculture System:	Intermediate Cutting				
This cutblock proposes harvesting within a riparian management zone:	NO	Harvesting is proposed within a riparian reserve zone:	NO		

Basic Cutblock Information					
Cutting Permit:	Block Number: P3	Opening #: -		Approximate Cutblock Area (ha):	9.5
Harvesting Method:	GROUND / CABLE				
Silviculture System:	Intermediate Cutting				
This cutblock proposes harvesting within a riparian management zone:	NO	Harvesting is proposed within a riparian reserve zone:	NO		

Basic Cutblock Information					
Cutting Permit:	Block Number: E3	Opening #: -		Approximate Cutblock Area (ha):	6.3
Harvesting Method:	GROUND / CABLE				
Silviculture System:	RETENTION				
This cutblock proposes harvesting within a riparian management zone:	NO	Harvesting is proposed within a riparian reserve zone:	NO		

Basic Cutblock Information					
Cutting Permit:	Block Number: E4	Opening #: -		Approximate Cutblock Area (ha):	9.4
Harvesting Method:	GROUND / CABLE				
Silviculture System:	RETENTION				
This cutblock proposes harvesting within a riparian management zone:	NO	Harvesting is proposed within a riparian reserve zone:	NO		

4.2 Minor Salvage Operations

Salvage operations will be carried out within the woodlot as necessary, to ensure a return on dead, dying and marginally economic timber, and to control disease and pest outbreaks. These operations will be carried out in a manner that limits the removal of healthy timber, the creation of soil disturbance and damage to existing regeneration or residual standing timber. Minor salvage operations may involve the harvesting of single trees, small patches or larger areas depending on the particular situation requiring salvage. Cedar shake and shingle salvage may occur within existing cutblocks and natural forest stands. A map of any proposed minor salvage operation will be presented to the Forest Service in order to confirm operational planning requirements and to request authority to harvest.

4.2.1 General Description

Minor salvage operations includes any harvesting of dead, pest infested or otherwise damaged timber. It also includes timber removed for sanitation purposes. The two most likely salvage opportunities within the woodlot are the harvesting of dead and down timber within identified root rot centers, and salvage of shake and shingle material from residual slash on new harvest areas. Other possible future salvage opportunities may include blow down, fire kill and pest or disease outbreaks.

4.2.2 Maximum Volumes

Minor salvage volumes will not exceed 2000 m3 per occurrence, excluding the volume harvested from any road clearing width, if the road is required to facilitate the removal of the timber to be salvaged. Whenever practical salvage will be on a single tree, selection basis, with the objective being to minimize the amount of healthy timber that is removed or damaged. Volumes harvested as minor salvage will contribute to the cut control volume calculation.

4.2.3 Priorities

First priority for salvage are trees that are attacked by insects such as Douglas-fir bark beetles, where the infestation will not only kill the affected trees, but if un-harvested, will intensify and spread to adjacent areas. These trees will normally be scheduled for harvest prior to the next flight of the insect, where operationally possible.

Second priority for salvage are blowdown trees and other damaged trees that are highly susceptible to insect attack and subsequent spread such as Douglas-fir. These trees will be harvested as soon as possible, and if infested by a bark beetle, will be scheduled for harvest prior to the next flight of the insect, where operationally possible.

The third priority for salvage is all remaining damaged timber where pest control is not an objective. These trees will be harvested, where possible, prior to significant deterioration of timber.

Salvage priorities will be to recover maximum economic benefit from damaged, dying or dead timber and to prevent the spread of pests and disease. Salvage efforts will be directed to protecting and rehabilitating the most productive sites first.

4.2.4 Protection of Other Resources

All salvage harvesting will comply with the Forest Practices code of British Columbia Act. Other resources will be protected during salvage operations unless specifically identified in individual salvage applications and approved by the district manager or his designate. Salvage operations will not occur within riparian management areas or wildlife tree patches unless there is a greater risk from not salvaging. The general management approach will be that timber within these areas will contribute to biodiversity whether it is standing, lying on the ground, living or dead. Only a significant forest health, water resource, slope stability or other such risk would justify harvesting within these areas. It is not the intent of salvage operations to completely sanitize the forest. Dead and down and dead standing trees will be maintained at normal endemic levels to contribute to wildlife habitat, stream stability, biological diversity and soil building processes.

4.2.5 Notice and Review

To achieve the pest control and utilization objectives desired from salvage operations, they must be harvested expeditiously. For these reasons, individual salvage patches are not shown on this plan, nor will there be any further notice prior to harvest, except under the following conditions.

Within wildlife tree patches and riparian areas individual salvage proposals will be referred to the designated Ministry of Environment official.

There are no specific salvage operations identified or planned within the woodlot at this time.

A map showing the salvage area(s) will be forwarded to the Forest Service to ensure all planning requirements are met before any salvage operation commences.

4.3 Minor Harvesting Operations

One of the benefits of small scale forest management is the ability of woodlot licensees to practice forestry at the tree level as well as the stand and forest level. During the term of this forest development plan minor harvesting operations may be undertaken to harvest up to 500 cubic meters (or 10 % of the volume specified for the 5 year cut control period) of "green" timber. This minor harvesting volume could include poles, boomsticks, house logs or an intention to expand an approved cutblock to take advantage of markets or overcome volume shortages at the end of the cut control period. Minor harvesting operations may involve the harvesting of special forest products, single trees, small patches of trees or larger areas depending on the particular situation. These operations will be carried out, providing the timber can be made accessible and harvested profitably without causing excessive soil disturbance, damage to existing regeneration or residual standing timber. A map of any proposed minor harvesting operation will be presented to the Ministry of Forest prior to harvesting to confirm operational planning requirements and request authority to harvest.

Volumes harvested under minor harvesting operations will count towards the cut control volume.

4.4 Site Plans

N/A

5. ACCESS MANAGEMENT

5.1 Access Management Tables

5.1.1 Road Construction, Major Culvert and Bridge Table

Road Name or Identification	Length (0.1 km)	Timing if critical	Major Culvert	Bridge Type
P 100	0.2	AUG	1X4	Wood culvert
P 200	0.2	N/A		
P 300	0.3	N/A		
P400	0.3	N/A		
SW MAIN	1.9	N/A	1X5	Wood Culvert
HARPER MAIN	1.0	AUG	1X5	Wood Culvert
A 100	0.3	N/A		
A 200	0.3	N/A	1X4	Wood Culvert
A 300	0.2	N/A		
A 400	0.3	N/A		
SW 100	1.0	N/A		
SW 110	0.1	N/A		
E 400	0.7	N/A		
E 410	0.1	N/A		
SUTIL MAIN	2.0	RP Approved		
SUTIL 100	1.0	N/A		

Existing roads have and will be used whenever possible. Roads will be built to Forest Practices Code guidelines, but the licensee commits to minimizing road and right of way widths in accordance with applicable Acts and Regulations. Soil and site productivity will be protected from inordinate soil disturbance by restricting road construction during periods of heavy rain and excessive runoff. All roads will be permanent to allow for silvicultural, salvage, protection and recreational access. Deactivation of roads will be seasonal only, and this is expected to be minimal due to gentle terrain conditions over the majority of the woodlot. Roads will not be gated to allow for recreation access. However, if vandalism, theft or illegal harvesting become a problem the licensee may apply to the Ministry of Forests for permission to gate some roads.

Some roads are being shown on this plan that do not necessarily develop cutblocks shown on the plan. Sutil 100, E 400, SW Main and Harper Main will access blocks to be shown on future MTSL 20495 and W 046 FDPs. Sutil 100 will also develop the western plateau of Read Island to enable small scale wind throw salvage operations to commence.

Harper Main does not show any development at this time as it will provide access to the west side of Read Island and avoid the condemned bridge on Raven Lumbers private land. The owner of this property is not interested in fixing the bridge and would prefer to remove it as soon as another option was available. Although Harper Main has little wood it directly accesses at this time, it will

have large volumes of both Woodlot and TSL wood tributary to it. Harper Main is designed to allow access to crown wood without depending on Raven Lumber's privately owned roads. Harper Main does not encroach on the 10m RRZ of the wetland complex. However, sections of Harper Main will intrude the RMZ.

5.1.2 Road Deactivation Table

Deactivation	Road Name or ID	Level of Deactivation	Timing if Critical
Completed	**None**		
Proposed	**None**		

Roads will not be deactivated, they will be maintained year round. Surface runoff will be managed on a seasonal basis through the use of water bars and x-ditches where required. Careful surface runoff management combined with the gentle terrain conditions over the majority of the woodlot make more than seasonal deactivation of roads unnecessary.

5.2 Access Maintenance

The licensee will maintain fire prevention access to all active harvest and salvage areas. Licensee recognizes the recreation potential within the woodlot and commits to keeping main roads open to 4 wheel drive access. This does not include snow removal for recreation access during winter months. There are no major structures scheduled for construction, maintenance or replacement during the life of this plan. There are no road use agreements with other parties.

6. APPENDIX

6.1 Advertisement

Insert copies of newspaper advertisement.

In accordance with WLFMR section 7(6)(a), the FDP must include a copy of the newspaper advertisement that was published to advertise the availability of the FDP for public review and comment. This can be done by cutting out the advertisement and pasting it into the FDP document in this location. When formatting the document leave sufficient spaces to allow you to paste the advertisement here. The date and name of the newspaper should be included in the cut out advertisement.

See attached Campbell River Courier adds dated July 5, 2001 and July 10, 2001.

6.2 Review and Comment / Documentation and Referral

6.2.1 Written Comments Received from Public Review

See "Attendance and Comment Log"

6.2.2 First Nations

See July 26, 2001 response from Klahoose Band. No other comments received by July 14, 2001.

6.2.3 Agencies

No comments recieved

6.2.4 Public Review Attendance Log

See "Attendance and Comment Log"

6.3 Summary of Revisions

Revisions are shown in correct locations as bold type within originally submitted text.

3.1.2 Measures to Protect

Site plans will identify root rot pockets. They will be reforested with resistant species or de-stumped post harvest.

Three-meter knockdown of hemlock regeneration will be prescribed in areas of high hemlock mistletoe hazard. Hemlock regeneration may be maintained if there is low risk of mistletoe infection and Hw is prescribed as an acceptable species on that site or SU in the site plan.

Plantations with heavy browse from deer or voles will be protected through mechanical or other means.

3.5.3 Measures to Protect

Large non-operable stands of Douglas Fir leading, rock outcrops will provide excellent raptor nesting opportunities as well as deer bedding and permanent forest cover.

In the absence of a Landscape Unit Designation, W0046 will be managed according to the **December 31, 1999** letter or any replacement letter from the Sunshine Coast Forest District regarding stand level biodiversity requirements under the Forest Practices Code and interim wildlife tree patch retention requirements. Non-operable stands will be linked with wildlife tree patches and riparian reserve zones to maintain areas with interior forest conditions.

4.1 Cutblock Information Tables

Have added general objective stating, **Trees to be retained will be Wind firm species such as Cw or Fd (vets where available). Also 0-50% Basal Area range has been altered to actual 0-25 m^2/ha.**

5.1.1 Access Management Addition

Some roads are being shown on this plan that do not necessarily develop cutblocks shown on the plan. Sutil 100, E 400, SW Main and Harper Main will access blocks to be shown on future MTSL 20495 and W 046 FDPs. Sutil 100 will also develop the western plateau of Read Island to enable small scale wind throw salvage operations to commence.

Harper Main does not show any development at this time as it will provide access to the west side of Read Island and avoid the condemned bridge on Raven Lumbers private land. The owner of this property is not interested in fixing the bridge and would prefer to remove it as soon as another option was available. Although Harper Main has little wood it directly accesses at this time, it will have large volumes of both Woodlot and TSL wood tributary to it. Harper Main is designed to allow access to crown wood without depending on Raven Lumber's privately owned roads. Harper Main does not encroach on the 10m RRZ of the wetland complex. However, sections of Harper Main will intrude the RMZ.

5.1.1 Road Construction, Major Culvert and Bridge Table

Wood Culverts have been deleted from table as they do not meet definition of major culvert.

7. Maps

Attendance / Comment Log
Woodlot License W0046
2001-2008 Forest Development Plan
Public Review

July 12, 2001
08:00 - 16:00
Evans Bay, BC

Attended By	Comments
s.22	WELL - PRESENTED PLANNING

Date	Time	Band / Agency	Who	In / Out	Discussuion / Message
July 23, 2001	13:06	Klahoose First Nation	Ray Noble	In	Sees no problem with proposed logging on Read Island. Will fax something along that line. Appreciates the call
July 23, 2001	13:15	Homalco First Nation	Chief Richard Harry	Out	Left voice mail asked if he had any questions RE:WL 0046 FDP, would he like to set up a meeting to discuss. Reminded him I needed correspondance by Aug 7th.
July 23, 2001	13:16	Department of Fisheries and Oceans	Frank Voisey	Out	s.22 left voice mail asking for comments on WL 0046 FDP to be faxed to 604 414 0345
July 23, 2001	13:18	MoELP	Ron Diederichs	Out	Left message for him to return my call
July 23, 2001	13:18	Hamatla Treaty Society	Rodney Arnold, RPF	In	Had not looked at it yet. Would look at it next week. I offered him a meeting to discuss and reminded him of timelines, he acknowledged and thanked me for the offer. Told him I would follow up next week.
July 23, 2001	15:40	MoELP	Ron Diederichs	In	Had not recieved any thing yet. Probably in the office some where. Would speak to other habitat officer and get back to me. Told him to fax comments to 604 414 0345. Thanked him for his time.
July 24, 2001	11:00	Homalco First Nation	Chief Richard Harry	Out	Told him who I was again, reminded him of plan submission and that no comments received. Asked if he would like to set up a meeting, or he could call or fax any concerns to me at my home phone number
July 24, 2001	11:05	Homalco First Nation	Catherine Willis	Out	s.22
July 26, 2001	13:15	Homalco First Nation	Chief Richard Harry	Out	Told him who I was again, reminded him of plan submission July 3, 2001 and that no comments received. End of consultation approaching would he like to set up a meeting, or he could call or fax any concerns to me at my home phone number.
July 26, 2001	13:19	Klahoose First Nation	Chief Ray Noble	In	Remembered talking earlier, forgot to fax, was going to do after hanging up. He asked what it should say, I told him what he said on phone," Klahoose did not object to proposed plan" would be fine. Said should have a fax later today.
July 26, 2001	13:24	Hamatla Treaty Society	Rodney Arnold, RPF	In	Remembered talking earlier, has 28 different plans to review, could not find would call back after looking for it.
July 26, 2001	13:35	Hamatla Treaty Society	Rodney Arnold, RPF	In	Returned call. Found plan and looked quickly. Noticed 2nd growth types asked if any Cw snags standing amoungst 2nd growth, TC -No all logged off. Asked about native usage of WL for hunting and plant harvesting. Told him to refer to FDP text, would not be objected to if used responsibly. Was going to pass to TUS branch and draft letter prior to his s.22 Did not see any concerns.

KLAHOOSE FIRST NATION

July 26, 2001.

Mr. Trevor Campbell
Powell River. B.C.

Re: Telecon. Ray Noble/Trevor Campbell.

Dear Trevor,

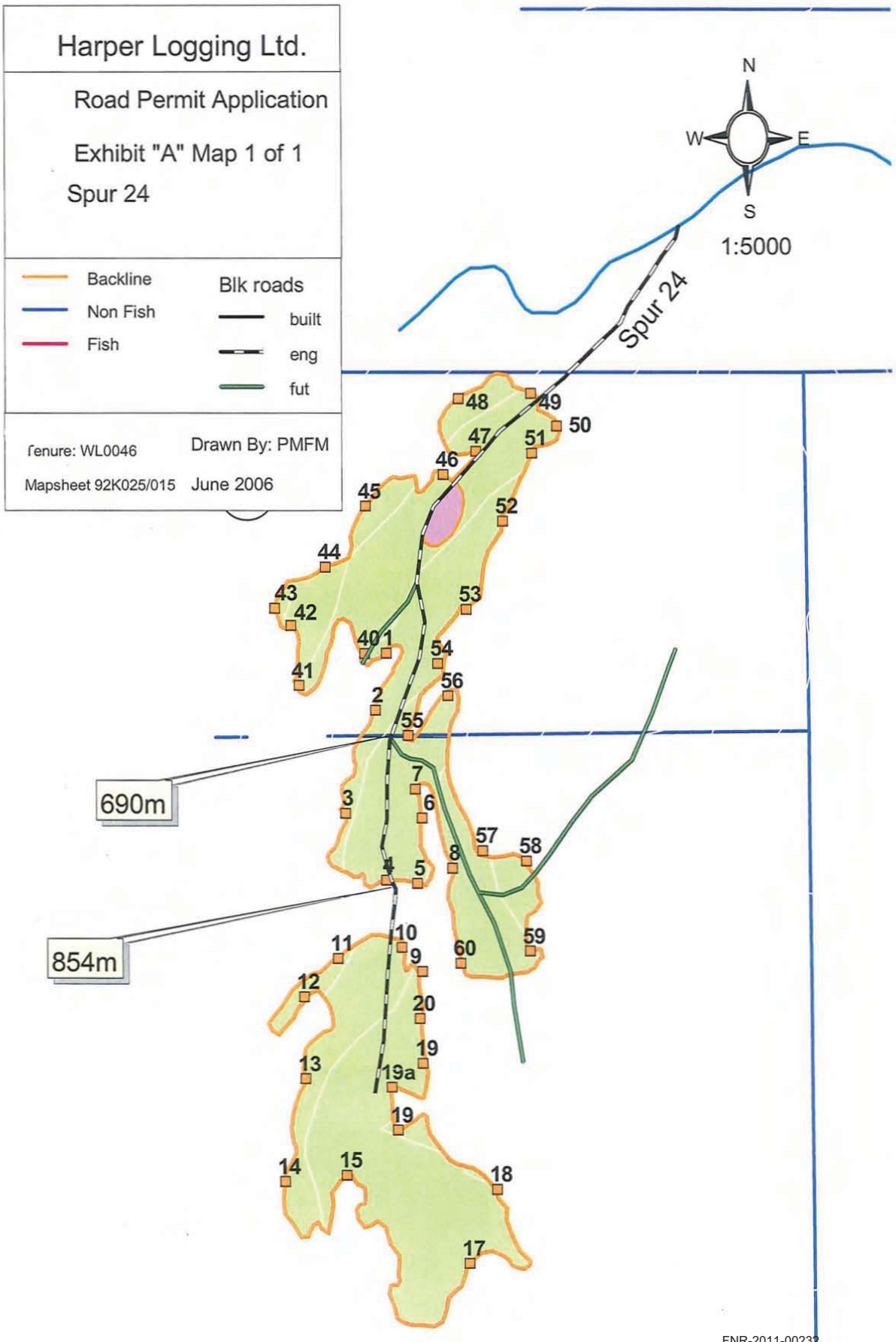
Klahoose First Nation does not have a problem with the logging on Reid Island. The logging has been going on for some time on Reid Island by Harper Graham.

I have heard rumor around the camp fire Mr. Graham does a superior job of the logging he is doing and he is well respected.

I trust this letter is all you require, if it does not please give me a call at: 250 935 – 6536 or Fax: 250 935-6997.

Ray Noble
Chief of the Klahoose First Nation.

Box 9, Squirrel Cove, B.C. Canada V0P 1K0 (250) 935-6536 Fax (250) 935-6997


Harper Logging Ltd.
Road Permit Application
Exhibit "A" Map 1 of 1
Spur 24
Backline
Non Fish
Fish
Blk roads
built
eng
fut
Tenure: WL0046
Drawn By: PMFM
Mapsheet 92K025/015
June 2006
N
W
E
S
1:5000
Spur 24
690m
854m
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
17
18
19
19a
20
40
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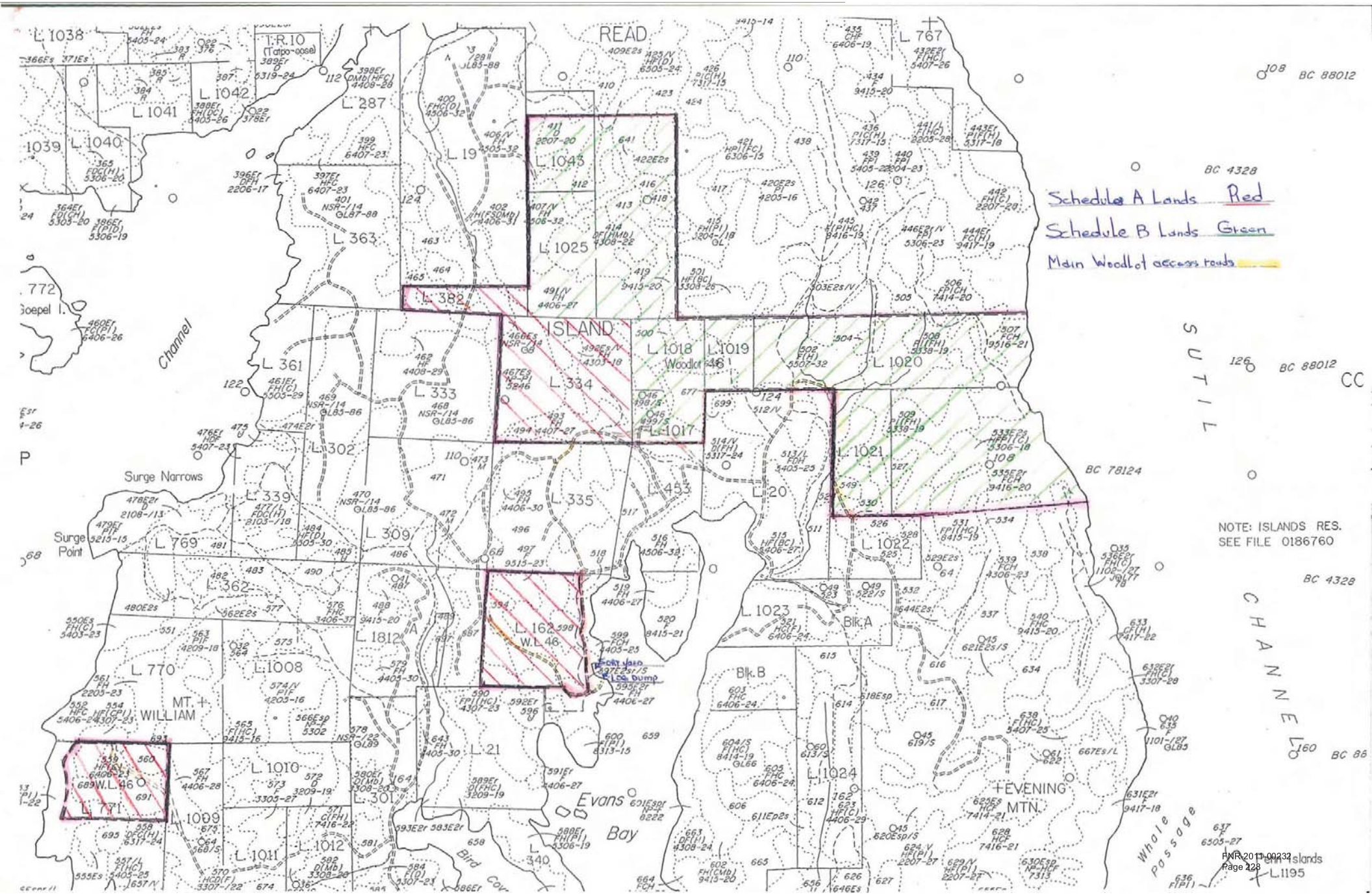
Schedule A Lands Red
Schedule B Lands Green
Main Woodlot access roads
NOTE: ISLANDS RES.
SEE FILE 0186760
READ ISLAND
Surge Narrows
Surge Point
Channel
Woodlot 46
MT. WILLIAM
Evans Bay
EVENING MTN.
Whale Passage
SUTIL CHANNEL
Blk.A
Blk.B
BC 88012
BC 4328
BC 78124
BC 86
L.1038
L.1042
L.1041
L.1040
L.1039
L.287
L.19
L.1043
L.767
L.1025
L.363
L.382
L.1018
L.1019
L.1020
L.361
L.334
L.333
L.1017
L.1021
L.302
L.339
L.335
L.453
L.20
L.769
L.309
L.1022
L.362
L.1812
L.1023
L.770
L.1008
L.162
W.L.46
L.1
L.21
L.1024
L.1010
L.301
L.771
L.1009
L.1011
L.1012
L.340
L.1195
Islands

BRITISH COLUMBIA

Document name: \\TILE\S63040\!Workgrp\Tenures\Woodlots\W0046\MP Approval.doc BK/tp
File: ORCS 19720-50/W0046

January 12, 2006

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Your October 3, 2005, submission of an amendment to Management Plan No. 2 for Woodlot Licence W0046 is hereby approved as of January 9, 2006.

As per Section 63.2 of the *Forest Act* the increase in Annual Allowable Cut (AAC) will be prorated for 2006. The AAC for the year starting January 1, 2006 will be 3726 m^3. Commencing January 1, 2007 the AAC will be 3740 m^3.

This letter forms an integral part of Management Plan No. 2 for Woodlot Licence W0046 and should be attached thereto.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachment(s): Copy of Approved Management Plan Amendment

bpc: Val Ciapponi, Tenures Manager
Coast Forest Region

Resource Tenures and Engineering Branch
Schedule B AAC Commencing January 1, 2006= 2850 m^3 Schedule A AAC = 876 m^3
Schedule B AAC Commencing January 1, 2007 = 2861 m^3 Schedule A AAC = 879 m^3
AAC for 2006 prorated as of approval date of management plan amendment, January 9, 2006

Timber Appraisal Section
BC Assessment Authority

Ministry of Forests and Range and Ministry Responsible for Housing
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

October 2, 2005

Harper Logging Ltd.
Box 299
Heriot Bay, BC
V0P 1H0

District Manager
Ministry of Forests
Sunshine Coast Forest District
7077 Duncan Street
Powell River, B.C.
V8A 1 W1

ATTENTION: Mr. Greg Hemphill, District Manager.

RE: **WL 0046 Management Plan #3 Amendment and Annual Allowable Cut Adjustment**

Dear Sir,

Please accept this letter as a request for an Amendment to the Management Plan #3 for Woodlot W046, located on Read Island, which includes a revision to the Annual Allowable Cut levels as set out in the Management Plan document.

Over the past one and one-half years a re-inventory project has been conducted within the Schedule A and B lands within Woodlot 0046. The resulting inventory data has been compiled and entered into the Woodlot for Windows program. Over a period of time we have been discussing the re-inventory project with Mr. Brian Kukulies in order to properly identify and set out the parameters and assumptions for the Woodlot re-inventory. To date the following information has been provided to Mr. Kukulies: a copy of the cruise compilation report; a copy of the re-inventory plot locations map; a copy of the Woodlot for Windows program output and a list of the assumptions that were used to determine the new Annual Allowable Cut.

As a result of the field data collection, compilation and AAC calculations we hereby request that the Woodlot 0046 annual allowable cut be increased by approximately 13% from 3,267 m^3 /year to a projected 3,740 m^3 /year. This adjustment is consistent with the completed re-inventory project.

Should you wish to discuss this further please feel free to contact Harper Graham or myself at your convenience.

Yours truly,

REGISTERED PROFESSIONAL PROVINCE OF PAUL J. KUTZ BRITISH COLUMBIA REGISTER NO. 2390

Paul Kutz, R.P.F.
Forester

G Hemphill
DISTRICT MANAGER

c.c. Harper Graham

Amendment to Management Plan-resubmission.doc

Jan 9, 2006.
DATE

BRITISH COLUMBIA

Document name: G:\!Workgrp\Tenures\TSL Conversion\A20495 W0046 FN consult remind.doc BK/tp

File: ORCS 19600-20/A20495
ORCS 19720-50/W0046

July 13, 2005

Chief Ralph Dick
Wewaiki Nation
PO Box 220
Quathiaski Cove, British Columbia
V0P 1N0

Chief Ralph Dick:

Further to our letters of June 3, 2005 regarding two decisions:

1. The proposed amendment to the management plan for Woodlot Licence W0046 to allow for an increase in the allowable annual cut as a result of an inventory of the woodlot and,

2. The conversion of replaceable Timber Sale Licence A20495 which would result in additional area being added to Woodlot Licence W0046 that would meet the allowable annual cut of the timber sale licence.

Both licences are located on Read Island. The purpose of undertaking this consultation prior to the district manager making these decisions is to identify any aboriginal interests that may be effected by these decisions and to reach a workable accommodation where appropriate.

If you wish to meet to regarding these two issues please contact me at 604 485-0725 to arrange a meeting.

Yours truly,

Brian Kukulies, R.P.F.
Tenures Forester
Sunshine Coast Forest District

Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA

Document name: G:\!Workgrp\Tenures\TSL Conversion\A20495 W0046 FN consult remind.doc BK/tp

File: ORCS 19600-20/A20495
ORCS 19720-50/W0046

July 13, 2005

Chief Dwayne Hanson
Klahoose First Nation
PO Box 9
Squirrel Cove, British Columbia
V0P 1K0

Chief Dwayne Hanson:

Further to our letters of June 3, 2005 regarding two decisions:

1. The proposed amendment to the management plan for Woodlot Licence W0046 to allow for an increase in the allowable annual cut as a result of an inventory of the woodlot and,

2. The conversion of replaceable Timber Sale Licence A20495 which would result in additional area being added to Woodlot Licence W0046 that would meet the allowable annual cut of the timber sale licence.

Both licences are located on Read Island. The purpose of undertaking this consultation prior to the district manager making these decisions is to identify any aboriginal interests that may be effected by these decisions and to reach a workable accommodation where appropriate.

If you wish to meet to regarding these two issues please contact me at 604 485-0725 to arrange a meeting.

Yours truly,

Brian Kukulies, R.P.F.
Tenures Forester
Sunshine Coast Forest District

Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA

Document name: G:\!Workgrp\Tenures\TSL Conversion\A20495 W0046 FN consult remind.doc BK/tp

File: ORCS 19600-20/A20495
ORCS 19720-50/W0046

July 13, 2005

Chief Darren Blaney
Xwe`malhkwu First Nation
1218 Bute Crescent
Campbell River, British Columbia
V9H 1G5

Chief Darren Blaney:

Further to our letters of June 3, 2005 regarding two decisions:

1. The proposed amendment to the management plan for Woodlot Licence W0046 to allow for an increase in the allowable annual cut as a result of an inventory of the woodlot and,

2. The conversion of replaceable Timber Sale Licence A20495 which would result in additional area being added to Woodlot Licence W0046 that would meet the allowable annual cut of the timber sale licence.

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File: ORCS 19600-20/A20495
ORCS 19720-50/W0046

July 13, 2005

Art Wilson, Forestry Co-ordinator
Hamatla Treaty Society
1441 Old Island Highway
Campbell River, British Columbia
V9W 2E4

Art Wilson:

Further to our letters of June 3, 2005 regarding two decisions:

1. The proposed amendment to the management plan for Woodlot Licence W0046 to allow for an increase in the allowable annual cut as a result of an inventory of the woodlot and,

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Yours truly,

Brian Kukulies, R.P.F.
Tenures Forester
Sunshine Coast Forest District

Ministry of Forests

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Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

MINISTRY OF FORESTS
RECEIVED
JAN 21 1998
POWELL RIVER, B.C.

Woodlot Licence # 046

Read Island - SCFD

Management Plan

January 1, 1998 to December 31, 2003

SUNSHINE COAST FOREST DISTRICT
7077 DUNCAN STREET
POWELL RIVER, BC V8A 1W1
Ph. (604) 485-0745 Fax: (604) 485-0799

JAN 21 1997

RECEIPT ACKNOWLEDGED
19720-30/W0046
OUR FILE No.: .....

Prepared by:

HARPER GRAHAM

Licencee:
HARPER LOGGING LTD.

Signature H Graham

G Hemphill

Greg Hemphill
District Manager
Sunshine Coast Forest District

WOODLOT LICENCE 046
MANAGEMENT PLAN
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WOODLOT LICENCE 046
MANAGEMENT PLAN
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Appendix I - Forest Cover Inventory
Appendix II- AAC Determination
Appendix III- Forest Development Plan

1.0 Area Description

Schedule A Land: Area: 165 ha Map reference: 92K 025
(Private Land) Legal Description: Lots 334, 382, 162 and the north half of 771

General Location and Area Description:

The private portion Woodlot 046 is located at the north end of Evans Bay, on the east side of Read Island. The private lands are the adjacent Lots 334 and 382. The major part of Lot 162 is on the west side of Evans Bay and the north half of Lot 771 on the west side of Read Island.

Schedule B Land: Area: 364 ha Map reference: 92K 025
(Crown Land)

General Location and Area Description (Private and Crown Land):

The Crown Land portion is the land adjoining the above lots within the Sunshine Coast Timber Supply area.
Read Island is accessed by boat or plane, from wherever convenient.
The closest larger community is Heriot Bay (Quadra Island) or Campbell River.

2.0 Timber Resource

2.1 Annual Allowable Cut (AAC)

Annual Allowable Cut (AAC) for Woodlot Licence # 046 is:

Schedule A lands: 848 m^3
Schedule B lands: 2,274 m^3

2.2 Cut Control

The five year cut control period starts January 1, 1998 and ends December 31, 2003. The Licensee is committed to harvest, during this five year cut control period, a total volume of timber of 15610 m^3 or will be within the +/- 10% of the five year cut.

3.0 Higher Level Plans

There are no higher level plans that cover the woodlot licence.

4.0 Licensee's Goals

The goal is to manage the timber resource of Woodlot Licence # 046, on a sustained yield basis, following the principles of integrated resources management.

The licensee will carry out environmental protection measures by co-operating fully with all government agencies concerned with resource management.

To realize the highest possible utilization of the timber resource and operate the licence in a profitable manner.

Woodlot activities will be conducted in compliance with the Forest Practices Code of BC Act, the Forest Act and associated legislation and regulations.

Specific integrated resource management goals are access development of WL046 for flexibility in logging plans, fire protection, pest management and silviculture.

To increase the licencee's knowledge and experience in forestry and to become more involved with the day to day forest management on the woodlot.

Supplement the licencee's income

5.0 Inventories

5.1 Timber Resources Inventory

The current forest inventory information for the Crown Land portion (Schedule 'B') and the Private land portion (Schedule 'A') of the Woodlot, are shown in Appendix I and are based on the 1993 inventory of Woodlot Licence #046. This inventory will be updated as disturbances occur on the licence area.

Pending inventory is currently being worked on as new 1-5000 maps become available. This may not get all done in 1998, however it will be finished during the term of this plan. When finished adjustments to cut control will be done at this time and will take effect for the years remaining on this management plan. For your record, the private lands will be updated also.

5.2 Terrain Stability Inventory

Terrain assessments will be carried out on those areas that require an assessment as per the Forest Practice Code.

5.3 Fish Stream Classification Inventory

Will be completed during the term of this plan or when required on a block by block basis.

5.4 Archeological Overview Assessment

Done by MoF in 1997. The MoF will complete an Archeological Impact Assessment during 1997/98.

5.5 Watershed Assessment Inventory

There are no designated or candidate community watersheds in the woodlot licence area. An assessment is not required.

5.6 Visual Quality Assessment

The licencee will use landscape inventory maps supplied by the Forest Service. Visual impact assessments will be carried out as required.

6.0 Management Objectives

6.1 Timber Resource

6.11 Forest Products

The following forest products will be produced from the licence area:

Major Products:

1. Sawlogs
2. Poles & Pilings
3. Pulp logs

Minor products:

1. Shake Blocks
2. Fence Posts
3. Possible mushrooms collected by the public.
4. Possible fire wood, but unlikely because of remoteness.

6.12 Cutting Priorities

The Licence 046 cutting priorities are as follows:

1) Blowdown, fire kill or priority insect attacks
2) Older mature stands first
3) Stands suffering a net volume loss from disease or parasitism and decadent stands
4) Susceptible stands and other mature stands

Special Forest Products/Salvage Operations:

One of the benefits of small-scale forest management is the ability of woodlot licensees to practice forestry at the tree level, as well as the stand level, and forest level. The comprehensive year-round forest road system that the licensee will develop, over time, will result in greater access to the woodlot's forest resources. As a result, we will be able to economically remove individual stems should they die or be damaged due to blowdown or fire, or be affected by root disease.

The licensee requires MoF approval for minor harvesting salvage operations which include individual or groups of merchantable trees which are not usually administered through standard operational planning procedures; for example stems which are blown down across access roads or skid trails in winter storms. In situations where salvage opportunities exist, that have not been identified in the Development Plan, the licensees will apply to the District Manager for exemption from requirements of a Forest Development Plan under Section 17 of the *Operational Planning Regulation*. Similarly, exemptions from Logging Plans and Sulviculture Prescriptions can be applied for under the *Forest*

6.12 Cutting Priorities cont...

Practices Code of British Columbia Act. The total volume removed in this manner will not usually exceed 500 m^3 in any given year. The removal of timber in this manner will contribute to the 5-year cut control period, and assist in spreading the harvesting activities throughout the woodlot area.

The removal of salvage timber in this manner will be important in areas of older age classes with high levels of root disease. The salvage of timber from road networks will also ensure effective access, and allow the licencee to monitor all areas of the woodlot more often.

The areas scheduled for harvest during the five-year term of this Management Plan are illustrated on the Development Plan Map (Appendix II). The timber to be harvested may be characterized as:

A lower quality of stands that have been logged and picked through in the 30ies and 40ies by the old timers, leaving only pockets of timber that was probably not accessible to them with the equipment they had at the time. The second growth however is of good quality and sells well on the log market.

The next plan may focus on some changes depending on the changing market for fibre world wide.

6.13 Utilization Standards

The utilization standards that are set forth in the cutting permit document shall be followed. Any deviations from these utilization standards will be detailed in the silviculture prescription along with the reason why.

6.2 Non-Timber Values and Resource Objectives

6.21 Landscape Management

The general Visual Quality Objective (VQO) for this woodlot is Partial Retention (PR). As the activities on the woodlot must be subordinate in the landscape the components of landscape design will be utilized to meet the objective.

Clearcut size, shape and location and vegetative screens will be some of the components used to reduce the contrast in vegetative cover.

Most blocks will be 10HA or smaller.

The use of individual and groups of trees, riparian reserves, WTP's when economic and silviculture conditions allow.

Some old growth trees that do not infringe on safety will be left. Species will be mainly Fir and Maple.

6.22 Biological Diversity

Biodiversity requirements on a landscape level will be assessed through the Landscape Planning Process to be completed by the Ministry of Environment Lands and Parks and the Ministry of Forests. Areas within the license will be considered during this process. Until this process is completed, stand level biodiversity techniques will be used by the Licencee.

For biological diversity, proposed management strategies are:

- retention of coarse woody debris
- wildlife tree retention
- wildlife tree patches
- old growth reserves
- pattern of forest patches (mozaic) partial cutting

Specific measures will be outlined in the forest development plans and silviculture prescriptions.

6.23 Soil Management

The Forest Practices Code of B.C. Act, Regulations, and Standards will be adhered to with regards to protection of the soil resource.

The proposed strategies and measures to be taken are:

1. minimize disturbance.
2. know locations of sensitive or problem soils. They will be assessed and plans to minimize any disturbance will be carried out such as using appropriate weather windows and equipment.
3. identify the timing and intended duration of any proposed treatments such as site prep etc. for appropriate weather condition.

Specific measures for the soil management are in the forest development plan and silviculture prescriptions.

6.24 Water Management

The Forest Practices Code of B.C. Act, Regulations, and Standards will be adhered to with regards to protection of the water resource. The water users will be notified of any development which may affect water prior to development taking place. Both quantity and quality of water will be maintained.

A water management concern I have is regarding the buffer zones along the creeks that have a stand of very high second growth trees near them. If I log to the buffer zone and leave the tall trees in the buffer zone I am afraid they will blow down over the creek and cause a worse mess than if I tipped the tallest ones out of the buffer zone. At present one cannot touch these trees even if MoF and Fisheries agree that they should come out with current logging of the block. A variance is needed to address this problem properly. I feel the answer to this question is out of my hands.

6.25 Recreation Management

Very little use of this woodlot for recreation because of its remoteness. I have not noticed any locals or tourists using this woodlot for any activity at all.

However anyone who wishes to use the area for recreation may do so.

Logging roads may be gated during high fire hazard or active logging in the area. Appropriate signage will be used if this should happen. Gating of any roads on the woodlot will only be done with prior approval of the D.M.

6.26 Cultural Heritage Management

No known Cultural Heritage areas. However, if any items of cultural significance are found the licencee will work with the MoF and First Nations.

6.27 Range Management

Not applicable to this woodlot. There are three cows that live on Read Island but have not caused any impact on the woodlot.

6.28 Wildlife Management

Wildlife on Woodlot 046 at present: There are Blacktail deer, both Willow and Blue Grouse, Turkey Vultures and numerous small species as well as Ravens and Eagles. Any known sites such as roosting or nesting sites, the licencee would work with the Ministry of Environment to protect these areas.

These sites would then be located on a Development Plan map.

The small clearcuts are good habitat for the deer to browse. Snags and small cutblocks will provide habitat for small species, leaving some slash accumulations for bird habitat.

6.29 Fisheries Management

Forest Practices Code of B.C. Act specifications will be followed for the management of the fisheries resource, including associated riparian areas.

There are 2 Creeks within the boundaries of the Woodlot. The Whiterock Pass Creek system and the Ralph River Lannie Creek system.

Only the Whiterock system is a salmon bearing creek, but no spawning within the boundaries of the woodlot. The creek within the woodlot may be utilized by salmon fry.

Their class would be shown on a Development Plan map.

6.3 Harvesting

The season of harvesting operations will be guided by the site specific factors that will be detailed in the silviculture prescriptions and logging plans.

The Licencee will carry out harvesting in compliance with the standards and regulations detailed in the Forest Practices Code of British Columbia Act, Forest, Range Act and appropriate regulations.

The Licensee will carry out harvesting in a manner that is within acceptable levels of site disturbance, as defined in the regulations and guidebooks. As well, harvesting systems will be designed to minimize site degradation.

Hand falling will be used at present. Mechanical falling may be used in future if conditions warrant.

Yarding techniques will depend on the soil conditions and the time of year. Currently, yarding is done by overhead cable, hoechucking and skidder. This will be continued. The licencee may utilize small lighter ground based tracked skidders if appropriate.

Transportation will be standard trucks, as we build all weather roads.

Equipment list:

Madill Mini Tower Model 071
Barko Log Loader
KW Log Truck
518 Cat Skidder
Komatsu Hoe Chucker

6.4 Silviculture

6.41 Reforestation Methods

The Licencee shall ensure that a free growing stand is achieved within approved time frames. To adequately restock denuded areas, reforestation will be accomplished by planting or relying on natural establishment. Brushing the sites may be required one or more times until trees are free-growing. Site prep will be done where conditions warrant. Silviculture prescriptions will set out detailed specifications for individual blocks. Planting will be the most common reforestation method and the licencee will endeavor to plant at the first opportunity following harvest. Cottonwood planting may be tried on suitable sites as a trail. The biogeoclimate subzone is CWHxm. Planted trees are Fir, Cedar and some Grand Fir.

6.42 Incremental Silviculture

Incremental silviculture projects which will be considered for the term of this management plan include spacing and possible fertilization.

Detailed prescription for the projects will be presented in stand management prescriptions.

Some projects may include:

1) Rehab alder on DL382
2) Consider planting cottonwood on DL382
3) Thinning considered (commercial)
4) Possible fertilization

6.5 Forest Protection

6.51 Fire Prevention

The proposed management objectives for fire prevention and suppression are that all activities are to be carried out in accordance with the approved Fire Pre-Organization Plan.

Proposed strategies for meeting those objectives are:

- assess roadside and landing accumulations for fire hazard and burn only if necessary. Undertake prescribed burning if necessary to minimize the hazard.
- Prescribed roadside accumulation burns are to be burned when fire hazard rating is nil.
- Utilize best weather information available prior to burning slash.
- Plan for increased logging caution during higher risk periods such as June, July, august and September
- Practice increased logging caution during hot and dry periods.
- Plan for potential shutdowns during high risk periods such as July and August.
- all logging and road building activities to be carried out in accordance with the approved Fire Pre-Organization Plan.
- Deactivate and rehabilitate some roads to cutblocks and within cutblocks to limit access.

6.52 Forest Health

The proposed management objectives for pest management and forest health are to check all areas in the everyday course of forest management on the Woodlot.

Do a survey if anything questionable is recorded.

The proposed strategies and measures to be taken to achieve the objectives above:

Check with MoF Forest Health officer.
Check on questionable areas often to determine significance of problem.
Consultation with specialists in the field of pest management and forest health to develop a plan.
Hemlock mistletoe and some powder worm are the only known problem at this time. For this plan we will monitor the problem and deal with it if it shows signs of getting worse. Our feeling is it won't get worse as the stands are maturing.
Treatment will likely be the harvest of those species that have significant forest health concerns.

6.6 Road Construction, Maintenance and Deactivation

For the term of this plan, the licencee will follow these objectives for road construction, maintenance and deactivation:

To continue to construct main access roads for more flexibility, such as fire protection access to windthrow dead and down timber and to reach better market conditions with a product that is saleable.

Roads not currently used would be deactivated to semi permanent state. This will provide future access.

Totally deactivate only roads that will not be needed (spurs ect).

The licencee will try to keep roads to less than 20 meters RW and to a 5 meter running surface.

Ditching and brushing have been done in the past and some culverts may require replacing during the term of this plan.

7.0 Referrals and Consultations

7.1 Trappers, Guides and Other Licensed Resource Users

The forest development plan, silviculture prescription and stand management prescription will be referred to any tenure holder. There are no known tenure holders that I know of at this time.

7.2 First Nations

The following First Nations will be contacted and given the opportunity to review the Forest Development Plan, Silviculture Prescriptions and Stand Management Prescriptions for the purpose of ensuring that development does not impact traditional use activities and cultural heritage resources.

1. Chief Richard Harry
   Homolco First Nation
   Bute Crescent 1218
   Campbell River, B.C.
   V9H 1 G5
   (250) 923-4979

2. Chief Gilbert Hanuse
   Klahoose First Nation
   Box 9
   Squirrel Cove, B.C.
   V0P 1K0
   (250) 935-6536

3. Chief John Henderson
   Homalco First Nation
   Bute Crescent 1218
   Campbell River, B.C.
   (250) 923-4979

4. Chief Ralph Dick
   Cape Mudge Band
   Box 220
   Quathiaski Cove, B.C.
   (250) 285-3316

8.0 Residue and Waste Surveys

Upon completion of primary harvesting of a block the licencee will notify the Woodlot Administrator within fourteen (14) days. The Licensee(s) will not be required to perform waste and residue measurements provided utilization practices appear acceptable. If utilization appears unacceptable or instruction to improve utilization was given by a Forest Officer during a harvesting inspection, the District Manager will conduct a waste assessment survey. Monetary and/or cut control billings may follow, depending on the results of the survey.

9.0 Community Involvement

Woodlot 046 is in a very remote location. The only community involvement is with S.N.F.A.C. (Surge Narrows Forestry Advisory Committee)

10.0 Compatible Uses

The Licencee recognizes that the Ministry of Forests may grant other tenures over the Crown land portion of the Woodlot Licence area which are compatible with Forest Management and/or in compliance with the *Forest Act* and the *Range Act*.

None as Yet

11.0 Other Uses and Issues

To date there are no other uses or users regarding this woodlot.

12.0 Provision for Revision

This Management Plan will be reviewed annually and revised as required. Any amendment required to revise or update the management plan, either at the request of the licencee or licensor, will be submitted to the district manager for approval.

A new management plan will be submitted for approval on or before July 12, 2003 covering the subsequent five year period or sooner if required.

13.0 Annual Report

An annual report will be submitted to the Ministry of Forests on or before April 30th of each year, covering the previous calendar year. The report will include information and a map (scale 1:5000) for each completed project(s). Reporting requirements apply to all work done on the Woodlot, including road construction, harvesting, basic and incremental silviculture projects.

APPENDIX I

FOREST COVER SUMMARY TABLE
INVENTORY SUMMARY TABLE

Forest Cover Summary			
	Schedule A (Ha)	Schedule B (Ha)	Total (Ha)
Mature Coniferous forest (species mix)	255.5	65.7	320.7
Deciduous Forest (species mix)	41.2	15.3	56.5
Immature Coniferous Forest	49.4	47.5	96.9
Not Sufficiently Restocked	0.0	0.0	0.0
Non-Commercial (brush)	0.0	0.0	0.0
Unproductive (rock, swamp)	15.9	36.5	52.4
Roads and Landings	2.0	3.0	5.0
Total	364	165	529

APPENDIX 2

Annual Allowable Cut (AAC) Calculation

NOTE

File: 19720-55/W0046
Date: February 3, 1998
Subject: Annual Allowable Cut (AAC) calculation Woodlot Licence W0046

The two attached WOODLOT runs for the Crown and private lands were not used to calculate the Woodlot Licence AAC. The two runs show an AAC that is lower than the previously approved AAC. Currently the Vancouver Forest Region is developing new 1:5000 scale forest cover maps for the woodlots in this region. Licensees have the option to have their private lands done as well. Based on this new map the licensee will complete a ground re-inventory to confirm or alter the forest cover polygons of the new map. The licensee has committed to completing this inventory during the term of this plan. Once the re-inventory has been completed a new AAC will be calculated. I feel that reducing the AAC of the Woodlot Licence at this time is unwarranted. In the past re-inventories of Woodlot Licence have resulted in an increase in the AAC, in some cases a dramatic increase. The risk of leaving the AAC as is to the long term management of the woodlot is minimal.
If the licensee has not completed the re-inventory by the end of the term of this Management Plan the AAC will be calculated using the Ministry of Forests forest cover information.

Brian Kukulies, R.P.F.
Woodlot Forester
Sunshine Coast Forest District

Woodlot Licence Harvest Planning report

Date : 3 February, 1998

Woodlot Licence #: W0046
Forest District : Sunshine Coast
Company : Harper Logging Ltd
User : Brian Kukulies
Woodlot File : H:\WOODLOT\FILENOTE\W0046\w0046c.lot
Scenario : Crown Land

Model Information:
Woodlot Version : Beta1.13 - September, 1997 - WIN95 / NT
VDYP Version : Prod 6.4a
TIPSY Version : BTIPSY V2.2.1

1.0 Introduction

This report summarises information used to calculate a long term harvest rate on Woodlot Licence No. W0046. The calculated harvest rate can be used to assist in determining the allowable annual cut (AAC). It should be assessed in light of the assumptions used, social and economic considerations in determining the AAC.

2.0 Polygon Data

a) General Information and Current Volumes

Map Sheet	Poly ID	Area (ha)	Age (Yrs.)	VAF	PSYU	FIZ Zone	MANAGE Cur/Fut	Silv	Vol. m^3/ha	Net Vol. m^3
92K025	406	5.2	77	1.00	0194	B	Nat/Man	CC	701	3,646
92K025	407	10.8	77	1.00	0194	B	Nat/Man	CC	722	7,802
92K025	411	17.6	37	1.00	0194	B	Nat/Man	CC	97	1,712
92K025	412	7.3	77	1.00	0194	B	Nat/Man	CC	469	3,423
92K025	413	18.9	77	1.00	0194	B	Nat/Man	CC	487	9,206
92K025	414	19.6	77	1.00	0194	B	Nat/Man	CC	335	6,556
92K025	415	0.9	42	1.00	0194	B	Nat/Man	CC	35	32
92K025	416	5.8	42	1.00	0194	B	Nat/Man	CC	35	203
92K025	418	2.3	97	1.00	0194	B	Nat/Man	CC	226	519
92K025	419	4.7	307	1.00	0194	B	Nat/Man	CC	478	2,248
92K025	422	7.0	37	1.00	0194	B	Nat/Man	CC	75	522
92K025	423	2.3	117	1.00	0194	B	Nat/Man	CC	373	858
92K025	445	38.3	154	1.00	0194	B	Nat/Man	CC	410	15,714
92K025	446	0.2	87	1.00	0194	B	Nat/Man	CC	322	64
92K025	463	0.6	77	1.00	0194	B	Nat/Man	CC	462	277
92K025	491	45.5	77	1.00	0194	B	Nat/Man	CC	541	24,620
92K025	495	0.5	77	1.00	0194	B	Nat/Man	CC	662	331
92K025	498	4.6	10	1.00	0194	B	Man/Man	CC	0	0
92K025	499	3.3	10	1.00	0194	B	Man/Man	CC	0	0
92K025	501	3.3	44	1.00	0194	B	Nat/Man	CC	324	1,068
92K025	502	39.4	85	1.00	0194	B	Nat/Man	CC	699	27,537
92K025	503	2.5	77	1.00	0194	B	Nat/Man	CC	372	931
92K025	504	2.7	77	1.00	0194	B	Nat/Man	CC	270	729
92K025	505	0.9	21	1.00	0194	B	Nat/Man	CC	0	0
92K025	506	4.2	137	1.00	0194	B	Nat/Man	CC	382	1,606
92K025	507	16.0	287	1.00	0194	B	Nat/Man	CC	642	10,275
92K025	508	14.9	97	1.00	0194	B	Nat/Man	CC	300	4,474
92K025	509	12.9	97	1.00	0194	B	Nat/Man	CC	300	3,874
92K025	511	1.2	87	1.00	0194	B	Nat/Man	CC	295	354
92K025	513	1.1	87	1.00	0194	B	Nat/Man	CC	355	390
92K025	524	4.3	307	1.00	0194	B	Nat/Man	CC	468	2,011
92K025	526	5.0	29	1.00	0194	B	Nat/Man	CC	11	57
92K025	527	2.7	29	1.00	0194	B	Nat/Man	CC	19	50
92K025	529	1.1	27	1.00	0194	B	Nat/Man	CC	0	0
92K025	530	7.0	29	1.00	0194	B	Nat/Man	CC	19	130
92K025	531	3.8	222	1.00	0194	B	Nat/Man	CC	441	1,675
92K025	533	6.1	26	1.00	0194	B	Nat/Man	CC	0	0

92K025	534	0.6	27	1.00	0194	B	Nat/Man	CC	0	0
92K025	535	11.1	307	1.00	0194	B	Nat/Man	CC	567	6,289
92K025	536	1.1	14	1.00	0194	B	Man/Man	CC	0	0
92K025	537	1.5	27	1.00	0194	B	Nat/Man	CC	0	0
92K025	561	0.4	37	1.00	0194	B	Nat/Man	CC	79	32
92K025	592	0.1	57	1.00	0194	B	Nat/Man	CC	199	20
92K025	639	5.3	307	1.00	0194	B	Nat/Man	CC	489	2,591
92K025	641	1.5	77	1.00	0194	B	Nat/Man	CC	469	703
TOTAL		346.1								142,530

3.0 Yield Data

a) VDYP (unmanaged) Specific - Input

Map Sheet	Poly ID	Site Index (m)	Crown Closure	Stock Class	SPECIES AND COMPOSITION S1 %	S2 %	S3 %	S4 %	S5 %	S6 %
92K025	406	31.9	50	0	FD 70%	HW 30%	0%	0%	0%	0%
92K025	407	31.9	60	0	FD 70%	HW 30%	0%	0%	0%	0%
92K025	411	20.2	70	0	DR 90%	FD 5%	HW 5%	0%	0%	0%
92K025	412	26.8	40	0	FD 50%	HW 40%	DR 10%	0%	0%	0%
92K025	413	26.8	50	0	FD 50%	HW 40%	DR 10%	0%	0%	0%
92K025	414	21.5	80	0	DR 60%	FD 20%	HW 10%	MB 10%	0%	0%
92K025	415	18.0	40	0	FD 50%	HW 40%	PL 10%	0%	0%	0%
92K025	416	18.0	40	0	FD 50%	HW 40%	PL 10%	0%	0%	0%
92K025	418	13.6	50	0	PL 60%	HW 20%	FD 10%	CW 10%	0%	0%
92K025	419	19.6	50	1	FD 100%	0%	0%	0%	0%	0%
92K025	422	22.5	40	0	FD 60%	HW 40%	0%	0%	0%	0%
92K025	423	14.8	60	0	HW 50%	PL 20%	FD 20%	CW 10%	0%	0%
92K025	445	19.1	60	1	FD 60%	PL 15%	HW 15%	CW 10%	0%	0%
92K025	446	22.5	60	0	FD 60%	PL 40%	0%	0%	0%	0%
92K025	463	26.8	70	0	FD 40%	HW 30%	DR 30%	0%	0%	0%
92K025	491	26.8	60	0	FD 60%	HW 40%	0%	0%	0%	0%
92K025	495	30.2	60	0	FD 70%	HW 30%	0%	0%	0%	0%
92K025	498									
92K025	499									
92K025	501	27.8	80	0	HW 45%	FD 30%	BG 10%	CW 10%	PL 5%	0%
92K025	502	31.9	70	0	FD 82%	HW 12%	BG 3%	CW 2%	DR 1%	0%
92K025	503	24.2	40	0	FD 45%	HW 30%	DR 15%	CW 10%	0%	0%
92K025	504	22.5	90	0	DR 100%	0%	0%	0%	0%	0%
92K025	505	18.0	20	0	FD 30%	HW 30%	CW 30%	PL 10%	0%	0%
92K025	506	20.1	40	1	FD 40%	PL 20%	CW 20%	HW 20%	0%	0%
92K025	507	21.4	60	1	FD 45%	CW 31%	HW 24%	0%	0%	0%
92K025	508	18.9	80	0	PL 80%	FD 10%	HW 10%	0%	0%	0%
92K025	509	18.9	80	0	PL 80%	FD 10%	HW 10%	0%	0%	0%
92K025	511	23.8	80	0	DR 85%	FD 5%	HW 5%	CW 5%	0%	0%
92K025	513	24.9	50	0	FD 55%	DR 20%	HW 20%	CW 5%	0%	0%
92K025	524	19.1	60	0	FD 100%	0%	0%	0%	0%	0%
92K025	526	22.0	30	0	HW 50%	CW 30%	FD 20%	0%	0%	0%
92K025	527	22.0	60	0	HW 50%	CW 30%	FD 20%	0%	0%	0%
92K025	529	14.0	30	0	HW 60%	CW 20%	FD 20%	0%	0%	0%
92K025	530	22.0	60	0	HW 50%	CW 30%	FD 20%	0%	0%	0%
92K025	531	19.4	50	1	FD 50%	PL 30%	HW 10%	CW 10%	0%	0%
92K025	533	17.6	60	0	HW 40%	FD 30%	PL 20%	CW 10%	0%	0%
92K025	534	14.0	50	0	HW 60%	CW 20%	FD 20%	0%	0%	0%
92K025	535	19.6	60	1	FD 50%	CW 30%	HW 20%	0%	0%	0%
92K025	536									
92K025	537	14.0	50	0	HW 60%	CW 20%	FD 20%	0%	0%	0%
92K025	561	22.5	50	0	FD 60%	HW 40%	0%	0%	0%	0%
92K025	592	18.6	90	0	DR 80%	FD 10%	HW 5%	CW 5%	0%	0%
92K025	639	19.6	60	1	FD 100%	0%	0%	0%	0%	0%
92K025	641	26.8	40	0	FD 50%	HW 40%	DR 10%	0%	0%	0%

b) TIPSY (Managed) Specific - Input

Map Sheet	Poly ID	Site Index (m)	Initial Density (s/ha)	Thinned to (s/ha)	Regen-eration	SPECIES AND COMPOSITION S1 %	S2 %	S3 %	S4 %	S5 %
92K025	406	32.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	407	32.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	411	30.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	412	27.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	413	27.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	414	30.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	415	18.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	416	18.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	418	14.0	500	--	Planted	FD 100%	0%	0%	0%	0%
92K025	419	20.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	422	22.0	700	--	Planted	FD 100%	0%	0%	0%	0%
92K025	423	15.0	500	--	Planted	FD 100%	0%	0%	0%	0%
92K025	445	19.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	446	22.0	700	--	Planted	FD 100%	0%	0%	0%	0%
92K025	463	27.0	900	--	Planted	FD 80%	CW 20%	0%	0%	0%
92K025	491	27.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	495	30.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	498	27.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	499	27.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	501	28.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	502	30.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	503	24.0	800	--	Planted	FD 80%	CW 20%	0%	0%	0%
92K025	504	30.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	505	18.0	500	--	Planted	FD 100%	0%	0%	0%	0%
92K025	506	20.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	507	21.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	508	19.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	509	19.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	511	30.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	513	25.0	900	--	Planted	FD 80%	CW 20%	0%	0%	0%
92K025	524	19.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	526	22.0	700	--	Planted	FD 100%	0%	0%	0%	0%
92K025	527	22.0	700	--	Planted	FD 100%	0%	0%	0%	0%
92K025	529	14.0	500	--	Planted	FD 100%	0%	0%	0%	0%
92K025	530	22.0	700	--	Planted	FD 100%	0%	0%	0%	0%
92K025	531	19.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	533	18.0	500	--	Planted	FD 100%	0%	0%	0%	0%
92K025	534	14.0	500	--	Planted	FD 100%	0%	0%	0%	0%
92K025	535	20.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	536	27.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	537	14.0	500	--	Planted	FD 100%	0%	0%	0%	0%
92K025	561	23.0	800	--	Planted	FD 100%	0%	0%	0%	0%
92K025	592	30.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	639	20.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	641	27.0	900	--	Planted	FD 80%	CW 20%	0%	0%	0%

c) First and Subsequent Cutting Parameters

Map Sheet	Poly ID	Yield Type	CULMINATION Age (yrs)	Vol (m^3/ha)	Mai (m^3/ha/yr)	HARVEST AGE Age (yrs)	Vol (m^3/ha)	Mai (m^3/ha)	PARTIAL CUT % Cut	Re-Enter (m^3/ha/yr)
	(yrs)									
92K025	406	VDYP	68	624	9.49	68	624	9.49	--	--
		TIPSY	80	913	11.41	80	913	11.41	--	--
92K025	407	VDYP	70	661	9.78	70	661	9.78	--	--
		TIPSY	80	913	11.41	80	913	11.41	--	--
92K025	411	VDYP	55	173	3.31	81	201	2.60	--	--
		TIPSY	90	906	10.06	90	906	10.06	--	--
92K025	412	VDYP	70	429	6.36	70	429	6.36	--	--
		TIPSY	90	697	7.75	90	697	7.75	--	--
92K025	413	VDYP	68	433	6.60	68	433	6.60	--	--
		TIPSY	90	697	7.75	90	697	7.75	--	--
92K025	414	VDYP	60	292	5.10	60	292	5.10	--	--

		TIPSY	90	906	10.06	90	906	10.06	--	--
92K025	415	VDYP	102	318	3.28	102	318	3.28	--	--
		TIPSY	120	272	2.27	120	272	2.27	--	--
92K025	416	VDYP	102	318	3.28	102	318	3.28	--	--
		TIPSY	120	272	2.27	120	272	2.27	--	--
92K025	418	VDYP	128	326	2.69	128	326	2.69	--	--
		TIPSY	120	122	1.02	230	201	0.87	--	--
92K025	419	VDYP	107	351	3.46	107	351	3.46	--	--
		TIPSY	110	332	3.02	110	332	3.02	--	--
92K025	422	VDYP	85	415	5.10	85	415	5.10	--	--
		TIPSY	100	400	4.00	100	400	4.00	--	--
92K025	423	VDYP	130	417	3.46	130	417	3.46	--	--
		TIPSY	120	149	1.24	170	200	1.18	--	--
92K025	445	VDYP	108	319	3.14	108	319	3.14	--	--
		TIPSY	120	315	2.63	120	315	2.63	--	--
92K025	446	VDYP	115	439	3.98	115	439	3.98	--	--
		TIPSY	100	400	4.00	100	400	4.00	--	--
92K025	463	VDYP	60	373	6.44	60	373	6.44	--	--
		TIPSY	90	661	7.34	90	661	7.34	--	--
92K025	491	VDYP	73	514	7.30	73	514	7.30	--	--
		TIPSY	90	697	7.75	90	697	7.75	--	--
92K025	495	VDYP	71	613	8.95	71	613	8.95	--	--
		TIPSY	90	906	10.06	90	906	10.06	--	--
92K025	498	TIPSY	90	700	7.78	90	700	7.78	--	--
		TIPSY	90	700	7.78	90	700	7.78	--	--
92K025	499	TIPSY	90	700	7.78	90	700	7.78	--	--
		TIPSY	90	700	7.78	90	700	7.78	--	--
92K025	501	VDYP	79	693	9.14	79	693	9.14	--	--
		TIPSY	90	751	8.34	90	751	8.34	--	--
92K025	502	VDYP	73	607	8.63	73	607	8.63	--	--
		TIPSY	90	906	10.06	90	906	10.06	--	--
92K025	503	VDYP	74	358	5.04	74	358	5.04	--	--
		TIPSY	100	562	5.62	100	562	5.62	--	--
92K025	504	VDYP	43	202	4.95	43	202	4.95	--	--
		TIPSY	90	906	10.06	90	906	10.06	--	--
92K025	505	VDYP	107	275	2.81	107	275	2.81	--	--
		TIPSY	120	250	2.08	120	250	2.08	--	--
92K025	506	VDYP	109	319	3.15	109	319	3.15	--	--
		TIPSY	110	332	3.02	110	332	3.02	--	--
92K025	507	VDYP	100	408	4.42	100	408	4.42	--	--
		TIPSY	110	377	3.42	110	377	3.42	--	--
92K025	508	VDYP	112	350	3.22	112	350	3.22	--	--
		TIPSY	120	315	2.63	120	315	2.63	--	--
92K025	509	VDYP	112	350	3.22	112	350	3.22	--	--
		TIPSY	120	315	2.63	120	315	2.63	--	--
92K025	511	VDYP	46	212	4.83	46	212	4.83	--	--
		TIPSY	90	906	10.06	90	906	10.06	--	--
92K025	513	VDYP	67	281	4.35	67	281	4.35	--	--
		TIPSY	100	622	6.22	100	622	6.22	--	--
92K025	524	VDYP	106	340	3.38	106	340	3.38	--	--
		TIPSY	120	315	2.63	120	315	2.63	--	--
92K025	526	VDYP	97	449	4.99	97	449	4.99	--	--
		TIPSY	100	400	4.00	100	400	4.00	--	--
92K025	527	VDYP	97	497	5.52	97	497	5.52	--	--
		TIPSY	100	400	4.00	100	400	4.00	--	--
92K025	529	VDYP	118	272	2.55	118	272	2.55	--	--
		TIPSY	120	122	1.02	230	201	0.87	--	--
92K025	530	VDYP	97	497	5.52	97	497	5.52	--	--
		TIPSY	100	400	4.00	100	400	4.00	--	--
92K025	531	VDYP	116	329	3.02	116	329	3.02	--	--
		TIPSY	120	315	2.63	120	315	2.63	--	--
92K025	533	VDYP	117	481	4.41	117	481	4.41	--	--
		TIPSY	120	250	2.08	120	250	2.08	--	--
92K025	534	VDYP	119	299	2.78	119	299	2.78	--	--
		TIPSY	120	122	1.02	230	201	0.87	--	--
92K025	535	VDYP	107	377	3.85	107	377	3.85	--	--
		TIPSY	110	332	3.02	110	332	3.02	--	--
92K025	536	TIPSY	90	700	7.78	90	700	7.78	--	--
		TIPSY	90	700	7.78	90	700	7.78	--	--
92K025	537	VDYP	119	299	2.78	119	299	2.78	--	--
		TIPSY	120	122	1.02	230	201	0.87	--	--

92K025	561	VDYP	81	409	5.26	81	409	5.26	--	--
		TIPSY	90	411	4.57	90	411	4.57	--	--
92K025	592	VDYP	60	212	3.70	60	212	3.70	--	--
		TIPSY	90	906	10.06	90	906	10.06	--	--
92K025	639	VDYP	108	364	3.55	108	364	3.55	--	--
		TIPSY	110	332	3.02	110	332	3.02	--	--
92K025	641	VDYP	70	429	6.36	70	429	6.36	--	--
		TIPSY	90	661	7.34	90	661	7.34	--	--
Average Exisiting					428	5.49		429	5.45	
Average Future				583	6.19		584	6.18		

4.0 Calculation Assumptions

a) Initial Cut Order (Sort Order)

Map Sheet	Poly ID	Age (yrs)	1st Harvest Age (yrs)
92K025	406	77	68
92K025	407	77	70
92K025	411	37	81
92K025	412	77	70
92K025	413	77	68
92K025	414	77	60
92K025	415	42	102
92K025	416	42	102
92K025	418	97	128
92K025	419	307	107
92K025	422	37	85
92K025	423	117	130
92K025	445	154	108
92K025	446	87	115
92K025	463	77	60
92K025	491	77	73
92K025	495	77	71
92K025	498	10	90
92K025	499	10	90
92K025	501	44	79
92K025	502	85	73
92K025	503	77	74
92K025	504	77	43
92K025	505	21	107
92K025	506	137	109
92K025	507	287	100
92K025	508	97	112
92K025	509	97	112
92K025	511	87	46
92K025	513	87	67
92K025	524	307	106
92K025	526	29	97
92K025	527	29	97
92K025	529	27	118
92K025	530	29	97
92K025	531	222	116
92K025	533	26	117
92K025	534	27	119
92K025	535	307	107
92K025	536	14	90
92K025	537	27	119
92K025	561	37	81
92K025	592	57	60
92K025	639	307	108
92K025	641	77	70

b) Constraints

Area Netdown : 5
Height Constraint : NONE
Age Constraint : NONE

Minimum constraints

Minimum Harvest Age : 40 Years
Minimum Harvest Diameter : 20 cm.
Minimum Harvest Vol/ha : 200 m³/ha.
TIPSY OAF1 : 15%
TIPSY OAF2 : 5%
P.C. Adjustment Factor : 1.00
Planning Horizon : 250 years

5.0 Harvest Planning Results

a) Harvest Rate : 1952 m³/year

b) Harvest by Polygon: **

Map Sheet	Polygon ID Harvested	Que & Pass	Net Area (ha)	Start Date (yr)	End Date (yr)	Harvest Length (yrs)	Target Age (yrs)	Target Volume (m³/ha)	Harvest Age (yrs)	Harvest Volume (m³/ha)	Volume (m³)
92K025	406	C1	5.2	1998	1999	1.8	68	624	77	701	3,481
92K025	407	C1	10.8	1999	2003	4.7	70	661	78	731	7,683
92K025	412	C1	7.3	2003	2005	2.5	70	429	82	495	3,470
92K025	413	C1	18.9	2005	2010	5.4	68	433	84	524	9,627
92K025	414	C1	19.6	2010	2013	3.9	60	292	89	358	6,730
92K025	419	C1	4.7	2013	2014	2.0	107	351	322	478	2,136
92K025	423	C1	2.3	2014	2015	1.5	130	417	133	426	938
92K025	445	C1	38.3	2015	2023	8.4	108	319	171	423	15,426
92K025	463	C1	0.6	2023	2023	0.2	60	373	102	559	318
92K025	491	C1	45.5	2023	2039	16.4	73	514	102	681	30,949
92K025	418	Q1	2.3	2039	2039	0.4	128	326	138	350	765
92K025	446	Q1	0.2	2039	2039	0.0	115	439	128	483	92
92K025	495	C1	0.5	2039	2040	1.0	71	613	118	916	435
92K025	501	C1	3.3	2040	2041	1.2	79	693	86	749	2,354
92K025	502	C1	39.4	2041	2059	18.8	73	607	128	939	36,265
92K025	411	Q1	17.6	2059	2061	2.6	81	201	98	207	3,476
92K025	415	Q1	0.9	2061	2061	0.1	102	318	105	327	280
92K025	416	Q1	5.8	2061	2062	1.7	102	318	105	327	1,815
92K025	422	Q1	7.0	2062	2064	2.3	85	415	101	482	3,230
92K025	503	C1	2.5	2064	2065	1.0	74	358	143	564	1,340
92K025	504	C1	2.7	2065	2065	0.4	43	202	144	270	693
92K025	506	C1	4.2	2065	2066	1.3	109	319	204	442	1,764
92K025	507	C1	16.0	2066	2071	5.3	100	408	355	644	9,781
92K025	508	C1	14.9	2071	2074	3.6	112	350	170	454	6,430
92K025	509	C1	12.9	2074	2077	3.4	112	350	173	455	5,573
92K025	511	C1	1.2	2077	2077	0.2	46	212	166	341	389
92K025	513	C1	1.1	2077	2077	0.3	67	281	166	493	515
92K025	524	C1	4.3	2077	2078	1.9	106	340	386	468	1,910
92K025	498	Q1	4.6	2078	2080	2.5	90	700	90	700	3,097
92K025	499	Q1	3.3	2080	2081	1.6	90	700	92	714	2,252
92K025	526	C1	5.0	2081	2082	1.9	97	449	112	502	2,393
92K025	527	C1	2.7	2082	2083	1.6	97	497	113	559	1,441
92K025	530	C1	7.0	2083	2085	2.5	97	497	114	563	3,764
92K025	505	Q1	0.9	2085	2085	0.1	107	275	108	278	237
92K025	531	C1	3.8	2085	2086	1.5	116	329	309	464	1,674
92K025	535	C1	11.1	2086	2089	3.6	107	377	395	567	5,975
92K025	529	Q1	1.1	2089	2089	0.1	118	272	118	272	284
92K025	533	Q1	6.1	2089	2091	2.1	117	481	117	481	2,807
92K025	534	Q1	0.6	2091	2091	0.1	119	299	120	302	172
92K025	536	C1	1.1	2091	2091	0.4	90	700	107	818	855
92K025	537	C1	1.5	2091	2091	0.2	119	299	120	302	430
92K025	561	C1	0.4	2091	2092	1.0	81	409	130	590	224
92K025	592	C1	0.1	2092	2092	0.0	60	212	151	279	26

92K025	639	C1	5.3	2092	2093	1.3	108	364	401	489	2,462
92K025	641	C1	1.5	2093	2093	0.5	70	429	172	725	1,034
92K025	406	C2	5.2	2093	2096	3.5	80	913	93	1,050	5,270
92K025	407	C2	10.8	2096	2102	6.2	80	913	94	1,060	11,163
92K025	412	C2	7.3	2102	2104	2.9	90	697	97	748	5,241
92K025	413	C2	18.9	2104	2111	8.0	90	697	96	741	13,805
92K025	414	C2	19.6	2111	2121	10.8	90	906	99	985	19,146
92K025	463	C2	0.6	2121	2122	1.0	90	661	97	708	404
92K025	491	C2	45.5	2122	2138	16.7	90	697	90	697	32,505
92K025	419	Q2	4.7	2138	2139	1.5	110	332	124	371	1,665
92K025	495	C2	0.5	2139	2139	0.2	90	906	99	985	468
92K025	501	C2	3.3	2139	2141	2.1	90	751	97	805	2,545
92K025	445	Q2	38.3	2141	2147	6.1	120	315	121	318	11,789
92K025	446	Q2	0.2	2147	2147	0.0	100	400	107	425	81
92K025	502	C2	39.4	2147	2166	20.0	90	906	96	959	38,742
92K025	411	Q2	17.6	2166	2176	10.2	90	906	105	1,033	17,935
92K025	422	Q2	7.0	2176	2177	1.7	100	400	112	442	2,945
92K025	498	Q2	4.6	2177	2179	2.4	90	700	97	750	3,313
92K025	499	Q2	3.3	2179	2180	1.6	90	700	97	750	2,364
92K025	503	C2	2.5	2180	2181	1.4	100	562	114	633	1,509
92K025	504	C2	2.7	2181	2182	1.8	90	906	115	1,110	2,857
92K025	415	Q2	0.9	2182	2182	0.1	120	272	120	272	233
92K025	416	Q2	5.8	2182	2183	1.7	120	272	120	272	1,510
92K025	506	C2	4.2	2183	2184	1.5	110	332	117	352	1,413
92K025	507	C2	16.0	2184	2187	3.5	110	377	114	388	5,972
92K025	423	Q2	2.3	2187	2187	0.2	170	200	171	201	440
92K025	511	C2	1.2	2187	2188	1.4	90	906	109	1,065	1,219
92K025	513	C2	1.1	2188	2188	0.4	100	622	110	676	706
92K025	526	C2	5.0	2188	2189	1.8	100	400	106	421	2,013
92K025	527	C2	2.7	2189	2190	1.3	100	400	105	418	1,076
92K025	530	C2	7.0	2190	2191	1.7	100	400	105	418	2,789
92K025	536	C2	1.1	2191	2192	1.2	90	700	99	765	802
92K025	561	C2	0.4	2192	2192	0.1	90	411	100	454	172
92K025	592	C2	0.1	2192	2192	0.0	90	906	99	985	94
92K025	641	C2	1.5	2192	2192	0.5	90	661	98	715	1,019
92K025	406	C3	5.2	2192	2195	3.6	80	913	96	1,080	5,417
92K025	508	Q2	14.9	2195	2197	2.9	120	315	121	318	4,540
92K025	509	Q2	12.9	2197	2199	2.9	120	315	121	318	3,936
92K025	524	Q2	4.3	2199	2200	1.6	120	315	121	318	1,307
92K025	535	Q2	11.1	2200	2202	2.4	110	332	112	338	3,594
92K025	407	C3	10.8	2202	2208	6.6	80	913	102	1,136	11,919
92K025	505	Q2	0.9	2208	2208	0.1	120	250	122	254	217
92K025	531	Q2	3.8	2208	2209	1.3	120	315	122	320	1,160
92K025	639	Q2	5.3	2209	2210	1.2	110	332	115	347	1,747
92K025	412	C3	7.3	2210	2213	3.1	90	697	106	810	5,666
92K025	533	Q2	6.1	2213	2213	0.8	120	250	122	254	1,472
92K025	413	C3	18.9	2213	2221	8.4	90	697	105	803	14,899
92K025	414	C3	19.6	2221	2231	10.6	90	906	104	1,026	19,816
92K025	463	C3	0.6	2231	2231	0.2	90	661	109	783	446
92K025	491	C3	45.5	2231	2248	17.0	90	697	100	770	31,560

Total Volume Harvested : 487,893 m³
Volume Harvested/Planning Horizon: 1,951 m³/year

** Net of decay, waste, breakage, VAF and OAFs

c) Age Constraints Not Met During the following Period(s)

d) Height Constraints Not Met During the following Period(s)

e) Nothing Harvestable During the following Period(s)

f) Minimum Constraints Not Met During the following Period(s)

Woodlot Licence Harvest Planning report

Date : 3 February, 1998

Woodlot Licence #: W0046
Forest District : Sunshine Coast
Company : Harper Logging Ltd.
User : Brian Kukulies
Woodlot File : H:\WOODLOT\FILENOTE\W0046\w0046p.lot
Scenario : Private Land 1

Model Information:
Woodlot Version : Beta1.13 - September, 1997 - WIN95 / NT
VDYP Version : Prod 6.4a
TIPSY Version : BTIPSY V2.2.1

1.0 Introduction

This report summarises information used to calculate a long term harvest rate on Woodlot Licence No. W0046. The calculated harvest rate can be used to assist in determining the allowable annual cut (AAC). It should be assessed in light of the assumptions used, social and economic considerations in determining the AAC.

2.0 Polygon Data

a) General Information and Current Volumes

Map Sheet	Poly ID	Area (ha)	Age (Yrs.)	VAF	PSYU	FIZ Zone	MANAGE Cur/Fut	Silv	Vol. m^3/ha	Net Vol. m^3
92K025	413	0.8	77	1.00	0194	B	Nat/Man	CC	487	390
92K025	462	3.2	77	1.00	0194	B	Nat/Man	CC	717	2,293
92K025	464	2.5	97	1.00	0194	B	Nat/Man	CC	642	1,604
92K025	465	3.2	77	1.00	0194	B	Nat/Man	CC	464	1,485
92K025	471	7.0	10	1.00	0194	B	Man/Man	CC	0	0
92K025	491	21.0	77	1.00	0194	B	Nat/Man	CC	541	11,363
92K025	492	0.5	77	1.00	0194	B	Nat/Man	CC	188	94
92K025	493	10.4	77	1.00	0194	B	Nat/Man	CC	561	5,831
92K025	494	2.1	77	1.00	0194	B	Nat/Man	CC	268	563
92K025	496	18.0	14	1.00	0194	B	Man/Man	CC	0	0
92K025	497	5.7	307	1.00	0194	B	Nat/Man	CC	611	3,483
92K025	516	0.8	77	1.00	0194	B	Nat/Man	CC	713	571
92K025	553	4.9	97	1.00	0194	B	Nat/Man	CC	437	2,140
92K025	554	4.6	67	1.00	0194	B	Nat/Man	CC	386	1,776
92K025	555	0.2	67	1.00	0194	B	Nat/Man	CC	270	54
92K025	558	0.8	107	1.00	0194	B	Nat/Man	CC	536	428
92K025	559	5.6	107	1.00	0194	B	Nat/Man	CC	625	3,499
92K025	560	9.2	67	1.00	0194	B	Nat/Man	CC	247	2,273
92K025	567	1.6	77	1.00	0194	B	Nat/Man	CC	568	908
92K025	590	3.5	77	1.00	0194	B	Nat/Man	CC	303	1,062
92K025	594	3.8	307	1.00	0194	B	Nat/Man	CC	613	2,329
92K025	595	4.3	77	1.00	0194	B	Nat/Man	CC	447	1,920
92K025	597	2.0	77	1.00	0194	B	Nat/Man	CC	473	946
92K025	598	3.6	307	1.00	0194	B	Nat/Man	CC	478	1,722
92K025	599	0.7	77	1.00	0194	B	Nat/Man	CC	430	301
92K025	711	2.6	3	1.00	0194	B	Man/Man	CC	0	0
92K025	713	5.9	3	1.00	0194	B	Man/Man	CC	0	0
TOTAL		128.5								47,038

3.0 Yield Data

a) VDYP (unmanaged) Specific - Input

Map Sheet	Poly ID	Site Index (m)	Crown Closure	Stock Class	SPECIES AND COMPOSITION S1 %	S2 %	S3 %	S4 %	S5 %	S6 %
92K025	413	26.8	50	0	FD 50%	HW 40%	DR 10%	0%	0%	0%
92K025	462	28.8	80	0	HW 60%	FD 40%	0%	0%	0%	0%
92K025	464	26.4	60	0	FD 60%	HW 40%	0%	0%	0%	0%
92K025	465	24.6	90	0	DR 60%	FD 20%	HW 20%	0%	0%	0%
92K025	471									
92K025	491	26.8	60	0	FD 60%	HW 40%	0%	0%	0%	0%
92K025	492	18.1	30	0	FD 80%	HW 20%	0%	0%	0%	0%
92K025	493	26.8	70	0	FD 70%	HW 30%	0%	0%	0%	0%
92K025	494	24.6	80	0	DR 100%	0%	0%	0%	0%	0%
92K025	496									
92K025	497	22.7	50	1	FD 100%	0%	0%	0%	0%	0%
92K025	516	31.9	60	0	FD 60%	HW 40%	0%	0%	0%	0%
92K025	553	21.9	50	0	FD 40%	HW 40%	CW 10%	PL 10%	0%	0%
92K025	554	22.8	70	0	HW 40%	FD 35%	CW 10%	PL 10%	DR 5%	0%
92K025	555	21.0	50	0	FD 50%	HW 30%	PL 10%	CW 10%	0%	0%
92K025	558	23.9	70	0	DR 40%	FD 30%	CW 20%	HW 10%	0%	0%
92K025	559	22.8	60	0	HW 50%	FD 35%	CW 10%	DR 5%	0%	0%
92K025	560	20.8	90	0	DR 100%	0%	0%	0%	0%	0%
92K025	567	27.6	60	0	FD 60%	HW 40%	0%	0%	0%	0%
92K025	590	22.5	70	0	FD 60%	PL 20%	HW 10%	CW 10%	0%	0%
92K025	594	22.7	40	1	FD 85%	HW 10%	CW 5%	0%	0%	0%
92K025	595	26.8	60	0	FD 80%	HW 20%	0%	0%	0%	0%
92K025	597	25.1	50	0	FD 70%	HW 30%	0%	0%	0%	0%
92K025	598	19.6	50	1	FD 100%	0%	0%	0%	0%	0%
92K025	599	25.1	50	0	FD 60%	CW 20%	HW 20%	0%	0%	0%
92K025	711									
92K025	713									

b) TIPSY (Managed) Specific - Input

Map Sheet	Poly ID	Site Index (m)	Initial Density (s/ha)	Thinned to (s/ha)	Regen-eration	SPECIES AND COMPOSITION S1 %	S2 %	S3 %	S4 %	S5 %
92K025	413	27.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	462	29.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	464	26.0	900	--	Planted	FD 80%	CW 20%	0%	0%	0%
92K025	465	25.0	900	--	Planted	FD 80%	CW 20%	0%	0%	0%
92K025	471	27.0	900	--	Planted	FD 100%	0%	0%	0%	0%
92K025	491	27.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	492	18.0	500	--	Planted	FD 100%	0%	0%	0%	0%
92K025	493	27.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	494	30.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	496	25.0	900	--	Planted	FD 80%	CW 20%	0%	0%	0%
92K025	497	23.0	700	--	Planted	FD 100%	0%	0%	0%	0%
92K025	516	32.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	553	22.0	700	--	Planted	FD 100%	0%	0%	0%	0%
92K025	554	23.0	800	--	Planted	FD 100%	0%	0%	0%	0%
92K025	555	21.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	558	30.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	559	21.0	700	--	Planted	FD 100%	0%	0%	0%	0%
92K025	560	30.0	900	--	Planted	FD 60%	CW 40%	0%	0%	0%
92K025	567	28.0	900	--	Planted	FD 70%	CW 30%	0%	0%	0%
92K025	590	23.0	800	--	Planted	FD 100%	0%	0%	0%	0%
92K025	594	23.0	800	--	Planted	FD 100%	0%	0%	0%	0%
92K025	595	27.0	900	--	Planted	FD 80%	CW 20%	0%	0%	0%
92K025	597	25.0	900	--	Planted	FD 80%	CW 20%	0%	0%	0%
92K025	598	20.0	600	--	Planted	FD 100%	0%	0%	0%	0%
92K025	599	25.0	900	--	Planted	FD 80%	CW 20%	0%	0%	0%
92K025	711	25.0	1,100	--	Planted	FD 54%	CW 32%	HW 14%	0%	0%
92K025	713	25.0	1,000	--	Planted	FD 69%	CW 28%	HW 3%	0%	0%

c) First and Subsequent Cutting Parameters

Map Sheet	Poly ID	Yield Type	CULMINATION Age (yrs)	Vol (m^3/ha)	Mai (m^3/ha/yr)	HARVEST AGE Age (yrs)	Vol (m^3/ha)	Mai (m^3/ha)	PARTIAL CUT % Cut	Re-Enter (m^3/ha/yr)
	(yrs)									
92K025	413	VDYP	68	433	6.60	68	433	6.60	--	--
		TIPSY	90	697	7.75	90	697	7.75	--	--
92K025	462	VDYP	73	681	9.68	73	681	9.68	--	--
		TIPSY	90	806	8.95	90	806	8.95	--	--
92K025	464	VDYP	73	501	7.12	73	501	7.12	--	--
		TIPSY	90	609	6.77	90	609	6.77	--	--
92K025	465	VDYP	55	370	7.02	55	370	7.02	--	--
		TIPSY	100	622	6.22	100	622	6.22	--	--
92K025	471	TIPSY	80	526	6.57	80	526	6.57	--	--
		TIPSY	80	526	6.57	80	526	6.57	--	--
92K025	491	VDYP	73	514	7.30	73	514	7.30	--	--
		TIPSY	90	697	7.75	90	697	7.75	--	--
92K025	492	VDYP	108	281	2.75	108	281	2.75	--	--
		TIPSY	120	250	2.08	120	250	2.08	--	--
92K025	493	VDYP	77	561	7.57	77	561	7.57	--	--
		TIPSY	90	697	7.75	90	697	7.75	--	--
92K025	494	VDYP	38	190	5.24	41	203	5.22	--	--
		TIPSY	90	906	10.06	90	906	10.06	--	--
92K025	496	TIPSY	100	625	6.25	100	625	6.25	--	--
		TIPSY	100	625	6.25	100	625	6.25	--	--
92K025	497	VDYP	97	416	4.50	97	416	4.50	--	--
		TIPSY	90	399	4.43	90	399	4.43	--	--
92K025	516	VDYP	69	646	9.69	69	646	9.69	--	--
		TIPSY	80	913	11.41	80	913	11.41	--	--
92K025	553	VDYP	86	392	4.77	86	392	4.77	--	--
		TIPSY	100	400	4.00	100	400	4.00	--	--
92K025	554	VDYP	94	568	6.37	94	568	6.37	--	--
		TIPSY	90	411	4.57	90	411	4.57	--	--
92K025	555	VDYP	95	404	4.48	95	404	4.48	--	--
		TIPSY	110	377	3.42	110	377	3.42	--	--
92K025	558	VDYP	60	335	5.82	60	335	5.82	--	--
		TIPSY	90	906	10.06	90	906	10.06	--	--
92K025	559	VDYP	89	534	6.31	89	534	6.31	--	--
		TIPSY	100	356	3.56	100	356	3.56	--	--
92K025	560	VDYP	50	209	4.40	50	209	4.40	--	--
		TIPSY	90	906	10.06	90	906	10.06	--	--
92K025	567	VDYP	73	540	7.67	73	540	7.67	--	--
		TIPSY	90	751	8.34	90	751	8.34	--	--
92K025	590	VDYP	99	400	4.26	99	400	4.26	--	--
		TIPSY	90	411	4.57	90	411	4.57	--	--
92K025	594	VDYP	90	383	4.46	90	383	4.46	--	--
		TIPSY	90	411	4.57	90	411	4.57	--	--
92K025	595	VDYP	77	447	6.03	77	447	6.03	--	--
		TIPSY	90	661	7.34	90	661	7.34	--	--
92K025	597	VDYP	80	492	6.40	80	492	6.40	--	--
		TIPSY	100	622	6.22	100	622	6.22	--	--
92K025	598	VDYP	107	351	3.46	107	351	3.46	--	--
		TIPSY	110	332	3.02	110	332	3.02	--	--
92K025	599	VDYP	90	502	5.90	90	502	5.90	--	--
		TIPSY	100	622	6.22	100	622	6.22	--	--
92K025	711	TIPSY	100	701	7.01	100	701	7.01	--	--
		TIPSY	100	701	7.01	100	701	7.01	--	--
92K025	713	TIPSY	100	661	6.61	100	661	6.61	--	--
		TIPSY	100	661	6.61	100	661	6.61	--	--
Average Exisiting					496	6.25		496	6.25	
Average Future				616	6.65		616	6.65		

4.0 Calculation Assumptions

a) Initial Cut Order (Sort Order)

Map Sheet	Poly ID	Age (yrs)	1st Harvest Age (yrs)
92K025	594	307	90
92K025	497	307	97
92K025	598	307	107
92K025	558	107	60
92K025	559	107	89
92K025	464	97	73
92K025	553	97	86
92K025	494	77	41
92K025	465	77	55
92K025	413	77	68
92K025	516	77	69
92K025	462	77	73
92K025	491	77	73
92K025	567	77	73
92K025	493	77	77
92K025	595	77	77
92K025	597	77	80
92K025	599	77	90
92K025	590	77	99
92K025	492	77	108
92K025	560	67	50
92K025	554	67	94
92K025	555	67	95
92K025	496	14	100
92K025	471	10	80
92K025	711	3	100
92K025	713	3	100

b) Constraints

Area Netdown : 7
Height Constraint : NONE
Age Constraint : NONE

Minimum constraints

Minimum Harvest Age : 40 Years
Minimum Harvest Diameter : 20 cm.
Minimum Harvest Vol/ha : 200 m^3/ha.
TIPSY OAF1 : 15%
TIPSY OAF2 : 5%
P.C. Adjustment Factor : 1.00
Planning Horizon : 250 years

5.0 Harvest Planning Results

a) Harvest Rate : 705 m^3/year

b) Harvest by Polygon: **

Map Sheet	Polygon ID Harvested	Que & Pass	Net Area (ha)	Start Date (yr)	End Date (yr)	Harvest Length (yrs)	Target Age (yrs)	Target Volume (m^3/ha)	Harvest Age (yrs)	Harvest Volume (m^3/ha)	Volume (m^3)
92K025	594	C1	3.8	1998	2001	3.1	90	383	307	613	2,166
92K025	497	C1	5.7	2001	2005	4.7	97	416	310	611	3,239
92K025	598	C1	3.6	2005	2007	2.9	107	351	314	478	1,601
92K025	558	C1	0.8	2007	2008	1.5	60	335	116	562	420
92K025	559	C1	5.6	2008	2013	5.5	89	534	117	668	3,527
92K025	464	C1	2.5	2013	2015	2.9	73	501	112	710	1,661
92K025	553	C1	4.9	2015	2019	4.1	86	392	114	495	2,282
92K025	494	C1	2.1	2019	2019	0.7	41	203	98	268	524
92K025	465	C1	3.2	2019	2022	3.1	55	370	98	522	1,565
92K025	413	C1	0.8	2022	2022	0.6	68	433	101	600	446
92K025	516	C1	0.8	2022	2023	1.7	69	646	101	876	655
92K025	462	C1	3.2	2023	2027	4.5	73	681	102	902	2,722
92K025	491	C1	21.0	2027	2048	21.1	73	514	106	700	14,480
92K025	567	C1	1.6	2048	2049	1.8	73	540	127	815	1,215
92K025	493	C1	10.4	2049	2061	12.4	77	561	128	828	8,186
92K025	595	C1	4.3	2061	2065	4.4	77	447	140	698	2,806
92K025	597	C1	2.0	2065	2067	2.3	80	492	144	745	1,388
92K025	599	C1	0.7	2067	2067	0.6	90	502	146	699	455
92K025	590	C1	3.5	2067	2070	3.5	99	400	146	538	1,761
92K025	492	C1	0.5	2070	2070	0.2	108	281	149	351	163
92K025	560	C1	9.2	2070	2073	3.7	50	209	139	247	2,114
92K025	554	C1	4.6	2073	2078	5.5	94	568	142	784	3,391
92K025	555	C1	0.2	2078	2078	0.1	95	404	147	549	102
92K025	471	C1	7.0	2078	2084	6.3	80	526	90	591	3,956
92K025	496	Q1	18.0	2084	2100	16.1	100	625	100	625	11,124
92K025	711	C1	2.6	2100	2102	2.6	100	701	105	733	1,785
92K025	713	C1	5.9	2102	2108	6.2	100	661	107	702	3,943
92K025	594	C2	3.8	2108	2110	2.6	90	411	108	483	1,718
92K025	497	C2	5.7	2110	2114	4.2	90	399	107	468	2,517
92K025	558	C2	0.8	2114	2115	1.3	90	906	106	1,041	776
92K025	559	C2	5.6	2115	2118	3.1	100	356	105	374	1,968
92K025	598	Q2	3.6	2118	2119	1.7	110	332	112	338	1,135
92K025	464	C2	2.5	2119	2122	3.0	90	609	105	703	1,652
92K025	553	C2	4.9	2122	2124	2.8	100	400	105	418	1,918
92K025	494	C2	2.1	2124	2127	3.7	90	906	105	1,033	2,045
92K025	465	C2	3.2	2127	2130	3.5	100	622	107	659	1,988
92K025	413	C2	0.8	2130	2131	1.4	90	697	108	823	614
92K025	516	C2	0.8	2131	2132	1.6	80	913	109	1,196	893
92K025	462	C2	3.2	2132	2136	4.6	90	806	107	934	2,824
92K025	491	C2	21.0	2136	2159	23.6	90	697	98	755	16,193
92K025	567	C2	1.6	2159	2161	2.5	90	751	111	902	1,351
92K025	493	C2	10.4	2161	2173	12.1	90	697	106	810	8,178
92K025	595	C2	4.3	2173	2177	4.6	90	661	110	789	3,196
92K025	597	C2	2.0	2177	2179	2.5	100	622	111	680	1,275
92K025	599	C2	0.7	2179	2180	1.1	100	622	112	685	447
92K025	590	C2	3.5	2180	2182	2.4	90	411	112	497	1,626
92K025	560	C2	9.2	2182	2196	14.0	90	906	110	1,073	9,590
92K025	492	Q2	0.5	2196	2196	0.2	120	250	126	262	122
92K025	554	C2	4.6	2196	2199	3.4	90	411	120	525	2,261
92K025	555	C2	0.2	2199	2199	0.1	110	377	121	409	76
92K025	496	C2	18.0	2199	2216	17.2	100	625	107	662	11,766
92K025	471	C2	7.0	2216	2223	7.6	80	526	135	791	5,214
92K025	711	C2	2.6	2223	2226	3.5	100	701	122	832	2,030
92K025	713	C2	5.9	2226	2232	6.6	100	661	121	777	4,343
92K025	594	C3	3.8	2232	2235	3.3	90	411	123	534	1,904
92K025	497	C3	5.7	2235	2239	4.3	90	399	123	523	2,805
92K025	598	C3	3.6	2239	2241	2.0	110	332	121	364	1,223
92K025	558	C3	0.8	2241	2242	1.3	90	906	127	1,189	885
92K025	559	C3	5.6	2242	2245	3.5	100	356	126	437	2,294
92K025	464	C3	2.5	2245	2248	3.0	90	609	125	805	1,735

Total Volume Harvested : 176,239 m^3

Volume Harvested/Planning Horizon: 704 m^3/year

** Net of decay, waste, breakage, VAF and OAFs

c) Age Constraints Not Met During the following Period(s)

d) Height Constraints Not Met During the following Period(s)

e) Nothing Harvestable During the following Period(s)

f) Minimum Constraints Not Met During the following Period(s)

APPENDIX 3

FOREST DEVELOPMENT PLAN MAP
1:20,000 Scale

GST #102282530

Harper Logging Ltd.

BOX 299
HERIOT BAY, B.C.
V0P 1H0 285-2325

September 22, 1993

Ministry of Forests
Powell River, B.C.

ATTENTION: Ferd Hamre
Operations Manager

RE: Woodlot License 046
Revision to Management Plan No. 2

Dear Mr. Hamre,

Please note the following revisions to the above mentioned Plan.

1. SECTION 2.0 LICENSEE GOALS

Harvesting priorities will be within the framework of the minimum cutting ages for the Timber Supply area. Selected old growth trees will be left on some cutblocks where safety and ground conditions permit. Biodiversity is being addressed by the use of small distributed cutblocks and the planting of a variety of ecologically suitable species.

2. SECTION 3.6 BASIC SILVICULTURE

All basic silviculture activities will be carried out as required by part 10.1 of the Forest Act and the Silviculture Regulations.

3. SECTION 3.7 INCREMENTAL SILVICULTURE

All incremental treatments will be conducted in accordance with the requirements of Part 10.1 of the Forest Act and the Silviculture Regulation.

All incremental silviculture activities will have prior approval of the Forest Service.

4. SECTION 3.10 CRUISING AND SCALING

Cruising will be conducted in accordance with Ministry of Forests cruising and cruise compilation procedures (Provincial Cruising Manual) and Operational Cruising Requirements in the Vancouver Forest Region. Scaling will be conducted in accordance with the Forest Act and Scaling Regulations.

5. SECTION 4.0 LONG TERM FOREST MANAGEMENT

Brushing, spacing and stand tending and other operations required for the purpose of establishing a free growing crop of trees of a commercially valuable species is deemed to be Basic Silviculture and accordingly is funded by the licensee.

Yours Truly,

Harper Graham

HG\lt

MINISTRY OF FOREST
RECEIVED
FEB 23 1993
POWELL RIVER, B.C.

HARPER LOGGING LTD.

WOODLOT LICENSE 046

MANAGEMENT PLAN NO. 2

LICENSEE: Harper Logging Ltd.
Box 299
Heriot Bay, BC
V0P 1H0

TERM: January 1, 1993 to December 31, 1997

VANCOUVER FOREST REGION

SUNSHINE COAST FOREST DISTRICT

PREPARED BY: Harper Logging Ltd.
Box 299
Heriot Bay, BC
V9W 1H0

Calverley Forest Services Ltd.
Box 184
Heriot Bay, BC
V0P 1H0

LICENSEE: Harper Logging Ltd. **Date:** Feb 19 '93

APPROVED BY:: [signature] **Date:** Feb 19 '93

Approved By: [signature] April 2/93
Subject to District Manager
approval provisos dated
April 2/93.

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1.0 AREA DESCRIPTION

The Crown portion of Woodlot 046 is located at the north end of Evans Bay, on the east side of Read Island. The private lands are the adjacent Lots 334 and 382. The major part of Lot 162 is on the west side of Evans Bay and the north 1/2 of Lot 771 on the west side of Read Island. The woodlot is contained within the Sunshine Coast Timber Supply area and is comprised of 364 hectares of Crown Land and 165 hectares of private land.

2.0 LICENSEE GOALS

Licensee goals are to have a sustained yield, well managed, long term timber supply which will provide the following:

1 Employment for family, present employees and local residents.

2 Provide full utilization of the existing Harper Logging Ltd. facilities and equipment.

3 Sustained yield forestry in accordance with Ministry of Forests regulations.

4 Maximize the production of vigorous, well tended, high quality stands with good basic silvicutural program - planting, brushing and weeding.

5 Provide a steady income from the sale of timber products.

6 Managed Forest Land tax status.

3.0 TIMBER MANAGEMENT

3.1 ALLOWABLE ANNUAL CUT

A. A. C. on the crown portion is initially set at 2,274 m^3 and on the private portion 848 m^3 (as shown in Appendix B).

The recoverable waste on all areas over which logging operations are conducted will be determined, and such volumes as found will be included in the annual harvest.

3.2 ACCESS DEVELOPMENT

Access development will strive to meet the long term management goals as well as short term harvesting goals.

Main road developments shall be in accordance with the British Columbia Forest Service (BCFS) Engineering Specifications for the planning, design, location, construction and maintenance of logging roads and drainage structures in the Vancouver Forest Region (as shown in Appendix).

Skid road development shall be in accordance with the BCFS Minimum Specifications for skid roads (as shown in Appendix)

3.3 HARVESTING

Unless exempted by the District Manager, five year development plans will be submitted in accordance with Ministry of Forest and Lands requirements. Logging will be primarily small openings or green tree retention cuts similar to what has been done on Lot 162, with thinning and sanitation cuts starting once access has been improved. Logging will be carried out with equipment owned by Harper Logging Ltd. Skidders and backhoes will be used on gentle, well drained ground with mini tower being used for steep sensitive sites.

Stands are to be evaluated on a site specific basis by Pre-harvest Silviculture Prescriptions. Allocation of harvesting equipment will be based on these prescriptions.

Integrated resource management will be carried out and efforts will be made to facilitate interaction of agencies and the public with the licensee.

The licensee will use techniques that maintain stand biodiversity and retain old growith characteristics and meet wildlife needs.

3.4HAULING AND PROCESSING

Most logs will be hauled to the Harper Logging Ltd. dry sort on Lot 162 and the east portion of the woodlot will have to be watered at a site at the south east corner of Lot 1020, this is an old log dumping site and Lands Department has been informed of our intentions (refer to Appendix E).

3.5 UTILIZATION STANDARDS

Utilization specifications will follow Forest Service policy as specified in the approved cutting permit for each cut block.

3.6 BASIC SILVICULTURE

Preharvest silviculture assessments and basic silviculture assessments and basic silviculture treatments will be in accordance with the Ministry of Forests Basic Silviculture Regulations.

Standards and species selection will be based on Guidelines for Free Growing Stocking Standards for the Vancouver Forest Region.

Potential brush sites will be planted the first spring after logging and all sites will be planted within 3 years. Douglas Fir will be the major species planted with other species mixed in to add biodiversity, hemlock will be allowed to seed in naturally as a minor species. Site preparation, brushing, weeding and spacing will be applied when necessary to produce a vigorous, mixed species coniferous stand at free to grow stage.

3.7 INCREMENTAL SILVICULTURE

In keeping with Long Term Forest Management Goals, intensive silviculture practices will be used to augment basic silviculture. Specific projects will be identified in forward plans and will conform to Vancouver Forest Region policies.

3.8 FIRE PROTECTION

Fire protection will be to Ministry standards and will be facilitated by the existing fire equipment owned by Harper Logging Ltd.

All logged areas will be evaluated with respect to hazard and silvicultural considerations with hazard abatement and site preparation being completed to the satisfaction of the Forest Officer.

A protection fire organization plan and fuel management plan will be submitted. These plans will be coordinated with the plans for the adjacent Harper Logging Ltd. quota cutting permits.

3.9 Pests, Disease and Windfall

Spruce Weevil has increased dramatically in the last 5 years and Sitka Spruce is no longer an acceptable minor species. Residual Hemlock are heavily infested with Dwarf Mistletoe and the worst of these stands will require sanitation cuts.

Wind is a problem in some areas, particularly wetter sites exposed to the winter north of "Bute winds". A program to salvage windfall is in place.

Specific harvesting patterns and subsequent site treatment shall be in accordance with prescribed disease management for the Vancouver Forest Region.

3.10 CRUISING AND SCALING

As per Ministry of Forest specifications.

4.0 LONG TERM FOREST MANAGEMENT GOALS

Management strategies specific to each stand will be in accordance with Basic Silviculture Policy and take into consideration environmental concerns and constraints.

A Continue access development as identified in Section 3.2.

B Continue harvesting as outlined in section 3.3

C Intensive management of age Class 3 to 6 stands (thinning, sanitation and salvage cutting)

D Intensive management of younger stands.

5.0 FOREST RECREATION

Very little recreation use is made of the woodlot areas, however, access will be granted to all but active logging sites.

6.0 ENVIRONMENTAL CONCERNS

There is one small creek containing some small trout on Lot 1020, and the watershed of Whiterock Pass Creek, a Class 1 stream, is located on Lot 1025.

Areas planned for harvest will take into consideration the Coast Planning, Coastal Fishery, Forestry, Site Degredation, Landscape Management and other resource management guidelines.

7.0 FOREST INVENTORY

Cruising will be carried forward to meet the cutting permit obligations. A major Forest Inventory is not planned at this time.

CROWN PORTION*

Age Class 7+	21%
Age Class 4, 5, 6	24%
Age Class 2, 3	30%
Age Class 1	05%
Alder Fir Mix	16%
N. P.	4%

* Based on inventory maps and field inspections

PRIVATE

Age Class 7+	12%
Age Class 4, 5, 6	44%
Age Class 2, 3	11%
Age Class 1	13%
Alder Fir Mix	06%
NP Swamp	14%

AGE CLASS 7+

These stands on the private and crown portions are either small patches of mature fir, hemlock and cedar, or selectively logged stands of vets and older immature. These stands are not putting on any significant increment and are available for logging.

AGE CLASS 4, 5, 6

Generally vigorous healthy stands on good sites. Some of the hemlock is heavily infected with Dwarf Mistletoe. Some of these stands have a significant component of vets and could be considered loggable.

AGE CLASS 1, 2, 3

Some of the age Class 3, is on high sites and will be good candidates for a thinning program. Brushing, weeding and planting is up to date on recently logged stands.

ALDER FIR

A few Alder-Fir stands, 7 ha on Lot 771, 58 ha on Lot 1025 and 2 ha on Lot 382, are candidates for rehabilitation. Economics will dictate the timing of these harvests.

APPENDICES

A. Map of Area

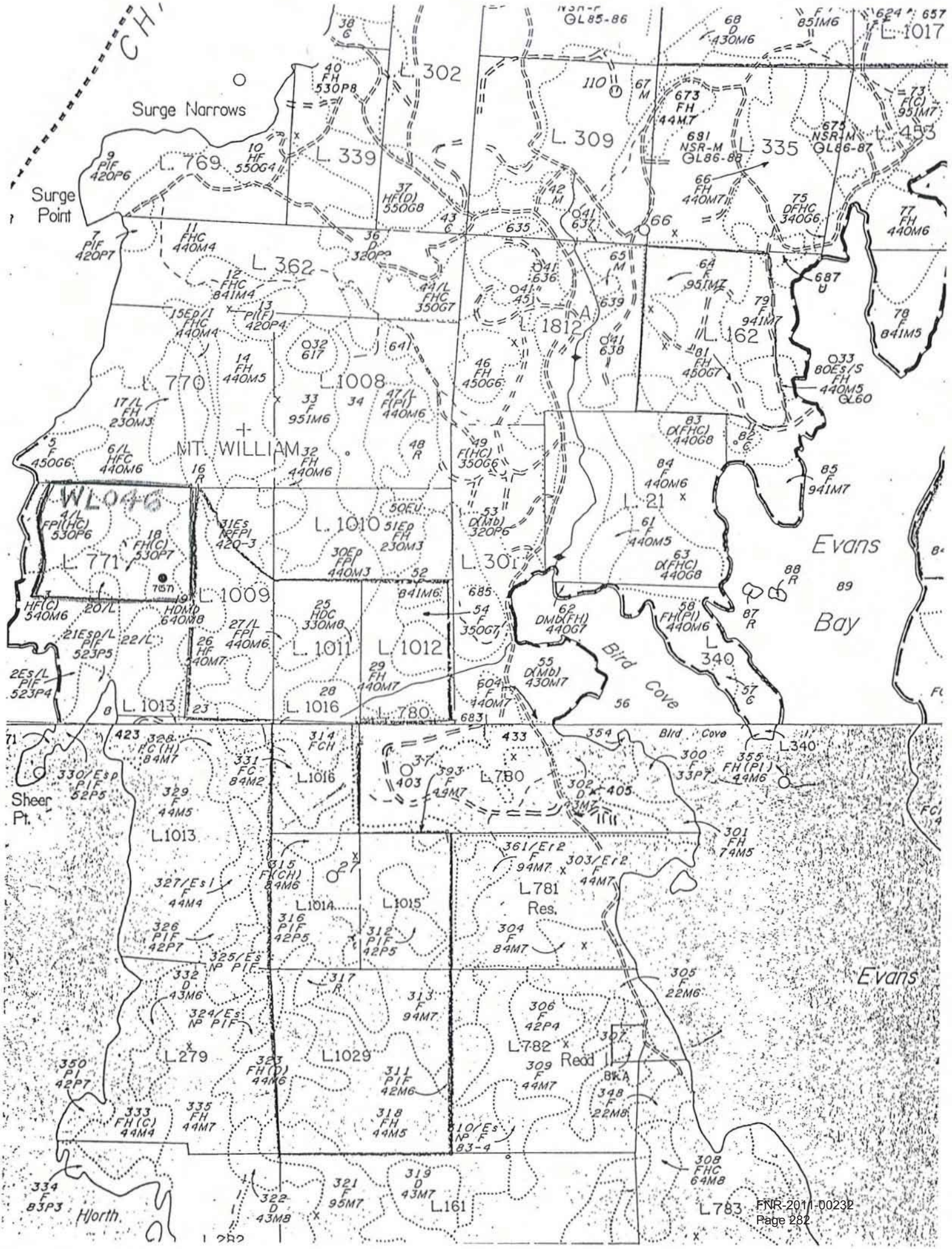
B. Annual Allowable Cut Allocation

C. British Columbia Forest Service Engineering specifications

D. British Columbia Forest Service skid road specifications

E. Correspondence from Ministry of Forest and Lands regarding log dump on Whale Passage.

F Silviculture Plan


Surge Narrows
Surge Point
MT. WILLIAM
Evans Bay
Bird Cove
Sheer Pt.
Hworth.
Reed I.
L. 769
L. 339
L. 302
L. 309
L. 335
L. 453
L. 1017
L. 362
L. 1812
L. 162
L. 770
L. 1008
L. 21
L. 1010
L. 301
L. 771
L. 1009
L. 1011
L. 1012
L. 340
L. 1013
L. 1016
L. 780
L. 1014
L. 1015
L. 781
Res.
L. 1014A
L. 279
L. 1029
L. 782
L. 161
L. 783
WL046

...ABLE ANNUAL CUT (A.A.C.) DETERMINATION

W.L. 046

1. DATA:

	FOREST CLASSES	AREA ha.	AREA x CULMINATION AGE	AREA x VOLUME (A.V.L)	M^3/Yr. (MAX. M.A.I. x AREA)	
CROWN	IMMATURE	284.5			1781	1
	N.S.R.	10.3				2
	SUB TOTAL	294.8				
7	MATURE	69.6			493	3
	TOTAL	364.4	6	5	4	
	NON-FOREST					
	TOTALS	364.4	8			
PRIVATE	IMMATURE	109.7			786	9
	N.S.R.	22.4				10
	SUB TOTAL	132.1				
12	MATURE	8.3			62	11
	TOTAL	140.4	13	14	15	3122
	NON-FOREST	24.3				16 (1+2+3+9+10+11)
	TOTALS	164.7	19	18 (5+14)	17 (4+15)	
	GRAND TOTALS	504.8	20 (6+13)			
		529.1	21 (8+19)			

2. DETERMINATION (a) For licence areas composed of less than 75% by area of mature (by Inventory standards) stands A.A.C. = 16 = 3122 M^3

(b) For licence areas composed of more than 75% by area of mature (by Inventory standards) stands A.A.C. = $17 \times \frac{(7+12)}{18} + (1+2+9+10) =$ _____ M^3

* - Summary data to be provided by the Inventory Branch

WOODLOT LICENCE # 0046

RECEIVED
NOV 27 2007

WOODLOT LICENCE PLAN #1

First Term
2007 to 2017

Harper Logging Ltd.
Box 299
Heriot Bay, BC
E-mail: harplog@oberon.ark.com
Phone: **(250) 285-2325** Fax: **(250) 285-2305**

Authorized Licensee Signature: **Harper Graham**

for Paul Kirby

Signature

Date November 26, 2007

FINAL
DEC 07 2007
APPROVED BY B. Hawrys
Dec 18, 2007.

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DISCLAIMER

- Recognising the special nature of management on a woodlot licence, this disclaimer forms part of the Woodlot Licence Plan (WLP) for Woodlot Licence Number 0046 and advises that:
  - The decision to operate under one or more of the Default Performance Requirements provided in the Woodlot Licence Planning and Practices Regulation (WLPPR) is the sole responsibility of the woodlot licence holder, and involved no detailed oversight or advice from the prescribing registered professional forester. This disclaimer is signed on the explicit understanding and information provided by government that, the use and achievement of a Default Performance Requirement, meets the expectations of government with respect to the management of woodlot licences;
  - The undersigned Registered Professional Forester has been retained to provide advice on the practice of professional forestry with regard to items such as alternative performance requirements, applicable results and strategies and other required measures that do not have a default performance requirement provided in the WLPPR

Signed
Name: Paul J. Kutz

RPF # 2390

Contact phone number (604) 485-2062

Email: s.22

Seal:

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I. CONTENT FOR A WOODLOT LICENCE PLAN (WLP)

1.0 PLAN AREA

☒ This plan covers the entire Woodlot Licence area.

This Woodlot Licence 0046 Woodlot Plan #1 is consistent with the objectives established by government in land use plans. The broad objectives set by government are found in Section 9 of the WLPPR. Additional land use objectives, as well as any other objectives and designations which may apply to the Woodlot licence area, are found in Section 10. In addition, the Sunshine Coast Forest District (SCFD) has provided the Objectives Matrix that is used to determine relevent and current FRPA Values and Elements.

The holder of Woodlot Licence 0046 is Harper Logging Ltd., based out of Heriot Bay, BC. The Woodlot is an aggregate of crown (Schedule B) and private (Schedule A) lands. The private land portion is 165 hectares while the crown land portion totals 1485 hectares. This brings the total area of WL0046 to 1650 hectares. The Annual Allowable Cut level as approved by the Ministry of Forests is 7022 m^3 per year. The Licence is located on Read Island within the Sunshine Coast Forest District. A map is provided in the attached appendix.

The operable forest cover is primarily age class 4 and 5 second growth, Douglas fir leading stands that were restocked by natural regeneration following logging. The terrain is generally gently rolling with pockets of rock outcrops.

2.0 MAP AND INFORMATION

The development of this Woodlot Licence Plan is intended to identify areas in which harvesting activities will be avoided or modified to protect resource features, manage resource values, and address areas with other special interest of sensitive areas. The areas above are located, identified and discussed within the text and mapping components of this plan. Furthermore, management strategies are highlighted and performance requirements defined as spelled out in the Woodlot regulations.

In the opinion of the authors, this Woodlot Plan is consistent with the Ministry of Forests objectives as per the Sunshine Coast District's "Objectives Matrix".

The main access route through the Woodlot Licence originates at Evan's Bay where Harper Graham maintains a log dump and local dock. From Evan's Bay roads provide access west and south towards Rosen Lake and east towards Evening Mountain. No publicly scheduled ferry routes serve Read Island; therefore, access is somewhat restricted to the general public. It should be noted that there are a small number of private residences located on Read Island along with a small school that is located in Surge Narrows.

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Recent work completed for the submission of this WLP included: a general mapping update of blocks, roads, and tenure lines; a review of wildlife tree patches within the woodlot area; and a review of the WLP to ensure consistency with the objectives stated by the Minister of Environment regarding both the winter survival of specified ungulate species and the survival of a Species at Risk (notice) applicable to the Sunshine Coast Forest District.

The Woodlot License Plan Map (Appendix 1) includes the following information:

- Forest cover,
- Topography,
- Location and riparian class of streams and wetlands,
- The location of public utilities (transmission lines),
- Contiguous areas of sensitive soil,
- Domestic water supply intakes (known),
- Existing roads,
- Recreation trails,
- Known scenic areas (per Sunshine Coast Forest District May 16, 1997 letter),
- Private property within and adjacent to the woodlot,

The following does not apply to the woodlot and is not shown:

- Wildlife habitat areas,
- Ungulate winter ranges,
- Community watersheds or fisheries sensitive watersheds,
- Licensed community water supply intakes and infrastructure,
- Temporary or permanent barricades to restrict vehicle access.

Other information pertaining to the Woodlot Licence Plan is described in words (text) as follows:

- Biogeoclimatic Ecosystem Classification

  The woodlot is within the CWH xm biogeoclimatic sub zone where the average rainfall can range from 110 to 270cm/yr. Past fire occurrence and logging have resulted in a forest cover primarily composed of Douglas fir (Fd), accompanied by Western Hemlock (Hw) and minor amounts of Western Red Cedar (Cw). On the wetter and richer sites deciduous species including maple (Mb) and Red Alder (Dr) and Grand Fir (Bg) can be found. Throughout the Woodlot Licence area the majority of sites are zonal. The general terrain of the woodlot is rolling with numerous rock outcrops, some in the form of prominent rock bluffs. Slopes range form flat to vertical (at bluffs), but are generally moderate in the operable forested areas.

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- Wildlife Notice-Minister of Environment

The Notices for wildlife rely on the Identified Wildlife Management Strategy Version 2004 (IWMS) to guide the identification of suitable habitat required for the survival of species at risk.

Notice- Indicators of the Amount, Distribution, and Attributes of Wildlife Habitat Required for the Winter Survival of Ungulate Species in the Sunshine Coast Timber Supply Area.

Critical Mountain Goat Winter Habitat is not found within this license.

Notice- Indicators of the Amount, Distribution, and Attributes of Wildlife Habitat Required for the Survival of Species at Risk in the Sunshine Coast Timber Supply Area.

s.18

The SCFD requirement has been met with the creation of a s.18 *management area located in the* s.18 *geography managed by BC Timber Sales (BCTS).*

B. Marbled Murrelet:

No nest of the Marbled Murrelet is known to exist on this plan.

The Notice amount calls for:

1) *All suitable nesting habitat within the non-contributing land base.*
2) *All suitable nesting habitat located within OGMA.*
3) *Suitable nesting habitat to a maximum of 495 ha of MTHLB.*

In order to be consistent with the Notice criteria, future harvest areas are to be selected for conservation management in the Cortes LU based on;

a) All suitable nesting habitat within the non-contributing land base,
b) All suitable nesting habitat located within OGMA, and
c) Suitable nesting habitat to a maximum impact of 495 ha

Note 1: For the case of a Wildlife Habitat Area, the spatial delineation is maintained by government as part of the Order that legally establishes the WHA. Since the Notice was given, 11 WHAs have been established in the Howe Landscape Unit and 2 WHAs have been established in the Brittain Landscape Unit. These 13 WHAs account for an impact on the Mature THLB of 428 ha, which leaves only 67 ha available for future WHAs within the THLB in the SCFD.

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Note 2: Inventory work completed in 2003, 2004, and 2005 to identify high priority Marbled Murrelet habitat remains in draft and is not shown. Refinements of suitable nesting habitat provided by acceptable inventory methods will be preferred to the habitat algorithm initially proposed by the Habitat Recovery Team until such time as the final WHA amounts are identified in the SCFD.

Note 3: Currently, the Cortes Landscape Unit Plan is in the draft stage.

- *Old Growth Management Areas (OGMA's):*
  These have been preliminarily selected within the Landscape Unit. On Read Island, there are several draft OGMA's selected; however, none are within the identified Woodlot 0046 area.

- *Grizzly Bear:*
  The Cortes Landscape Unit is not known to have any Grizzly Bear populations.

- *Vananda Creek Sticklebacks:*
  The Cortes Landscape Unit is not known to have any Stickleback populations.

- *"Queen Charlotte" Goshawk***:
  The notice identifies the amount distribution and attributes consistent with the habitat required. The Woodlot holder anticipates that the area being set aside be built around active nest sites. There are currently no known active nests within the area to which the Notice applies, managed under this Woodlot License Plan.

** To determine suitable Northern Goshawk habitat (*Accipiter gentiles laingi*) a habitat supply model was developed for the Sunshine Coast Forest District, (shared between major licensees) that could accurately predict amounts of suitable habitat based on available forest cover attributes. From this model three-goshawk management areas located in the Cortes FDU (West Redonda Island) have been spatially identified. The amounts and impacts associated for the three goshawk management areas meet the Notice requirement and fulfil the district (SCFD) requirements until such time as WHA's are officially declared.

- There currently is no Notice for Survival of Regionally Important Wildlife.

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3.0 AREAS WHERE TIMBER HARVESTING WILL BE AVOIDED

There are no areas in this woodlot licence where timber harvesting will be strictly avoided.

4.0 AREAS WHERE TIMBER HARVESTING WILL BE MODIFIED

Areas in this Woodlot Licence where timber harvesting will be modified to protect and manage resource are shown on the map by shading, hatching or lines.

☒ Riparian reserve zones (RRZs) are not planned for regular harvesting other those specified by regulation (as outlined in the WLPPR Sect 39) such as tree removal for the purpose of creating trails, carrying out a sanitation treatment or salvaging of a windthrow tree. Streams classifications that contain a RRZs are outlined in Table 1 and are denoted by a red line on the map.

☒ Riparian Management Zones (RMZs). Table 1 below outlines how timber harvesting will be modified based on the stream and lake classification. Depending on the present stand structure, terrain, windthrow risk and block configuration the retention level will be uniform, grouped or spatially distinct. Harvesting operations are permitted within a RMZ provided they are conducted with the intent of meeting the requirements as outlined in Table 1 and the specific site conditions. This site-specific information will be used to determine the range of retention (all streams except S3 range from 0-100% retention) for the specific RMZ. In general, understory and unmerchantable timber and other conifers of good form and vigour will be maintained as much as possible to provide cover, maintain stream bank stability and natural stream flow.

Road construction within riparian management zones will be avoided where possible, unless alternate locations would result in a higher risk of environmental damage. Where encroachment is unavoidable, impacts will be minimized through the use of narrow right of ways, silt fencing, grass seeding, etc. Riparian management areas will be protected throughout all phases of forestry operations through careful stream assessments and classifications, applying appropriate prescriptions that meet the general objectives as stated above, and through appropriate supervision of operations in the vicinity of these areas. A documented rationale will be placed on file and signed off by a qualified member of the Association of BC Professional Foresters for any areas requiring an encroachment.

☒ Scenic Areas within the Woodlot are shown on the attached map. Harvest areas within the approved scenic area polygons contain a variety of Visual Quality Objectives. The layout strategies to meet the objectives will be accomplished by locating blocks using existing screens such as topography whenever possible. Small opening sizes and

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utilizing partial harvesting systems such as the retention silvicultural system will also be used whenever ground conditions permit. Also, at the pre-harvest planning stage, visual concerns can be modelled and remedied prior to harvesting if problems are perceived.

Table 1: Modification of harvesting in RMZ's by riparian classification.

Riparian Class	RMA		Intent of RMZ Management	Species to Retain	RMZ Retention Level Post Harvest (% basal area)
	RRZ Width (m)	RMZ Width (m)			
S3 (Fish bearing) 1.5-5m wide	20	20	• Maintain integrity of the RRZ. • Manage windthrow hazard to the reserve zone • Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure.	Fd, Cw, Hw, Pw, Ss, Dr and Mb	25-100%
S4 (Fish bearing) < 1.5m wide	0	30	• Maintain stream bank integrity • Provide shaded cover, LWD and litter, i.e.: Retain under story conifers, and other non-merch species and vegetation where possible.		0-100%
S5 (non-Fish) ≥3m wide	0	30	• Minimize debris transport to lower reaches of stream • Retain under story Cw, and other non-merch species and vegetation where possible.		0-100%
S6 (non-Fish) ≤3m wide	0	20	• Minimize debris transport to lower reaches of stream • Retain under story Cw, and other non-merch species and vegetation where possible.		0-100%
W1 (wetland >5ha)	10	40	• Maintain integrity of the RRZ • Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure		0-100%
W3 (wetland 1-5ha)	0	30	• Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure		0-100%
W5 (wetland complex)	10	40	• Maintain integrity of the RRZ • Maintain wildlife attributes within RMA such as wildlife tree cover, nesting and perching habitat and diversity of vertical forest structure		0-100%

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5.0 CONSERVING AND PROTECTING CULTURAL HERITAGE RESOURCES

There are no known Cultural Heritage Resource Features within Woodlot 0046. While planning and implementing proposed activities, potential impacts on archaeological resources will be minimized. In order to accomplish this, Harper Logging Ltd. will endeavour to identify objects, sites, or locations of traditional aboriginal societal practices during field layout and site plan stages. Bands with Traditional Territory within Woodlot 0046 include the Klahoose, Homelco First Nations and Hamatla Treaty Society. Consultation with these bands is ongoing during the planning stages to avoid or minimize impacts on archaeological resources. Documentation of all consultation with affected First Nations is included within the supplemental information (Part 2) of the plan.

On an annual basis, commencing the year after the WLP comes into effect, Harper Logging Ltd. will attempt to contact the First Nations that have an asserted traditional territory with the defined area to discuss the harvesting and road building activities planned for the upcoming year of operations. In addition, a request will be made to the First Nation for any new information regarding any potentially affected Cultural Heritage Resource not previously identified to Harper Logging Ltd. Any new information received will be forwarded to the Ministry of Forests.

The following results and strategies (Table 2) for managing cultural heritage values will apply.

Table 2: Cultural Heritage Values and Associated Results and Strategies

Cultural Heritage Value	Result and Strategy
Cedar	*Result:* • Enable continued access to red cedar for traditional use by local First Nations *Strategy:* • Based on availability of stock and ecological suitability (e.g. Cw listed as preferred species), a component of Cedar will continue to be planted in the woodlot to ensure a long-term supply. • Naturally occurring young cedar trees (including poles) will be retained where operationally feasible.

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Traditionally Used Plants	*Result:* • Enable continued access to traditionally used plants for traditional use by local First Nations. *Strategy:* • When local First Nations have indicated specific interest in traditional use plants, the licensee will identify the presence of such plants in planned harvest areas and communicate this to the interested First Nations prior to cutting permit submission. This is to allow for review by the local First Nations and that any collections of traditional use plants can be initiated by the local First Nations prior to harvest. • A no-pesticide use policy is implemented in this Woodlot Licence. Manual brushing and early planting of large stock is the preferred method to overcome brush problems.
Cultural Heritage Resources	*Result:* • Harvest plans will consider identified cultural heritage resources. *Strategy:* • The Licensee will share information with local First Nations upon request and be available for field reviews.

If the licensee or any personnel connected with the Woodlot Licence operation finds evidence of tradition use or cultural heritage values, the Ministry of Forests Aboriginal Liaison Officer will be notified and all work will cease within the immediate (20 m) area. The licensee will cooperate fully, as requested by the Ministry of Forests Aboriginal Liaison Officer.

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6.0 WILDLIFE TREE RETENTION STRATEGY

Note: The proportion of the Woodlot Licence area that is occupied by wildlife tree retention areas is specified in the "PERFORMANCE REQUIREMENTS" section of this plan.

INDIVIDUAL WILDLIFE TREES

a) Species and Characteristics:

The following table describes the species and characteristics of individual trees that will guide the selection of wildlife trees to be retained.

Table 3: Wildlife Tree Value and Characteristics

HIGH (at least two of the listed characteristics)	MEDIUM	LOW
• Internal decay (heartrot or natural/excavated cavities present) • Crevices present (loose bark or cracks suitable for bats) • Large brooms present • Active or recent wildlife use • Current insect infestation • Tree structure suitable for wildlife use (e.g., large nest, hunting perch, bear den, etc.) • Largest trees on site (height and/or diameter) and/or veterans • Locally important wildlife tree species • Should a variety of ecologically suitable species be present on the site the following can be used as a guide to the selection of species for wildlife trees: Douglas Fir, Western Red Cedar, Grand fir as highest priority; Western hemlock, Sitka Spruce and deciduous should be considered a lower priority and only selected as a last resort.	• Large, stable trees that will likely develop two or more of the above attributes for High.	• Trees not covered by High or Medium categories.

Throughout Woodlot W0046 a number of veteran (old growth) trees, mostly Douglas fir are scattered throughout the license area. These trees add structural and biological complexity of the second growth forest and will be retained as wildlife trees (except as itemized in item b) below). In some cases second growth trees will be retained as wildlife trees to supply wildlife and biological diversity values and/or for the recruitment of future vets, to vary the age classes on the Woodlot, to reduce wind fetch in long openings, and/or act as a seed source or visual screen.

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WL0046 has an individual wildlife tree management strategy that is predicated on retaining trees that have existing wildlife use and valuable characteristics. There will be many individual trees that are composed of a variety of species, age and form. Within this wildlife tree population there will be an increasing value for wildlife overtime as the majority of the high value trees are Douglas fir and red cedar that are long lived species and will remain structurally strong for long periods even after death. Due to the number of scattered wildlife trees within the Woodlot when one individual tree is lost it will not materially affect the potential wildlife trees available for the wildlife tree users. In fact, even the trees that may fall will continue to provide wildlife habitat and biodiversity values as large woody debris.
Where safe to do so, an average of one (1) wildlife tree per hectare will be retained arranged as singles, clumps or groups either internal or external to the harvest proposal. Where required, these individual trees will count towards the 8% retention target for the WLP. Calculation of the tree's contribution will be determined using basal area (i.e. measuring diameter and heights) as a unit of measurement where $50m^2$ of individual trees will be equal to one (1) hectare of Wildlife Tree Retention area.

b) Conditions Under Which Individual Wildlife Trees May Be Removed:

Specific conditions that influence the decision of where individual wildlife trees may be removed include:

- ✓ Worker safety
- ✓ The significance of forest health risk to surrounding stands
- ✓ The ability to retain other wildlife trees to perform as suitable wildlife habitat, and
- ✓ The availability of wildlife trees adjacent openings.

Alternatives to removal of a wildlife tree will be given priority such as the establishment of a 'no work zone' or widening of a riparian width to protect the feature balanced with tree removal farther away from the feature within the RMA. All workers involved with the removal of potential wildlife trees will be informed of developed standards prior to fieldwork to help mitigate unnecessary removals.

c) Replacement of Individual Wildlife Trees:

Individual trees will be replaced if they are of "high" wildlife value. Replacement trees will be selected using criteria outlined above with a preference for selecting trees that have two or more high wildlife tree value characteristics. If possible, retain stems within streamside reserves. Harper Logging Ltd. will at all times maintain a minimum of 8% WTR throughout the Woodlot. Individual trees that contribute to the retention target and are required to be replaced will be re-allocated as part of the overall WTR strategy.

WILDLIFE TREE RETENTION AREAS

a) Forest Cover Attributes:

Wildlife tree retention areas (WTRs) are planned preferably in fully constrained areas for long term retention (e.g. riparian reserve zones). Under the WLPPR 52 (1) the amount of WTR's must be no less than 8% of the area of the Woodlot. The regulation also indicates that the WTR does not have to be mapped as the location of good WTR's can change over time based on changing forest management decision making. Wildlife tree patches (WTP's) previously assigned to cut blocks at the stand level, when combined with the future wildlife tree retention areas to be assigned during future operational planning, will supply a significant area of the Woodlots biodiversity and coarse woody debris (CWD) values.

In review of the May 16, 2006 document "*Wildlife Tree Retention: Management Guidance*" the following sections have been adopted for this WLP. Throughout the WLP the selection of WTR areas will be considered using the following criteria in order of priority:

1. Protect trees with valuable wildlife tree attributes;
2. Where there are few trees with valuable attributes, locate retention in areas most suitable for long-term wildlife tree recruitment; and
3. Where there are no opportunities for current or future valuable wildlife tree attributes, locate wildlife tree retention to be representative of the pre-harvest stand.

Generally, the approach for selecting an area of patch wildlife tree retention is to anchor the patch on ecologically valuable attributes (Table 3 above) such as:

- A high-value wildlife tree (e.g., veteran tree);
- A valuable wildlife habitat feature (e.g., raptor nest),
- An area of high wildlife use (e.g., wetland, riparian management zone, confluence of two small streams); or
- Resource features requiring protection, provided there are also high- or medium-value wildlife trees that will be retained (e.g., culturally modified trees, or habitat for species at risk).

In the absence of ecologically valuable anchors for a wildlife tree patch, the following will be considered (in order of ecological preference):

- Retaining the largest trees possible;
- Retaining trees representative of the pre-harvest stand; and
- Maintaining ecological inter-patch spacing.

Where possible, trees will be selected that have the potential of developing high-value wildlife tree attributes within the rotation period. Characteristics include trees that are more open grown, have current defects (e.g., stem scars, broken tops) or larger branches. Uncommon tree species or stand characteristics present in the stand will also be

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considered for retention. In addition, areas that are not operational (e.g., seasonally wetted areas, seepage sites), but contain wildlife tree attributes, will be considered for retention to minimize timber supply impacts. If there are two areas that are equal in terms of wildlife tree and biodiversity benefits, and both are within (or contiguous to) the cutblock, the non-operable area will be selected for retention.

b) Conditions Under Which Trees May Be Removed from Wildlife Tree Retention Areas:

Stand-specific issues that influence the decision of where salvage may be appropriate for WTR's include:

- ✓ Worker safety
- ✓ The significance of forest health risk to surrounding stands including the salvage of windthrow timber
- ✓ The ability to retain other wildlife trees to perform as suitable wildlife habitat, and
- ✓ The availability of wildlife trees in adjacent openings.

Given the stand specific considerations outlined above the salvage of timber is permitted within a WTR area. Should a site-specific condition (such as windthrow or catastrophic events) occur within a RRZ then the conditions for the removed of such timber must follow Sec 39 of the WLPPR.

When assessing the potential to salvage a WTR area the level of impact will be determined. In areas that contain damage up to approx. 50% of the dominant or co-dominant trees the removal would focus on downed timber only, protecting the standing green. If more significant amounts of wildlife trees are lost due to wind-throw or other catastrophic events (exceeds 50% of the dominant or co-dominant trees) in WTR area then salvage of the damaged and remaining stems will be considered. Salvage of the area will be allowed considering other environmental constraints and the replacement strategy below.

The salvage of portions of the WTR either singles, clumps, or impacted areas created for improved safety to people is good forest management. Individual trees may be felled but not removed if considered a safety hazard.

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c) Replacement of Trees Removed from Wildlife Tree Retention Areas:

No strategy for the specific replacement of individual trees felled as danger trees posing a hazard within a defined distance of a cutting-authority is presented as this will not threaten the long-term function or integrity of WTR's.

Where salvage/harvest is planned and authorized within a wildlife tree retention area, the replacement with another suitable area in size, value and species composition will be selected. When the level of impact on a WTR is <50% (this typically provides for a high level of forest influence within the stand and is considered not to be a clear-cut) then the WTR will continue to contribute to the overall retention target. When the level of impact exceeds 50% then the WTR area should be replaced with other suitable habitat in the nearest possible location.

If a WTR suffers blow down, but is not salvaged, it will not be replaced. Replacement areas must have equal or better wildlife values. For non-riparian WTR's attempts will be made to incorporate important features such as snags, and other significant wildlife features.

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7.0 MEASURES TO PREVENT INTRODUCTION OR SPREAD OF INVASIVE PLANTS

There is only one invasive species (Scotch Broom) of potential concern; although it is not currently a problem on the woodlot. There is no range use on the woodlot. The introduction or spread of invasive plants, specifically Scotch Broom into the Woodlot is unlikely under current forest management practices. However, in order to prevent the introduction of these plant species the main strategy within the WLP will be to regularly monitor for invasive plants and carry out control measures before they reproduce on roads and other areas where primary forest activities have created suitable seedbeds.

In the event that Scotch Broom or another invasive species does become established the strategies listed below will be implemented. The holder of this Woodlot will use three complimentary strategies to counter the introduction or spread of invasive plant species. These include:

1) Prevention and Control

- The holder's foresters will be encouraged to review the MOE's alien species web site and review the identification, control and management of invasive plants.
- The goal of this WLP is to annually identify known sites of invasive plants and sites that are at high risk to invasive plant establishment through their forest practices within the area under this plan
- Preventative measures to minimize the occurrence and spread of invasive plants will include grass seeding of exposed soils following soil disturbance where the introduction or spread of invasive plants is likely. Grass seeding will be done before the end of the first complete growing season immediately following the completion of the relevant activity (e.g. construction of a road or landing or heavy disturbed forest floor displacement). Seed mixtures used for the above purposes or for those under Section 29 of the WLPPR will be assessed to ensure that their use does not introduce other invasive species. These are typically Canada Common No 1 Forage Mixture or better.
- If moderate to high risk invasive plants are likely to establish in cut blocks harvested during the forest regeneration phase, the Holder of this WLP will through normal reforestation practices:
    i. Establish a stand of coniferous and/or deciduous crop trees consistent with the applicable stocking for the area on or before the regeneration date; and
    ii. Meet Free Growing requirements consistent with the applicable stocking standards on or before the late Free Growing Date so that the stand will form a closed canopy to suppress seed and vegetative production of shade intolerant invasive plants.

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2) Detection of Invasive Plant Species

- Invasive plants will be detected through the normal planting surveys, regeneration survival surveys and free-to-grow surveys. Due to the small size of the Woodlot area employees of Harper Logging Ltd. will be able to detect any invasion of unwanted species along roadways and disturbed areas outside of the active harvesting and road construction areas.
- Action plans will be developed to combat the spread of invasive plants, if the introduction or spread is likely to be the result of the WLP holder's forest practices. When discovered, invasive plants will be mapped and reported to the Ministry of Forests.

3) Management or Elimination of Invasive Plant Species

- If invasive plants are discovered and if the introduction or spread is likely to be the result of equipment, machinery, or clothing, then: (a) prior to transport the cleaning of tires, tracks, bucket, undercarriage, etc. on machines will be completed and (b) the removal of burrs or plant components from clothing should be normal practice.

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8.0 MEASURES TO MITIGATE EFFECT OF REMOVING NATURAL RANGE BARRIERS

There are no range tenures on Read Island therefore no measures or activities are required or proposed.

9.0 STOCKING INFORMATION FOR SPECIFIED AREAS

Unless exempted by the District Manager, the stocking standards indicated below apply to areas where the establishment of a free growing stand is not required and harvesting is limited to commercial thinning, removal of individual trees, small pockets of damaged or diseased timber (i.e. windthow) or a similar type of intermediate cutting, and for harvesting special forest products.

☒ For the purposes of section 12 and 34(3) of the WLPPR the Uneven-aged Stocking standards for single-tree selection, as found in the MoF publication "Reference Guide for FDP Stocking Standards", are adopted. Specified areas include:

- Areas subject to commercial thinning,
- The removal of individual trees, or
- Areas subject to single/group tree selection or
- Other types of intermediate cutting and /or
- Areas subject to the harvest of special forest products.

For the purposes of this plan, commercal thinning, the removal of individual trees, single/group selection, intermediate cutting or the harvest of special forest products may take place anywhere within the woodlot except in designated areas where harvesting will be avoided. The delineation of specific areas will be conducted in conjunction with the pre-harvest mapping as per Section 33 of the WLPPR. For salvage of scattered windthrow or root rot mortality, openings of up to 1.0 ha in size are acceptable, not requiring regeneration. For openings greater than 1.0 ha even-aged stocking standards will apply.

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10.0 PERFORMANCE REQUIREMENTS

SOIL DISTURBANCE LIMITS

☒ Default WLPPR s.24(1)(b):

- 8% of Net Area to be Reforested

PERMANENT ACCESS STRUCTURES

☒ Default: WLPPR s.25:

The maximum area occupied by permanent access structures is as follows:

1. For Cutblocks ≥ 5 ha – 7% of the total cutblock area
2. For Cutblocks < 5 ha – 10% of the total cutblock area
3. For the Total Woodlot Licence Area – 7% of the total Woodlot Licence area

STOCKING STANDARDS

☒ Alternative WLPPR s. 35(1)(a): The stocking standards, regeneration dates and free growing dates are indicated in Appendix II. In addition, a set of footnotes and rationales are provided for the Alternative Stocking Standards.

WIDTH OF STREAM RIPARIAN AREAS

☒ Default WLPPR s.36(4)(b):

The minimum width of the riparian reserve zone, riparian management zone and riparian management area are as described in WLPPR s.36(4)(b).

WIDTH OF WETLAND RIPARIAN AREAS

☒ Default: WLPPR s.37(3)(b) The minimum width of the riparian reserve zone, riparian management zone and riparian management area are as described in WLPPR s.37(3)(b).

WIDTH OF LAKE RIPARIAN AREAS

☒ Default: WLPPR s.38(2)(b) The minimum width of the riparian reserve zone, riparian management zone and riparian management area are as described in WLPPR s.38(2)(b).

RESTRICTIONS IN A RIPARIAN RESERVE ZONE

☒ Default: WLPPR s.39. Cutting, modifying or removing trees in a riparian reserve zone is limited to the purposes described in Section 39(1) and 39(2) of the WLPPR.
☒ WLPPR s.39(2.1): Within the Woodlot area there are two fish bearing creeks where road construction is proposed and a crossing may be necessary within a riparian reserve zone: Lanny Creek and/or Ralph Creek.

RESTRICTIONS IN A RIPARIAN MANAGEMENT ZONE

☒ Default: WLPPR s.40(1)(b)(c) or (d) Construction of a road in a riparian management zone is limited to the conditions described is Section 40(1) of the WLPPR without additional conditions to allow road construction being provided in the woodlot licence plan.

WILDLIFE TREE RETENTION

Unless exempted by the district manager, the proportion of the Woodlot Licence area that will be occupied by wildlife tree retention is:

☒ Default WLPPR s.52(1)

- The defaults specified in Section 52(1) of the WLPPR is adopted. It specifies that the proportion of the Woodlot Licence area that is dedicated to wildlife tree retention areas have to be no less than the least of the following:
    - 8% of the Woodlot licence area.

COARSE WOODY DEBRIS

Unless exempted by the district manager or the WLPPR, the minimum amount of coarse woody debris to be left on areas where there is a requirement to establish a free growing stand is
☒ Default: WLPPR s.54(1)(b)

- Area on Coast – minimum retention of 4 logs per ha ≥5 m in length and ≥30 cm in diameter at one end.

RESOURCE FEATURES

Unless exempted by the district manager, the woodlot licence holder will
☒ Default WLPPR s.56(1)(b): Ensure that forest practices do not damage or render ineffective a resource feature.

****

Note: Only the performance requirements in Part 3 (Practice Requirements) of the WLPPR for which an alternative can be proposed are shown in this Woodlot Licence Plan. The remaining performance requirements in Part 3 are not shown, nor are the performance requirements in Part 4 (Roads).

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APPENDICES

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Appendix I: The Woodlot Licence Plan Map

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Appendix II: Stocking Standards, Regeneration Dates and Free Growing Dates for Free Growing Stands

These stocking standards are proposed as an alternative performance requirement for the purposes of section 35(1) (a) of the Woodlot Licence Planning and Practices Regulation to areas harvested under this woodlot licence plan where the establishment of a free growing stand is required under section 29(3) of the *Forest and Range Practices Act.*

Biogeoclimatic Ecosystem Classification			Preferred Species	Acceptable Species	MITD	TSS	MSSpa	MSSp	Regen date	FG Date	Min. FG Ht by Species		Crop Tree to
ID #	Zone & Variant	Site Series			(m)	(sph)	(sph)	(sph)	(yrs)	(yrs)	Species	Ht (m)	Brush %
A	CWH xm	01/04	Fd	Pw[5] Hw[8] Cw	2.0	900	500	400	3	20	Fd Pw Hw Cw	3.0 2.5 2.0 1.5	150
B	CWH xm	02	Pl Fd	Pw[5] Lw[8]	2.0	400	200	200	3	20	Pl Fd Pw Lw	1.25 2.0 2.5 1.5	150
C	CWH xm	03	Fd	Cw Pw[5] Pl[6] Lw[8]	2.0	800	400	400	3	20	Fd Cw Pw Pl Lw	2.0 1.0 2.5 1.25 1.5	150
D	CWH xm	05/07	Cw Fd Bg[10]	Pw[5]	2.0	900	500	400	3	20	Cw Fd Bg Pw	2.0 4.0 3.5 2.5	150
E	CWH xm	06	Fd Cw Hw	Bg[10] Pw[5]	2.0	900	500	400	6	20	Fd Cw Hw Bg Pw	3.0 1.5 2.0 3.0 2.5	150
F	CWH xm	08/09[1]	Cw Bg	Ss[7]	2.0	900	500	400	3	20	Cw Bg Ss	2.0 3.5 4.0	150
G	CWH xm	10	Act		2.0	800	400	400	3	20	Act	4.0	150
H	CWH xm	11[1]	Pl[1] Cw		2.0	400	200	200	3	20	Pl Cw	1.25 1.0	150
I	CWH xm	12[1]	Cw	Hw[1] Pw[5] Ss[7]	2.0	800	400	400	3	20	Cw Hw Pw Ss	1.0 1.5 2.5 1.5	150
J	CWH xm	13/14[1,2]	Bg Cw Fd[1]	Ss	2.0	900	500	400	3	20	Bg Cw Fd Ss	3.5 2.0 4.0 4.0	150

Biogeoclimatic Ecosystem Classification			Preferred Species	Acceptable Species	MITD	TSS	MSSpa	MSSp	Regen date	FG Date	Min. FG Ht by Species		Crop Tree to
ID #	Zone & Variant	Site Series			(m)	(sph)	(sph)	(sph)	(yrs)	(yrs)	Species	Ht (m)	Brush %
K	CWH xm	15[1,2]	Cw	Ss[7,9]	2.0	800	400	400	3	20	Cw	2.0	150
L	CWH xm	01/06[11]	Dr[4] Mb		2.0	1200	1000	800	3	20	Dr Mb	3.0 3.0	150
M	CWH xm	05/07/08/ 09[1]/02/13/ 14[1,2]/15[1,2]	Act Dr[4]Mb		2.0	1200	1000	800	3	20	Act Dr Mb	4.0 4.0 4.0	150

Regen date = Regeneration Date F G Date = Free Growing Date	MITD = Minimum distance between well spaced trees of the preferred and acceptable species	Crop Tree to Brush % = the height of free growing trees relative to the competing vegetation within a 1 m radius cylinder around the tree.
TSS = Target Stocking Standard (sph = healthy well spaced trees / ha)	MSSpa = Minimum Stocking Standard of well spaced trees of preferred and acceptable species	MSSp = Minimum Stocking Standard of well spaced trees of preferred species

ID # K - CWHxm - 5
Note - omitted. Ss
Ht - Spec free in
Results as 4.0 m
OK
B.K
approved in Results

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Foot Notes

1 Elevated microsites are preferred
2 These sites represent areas with strongly fluctuating water tables. They are often found as mosaics in combination with other sites. Elevated microsites are preferred, either mechanical or natural
3 Trees are not acceptable within 10 m of second growth stumps, except Cw, Pw, Lw and deciduous species.
4 Dr & Mb are not acceptable on 02 and 04 site series (too dry). Avoid planting in gleyed soils and frost pockets.
5 Pw must be free of blister rust within 60 cm of the stem and be pruned as per ministry guidelines or be blister rust resistant stock ($\geq$50% resistance)
6 Restricted to nutrient-very-poor sites and as a minor species only
7 Risk of weevil damage, use resistant stock where available, Ss will not exceed 20% of the free growing stand on 08 & 12 site series or 5% of the free growing stand on 09,13,14,&15 site series on a dispersed basis. Clumps will not to exceed 0.1ha in size.
8 Hw is not acceptable on site series 04. Lw may be used but strictly on a trial basis. The proportion of the free-growing stand comprised of Hw or Lw if established will not exceed 20%. Lw will not exceed 5% of the free growing stand on site series 02.
9 May be planted on prepared mounds.
10 Based on past experience and knowledge Bg performs best on areas that are subject to frost and the slightly wetter/richer areas
11 Establishment of deciduous species is permitted within these site series provided the site contains a sufficient moisture regime to support deciduous species (i.e. limited salal content).

Stocking Standards - General Comments

This alternative stocking standards table has been developed from the Reference Guide for FDP Stocking Standards dated December 11, 2002, the standards established in the Woodlot Licence Forest Management Regulations (January 31, 2004) Division 2 of Part 6, Schedule A, Table A as well as the correlated guidelines and site interpretation for the Vancouver Forest Region (VFR). Where site series have similar stocking standards, they have been combined. Sections A-K are the most common stocking standards for the Woodlot and will be employed the majority of the time. Sections L&M are the deciduous stocking standards. Rationales for employing these standards are listed below.

Biogeoclimatic unit or BEC means the zone, subzone, variant and site series described in the most recent field guide published by the Ministry of Forests for the identification and interpretation of ecosystems as applicable to a harvested area.

Where standards units (SUs) are comprised of an un-mappable mosaic of site series, the practice will be to manage for the stocking standards, noted by the ID#, of the dominant site series provided that the tree species are suitable in all site series contained within the SU.

Higher stocking is noted for the deciduous stands to ensure self-pruning and may include a conifer component (although mixed stand management is not being proposed). The maximum density post-spacing has been increased to allow for two stage spacing entries in order to manage snow press, blow down risks and provide the opportunity to capture the small-diameter resource.

A limited number of scattered deciduous trees will be tolerated on all conifer plantations: to provide a nurse crop, promote nutrient cycling or for general biodiversity objectives. Allow up to 50 sph as "ghost" trees during surveys on all sites. No deciduous within 10m of each other will be accepted for dispersed single stems due to increased competitive density effects. Should one of the "ghost trees" be encountered within a plot during a free growing survey the conifer tree will be deemed to be not free growing following the normal definition of a free growing tree.

Reduction of inter-tree spacing to 1.5 m is acceptable for the following site-specific conditions: frequent bedrock, large blocky colluvium, hygric sites, and disturbed roadside areas amongst slash accumulations (up to 10 m from the traveled portion of the road). Reduction of inter-tree spacing to 1.0 m is acceptable on mounded sites only.

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Deciduous Management

Deciduous management within W0046 is planned strictly as an option – not as the preferred management regime. The establishment of a deciduous crop will only be considered provided the stocking standards as outlined in ID#s L&M can be met. Past experience with deciduous management indicates that within a cutblock only a portion of the area is suitable for the establishment of deciduous. The number of sites within W0046 that may be suitable are limited; therefore, no more that 1-2 hectares of area per year (to a maximum of 10 hectares within a 5-year cut-control period) may be selected for deciduous management.

When reviewing the W0046 Management Plan it outlines in Section 6.41 the potential for planting deciduous species** on a trial basis provided they are planted on suitable sites. This WLP wishes to continue to operate in the spirit of not wanting to limit the possibility or opportunity to try regenerating alternative species on a very minor basis and to have the ability to grow a viable stand of quality deciduous for potential future markets.

Although available, the amount of operational information available for the establishment of deciduous stands is known only by few local foresters. As part of the trial basis, Harper Logging Ltd and his forester will seek out information from any local sources to ensure a quality plantation. This may include reviewing of the North-West Hardwood (NWH) FSP and/or discussing regimes with their forester. The information listed below in regards to regimes and establishment of deciduous stands is general in nature and not intended to be a comprehensive guide to establishing a new crop of deciduous tree.

Deciduous production and management is supported by the following research:

- L.Sigurdson et al. 2nd draft report on Weyerhauser's Red Alder Management Practices (1998),
- Hibbs et al. The Biology and Management of Red Alder (1994),
- E.B. Petersons et al. FRDA Report 250 . Black Cottonwood and Balsam poplar manager.s handbook for British Columbia (1996).
- P.J. Courtin et al. Forest Research Extension Note 016 - Red Alder management trials in the Vancouver Forest Region (2002).

*** Within the W0046 Management Plan (produced in 1998) references are made to the deciduous species cottonwood. In 1998 cottonwood was considered as being a viable deciduous species for the pulp and paper market. Since then cottonwood is no longer considered as a viable deciduous species due to declining interest by the pulp and paper sector – rather red alder and maple are marketable as a high value furniture stock.*

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Regime:
The product objective is to manage for high quality knot-free sawlogs on a 40 - 50 year rotation. Establish stand with high densities (1500 sph) is required to achieve a target of 1200 stems/ha at free-growing. At approximately age 10 but not before stand height 12 to 16 m space to 900 stems/ha. Dead branch prune the crop trees early and continue density regulation treatments approx. every ten years to maintain good crown forms and eliminate low quality stems. The minimum free growing height criterion for deciduous species is based on the tallest conifer standard for each site series.

The establishment of a second crop conifer layer (Cw, Ss) before or after density treatment is optional. If a cedar or Sitka spruce understory is planted in addition, then the natural pruning of the alder would be enhanced. The removal of the alder at harvest age is operationally possible, while leaving a fully stocked, semi-mature conifer pole stand behind. Where conifers are established underneath a designated deciduous stand, the stand's regeneration and free to grow status will be measured using the deciduous standards only.

Damage criteria for deciduous species have not been formally established. General free-growing criteria will be adopted, such that well spaced stems will be of good form, health and vigour.

II. SUPPLEMENTAL INFORMATION TO SUPPORT OF THE PROPOSED WOODLOT LICENCE PLAN

1. REVIEW AND COMMENT

a) Advertising

An advertisement was placed in the Campbell River Courier-Islander on July 27, 2007 and August 1, 2007 and in the Campbell River Mirror on July 27, 2007 and August 3, 2007. A copy is included in Section 5 of this Supplement. Additionally, notices were placed on the bulletin boards at the Surge Narrows Post Office to further raise awareness and solicit comment. An open house at the Read Island Field office was held on August 8, 2007 from 4:00 to 8:00pm. In addition, copies of the WLP are available in a digital form for any interested parties.

b) Referrals

This plan was referred to the District Manager, Ministry of Forests, Sunshine Coast Forest District, and to the following First Nations for review and comment.

Hamatla Treaty Society
Campbell River Indian Band
Klahoose First Nation
Homalco First Nation
Cape Mudge First Nation

c) Copy of Written Comments Received

No written public comments were received during the Public Review and Comment Period.

No public attended the August 8, 2007 open house that was held on Read Island.

No digital copies were requested during the Public Review and Comment period.

A copy of comments provided by the Ministry of Forests on August 24, 2007 is attached to this document in Section 6.

d) Revisions Made as a Result of Written Comments Received

Details of revisions made as a result of the comments provided by the Ministry of Forests can be found in Section 6.

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e) The following documents, reports and maps were reviewed in the preparation and submission of the WLP:

- Provincial Wildlife Tree Policy and Management Recommendations – February 2000
- Information concerning Wildlife Habitat for the survival of species at risk in the Sunshine Coast Forest District – March 2006
- Order Establishing Provincial Non-Spatial Old Growth Objectives – June 2004
- Several Map View plots of the location of Invasive Plant species – May 2007
- Invasive Plant Map Label Legend
- Introduction to the Reference Guide for FDP Stocking Standards – March 2007
- Water_Pod_50K, - May 2007
- Water Licences Report – April 2007
- SCFD Landscape Unit boundary map
- Implementation policy for the provincial order of non-spatial old growth objectives.
- Ministry of Environment Order for: Category of Species at Risk – June 2006
- Ministry of Environment Approved Wildlife Habitat Areas (WHAs) – March 2007
- Ministry of Environment Approved Fisheries Sensitive Watersheds – April 2007
- Ministry of Forests Notice – Indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of ungulate species in the Sunshine Coast Timber Supply Area
- Ministry of Environment Ungulate Winter Range Notices, FPPR section 7 and WLPPR section 9
- Information concerning wildlife habitat for the winter survival of ungulate species in Sunshine Coast Timber Supply Area
- Map showing the Proposed Ungulate Winter Range in the Sunshine Coast TSA
- Ministry of Environment Species at Risk Notices FPPR section 7 and WLPPR section 9 – April 2007
- Map showing: Material to support the Notice for Species at Risk the Sunshine Coast Forest District. Included on the map were proposed: Grizzly Bear WHAs; Draft Stickleback WHA and Community Watershed Boundaries for the Sunshine Coast Forest District -- February 2005
- Map showing: Suitable Marbled Mulelet habitat for the Sunshine Coast Forest District – July 2004
- Ministry of Forest Notice – Indicators of the Amount, distribution and Attributes of Wildlife Habitat required for the survival of species at risk in the Sunshine Coast Forest District – March 2, 2006
- Proposed Draft Order for the List of Wildlife Habitat Features
- Ministry of Environment's Proposed List of Wildlife Habitat Features – April 2007
- Ministry of Environment's Approved Ungulate Winter Ranges -- Updated March 1, 2007
- NorthWest Hardwood's Cortes FDU map

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- Reference Guide for FDP Stocking Standards -- December 11, 2002,
- Woodlot Licence Forest Management Regulations -- January 31, 2004
- WLPPR
- WLFMR
- Forest and Range Practices Act
- Forest Planning and Practices Regulation

2. EFFORTS MADE TO MEET WITH FIRST NATIONS

On July 27, 2007 the following First Nations with asserted traditional territory were provided with a formal letter containing information relating to the preparation and development of a Woodlot Licence Plan for W0046:

- Klahoose First Nation (also included a map of the WLP area)
- Homalco First Nation (also included a map of the WLP area)
- Hamatla Treaty Society (also included a map of the WLP area)
- Cape Mudge Band (letter only)
- Campbell River Band (letter only)

Below is a synopsis of the letters that were sent and what was asked of the various First Nations Bands. They were requested to:

- Provide any information that the Band may be willing to share on cultural heritage resources within the woodlot licence area that are of continuing importance to your community.
- Provide any site-specific information on cultural heritage resources that the Band may be willing to provide.
- Meet with representatives of the First Nation sometime during the month of August when it was mutually convenient to discuss and obtain any specific information that can be provided to assist in the development of a successful result or strategy

Please see below for documentation on sending the documents and to whom. A copy of one of the letters is provided below.

As of September 27, 2007 (60 days) no representative from Harper Logging Ltd. had been contacted by any of the First Nations Bands to discuss the Woodlot Licence Plan.

On September 28, 2007 a representative from the Campbell River Band phoned Harper Graham to suggest that he forward on the letter and information to the Homalco First Nation.

On October 3, 2007 Harper Graham personally attempted to make contact with the Klahoose, and Homalco First Nation and the Hamatla Treaty Society by going to their respective offices. At that time Harper Graham provided an additional copy of the letter

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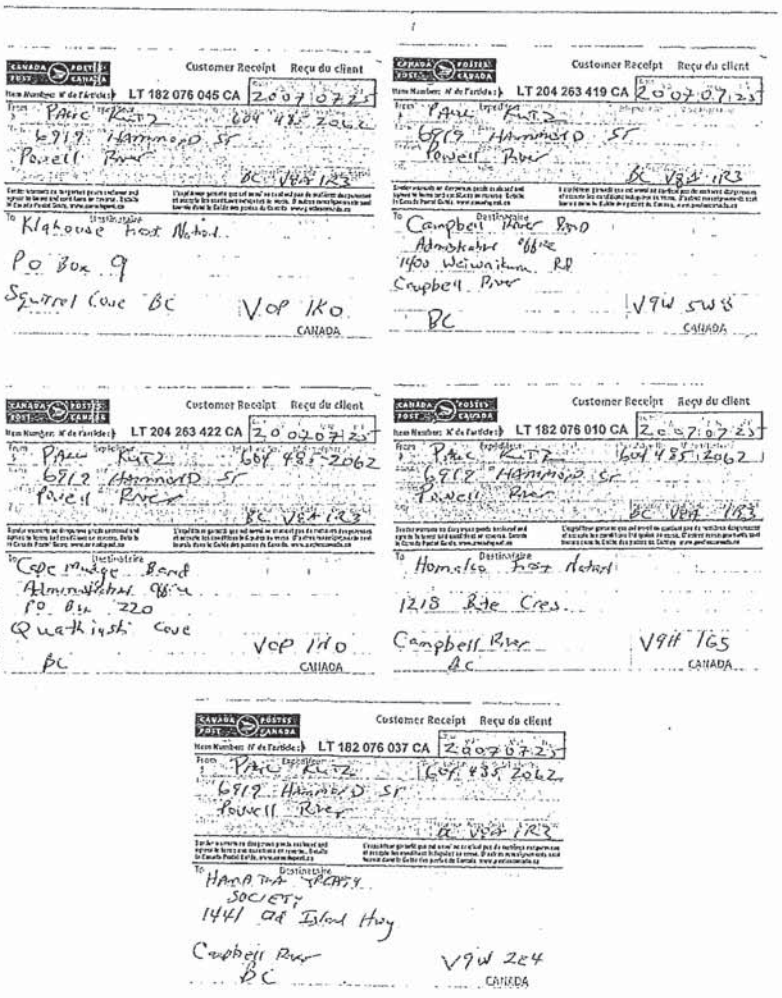
that was previously sent to the Bands; in all cases the secretary took note of the fact that Harper Graham came by the office and was told the letter would be passed onto the appropriate person. As of October 17, 2007 there has been no further contact been made by any of the Bands to any representatives of Harper Logging Ltd, including the Klahoose First Nation.

COPY OF RECEIPTS FOR LETTERS SENT TO FIRST NATIONS



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EXAMPLE OF LETTER SENT TO FIRST NATIONS

Harper Logging Ltd.

BOX 299
HERIOT BAY, B.C.
V0P 1H0 285-2325

July 25, 2007

Klahoose First Nation
PO box 9
Squirrel Cove, British Columbia
V0P 1K0

Dear Chief Ken Brown:

I am initiating the process of preparing a Woodlot Licence Plan (WLP) for Woodlot Licence W0046, located on Read Island, as illustrated in the attached map.

Recognizing that this woodlot licence area is within the asserted traditional territory of the Klahoose First Nation, I am requesting any information you may be willing to share on cultural heritage resources within the woodlot licence area that are of continuing importance to your community. The woodlot licence plan requires the preparation of a result or strategy to conserve and protect cultural heritage resources that are of continuing importance to First Nations and are not protected by the *Heritage Conservation Act*. I have provided a copy of the DRAFT WLP for your review and comment -- particularly the Culture Heritage Resources section.

This woodlot licence covers an area of 1485 hectares of Crown land and has a long term sustainable harvest rate of 7022 cubic meters per year. Only small portions of the woodlot licence area will be the site of harvesting activities in the foreseeable future. To assist us in understanding the cultural heritage resources that may be practised or located in the woodlot licence area, I would appreciate any site specific information on cultural heritage resources that you may be willing to provide.

I would like to meet with representatives of the Klahoose First Nation sometime during the month of August when it is mutually convenient to discuss and obtain any specific information that can be provided to assist in the development of a successful result or strategy. Please contact either Harper Graham by phone at (250) 285-2325 or myself at (604) 485-2062 to discuss when it may be possible to meet; alternatively you may contact me by e-mail at: s.22

Please let me know if you are unable to meet or provide information and I will develop this result or strategy based on the available information. Any comments received by the Klahoose First Nation will be submitted as part of the formal review and comment process prior to the final plan being submitted to the Ministry of Forests and Range District Manager, for approval.

Yours Truly,
Harper Logging Ltd.

Paul Kutz

Paul Kutz RPF
Forester

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3. EXEMPTIONS

None requested

4. RATIONALE IN SUPPORT OF PROPOSED ALTERNATIVE PERFORMANCE REQUIREMENTS

STOCKING STANDARDS

The alternative stocking standards (see Appendix 2) that apply under this Woodlot Licence Plan comprise minor modifications to the default standards to reflect circumstances, experience, and management regimes particular to the woodlot. These are consistent with the licensee's intent to manage the woodlot to produce high quality forest products, maintain site productivity, and explore new concepts for efficient, economic, and low impact forest management as well as to manage a small part of the woodlot for deciduous species.

The table of stocking standards presented in Appendix 2 has been developed from the *Reference Guide for FDP Stocking Standards* dated December 11, 2002 and from the standards established in the Woodlot Licence Forest Management Regulations (January 31, 2004) Division 2 of Part 6, Schedule A, Table A, as well as the related guidelines and site interpretation for the Vancouver Forest Region (VFR). In addition, the establishment of stands and the free growing dates as outlined in the FPPR regulations were considered. The table represents a synthesis of these requirements and describes how they will apply to the woodlot.

The primary differences from the default standards are:

a) Where site series have similar stocking standards, they have been combined.
b) The latest free growing date for most site series has been set at 20 years which is consistent with the FPPR regulations,
c) Sitka spruce (Ss) has been added as an acceptable species on sites with fluctuating water tables where mechanical mounding is undertaken. On wet sites and sites with fluctuating water tables, it is possible to mound in order to create micro planting sites for Sitka spruce, cedar and alder. This is proposed on a small scale and has therefore added Ss as an acceptable species and has reduced the minimum inter-tree distance to 1.0m on mounded sites.

In addition, ID #s L & M have been added to the stocking standards. This table is intended to define the stocking standards that will apply to deciduous (broadleaf) management. The Chief Foresters stocking standards accept black cottonwood (Act), red alder (Dr) and bigleaf maple (Mb) as productive, reliable and feasible regeneration options on several site series within the CWHxm zone.

The use of deciduous species will be implemented in consideration of the Chief Foresters memorandum dated August 22nd, 2000 and the supporting note Common Principles for the Management of Red Alder within the Coast Forest

Region. Dated August 2004. The management for deciduous species is proposed on a limited scale and is consistent with the management assumptions adopted in the Management Plan Annual Allowable Cut (AAC) calculation for the Sunshine Coast TSA.

5. Copies of Newspaper Advertisements

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Friday, July 27, 2007

906 Coming Events 906 Coming Events

SATURDAY AUGUST 18TH

SNOOP DOGG

WITH FULL BAND PERFORMANCE

LIL JON DME CLICK

Bubba Sparxxx Swollen Members

Over 40 DJ's

Donald Glaude DJ Jelo

George Acosta The Thrillseekers

Tickets available at All Ticket Masterphile Outlets SUMMERBREAK.CA

Highway 1, Peqtum Road, CHILLIWACK, BRITISH COLUMBIA

910 Legals and Tenders

PUBLIC VIEWING OF THE WOODLOT LICENCE PLAN FOR WOODLOT 0046 - READ ISLAND

The draft 10-year Woodlot Licence Plan for Woodlot Licence W0046 will be available for public viewing and comments at the Harper Logging field office on August 8, 2007 from 4:00 pm to 8:00 pm. The Plan is now available for review and comments for a period of 30 days, starting with the publication of this notice.
Written comments must be received no later than August 27, 2007. Copies of the plan will be located at the Ministry of Forests, Sunshine Coast Forest District Office, (7077 Duncan St. Powell River, BC) and at the Licensee's residence in Heriot Bay, Quadra Island, BC. Please call 250-285-2325 to arrange for a viewing. An electronic copy of the plan can also be requested by email from paulkutz@shaw.ca or by phone at (604) 485-2062. Written comments should be sent to Harper Graham, Harper Logging Ltd. PO Box 299 Heriot Bay, BC V0P 1H0. Recent legislation has changed the planning requirements for holders of a Woodlot Licence. The Woodlot Plan requires all sensitive and highly valued areas of the woodlot to be identified and either placed in reserves or management areas that will have modified harvesting. This Woodlot is comprised of both crown forest land and private forest land - both located on Read Island.

Wednesday, Aug. 1, 2007

875 Boats, Services & Accessories 876 Boats, Services & Accessories

910 Legals and Tenders

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CAMPBELL RIVER MIRROR FRIDAY, AUGUST 3, 2007 B7

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B8 CAMPBELL RIVER MIRROR FRIDAY, JULY 27, 2007

PUBLIC VIEWING OF THE WOODLOT LICENCE PLAN FOR WOODLOT 0046 – READ ISLAND

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6. MINISTRY OF FORESTS COMMENT AND REVIEW OF WLP FOR WL0046

August 24, 2007

Comments on the Woodlot Licence Plan (2007-2017) For Woodlot Licence W0046 Located on Read Island

A review of the above plan was completed during the review and comment stage of the planning process. This review was completed consistent with previous practices where MoFR staff has reviewed Forest Stewardship Plans of other licensees as a service to the licensee and to hopefully accelerate the approval process once the WLP is submitted for approval.

During this review the *Forest and Range Practices Act*, Woodlot Licence Planning and Practice Regulation Woodlot Licence Plan Template (May 2006 Version) and the Companion Guide Woodlot Licence Planning and Practices Workshop where used as references.

1. Map and Information
   Mapping Content
   What do the blue polygons signify? I did not notice this colour in the legend. Adjacent Private land is not shown and private land within the woodlot is not shown.

   Large blue polygons indicate the Woodlot Licence Plan Area.
   Adjacent private land is now shown on the map. Private land within the Woodlot is shown on map and indicated with Schedule A lands.

2. Wildlife Notices
   MAMU – From the information that we have from the recovery team it appears that there are some areas in the woodlot that are suitable for MAMU nesting. These areas are located in the contributing. We have a map showing these areas including Read Island. You are welcome to have a look .

   I have reviewed the DRAFT Cortes Landscape Unit Plan. I do note that several of the contributing areas you refer to are already constrained as OGMAs.

3. Areas Where Timber Harvesting Will be Modified
   Looking at the WLP template regarding areas where harvesting is to be modified it states that "the WLP should provide a general description of the post harvest stand structure that is measurable and verifiable."
   Table 1 Noted that you have included in your table S1 and S2 streams. Are there any in the WL? No there are none present. The remaining streams, you have basal area retention 0-100%. How is 0% modified from other areas?

Table 1 has no reference to S1 or S2 creeks. Within the text I have defined what a 0% basal area retention is within the RMA.

The statement that you have included regarding the rationale signed by a professional, does this only apply in situations where a road will be constructed in a RMA or does it also cover areas where harvesting is carried out within the RMZ as well.

A professional signoff is only required for constructing a road within a RMA

Scenic Areas – You reference a site plan. The WLPPR does not require the development of a site plan so maybe a brief explanation of what is a site plan is needed. I would expect that this will be an expanded pre –harvest map with any data that needed to be collected for management decisions. Both of these are not enforceable documents.

Reference to a Site Plan has been removed and replaced with a pre-harvest planning stage document.

4. Conserving and Protecting Cultural Heritage Resources
Communication with FN, what is the timeline for this to take place prior to harvesting?

This section has been updated to reflect the comments and provide timelines for communications.

5. Wildlife Tree Retention's Strategy
Wildlife Tree Characteristics – a personal thought, you have stated all species, do you think it is worthwhile to put the species in a priority list, which species will be empasized? Just thinking for long term retention that conifer is more appropriate than deciduous.

I have considered your comments and updated this section with a priority of species to consider.

Retention of individual trees – you have used the word "generally" in regards to the retention of WTs. Any thoughts to the situations where this may not happen? Generally does not include all situations. I have removed the word Generally.

Will the retention of these trees go toward the 8% retention target? If so how will you determine the tree's contribution? This section has been updated to include how the individual trees will contribute – through the use of basal area determinations

Conditions of removal – "The desire to re-assign the WT…" When you refer to site plans are you referring to blocks harvested under a site plan? There is no

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reference to site plans under FRPA for woodlots. Reference to Site Plans has been removed.

Replacement of WT – only high value WT will be replaced. If you have individual WT that are contributing to the WTR target and this includes medium or lower class WT will this not potentially put you in a position of not meeting the target? This section has been updated to indicated that the WTs will be re-allocated

6. Wildlife Tree Retention Areas
WLPPR Section 11(b) describes the general forest cover attributes for WTR area. How have you done this? Could someone go out on the woodlot and know that an area has met the necessary criteria for being a WTR? I have revised this section using information outlined in the *Wildlife Tree Retention: Management Guidance*" Policy paper

Removal Conditions – reference to a site plan? Reference to Site Plan removed.

Not sure of what you are describing regarding the salvage of blowdown in RRZ? Are saying that if the area loses its character and function it will be harvested or is the RRZ excluded from salvage? Are you saying "character and function"? Looking at Sec 39 WLPPR trees can only be removed from a RRZ if the removal will not have a material adverse affect on the RRZ. Need some clarity of what you are saying here. Are you saying that salvage will take place in WTR areas, not in a RRZ, only if the character and function of the WTR area is maintained? From your strategy it appears that salvage will not be undertaken if the blowdown is less than 25% and >25% salvage will be assessed?
This section has been re-written to provide clarity.

Replacement Strategy – replacement of salvaged areas will be "assessed". Does this mean that the surrounding area will be assessed to identify an alternate similar area to the area salvaged?
Will partially harvested WTR areas still contribute to the WT retention target? If so how will the contributory amount be calculated?
This section has been re-written to provide clarity. The word "assessed" has been changed to "selected".

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7. This section includes measures to prevent the introduction of invasive plants but in your opening paragraph you seem to imply that the strategy will be applied if invasive plants become established. How about the strategy to prevent the introduction of these plants? Section has been updated.

Third bullet under Prevention and Control
Is there a timeline from time of disturbance to time of seeding? From what I have seen in FSPs, the current standard for seed is Canada Common No 1 Forage Mixture or better. Section has been updated and timeline included.

Detection of Invasive Plant Species
You have mentioned that the detection will be through normal surveys on blocks but you don't mention anything about road side disturbed areas outside of blocks. Section has been updated

8 Stocking Information for Specified Areas
They way that I understand this section working is that if you do not include a copy of the standards you want to apply if they change the standards in the WLP will automatically change. See this section in the WLP template. I have reviewed and agree that the standards will automatically change.
Last sentence do you mean openings greater than 0.1 ha in area? Yes, updated.

9 Restrictions in RRZ
If you believe you will be crossing a specific RRZ within the WL it should be specified in the text or the approximate location shown on the map. Section 39(2.1) speaks about roads within a RRZ within a cutblock but this is incorrect and the training on WLPs was based on the construction of a road within a RRZ anywhere which will be in the next amendment to the WLPPR. The allowable reasons for felling trees in a RRZ includes construction of a crossing but this does not authorize the building a road within a RRZ.

Within the WLP there are no current plans to construct a road within a RRZ.

10 Restrictions in a RMZ
In your alternate performance requirement are saying that all of Section 40 applies or only section 40(1)(b), (c) and (d)? By applying all of section 40 you remove the ability to be exempted from the requirements under sections 40 (2), (3) and (4). These apply unless otherwise exempted.
The template also suggests that the approximate location of the proposed road location in the RMZ should be shown on the map or described in the text. Do you know if instances where this may be applied?

I have re-considered the statements outlined in the Alternative standards and have revised the document to select the Default

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11 Appendix II Stocking Standards

I have had some discussions with other staff regarding some of the standards that you have proposed. The points that have been raised area as follows:

a) Acceptance of Pw blister rust free within 10 cm of the stem. In discussions with Ron Diprose he stated that anything rust less than 60cm from the stem an there is high likelihood that the main stem will be infected. I will default to the expert. Footnote changed to reflect 60 cm.

b) Where Bg is referenced with a foot note will the establishment and acceptance of Bg be restricted to the areas described in the foot note? Yes

c) Stocking ID G – Dr and Mb are limited in productivity, reliability and/or feasibility according to the Estab to Free Growing Guidebook. Also, there are no stocking levels for this site in the guidebook. What did you base your standard on? I have reviewed the standards for the Low bench sites and have removed Dr and Mb as preferable/acceptable species from this standard.

As I understand these are low bench sites associated with fluctuating river levels that may result in periods of flooding. Generally, the species you would find is cottonwood. Are there sites like this in the woodlot? Rarely

d) Stocking Unit J – no free growing height for Ss. Free growing height updated.

e) Stocking Unit L your foot note says that Dr and Mb note acceptable on 02 and 04 sites but you have included the 04 site? I have reviewed and updated the stocking unit to exclude the 04 site.

12 Stocking Standards –General Comments

You reference minimum post spacing density but no densities are shown. I don't believe that this has to be specified. Meeting the definition of a free growing stand would require you to space. I have updated and removed this reference to post spacing densities.

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WOODLOT LICENCE
W0046

THIS LICENCE, dated **January 1, 2008**.

BETWEEN:

HER MAJESTY THE QUEEN IN RIGHT
OF THE PROVINCE OF BRITISH COLUMBIA,
as represented by THE DISTRICT MANAGER, of
SUNSHINE COAST FOREST DISTRICT
MINISTRY OF FORESTS AND RANGE
7077 DUNCAN STREET
POWELL RIVER, BRITISH COLUMBIA
V8A 1W1
Phone: 604 485-0700 Fax: 604 485-0799
(the "District Manager")

AND:

HARPER LOGGING LTD.
BOX 299
HERIOT BAY, BRITISH COLUMBIA
V0P 1H0
Phone: 250 285-2325 Fax: 250 285-2305
(the "Licensee")

WHEREAS:

A. Pursuant to Section 46(1) of the *Forest Act*, the District Manager offered the Licensee a replacement for Woodlot Licence W0046 which term began on January 1, 1998;

B. The Licensee accepted the replacement offer;

C. The Parties have entered into this Licence pursuant to Section 46(7) of the *Forest Act*.

"The Table of Contents and headings in this Licence are included for convenience only and do not form a Part of this Licence and in no way define, limit, alter or enlarge the scope or meaning of any provision of this Licence."

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THE PARTIES agree as follows:

1.00 GRANT OF RIGHTS AND TERM

1.01 The term of this Licence is **20 years**, beginning on **January 1, 2008**.

1.02 Subject to this Licence and the Forestry Legislation the District Manager grants the Licensee during the term of this Licence:

(a) the right to manage Schedule "B" Land in accordance with this Licence, the Forestry Legislation, the management plan in effect under this Licence, and operational plans approved in respect of this Licence;

(b) the exclusive right to harvest Crown timber from Schedule "B" Land; and

(c) the right to enter Schedule "B" Land for the purpose of exercising a right or fulfilling an obligation under or associated with this Licence.

1.03 The Licensee must not harvest timber:

(a) from Schedule "A" Land except under a cutting permit; or

(b) from Schedule "B" Land except under a cutting permit or road permit;

or as otherwise authorized under the Forestry Legislation.

1.04 Subparagraph 1.03(a) does not apply to:

(a) a reserve as defined under the *Indian Act (Canada)*; or

(b) a road clearing width on private land.

1.05 Subject to Paragraph 1.06, the Licensee will not enter, use or occupy Schedule "B" Land except under and in accordance with a cutting permit, road permit, or special use permit authorizing such use or occupation.

1.06 Paragraph 1.05 does not apply to temporary use or occupation for the purpose of:

(a) carrying out silviculture activities;

(b) collecting inventory information;

(c) doing engineering layouts and surveys;

(d) carrying out protection activities; or

(e) fulfilling other obligations of the Licensee under or associated with this Licence.

2.00 OTHER CONDITIONS AND REQUIREMENTS

2.01 The Licensee is bound by and must comply with the conditions and requirements set out in Schedule "C" to this Licence.

2.02 The Licensee must not harvest timber if the timber is specified as reserved timber in a cutting permit, or under an applicable operational plan or the Forestry Legislation.

2.03 The Regional or District Manager, in a notice given to the Licensee, may advise the Licensee that after the date specified in the notice the Licensee may only submit applications for cutting permits for areas of Crown land meeting the requirements set out in the notice.

2.04 The requirements referred to in Paragraph 2.03 may restrict the areas of land for which the Licensee may submit applications for cutting permits to any or all of the following:

(a) a part of the licence area;

(b) a type of terrain within the licence area; and

(c) a type of timber within the licence area.

2.05 Before giving notice under Paragraph 2.03, the Regional or District Manager will consult with the Licensee and will consider its comments.

2.06 During the term of this Licence, the Licensee must not:

(a) acquire a timber processing facility; or

(b) acquire control of a corporation that owns or leases a timber processing facility;

unless authorized to do so in Schedule "C".

2.07 During the term of this Licence, the Licensee must not:

(a) construct or operate; or

(b) authorize or purport to authorize another person to construct or operate;

a timber processing facility within the licence area unless authorized to do so in Schedule "C".

3.00 TIMBER VOLUME CHARGED TO THE LICENCE

3.01 The following volumes included in statements issued on behalf of the Government to the Licensee will be included as "volume of timber harvested" for cut control purposes:

(a) the volume of timber cut under the Licence and under road permits associated with the Licence, that meets the cut control specifications;

(b) the volume of timber estimated to be wasted or damaged under Part 4.00 and under road permits associated with the Licence;

(c) the volume of timber cut, damaged or destroyed without authorization by the Licensee;

(d) the volume of timber which may be credited by the Regional or District Manager in respect of the Licence; and

(e) the excess volume of timber, if any, carried forward under Section 75.7 of the *Forest Act* from the immediately preceding cut control period.

3.02 The following species and grades of timber are part of the cut control specifications for this Licence.

(a) All coniferous species that are:

(i) Sawlog Grade (Grade X or better); or

(ii) Grade Code Y;

(b) All deciduous species Sawlog grade (Grade Code W).

4.00 WASTE ASSESSMENT

4.01 The quantity and quality of merchantable Crown timber that could have been harvested under this Licence but at the Licensee's discretion was not harvested, will be determined in accordance with the provisions of Provincial Logging Residue and Waste Measurement Procedures Manual, as amended or replaced from time to time.

4.02 The District Manager, in a notice given to the Licensee, may require the Licensee to pay in respect of the volume of timber determined under Paragraph 4.01, a monetary assessment for all waste.

4.03 The amount of money that the Licensee must pay under a waste assessment will be determined in accordance with the provisions of the Provincial Logging Residue and Waste Measurement Procedures Manual as they are at the time the quantity and quality of merchantable Crown timber is determined under Paragraph 4.01

4.04 For the purpose of conducting the assessment of the volume of timber that was not harvested as described in Paragraph 4.01:

(a) the Licensee must conduct an assessment in accordance with the current Provincial Logging Residue and Waste Measurement Procedures Manual after the Licensee has declared that primary logging has been completed for each cut block; or

(b) the District Manager may conduct an assessment in accordance with the current Provincial Logging Residue and Waste Measurement Procedures Manual after the expiry of the term of a cutting permit or Licence or the Licence and/or cutting permit otherwise being terminated, whichever occurs first.

4.05 If the District Manager carries out an assessment under Paragraph 4.04, the District Manager, in a notice given to the Licensee, may require the Licensee to pay the costs reasonably incurred by the District Manager in carrying out the assessment.

5.00 MANAGEMENT PLAN

5.01 The Licensee must submit a proposed management plan to the District Manager on or before a date specified by the District Manager in a notice given to the Licensee.

5.02 A proposed management plan submitted under Paragraph 5.01 or Subparagraph 5.04(b) must:

(a) be prepared in accordance with;

(i) any directions of the District Manager; and

(ii) any applicable handbook;

(b) be consistent with;

(i) this Licence;

(ii) the Forestry Legislation;

(iii) higher level plans under the *Forest Practices Code of British Columbia Act* or the *Forest and Range Practices Act*;

(c) include inventories of the timber resources in the licence area, prepared in the manner, presented in the format and meeting the specifications referred to in;

(i) any directions of the District Manager; and

(ii) any applicable handbook;

(d) include any other inventories and information regarding the development, management and use of the licence area that the District Manager requires to determine the allowable annual cut for the licence area;

(e) propose an allowable annual cut for the licence area which considers the following;

(i) inventories and other information referred to in Subparagraphs 5.02(c) and 5.02(d);

(ii) timber harvest specifications proposed for the timber resources in the licence area;

(iii) the management and conservation of non timber resource values in the licence area, including visual quality, biological diversity, soils, recreation resources, cultural heritage resources, range land, wildlife, water and fish habitats;

(iv) the control of forests health factors or salvage of timber damaged by catastrophic events;

(v) silviculture practices and forest health factors that may impact on timber production;

(vi) the anticipated impact of the reductions to the productive portion of the licence area due to permanent roads, landings, pits and trails; and

(vii) any other factors that may impact on the allowable annual cut for the licence area;

(f) contain a rationale for the proposed allowable annual cut referred to in Subparagraph 5.02(e) prepared in accordance with;

(i) any directions of the District Manager; and

(ii) any applicable handbook;

(g) if required in;

(i) any directions of the District Manager; or

(ii) any applicable handbook;

provide some or all of the information referred to in this Paragraph in the form of maps meeting the requirements of the District Manager or the handbook, as the case may be; and

(h) contain;

(i) a commitment to update the inventories and information referred to in Subparagraphs 5.02(c) and 5.02(d) if required by the District Manager;

(ii) the commitments made in the Licensee's application for the Woodlot Licence; and

(iii) the Licensee's goals for the Woodlot Licence.

5.03 The District Manager, within three months after the date on which the District Manager receives a proposed management plan submitted under Paragraph 5.01 or Subparagraph 5.04(b), will in a notice given to the Licensee approve the proposed management plan, subject to such conditions as the District Manager considers necessary or appropriate, if:

(a) the District Manager is satisfied that the proposed management plan meets the requirements of Paragraph 5.02;

(b) the proposed management plan includes inventories and information referred to Subparagraphs 5.02(c) and 5.02(d) which are satisfactory to the District Manager; and

(c) the District Manager has determined an allowable annual cut for the licence area, based on the proposed management plan.

5.04 If the District Manager does not approve a proposed management plan under Paragraph 5.03:

(a) the District Manager, within three months after the date on which the District Manager receives the proposed management plan, will specify in a notice given to the Licensee why the District Manager has not approved the proposed management plan; and

(b) the Licensee, within one month after the date on which the Licensee is given the notice referred to in Subparagraph 5.04(a), must submit a new or revised proposed management plan to the District Manager.

5.05 Subject to Paragraph 5.06, the management plan in effect under this Licence expires three months after the date upon which the Licensee is required to submit a proposed management plan pursuant to a notice given to the Licensee under Paragraph 5.01.

5.06 If:

(a) the District Manager, within three months after the date on which the District Manager receives a proposed management plan submitted under Paragraph 5.01, has neither;

(i) approved the proposed management plan under Paragraph 5.03; nor

(ii) given the Licensee a notice referred to in Subparagraph 5.04(a); and

(b) there is a management plan in effect under this Licence;

then the term of the management plan referred to in Subparagraph (b) is deemed to be extended until such time as the District Manager approves the proposed management plan under Paragraph 5.03, or gives the Licensee a notice referred to in Subparagraph 5.04(a), as the case may be.

5.07 The Licensee must manage both Schedule "A" Land and Schedule "B" Land in accordance with the management plan in effect under this Licence.

5.08 Subject to Paragraph 5.06, the Management Plan:

(a) approved under the Woodlot Licence replaced by this Licence; and

(b) still in effect on the date immediately preceding the start date referred to in Paragraph 1.01;

is deemed to be the Management Plan in effect under this Licence.

5.09 A Management Plan:

(a) referred to in Paragraph 5.08; or

(b) approved by the District Manager under Paragraph 5.03;

is deemed to be part of this Licence during the period the Management Plan remains in effect.

6.00 ROADS

6.01 If the District Manager consents to a road closure or restriction in accordance with the Forestry Legislation, the Licensee must comply with any directions of the District Manager with respect to the closure or restriction, including directions regarding the type, location and marking of barricades and the posting of warning notices.

7.00 CRUISE AND APPRAISAL INFORMATION

7.01 Unless otherwise authorized by the District Manager, the Licensee must ensure that cruise data submitted under this Licence are:

(a) compiled in accordance with the Cruise Compilation Manual as amended from time to time; and

(b) based on cruises carried out in accordance with the Cruising Manual prepared by the Ministry of Forests and Range as amended from time to time.

7.02 The Licensee must ensure that appraisal data submitted under this Licence are:

(a) compiled in accordance with; and

(b) include all data required under;

the policies and procedures approved by the Minister from time to time under Section 105 of the *Forest Act* for the forest region in which the licence area is located.

8.00 CUTTING PERMITS

8.01 Subject to Paragraphs 8.02, 8.03 and 8.04, the Licensee may submit an application to the District Manager for a cutting permit to authorize the Licensee to harvest one or more proximate areas of land within the licence area which are either:

(a) identified in a Forest Development Plan or Woodlot Licence Plan for which the Licensee may, during the term of the Forest Development Plan or Woodlot Licence Plan, apply for a cutting permit; or

(b) exempted under the *Forest Practices Code of British Columbia Act* from the requirement for a Forest Development Plan or under the *Forest and Range Practices Act* from the requirement for a Woodlot Licence Plan.

8.02 Before submitting an application for a cutting permit, the Licensee must compile:

(a) cruise data; and

(b) appraisal data;

in accordance with the requirements of Part 8.00, for the areas of Schedule "B" Land to be included in the application.

8.03 An application for a cutting permit submitted under Paragraph 8.01 must:

(a) be in a form acceptable to the District Manager;

(b) include;

(i) a map to a scale acceptable to the District Manager showing the areas referred to in the application; and

(ii) the cruise data and appraisal data referred to in Subparagraphs 8.02(a) and 8.02(b); and

(c) if required by the District Manager, identify the sequence in which the areas of land referred to in the application for the cutting permit would be harvested if the cutting permit is issued.

8.04 The areas of land shown on the map referred to in clause 8.03(b)(i) must be consistent with areas referred to in paragraph 8.01

8.05 Subject to Paragraphs 8.06 through 8.15 inclusive and Paragraph 8.04, upon receipt of an application for a cutting permit submitted under Paragraph 8.01, the District Manager will issue a cutting permit to the Licensee if:

(a) there is a management plan in effect under this Licence;

(b) the District Manager is satisfied that;

(i) the requirements of Paragraphs 8.01 through 8.04 inclusive have been met; and

(ii) the cruise data and appraisal data referred in Subparagraphs 8.02(a) and 8.02(b) are adequate for the purpose of determining stumpage rates for timber harvested from Schedule "B" Land;

(c) the location of the areas of land referred to in the application for the cutting permit, and the types of terrain and timber, meet any conditions or requirements referred to in Part 2.00;

(d) the District Manager is satisfied that any sequence of harvesting referred to in Subparagraph 8.03(c) is appropriate;

(e) the District Manager is satisfied that activities and operations under or associated with the cutting permit will be consistent with this Licence, the Forestry Legislation, operational plans, and the management plan referred to in Subparagraph (a).

8.06 The District Manager may consult trappers, guide outfitters, range tenure holders and other licensed resource users, who may be affected directly or indirectly by activities or operations under or associated with a cutting permit, engaged in or carried out on areas of land referred to in an application for the cutting permit.

8.07 The District Manager may consult other resource agencies for the purpose of determining whether activities and operations under or associated with a cutting permit, engaged in or carried out on areas of land referred to in an application for a cutting permit, meet the requirements of the Forestry Legislation.

8.08 The District Manager may impose conditions and requirements in a cutting permit to protect the interests of trappers, guide outfitters, range tenure holders and other licensed resource users, and ensure activities and operations under or associated with the cutting permit meet the requirements of the Forestry Legislation.

8.09 The District Manager may consult an aboriginal group who have an aboriginal interest or proven aboriginal right, including aboriginal title, or a treaty right, that may be affected by activities or operations carried out under or associated with a cutting permit.

8.10 The District Manager may impose conditions in a cutting permit to address an aboriginal interest or proven aboriginal right, including aboriginal title, or a treaty right.

8.11 The District Manager may refuse to issue a cutting permit if, in the opinion of the District Manager, issuance of the cutting permit would potentially result in an unjustifiable infringement of an aboriginal interest or proven aboriginal right, including aboriginal title, or a treaty right.

8.12 The District Manager may refuse to issue a cutting permit if a required operational plan has not been approved for an area of land referred to in the application for the cutting permit.

8.13 If the District Manager:

(a) determines that a cutting permit may not be issued because the requirements of Paragraph 8.05 have not been met;

(b) is carrying out consultations under Paragraph 8.06, 8.07 or 8.09; or

(c) refuses to issue a cutting permit under Paragraph 8.11 or 8.12;

the District Manager will notify the Licensee within 45 days of the date on which the application for the cutting permit was submitted.

8.14 A cutting permit must:

(a) identify the boundaries of the areas of Schedule A and/or B Land which, subject to this Licence and the Forestry Legislation, the Licensee is authorized to conduct operations;

(b) specify a term which does not exceed four years;

(c) specify a timber mark to be used in conjunction with the timber harvesting operations carried out under the cutting permit;

(d) specify whether, for the purpose of determining the amount of stumpage payable in respect of timber removed under the cutting permit, the volume or quantity of timber is to be determined using information provided by;

(i) a scale of the timber; or

(ii) a cruise of the timber conducted before the timber is cut; and

(e) include such other provisions, consistent with this Licence, as the District Manager considers necessary or appropriate.

8.15 The District Manager may amend a cutting permit only with the consent of the Licensee.

8.16 The Licensee is required to make application to the District Manager for an extension to a cutting permit at least 45 days before expiry of the cutting permit in a form as required by the District Manager.

8.17 A cutting permit is deemed to be part of this Licence.

8.18 All cutting permits in effect that were issued under the Woodlot Licence that is replaced by this Licence continue under this Licence for the duration of their respective terms.

9.00 ACCESS

9.01 Nothing in this Licence authorizes the Licensee to in any way restrict the Crown's right of access to Crown lands.

9.02 The Regional or District Manager may:

(a) enter onto Schedule "A" land; and

(b) use roads owned or deemed to be owned by the Licensee;

for the purpose inspecting the Licensee's activities under or associated with this Licence, and for the purpose of fulfilling an obligation or exercising a right under this Licence.

10.00 COURT DETERMINED ABORIGINAL RIGHTS AND/OR TITLE

10.01 Notwithstanding any other provision of this Licence, if a court of competent jurisdiction:

(a) determines that activities or operations under or associated with this Licence will unjustifiably infringe an aboriginal right and/or title, or treaty right;

(b) grants an injunction further to a determination referred to in Subparagraph 10.01(a); or

(c) grants an injunction pending a determination of whether activities or operations under or associated with this Licence will unjustifiably infringe an aboriginal right and/or title, or treaty right;

the Regional or District Manager, in a notice given to the Licensee, may vary or suspend, this Licence in whole or in part, or refuse to issue a cutting permit or road permit issued to the Licensee so as to be consistent with the court determination.

10.02 Subject to this Licence and the Forestry Legislation, if:

(a) under Paragraph 10.01, the Regional or District Manager has varied a cutting permit, road permit issued to the Licensee;

(b) a court of competent jurisdiction subsequently overturns, sets aside or dissolves the determination or injunction referred to in that Paragraph; and

(c) it is practical to do so;

the Regional or District Manager, at the request of the Licensee, will vary the permit to reflect as closely as possible, for the remainder of its term, the terms and conditions of the permit prior to the variation under Paragraph 10.01.

10.03 Subject to this Licence and the Forestry Legislation, if:

(a) under Paragraph 10.01, the District Manager has suspended a cutting permit or road permit issued to the Licensee;

(b) a court of competent jurisdiction subsequently overturns, sets aside or dissolves the determination or injunction referred to in that Paragraph; and

(c) it is practical to do so;

the Regional or District Manager, at the request of the Licensee, will reinstate the permit for the remainder of its term.

10.04 Subject to this Licence and the Forestry Legislation, if:

(a) under Paragraph 10.01, the District Manager has refused to issue a cutting permit or road permit;

(b) a court of competent jurisdiction subsequently overturns, sets aside or dissolves the determination or injunction referred to in that Paragraph; and

(c) it is practical to do so;

the Regional or District Manager, at the request of the Licensee, will issue the permit.

11.00 REPORTING

11.01 The Regional or District Manager, in a notice given to the Licensee, may require the Licensee to submit a report containing such information as the Regional or District Manager requires regarding:

(a) the Licensee's performance of its obligations under or in respect of this Licence; and

(b) the processing, use or disposition of the timber harvested under this Licence;

if the information is not included in any other reports which the Licensee must submit under the Forestry Legislation.

11.02 Upon receipt of a notice referred to in Paragraph 11.01 the Licensee, on or before the date specified in the notice, must submit a report to the Regional or District Manager containing the required information.

11.03 Subject to Paragraph 11.04, the Regional or District Manager may include the information contained in a report submitted under Paragraph 11.02 in any reports prepared by the Ministry of Forests and Range for public review.

11.04 Subject to the *Freedom of Information and Protection of Privacy Act*, the Regional or District Manager will not disclose information provided in confidence by the Licensee in a report submitted under Paragraph 11.02.

12.00 FINANCIAL AND DEPOSITS

12.01 In addition to any money payable in respect of this Licence or a road permit under the Forestry Legislation, the Licensee must pay to the Crown, immediately upon receipt of a notice, statement or invoice issued on behalf of the Crown:

(a) stumpage under Part 7 of the *Forest Act* in respect of timber harvested;

(i) under a cutting permit from Schedule "B" Land; or

(ii) under a road permit;

at rates determined, redetermined and varied under Section 105 of that Act;

(b) any payments required under Part 4.00.

12.02 During the term of this Licence, the Licensee must maintain with the Crown a deposit in the amount prescribed under the *Forest Act* or the Regulations made under that Act, in a form acceptable to the Minister, as security for the Licensee's performance of its obligations under or in respect of this Licence or a road permit.

12.03 If the Regional or District Manager gives the Licensee a notice that an amount has been taken under this part from the deposit, the Licensee, within four weeks of the date on which the notice is given, must pay to the Crown, in a form acceptable to the Minister, an amount sufficient to replenish the deposit.

12.04 If the Licensee fails:

(a) to pay money that the Licensee is required to pay to the Crown under;

(i) this Licence or a road permit; or

(ii) Forestry Legislation in respect of this Licence or a road permit; or

(b) to otherwise perform its obligations under;

(i) this Licence or a road permit; or

(ii) the Forestry Legislation in respect of this Licence or a road permit;

the Regional or District Manager, after at least four weeks notice to the Licensee, may take from the deposit;

(c) an amount equal to the money which the Licensee failed to pay;

(d) an amount sufficient to cover all costs incurred by the Regional or District Manager in remedying the Licensee's failure to perform its obligations; or

(e) an amount equal to the Regional or District Manager's estimate of the costs which the Regional or District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations;

and for that purpose a security included in the deposit may be realized.

12.05 A notice referred to in Paragraph 12.04 must specify:

(a) the money which the Licensee has failed to pay or the obligation which the Licensee has failed to perform; and

(b) the amount the Regional or District Manager intends to take from the deposit.

12.06 Subject to Paragraphs 12.08, 12.03 and 12.10, if:

(a) the Regional or District Manager, under Paragraph 12.04, takes from the deposit an amount equal to the Regional or District Manager's estimate of the costs which the Regional or District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations; and

(b) the costs incurred by the Regional or District Manager in remedying the Licensee's failure to perform its obligations are less than the amount taken from the deposit;

the Government will as soon as feasible return to the Licensee an amount equal to the difference between the amount taken from the deposit and the costs incurred by the Regional or District Manager.

12.07 If:

(a) the Regional or District Manager, under Paragraph 12.04 takes from the deposit an amount equal to the Regional or District Manager's estimate of the costs which the Regional or District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations; and

(b) the costs incurred by the Regional or District Manager in remedying the Licensee's failure to perform its obligations are greater than the amount taken from the deposit;

the Regional or District Manager may take from the deposit an additional amount equal to the difference between the costs incurred by the Regional or District Manager and the amount originally taken from the deposit, and for that purpose a security included in the deposit may be realized.

12.08 If the Regional or District Manager, under Paragraph 12.04, takes from the deposit an amount equal to the Regional or District Manager's estimate of the costs which the Regional or District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations, the Regional or District Manager is under no obligation to remedy the Licensee's failure.

12.09 If:

(a) the Regional or District Manager, under Paragraph 12.04, takes from the deposit an amount equal to the Regional or District Manager's estimate of the costs which the Regional or District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations;

(b) the Regional or District Manager does not remedy the Licensee's failure to perform its obligations; and

(c) the Regional or District Manager gives a notice to the Licensee indicating that the Crown will not be remedying the Licensee's failure to perform its obligations;

subject to Paragraph 12.10, the Crown may retain the amount taken from the deposit under Paragraph 12.02.

12.10 If, after receiving a notice referred to in Paragraph 12.03, the Licensee:

(a) remedies the failure to perform its obligations; and

(b) gives a notice to that effect to the Regional or District Manager within three months of the date on which the notice referred to in Paragraph 12.03 is given to the Licensee, or within such longer period as the Regional or District Manager may approve;

the Crown will return to the Licensee an amount equal to the difference between the amount taken from the deposit and any costs incurred by the Regional or District Manager in respect of the Licensee's failure to perform its obligations.

12.11 If the Regional or District Manager considers that:

(a) any activity or operation that may be engaged in or carried out under this Licence is likely to cause damage to persons or property; and

(b) the deposit is insufficient to indemnify the Crown for any liability which the Crown might incur as a consequence of the activity or operation;

the Regional or District Manager may require the Licensee to maintain with the Crown a special deposit, in a form acceptable to the Minister, in the amount determined by the Regional or District Manager, and the Licensee must comply.

12.12 If the Licensee fails to:

(a) remedy any damage resulting from an activity or operation referred to in Paragraph 12.11; or

(b) compensate any person who suffers a loss as a result of an activity or operation referred to in Paragraph 12.11;

the Regional or District Manager, after at least four weeks notice to the Licensee, may take an amount from the special deposit sufficient to indemnify the Crown for any liability which is or may be incurred by the Crown as a consequence of a failure referred to in Subparagraph (a) or (b).

12.13 A notice referred to in Paragraph 12.12 must specify:

(a) the nature of the Licensee's failure; and

(b) the amount the Regional or District Manager intends to take from the special deposit.

12.14 Subject to the *Forest Act* and the Regulations made under that Act, the Crown will return to the Licensee:

(a) the deposit, less deductions made under Paragraphs 12.04 and 12.07 when;

(i) this Licence expires, or is surrendered, and is not replaced under Section 46 of the *Forest Act*; and

(ii) the Regional or District Manager is satisfied that the Licensee has fulfilled its obligations under or in respect of this Licence; and

(b) a special deposit, less deductions made under Paragraph 12.12, when the Regional or District Manager is satisfied that the Crown is no longer at risk of being held liable as a consequence of an activity or operation referred to in Paragraph 12.11.

13.00 REPRESENTATIONS

13.01 The Licensee represents and warrants that the Licensee:

(a) is a corporation, other than a society, that is controlled by persons who are;

(i) Canadian citizens or permanent residents of Canada; and

(ii) 19 years of age or older;

(b) is the owner of all Schedule "A" Land;

(c) does not own or lease a timber processing facility in the Province or control a corporation that owns or leases a timber processing facility in the Province, unless authorized to do so in Schedule "C";

(d) does not hold more than one other Woodlot Licence or control a corporation that holds more than one other Woodlot Licence;

(e) has the ability to undertake and complete its obligations under the Licence within the term;

(f) has the ability to carry out its obligations in a safe and environmentally sound fashion;

(g) has reviewed the licence area and has fully informed itself of all matters relating to the Licence; and

(h) has no legal or other reason why it cannot enter into the Licence.

13.02 All representations and warranties made in Paragraph 13.01 are material and will conclusively be deemed to have been relied upon by the Crown, notwithstanding any prior or subsequent investigations by the Crown, and they will continue in full force and effect for the term of this Licence.

14.00 LIABILITY AND INDEMNITY

14.01 The Licensee must indemnify the Crown against and save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses faced, incurred or suffered by the Crown as a result, directly or indirectly, of any act or omission of:

(a) the Licensee;

(b) an employee or agent of the Licensee;

(c) a contractor of the Licensee who engages in any activity or carries out any operation, including but not restricted to harvesting operations, under or associated with this Licence or a road permit; or

(d) any other person who on behalf of or with the consent of the Licensee engages in any activity or carries out any operation, including but not restricted to harvesting operations, under or associated with this Licence or a road permit.

14.02 For greater certainty, the Licensee has no obligation to indemnify the Crown under Paragraph 14.01 in respect of any act or omission of:

(a) an employee, agent or contractor of the Crown, in the course of carrying out his or her duties as employee, agent or contractor of the Crown; or

(b) a person, other than the Licensee, to whom the Crown has granted the right to use or occupy Crown land, in the course of exercising those rights.

14.03 Amounts taken under Part 12.00 from the deposit or a special deposit, and any payments required under Part 4.00 or Part 12.00 are in addition to and not in substitution for any other remedies available to the Crown in respect of a default of the Licensee.

14.04 The Government is not liable to the Licensee for injuries, losses, expenses, or costs incurred or suffered by the Licensee as a result, directly or indirectly, of an act or omission of a person who is not a Party to this Licence, including but not restricted to an act or omission of a person disrupting, stopping or otherwise interfering with the Licensee's operations under this Licence by road blocks or other means.

15.00 TERMINATION

15.01 If this Licence expires and is not replaced under Section 46 of the *Forest Act*, or is surrendered, cancelled or otherwise terminated:

(a) all cutting permits will immediately terminate; and

(b) timber, including logs and special forest products, cut under the authority of this Licence and which are still located on Crown land, will vest in the Crown, without right of compensation to the Licensee;

(c) unless otherwise agreed to between the District Manager and the Licensee prior to the surrender, cancellation or termination of this Licence, title to all improvements, including roads and bridges, constructed by the Licensee on Crown land under the authority of this Licence will vest in the Crown, without right of compensation to the Licensee; and

(d) the Licensee may continue to enter Schedule "B" Land for a period of one month after the expiry or termination of this Licence for the purpose of removing the Licensee's property.

15.02 The Licensee will not take away any improvements or remove any timber referred to in Subparagraph 15.01(b), unless authorized to do so by the Regional Manager.

15.03 If the Licensee commits an act of bankruptcy, makes a general assignment for the benefit of its creditors or otherwise acknowledges its insolvency, the Regional or District Manager may, in a notice given to the Licensee, cancel this Licence.

16.00 WAIVER

16.01 No waiver by the Crown of any default non-compliance by the Licensee in the strict and literal performance of or compliance with any provision of the Licence will be deemed to be a waiver of the strict and literal performance of or compliance with any other provision, condition or requirement of the Licence or to be a waiver of, or in any manner release the Licensee from compliance with any provision, condition or requirement in the future, nor will any delay or omission by the Crown in the exercising of any right hereunder in any manner with respect to non-compliance impair the exercise of any such rights in the future.

17.00 NOTICE

17.01 A notice given under this Licence must be in writing.

17.02 A notice given under this Licence may be:

(a) delivered by hand;

(b) sent by mail; or

(c) subject to Paragraph 17.05, sent by facsimile transmission;

to the address or facsimile number, as applicable, specified on the first page of this Licence, or to such other address or facsimile number as is specified in a notice given in accordance with this Part.

17.03 If a notice is given under this Licence, it is deemed to have been given:

(a) if it is given in accordance with Subparagraph 17.02(a), on the date it is delivered by hand;

(b) if it is given in accordance with Subparagraph 17.02(b), subject to Paragraph 17.04, on the eighth day after its deposit in a Canada Post Office at any place in Canada; and

(c) if it is given in accordance with Subparagraph 17.02(c), subject to Paragraph 17.05, on the date it is sent by facsimile transmission.

17.04 If, between the time a notice is mailed in accordance with Subparagraph 17.02(b) and the time it is actually received, there occurs a postal strike, lockout or slowdown that might reasonably affect delivery of the notice, the notice is not deemed to be given until the Party actually receives it.

17.05 If a notice is sent by facsimile transmission, the Party sending the notice must take reasonable steps to ensure that the transmission has been successfully completed.

17.06 Either Party may, from time to time, advise the other Party by notice in writing, of any change of address of the Party giving such notice and, from and after the giving of such notice, the address specified will, for purposes of this Licence, be considered to be the address of the Party giving such notice.

18.00 MISCELLANEOUS

18.01 The Licensee must:

(a) comply with the Forestry Legislation; and

(b) ensure that its employees, agents and contractors comply with these Acts, Regulations and Standards when engaging in or carrying out activities or operations under or associated with this Licence.

18.02 Nothing in this Licence is to be construed as authorizing the Licensee to engage in any activities or carry out any operations otherwise than in accordance with the requirements of the Forestry Legislation.

18.03 This Licence will enure to the benefit of, and be binding on, the Parties and their respective heirs, executors, successors and permitted assigns.

18.04 The laws of British Columbia will govern the interpretation of this Licence and the performance of the Parties' obligations under this Licence.

18.05 Any power conferred or duty imposed on the Regional or District Manager under this Licence may be exercised or fulfilled by any person authorized to do so by the Regional or District Manager.

18.06 The Licensee must comply with the requirements of all legislation applicable to activities or operations under or associated with this Licence, including but not restricted to the *Workers Compensation Act*, *Health Act*, and *Employment Standards Act*, and the Regulations made under those Acts.

18.07 The Schedules to this Licence are deemed to be part of this Licence.

18.08 Nothing in this Licence authorizes the Licensee to in any way restrict the Government's right of access to the licence area, or the right of any other authorized entrant, user or occupier of these areas.

18.09 Subject to this Licence and all applicable legislation, including but not restricted to the Forestry Legislation, the Minister will ensure that the obligations under this Licence of the Ministry employees referred to in this Licence are fulfilled.

18.10 Nothing in this Licence entitles the Licensee to have an area of Schedule "B" Land to be replaced with another area, or to have rights awarded under another Licence under the *Forest Act*, in the event:

(a) timber is damaged or destroyed by pests, fire, wind or other natural causes;

(b) an area of land is deleted from the licence area under the Forestry Legislation, or under any other Act or Regulation; or

(c) this Licence expires, is surrendered, is cancelled or otherwise terminated.

18.11 At the request of the Regional or District Manager, the Licensee will survey and define on the ground any or all boundaries of the licence area.

18.12 Where harvesting of timber has been authorized under this Licence, the District Manager in a notice to the Licensee, may require the Licensee to carry out a legal survey on the portions of the area to be operated upon that are adjacent to any private land boundaries.

19.00 INTERPRETATION & DEFINITIONS

19.01 This Licence is divided into Parts, Paragraphs, Subparagraphs, Clauses and Subclauses, illustrated as follows:

1.00 Part;
1.01 Paragraph;
(a) Subparagraph;
(i) Clause;
(A) Subclause;

and a reference to a Subparagraph, Clause or Subclause is to be construed as a reference to a Subparagraph, Clause or Subclause of the Paragraph, Subparagraph or Clause, as the case may be, in which the reference occurs.

19.02 In this Licence, unless the context otherwise requires:

"aboriginal interest" means a potential aboriginal right and/or aboriginal title that has not been proven through a court process;

"cutting permit" means a cutting permit issued under this Licence;

"District Manager" means;

(a) a District Manager appointed under the *Ministry of Forests and Range Act*, for a forest district in which all or part of the licence area is situated; and

(b) any person authorized by the District Manager to exercise a power or fulfill a duty under this Licence;

"*Forest Act*" means the *Forest Act*, R.S.B.C. 1996, c. 157, as amended from time to time, or the successor to this Act, if it is repealed;

"*Forest and Range Practices Act*" means the *Forest and Range Practices Act*, S.B.C. 2002, c. 69 as amended from time to time, or the successor to this Act, if it is repealed;

"Forest Development Plan" means a Forest Development Plan referred to in the *Forest Practices Code of British Columbia Act* that is approved by the District Manager in respect of this Licence;

"Forestry Legislation" means, but is not restricted to;

(a) the *Forest Act*;

(b) the *Forest Practices Code of British Columbia Act*;

(c) the *Forest and Range Practices Act*; and

the Regulations and Standards made under those Acts;

"*Forest Practices Code of British Columbia Act*" means the *Forest Practices Code of British Columbia Act*, R.S.B.C. 1996, c. 159, as amended from time to time, or the successor to this Act, if it is repealed;

"Government" means the Government of the Province of British Columbia;

"handbook" means a guideline, guidebook, policy, procedure, or manual set or approved by the Ministry for preparation of a management plan or the preparation of inventories and other information to be included in a management plan;

"harvest" means;

(a) cut;

(b) remove; and

(c) cut and remove;

"licence area" means Schedule "A" Land and Schedule "B" Land;

"management plan" means the management plan prepared and approved for this Licence in accordance with Part 5.00 of this Licence;

"merchantable Crown timber" means timber that meets or exceeds the timber merchantability specifications described in the Provincial Logging Residue and Waste Measurement Procedures Manual, as amended or replaced from time to time;

"Minister" means the Minister responsible for administering the *Forest Act*;

"person" includes a corporation and a partnership and an Indian Band, unless the context requires otherwise;

"primary logging" means felling timber and yarding or forwarding the timber to central landings or road sides, but does not include removing the timber from these landings or road sides;

"Regional Manager" means;

(a) a Regional Manager appointed under the *Ministry of Forests and Range Act*, for the forest region in which all or part of the licence area is situated; and

(b) any person authorized by the Regional Manager to exercise a power or fulfill a duty under this Licence;

"remove" means the removal of timber from the licence area and "removed" and "removing" have the corresponding meanings;

"road permit" means a road permit entered into under the *Forest Act* which provides access to timber harvested, or to be harvested, under this Licence;

"Schedule "A" Land" means the private land described in the Schedule "A" to this Licence;

"Schedule "B" Land" means the Crown land described in Schedule "B" to this Licence;

"special deposit" means a special deposit referred to in Paragraph 12.11;

"special use permit" means a special use permit issued under the *Forest Act* before June 15, 1995, or under the *Forest Practices Code of British Columbia Act* on or after June 15, 1995, to authorize the Licensee to use or occupy Crown land within the licence area;

"waste" means merchantable Crown timber that could have been cut and removed under this Licence but that the Licensee at his discretion does not cut and remove, and as defined in the Provincial Logging Residue and Waste Measurement Procedures Manual, as amended from time to time;

"Woodlot Licence Plan" means a Woodlot Licence Plan referred to in the *Forest and Range Practices Act*, that is prepared or approved by the Minister in respect of the Licence.

19.03 Unless otherwise provided in Paragraph 19.02, if a word or phrase used in this Licence is defined in the *Forest Act* or the *Forest Practices Code of British Columbia Act* the definition in the Act applies to this Licence, and where the word or phrase in the Act is replaced by a new word or phrase, this Licence is deemed to have been amended accordingly.

19.03 If a provision of the *Forest Act* or the *Forest Practices Code of British Columbia Act* referred to in this Licence is renumbered, the reference in this Licence is to be construed as a reference to the provision as renumbered.

19.04 In this Licence, unless the context otherwise requires,

(a) the singular includes the plural and the plural includes the singular; and

(b) the masculine, the feminine and the neuter are interchangeable.

IN WITNESS WHEREOF the Licence has been executed by the District Manager and the Licensee on the date first written above.

SIGNED by the District Manager on behalf of Her Majesty the Queen in Right of the Province of British Columbia in the presence of:

Signature

Printed Name

Greg Hemphill, District Manager
Sunshine Coast Forest District

Sept 2/07
Dated

THE COMMON SEAL of the Licensee was affixed in the presence of:

Signature

Printed Name

c/s

(or)

SIGNED, SEALED AND DELIVERED by the Licensee in the presence of:

Signature

Printed Name

HARPER LOGGING LTD.
Licensee

Harper Graham
Harper Logging Ltd.

Dated

SCHEDULE "A"

1.00 DESCRIPTION OF NON CROWN LANDS

1.01 The private land subject to this Licence is as described on the attached Exhibit "A" Map(s).

SCHEDULE "B"

1.00 DESCRIPTION OF CROWN LANDS

1.01 The Crown land subject to this Licence is as described on the attached Exhibit "A" Map(s).

SCHEDULE "C"
OTHER CONDITIONS AND REQUIREMENTS

1.00 SCHEDULE OF OPERATIONS

1.01 The Licensee must ensure that:

(a) all phases of timber harvesting and related operations under or associated with this Licence are synchronized; and

(b) all harvesting on one area designated for harvest under this Licence is completed to the satisfaction of the District Manager before harvesting is commenced on another area.

2.00 SCALE-BASED STUMPAGE

2.01 For the purpose of determining the amount of stumpage payable in respect of timber removed under this Licence, the volume or quantity of timber harvested will be determined using information provided in a scale of the timber.

2.02 The Licensee must ensure that:

(a) all timber removed under this Licence is scaled; and

(b) the scale of the timber is conducted properly in accordance with the requirements of the *Forest Act* and the Regulations made under that Act.

Province of British Columbia
Ministry of Forests

MAP OF ▸ WOODLOT LICENCE 046
SCHEDULE 'A' LAND

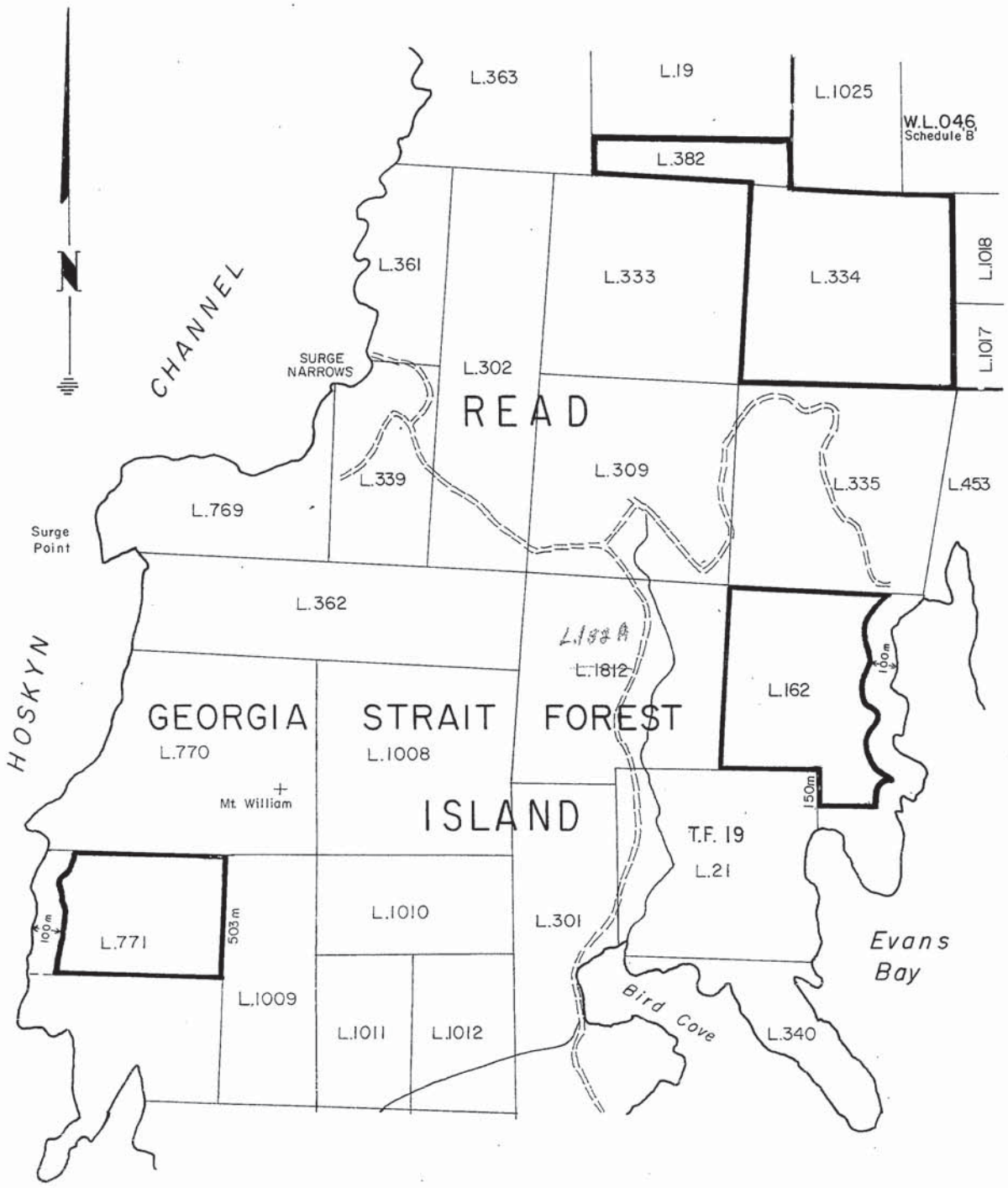
EXHIBIT 'A'

U.T.M.	Zone	East	North	Reg	Compt.	L
Grid	10	351200	5560000	30	10	

Date 88-01-21
Ref. Map 92K/3g,h
Base Used 92K.025
Scale 1: 20 000
Area 165 hectares ±

FOREST REGION ▸ 01 VANCOUVER
LAND DISTRICT ▸ 51 SAYWARD
DISTRICT ▸ 15 POWELL RIVER
OUTLINE ▸ ———

MANAGEMENT UNIT		TIMBER SUPPLY AREA		PULPWOOD AGREEMENT	CASCADES
Type	O - P.S.Y.U.	Number	39-SUNSHINE COAST		
Number	64-QUADRA	Block	52-POWELL RIVER		East
Block		Sub-B			West C



Drawn by P.F.N.R.

FS 357 T/M 86/3 ∝

BRITISH COLUMBIA

Distribution: [Distribution List]
Document name: G:\!Workgrp\Tenures\Woodlots\W0046\WL Amend.doc BK/tp
Contact: Brian Kukulies
Date typed: 2006/01/16 Date last saved: 2006/01/20 8:19 am

File: 0RCS 19720-25/W0046
ORCS 19720-50/W0046

January 20, 2006

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

Dear Harper Graham:

Please find attached the fully executed amendment to Woodlot Licene W0046 increasing the area as a result of the conversion of your Replaceable Timber Sale Licence A20495. As per Section 24.5 of the *Forest Act* the allowable annual cut (AAC) of Woodlot Licence W0046 is increased to 6549m^3. This AAC will take effect on January 6, 2006. The Cut control letter for 2006 will show this revised volume along with the increase as a result of the re-inventory. The total AAC for 2006, as of January 9,2006, is 7008m^3 and will increase in 2007 to 7022m^3.

As a result of this amendment to the woodlot licence I recommend that you review the approved management plan to ensure that it is consistent with the additional area. If required please make any changes and submit them for my consideration.

Your Replaceable Timber Sale Licence A20495 is deemed to have been surrendered on January 6, 2006. Please return your timber sale licence document to this office if possible.

Ministry of Forests and Range and Ministry Responsible for Housing
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1
Tel: (604) 485-0700
Fax: (604) 485-0799

Cutting permits issued under the timber sale licence that are still in good standing will be transferred to the woodlot licence.

This letter forms an integral part of Management Plan No. 3 for Woodlot Licence W0046 and should be attached thereto.

If you have any questions please contact Brian Kukulies, Tenures Forester at 604 485-0725.

Yours truly,

Greg Hemphill
District Manager
Sunshine Coast Forest District

Attachment(s): Amendment No. 3 and Exhibit A map

bpc: Val Ciapponi, Tenures Manager
Coast Forest Region

Resource Tenures and Engineering Branch
Please note letter of January 12, 2006 increasing the AAC of Woodlot Licence W0046 as a result of a re-inventory.
Schedule B AAC Commencing on January 1, 2006 = 6132m^3 Schedule A AAC = 876m^3
Schedule B AAC Commencing on January 1, 2007 = 6143m^3 Schedule A AAC = 879m^3
The above numbers take into account both the increase in AAC as per the January 12, 2006 letter and the conversion of A20495.

BRITISH COLUMBIA Ministry of Forests

Amendment Number 2

Amendment to Woodlot Licence W0046. Memorandum of amendment to Woodlot Licence W0046 made this 6th day of January , 2006 between the District Manager of the Sunshine Coast Forest District and the Licensee of the said Licence.

WHEREAS it is mutually agreed to amend the terms and conditions of the said Licence and the parties hereto have agreed to amend the same as set forth in this memorandum:

NOW, THEREFORE, in consideration of the premises and other valuable consideration now exchanged between the parties hereto, said parties agree as follows:

Effective this day:

The attached Exhibit "A" map for Schedule B Lands dated December 15, 2005 cancels and replaces Exhibit "A" Map for Schedule B Lands dated February 11, 1999.

This forms an integral part of the original Licence and should be attached thereto.

Subject to the foregoing, the parties hereto confirm the said Licence.

IN WITNESS WHEREOF the said parties have hereunto set their hands and seals and/or the Licensee has caused its corporate seal to be affixed in the presence of the duly authorized officers in that behalf on the date and year first above written.

Signed, sealed, and delivered by the Licensor in the presence of }

(Witness)

Greg Hemphill, District Manager
Sunshine Coast Forest District

Licensor

Signed, sealed, and delivered by the Licensee in the presence of }

(Witness)

Harper Graham
Harper Logging Ltd.

SEAL
Licensee

Note: If the Licensee is a co-partnership, the amendment must be signed and sealed by each member of the partnership. All written signatures must be made in ink.

If the Licensee is a corporation, the corporate seal must be affixed by the officials who are authorized to execute deeds on behalf of the corporation and be accompanied by the signature of these officials.

F.S. 3 - HTH 92/6

BRITISH COLUMBIA

Document name: G:\!WORKGRP\TIMBER\WOODLOTS\W46TOPFCL.DOC BK
CONTACT: Brian Kukulies, R.P.F.,

File: ORCS 19720-25/W0046

October 15, 1999

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Harper Graham:

Please find attached your fully executed copy of FS 3 Amendment No. 1 to Woodlot Licence W0046 to increase the Crown land area to 400 hectares.

If you have any questions please contact, Brian Kukulies, Tenures Forester, at (604) 485-0725.

Yours truly,

Trudy Perrin
Resource Clerk
Sunshine Coast Forest District

Attachment

!pbc: Resource Tenures and Engineering Branch

!pbc: Vancouver Forest Region - Valuation

Ministry of Forests

Sunshine Coast Forest District

Mailing Address:
7077 Duncan Street
Powell River, BC V8A 1W1

Tel: (604) 485-0700
Fax: (604) 485-0799

BRITISH COLUMBIA Ministry of Forests

Amendment Number 1

Amendment to Woodlot Licence W0046.

Memorandum of amendment to Woodlot Licence W0046 made this 22nd day of September, 1999 between the District Manager of the Sunshine Coast Forest District and the Licensee of the said Licence.

WHEREAS it is mutually agreed to amend the terms and conditions of the said Licence and the parties hereto have agreed to amend the same as set forth in this memorandum:

NOW, THEREFORE, in consideration of the premises and other valuable consideration now exchanged between the parties hereto, said parties agree as follows:

Effective this day:

The attached Exhibit "A" Map for "Schedule B Lands" dated February 11, 1999 cancels and replaces Exhibit "A" Map for "Schedule B Lands" dated January 21, 1988.

This forms an integral part of the original Licence and should be attached thereto.

Subject to the foregoing, the parties hereto confirm the said Licence.

IN WITNESS WHEREOF the said parties have hereunto set their hands and seals and/or the Licensee has caused its corporate seal to be affixed in the presence of the duly authorized officers in that behalf on the date and year first above written.

Signed, sealed, and delivered by the Licensor in the presence of

(Witness)

Greg Hemphill, District Manager
Sunshine Coast Forest District

(Licensor)

Signed, sealed, and delivered by the Licensee in the presence of

(Witness)

SEAL

(Licensee)

Note: If the Licensee is a co-partnership, the amendment must be signed and sealed by each member of the partnership. All written signatures must be made in ink.

If the Licensee is a corporation, the corporate seal must be affixed by the officials who are authorized to execute deeds on behalf of the corporation and be accompanied by the signature of these officials.

F.S. 3 - HTH 92/6

BRITISH COLUMBIA

Distribution: [DISTRIBUTION]
Document name: g\temp\woodlots\46fl
CONTACT: Brian K

File: ORCS 19720-25/W0046

July 21, 1997

Harper Graham
Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
VOP 1H0

Dear Harper Graham:

We herewith enclose your completed copy of replacement Woodlot Licence W0046.

Please read your licence document carefully and be prepared to comply with all conditions set out therein.

Yours truly,

Bill Rose
Office Services Supervisor
Sunshine Coast Forest District

Enclousure

bcc: Resource Tenures and Engineering Branch - Victoria
Note: Original of Licence document attached.
Crown AAC=2274m^3, private AAC=848m^3.

BC Assessment Authority - Timber Appraisal Section
Note: Copy of Licence document attached. This licence cancels and replaces previous licence for the same area.

Enter into contracts issued book

Ministry of Forests
Sunshine Coast Forest District
Mailing Address:
7077 Duncan Street
Powell River BC V8A 1W1
Location:
7077 Duncan Street
Powell River BC V8A 1W1
Tel: 604-485-0700
Fax: 604-485-0799

WOODLOT LICENCE W0046

THIS LICENCE, dated January 1, 1998

BETWEEN:

THE DISTRICT MANAGER, on behalf of
HER MAJESTY THE QUEEN IN RIGHT
OF THE PROVINCE OF BRITISH COLUMBIA,
SUNSHINE COAST FOREST DISTRICT
(the "District Manager")

AND:

Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0
(the "Licensee")

WHEREAS:

A. The District Manager offered the Licensee a replacement for Woodlot Licence No. W0046, dated May 29, 1997, pursuant to **SECTION 46(1) OF THE *FOREST ACT***;

B. The Licensee accepted the replacement offer;

C. The parties have entered into this Licence pursuant to **SECTION 46(7) OF THE *FOREST ACT***.

THE PARTIES agree as follows:

1.00 GRANT OF RIGHTS AND TERM

1.01 Subject to this Licence and the Acts, regulations and standards referred to in paragraph 10.01, the District Manager grants the Licensee

(a) the exclusive right during the term of this Licence to harvest timber from Schedule B Land,

(b) the right to manage Schedule B Land in accordance with this Licence, the Acts, regulations and standards referred to in paragraph 10.01, higher level plans, the management plan in effect under this Licence, and operational plans approved in respect of this Licence, and

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Page 365

(c) the right to enter Schedule B Land for the purpose of exercising a right or fulfilling an obligation under or associated with this Licence.

1.02 The Licensee must not harvest timber

(a) from Schedule A Land except under a Cutting Permit, or

(b) from Schedule B Land except under a Cutting Permit or road permit.

1.03 Subject to paragraph 1.04, the Licensee must not use or occupy Schedule B Land except under and in accordance with a Cutting Permit, road permit, or special use permit authorizing such use or occupation.

1.04 Paragraph 1.03 does not apply to temporary use or occupation for the purpose of

(a) carrying out silviculture,

(b) collecting inventory information,

(c) doing engineering layouts and surveys,

(d) carrying out protection activities, or

(e) fulfilling other obligations of the Licensee under or associated with this Licence.

1.05 The term of this Licence is 15 years, beginning on January 1, l998

2.00 REPRESENTATIONS AND WARRANTIES

2.01 The Licensee represents and warrants that the Licensee

(a) is a corporation, other than a society, that is controlled by persons who are

(i) Canadian citizens or permanent residents of Canada, and
(ii) 19 years of age or older,

(b) is the owner or lessee of all Schedule A Land,

(c) does not own a timber processing facility in the Province or control a corporation that owns a timber processing facility in the Province, and

(d) does not hold another woodlot licence.

2.02 All representations and warranties made in paragraph 2.01 are material and will conclusively be deemed to have been relied upon by the Crown, notwithstanding any prior or subsequent investigations by the Crown, and they will continue in full force and effect for the term of this Licence.

3.00 SPECIAL CONDITIONS AND REQUIREMENTS

3.01 The Licensee is bound by and must comply with the conditions and requirements set out in Schedule "C" to this Licence.

4.00 MANAGEMENT PLANS

4.01 Subject to paragraph 4.06, the management plan

(a) approved under the woodlot licence replaced by this Licence, and

(b) still in effect on the date immediately preceding the date referred to in paragraph 1.05,

is deemed to be the management plan in effect under this Licence.

4.02 The Licensee must submit a proposed management plan to the District Manager

(a) on such other dates as the District Manager may specify in a notice given to the Licensee.

4.03 A proposed management plan submitted under paragraph 4.02 or 4.05(b) must

(a) be prepared in accordance with
  (i) any directions of the District Manager, and
  (ii) any applicable manual,

(b) be consistent with
  (i) this Licence,
  (ii) the Act, regulations and standards referred to in paragraph 10.01,
  (iii) higher level plans, including any objectives for resource management zones, landscape units and sensitive areas under the *Forest Practices Code of British Columbia Act*,

(c) include inventories of the timber resources in the Licence Area, prepared in the manner, presented in the format and meeting the specifications referred to in
  (i) any directions of the District Manager, and
  (ii) any applicable manual,

(d) include any other inventories and information regarding the development, management and use of Licence Area that the District Manager requires,

(e) propose management objectives regarding
  (i) utilization of the timber resources in the Licence Area, including harvesting methods and felling, bucking and utilization specifications suitable to the types of timber and terrain in the Licence Area,
  (ii) protection and conservation of the non-timber values and resources in the Licence Area, including visual quality, biological diversity, soils, water, recreation resources, cultural heritage resources, range land, and wildlife and fish habitats,
  (iii) forest fire prevention and suppression,

(iv) forest health, including pest management,
(v) silviculture, and
(vi) road construction, maintenance and deactivation,

(f) include proposals for meeting the proposed management objectives referred to in subparagraph (e), including measures to be taken and specifications to be followed by the Licensee which meet or, if the Licensee so chooses, exceeds any requirements of the Act, regulations and standards referred to in paragraph 10.01, or of the higher level plans referred to in paragraph (b),

(g) if required in

(i) any directions of the District Manager, or
(ii) any applicable manual,

provide some or all of the information referred to in this paragraph in the form of maps meeting the requirements of the District Manager or the manual, as the case may be,

(h) specify measures to be taken by the Licensee to identify and consult with persons using the Licence Area for purposes other than timber productions, including

(i) trappers, guide outfitters, range tenure holders, and other licensed resource users, and
(ii) aboriginal people who are or who may be carrying out aboriginal activities,

(i) propose a volume of timber to be harvested from the Licence Area during each year, or during such other period agreed to by the District Manager, which is consistent with

(i) the inventories and information referred to in subparagraphs (c) and (d), and
(ii) the management objectives referred to in subparagraph (e) and the proposals for meeting these objectives referred to in subparagraph (f), and

(j) a rationale for the proposed volume of timber referred to in subparagraph (i) prepared in accordance with

(i) any directions of the District Manager, and
(ii) any applicable manual.

4.04 The District Manager, within three months after the date on which the District Manager receives a proposed management plan submitted under paragraph 4.02 or 4.05(b), will in a notice given to the Licensee approve the proposed management plan, subject to such conditions as the District Manager considers necessary or appropriate, if

(a) the District Manager is satisfied that the proposed management plan meets the requirements of paragraph 4.03,

(b) the proposed management plan includes

(i) inventories and information referred to paragraph 4.03(c) and (d),
(ii) management objectives referred to in paragraph 4.03(e) and proposals for meeting these objectives referred to in paragraph 4.03(f), and
(iii) measures referred to in paragraph 4.03(h) for identifying and consulting with persons using the Licence Area for purposes other than timber productions,

which are satisfactory to the District Manager, and

(c) the District Manager determines that the proposed volume referred to in paragraph 4.03(i) is an appropriate volume of timber to be harvested during the applicable period.

4.05 If the District Manager does not approve a proposed management plan under paragraph 4.04,

(a) the District Manager, within three months after the date on which the District Manager receives the proposed management plan, will specify in a notice given to the Licensee why the District Manager has not approved the proposed management plan, and

(b) the Licensee, within one month after the date on which the Licensee is given the notice referred to in subparagraph (a), must submit a new or revised proposed management plan to the District Manager.

4.06 Subject to paragraph 4.07, the management plan in effect under this Licence expires three months after the date upon which the Licensee

(a) is required to submit a proposed management plan pursuant to a notice given to the Licensee under paragraph 4.02(a).

4.07 If

(a) the District Manager, within three months after the date on which the District Manager receives a proposed management plan submitted under paragraph 4.02, has neither
(i) approved the proposed management plan under paragraph 4.04, nor
(ii) given the Licensee a notice referred to in paragraph 4.05(a), and

(b) there is a management plan in effect under this Licence,

then the term of the management plan referred to in subparagraph (b) is deemed to be extended until such time as the District Manager approves the proposed management plan under paragraph 4.04, or gives the Licensee a notice referred to in paragraph 4.05(a), as the case may be.

4.08 The Licensee must manage both Schedule A Land and Schedule B Land in accordance with the management plan in effect under this Licence.

4.09 A management plan

(a) referred to in paragraph 4.01, or

(b) approved by the District Manager under paragraph 4.04,

is deemed to be part of this Licence during the period the management plan remains in effect.

5.00 FELLING, BUCKING AND UTILIZATION SPECIFICATIONS

5.01 Subject to paragraph 5.06, the Licensee must

(a) fell standing timber of the species specified in a Cutting Permit, in accordance with the felling specifications set out in the Cutting Permit,

(b) buck felled and dead-and-down timber of the species referred to in paragraph (a) in accordance with the bucking specifications set out in the Cutting Permit, and

(c) utilize all timber of the species and grades specified in the Cutting Permit as obligatory utilization if the timber meets the utilization specifications set out in the Cutting Permit.

5.02 The following will be identified as waste in an assessment under Part 6.00:

(a) timber referred to in paragraph 5.01(a) that is not felled in accordance with the requirements of that paragraph;

(b) timber referred to in paragraph 5.01(b) that is not bucked in accordance with the requirements of that paragraph; and

(c) timber referred to in paragraph 5.01(c) that is not utilized in accordance with the requirements of that paragraph.

5.03 A Cutting Permit may include a requirement that the Licensee fell timber not referred to in paragraph 5.01(a), in which case, subject to paragraph 5.06, the Licensee must fell but need not utilize such timber.

5.04 Subject to paragraph 5.06, the Licensee may utilize

(a) timber of the species and grades specified in a Cutting Permit as optional utilization, and

(b) timber referred to in paragraph 5.03.

5.05 Timber referred to in paragraph 5.04(a) that is not utilized by the Licensee will be identified as residue in an assessment under Part 6.00, unless otherwise provided in the ***Provincial Logging Residue and Waste Measurement Procedures Manual***, dated January 1, 1994, as amended from time to time.

5.06 The Licensee must not fell standing timber, and must not buck or utilize felled or dead-and-down timber, if

(a) the timber is specified in a Cutting Permit as reserved timber, or

(b) under an operational plan or the Acts, regulations or standards referred to in paragraph 10.01, the Licensee is required not to fell the timber, or not to buck or utilize the timber, for any reason, including silviculture, biodiversity or other forest management reasons.

5.07 If the Licensee fells, bucks or utilizes timber contrary to paragraph 5.06, the Licensee must

(a) immediately notify the District Manager, and

(b) comply with any directions of the District Manager in respect of the timber.

5.08 Subject to paragraph 5.09 and 5.11, felling, bucking and utilization specifications in a Cutting Permit will be based on the specifications set out in the management plan in effect under this Licence.

5.09 If the management plan in effect under this Licence does not contain felling, bucking or utilization specifications, the specifications in a Cutting Permit will be adhered to.

5.10 In this paragraph and in paragraph 5.09,

(a) "butt end" means the log end that was previously attached to the stump,

(b) "butt log" means the log cut from the portion of the tree that was previously attached to the stump,

(c) "diameter at stump height" means

(i) in the case of standing timber, the diameter of the tree (outside bark) measured at the point of the maximum stump height,

(ii) in the case of a butt log, the diameter (outside bark) at the butt end of the log,

(d) "slab" means one of 2 or more parts of a log produced as a result of the log fracturing along its length,

(e) "stump height" means the height of the stump measured on the side the stump adjacent to the highest ground,

(f) "top diameter" means the diameter (inside bark) at the narrowest end of the log,

(g) "top log" means any log that is not a butt log.

5.11 The District Manager may include specifications in a Cutting Permit which are in addition to, or which replace, those referred to in paragraph 5.08 or 5.09 if, in the opinion of the District Manager, the additional or replacement specifications are necessary to ensure consistency with

(a) the Acts, regulations or standards referred to in paragraph 10.01,

(b) a higher level plan,

(c) an operational plan, or

(d) Ministry policy on timber utilization.

5.12 Before including specifications referred to in paragraph 5.11 in a Cutting Permit, the District Manager will consult the Licensee and consider any recommendations made by the Licensee.

6.00 RESIDUE AND WASTE ASSESSMENTS

6.01 The District Manager may, in accordance with the ***Provincial Logging Residue and Waste Measurement Procedures Manual***, dated January 1, 1994, as amended from time to time,

(a) carry out an assessment of the volume of residue and waste left on an area of land authorized for harvest under a Cutting Permit

(i) at any time after primary logging on the area has been completed, or

(ii) if primary logging on the area is not completed before the Cutting Permit expires or is otherwise terminated, at any time after the expiry or termination of the Cutting Permit, and

(b) as part of the assessment,

(i) measure the timber that was not felled, or was not bucked or utilized, in accordance with the specifications set out in the Cutting Permit,

(ii) classify the timber referred to in clause (i) as residue or waste, and

(iii) classify the residue and waste as avoidable or unavoidable.

6.02 The District Manager, in a notice given to the Licensee, may require the Licensee to pay in respect of avoidable waste left on an area of Schedule B Land authorized for harvest under a Cutting Permit an amount determined in accordance with paragraph 6.03.

6.03 For the purpose of determining the amount payable under paragraph 6.02, the District Manager will

(a) multiply

(i) the volume of avoidable waste assessed under paragraph 6.01 based on sawlog grades, by

(ii) the average stumpage rate charged for sawlogs harvested under the Cutting Permit in statements or invoices issued during the 12 month period ending 1 month after the month in which

(A) primary logging on the area was completed, or

(B) the Cutting Permit expires or is otherwise terminated,

as the case may be, and

(b) multiply

(i) the volume of avoidable waste assessed under paragraph 6.01 based on grades other than sawlog grades, by

(ii) the stumpage rate charged for timber of the applicable grades.

7.00 CUT CONTROL

7.01 For the purposes of the definition of "5 year cut control period" in Section 53 of the *Forest Act*, the first 5 year period for this Licence begins on January 1, 1998

7.02 For the purposes of subparagraph (b) of the definition of the "volume of timber harvested during a calendar year" in Section 53 of the *Forest Act*, the volume of

(a) avoidable residue,

(b) unavoidable residue,

(c) avoidable waste, and

(d) unavoidable waste

left on areas of land authorized for harvest under a Cutting Permit, as determined by an assessment under paragraph 6.01, will be charged to the Licensee as volumes of timber estimated to be wasted or damaged.

8.00 CRUISE AND APPRAISAL INFORMATION

8.01 The Licensee must ensure that cruise data submitted under this Licence are

(a) compiled in accordance with the ***Cruising Compilation System, Change Specifications, Detailed Requirements and Design Manual***, updated April 1, 1995, as amended from time to time, and

(b) based on cruises carried out in accordance with the ***Cruising Manual*** prepared by the Ministry of Forests, updated April 1, 1995, as amended from time to time.

8.02 The Licensee must ensure that appraisal data submitted under this Licence are

(a) compiled in accordance with, and

(b) include all data required under,

the policies and procedures approved by the Minister from time to time under Section 105 of the *Forest Act* for the forest region in which the Licence Area is located.

9.00 CUTTING PERMITS

9.01 Subject to paragraphs 9.02, 9.03 and 9.04, the Licensee may submit an application to the District Manager for a Cutting Permit to authorize the Licensee to harvest one or more proximate areas of land within the Licence Area which are either

(a) identified on a forest development plan as cutblocks for which the Licensee may, during the term of the forest development plan, apply for a Cutting Permit, or

(b) exempted under the *Forest Practices Code of British Columbia Act* from the requirement for a forest development plan.

9.02 Before submitting an application for a Cutting Permit, the Licensee must compile

(a) cruise data, and

(b) appraisal data,

in accordance with the requirements of Part 8.00, for the areas of Schedule B Land to be included in the application.

9.03 An application for a Cutting Permit submitted under paragraph 9.01 must

(a) be in a form acceptable to the District Manager,

(b) include

(i) a map to a scale acceptable to the District Manager showing the areas referred to in the application, and

(ii) the cruise data and appraisal data referred to in paragraph 9.02(a), and

(c) identify the sequence in which the areas of land referred to in the application for the Cutting Permit would be harvested if the Cutting Permit is issued, and

(d) provide the names, addresses and phone numbers of contractors and subcontractors who may engage in or carry out activities or operations under or associated with the Cutting Permit.

9.04 The areas of land shown on the map referred to in paragraph 9.03(b)(i) must be identical to

(a) cutblocks referred to in paragraph 9.01(a), or

(b) areas referred to in paragraph 9.01(b),

allowing only for any difference in scale between maps used in the forest development plan or exemption and the map referred to in paragraph 9.03(b)(i).

9.05 Subject to paragraphs 9.06 through 9.11 inclusive and paragraph 11.01, upon receipt of an application for a Cutting Permit submitted under paragraph 9.01, the District Manager will issue a Cutting Permit to the Licensee if

(a) there is management plan in effect under this Licence,

(b) the District Manager is satisfied that

(i) the requirements of paragraphs 9.01 through 9.04 inclusive have been met, and

(ii) the cruise data and appraisal data referred in paragraph 9.03(b)(ii) is adequate for the purpose of determining stumpage rates for timber harvested from Schedule B Land,

(c) the location of the areas of land referred to in the application for the Cutting Permit, and the types of terrain and timber, meet any conditions or requirements referred to in Part 3.00,

(d) the District Manager is satisfied that the sequence of harvesting referred to in paragraph 9.03(c) is appropriate

(e) the District Manager is satisfied that activities and operations under or associated with the Cutting Permit will be consistent with this Licence, the Acts, regulations and standards referred to in paragraph 10.01, higher level plans, and the management plan referred to in subparagraph (a).

9.06 The District Manager may consult

(a) aboriginal people who may be carrying out aboriginal activities, and

(b) trappers, guide outfitters, range tenure holders and other licensed resource users,

who may be affected directly or indirectly by activities or operations under or associated with a Cutting Permit, engaged in or carried out on areas of land referred to in an application for the Cutting Permit.

9.07 The District Manager may consult other resource agencies for the purpose of determining whether activities and operations under or associated with a Cutting Permit, engaged in or carried out on areas of land referred to in an application for a Cutting Permit, will adequately manage and conserve the forest resources of these areas.

9.08 The District Manager may impose conditions and requirements in a Cutting Permit to

(a) protect the interests of

(i) aboriginal people who may be carrying out aboriginal activities, and

(ii) trappers, guide outfitters, range tenure holders and other licensed resource users, and

(b) ensure activities and operations under or associated with the Cutting Permit will adequately manage and conserve the forest resources of the areas referred to in the Cutting Permit.

9.09 The District Manager may refuse to issue a Cutting Permit if, in the opinion of the District Manager, issuance of the Cutting Permit would result in an infringement of an aboriginal right.

9.10 The District Manager may refuse to issue a Cutting Permit if a silviculture prescription or logging plan has not been prepared or approved for an area of land referred to in the application for the Cutting Permit.

9.11 The District Manager may refuse to issue a Cutting Permit if the District Manager is satisfied

(a) the Licensee will be able to harvest the volume of timber to be harvested from the Licence Area during each year, or during such other period agreed to by the District Manager, as provided in the management plan in effect under this Licence, and

(b) refusing to issue the Cutting Permit will not compromise the management plan in effect under this Licence or a forest development plan approved in respect of this Licence.

9.12 If the District Manager

(a) determines that the requirements of paragraph 9.05 have not been met,

(b) refuses to issue a Cutting Permit under paragraph 9.09, 9.10 or 9.11, or

(c) is carrying out consultations under subparagraph 9.06 or 9.07,

the District Manager will notify the Licensee within 60 days of the date on which the application for the Cutting Permit was submitted.

9.13 A Cutting Permit must

(a) identify the boundaries of the areas of land which, subject to this Licence and the Acts, regulations and standards referred to in paragraph 10.01, the Licensee is authorized to harvest,

(b) specify a term which, subject to paragraph 9.15, does not exceed three years,

(c) specify whether, for the purpose of determining the amount of stumpage payable in respect of timber harvested under the Cutting Permit, the volume or quantity of timber is to be determined using information provided by

(i) a scale of the timber, or

(ii) a cruise of the timber conducted before the timber is cut,

(d) specify a timber mark to be used in conjunction with the timber harvesting operations carried out under the Cutting Permit,

(e) specify the species and grades of timber which are obligatory utilization and the species and grades, if any, which are optional utilization, and

(f) include such other provisions, consistent with this Licence, as the District Manager considers necessary or appropriate.

9.14 Subject to 9.15, the District Manager may amend a Cutting Permit only with the consent of the Licensee.

9.15 With or without the consent of the Licensee, the District Manager, in a notice given to the Licensee, may

(a) extend the term of a Cutting Permit, and

(b) if he or she does so, amend the Cutting Permit to the extent necessary to ensure the Cutting Permit is consistent with the forest development plan in effect at the time the Cutting Permit is extended.

9.16 A Cutting Permit that

(a) was issued under the woodlot licence replaced by this Licence, and

(b) is still in effect on the date this Licence is executed,

continues in effect under this Licence for the duration of its term.

9.17 A Cutting Permit is deemed to be part of this Licence.

10.00 LEGISLATIVE FRAMEWORK

10.01 This Licence is subject to

(a) the *Forest Act* and the regulations made under that Act, and

(b) the *Forest Practices Code of British Columbia Act* and the regulations and standards made under that Act.

10.02 The Licensee must

(a) comply with the Acts, regulations and standards referred to in paragraph 10.01, and

(b) ensure that its employees, agents and contractors comply with these Acts, regulations and standards when engaging in or carrying out activities or operations under or associated with this Licence.

10.03 Nothing in this Licence is to be construed as authorizing the Licensee to harvest timber or engage in or carry out any other forest practices until

(a) all applicable operational plans have been prepared or approved by the District Manager, and

(b) in the case of road construction or modification, a road layout and design has been approved by the District Manager.

10.04 Nothing in this Licence is to be construed as authorizing the Licensee to engage in any activities or carry out any operations otherwise than in accordance with the requirements of the Acts, regulations and standards referred to in paragraph 10.01.

11.00 INTERFERENCE WITH ABORIGINAL RIGHTS

11.01 Notwithstanding any other provision of this Licence, if a court of competent jurisdiction

(a) determines that activities or operations under or associated with this Licence are interfering or may interfere with an aboriginal right,

(b) grants an injunction further to a determination referred to in subparagraph (a), or

(c) grants an injunction pending a determination of whether activities or operations under or associated with this Licence are interfering or may interfere with an aboriginal right,

the District Manager, in a notice given to the Licensee, may vary or suspend, in whole or in part, or refuse to issue a Cutting Permit or road permit to the extent necessary to ensure there is no interference or no further interference with the aboriginal right or the alleged aboriginal right, having regard to any determination of the court and the terms of any injunction granted by the court.

11.02 Subject to this Licence and the Acts, regulations and standards referred to in paragraph 10.01, if

(a) the District Manager has varied a Cutting Permit road permit under paragraph 11.01,

(b) a court of competent jurisdiction subsequently overturns, sets aside or dissolves the determination or injunction referred to in that paragraph, and

(c) it is practical to do so,

the District Manager, at the request of the Licensee, will vary the permit to reflect as closely as possible, for the remainder of its term, the terms and conditions of the permit prior to the variation under paragraph 11.01.

11.03 Subject to this Licence and the Acts, regulations and standards referred to in paragraph 10.01, if

(a) the District Manager has suspended a Cutting Permit or road permit under paragraph 11.01,

(b) a court of competent jurisdiction subsequently overturns, sets aside or dissolves the determination or injunction referred to in that paragraph, and

(c) it is practical to do so,

the District Manager, at the request of the Licensee, will reinstate the permit for the remainder of its term.

11.04 Subject to this Licence and the Acts, regulations and standards referred to in paragraph 10.01, if

(a) the District Manager has refused to issue a Cutting Permit or road permit under paragraph 11.01,

(b) a court of competent jurisdiction subsequently overturns, sets aside or dissolves the determination or injunction referred to in that paragraph, and

(c) it is practical to do so,

the District Manager, at the request of the Licensee, will issue the permit.

12.00 FINANCIAL AND DEPOSITS

12.01 In addition to any money payable in respect of this Licence or a road permit under the Acts or regulations referred to in paragraph 10.01, the Licensee must pay to the Crown, immediately upon receipt of a notice, statement or invoice issued on behalf of the Crown,

(a) stumpage under Part 7 of the *Forest Act* in respect of timber harvested

(i) under a Cutting Permit from Schedule B Land, or
(ii) under a road permit,

at rates determined, redetermined and varied under Section 105 of that Act, and

(b) any payments required under Part 6.00.

12.02 During the term of this Licence, the Licensee must maintain with the Crown a deposit in the amount prescribed under the *Forest Act* or the regulations made under that Act, in a form acceptable to the Minister, as security for the Licensee's performance of its obligations under or in respect of this Licence or a road permit.

12.03 If the District Manager gives the Licensee a notice that an amount has been taken under this Part from the deposit, the Licensee, within four weeks of the date on which the notice is given, must pay to the Crown, in a form acceptable to the Minister, an amount sufficient to replenish the deposit.

12.04 If the Licensee fails

(a) to pay money that the Licensee is required to pay to the Crown under
  (i) this Licence or a road permit, or
  (ii) the Acts or regulations referred to in paragraph 10.01 in respect of this Licence or a road permit, or

(b) to otherwise perform its obligations under
  (i) this Licence or a road permit, or
  (ii) the Acts, regulations or standards referred to in paragraph 10.01 in respect of this Licence or a road permit,

the District Manager, after at least four weeks notice to the Licensee, may take from the deposit

(c) an amount equal to the money which the Licensee failed to pay,

(d) an amount sufficient to cover all costs incurred by the District Manager in remedying the Licensee's failure to perform its obligations, or

(e) an amount equal to the District Manager's estimate of the costs which the District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations,

and for that purpose a security included in the deposit may be realized.

12.05 A notice referred to in paragraph 12.04 must specify

(a) the money which the Licensee has failed to pay or the obligation which the Licensee has failed to perform, and

(b) the amount the District Manager intends to take from the deposit.

12.06 Subject to paragraphs 12.08, 12.09 and 12.10, if

(a) the District Manager, under paragraph 12.04, takes from the deposit an amount equal to the District Manager's estimate of the costs which the District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations, and

(b) the costs incurred by the District Manager in remedying the Licensee's failure to perform its obligations are less than the amount taken from the deposit,

the Crown will as soon as feasible return to the Licensee an amount equal to the difference between the amount taken from the deposit and the costs incurred by the District Manager.

12.07 If

(a) the District Manager, under paragraph 12.04, takes from the deposit an amount equal to the District Manager's estimate of the costs which the District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations, and

(b) the costs incurred by the District Manager in remedying the Licensee's failure to perform its obligations are greater than the amount taken from the deposit,

the District Manager may take from the deposit an additional amount equal to the difference between the costs incurred by the District Manager and the amount originally taken from the deposit, and for that purpose a security included in the deposit may be realized.

12.08 If the District Manager, under paragraph 12.04, takes from the deposit an amount equal to the District Manager's estimate of the costs which the District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations, the District Manager is under no obligation to remedy the Licensee's failure.

12.09 If

(a) the District Manager, under paragraph 12.04, takes from the deposit an amount equal to the District Manager's estimate of the costs which the District Manager could reasonably expect to incur in remedying the Licensee's failure to perform its obligations,

(b) the District Manager does not remedy the Licensee's failure to perform its obligations, and

(c) the District Manager gives a notice to the Licensee indicating that the Crown will not be remedying the Licensee's failure to perform its obligations,

subject to paragraph 12.10, the Crown may retain the amount taken from the deposit under paragraph 12.06.

12.10 If, after receiving a notice referred to in paragraph 12.09, the Licensee

(a) remedies the failure to perform its obligations, and

(b) gives a notice to that effect to the District Manager within three months of the date on which the notice referred to in paragraph 12.09 is given to the Licensee, or within such longer period as the District Manager may approve,

the Crown will return to the Licensee an amount equal to the difference between the amount taken from the deposit and any costs incurred by the District Manager in respect of the Licensee's failure to perform its obligations.

12.11 If the District Manager considers that

(a) any activity or operation that may be engaged in or carried out under this Licence is likely to cause damage to persons or property, and

(b) the deposit is insufficient to indemnify the Crown for any liability which the Crown might incur as a consequence of the activity or operation,

the District Manager may require the Licensee to maintain with the Crown a special deposit, in a form acceptable to the Minister, in the amount determined by the District Manager, and the Licensee must comply.

12.12 If the Licensee fails to

(a) remedy any damage resulting from an activity or operation referred to in paragraph 12.11, or

(b) compensate any person who suffers a loss as a result of an activity or operation referred to in paragraph 12.11,

the District Manager, after at least four weeks notice to the Licensee, may take an amount from the special deposit sufficient to indemnify the Crown for any liability which is or may be incurred by the Crown as a consequence of a failure referred to in subparagraph (a) or (b).

12.13 A notice referred to in paragraph 12.12 must specify

(a) the nature of the Licensee's failure, and

(b) the amount the District Manager intends to take from the special deposit.

12.14 Subject to the *Forest Act* and the regulations made under that Act, the Crown will return to the Licensee

(a) the deposit, less deductions made under paragraphs 12.04 and 12.07, when

(i) this Licence expires, or is surrendered, and is not replaced under Section 46 of the *Forest Act*, and

(ii) the District Manager is satisfied that the Licensee has fulfilled its obligations under or in respect of this Licence, and

(b) a special deposit, less deductions made under paragraph 12.12, when the District Manager is satisfied that the Crown is no longer at risk of being held liable as a consequence of an activity or operation referred to in paragraph 12.11.

13.00 ROADS

13.01 The Licensee must ensure that all roads constructed or modified by or on behalf of the Licensee on Schedule B Land are

(a) identified on a forest development plan and authorized under a road permit, or

(b) authorized under paragraph 13.02.

13.02 The Licensee may construct or modify roads on Schedule B Land under the authority of a Cutting Permit if the roads are

(a) identified on a logging plan,

(b) wholly contained within a cutblock identified on a forest development plan, and

(c) not identified on a forest development plan as providing access to more than one cutblock.

13.03 Subject to paragraph 13.04, roads referred to in paragraph 13.02 may be used for non-industrial purposes by any person without charge.

13.04 The Licensee may close or restrict use of roads referred to in paragraph 13.02 if

(a) in the opinion of the District Manager, activities or operations under or associated with the Cutting Permit represent a danger to life or property,

(b) the District Manager consents to the closure or restriction, and

(c) the Licensee complies with any directions of the District Manager with respect to the closure or restriction, including directions regarding the location and marking of gates and the posting of warning notices.

14.00 RESTRICTIONS

14.01 During the term of this Licence, the Licensee must not

(a) acquire a timber processing facility, or

(b) acquire control of a corporation that owns a timber processing facility.

14.02 During the term of this licence, the Licensee must not

(a) construct or operate, or

(b) authorize or purport to authorize another person to construct or operate

a timber processing facility within the Licence Area.

14.03 During the term of this Licence, the Licensee

(a) must not acquire another woodlot licence,

(b) acquire control of a corporation that holds a woodlot licence.

15.00 REPORTING

15.01 The District Manager, in a notice given to the Licensee, may require the Licensee to submit a report containing such information as the District Manager requires regarding

(a) the Licensee's performance of its obligations under or in respect of this Licence, and

(b) the processing, use or disposition of the timber harvested under this Licence,

if the information is not included in any other reports which the Licensee must submit under the Acts or regulations referred to in paragraph 10.01.

15.02 Upon receipt of a notice referred to in paragraph 15.01, the Licensee, on or before the date specified in the notice, must submit a report to the District Manager containing the required information.

15.03 Subject to paragraph 15.04, the District Manager may include the information contained in a report submitted under paragraph 15.02 in any reports prepared by the Ministry of Forests for public review.

15.04 Subject to the *Freedom of Information and Protection of Privacy Act*, the District Manager will not disclose information provided in confidence by the Licensee in a report submitted under paragraph 15.02.

16.00 ACCESS

16.01 Nothing in this Licence authorizes the Licensee to in any way restrict the Crown's right of access to Schedule B Land.

16.02 The District Manager may

(a) enter onto Schedule A land, and

(b) use roads owned or deemed to be owned by the Licensee,

for the purpose inspecting the Licensee's activities under or associated with this Licence, and for the purpose of fulfilling an obligation or exercising a right under this Licence.

17.00 LIABILITY AND INDEMNITY

17.01 The Licensee must indemnify the Crown against and save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses faced, incurred or suffered by the Crown as a result, directly or indirectly, of any act or omission of

(a) the Licensee,

(b) an employee or agent of the Licensee,

(c) a contractor of the Licensee who engages in any activity or carries out any operation, including but not restricted to harvesting operations, under or associated with this Licence or a road permit, or

(d) any other person who on behalf of or with the consent of the Licensee engages in any activity or carries out any operation, including but not restricted to harvesting operations, under or associated with this Licence or a road permit.

17.02 For greater certainty, the Licensee has no obligation to indemnify the Crown under paragraph 17.01 in respect of any act or omission of

(a) an employee, agent or contractor of the Crown, in the course of carrying out his or her duties as employee, agent or contractor of the Crown, or

(b) a person, other than the Licensee, to whom the Crown has granted the right to use or occupy Crown land, in the course of exercising those rights.

17.03 Amounts taken under Part 12.00 from the deposit or a special deposit, and any payments required under Part 6.00, are in addition to and not in substitution for any other remedies available to the Crown in respect of a default of the Licensee.

18.00 LIMITATION OF LIABILITY

18.01 The Crown is not liable to the Licensee for injuries, losses, expenses, or costs incurred or suffered by the Licensee as a result, directly or indirectly, of an act or omission of a person who is not a party to this Licence, including but not restricted to an act or omission of a person disrupting, stopping or otherwise interfering with the Licensee's operations under this Licence by road blocks or other means.

19.00 TERMINATION

19.01 If this Licence expires and is not replaced under Section 46 of the *Forest Act*, or is surrendered, cancelled or otherwise terminated,

(a) all Cutting Permits will immediately terminate, and

(b) title to all

(i) improvements, including roads and bridges, constructed by the Licensee under the authority of this Licence, and

(ii) timber, including logs and special forest products, harvested under the authority of this Licence and are still located on Crown land,

will vest in the Crown, without right of compensation to the Licensee, and

(c) the Licensee may continue to enter Schedule B Land for a period of one month after the expiry or termination of this Licence for the purpose of removing the Licensee's property.

19.02 The Licensee must not remove any improvements or timber referred to in paragraph 19.01(b), unless authorized to do so by the District Manager.

19.03 If a road permit expires or is surrendered, cancelled or otherwise terminated, all improvements, including roads and bridges, constructed under the authority of the road permit will vest in the Crown, without right of compensation to the Licensee, unless otherwise specified in the road permit.

19.04 The Licensee must not remove any improvements vesting in the Crown under paragraph 19.03, unless authorized to do so by the District Manager.

19.05 If the Licensee commits an act of bankruptcy, makes a general assignment for the benefit of its creditors or otherwise acknowledges its insolvency, the District Manager may, in a notice given to the Licensee, cancel this Licence.

20.00 NOTICE

20.01 A notice given under this Licence must be in writing.

20.02 A notice given under this Licence may be

(a) delivered by hand,

(b) sent by mail, or

(c) subject to paragraph 20.05, sent by facsimile transmission,

to the address or facsimile number, as applicable, specified on the first page of this Licence, or to such other address or facsimile number as is specified in a notice given in accordance with this Part.

20.03 If a notice is given under this Licence, it is deemed to have been given

(a) if it is given in accordance with subparagraph 20.02(a), on the date it is delivered by hand,

(b) if it is given in accordance with subparagraph 20.02(b), subject to paragraph 20.04, on the eighth day after its deposit in a Canada Post Office at any place in Canada, and

(c) if it is given in accordance with subparagraph 20.02(c), subject to paragraph 20.05, on the date it is sent by facsimile transmission.

20.04 If, between the time a notice is mailed in accordance with subparagraph 20.02(b) and the time it is actually received, there occurs a postal strike, lockout or slowdown that might reasonably affect delivery of the notice, the notice is not deemed to be given until the party actually receives it.

20.05 If a notice is sent by facsimile transmission, the party sending the notice must take reasonable steps to ensure that the transmission has been successfully completed.

21.00 MISCELLANEOUS

21.01 This Licence will enure to the benefit of, and be binding on, the parties and their respective heirs, executors, successors and permitted assigns.

21.02 Any power conferred or duty imposed on the District Manager under this Licence may be exercised or fulfilled by any person authorized to do so by the District Manager.

21.03 The Schedules to this Licence are deemed to be part of this Licence.

21.04 The laws of British Columbia will govern the interpretation of this Licence and the performance of the parties' obligations under this Licence.

21.05 The Licensee must comply with the requirements of all legislation applicable to activities or operations under or associated with this Licence, including but not restricted to the *Workers Compensation Act*, *Health Act*, and *Employment Standards Act*, and the regulations made under those Acts.

21.06 At the request of the District Manager, the Licensee must survey and define on the ground any or all boundaries of the Licence Area.

21.07 Nothing in this Licence entitles the Licensee to have an area of Schedule B Land replaced with another area, or to have harvesting rights awarded under another agreement under the *Forest Act*, in the event timber is damaged or destroyed by pests, fire, wind or other natural causes, or an area of land is deleted from the Licence Area under the Acts or regulations referred to in paragraph 10.01, or under any other Act or regulation.

22.00 INTERPRETATION

22.01 In this Licence, unless the context otherwise requires

(a) "aboriginal activities" means cultural, spiritual, religious, and sustenance activities associated with traditional aboriginal life, including aboriginal rights,

(b) "aboriginal people" includes registered and non-registered Indians, Inuits and Metis,

(c) "average stumpage rate charged for sawlogs" means the total stumpage charged for sawlogs divided by the total volume of sawlogs,

(d) "avoidable" in respect of residue or waste means timber that does not fall within the definition of unavoidable,

(e) "Cutting Permit" means a Cutting Permit issued under this Licence, or a Cutting Permit referred to in paragraph 9.16,

(f) "deposit" means the deposit referred to in paragraph 12.02,

(g) "*Forest Act*" means the *Forest Act*, R.S.B.C. 1996, c. 157, as amended from time to time, or the successor to this Act, if it is repealed,

(h) "forest development plan" means a forest development plan referred to in the *Forest Practices Code of British Columbia Act* that is approved by the District Manager in respect of this Licence,

(i) "*Forest Practices Code of British Columbia Act*" means the *Forest Practices Code of British Columbia Act*, S.B.C. 1996, c. 159, as amended from time to time, or the successor to this Act, if it is repealed,

(j) "Licence Area" means Schedule A Land and Schedule B Land,

(k) "logging plan" means a logging plan referred to in the *Forest Practices Code of British Columbia Act* that is approved by the District Manager in respect of this Licence,

(l) "manual" means a guideline, guidebook, policy, procedure, or manual set or approved by the Ministry for preparation of a management plan or the preparation of inventories and other information to be included in a management plan,

(m) "Minister" means the minister responsible for administering the *Forest Act*,

(n) "person" includes a corporation and a partnership, unless the context indicates otherwise,

(o) "pest" means any animal, insect, fungus, bacteria, virus, nematode, or other organism which is detrimental to effective forest management,

(p) "primary logging" means felling timber and yarding or forwarding the timber to central landings or road-sides, but does not include removing the timber from these landings or road-sides,

(q) "residue" means timber of a species and grade specified in a Cutting Permit as optional utilization that is not utilized by the Licensee, excluding timber which, under the ***Provincial Logging Residue and Waste Measurement Procedures Manual***, dated January 1, 1994, as amended from time to time, is not assessed as residue,

(r) "road permit" means a road permit entered into under the *Forest Act* which provides access to timber harvested, or to be harvested, under this Licence,

(s) "Schedule A Land" means the private land described in the Schedule "A" to this Licence,

(t) "Schedule B Land" means the Crown land described in Schedule "B" to this Licence,

(u) "silviculture prescription" means a silviculture prescription referred to in the *Forest Practices Code of British Columbia Act* that is approved by the District Manager in respect of this Licence,

(v) "special deposit" means a special deposit referred to in paragraph 12.11,

(w) "special use permit" means a special use permit issued under the *Forest Act* before June 15, 1995, or under the *Forest Practices Code of British Columbia Act* on or after June 15, 1995, to authorize the Licensee to use or occupy Crown land within the Licence Area,

(x) "unavoidable" in respect of residue or waste means timber that was not felled, or was not bucked or utilized, in accordance with the specifications set out in a Cutting Permit, because the timber

(i) is inaccessible or physically obstructed,
(ii) could not be felled, bucked or utilized safely, or
(iii) could not be felled, bucked or utilized because of the restriction referred to in paragraph 5.06,

(y) "utilize" means to remove timber from the Licence Area for use or processing elsewhere,

(z) "waste" means

(i) timber referred to in paragraph 5.01(a) that is not felled in accordance with the requirements of that paragraph;
(ii) timber referred to in paragraph 5.01(b) that is not bucked in accordance with the requirements of that paragraph; and
(iii) timber referred to in paragraph 5.01(c) that is not utilized in accordance with the requirements of that paragraph.

22.02 Unless otherwise provided in paragraph 22.01, if a word or phrase used in this Licence is defined in the *Forest Act* or the *Forest Practices Code of British Columbia Act* the definition in the Act applies to this Licence, and where the word or phrase in the Act is replaced by a new word or phrase, this Licence is deemed to have been amended accordingly.

22.03 If a provision of the *Forest Act* or the *Forest Practices Code of British Columbia Act* referred to in this Licence is renumbered, the reference in this Licence is to be construed as a reference to the provision as renumbered.

22.04 In this Licence, unless the context otherwise requires,

(a) the singular includes the plural and the plural includes the singular, and

(b) the masculine, the feminine and the neuter are interchangeable.

22.05 This Licence is divided into parts, paragraphs, subparagraphs, clauses and subclauses, illustrated as follows:

1.00 part,
1.01 paragraph,
(a) subparagraph,
(i) clause,
(A) subclause;

and a reference to a subparagraph, clause or subclause is to be construed as a reference to a subparagraph, clause or subclause of the paragraph, subparagraph or clause, as the case may be, in which the reference occurs.

IN WITNESS WHEREOF this Licence has been executed by the District Manager and the Licensee on the date first written above.

SIGNED by the District Manager on behalf of Her Majesty the Queen in Right of the Province of British Columbia in the presence of:

J Perrin

Acting for

Greg Hemphill
District Manager
Sunshine Coast Forest District

THE COMMON SEAL of the Licensee was affixed in the presence of:

c/s

.....

.....

(or)

SIGNED by the Licensee in the presence of:

Lois Taylor

HERIOT BAY B.C.

HARPER LOGGING LTD.

A. Graham

(Licensee)

SCHEDULE "C"

SPECIAL CONDITIONS AND REQUIREMENTS

N/A

Province of British Columbia | Ministry of Forests

WOODLOT LICENCE

No. 046

THIS LICENCE dated for reference the 1 day of January, 19 93

BETWEEN:

THE DISTRICT MANAGER, on behalf of
HER MAJESTY THE QUEEN in right of
the Province of British Columbia

(the "Licensor")

AND:

Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

(the "Licensee")

WHEREAS:

(a) the Licensee has applied for a Licence under Section 41 of the *Forest Act,* and the Crown has approved a Management & Working Plan for the proposed Woodlot Licence, or
(b) the Licensee has requested a replacement Licence under Section 43 of the *Forest Act,*

THE PARTIES AGREE AS FOLLOWS:

1.00 GRANT OF RIGHTS, LICENCE AREA AND TERM

1.01 Subject to the *Forest Act* and Regulations and to this Licence, and in consideration of the Licensee's covenants in this Licence, the Licensor grants to the Licensee:
(a) the right, during the term of this Licence, to enter and occupy Crown land in the Licence Area for the purpose of managing its timber resources and timber growth capability according to this Licence and the *Forest Act,*
(b) the right, during the term of this Licence, to manage Crown land in the Licence Area according to this Licence and the *Forest Act,* and
(c) subject to the provisions of the *Forest Act,* the exclusive right during the term of this Licence to harvest timber, according to the Management & Working Plan, Pre-Harvest Silviculture Prescriptions and Cutting Permits, from Crown land and private land in the Licence Area.

1.02 The Licence Area is:
(a) the private land described and/or shown on the sketch dated January 21, 1988 and marked Schedule "A" to this Licence; and
(b) the Crown land described and/or shown on the sketch dated January 21, 1988 and marked Schedule "B" to this Licence, but excludes Crown land deleted, from time to time, under the *Forest Act.*

1.03 The term of this Licence will be 15 years and will, notwithstanding the date of execution and delivery of this Licence, be conclusively deemed to commence on January 1, 19 93, and will end on December 31, 2007 (the "Term").

1.04 This Licence is replaceable/~~not replaceable~~ under the *Forest Act.*

2.00 MANAGEMENT & WORKING PLANS

2.01 The Licensee will submit, for the approval of the District Manager, Management & Working Plans as and when required by the Licensor in notices given, from time to time, to the Licensee.

2.02 A Management & Working Plan, in addition to being prepared in accordance with Section 42(f) of the *Forest Act,* will contain such information as required by the District Manager concerning the management of the Licence Area.

5.04 If the Deposit is reduced pursuant to paragraph 5.03, the Licensee shall forthwith pay to the Crown in cash or in securities acceptable to the Licensor, an amount of money sufficient to maintain the Deposit in the amount specified under paragraph 5.02.

5.05 Where the District Manager considers that timber harvesting or related operations proposed to be carried out under a Cutting Permit or Road Permit are likely to cause damage to improvements or chattels of a lawful occupier or lawful user of Crown land, the Licensee may be required, in the Cutting Permit or Road Permit, to:
(a) prevent the damage from occurring;
(b) pay reasonable compensation to the occupier or user in respect of damage that occurs; and
(c) pay to the Crown a Special Deposit, in cash or in securities acceptable to the Licensor, in an amount determined by the Licensor to be adequate security for the performance of the Licensee's obligations under subparagraphs (a) and (b).

5.06 If the Licensee under a Cutting Permit or Road Permit referred to in paragraph 5.05 fails to
(a) prevent the damage from occurring; and
(b) pay reasonable compensation, as determined by the Regional Manager or District Manager, to the occupier or user,
the Licensor may, after at least 30 days' notice to the Licensee, pay reasonable compensation to the occupier or user from the Deposit, Special Deposit or both, and for this purpose a security included in the Deposit, Special Deposit or both may be sold.

5.07 The Licensor will refund to the Licensee:
(a) the Deposit (minus deductions made under paragraphs 5.03 and 5.06) when this Licence terminates, expires and is not replaced under Section 43 of the *Forest Act* or is cancelled; and
(b) a Special Deposit (minus deductions made under paragraph 5.06) when the Cutting Permit or Road Permit referred to in paragraph 5.05 expires.

5.08 If this Licence is cancelled, terminates or expires and is not replaced under Section 43 of the *Forest Act*, the Licensor may retain a reasonable portion of the Deposit and the Special Deposit until such time as all obligations of the Licensee under this Licence and the *Forest Act* are fulfilled.

5.09 If this Licence is disposed of otherwise than bona fide by way of security, the Deposit and any Special Deposit shall be deemed to be assigned for the benefit of the person taking the disposition of this Licence, and the Crown shall not be bound to account to the Licensee for them.

.00 **ROADS**

6.01 The locations, specifications and standards of all roads to be built on Crown land by the Licensee to provide access to or in the Licence Area shall be:
(a) except branch or spur roads on land that is subject to a Cutting Permit, included in Road Permits entered into under the *Forest Act* between the District Manager and the Licensee to access timber harvested under this Licence; and
(b) consistent with the Management & Working Plan in effect from time to time.

6.02 The Regional Manager, District Manager and Forest Officers may at reasonable times use roads on the Licence Area and enter Schedule "A" land to carry out their responsibilities in the Licence Area.

6.03 The Licensee shall not restrict public access on Schedule "B" land except during periods of hazard, including fire hazard and hazard due to active harvesting and related operations.

.00 **TIMBER PROCESSING**

7.01 The Licensee shall not own and shall not acquire a timber processing facility or control of a corporation that owns a timber processing facility in the Province.

.00 **FORESTRY AND SILVICULTURE**

8.01 The Licensee will not post a sign concerning forestry practises or the development and maintenance of recreation sites or trails under this Licence unless the sign acknowledges the Crown's contributions to such practises or development and maintenance.

8.02 Increases in the allowable Annual Cut attributable to incremental silviculture undertaken by the Licensee at its expense will accrue to the Licensee.

8.03 If, under this Licence or the *Forest Act*, the Licensee is required to develop or maintain a recreation site or trail on Schedule "B" land, the Licensee may enter the Schedule "B" land and develop or maintain the recreation site or trail.

.00 **LIABILITY AND INDEMNITY**

9.01 The Licensee will indemnify the Crown against and save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses faced, incurred or suffered by the Crown as a result, directly or indirectly, of wrongful acts and omissions on the Licence Area of:
(a) the Licensee;
(b) an employee of the Licensee;
(c) a person who performs work directly or indirectly under contract with the Licensee; and
(d) any other person who carries on timber harvesting or related operations on the Licence Area with the consent of the Licensee, except:
(i) a servant or agent of the Crown, or
(ii) a person who uses or occupies the Licence Area under rights granted by the Crown.

12.04 Where a notice is required under this Licence, the notice shall be in writing and shall be deemed to have been given if delivered to, or if sent by prepaid registered m ddressed to:

the Licensor: Ministry of Forests
7077 Duncan Street
Powell River, British Columbia
V8A 1W1

and

the Licensee: Harper Logging Ltd.
Box 299
Heriot Bay, British Columbia
V0P 1H0

12.05 Where, between the time a notice is mailed under paragraph 12.04 and the time it is actually received by a party, there occurs a postal strike, lockout or slowdown that might reasonably affect delivery of the notice, the notice shall not be deemed to be given until the party actually receives it.

12.06 Either party may, from time to time, advise the other by notice in writing of any change of address of the party giving such notice, and from and after the giving of such notice the address therein specified will, for purposes of the preceding paragraph, be deemed to be the address of the party giving such notice.

12.07 Any notice, report, direction or document transmitted by telex or facsimile from either party or the Minister will be conclusively deemed validly given to and received by the intended recipient when so transmitted.

12.08 This Licence will enure to the benefit of, and be binding on, the parties and their respective successors and permitted assigns.

12.09 If any of the following documents create covenants, obligations or agreements on behalf of the Licensee, those covenants, obligations and agreements shall form part of this Licence as if set out at length in it:
(a) a Management & Working Plan;
(b) a Pre-Harvest Silviculture Prescription;
(c) a Cutting Permit;
(d) a Road Permit entered into to access timber harvested under this Licence; and

12.10 If any of the documents listed in paragraph 12.09 conflict with or are inconsistent with this Licence, this Licence shall govern to the extent of the conflict or inconsistency.

3.00 INTERPRETATION

13.01 If a word or phrase used in this Licence is defined in the *Forest Act* or Regulations, the definition in the *Forest Act* or Regulations applies to this Licence.

13.02 In this Licence, notwithstanding paragraph 13.01, unless the context otherwise requires:
(a) "Cutting Permit" means a Cutting permit issued under paragraph 3.02;
(b) "Deposit" means the Deposit required to be maintained by the Licensee under paragraph 5.02;
(c) "District Manager" means a District Manager of a Forest District in which the Woodlot Licence Area, or part of it, is situated;
(d) "five-year cut control period" means the five-year period beginning January 1 of the year when the term of this Licence begins, unless otherwise designated by the Regional Manager, and each succeeding five-year period;
(e) "*Forest Act* " means the *Forest Act,* R.S. 1979, Ch. 140, as amended from time to time;
(f) "Forest Service" means the forest service continued under the *Ministry of Forests Act;*
(g) "harvest" includes entry on the Licence Area for the purpose of cutting and removing timber;
(h) "Licence Area" means the area described in paragraph 1.02;
(i) "Licensor" includes a person authorized by the Licensor where the context of this Licence, the *Forest Act* and the Regulations so permit;
(j) "Management & Working Plan" means a management and working plan approved under paragraph 2.03;
(k) "Person" includes a corporation and a partnership;
(l) "Pre-Harvest Silviculture Prescription" means pre-harvest silviculture prescription prepared and approved in accordance with Part 10.1 of the *Forest Act;*
(m) "Regional Manager" means the Regional Manager appointed, under the *Ministry of Forests Act,* for the Forest Region in which the Licence Area, or part, is situated;
(n) "Regulations" means regulations made under the *Forest Act* and includes amendments to them;
(o) "Road Permit" means a Road Permit entered into between the District Manager and the Licensee, under the *Forest Act,* to provide access to or in the Licence Area;
(p) "Schedule "A" land" means the private land described in Schedule "A";
(q) "Schedule "B" land" means the Crown land described in Schedule "B", except for any part thereof deleted from time to time under the *Forest Act;* and
(r) "Special Deposit" means the Deposit required to be maintained by the Licensee under subparagraph 5.05(c).

...icensee shall observe, a... by and comply with all laws, bylaws, orders, d... ...tions, ordinances and regulatiosn of any and all ...mpetent governmental authorities in any way affecting the Licence Area or the use and occupation of it by the Licensee.

13.04 Each Schedule attached to this Licence is an integral part of this Licence, as if set out at length in the body of this Licence.

13.05 In this Licence, unless the context otherwise requires:
(a) the singular includes the plural and the plural includes the signular;
(b) the masculine, the feminine and the neuter are interchangeable; and
(c) a reference to a series of numbers or letters by the first and last numbers or letters of the series includes the number or letter referred to first and the number or letter referred to last.

13.06 This Licence is divided into parts, paragraphs, subparagraphs, clauses and subclauses, illustrated as follows:

1.00 part,
1.01 paragraph,
(a) subparagraph,
(i) clause,
A. subclause,

and a reference to a subparagraph, clause or subclause shall be construed as a reference to the subparagraph, clause or subclause of the paragraph, subparagraph or clause, as the case may be, in which the reference occurs.

13.07 Where a section of the *Forest Act* referred to in this Licence is renumbered, the reference in this Licence shall be construed to be the section as renumbered.

This Licence has been executed by the Licensor and the Licensee on Apr 15th 1993.

SIGNED, SEALED AND DELIVERED by the District Manager on behalf of HER MAJESTY THE QUEEN in right of the Province of British Columbia in the presence of:

J Perrin

G Hemphill

Greg Hemphill, District Manager
Sunshine Coast Forest District

Vancouver Forest Region

THE COMMON SEAL of the Licensee was affixed in the presence of:

Harper Graham

Authorized Signatory

Pres.

Title

c/s

SIGNED, SEALED AND DELIVERED by the Licensee in the presence of:

Authorized Signatory

Title

Province of British Columbia
Ministry of Forests

MAP OF ▸ WOODLOT LICENCE 046
SCHEDULE 'A' LAND

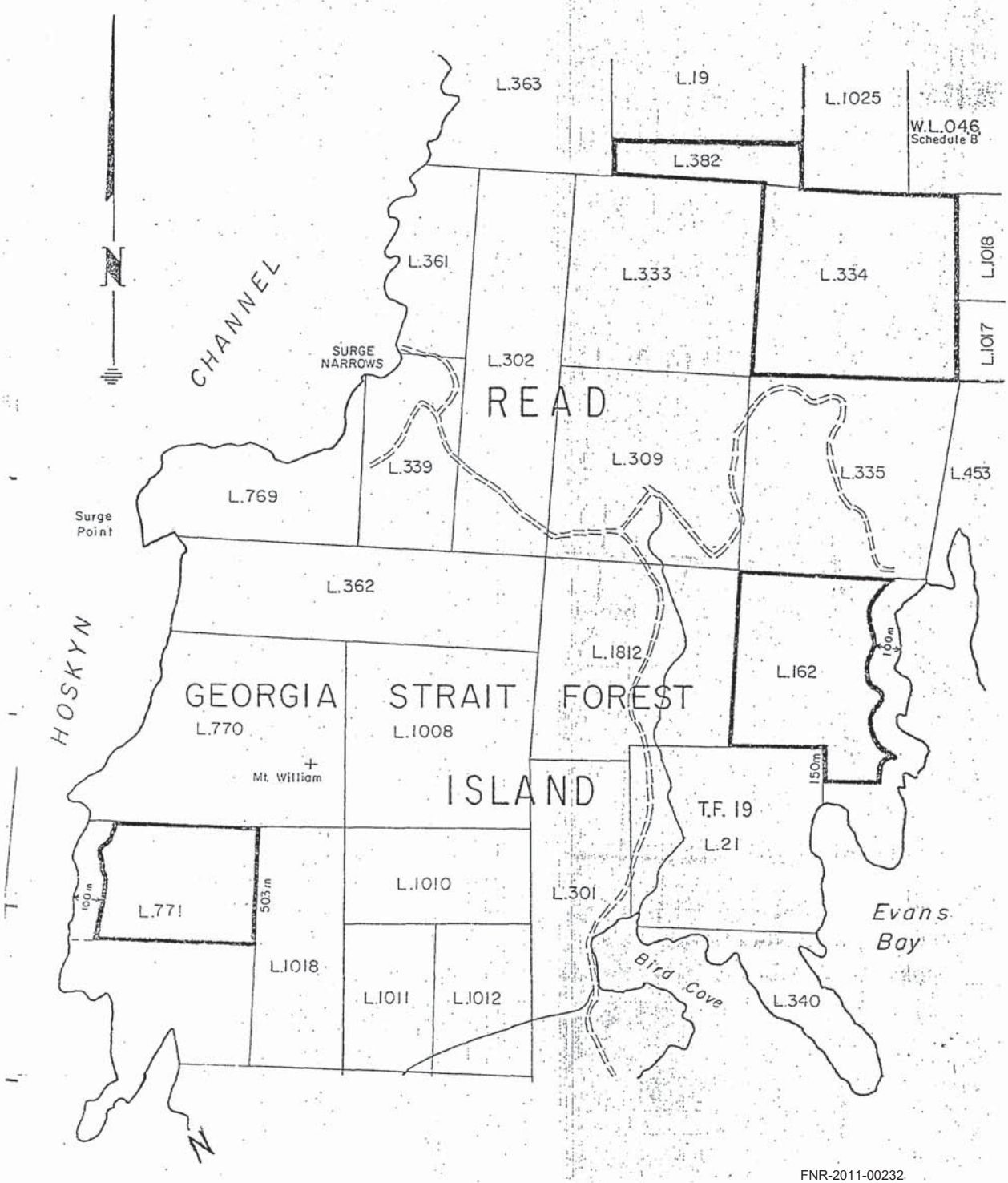
EXHIBIT 'A'

UTM.	Zone	East	North	Reg	Compt.	L
Grid	10	351200	5566000	30	10	

Date 88-01-21
Ref. Map 92K/3g,h
Base Used 92K025
Scale 1: 20 000
Area 165 hectares

FOREST REGION ▸ 01 VANCOUVER
LAND DISTRICT ▸ 51 SAYWARD
DISTRICT ▸ 15 POWELL RIVER
OUTLINE ▸

MANAGEMENT UNIT		TIMBER SUPPLY AREA		PULPWOOD AGREEMENT	CASCADES
Type	0-P.S.Y.U.	Number	39-SUNSHINE COAST		
Number	64-QUADRA	Block	52-POWELL RIVER		East
Block		Sub-B			West C



Drawn by P.R.L.

Province of British Columbia
Ministry of Forests

WOODLOT LICENCE 046
SCHEDULE B LAND

EXHIBIT 'A'

MAP OF ▸

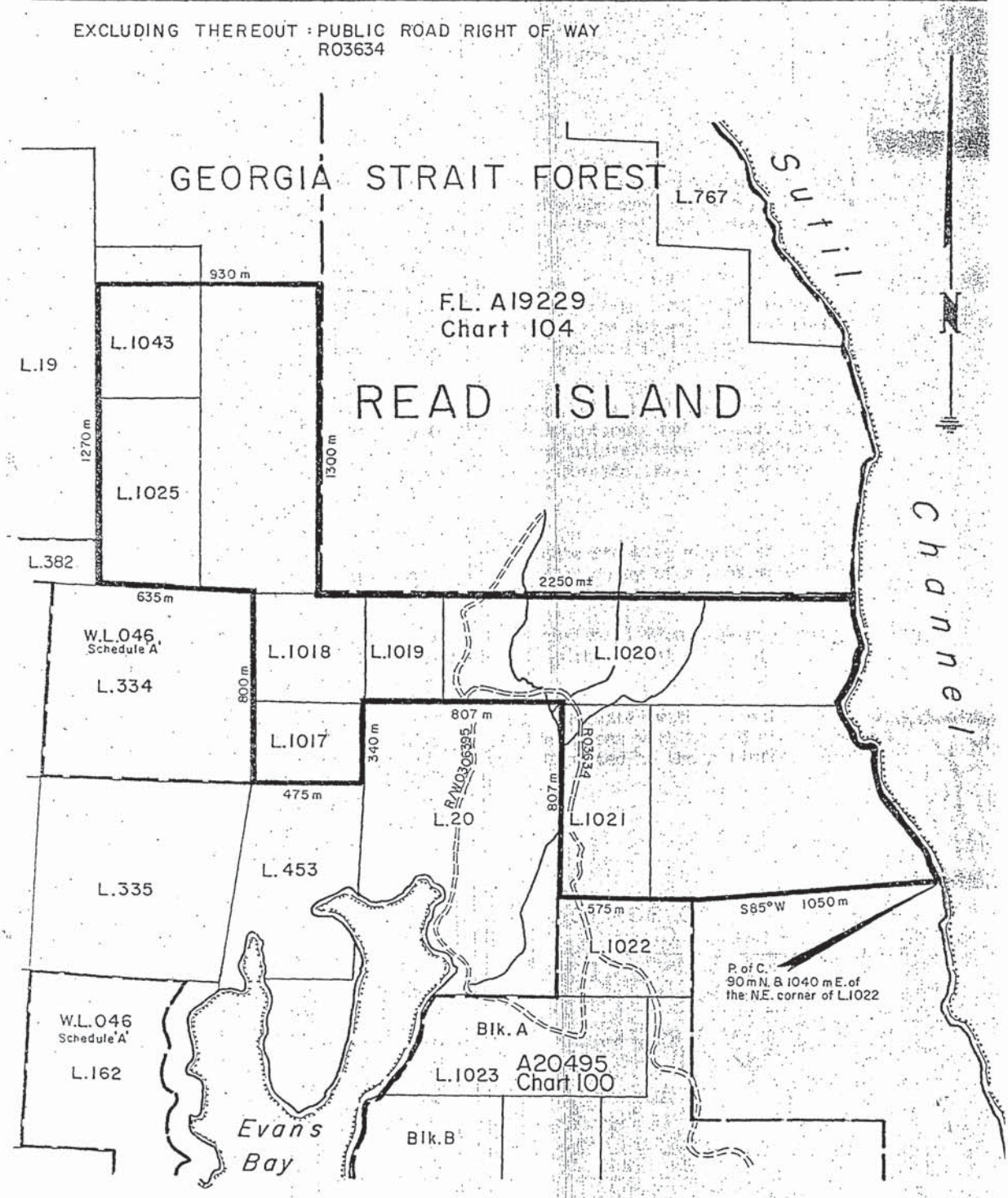
U.T.M. Grid	Zone	East	North	Reg	Compt.	L
	10	353600	5565500	30	10	

Date 88-01-21
Ref. Map 92K/3h
Base 92K.025
Scale 1: 20,000
Area 364 hectares

FOREST REGION ▸ 01 VANCOUVER
LAND DISTRICT ▸ 51 SAYWARD
DISTRICT ▸ 15 POWELL RIVER
OUTLINE ▸ ———

MANAGEMENT UNIT		TIMBER SUPPLY AREA		PULPWOOD AGREEMENT	CASCADES
Type	0-P.S.Y.U.	Number	39-SUNSHINE COAST		
Number	64-QUADRA	Block	52-POWELL RIVER		East
Block		Sub-B			West C

EXCLUDING THEREOUT : PUBLIC ROAD RIGHT OF WAY R03634



Drawn by P.R.L.

Province of British Columbia
Ministry of Forests

WOODLOT LICENCE No. 046

THIS LICENCE, made as of January 1, 1988,

BETWEEN:

THE DISTRICT MANAGER, on behalf
OF HER MAJESTY THE QUEEN IN RIGHT OF
THE PROVINCE OF BRITISH COLUMBIA,
7077 Duncan Street
Powell River, B.C.
V8A 1W1

(the "Licensor")

OF THE FIRST PART,

AND: Harper Logging Ltd.
575 Ash Street
Campbell River, B.C.
V9W 5L8

(the "Licensee")

OF THE SECOND PART,

WITNESSES that, under section 41 of the *Forest Act*, the parties agree as follows:

1.00 GRANT OF RIGHTS, LICENCE AREA AND TERM

1.01 Subject to this Licence and in consideration of the Licensee's covenants in it, the Licensor grants to the Licensee

(a) the right during the term of this Licence to enter and occupy Crown land in the licence area for the purpose of managing it according to management and working plans,

(b) the right during the term of this Licence to manage Crown land in the licence area according to management and working plans, and

(c) subject to the *Forest Act*, the exclusive right during the term of this Licence to harvest timber from Crown land in the licence area, according to management and working plans and from areas specified in cutting permits issued from time to time under this Licence.

1.02 The licence area is

(a) the private land described and or shown on the sketch dated **January 21, 1988** and marked Schedule A to this licence; and

(b) the Crown land described and or shown on the sketch dated **January 21, 1988** and marked Schedule B to this licence, but excludes Crown land deleted, from time to time, under the *Forest Act*.

1.03 The term of this Licence is **15** years, beginning **January 1,** . 19 **88**

1.04 This Licence may be amended by agreement of the parties by:

(a) adding private land owned or leased by the Licensee; or

(b) deleting private land described in Schedule A where

(i) the private land is required for a use that is more valuable than timber production; and

(ii) the deletion would not, in the Regional or District Manager's opinion, unreasonably disturb the management of the licence area for timber production.

2.00 MANAGEMENT AND WORKING PLANS

2.01 The Licensee will submit for the approval of the District Manager proposed management and working plans as and when required by the Licensor in notices given, from time to time, to the Licensee.

2.02 A proposed management and working plan shall be in such form and shall contain such information as the District Manager requires concerning the development, protection, restoration and improvement of the forest resources on the licence area.

2.03 The District Manager will approve, from time to time, management and working plans acceptable to him that specify

(a) a volume of timber to be harvested from the licence area during each year, or other period determined by the Licensor, of the term of this Licence, and the portion of such volume that the Licensor determines is attributable to Schedule B land, and

(b) measures to be taken by the Licensee for the development, protection, restoration and improvement of the forest resources on the licence area.

2.04 A management and working plan shall be deemed to be part of, and shall be consistent with this Licence.

3.00 CUTTING PERMITS

3.01 Without the written consent of the District Manager the Licensee will not cut timber on the licence area except under a cutting permit issued under this Licence, or under a road permit.

3.02 On application by the Licensee the District Manager will, from time to time, issue cutting permits to the Licensee, to enable the Licensee to harvest timber from the licence area within the limits specified in paragraph 4.02 and according to the management and working plan then in effect.

3.03 A cutting permit shall be deemed to be a part of this Licence, and subject to the management and working plan then in effect, shall

(a) authorize timber to be harvested under this Licence from a specific area of land in the licence area,
(b) be for a term, not exceeding 5 years,
(c) provide for the payment of stumpage rates applicable to timber harvested under it and procedures for varying the stumpage rates, where stumpage is payable in respect of the timber,
(d) prescribe utilization standards, other cutting specifications and forest practices to be followed in timber harvesting operations carried on under it,
(e) prescribe the specifications and standards of roads to be built on the land subject to the cutting permit,
(f) set out procedures for assessing timber wasted or damaged by the Licensee and damages payable to the Crown for timber wasted or damaged,
(g) specify a timber mark to be used in conjunction with the timber harvesting operations carried on under it, and
(h) include such other provisions, consistent with this Licence and the *Forest Act*, as the Licensor determines.

3.04 The Licensee will define on the ground the boundaries of the areas authorized for harvesting under a cutting permit, unless the District Manager determines otherwise.

3.05 Timber cut under this Licence shall be marked according to the *Forest Act* and cutting permits, and shall, subject to the *Forest Act*, be scaled according to the *Forest Act*.

4.00 CUT CONTROL

4.01 In this part the "volume of timber harvested" during a period of time means the total of

(a) the volume of timber cut under this Licence and under road permits, and
(b) that volume of timber that is estimated to be wasted or damaged under cutting permits issued pursuant to this Licence and under road permits, and
(c) the volume of timber cut during the period by the Licensee in the licence area, but not authorized for cutting under this Licence,

that is billed to the Licensee in statements issued on behalf of the Crown during the period, and in this paragraph "Licence" includes a Farm Woodlot Licence and a Woodlot Licence replaced by this Licence.

4.02 The Licensee will not permit the volume of timber harvested during a 5 year cut control period

(a) to be more than 110%, or
(b) to be less than 90%

of the total volume of timber authorized under this Licence to be harvested during the 5 year cut control period.

4.03 If the volume of timber harvested during a 5 year cut control period exceeds 110% of the total volume of timber authorized under this Licence to be harvested during the 5 year cut control period

(a) the Licensee will pay to the Crown, as liquidated damages, an amount of money equal to 2 times

(i) the volume exceeding 110% of the total volume authorized under this Licence to be harvested during the 5 year cut control period, multiplied by

(ii) the average stumpage rate applicable to timber harvested under this Licence, that is billed to the Licensee in statements issued on behalf of the Crown during the last year in which stumpage was payable in respect of timber harvested under this Licence, and

(b) the Licensor will consider the excess volume in specifying harvesting rates in the following management and working plan.

5.00 FINANCIAL AND DEPOSITS

5.01 In addition to other money payable by the Licensee under the *Forest Act* and under this Licence, but without duplication, the Licensee will pay to the Crown, immediately on receipt of a statement issued on behalf of the Crown,

(a) annual rent under the *Forest Act*,

(b) in respect of timber cut under this Licence from Schedule B land, stumpage at rates determined by a forest officer and varied under cutting permits,

(c) scaling fees determined under the regulations, and

(d) waste and damage assessments made under cutting permits.

5.02 During the term of this Licence the Licensee will maintain with the Crown a deposit in an amount prescribed in the regulations, in cash or in certified cheque, as security for the Licensee's performance of its obligations under this Licence and under the *Forest Act*.

5.03 If the Licensee fails to pay money it is required to pay to the Crown under the *Forest Act*, this Licence, a road permit or a cutting permit

(a) the payment may, after at least 30 days' notice has been given to the Licensee, be taken from the deposit maintained under paragraph 5.02, and

(b) the Licensee will forthwith pay to the Crown, in cash or in certified cheque, an amount of money sufficient to maintain the deposit in the amount specified under paragraph 5.02.

5.04 Where the District Manager considers that timber harvesting or related operations that are proposed to be carried out under a cutting permit or road permit are likely to cause damage to the improvements or chattels of a lawful occupier or lawful user of Crown land, the Licensee may be required in the cutting permit or road permit

(a) to prevent the damages from occurring,

(b) to pay reasonable compensation to the occupier in respect of damage that occurs, and

(c) to pay to the Crown a special deposit, in cash or in negotiable securities acceptable to the Minister, in an amount determined by the Licensor to be adequate security for the Licensee's performance of requirements under subparagraphs (a) and (b).

5.05 Where under a cutting permit or road permit referred to in paragraph 5.04 the Licensee

(a) fails to prevent the damage from occurring, and

(b) fails to pay reasonable compensation to the occupier or user,

the occupier or user may, after at least 30 days' notice has been given to the Licensee, be paid reasonable compensation, on the Licensee's behalf, out of a deposit paid under paragraph 5.04 or maintained under paragraph 5.02, or both, and for that purpose a security included in either deposit, or both of them, may be sold.

5.06 The Licensor will refund to the Licensee

(a) the deposit maintained under paragraph 5.02 (minus deductions made under paragraphs 5.03 and 5.05), when this Licence terminates, expires and is not replaced under section 43 of the *Forest Act*, or if this Licence is cancelled, and

(b) a special deposit paid under paragraph 5.04 (minus deductions made under paragraph 5.05), when the cutting permit or road permit referred to in paragraph 5.04 expires.

5.07 If this Licence is disposed of, within the meaning of the *Interpretation Act*, otherwise than bona fide by way of security, deposits held under this Licence shall be deemed to be assigned to the person taking the disposition of this Licence and the Crown shall not be bound afterward to account for the deposits to the person making the disposition.

6.00 ROADS AND ACCESS

6.01 The locations, specifications and standards of all roads to be built on Crown land by the Licensee to provide access to or in the licence area,

(a) shall, except branch or spur roads on land that is subject to a cutting permit, be included in road permits entered into under the *Forest Act* between the District Manager and the Licensee, and

(b) shall be consistent with management and working plans in effect from time to time.

6.02 The District Manager and Forest Officers may at reasonable times

(a) use roads on the licence area owned, or deemed to be owned, by the Licensee, and

(b) enter private land in the licence area,

to carry out their responsibilities in the licence area.

7.00 TIMBER PROCESSING

7.01 The Licensee does not own and will not acquire a timber processing facility or control of a corporation that owns a timber processing facility in the Province.

8.00 LIABILITY AND INDEMNITY

8.01 The Licensee will indemnify the Crown against and will save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses faced, incurred or suffered by the Crown as a result, directly or indirectly, of wrongful acts and omissions on the licence area of the Licensee, and

(a) an employee of the Licensee,

(b) a person who performs work directly or indirectly under contract with the Licensee, and

(c) any other person who carries on timber harvesting or related operations on the licence area with the consent of the Licensee, except

(i) a servant or agent of the Crown, or

(ii) any person who uses or occupies the licence area under rights granted by the Crown

acting within the scope of his duties.

8.02 Paragraph 8.01 does not apply to an act or omission that is a reasonable response to, and complies with, an order made on behalf of the Crown.

8.03 Where the Licensee fails to perform an obligation it is required to perform under this Licence, a management and working plan, a cutting permit, or a road permit

(a) the District Manager or a Forest Officer authorized by him may perform the obligation on the Licensee's behalf, and

(b) the Licensee will on demand pay the Crown an amount of money equal to the reasonable costs incurred under subparagraph (a) to perform the obligation.

8.04 Liquidated damages paid by the Licensee to the Crown under this Licence

(a) shall be in addition to, and not in substitution for, and

(b) shall not, if accepted on behalf of the Crown, be deemed to be a waiver of, any remedy available under the *Forest Act* to the Crown, the Minister, the District Manager or a Forest Officer, in respect of the default of the Licensee that led to the payment of liquidated damages.

8.05 The Crown will indemnify the Licensee against and will save it harmless from all claims, demands, suits, actions, causes of action, costs, expenses and losses faced, incurred or suffered by the Licensee as a result, directly or indirectly, of wrongful acts or omissions on the licence area of the Crown, its employees, agents and contractors.

9.00 TERMINATION

9.01 If this Licence is terminated, expires and is not replaced under section 43 of the *Forest Act*, or if this Licence is cancelled,

(a) cutting permits and road permits will terminate when the expiry, termination or cancellation occurs,

(b) title to all improvements, including roads and bridges, then fixed on Schedule B land shall vest in the Crown, without compensation to the Licensee, and

(c) property in logs, and in special forest products as defined in the *Forest Act*, then on Schedule B land shall pass to the Crown, without compensation to the Licensee.

9.02 If the Licensee commits an act of bankruptcy, makes a general assignment for the benefit of its creditors or otherwise acknowledges its insolvency, the Licensor may cancel this Licence in a notice served on the Licensee.

10.00 MISCELLANEOUS

10.01 The Licensee represents and warrants to the Licensor that the Licensee is the beneficial owner of the private lands described in Schedule A and the timber thereon and shall not assign or dispose of his interest in those lands except in accordance with the provisions of paragraph 1.04.

10.02 By April 30 of every year, or as otherwise approved by the District Manager, the Licensee will deliver to the District Manager an annual report in respect of this Licence for the preceding fiscal year (April 1 to March 31), containing such information as the District Manager requires.

10.03 If the Licensor so directs the Licensee will, at its own expense, survey and define on the grounds any or all boundaries of the licence area.

10.04 This Licence is subject to the *Forest Act*.

10.05 Where a notice is required under this Licence, the notice shall be in writing and shall be deemed to have been given if delivered to, or if sent by prepaid registerd mail addressed to the Licensee at the address specified on the first page of this Licence, or to such other address the Licensee had given to the Licensor in writing. Subject to paragraph 10.06, where service is by registered mail the notice shall be deemed to be given on the eighth day after its deposit in a Canada Post Office at any place in Canada.

10.06 Where, between the time a notice is mailed under paragraph 10.05 and the time it is actually received by a party, there occurs a postal strike, lockout or slowdown that might reasonably affect delivery of the notice, the notice shall not be deemed to be given until the party actually receives it.

10.07 This Licence will enure to the benefit of, and be binding on, the parties and their respective heirs, executors, successors and permitted assigns.

11.00 INTERPRETATION

11.01 In this Licence, unless the context otherwise requires,

(a) "Crown" has the same meaning as in the *Interpretation Act*,
(b) "Crown land" has the same meaning as in the *Forest Act*,
(c) "cutting permit" means a cutting permit issued under paragraph 3.02,
(d) "District Manager" means a district manager of a forest district in which the Timber Supply Area, or part, is situated,
(e) "5 year allowable cut" means the total of the allowable annual cut in effect each year during a 5 year cut control period,
(f) "5 year cut control period" means the 5 year period beginning January 1 of the year when the term of this Licence begins, unless otherwise designated by the Licensor, and each successive 5 year period,
(g) "Forest Officer" means a person who is designated as a forest officer under the *Forest Act*,
(h) "Forest Service" means the forest service continued under the *Ministry of Forests Act*,
(i) "harvest" includes entry on land for the purpose of cutting and removing timber, cutting the timber and removing the timber from the land,
(j) "licence area" is the licence area described in paragraph 1.02, but excludes Crown land deleted, from time to time, under the *Forest Act*,
(k) "management and working plan" means a management and working plan approved under paragraph 2.03,
(l) "Minister" means minister within the meaning of the *Forest Act*,
(m) "person" includes a corporation and a partnership,

(n) "private land" means land that is not Crown land,
(o) "Regional Manager" means the regional manager appointed under the *Ministry of Forests Act*, for the forest region in which the licence area, or part, is situated,
(p) "regulations" means regulations made under the *Forest Act* and includes amendments to them,
(q) "road permit" means a road permit entered into between the District Manager and the Licensee under the *Forest Act* to provide access to or in the licence area,
(r) Schedule A land means the private land of the Licensee, described in Schedule A to the Licence, and
(s) Schedule B land means the Crown land described in Schedule B to this Licence, but excludes land deleted, from time to time, under the *Forest Act*.

11.02 In this Licence, unless the context otherwise requires,
(a) the singular includes the plural and the plural includes the singular,
(b) the masculine, the feminine and the neuter are interchangeable, and
(c) a reference to a series of numbers or letters, by the first and last numbers or letters of the series, includes the number or letter referred to first and the number or letter referred to last.

11.03 This Licence is divided into parts, paragraphs, subparagraphs, and clauses, illustrated as follows:

1.00 part,
1.01 paragraph,
(a) subparagraph,
(i) clause,

and a reference to a subparagraph, or clause shall be construed as a reference to a subparagraph, or clause of the paragraph, subparagraph or clause, as the case may be, in which the reference occurs.

11.04 Where a section of the *Forest Act* referred to in this Licence is renumbered, the reference in this Licence shall be construed to be the section as renumbered.

IN WITNESS to this Licence, it has been signed on behalf of the Crown and it has been executed by the Licensee.

SIGNED, SEALED AND DELIVERED by the **District** Manager, on behalf of the Crown in the presence of:

J. Perin

J. B. Mountain

J.B. Mountain
Powell River Forest **District**

THE COMMON SEAL of the Licensee was affixed in the presence of:

(or)

SIGNED, SEALED AND DELIVERED, by the Licensee, in the presence of:

(Licensee)

Ministry of Forests and Lands
7077 Duncan Street
Powell River, B.C.
V8A 1W1

February 26, 1988

File: 850-14 W.L. 046

Harper Logging Ltd.
575 Ash Street
Campbell River, BC
V9W 5L8

Dear Sir(s):

Enclosed is your copy of fully executed Woodlot Licence No. 046.

The timber mark that has been allotted to this woodlot Licence is WLA.

The mark for the cutting permit will derive from a combination of the Woodlot Licence mark and the cutting permit alphabetical designation.

Yours truly,

J. B. Mountain

J.B. Mountain
District Manager Forest

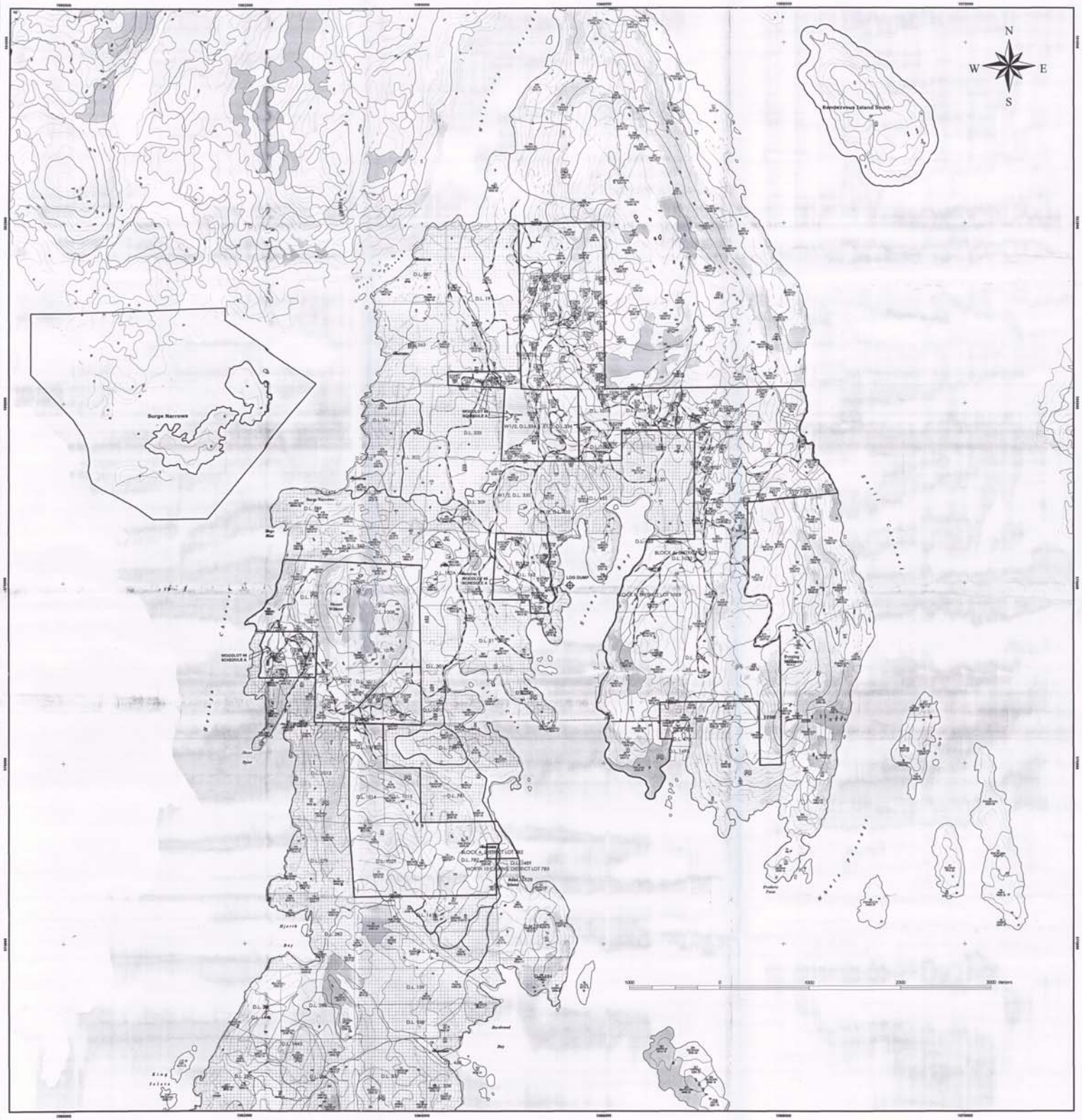
Encl.
!cc: -Timber Management Branch, Victoria - Attn: R. Spink
-Attached is original of Woodlot Licence document.
-Security deposit - Receipt #144435, $200.00, collection date 86-12-15
-Annual rent - Receipt #163781, $567.50, collection date 88-02-23
-AAC schedule B land - 2274m^3, AAC schedule A land 848m^3
!cc: -Vancouver Forest Region - Attn: Financial Operations
-Please transfer $200.00 deposit funds from Vancouver Suspense to Financial Services, T.S.D. Account
!cc: -Vancouver Forest Region - Attn: Timber Management
-Attached is photocopy of Woodlot Licence document, Deposit Record (FS 407), Summary Sheet Coding Data
!cc: -B.C. Assessment Authority, 1537 Hillside Ave. Victoria, BC V8T 4Y2
Attn: Timber Appraisal Section
-Copy of document and Exhibit "A" sketch attached.

Read Island, B.C.

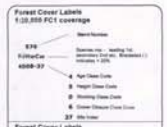
FINAL
NOV 2 2007
Approved, D. Hooper
Dec. 18, 2007

Woodlot License W0046

LICENSE PLAN 2007 - 2017



Forest Cover Labels
1:20,000 FC1 coverage



Forest Cover Labels
1:5000 Woodlot Inventory

NATURE STAND
Stand Number
Leading species Second Species Third Species
Site Index Stand Age
Volume/Ha

JUVENILE STAND
Stand Number
Leading species Second Species Third Species
Stand Age

AGE CLASS TABLE		DROWN CLOSURE TABLE		HEIGHT CLASS TABLE	
		(%age)		(metres)	
1	1-20	0	0-5	1	0.1 - 10.4
2	21-40	1	6-15	2	10.5 - 19.4
3	41-80	2	16-25	3	19.5 - 28.4
4	81-100	3	26-35	4	28.5 - 37.4
5	101-120	4	36-45	5	37.5 - 46.4
6	121-140	5	46-55	6	46.5 - 55.4
7	141-250	6	56-65	7	55.5 - 64.4
8	251+	7	66-75	8	64.5 +
		8	76-85		
		9	86-95		
		10	96-100		

STOCKING CLASS TABLE			SPECIES TABLE
0	applies	some, # trees/ha , dbh in cm.	Fd = Douglas Fir
0	all immature	N.A.	Hw = Western Hemlock
1	all mature	76, 27.5	Cw = Red Cedar
2	all mature	476, 27.5	Yc = Yellow Cedar/Cypress
3	3&4 all mature with Pl leading species	311, 17.5 50% stems @ 7.5+dbh are 12.5	Pw = Western White Pine Pl = Lodgepole Pine
4		>311, 17.5 50% stems @ 7.5+dbh are 12.5	Ba = Balsam Fir
			Sx = Sitka Spruce
R	all mature and immature	stands disturbed 26-75% by volume	Dr = Red Alder
			Mb = Broadleaf Maple
			D = Deciduous, other

Environmentally Sensitive Areas (ESA)
see table below for explanation of codes

CLASS 1 (HIGH)
- P
- PR
- R
- S
- SP
- SPR
- SR

CLASS 2 (MODERATE)
- P
- PR
- R
- S
- SP
- SPR
- SR

Environmentally Sensitive Areas (ESA)
explanation of above codes

P = Rp = Regeneration issues caused by biogeomatic factors in CLASS 1 and biotic factors in CLASS 2

R = Rr = Exceptionally high (CLASS 1) or high (CLASS 2) recreational values.

S = Rs = Exceptionally fragile or unstable soils (CLASS 1) or significantly unstable soils (CLASS 2)

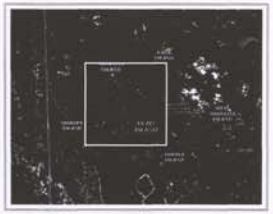
Codes may be combined to indicate multiple attributes assigned to single ESA polygons.

Generally CLASS 1 is categorized by the term "Extreme" while CLASS 2 is categorized by the term "High" and "somewhat less than CLASS1"

While other codes exist, they are NOT present on Read Island and therefore are not shown.

This map was produced using a combination of the most current available data and the most accurate projections possible.
Compiled and produced in BC ALBERS projection NAD83
NO UNAUTHORIZED REPRODUCTION WITHOUT EXPRESS WRITTEN CONSENT OF T. C. S. L.

Drawn by:	Lee Prescaner, RFT	Project ID:	READ ISLAND W0046 A B DEV. PLAN
Compiled by:	Lee Prescaner, RFT	Data source:	TRIM, FC1, and various new survey data
Compiled for:	Paul J. Katz, RPF	Date compiled:	June 2007
Approved by:	Ministry of Forests	Date Approved:	June 2007
Scale of original:	1:15,000 (1 cm = 150m)	Revision Number:	Original

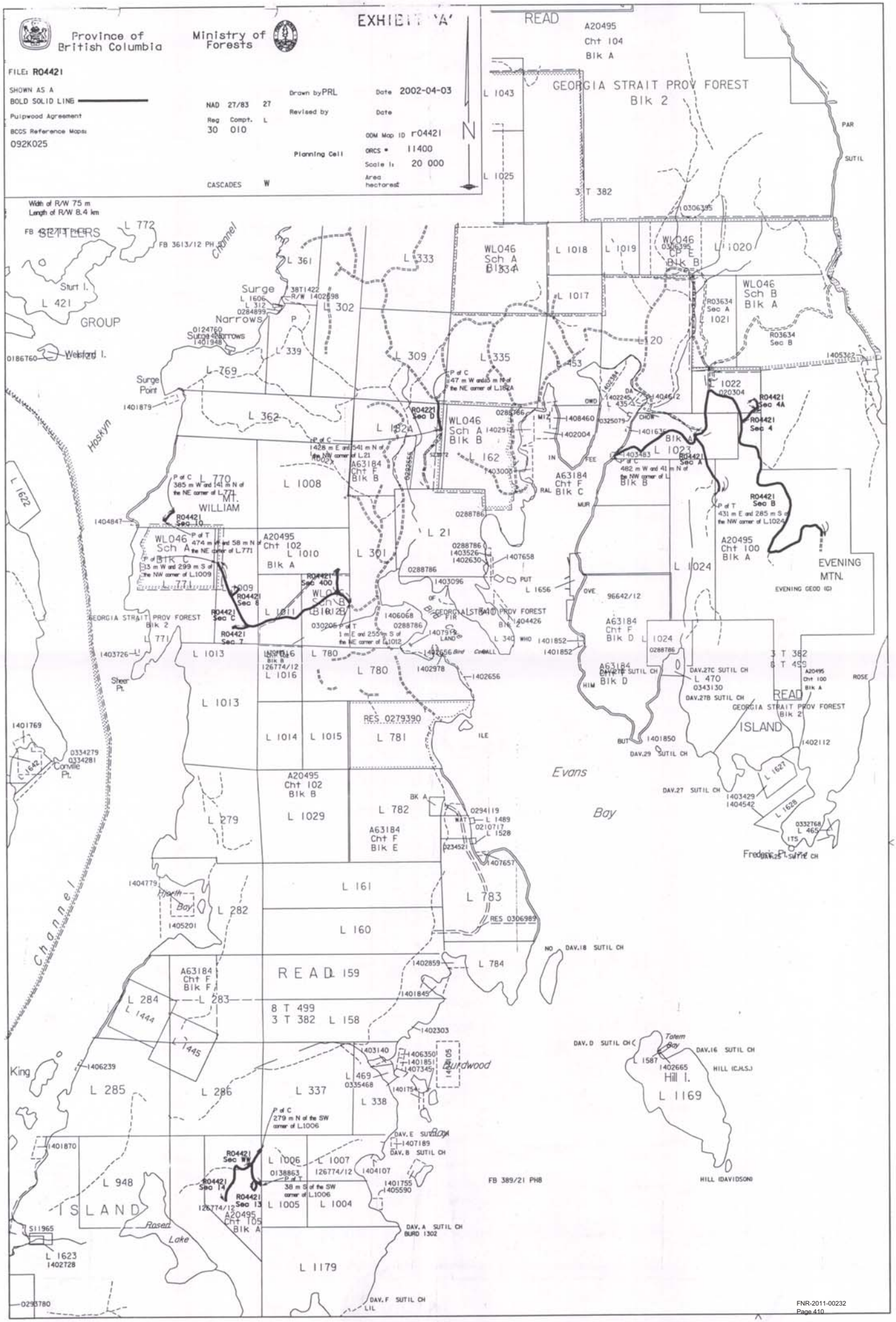


MAP NOTES:

Landscape Unit: Entire plan lies with the CORTES landscape unit.

Bio-geoclimatic Zone (BEC Zone): Entire plan is CWH xm

Harper Logging Ltd.
BOX 299
HERIOT BAY, B.C.
V0P 1H0 285-2325


Province of British Columbia
Ministry of Forests
EXHIBIT 'A'
FILE: R04421
SHOWN AS A
BOLD SOLID LINE
Pulpwood Agreement
BCGS Reference Maps:
092K025
NAD 27/83 27
Reg 30 Compt. 010 L
CASCADES W
Drawn by PRL
Date 2002-04-03
Revised by
Date
ODM Map ID R04421
ORCS # 11400
Scale 1: 20 000
Area hectares:
Planning Cell
Width of R/W 75 m
Length of R/W 8.4 km
READ
A20495
Cht 104
Blk A
GEORGIA STRAIT PROV FOREST
Blk 2
SUTIL
3 T 382
SEYMOUR
Channel
Sturt I.
L 421
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Surge Narrows
Welsford I.
Surge Point
Hoskyn
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M. WILLIAM
EVENING MTN.
EVENING GEOD ID
ISLAND
Evans
Bay
Fredrick Pt.
Sheer Pt.
Conville Pt.
King
Burdwood
Totem Bay
Hill I.
HILL (DAVIDSON)
HILL (C.H.S.)
Rosen Lake
Forth Bay
L 1622
L 1642
L 1627
L 1628
L 1623
L 1444
L 1445
L 1179
L 1169
L 1008
L 1010
L 1011
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L 1025
L 1656
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L 1528
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L 470
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L 772
L 361
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L 309
L 335
L 769
L 362
L 162
L 21
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L 160
L 159
L 158
L 1017
L 1018
L 1019
L 453
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RES 0306989
FB 389/21 PHB
FB 3613/12 PH
DAV.A SUTIL CH
DAV.B SUTIL CH
DAV.D SUTIL CH
DAV.E SUTIL CH
DAV.F SUTIL CH
DAV.16 SUTIL CH
DAV.18 SUTIL CH
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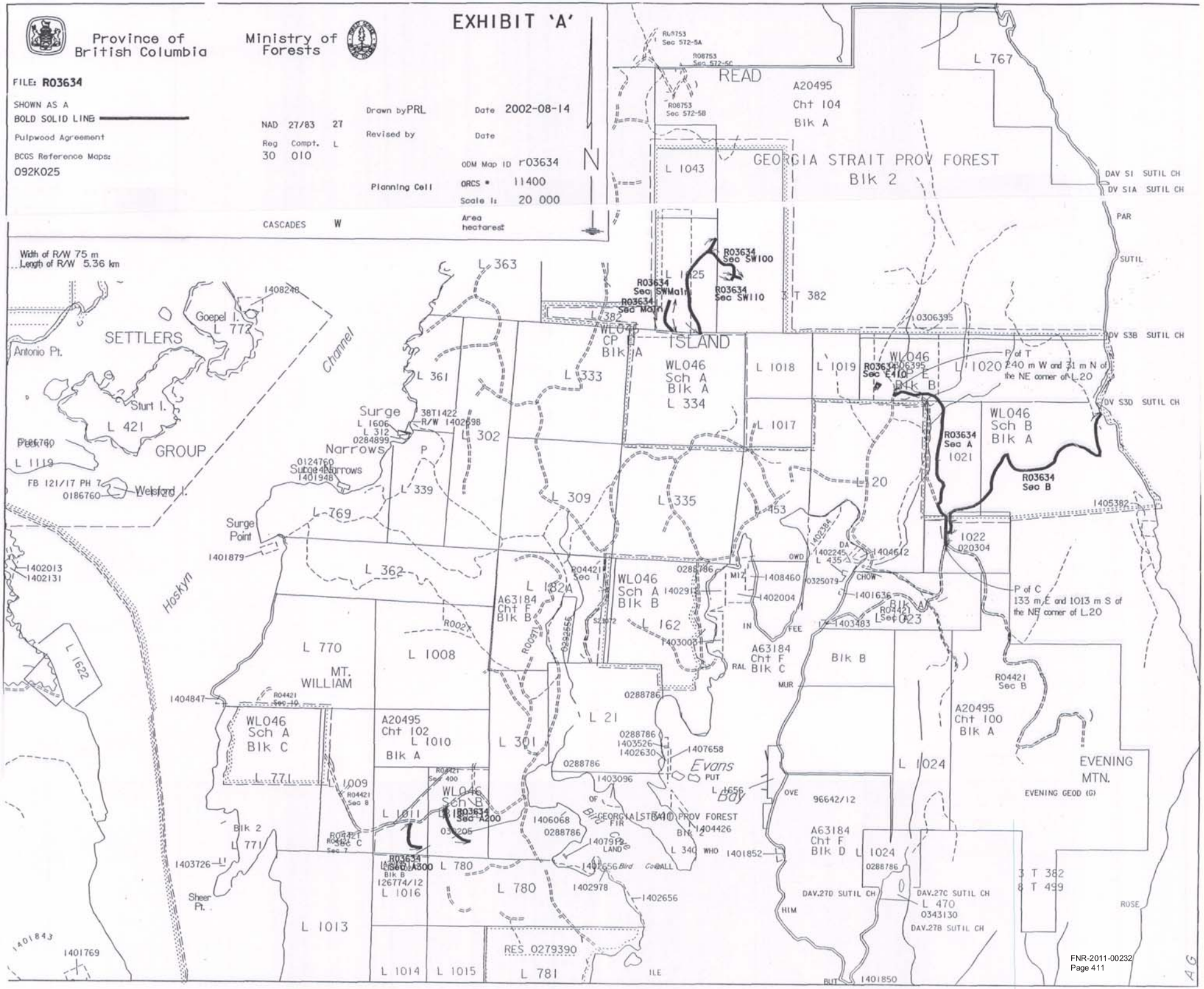
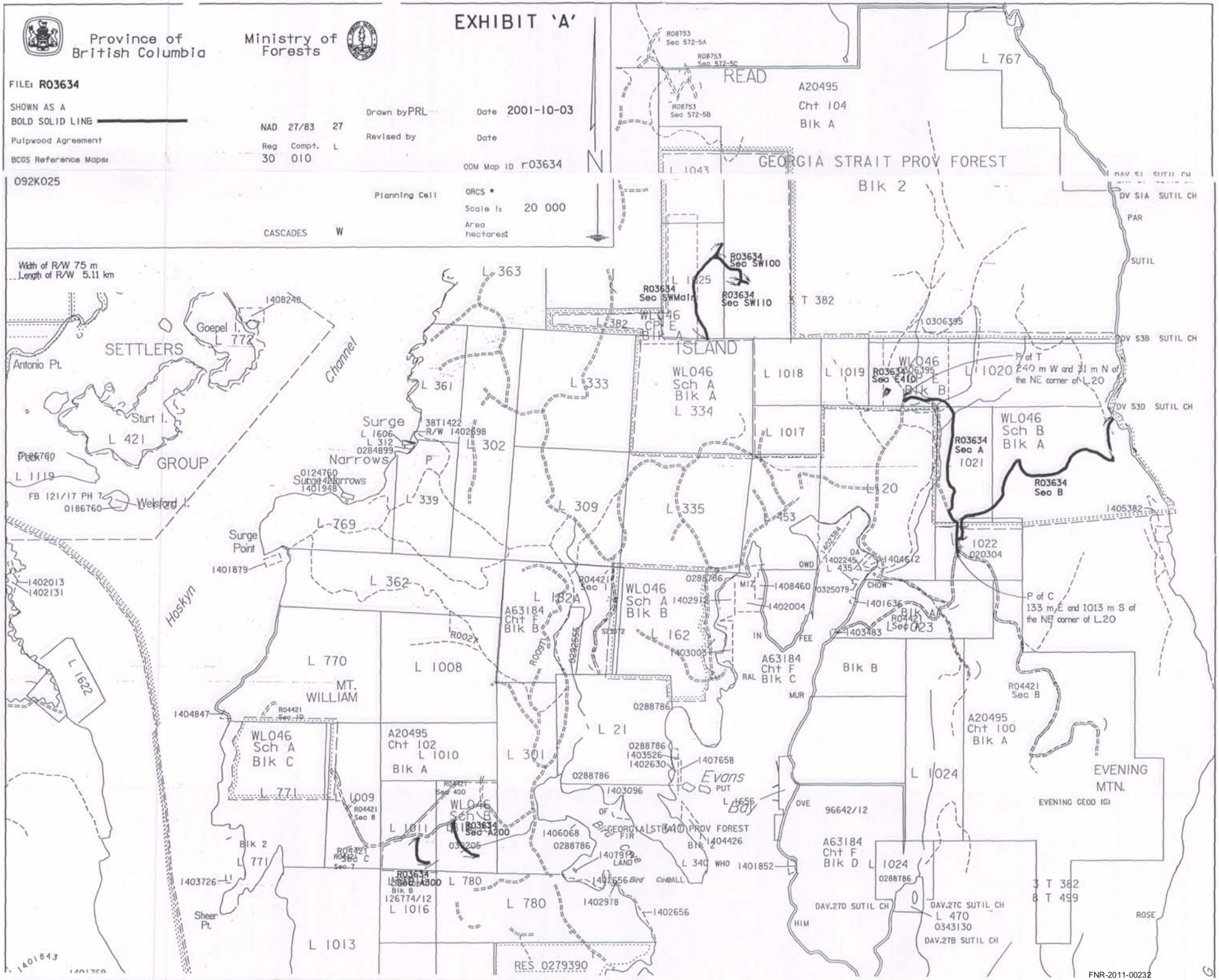
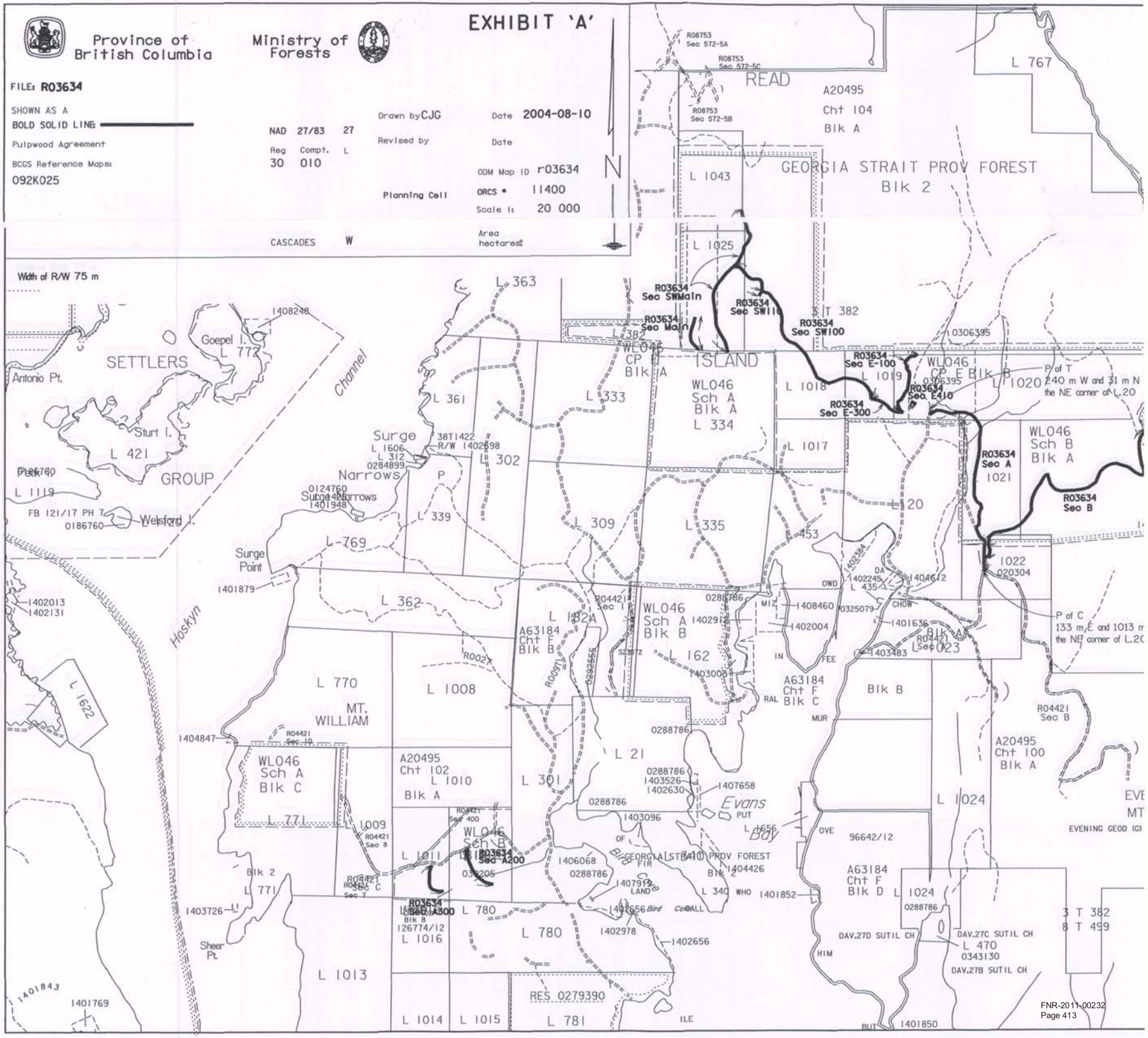
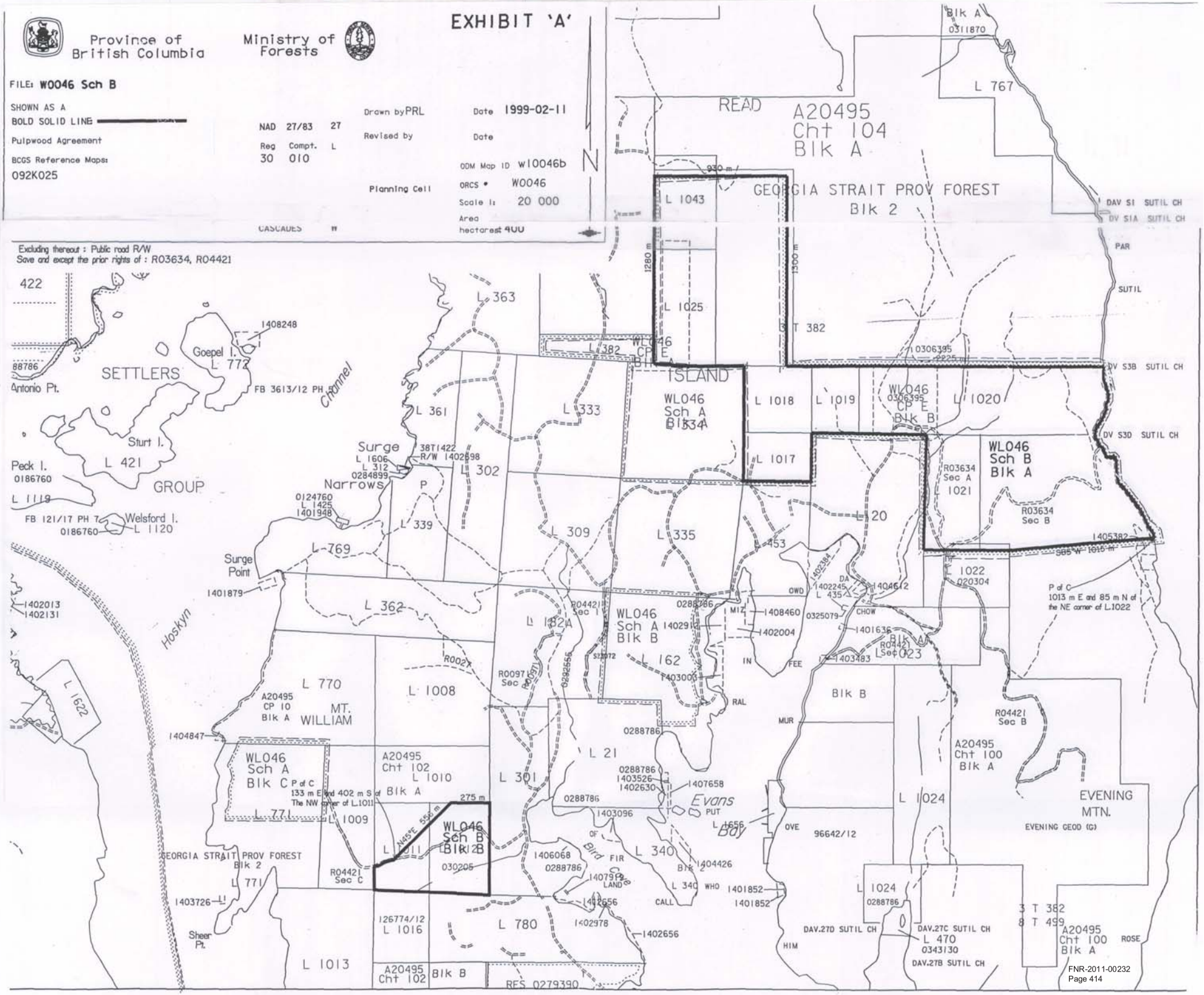
DAV.27 SUTIL CH
DAV.27B SUTIL CH
DAV.27C SUTIL CH
DAV.29 SUTIL CH


Province of British Columbia
Ministry of Forests
EXHIBIT 'A'
FILE: R03634
SHOWN AS A
BOLD SOLID LINE:
Pulpwood Agreement
BCGS Reference Maps:
092K025
NAD 27/83 27
Reg 30 Compt. 010 L
CASCADES W
Drawn by PRL
Date 2002-08-14
Revised by
Date
ODM Map ID r03634
ORCS # 11400
Scale 1: 20 000
Planning Cell
Area hectares
Width of R/W 75 m
Length of R/W 5.36 km
R03634 Sec SW100
R03634 Sec SWMain
R03634 Sec SW110
R03634 Sec Main
R03634 Sec E410
R03634 Sec A 1021
R03634 Sec B
R03634 Sec A200
R03634 Sec A300
READ
A20495 Cht 104 Blk A
GEORGIA STRAIT PROV FOREST Blk 2
SETTLERS
Antonio Pt.
Goepel I. L 772
Sturt I. L 421
GROUP
Welsford I.
Channel
Surge Narrows
Surge Point
Hoskyn
MT. WILLIAM
ISLAND
WL046 Sch A Blk A L 334
WL046 Sch B Blk A
WL046 Sch A Blk C
WL046 Sch A Blk B
A63184 Cht F Blk B
A63184 Cht F Blk C
A63184 Cht F Blk D L 1024
A20495 Cht 102 L 1010 Blk A
A20495 Cht 100 Blk A
Evans Bay
EVENING MTN.
EVENING GEOD (G)
GEORGIA STRAIT PROV FOREST Blk 2
RES 0279390
P of T 240 m W and 31 m N of the NE corner of L 20
P of C 133 m E and 1013 m S of the NE corner of L 20
DAV.27D SUTIL CH
DAV.27C SUTIL CH
DAV.27B SUTIL CH
DAV S1 SUTIL CH
DV S1A SUTIL CH
DV S3B SUTIL CH
DV S3D SUTIL CH
L 767
L 1043
L 1025
L 1018
L 1019
L 1020
L 1017
L 20
L 363
L 361
L 333
L 382
L 302
L 339
L 309
L 335
L 769
L 362
L 1008
L 770
L 1622
L 1009
L 1011
L 771
L 780
L 1013
L 1014
L 1015
L 781
L 1016
L 1024
L 470 0343130
L 21
L 301
L 162
L 340
L 453
1022 020304
1023
1408248
1402013
1402131
1401879
1404847
1403726
1401843
1401769
1402978
1402656
1403096
1407658
1406068
1404426
1401852
1401850
1405382
1403483
1403003
1402004
1408460
1401636
1404612
1402245
1402384
1325079
0306395
0288786
0284899
0186760
0124760
1401948
1402698
0398556
0325205
0343130
96642/12
126774/12
FNR-2011-00232
Page 411


Province of British Columbia
Ministry of Forests
EXHIBIT 'A'
FILE: R03634
SHOWN AS A BOLD SOLID LINE
Pulpwood Agreement
BCGS Reference Maps:
092K025
NAD 27/83 27
Reg 30 Compt. 010 L
Drawn by PRL
Date 2001-10-03
Revised by
Date
ODM Map ID r03634
Planning Cell
CASCADES W
ORCS *
Scale 1: 20 000
Area hectares
Width of R/W 75 m
Length of R/W 5.11 km
N
READ
A20495 Cht 104 Blk A
L 767
GEORGIA STRAIT PROV FOREST
Blk 2
DV S1A SUTIL CH
PAR
SUTIL
DV S3B SUTIL CH
DV S3D SUTIL CH
SETTLERS
Antonio Pt.
Goepel I. L 772
Channel
Sturt I. L 421
GROUP
Peck 760
L 1119
FB 121/17 PH 7
0186760
Welsford I.
Surge Narrows
Surge Narrows
0124760
1401948
1408248
1402698
0284899
0306395
Surge Point
1401879
Hoskyn
L 769
L 362
L 363
L 361
L 333
L 302
L 339
L 309
L 335
L 1017
L 1018
L 1019
L 1020
L 20
L 453
L 1025
T 382
WL046 CPE A Blk A
ISLAND
WL046 Sch A Blk A L 334
WL046 Sch B Blk A
R03634 Sec SW100
R03634 Sec SWMain
R03634 Sec SW110
R03634 Sec E410
R03634 Sec A 1021
R03634 Sec B
P of T 240 m W and 31 m N of the NE corner of L 20
P of C 133 m E and 1013 m S of the NE corner of L 20
1022 020304
1405382
1402384
1402245
1404612
1408460
1402004
1401636
1403483
0325079
0288786
0288786
0288786
0288786
1403526
1402630
1407658
1403096
1406068
0288786
1407926
1404426
1401852
1402978
1402656
1403726
1404847
1402013
1402131
1401843
L 1622
L 770
MT. WILLIAM
L 1008
L 1009
L 1010
L 1011
L 771
L 780
L 1013
L 1016
L 301
L 21
L 162
L 1024
L 470 0343130
A63184 Cht F Blk C
A63184 Cht F Blk D L 1024
A20495 Cht 102 L 1010 Blk A
A20495 Cht 100 Blk A
WL046 Sch A Blk C
WL046 Sch B Blk B
R04421 Sec 10
R04421 Sec 400
R04421 Sec 8
R04421 Sec C
R04421 Sec 7
R04421 Sec 1
R04421 Sec 023
R04421 Sec B
R03634 Sec A200
R03634 Sec A300
126774/12
Blk 2
Sheer Pt.
Evans Bay
EVENING MTN.
EVENING GEOD (G)
GEORGIA STRAIT PROV FOREST
Blk 2
Bird Co@ALL
WHO
HIM
OVE
96642/12
DAV.27D SUTIL CH
DAV.27C SUTIL CH
DAV.27B SUTIL CH
3 T 382
8 T 499
ROSE
RES 0279390


Province of British Columbia
Ministry of Forests
EXHIBIT 'A'
FILE: R03634
SHOWN AS A
BOLD SOLID LINE
Pulpwood Agreement
BCGS Reference Maps:
092K025
NAD 27/83 27
Reg 30 Compt. 010 L
Drawn by CJG
Date 2004-08-10
Revised by
Date
ODM Map ID r03634
Planning Cell
ORCS • 11400
Scale 1: 20 000
CASCADES W
Area hectares
N
Width of R/W 75 m
R03634 Sec SWMain
R03634 Sec SWII
R03634 Sec SW100
R03634 Sec Main
R03634 Sec E-100
R03634 Sec E-410
R03634 Sec E-300
R03634 Sec A
R03634 Sec B
R03634 Sec A200
R03634 Sec A300
READ
A20495 Cht 104 Blk A
GEORGIA STRAIT PROV FOREST Blk 2
ISLAND
WL046 CP E Blk A
WL046 Sch A Blk A L 334
WL046 CP E Blk B
WL046 Sch B Blk A
SETTLERS
GROUP
Goepel I. L 772
Antonio Pt.
Channel
Sturt I. L 421
Welsford I. L 420
Surge Narrows
Surge Point
Hoskyn Channel
MT. WILLIAM
Evans Bay
Sheer Pt.
A63184 Cht F Blk B
A63184 Cht F Blk C
A63184 Cht F Blk D L 1024
A20495 Cht 102 L 1010 Blk A
A20495 Cht 100 Blk A
WL046 Sch A Blk C
WL046 Sch B
L 1043
L 1025
L 1018
L 1019
L 1020
L 1017
L 1021
L 1022
L 1024
L 1008
L 1009
L 1011
L 1010
L 1013
L 1014
L 1015
L 1016
L 1622
L 1656
L 767
L 770
L 771
L 769
L 780
L 781
L 363
L 361
L 333
L 382
L 302
L 339
L 309
L 335
L 453
L 20
L 162
L 301
L 21
L 340
RES 0279390
P of T 240 m W and 31 m N the NE corner of L 20
P of C 133 m E and 1013 m the NE corner of L 20
EVENING GEOD (G)
FNR-2011-00232
Page 413


Province of British Columbia
Ministry of Forests
EXHIBIT 'A'
FILE: W0046 Sch B
SHOWN AS A BOLD SOLID LINE
Pulpwood Agreement
BCGS Reference Maps: 092K025
NAD 27/83 27
Reg 30 Compt. 010 L
Drawn by PRL
Date 1999-02-11
Revised by
Date
Planning Cell
ODM Map ID W10046b
ORCS # W0046
Scale 1: 20 000
Area hectares: 400
CASCADES
Excluding thereout : Public road R/W
Save and except the prior rights of : R03634, R04421
READ
A20495 Cht 104 Blk A
GEORGIA STRAIT PROV FOREST Blk 2
ISLAND
SETTLERS
GROUP
Goepel I. L 772
Antonio Pt.
Sturt I. L 421
Peck I. 0186760 L 1119
Welsford I. L 1120
Surge Narrows
Surge Point
Hoskyn Channel
MT. WILLIAM
EVENING MTN.
Evans Bay
Bird Cove
Sheer Pt.
WL046 Sch A Blk A
WL046 Sch A Blk B
WL046 Sch A Blk C
WL046 Sch B Blk B
WL046 CP E Blk A
WL046 CP E Blk B
R03634 Sec A 1021
R03634 Sec B
R04421 Sec B
R04421 Sec C
A20495 CP 10 Blk A
A20495 Cht 102 Blk A
A20495 Cht 102 Blk B
A20495 Cht 100 Blk A
A20495 Cht 100 Blk A
L 1025
L 1018
L 1019
L 1020
L 1017
L 1021
L 1022
L 1024
L 1023
L 1010
L 1009
L 1011
L 1012
L 1016
L 1013
L 1008
L 1622
L 1656
L 470
L 780
L 771
L 770
L 769
L 363
L 361
L 333
L 334
L 302
L 339
L 309
L 335
L 453
L 362
L 162
L 301
L 21
L 340
L 1024
T 382
3 T 382
8 T 499
DAV.27D SUTIL CH
DAV.27C SUTIL CH
DAV.27B SUTIL CH
DAV S1 SUTIL CH
DV S1A SUTIL CH
DV S3B SUTIL CH
DV S3D SUTIL CH
P of C 1013 m E and 85 m N of the NE corner of L.1022
P of C 133 m E and 402 m S of The NW corner of L.1011
RES 0279390
96642/12
126774/12
030205
0343130
0325079
0306395
0311870
0284899
0186760
0124760
0288786
0288756
0292556
1408248
1401879
1402013
1402131
1404847
1403726
1406068
1407658
1408460
1402004
1401636
1403483
1403003
1402978
1402656
1401852
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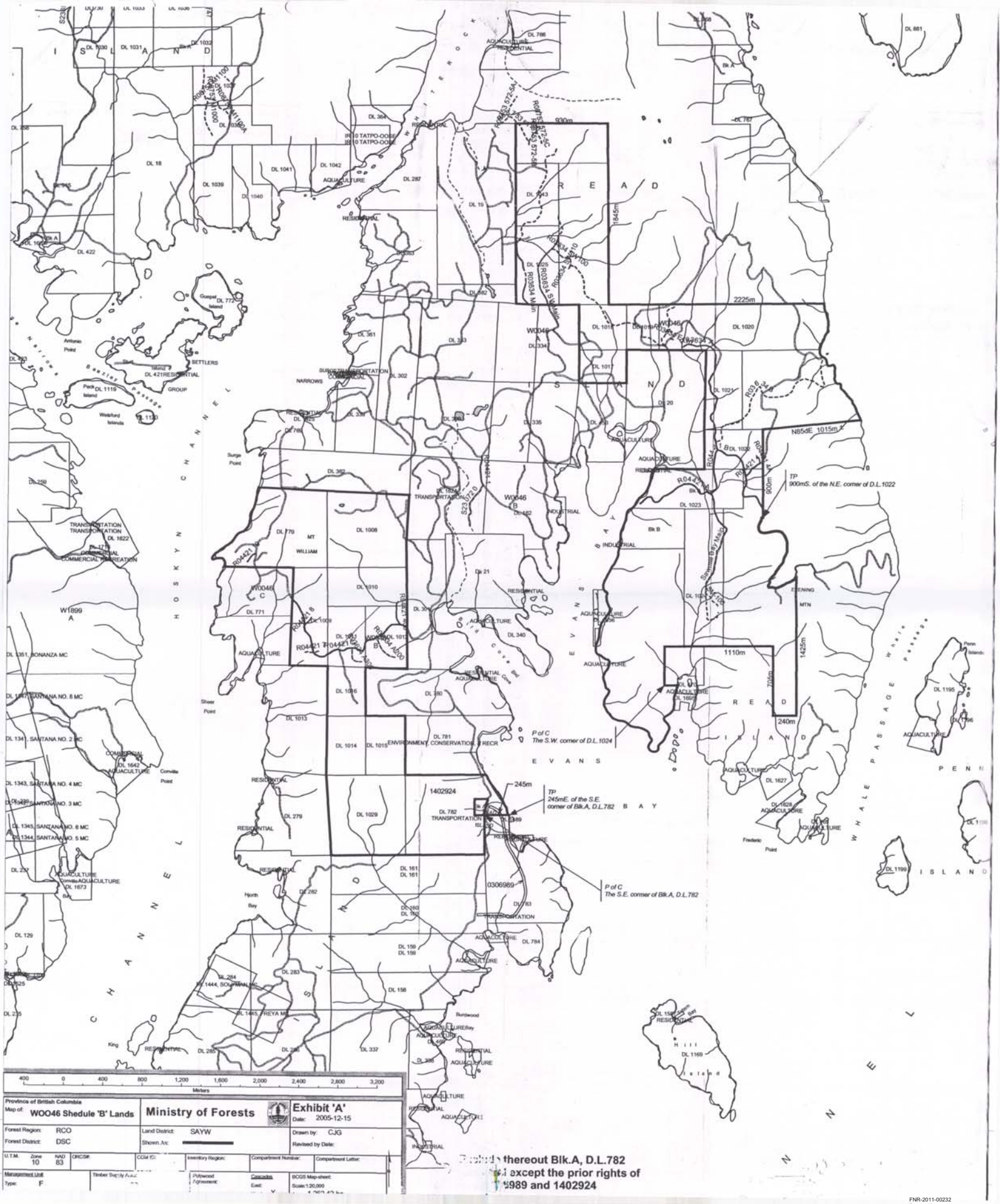
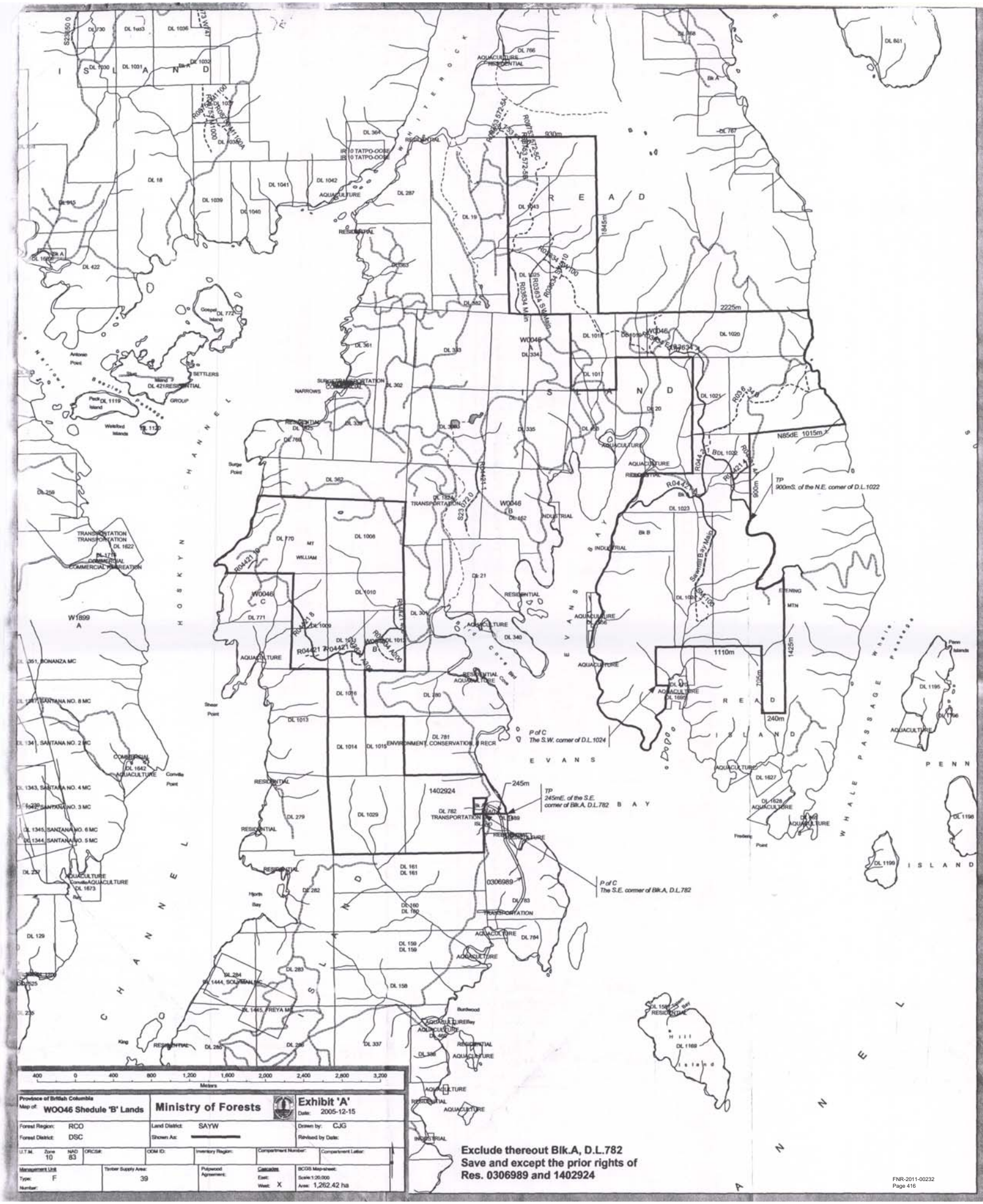


Excluding thereout Blk.A, D.L.782
Except the prior rights of
0306989 and 1402924



400 0 400 800 1,200 1,600 2,000 2,400 2,800 3,200
Metres

Province of British Columbia Map of: WO046 Shedule 'B' Lands	Ministry of Forests	Exhibit 'A' Date: 2005-12-15
Forest Region: RCO Forest District: DSC	Land District: SAYW Shown As:	Drawn by: CJG Revised by Date:
U.T.M. Zone 10 NAD 83 / ORCS#: / ODM ID: / Inventory Region: / Compartment Number: / Compartment Letter:		
Management Unit Type: F Number: / Timber Supply Area: 39 / Pulpwood Agreement: / Cascades East: West: X / BCGS Map-sheet: Scale:1:20,000 Area: 1,262.42 ha		