

File: 280-20

MAR 09 2006

BY EMAIL

To: Interior Regional Managers

From: The Honourable Rich Coleman
Minister of Forests and Range

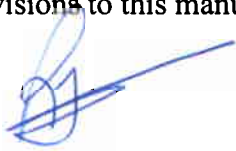
Re: **Amendment No. 11 to the *Interior Appraisal Manual***

I hereby approve Amendment No. 11 to the *Interior Appraisal Manual* and attach a copy for your use. The following sections have been amended.

- Section 4.11: Additional time periods have been added to each of the trend factor tables.
- Section 6.8: Miscellaneous stumpage rates for seismic line clearing are updated and a revised methodology and new clearing categories have been added. Table 6-4 includes a revised exemption for Grade 3 saw logs.
- Section 7.2 Duplicate text has been removed and minor revisions for clarity have been made.
- Section 7.5 Several housekeeping changes have been made.
- Appendix V: New categories of seismic line clearing are defined.



This amendment will come into force the date this memo is signed. Further amendments or revisions to this manual require my approval.

A handwritten signature in blue ink, appearing to be "Rich Coleman".

Rich Coleman
Minister

Attachment

pc: Bill Howard, Director, Revenue Branch
Grant Parnell, Director, Operations, BC Timber Sales
Doug Wrean, Director, Business Operations, BC Timber Sales
Interior Appraisal Advisory Committee



FOR FURTHER INFORMATION CONTACT:

Bob Bull
Senior Timber Pricing Forester (Interior)

Revenue Branch
Ministry of Forests and Range
PO Box 9511 Stn Prov Govt
Victoria, B.C. V8W 9C2

Phone: 356-7709
Email: Bob.Bull@gov.bc.ca
FAX: 387-5670

MANUAL TITLE Interior Appraisal Manual	
REVISION No. Amendment No. 11	ISSUE DATE March 9, 2006
MANUAL CO-ORDINATOR Judy Laton Revenue Branch	
AUTHORIZATION (Name, Title) W. Howard Director, Revenue Branch	

Please make the following changes to your copy of the above Ministry manual. Please insert the following specified pages and **file this notice** immediately after the Amendments Tab.

ACTION (Remove/Insert)	(VOL.) CHAPTER-SECTION-SUBJECT TABLE OF CONTENTS	PAGE(S)	COMMENTS
REMOVE	Table of Contents	iii - iv	After Table of Contents Tab
INSERT		iii - iv	
REMOVE	Chapter 4	55 - 58	After Chapter 4 Tab
INSERT		55 - 58	
REMOVE	Chapter 6	11 - 14	After Chapter 6 Tab
INSERT		11 - 14	
REMOVE	Chapter 7	3 - 4 9 - 12	After Chapter 7 Tab
INSERT		3 - 4 9 - 12	
REMOVE	Appendix	11 - 12	After Appendix Tab
INSERT		11 - 12	
REMOVE	Index	1 - 4	After Appendix Tab
INSERT		1 - 4	
INSERT	Minister's Letter and Manual Revision Transmittal		After Amendments Tab

4.5.2.2 Secondary Haul	4-38
4.5.3 Water Transportation Cost Estimate	4-38
4.5.4 Special Transportation Systems	4-39
4.6 Road Management.....	4-41
4.7 Road and Land Use Charges	4-44
4.8 Administration and Other Costs.....	4-45
4.8.1 Overhead	4-45
4.8.2 Isolated Cutting Authority Areas.....	4-46
4.8.3 Low Volume Cost Estimate	4-46
4.9 Basic Silviculture Cost Estimate	4-47
4.10 Manufacturing Cost Estimates	4-51
4.10.1 Grade 3 Pine Interim Adjustment.....	4-54
4.11 Cost Trend.....	4-56

5 Stumpage Rate Determination

5.1 Indicated Stumpage Rate (ISR).....	5-2
5.2 Value Index	5-3
5.3 Interior Mean Value Index	5-4
5.4 Market Value Indexing.....	5-5
5.4.1 Converting Indexes From 1997=100 Base to 1992=100 Base.....	5-5
5.4.2 Calculating the Interior Composite Index (ICI)	5-5
5.4.3 Calculating the Interior Target Rate	5-5
5.5 Interior Base Rate (IBR).....	5-7
5.6 Calculation of Stumpage Rate.....	5-8
5.6.1 Calculation of Indicated Stumpage Rate	5-8
5.6.2 Prescribed Minimum Stumpage Rate.....	5-8
5.6.3 Reserve Stumpage Rate.....	5-8
5.6.4 Upset Stumpage Rate	5-8
5.6.5 Total Stumpage Rate	5-8

6 Miscellaneous Timber Pricing Policies

6.1 Average Stumpage Rates by Forest Zone and Species.....	6-2
6.2 Cutting Authorities With 5 000 m ³ or Less Volume.....	6-3
6.3 Road Permits	6-5
6.3.1 Blanket Salvage Cutting Permits.....	6-6
6.4 Salvage Timber Stumpage Rates.....	6-7
6.5 Partially Harvested Timber	6-9
6.6 BC Timber Sales (BCTS).....	6-10
6.7 Levies (CVP only).....	6-11
6.8 Miscellaneous Stumpage Rates.....	6-12
6.8.1 Miscellaneous Stumpage Rates for Timber Licences	6-14

7 Market Pricing System

7.1 MPS Introduction	7-2
7.2 MPS Principles and Procedures	7-3
7.2.1 MPS Appraisals.....	7-3
7.2.2 MPS Stumpage Adjustments.....	7-3
7.2.3 Reappraisals for MPS Appraisals.....	7-3
7.2.4 Methodology	7-3
7.3 MPS Selling Prices.....	7-5
7.3.1 MPS Lumber Average Market Values	7-5
7.3.2 Calculation of Species Lumber Selling Price.....	7-5
7.4 Market Stumpage Price Calculation.....	7-7
7.4.1 Market Stumpage Price Variables.....	7-7
7.4.2 Market Stumpage Price Equation.....	7-9
7.5 MPS Stumpage Rate.....	7-10
7.5.1 MPS Upset Stumpage Rate	7-10
7.5.2 Upset Stumpage Rate Calculation.....	7-11
7.5.3 Prescribed Minimum Stumpage Rate.....	7-11
7.5.4 Total MPS Stumpage Rate	7-11

Appendices

Appendix I Equipment and Labour Rates	A-2
Appendix II Development Cost Allocation.....	A-4
Appendix III Relative Soil Moisture to Absolute Soil Moisture Conversion Table	A-5
Appendix IV Map Content.....	A-11
Appendix V Geophysical Clearance Line Categories	A-12

Index

Table 4-11 Grade 3 Pine Interim Adjustments

Point of Appraisal *	Grade 3 Pine Adjustment	Point of Appraisal *	Grade 3 Pine Adjustment
100 Mile House	4.57	Lavington	1.00
Adams Lake	1.68	Lillooet	0.00
Armstrong	1.63	Louis Creek	3.00
Bear Lake	3.70	Lumby	1.75
Boston Bar	4.28	Lytton	6.00
Burns Lake	1.47	Mackenzie	0.37
Canal Flats	0.59	McBride	1.02
Canoe	1.91	Merritt	1.02
Carnaby	0.00	Midway	0.70
Castlegar	1.73	Okanagan Falls	1.05
Chasm	2.42	Park Siding	1.07
Chetwynd	0.07	Prince George	6.36
Clear Lake	14.97	Princeton	0.56
Craigellachie	0.87	Quesnel	9.35
Cranbrook	0.00	Radium	1.26
Creston	0.69	Revelstoke	4.34
Elko	0.65	Slocan	1.60
Engen	12.97	Smithers	3.01
Fort Nelson	0.23	Squamish	0.00
Fort St. James	2.31	Strathnaver	12.62
Fort St. John	0.09	Taylor	0.07
Fraser Lake	11.84	Terrace	0.00
Galloway	0.94	Thrusms	1.54
Grand Forks	1.26	Upper Fraser	4.59
Hazleton	0.00	Valemount	1.26
Houston	1.02	Vanderhoof	3.27
Isle Pierre	14.85	Vavenby	1.77
Kamloops	1.75	Westbank	0.41
Kelowna	0.82	Williams Lake	3.46
Kitwanga	0.65	Ymir	1.80

* The list includes two former Points of Appraisal Cranbrook and Lillooet.

4.11 Cost Trend

Cost trend factors are separately applied to the total logging, silviculture and manufacturing cost estimates. The factors cover the period from the effective date of the cost base to the effective date of the rate calculation. Cost trend factors are applied at the appraisal effective date and at the date of each stumpage adjustment.

For trend factors applicable prior to November 1, 2004, refer to earlier *Interior Appraisal Manuals*.

Appraisal Effective Dates From August 1, 1996 to November 30, 1997

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
January 1 to March 31, 2005	0.954	1.0
April 1 to June 30, 2005	0.954	1.0
July 1 to September 30, 2005	0.954	1.0
October 1 to December 31, 2005	0.954	1.0
January 1 to March 31, 2006	0.954	1.0

Appraisal Effective Dates From December 1, 1997 to August 31, 1998

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
January 1 to March 31, 2005	0.886	1.0
April 1 to June 30, 2005	0.886	1.0
July 1 to September 30, 2005	0.886	1.0
October 1 to December 31, 2005	0.886	1.0
January 1 to March 31, 2006	0.886	1.0

Appraisal Effective Dates From September 1, 1998 to September 30, 1999

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
January 1 to March 31, 2005	0.936	1.0
April 1 to June 30, 2005	0.936	1.0
July 1 to September 30, 2005	0.936	1.0
October 1 to December 31, 2005	0.936	1.0
January 1 to March 31, 2006	0.936	1.0

Appraisal Effective Dates From October 1, 1999 to August 31, 2000

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
January 1 to March 31, 2005	0.983	1.0
April 1 to June 30, 2005	0.983	1.0
July 1 to September 30, 2005	0.983	1.0
October 1 to December 31, 2005	0.983	1.0
January 1 to March 31, 2006	0.983	1.0

Appraisal Effective Dates From September 1, 2000 to June 30, 2001

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
January 1 to March 31, 2005	0.967	1.0
April 1 to June 30, 2005	0.967	1.0
July 1 to September 30, 2005	0.967	1.0
October 1 to December 31, 2005	0.967	1.0
January 1 to March 31, 2006	0.967	1.0

Appraisal Effective Dates From July 1, 2001 to October 31, 2002

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
January 1 to March 31, 2005	0.967	1.0
April 1 to June 30, 2005	0.967	1.0
July 1 to September 30, 2005	0.967	1.0
October 1 to December 31, 2005	0.967	1.0
January 1 to March 31, 2006	0.967	1.0

Appraisal Effective Dates From November 1, 2002 to October 31, 2004

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
January 1 to March 31, 2005	1.007	1.0
April 1 to June 30, 2005	1.007	1.0
July 1 to September 30, 2005	1.007	1.0
October 1 to December 31, 2005	1.007	1.0
January 1 to March 31, 2006	1.007	1.0

Appraisal Effective Dates On or After November 1, 2004

<u>Appraisal Effective Date or Stumpage Adjustment Date</u>	<u>Trend Factor</u>	
	<u>Logging and Silviculture</u>	<u>Manufacturing</u>
January 1 to March 31, 2005	1.000	1.0
April 1 to June 30, 2005	1.000	1.0
July 1 to September 30, 2005	1.000	1.0
October 1 to December 31, 2005	1.000	1.0
January 1 to March 31, 2006	1.000	1.0

6.7 Levies (CVP only)

1. Silviculture Levy:

A silviculture cost estimate is made for every cutting authority that will require basic silviculture, including those with a volume of less than 2 000 m³.

A basic silviculture levy may be added to the reserve stumpage rate. The levy is equal to the district manager's cost estimate of silviculture liability to be incurred by the Crown.

2. Development/Administration Levy:

- a. A development levy may be added to the reserve stumpage rate. The development levy is equal to the appraisal cost estimate of road construction provided by the Crown as approved by the regional manager.
- b. An administration levy may be added to the reserve stumpage rate. The administration levy is equal to the district manager's cost estimate of administration provided by the Crown for preparing a Forestry Licence to Cut for salvage timber. An administration cost estimate is made for every cutting authority where the district office has to prepare all details of a Forestry Licence to Cut for salvage. No levy is applicable to professional applications.

The amount of any levy may be re-determined at reappraisal only.

6.8 Miscellaneous Stumpage Rates

1. **The stumpage rates for certain special forest products, including deciduous species, and low grade logs from all sources of Crown timber when scaled are prescribed in Table 6-4.**
2. **The stumpage rates for timber harvested for the purposes described, in the districts listed, in the forest district specific section of Table 6-4 are as prescribed in that table.**

Table 6-4 Miscellaneous Stumpage Rates**All Interior Forest Regions**

Species	Product	Reserve Stumpage Rate
Cedar	Shakes	\$6.00/m ³
Cedar	Blanks	\$7.20/m ³
Cedar	Fence Posts	\$3.00/m ³
Cedar	Mining Timbers & Fence Rails	\$3.00/m ³
All Species	Firewood	\$0.50/m ³
All Species	Bolts/Blocks	\$5.30/m ³
Yew	All	\$0.25/m ³
All Species	Grades: 3, 4, 5 and 6, except for grade 3 when the stumpage rate for that grade is determined under chapter 7 of this manual	\$0.25/m ³
Deciduous Species	All, except grades 3,4,5 and 6 and except where the upset stumpage rate is calculated under Section 7.5.1 (5)	\$0.50/m ³
All Species (except Cedar)	Fence Rails, Mining Timbers, Fence Posts	\$1.20/m ³
All Species	Pickets & Palings, Mine Cribbing, Car Stakes, Round Stakes & Sticks, Rails (Split), Lagging (Split), Orchard Props	\$1.20/m ³
All Species	Christmas Tree: under 3m 3-5 m over 5 m	\$0.20/each \$1.00/each \$1.50/each
All Species	Logs salvaged below the high water levels of Reservoir Lakes and the Slocan, Kootenay, Mineral, Babine and Ootsa Lakes	\$0.25/m ³
All Species	Marine Beachcomb	\$0.70/m ³
All Species	Trees classified as "Dead Potential" on Cruise-based cutting authorities	\$0.25/m ³
All Coniferous	For logs harvested from the Alex Fraser (UBC), Aleza Lake (UBC and UNBC) and Fort St. James (UNBC) Research Forests	\$0.25/m ³
All Species	Firmwood Reject	NIL

Forest District Specific

Description of Activity	Forest District	Reserve Stumpage Rate
Gross area cleared for mining exploration trails, seismic lines ¹ , gas or oil well sites and right-of-way to well sites. ²	Rocky Mountain	\$2,375/ha
	Peace	\$1,980/ha
	Ft. Nelson	\$1,165/ha
	Mackenzie	\$2,122/ha

¹ The corresponding district reserve stumpage rate from the above table is adjusted according to the category of line clearing as follows:

- Category 1 - no adjustment
- Category 2 - 1/2 of the reserve stumpage rate
- Category 3 - 1/3 of the reserve stumpage rate

The gross area for each category reported as new line on the either; the Oil and Gas Commission's Geophysical Final Plan cover sheet or an As Cleared Plan is multiplied by the reserve stumpage rate as adjusted above (refer to Appendix V for category definitions).

² For pipe line rights-of-way a stumpage rate may be determined by using the above rates for cutting authorities containing less than 2 000 m³, of merchantable volume. For cutting authorities of 2 000 m³ and over see section 6.2.

6.8.1 Miscellaneous Stumpage Rates for Timber Licences

Timber licence cutting authority areas that have not been appraised and have a cutting authority term that began before May 1, 1995, must be appraised effective April 1, 2003.

7.2 MPS Principles and Procedures

7.2.1 MPS Appraisals

1. The **MPS** upset stumpage rate **must** be calculated using the *Interior Appraisal Manual* and monthly parameters (selling prices and consumer price index (CPI)) in effect on the date **that the rate is determined** (appraisal effective date).
2. The **MPS upset stumpage** rate **and** the bonus bid remain in effect from the date of award of the sale until the sale expires.
3. All **MPS upset** stumpage rates on Section 20 timber sale licences advertised on or after November 1, 2003 and Forestry Licences to Cut awarded under section 47.6 (3) of the *Forest Act* are fixed for the term of the timber sale and all extensions.

7.2.2 MPS Stumpage Adjustments

1. For cutting authorities that were advertised prior to November 1, 2003, that elected to have, or have adjustable stumpage rates, the stumpage rates are adjusted quarterly on January 1, April 1, July 1, and October 1, of each year.
2. At the time of the quarterly adjustment, the **MPS upset stumpage** rate will be re-calculated based on the equations applicable for the appraisal effective date and the cutting authority data. The monthly parameters effective for the month of the adjustment will be used in the calculation instead of the original values. All other data remain unchanged.
3. This process is repeated quarterly until the cutting authority is reappraised.

7.2.3 Reappraisals for MPS Appraisals

Revised data and revised monthly parameters will be used with the equations in effect on the reappraisal date. Any reappraisal will follow the policy direction of chapter 2 of this manual. The original bonus bid remains in effect.

7.2.4 Methodology

1. **The following methodology must be used for the calculation of the MPS** upset stumpage rate:
 - a. Calculate a selling price (SP) of the products that can be recovered from the stand using sections 7.3.1 and 7.3.2 with the variables as defined.

- b. Calculate the market stumpage price using the equation in section 7.4.2, the variables for the stand, and the SP calculated in section 7.3.
 - c. Calculate the MPS upset stumpage rate according to section 7.5.
2. One stumpage rate is determined for all appraised coniferous sawlogs in each cutting authority area **except where** the **MPS** upset stumpage rate has been calculated under section 7.5.1 (5).
3. **Where the MPS upset stumpage rate has been calculated under section 7.5.1(5)** one stumpage rate is determined for all appraised coniferous and deciduous sawlogs in each cutting authority area.
4. **All** other products are priced using miscellaneous stumpage rates as **prescribed** under section 6.8.

7.4.2 Market Stumpage Price Equation

Using the variables defined in section 7.4.1, the selling price calculated in section 7.3.2 and the equation below, calculate the market stumpage price (MSP).

$$\begin{aligned} \text{MSP} = & [44.1590 + 0.1895 * \text{SP/CPIF} - 0.9615 * \text{DC/CPIF} + 0.1747 * (\text{VOL}/1000) \\ & - 0.1327 * \text{S}\% + 9.0319 * \ln(\text{VPT}) + 0.009378 * \text{VPH} - 12.7571 * \\ & (\text{BWDN}\%/100) - 7.7502 * (\text{CY}\%/100) - 35.8595 * (\text{HP}\%/100) - 9.7689 * \\ & (\text{HORSE}\%/100) - 21.9802 * (\text{BURN}\%/100) - 2.0871 * \text{CYCLE} - 7.8954 * \\ & \text{HECE} + 29.5252 * (\text{WH}\%/100) - 7.9152 * \text{Z9} - 5.4166 * \text{SAL} - 0.5179 * \\ & (1/\text{VPT})] * \text{CPIF} \end{aligned}$$

For the above equation the following definitions apply:

1. If the percentage of hemlock, balsam and cedar volume in the cutting authority is greater than or equal to 50 percent of the total net cruise coniferous volume, then HECE = 1, otherwise enter 0.
2. If the selling price zone is Fort Nelson Peace (9) then Z9 = 1, otherwise enter 0.
3. If the total net cruise coniferous volume is greater than 50 000, then VOL = 50 000.
4. If horse or helicopter log appraisals, then VPT = 0.5490.
5. Where for salvage (SAL):
 - a. greater than one-third of the net cruise volume for the cutting authority has been physically damaged by ice storm, blowdown, fire, snow press, or
 - b. greater than one-third of the net cruise volume for the cutting authority has been attacked by mountain pine beetle, or other forest pests, that will result in the death of the attacked trees within one year, as determined by the district manager. Salvage (SAL) shall be = 1, or
 - c. except as provided in subsection 5 (a) and (b) SAL shall be = 0.

7.5 MPS Stumpage Rate

7.5.1 MPS Upset Stumpage Rate

1. Subject to subsections (2) (3) (4) (5) (6) and (8) for the timber sale licences advertised on or after December 2, 2005, the MPS upset stumpage rate is determined by the Timber Sales Manager by multiplying the upset stumpage rate calculated in section 7.5.2 by the green log fraction.

The green log fraction is determined as follows:

$$\frac{\text{District Grade Code (blank) volume (m}^3\text{)*}}{\text{District Grade Code (blank) volume (m}^3\text{)*} + \text{District Grade 3 volume (m}^3\text{)*}}$$

* The volumes are determined from the billing history records of the Revenue Branch for BCTS auctions in each forest district for the six-month ending November 30, 2005.

2. Where applications for a timber sale licence with an **MPS** upset stumpage rate determined under section 7.5.1 (1) have been invited but no applications have been received, the **MPS** upset stumpage rate shall be equal to the variable cost per cubic metre of preparing the timber for sale when that is requested by the Timber Sales Manager.
3. Where the director of BC Timber Sales does not anticipate that applications for a timber sale licence with an **MPS** upset stumpage rate determined under section 7.5.1 (1) will be received because of market conditions, the **MPS** upset stumpage rate shall be equal to the variable cost per cubic metre of preparing the timber for sale when that is requested by the Timber Sales Manager.
4. The **MPS** upset stumpage rate for timber that has been decked for over three years **and is administered by** the Timber Sales Manager, shall be the prescribed minimum stumpage rate when the Timber Sales Manager **in his or her sole discretion decides upon that rate.**
5. The **MPS** upset stumpage rate for timber sale licences with a minimum deciduous content of seventy percent of the net cruise volume, will be the greater of:
 - i. The variable cost per cubic metre of preparing the timber for sale, or
 - ii.
$$\frac{\$ / \text{m}^3 = 0.70 [(\text{NCV deciduous (m}^3) \times 0.50 (\$/\text{m}^3)) + (\text{NCV coniferous (m}^3) \times 40.78 (\$/\text{m}^3))]}{\text{TNCV (m}^3)}$$

where: NCV = net cruise volume (cubic metres)

TNCV = Net cruise volume deciduous + net cruise volume coniferous

6. The MPS upset stumpage rate for a cutting authority entered into under section 47.6 (3) of the Forest Act shall be the market stumpage price for that cutting authority.
7. The variable cost per cubic metre of preparing the timber for sale shall be calculated by the Timber Sales Manager.
8. Notwithstanding anything else in this section the MPS upset stumpage rate must not be lower than the prescribed minimum stumpage rate.

7.5.2 Upset Stumpage Rate Calculation

The upset stumpage rate (USR) is calculated by multiplying the Market Stumpage Price (MSP) by the difference between 1 and the discount factor (DF) as follows:

$$\text{USR} = \text{MSP} * (1 - \text{DF})$$

Where:

USR = Upset stumpage rate
 MSP = Market Stumpage Price as defined in Section 7.4.2
 DF = 0.00 if section 7.5.1 (6) applies, otherwise DF = 0.30

7.5.3 Prescribed Minimum Stumpage Rate

The minimum stumpage rate is prescribed by the minimum stumpage rate regulation (BC Regulation 354/87). The current minimum stumpage rate is \$0.25 per cubic metre.

7.5.4 Total MPS Stumpage Rate

1. The total MPS stumpage rate is the sum of the MPS upset stumpage rate and the bonus bid, or bonus offer.
2. Where the MPS upset stumpage rate is determined under subsections 1, 2, 3, 4, and 6 of section 7.5.1, or section 7.5.2, the total MPS stumpage rate applies to the Grade Code (blank) and Grade 3 coniferous sawlogs.
3. Where the MPS upset stumpage rate is determined under section 7.5.1(5), the total MPS stumpage rate applies to Grade Code (blank) and Grade 3 coniferous and deciduous sawlogs.

This page is intentionally left blank.

Appendix IV Map Content

The map(s) submitted with the appraisal data submission must be at a scale of 1:5000 or 1:10000. Additional maps at other scales may be included as required. At a minimum the map(s) shall indicate the following information:

- a. Cutting permit block boundaries.
- b. Retention areas within the cutting permit blocks.
- c. Delineation of biogeoclimatic zone, subzone and variant areas.
- d. Delineation of areas by harvest method (ground, cable, or helicopter, etc.) and partial cut percent.
- e. Delineation of areas that are the subject of specified operations cost estimates (e.g., skidder swing, root disease control).
- f. The geographic midpoint of each cutblock and common junction of the permit.
- g. Existing roads.
- h. Roads to be built by type (operational, block, winter) including sections to be gravelled and or sections that are “wet” (as defined in this manual).
- i. Location of roads/structures that are the subject of detailed engineered estimates.
- j. Location and type of other development such as remedial fencing, cattleguards and pipeline crossings.
- k. Map Scale indicated using a graphic bar scale.

The map may include other information considered relevant to the appraisal.

For reappraisal data submissions, reference may be made to the original map submitted. Any change to the harvest plan or area of harvest due to a “changed circumstance (section 2.3.2.1) during the term of the cutting authority must be mapped and promptly submitted to the district.

As part of the initial appraisal data submission the map(s) may be submitted in electronic format. At least two copies shall be submitted to the district in paper form prior to the cutting permit being approved.

Appendix V Geophysical Clearance Line Categories

The following categories of geophysical line clearing apply to Table 6-4. All clearing activity in the categories below must follow the best practices of meandering avoidance, line of site to a maximum of 200 metres, and avoidance of merchantable timber wherever possible. Failure to employ these best practices (as determined by the district manager) will result in the line clearing being billed as Category 1. The categories are defined as follows:

Category 1 – Any line section over 100 metres in length and over 4.25 metres in width.

Category 2 - Any line section over 100 metres in length and between 3.0 metres and 4.25 metres in width.

Category 3 – Any line section over 100 metres in length and less than 3.0 metres in width.

Index

A

Adjustable Stumpage Rates, 6-10
 Adjustments, 2-7
 CVP, 1-8
 Administration and Other Costs, 4-45
 Administration Levy, 6-11
 AMVs for Small Log Cutting Authorities, 3-2
 AMVs for Small Log Licences, 3-2
 Applicable Licences, 4-2
 Applicable Volume, 4-6
 Appraisal LRF, 3-11
 Appraisals
 New MPS Reappraisals, 7-3
 Area, 4-5
 Average Cost Estimates, 4-7
 Average Stumpage Rate, 1-7

B

Barge/Ferry, 4-40
 Barge/Ferry Not Used for Truck Haul, 4-40
 Basic Silviculture, 4-47
 BCTS, 6-10
 Benefits, 4-2, 4-51
 Biogeoclimatic Zone, 4-26
 Blasting, 4-13
 Block Roads, 4-13
 Bonus Bid, 1-7, 5-8
 Boom, 4-39
 Borrow Pit, 4-19
 Boulders, 4-13
 Breakage, 4-5
 Bridges, 4-22

C

Calculating the Interior Composite Index (ICI), 5-5
 Calculating the Interior Target Rate, 5-5
 Calculating the Target Rate, 5-5
 Calculation of Total Species End Product Selling Price, 3-10
 Camp, 4-39
 Canadian Lumber Standard/American Lumber Standard, 3-2
 Cattle Guards, 4-21
 Charges as a Share of Road Maintenance, 4-44
 Charges Other Than for Road Maintenance, 4-44
 Chip Value, 3-11
 Chip Yield, 3-11
 Chip Yield Derivation, 3-8
 Chip Yield Factors, 3-9
 Chips, 4-51
 Clear Cut, 4-31
 Clearing, 4-12
 Combined Product Recovery Factors, 3-7
 Comparative Cruising, 4-5
 Conventions and Terms of Reference, 1-2
 Converting Indexes From 1997=100 Base to 1992=100 Base, 5-5
 Corduroy, 4-22
 Cost Trend, 4-56
 Cost Trend Factors, 4-56
 Crib Back Fills, 4-19
 Cruise Data, 4-4
 Cruising Manual, 4-4
 Culverts, 4-12, 4-17
 Cutting Authority, 1-4
 Cutting Authority Document, 4-3
 Cycle Time, 4-35

D

Dead/Live Useless Snags, 4-33
 Debris Disposal, 4-12
 Decay, 4-5
 Decked Timber, 6-9
 Depreciation, 4-2, 4-51

Detailed Engineering Cost Estimates, 4-6, 4-7
 Determination of Stud Log Percent, 3-9
 Development Costs, 4-6
 Development Costs on Private Land, 4-10
 Development Levy, 6-11
 Dewater, 4-38
 Dewater and Reload, 4-39
 Distance to Support Centre, 4-27
 Ditch Construction, 4-12
 Drain Structure Cost Estimates, 4-7
 Drainage Structures, 4-17
 Drilling, 4-13
 Dump, 4-39

E

Effective Date, 4-56
 End Haul Construction, 4-22
 Existing Roads and Structures, 4-10
 Extended Road Amortization, 4-11

F

Fences, 4-21
 Fire Damage, 4-33
 Fixed Stumpage Rates, 6-10
Forest Act, 1-2
 Forest Development Plan, 4-3
 Forest Service *Cruising Manual*, 4-33
 Forest Service Roads, 4-44
 Free-Growing Stocking Standards, 4-47
 Fuel, 4-2, 4-51
 Full Appraisal, 2-2

G

Geo-tech Fabric, 4-22
 Grade 4 Hemlock AMVs, 3-3
 Gravel, 4-19
 Gross Volume, 4-28
 Ground Skidding, 4-25, 4-31
 Grubbing, 4-12

H

Haul Method, 4-36
 Heli Yarding Distance, 4-29

Helicopter, 4-25
 Helicopter Logging, 4-30
 Highway Haul, 4-37
 Highway Hauling, 4-36
 Horse, 4-25
 Horse Logging, 4-31

I

Indicated Stumpage Rate, 1-7, 5-8
 Installation, 4-19
 Insurance, 4-2, 4-51
 Interior Appraisal Data Submission, 4-4
 Interior Base Rate, 1-7, 5-8
 Interior Mean Value Index, 5-8
 Interior Target Rate, 1-7, 5-5
 Interior, Area of Application, 1-3
 Isolated Cutting Authorities, 4-28

L

Landings, 4-12
 Least Total Harvesting Cost Estimate, 4-2
 Licensee, 2-3
 Log Bridges, 4-19
 Low Volume Additive, 4-46
 LRF Update Add-ons, 3-7
 Lumber, 4-51
 Lumber Market Values, 1-7
 Lumber Recovery Factors, 3-6

M

Main Service Road, 4-6
 Maintenance, 4-2, 4-51
 Manufacturing Cost Differential, 3-10
 Manufacturing Costs, 1-2
 Market Pricing System, 7-2
 Material Costs, 4-12
 Mean Value Index, 1-7
 Minimum Stumpage Rate, 1-7
 Miscellaneous Stumpage Rates, 1-7
 Moving Assistance, 4-2
 MPS Stumpage Rate, 7-10

N

New Construction, 4-7

New Construction, 4-22
 Non-adjusting Stumpage Rates, 6-10

O

Off-Highway Haul, 4-37
 Off-Highway Hauling, 4-36
 Operating Cost, 1-7, 5-3
 Operational Road, 4-12
 Order, 2-2
 Other Land Use Charges, 4-44
 Other Roads, 4-44
 Overhead, 4-2
 Overhead Cable Logging, 4-25, 4-32
 Overland Construction, 4-22
 Overtime, 4-2, 4-51

P

Partial Cut Variables, 4-26
 Partial Cutting, 4-27
 Percent (%) Stud AMV, 3-9
 Percent Blowdown, 4-26
 Percent Rock, 4-13
 Percentage of the Indicated Stumpage Rate, 1-7
 Permitted Roads, 4-44
 Pipe Line Rights-of-Way, 6-14
 Pipeline Crossings, 4-21
 Point of Appraisal, 4-35
 Prescribed Minimum Stumpage Rate, 7-11
 Primary Haul, 4-37
 Profit and Risk Margins, 4-2

R

Railway, 4-39
 Railway Transportation, 4-39
 Random Lumber, 3-2
 Random Lumber AMVs, 3-3
 Reappraisal, 2-2
 Reconstruction, 4-22
 Reconstruction and Replacement, 4-8
 Reload, 4-38
 Repair, 4-2, 4-51
 Request for Approval for a Road Use Charge, 4-44

Reserve Stumpage Rate, 1-7
 Retaining Walls, 4-22
 Right-of-way Felling, 4-12
 Rip Rap, 4-19
 Road Type, 4-12
 Road Use Charges, 4-44
 Roads, 4-6
 Rock, 4-13
 Rock Drilling, 4-19
 Root Disease Control, 4-3
 Routine Road Maintenance Cost Estimate, 4-41

S

Secondary Haul, 4-38
 Section Length, 4-12
 Sector Times, 4-36
 Selling Price, 1-7, 5-3
 Shipping Differential, 3-10
 Side Slopes, 4-22
 Silviculture Levy, 6-11
 Silviculture Prescription, 4-3
 Site Preparation, 4-19
 Skidder Swinging, 4-3
 Skyline, 4-32
 Skyline Yarding Distance, 4-29
 Slope, 4-26
 Small Log, 3-2
 Small Tree Dummy Variable, 4-28
 Small Tree Volume, 4-28
 Snow and Ice Roads, 4-15
 Snow/Ice Road (WINTER), 4-12
 Soil Moisture Regime (SMR), 4-14
 Special Structures, 4-22
 Stabilizing Material, 4-19
 Stripping, 4-12
 Stud Lumber, 3-2, 3-3
 Stump Removal, 4-12
 Subgrade Construction, 4-12
 Subgrade Cost Estimate, 4-14
 Supplies, 4-2, 4-51
 Supply and Delivery, 4-19

T

Tabular Cost Estimates, 4-6
Tally Sheets, 4-4
Total Coniferous Volume of greater than
2 000 m³ to 5000 m³, 6-3
Total Coniferous Volume of Less than
2000 m³ or less, 6-3
Total Merchantable, 4-5
Total MPS Stumpage Rate, 7-11
Total Net Cruise Volume, 4-5
Total Stumpage Rate, 1-7
Tow, 4-39
Tributary Cutting Authority, 4-6
Truck Hauling, 4-19
Truck to Rail Transfer, 4-39
Turnout Construction, 4-12

U

Uphill Side Slope, 4-13
Upset Stumpage Rate, 1-7, 5-8
Upset Stumpage Rate Calculation, 7-11

V

Value Index, 1-7, 5-2, 5-8
Volume per Hectare, 4-5
Volume Per Hectare, 4-26
Volume per Tree, 4-28

W

Wages, 4-2, 4-51
Waste, 4-5