#### Ministry of Forests, Lands, Natural Resource Operations and Rural Development

Minister's Office

## **MEMORANDUM**

File: 250843

October 30, 2019

To: Interior Executive Directors

From: Honourable Doug Donaldson, Minister of Forests, Lands, Natural Resource Operations

and Rural Development

Re: <u>Amendment No. 1 to the Interior Appraisal Manual (IAM)</u>

The following is a summary of the changes:

The regular semi-annual updates of tabular rates (tables 6-1, 6-2, 6-4 and 6-5). These updates only apply to new woodlot, community forest, blanket salvage or licence-to-cut cutting authorities issued on or after the update date.

A few housekeeping changes have also been made.

This amendment will come into force on November 1, 2019. Copies of the amendment and the amended IAM are available at the following link:

 $\frac{http://www2.gov.bc.ca/gov/content/industry/forestry/competitive-forest-industry/timber-pricing/interior-timber-pricing/interior-appraisal-manual}{}$ 

Further amendments or revisions to this manual require my approval.

Doug Donaldson

Minister

pc Allan Bennett, Director, Timber Pricing Branch
Len Marsh, Director, Pricing and Tenures, Regional Operations Division, South Area
Jim Sayle, Director, Regional Operations Divisions, North Area
Darius Low, Revenue Team Lead, Regional Operations Division, North Area
Bruce Sullivan, Revenue Officer, Reginal Operations Division, South Area

# TIMBER PRICING BRANCH

# **Interior Appraisal Manual**

Effective July 1, 2019

Cost Base of: 2017

**Includes Amendments** 

Amendment No. 1

**Effective Date** 

November 1, 2019



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- c. the cutting authority **reserve area** or **reserve tree characteristics** are different from what was used in the original appraisal. These changes include:
  - i. for cutting authorities issued July 1, 2019 or later, an absolute<sup>1</sup> change in the reserve area(s); or
  - ii. for cutting authorities issued May 1, 2020 or later, a change in the reserve tree characteristics.
- 3. A licensee representative must submit a certified changed circumstance reappraisal data submission; or certify that no changed circumstances have occurred since the original appraisal no later than 180 days after the completion of primary harvesting activities or the cutting authority expiry date, whichever comes first.
  - a. A licensee representative may request an extension to the 180-day submission deadline by submitting a work plan and a new submission date to the regional revenue staff. If agreed to, the proposed submission date is the new submission deadline.
  - b. A licensee representative may choose not to submit a changed circumstance reappraisal if by using the appraisal effective in the quarter with the highest stumpage rate, the difference between the total stumpage for the appraisal and the total stumpage that would be calculated in a reappraisal as a result of a changed circumstance, is less than \$5,000. Total stumpage is calculated using the rate (\$/m³) x the total net cruise volume (m³).
    - i. The provision in paragraph (b) above does not apply to a changed circumstance under subsections (2)(b)(ii) or (2)(c).
    - ii. In the case of paragraph (b) above, a licensee representative must certify and provide a rationale why a changed circumstance reappraisal data submission is not required.
- 4. The effective date of a changed circumstance reappraisal is the day after the effective date of the cutting authority.
- 5. If a person responsible for stumpage determinations believes that a changed circumstance has occurred, and the licensee fails to provide a reappraisal data submission, they may initiate a reappraisal using the information that is available to them and must notify the licensee of that action.
- 6. If a changed circumstance is a result of a change in subsections (2)(b) or (2)(c) and a portion of the cutting authority area does not have cruise information available, the person who determines the stumpage rate may use the best information he/she deems available.

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<sup>&</sup>lt;sup>1</sup> Measured as the absolute change, e.g. an addition of 0.5 hectares and the subtraction of 0.5 different hectares is a 1-hectare change for the purposes of this section.

#### 2.2.3 Suddenly and Severely Damaged Timber

- 1. A licensee or BCTS representative may submit a reappraisal data submission for suddenly or severely damaged timber. Notwithstanding subsection 2.2 (1), the submission must be within 90 days of the date when the event that caused the sudden and severe damage stopped on the cutting authority area.
- 2. At least 15% of the total net cruise volume must be suddenly and severely damaged.
- 3. If a licensee was responsible or failed to comply with the Wildfire Act or Wildfire Regulations this section does not apply.
- 4. Only the standing timber remaining on the cutting authority area after the sudden and severe damage may be considered in the reappraisal data submission.
- 5. The effective date of the reappraisal is the first day of the month following the date when the event that caused the sudden and severe damage stopped on the cutting authority area.

#### 2.2.4 Minister's Direction

- 1. The Minister may at any time direct the determination, redetermination or variance of a stumpage rate.
- 2. The Minister must direct the determination, redetermination or variance of a stumpage rate effective on a future date.
- 3. The determination, redetermination or variance must be made in accordance with any other directions that the Minister may direct.
- 4. A licensee representative must submit to the district manager a reappraisal data submission, if requested by the district manager within 45 days of the Minister's direction.
- 5. Where a reappraisal is warranted but there isn't any timber remaining on the cutting authority area to apply the redetermined stumpage rate to, the reappraisal is redundant and not required.

## 2.2.5 Insect Damage

- a. A cutting authority with an adjustable stumpage rate may be reappraised on or after April 1, 2006 in accordance with this subsection if the licensee submits a revised ADS to the district manager.
  - i. Cutting authorities that have not been reappraised in accordance with this section may be reappraised once on or after July 1, 2014 during the remaining term and all extensions.
  - ii. Cutting authorities that have been reappraised once in accordance with this section prior to July 1, 2014 may be reappraised once on or after July 1, 2014 during the remaining term and all extensions.

# **5 Stumpage Rate Determination**

# 5.1 Stumpage Rate Determination for a Cutting Authority Entered into Under a BCTS Licence

- 1. Sections 5.1.1 through 5.1.3 are the policies and procedures for determining the upset for a cutting authority that is entered into under a BCTS licence.
- 2. a. The Market Pricing System for BCTS can only be used in the appraisal of a BCTS licence where data is available to do a full appraisal.
  - b. Where the data is not available to do a full appraisal of a cutting authority area, the appraisal must use the procedures outlined in chapter 6 of this manual.
- 3. a. All upsets for section 20 timber sale licences advertised on or after November 1, 2003, and Forestry Licences to Cut entered into under section 47.6(3) of the *Forest Act* and subject to section 6.7 of this manual, are fixed for the term and all extensions except where:
  - i. a reappraisal is done under section 2.2.3 due to sudden and severe damage, or
  - ii.a Minister's directed reappraisal is done under section 2.2.4.

### 5.1.1 Upset Stumpage Rates (Upset)

- 1. The upset can either be an upset rate  $(\$/m^3)$  or an upset value (\$).
- 2. The variable cost to prepare the timber for sale (VCU) is calculated by the timber sales manager.
- 3. Except as otherwise provided in this section the upset must be the greater of either:
  - a. The indicated upset determined by the regional revenue staff under section 5.1.2, or
  - b. The VCU:
  - unless the upset is approved by the Executive Director, BCTS.
- 4. If applications for a timber sale license are invited with an upset determined under subsections (3) or (6) but none are received, the timber sale manager may request a new upset with the purpose to re-advertise the timber sale license. The new upset must be greater than or equal to the VCU.
- 5. a. The upset for decked timber or partially harvested timber shall be the upset requested by the timber sales manager.
  - b. If the Timber Sales Manager intends to sell the decked timber or partially harvested timber competitively as a lump sum, the upset value is the upset value requested by the Timber Sales Manager using the volume of the decked or partially harvested timber as determined by an authorised scaler using a method approved by the minister.

# **6 Miscellaneous Policies**

# 6.1 Coniferous Average Sawlog Stumpage Rates by Forest Zone and Species

- 1. Each of the following forest zones referred to in Tables 6-1, 6-2, 6-4, 6-4a, 6-5 and 6-6 is made up of the following forest districts and or geographic units:
  - a. North Central Zone Mackenzie, Nadina, Prince George (less Robson Valley TSA), Quesnel and Stuart Nechako.
  - b. North East Zone Fort Nelson and Peace.
  - c. North West Zone Coast Mountain (excluding that portion that lies geographically within the North Coast Timber Supply Area), Skeena Stikine.
  - d. South Central Zone Williams Lake TSA Blocks A, B, C, D, E & I.
  - e. South East Zone Okanagan Shuswap, Rocky Mountain, Selkirk, and Thompson Rivers (plus Robson Valley TSA).
  - f. South West Zone 100 Mile House, Cascades, and Williams Lake TSA Blocks F, G, H, and J to N.
- 2. Where a species of coniferous timber is not listed in Table 6-1, 6-2, 6-4, 6-4a and 6-5, the rate that must be used for that species of timber is the rate listed in the column headed as OTHER.

Table 6-1: Coniferous Average Sawlog Stumpage Rates in \$/m<sup>3</sup>

FOREST ZONE	BALSAM	CEDAR	FIR	HEMLOCK	LARCH	L. PINE	SPRUCE	W. PINE	Y. PINE	OTHER <sup>1</sup>
North Central	33.31	-	43.05	35.78	-	30.59	34.13	-	-	33.85
North East	14.85	1	-	-	-	17.59	15.16	1	-	15.49
North West	10.50	10.58	-	5.50	-	26.90	22.52	1	-	12.72
South Central	10.85	1	7.78	-	-	8.74	7.94	1	-	8.06
South East	34.46	29.05	30.81	25.11	31.32	34.19	33.72	29.45	23.29	31.82
South West	32.52	40.13	31.38	34.98	37.62	25.93	37.05	39.76	-	31.67

<sup>&</sup>lt;sup>1</sup> Average for the Forest Zone

### 6.1.1 Community Forest Agreements

- 1. The sawlog stumpage rate for each species of coniferous timber harvested under any cutting authority issued under a Community Forest Agreement is the rate prescribed in Table 6-2 for the forest zone in which the cutting authority area is located.
- 2. Section 1.4.2, sections 6.1.2 through 6.5, commercial thinning in section 6.6, and sections 6.7 through 6.9 do not apply to Community Forest Agreement cutting authorities.
- 3. The stumpage rate determined under this section is redetermined on August 1 of each year in accordance with this section.
- 4. Notwithstanding subsection (1), (2), and (3), when a cutting authority is issued for the specific purpose to include projects funded by the Forest Enhancement Society of BC, the stumpage rate must be determined through a full appraisal ("fully appraised"). Refer to section 6.11 for details regarding cutting authorities with FESBC funding.

#### 6.1.2 Woodlot Licences

- 1. Except as provided in subsection (2) and (8) of this section, the sawlog stumpage rate for each species of coniferous timber harvested under a cutting permit issued for a woodlot licence with an effective date after November 30, 2008 is the rate prescribed in Table 6-2 for the forest zone in which the cutting authority area is located.
- 2. Where a woodlot licence cutting permit has been issued with an effective date after November 30, 2008 for the purpose of using amounts from an eligible extended road amortization agreement in an appraisal, then the stumpage rate will be determined using the procedures in this manual excluding this section.
- 3. Except as provided in subsection (4) of this section, the sawlog stumpage rate for coniferous timber harvested under a road permit issued for a woodlot licence is the rate prescribed in Table 6-2 for the forest zone in which the timber mark applies.
- 4. Where a woodlot has an eligible extended road amortization agreement before December 1, 2008 the sawlog stumpage rate for a road permit with an effective date on or after December 1, 2008 is calculated using the procedures in section 6.3.
- 5. The sawlog stumpage rate for each species of coniferous timber harvested under a blanket salvage cutting authority issued for a woodlot licence is the rate prescribed in Table 6-2 for the forest zone in which the blanket salvage cutting authority applies.
- 6. The stumpage rate determined under subsections (1), (3) and (5) of this section is redetermined on August 1, each year in accordance with this section.
- 7. Except as provided in subsections (2) and (4) of this section, sections 1.4.2, 6.1.1, 6.1.3 through 6.5, commercial thinning and Pre-harvest Waste Assessment in section 6.6, and sections 6.7 through 6.9 do not apply to Woodlot Licence cutting authorities.

8. Notwithstanding subsection (1) through (7), when a cutting authority is issued for the specific purpose to include projects funded by the Forest Enhancement Society of BC, the stumpage rate must be determined through a full appraisal ("fully appraised"). Refer to section 6.11 for details regarding cutting authorities with FESBC funding.

Table 6-2: Community Forest Agreements and Woodlot Licences: Coniferous Average Sawlog Stumpage Rates in \$/m<sup>3</sup>

FOREST ZONE	BALSAM	CEDAR	FIR	HEMLOCK	LARCH	L. PINE	SPRUCE	W. PINE	Y. PINE	OTHER <sup>1</sup>
North Central	5.00	-	6.46	5.37	-	4.59	5.12	-	-	5.08
North East	2.23	1	1	-	1	2.64	2.27	1	-	2.32
North West	1.58	1.59	-	0.83	-	4.03	3.38	-	-	1.91
South Central	1.63	-	1.17	-	-	1.31	1.19	-	-	1.21
South East	5.17	4.36	4.62	3.77	4.70	5.13	5.06	4.42	3.49	4.77
South West	4.88	6.02	4.71	5.25	5.64	3.89	5.56	5.96	-	4.75

<sup>&</sup>lt;sup>1</sup> Average for the Forest Zone

### 6.1.3 Incidental Conifer in Deciduous Leading Stands

- 1. Except as provided in section 5.1.1(6), this section applies to coniferous timber in a cutting authority area where the total estimated volume of all deciduous species to be harvested is greater than 70% of the total estimated volume of all species to be harvested.
- 2. a. The stumpage rate for coniferous timber is the rate prescribed in Table 6-3 for the smaller of the area of the forest district/district portion, timber supply area, region, or Area in which the entire cutting authority area for the tenure is located.
  - b. Where the Crown is responsible for basic silviculture on the cutting authority area, the stumpage rate for each species of coniferous timber must be the sum of the rate determined under paragraph (a) of this subsection and the silviculture levy determined under section 5.3.
- 3. A stumpage rate determined under subsection 2 must be redetermined on June 1, of each year in accordance with this section.
- 4. Notwithstanding subsection (2) in this section, the stumpage rate may be determined through a full appraisal in accordance with chapters 1, 2, 3, 4, and 5.
- 5. a. In this section the area of a forest district or the area of a timber supply area does not include the area of a park located within that district or timber supply area.
  - b. In this section the area of a Tree Farm Licence will be included in the area of the district or timber supply area in which it is geographically located.

- f. Salvage cannot occur on a road right-of-way which has an active timber mark associated with it.
- g. Except for a minister directed reappraisal (as provided in section 2.2.4), a stumpage rate determined under this section is fixed for the term of the cutting authority and all extensions.
- 5. a. The Damaged Timber sawlog stumpage rate for each species of coniferous timber is the rate in Table 6-4 or 6-4a for the Forest Zone in which the cutting authority area is located. The stumpage rates in Table 6-4a may be used when the:
  - i. estimated total net coniferous volume of timber on each cutblock is comprised of 80% or more Burnt Timber<sup>1</sup> (Burnt timber means any trees that meet the definition of Fire Codes A, B or C as per the Cruising Manual), and
  - ii. the burnt timber is evenly distributed throughout the cutblock(s).
  - b. Where the Crown is responsible for basic silviculture on the cutting authority area, the stumpage rate for each species of coniferous timber must be the sum of the rate determined under paragraph (a) of this subsection and the silviculture levy determined under section 5.3.
  - c. Notwithstanding paragraph (a), the stumpage rate for Damaged Timber may be determined through a full appraisal in accordance with chapters 1, 2, 3, 4 and 5.
- 6. The Post-Harvest Material sawlog stumpage rate for each species of coniferous timber is the rate in Table 6-5 for the forest zone in which the cutting authority area is located.

Table 6-4: Coniferous Average Sawlog Stumpage Rates for Salvage of Damaged Timber in \$/m³

FOREST ZONE	BALSAM	CEDAR	FIR	HEMLOCK	LARCH	L. PINE	SPRUCE	W. PINE	Y. PINE	OTHER1
North Central	19.99	-	38.75	21.47	-	22.94	30.72	-	-	27.39
North East	8.91	-	-	-	-	13.19	13.65	-	-	13.26
North West	6.30	9.52	-	3.30	-	20.17	20.27	-	-	9.44
South Central	6.51	-	7.00	-	-	6.55	7.15	-	-	6.98
South East	20.68	26.15	27.73	15.07	28.19	25.64	30.35	22.09	17.47	26.51
South West	19.51	36.11	28.24	20.99	33.86	19.45	33.34	29.82	-	26.95

<sup>&</sup>lt;sup>1</sup> Average for the Forest Zone

<sup>&</sup>lt;sup>1</sup> Eighty (80) percent or more of the estimated total net coniferous volume defined as burnt timber in each cutblock, based on a professional estimate by a forest professional registered with the Association of BC Forest Professionals. The professional estimate must include a description and supporting information of how the estimate was generated.

Table 6-4a: Coniferous Average Sawlog Stumpage Rates for Salvage of Fire Damaged Timber in \$/m<sup>3</sup>

FOREST ZONE	BALSAM	CEDAR	FIR	HEMLOCK	LARCH	L. PINE	SPRUCE	W. PINE	Y. PINE	OTHER1
North Central	18.33	1	27.59	20.37	1	15.98	19.24	1	-	18.95
North East	4.47	-	-	-	-	5.56	4.86	-	-	4.93
North West	4.41	4.08	-	1.09	-	12.10	9.96	-	-	5.09
South Central	2.20	-	1.43	-	-	1.82	1.85	-	-	1.67
South East	19.26	15.17	16.11	11.70	16.42	18.98	18.71	14.68	8.72	17.08
South West	18.78	24.45	17.73	19.29	22.40	13.23	22.65	24.38	-	18.03

<sup>&</sup>lt;sup>1</sup> Average for the Forest Zone

Table 6-5: Coniferous Average Sawlog Stumpage Rates for Salvage of Post-Harvest Material in \$/m<sup>3</sup>

FOREST ZONE	BALSAM	CEDAR	FIR	HEMLOCK	LARCH	L. PINE	SPRUCE	W. PINE	Y. PINE	OTHER1
North Central	8.33	-	21.53	8.95	-	15.30	17.06	-	-	14.74
North East	3.71	-	-	-	-	8.79	7.58	-	-	7.49
North West	2.63	8.46	-	1.38	-	13.45	11.26	-	-	5.19
South Central	2.71	-	3.89	-	-	4.37	3.97	-	-	3.96
South East	8.62	23.24	15.40	6.28	15.66	17.09	16.86	14.73	11.65	15.47
South West	8.13	32.10	15.69	8.75	18.81	12.97	18.52	19.88	-	15.30

<sup>&</sup>lt;sup>1</sup> Average for the Forest Zone

### 6.4.2 Blanket Salvage Cutting Authorities

- 1. This section may apply to cutting authorities issued under licences with an allowable annual cut or maximum harvest volume; excluding Community Forest Agreements in section 6.1.1, Woodlots Licences in section 6.1.2, BCTS or any timber in the Research Forests noted in Table 6-7.
- 2. Cutblocks amended into blanket salvage cutting authorities prior to February 15, 2016, must use section 6.4.2 of this manual as it was prior to February 15, 2016.
- 3. Cutblocks amended into blanket salvage cutting authorities on or after February 15, 2016 must be consistent with the Deputy Minister Memo: *Harvesting under a Blanket Salvage Permit (For Interior Regions)* signed January 29, 2016, where the cutblocks must be:
  - a. less than or equal to 15 hectares in size and 5000 m³ in volume; (unless the silviculture system used on the cut block is other than clear cutting, and at the completion of harvest the trees retained on the harvested area conform to the stocking standards specified in an approved Forest Stewardship Plan); and
  - b. issued for purposes of harvesting damaged timber as defined in section 6.4.1 (3); and
  - c. consistent with District Guidelines for Blanket Salvage Cutting Authorities.

Species	SFP Code	Product	Reserve Stumpage Rate
All Coniferous		For logs harvested from the following Research Forests: Alex Fraser (UBC), Aleza Lake (UBC and UNBC), College of New Caledonia (CNC), and Fort St. James (UNBC)	\$0.25/m <sup>3</sup>
All Species		Firmwood Reject (Grade code Z)	NIL
All Coniferous		Commercial thinning refers to an intermediate harvest with regard to even-aged stand management with:  Commercial thin stocking standards incorporated in a Forest Stewardship plan,  Stand age less than 45 years old; and  Residual stand left in a healthy, productive condition	\$0.25/m <sup>3</sup>

### District/TSA Specific

Description of Activity	Forest District	Reserve Stumpage Rate
New Crown land area disturbed for mining exploration trails, Seismic lines, gas or oil well sites and right-of-way to well sites or, authorizations for investigative purposes issued under the Land Act	Ft. Nelson Mackenzie Peace Rocky Mountain	\$ 836/ha \$ 1,638/ha \$ 1,926/ha \$ 2,160/ha

- 4. For Seismic lines, the corresponding district reserve stumpage rate from the above table is adjusted according to the category of line clearing as follows:
  - a. Category 1 no adjustment
  - b. Category 2 1/2 of the reserve stumpage rate
  - c. Category 3 1/3 of the reserve stumpage rate
- 5. For Seismic lines, the gross area for each category reported as new line on either:
  - a. the Oil and Gas Commission's Geophysical Final Plan cover sheet; or
  - b. an As Cleared Plan
  - is multiplied by the reserve stumpage rate as adjusted in subsection (4) above. Refer to Appendix V for category definitions.
- 6. For gas or oil well sites and right-of-way to well sites (pipe line rights-of-way) a stumpage rate must be determined by using the above rates for cutting authorities containing 2000 m<sup>3</sup> or less, of merchantable coniferous volume. For pipe line rights-of-way cutting authorities greater than 2000 m<sup>3</sup> use section 6.7.

## 6.7 Specific Licences to Cut

- 1. This section applies to:
  - a. Master licences to cut,
  - b. Occupant licences to cut, and
  - c. Forestry licences to cut:
    - i. Issued under section 47.6(3) of the *Act* in conjunction with an activity funded out of the BCTS account.
    - ii. Issued in conjunction with a works contract other than BCTS or issued for a fence line or protection of a fence line administered under the *Range Act*.
- 2. This section does not apply to:
  - a. Cutting authorities issued for any of the activities listed in Table 6-7 that have an area reserve stumpage rate in the following districts: Fort Nelson, Peace, Mackenzie, or Rocky Mountain, or
  - b. The proposed Site C reservoir and dam site, or
  - c. Projects where cruising of the timber to be harvested on any tenure listed in subsection (1) has been initiated for use in a full appraisal prior to November 1, 2013, or
  - d. Cutting authorities issued within a Controlled Recreational Area.
- 3. Unless otherwise directed by the Minister under section 2.2.4, the stumpage rate for any tenure listed in subsection (1) issued on or after November 1, 2013, must be the stumpage rate prescribed in Table 6-3 for the smaller of the area of the forest district, timber supply area, region, or Area in which the entire cutting authority area for the tenure is located, plus the average basic silviculture cost<sup>1</sup> for all species for the applicable Interior Area in which the cutting authority area is located at the time the stumpage rate is determined.
- 4. Where the licensee will have a silvicultural obligation imposed by the Ministry then the basic silviculture cost is not added under subsection (3) of this section.
- 5. Where the timber felled on the cutting authority area of any tenure listed in subsection (1) will not be removed from the site the volume used for billing may be estimated using an alternate method of scale approved by the Minister.
- 6. Except as provided under paragraph (7) of this section, the stumpage rate determined under this section will be re-determined annually on June 1st.
- 7. The stumpage rate determined under this section for a forestry licence to cut issued under section 47.6(3) of the *Act* is fixed for the term and all extensions.

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<sup>&</sup>lt;sup>1</sup> From the Interior Basic Silviculture Costs published quarterly and available on the Timber Pricing Branch website.

EQUIPMENT DESCRIPTION	BLUE BOOK SECTION NUMBER	<sup>1</sup> BLUE BOOK CATEGORY	<sup>2</sup> BLUE BOOK MODELS	\$/HOUR
Skidder + Roller – Towed: Sheepsfoot and grid	17.1 & 13.5	32 in. diameter (813mm) 2 drums rollers	Cat 515, 518C; Clark/Ranger 666-C, 666-D, F-66, F-66-D, H-66-G; Deere 540, 548-D, 548-E, 548-G, 548-GII, 548-GIII; TimberJack 360-D, 380 A/B/C/D (out-of-date models)	118.35
Tractor - Crawler	15.2	85-129.9 FWHP	Case 1150M, 750M, 850M; Cat D4K2 XL, D5K2 XL	144.15
Tractor - Crawler	15.2	130-189.9 FWHP	Case 1600M, Cat D6K2 XL-T4i, D6N-T4i	186.25
Tractor - Crawler	15.2	190-259.9 FWHP	Cat 2050M; Cat D7E-T4; Dressta TD-15M Extra	220.20
Tractor - Crawler	15.2	260-359.9 FWHP	Cat D8T-T4; Deere 1050J; Dressta TD25R	263.55
Tractor - Crawler	15.2	360-519.9 FWHP	Cat D9T-T4	316.30
Truck – Concrete Transit Mix	4.5	8 cu yd (6.1 m <sup>3</sup> )		109.55
Truck – Dump Gravel – Standard S/A or Tandem	16.1	14 cu yd (10.7m³)	Standard haul	98.30
Truck – Dump Gravel – Standard S/A or Tandem	16.1	14 cu yd (10.7m³)	Includes 10% for rip-rap haul	108.13
Truck – Dump Gravel Articulated	16.8	20-24 tonnes	<b>Bell</b> B25E; <b>Cat</b> 730C, 730C EJ	164.50
Truck – Dump Gravel Articulated	16.8	25–29 tonnes	Bell B30E; Cat 735B/C,740B EJ; Doosan/Moxy DA30	181.80
Truck – Logging (Highway)	16.2-C	6 axle 45,000 kg	Tandem tractor & lowbed with booster	123.10
Truck – Log Self Loading	16.2-C & 16.3		Truck – Logging (Highway) and 5-ton deck crane	136.30
Truck - Lowbed	16.2-C	5 axle unit	Tandem tractor and lowbed	112.05
Truck - Lowbed	16.2-C	7 axle unit	A or B train (or triple axle with booster)	140.75
Truck – Lowbed	16.2-C	8 axle unit	A or B train (or triple axle with booster)	143.85
Truck – Miscellaneous – Pilot Vehicle	16.2-A			55.50

<sup>\*</sup> includes 10% additional cost - 5% for brush guard package and 5% for hydraulic thumb.

- Capacity in cubic feet per minute, diameter or tonnes (Drills, Rollers, Cranes)
- Capacity in yards/m³ (Concrete Trucks, Gravel Dump Trucks, Loaders)
- Number of axles and/or gross vehicle weight in kilograms (Logging Trucks, Lowbeds)
- Operating weight in pounds or tonnes (Excavators, Skidders, Articulated Trucks)

<sup>&</sup>quot;All Found" includes all costs, expenses and profits necessary for the project work being undertaken with an allowance for operator's wages plus benefits (does not include a swamper). Operators are expected to report to the project site at their own expense unless there is an agreement to the contrary due to project location. Rates include insurance and WorkSafeBC costs.

<sup>&</sup>quot;BLUE BOOK CATEGORY" Categories as applicable provide:

Power in flywheel horsepower (Crawler Tractors, Graders)

"<sup>2</sup>BLUE BOOK MODELS" – Associated rates in \$/hour are for Blue Book equipment models for years 2014-2017 unless "out of date" (pre-2014) in which case the rate in \$/hr is for the relevant Blue Book equipment model for the specified year.

b. Miscellaneous Equipment Rates (Source: 2017-2018 Blue Book)

EQUIPMENT DESCRIPTION	BLUE BOOK SECTION NUMBER	BLUE BOOK CATEGORY	*\$/HOUR
Concrete Mixer	4.4	6 cu ft (0.17 m <sup>3</sup> )	7.78
Concrete Vibrator	4.3	12' to 21' (3.65m – 6.10m)	5.13
Powersaw	11.1	Over 20+ inch blade; over 57cm <sup>3</sup>	3.70

<sup>\*</sup>Labour not included

c. Wage Rates (Source: 2014-2019 United Steelworkers agreement rates)

LABOUR DESCRIPTION	GROUP	*\$/HOUR
Labourer	Group I	40.57
Roadman	Group II	40.91
Crib/Culvert Maker, Powderman	Group VII	42.97
Landingman	Group VIII	43.51
Rockdriller & Powderman (for load & blast only)	Group VII & XI	95.21
Bridgeman	Tradesman	53.20
Faller, including powersaw cost		76.19

<sup>\*</sup>Effective June 15, 2017. Includes 40% for payroll loading.

- 1. Except as provided in subsection 4 below, the labour and equipment rates in the Appendix I table will be used for all engineering cost estimates made under section 4.3.6 of this manual.
- 2. Except for subsections 3 and 4 of this appendix, there are no additions permitted to the Appendix I table rates.
- 3. A nominal cost estimate of \$50.00/person/day for the period of the project is permitted in the ECE for:
  - a. crew transportation, if the crew transportation cost has not already been accounted for in the appraisal; and if applicable
  - b. crew accommodation, if those doing the work must stay in a camp (as defined in section 3.2.30) while working on the project and the camp cost has not already been accounted for in the appraisal.
- 4. Use of rates for equipment not listed in this appendix must be approved by the regional timber pricing co-ordinator.