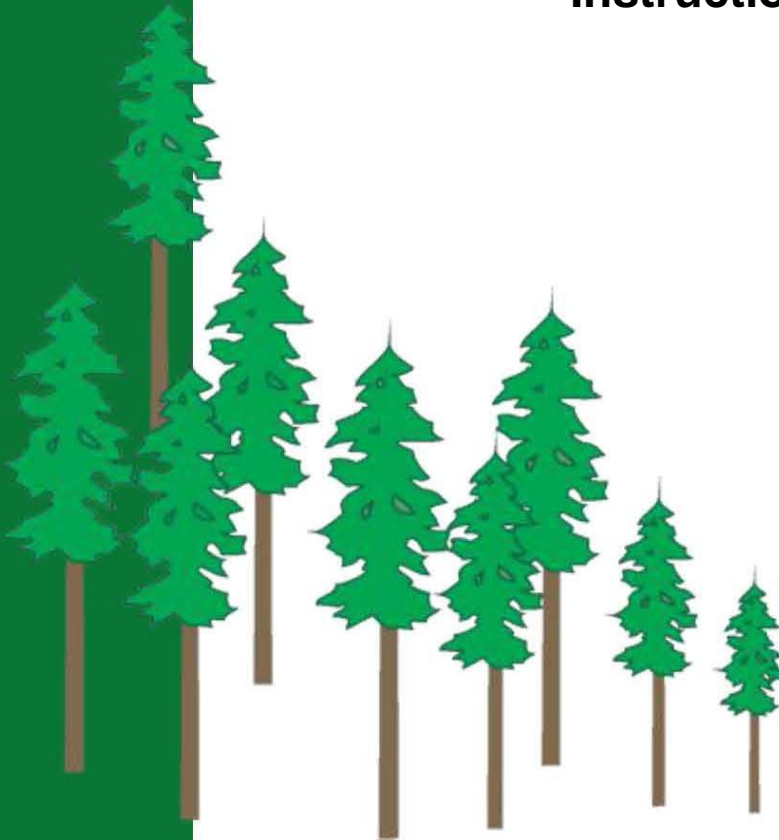




2018 Interior Logging Cost Report Instructions



Timber Pricing Branch

March 15, 2019

2018 Interior Logging Cost Report

Housekeeping/Updates to the 2018 Interior Log Cost Report Instructions

Reference / Schedule	Page	Comment
Overall	All	<p>For the 2018 cost collection year a new ILCR Application will be used. A new application was necessary to meet security protocols and to provide update cost collection ability. To align the instructions with the new application there are changes to all sections of the Instructions. As a result</p> <p>It is strongly advised that those entering cost data for 2018, review the instructions for all schedules as all have some level of change</p>
Timetable	4	NOTE the dates on the Timetable
Schedule 7A	24	For 2018 record bridge cost data and other information in the ILCR schedule 7A. DO NOT USE THE EXCEL BRIDGE COST TRACKING TEMPLATE PREVIOUSLY USED
Schedule 11	39	For 2018 record silviculture summary data directly into the ILCR – schedule 11 . Although you may use the silviculture cost excel template ENTER SUMMARY SILVICULTURE DATA DIRECTLY INTO THE ILCR. Schedule 11 data should be submit before Jan 31, 2020
ILCR web page		These instruction and other useful tools and can be found at the ILCR web page ; https://www2.gov.bc.ca/gov/content/industry/forestry/competitive-forest-industry/timber-pricing/interior-timber-pricing/interior-logging-cost-report-ilcr-tool

Reminders:

- Report costs for fencing, cattle guards, pipeline crossings and root rot treatment (stumping) on Schedule 9.
- Be sure to indicate the type of cattleguards installed as noted in the instructions, including load rating
- Record the sub-zone, variant, and relative moisture regime class for all subgrade road construction samples

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Time Table

<u>Task</u>	<u>Deadline (on or before)</u>
1. <u>Regional Revenue Accountant</u> : requests list of cut blocks and road activity from Licensees, and provide overview, including dates, for the ILCR process	February 01, 2019
2. <u>Licensees</u> : completes list of blocks and road samples and returns to Revenue Accountant.	February 28, 2019
3. <u>Regional Revenue Accountant</u> : selects samples to be included in ILCR and notifies licensee.	March 16, 2019
4. <u>Timber Pricing Branch</u> : posts ILCR instructions to web and changes ILCR to 2016 - available for licensees (rolled forward from 2015)	April 04, 2019
5. <u>Region Revenue Accountant</u> : notifies the licensees when the ILCR application is available and ensures licensees have access to the report instructions.	April 04, 2019
6. <u>Licensees</u> : complete and finalize the ILCR schedules 1 to 10 as per ILCR instructions and notify Revenue Accountant	May 31, 2019
7. <u>Region Revenue Accountant or Timber Pricing Branch</u> : notify licensees who are not finalized that they are delinquent, and that C&E will be notified.	June 08, 2019
8. <u>Timber Pricing Branch</u> : notify C&E of licensees who are not finalized by the deadline.	June 16, 2019
9. <u>Regional Revenue Accountant</u> : Completes audit/verification of reports - subject to queries and advises Timber Pricing Branch and	November 15, 2019
10. <u>Timber Pricing Branch</u> : submits the data set for statistical analysis by...Licensees	December 15, 2019
11. <u>Silviculture</u> : Schedule 10 silviculture is on a separate timing stream from schedules 01- 10, and therefore finalized and submitted separately	January 31, 2020

Getting Started

Access - You access the Annual Interior Logging Cost Report from the Ministry ILCR Web Site, enter your User Name and Password, Start Survey, You will be prompted to select the mill number to work with and the year. This is required even if you are working with one mill only. Select and enter, and **SAVE**, then you can proceed to any schedule, but it is recommend that you enter volumes into schedule 3 as a first step.

The screen below is what you see when first signing on:

The screenshot shows the ILCR web application interface. At the top left is the British Columbia logo and the text "Ministry of Forests, Lands, Natural Resource Operations and Rural Development". The main title is "INTERIOR LOGGING COST REPORT (ILCR)". Below the title is a navigation menu with buttons for "Home", "Schedules", "Check Status", "Generate Reports", "Print Schedules", and "Logout". The user name "Tom Casey" and a help icon are on the right. Below the navigation is a "Mill and Reporting Year" section with a "Save" button. The "Mill" dropdown is set to "Select Mill" and the "Reporting Year" dropdown is set to "Select Reporting Year".

STEP - 1 --- Enter Delivered Volumes for the period, for both crown tenures and private owned and purchased wood (PO&P) into **schedule 03 as a first step**. The entry section is mid-way down the page on schedule 03. See snipe of the entry section below. Doing so will populate the volumes for schedule 01. You can then enter data to schedule in any order

Total Overhead and Cost Per Unit Calculation			
	Harvest Volume (m ³)	Total Cost \$	Cost per Unit (\$/m ³)
Privately Owned & Purchased (PO&P) Timber:	<input type="text" value="5,000"/>	<input type="text" value="7,455"/>	<input type="text" value="1.49"/>
Crown Timber:	<input type="text" value="50,000"/>	<input type="text" value="125,445"/>	<input type="text" value="2.51"/>
Total Overhead:	<input type="text" value="55,000"/>	<input type="text" value="9,900"/>	<input type="text" value="2.42"/>

Link to ILCR Web Page to; request access, sign in, instructions and other helpful reference material.

<https://www2.gov.bc.ca/gov/content/industry/forestry/competitive-forest-industry/timber-pricing/interior-timber-pricing/interior-logging-cost-report-ilcr-tool>

General Instructions

Please be clear, precise and fully complete required schedules and sections. Data **MUST** be added to most of the cells that are not shaded. If there is no data enter “0” (zero).

Data **CANNOT** be added to cells that are shaded. These cells are system calculations or transfer of data from another schedule or data entry point and therefore locked.

All schedules have a **Comments Box** to explain unusual situations or costs that are outside the normal range, and which are not adequately measured or described by the existing survey data fields.

When entering data in any of the schedules **Save** and **Check Status** frequently. This will often provide an early warning of potential issues with the entered data for the schedule or sample and prevent data from being lost.

For some schedules it is necessary to **ADD** a record before saving. Selecting **SAVE** will not **ADD** and the data entered will be lost. Always **ADD** first and **SAVE** second.

Navigation - Refer to the Power Point document, **ILCR User Interface** posted as a PDF on the ILCR Web Page for assistance, information and tips. Navigate screens using the mouse or tabbing from entry point to entry point. The enter key is disabled, when navigating in the application. On schedules and sub-schedules where a number of samples are required and there is an “Add” button function, the user must “Add” before saving.

Help – For help in clarification of data to be entered use these instructions. There is instruction for each data entry point. For additional clarification contact the Regional Revenue Accountant for your area.

The certification and authorization form on the next page will need to be completed and signed off by an authorized company employee on completion of the ILCR

NOTE: Reported costs should include PST paid, **but should NOT include GST (HST)**, since these amount are recoverable by the licensee, and therefore not an expense.

Certification and Authorization Form

The Certificate and Authorization Form for Release of Information **must** be signed by a company official who is authorized to sign on behalf of the company, and sent to the Regional Revenue Accountant each year.

For Report Year: 2018

REPORTING COMPANY: _____
REPORTING DIVISION: _____

CERTIFICATE OF AUTHORIZATION AND RELEASE OF INFORMATION

The undersigned person having the appropriate authority on behalf of the reporting company and division certifies the information contained in the attached report has been accurately extracted from the operating cost statements and other official records of the company and may be verified by ministry audit.

The cost information and operational data contained in this report has been provided by the company to the Ministry of Forests, Lands and Natural Resource Operations with the express understanding that the ministry will keep the data confidential at all times and the data is protected from unauthorized disclosure by section 136 of the *Forest Act*, and the *Freedom of Information and Protection of Privacy Act*. The source of any information extracted from this survey will be kept unidentifiable:

Signature of Authorized Company Official:

Printed Name: _____
Title: _____
Telephone: _____
Date: _____

Biogeoclimatic Zones

The delineation of biotic regions or zones on the basis of vegetation, soils topography, and climate. These zones are based on the system developed by Dr. M. J. Krajina. BC has been divided into fourteen zones. For this report, the Alpine-Tundra zone has not been included. The biogeoclimatic zones for use in the survey are as follows:

LIST OF BIOGEOCLIMATIC ZONES AND ABBREVIATIONS

Abbreviation	Biogeoclimatic Zone Name (BEC)
BG	Bunchgrass
BWBS	Boreal White and Black Spruce
CDF	Coastal Douglas fir
CWH	Coastal Western Hemlock
ESSF	Englemann Spruce-Subalpine Fir
ICH	Interior Cedar-Hemlock
IDF	Interior Douglas fir
MH	Mountain Hemlock
MS	Montane Spruce
PP	Ponderosa Pine
SBPS	Sub-Boreal Pine-Spruce
SBS	Sub-Boreal Spruce
SWB	Spruce-Willow-Birch

Schedule 1 - Average Cost of Logging

Schedule 1 is used to derive an average cost of logs delivered to the consuming mill log yard on a fiscal year basis and is compiled from the annual company financial statements.

Cost categories provided are for *general reference only*. Total Company Logging Costs should be segregated and entered into schedule 1 in equivalent detail. The total cost of logging and the total harvested volume (all volumes, all grades, including firmwood reject, all species coniferous and deciduous must be reported throughout the report) must agree with or be reconciled to the annual company internal financial statements and supporting Management reporting.

Instructions:

1.1 Volumes: Click on Schedules Tab at top then Schedule 3

Enter the Crown Volume and Privately Owned or Purchased Volume on Schedule 3 (lower half of the screen) so the program will automatically populate the volumes required to be entered for schedules 1 and 2 as well as schedule 3.

Total Overhead and Cost Per Unit Calculation			
	Harvest Volume (m ³)	Total Cost \$	Cost per Unit (\$/m ³)
Privately Owned & Purchased (PO&P) Timber:	395,528	603,551	1.53
Crown Timber:	111,050	3,297,753	29.70
Total Overhead:	506,578	3,901,304	7.70

After volumes have been entered, schedules may be completed in any order.

Click on Schedules Tab at top then Schedule 1

1.2 Standing Tree to Loaded Truck: INCLUDE all costs for:

- felling standing trees
- bucking
- skidding or yarding to bush landing or roadside
- processing into logs and loading onto trucks for delivery
- skid trail and landing construction
- bucking and sorting logs on the landing, roadside or at intermediary sorts
- crew transportation (vehicle, air and boat) for all operations
- on-block road and bridge costs that cannot be reported separately from the tree- to-truck phase.

**** Note **** Costs included may be for contracted harvesting or work done by company crews

DO NOT INCLUDE:

- Overhead costs reported in Schedule 3 - Supervision and Administration Overhead (these costs will automatically transfer to Sch. 1 from Sch. 3)

1.3 Log Transportation: INCLUDE all costs for:

- movement of logs from initial loaded truck at the bush landing to the final mill site delivery point
- all direct costs of hauling the timber to the log yard, dryland sort or booming ground
- re-load and re-haul functions and dryland sort costs such as dumping, sorting and preparation of logs into booms or barge loads

Schedule 1 - Average Cost of Logging (cont'd)

- costs associated with movement of logs by water from the local tie up grounds to market destinations or processing facilities

DO NOT INCLUDE:

- Log yard costs that should be included in the sawmill cost center
- Scaling costs reported in Schedule 3 – Forest Management Administration (FMA)

1.4 Road Management: INCLUDE all costs for:

- road maintenance - grading, brush control, minor surfacing repairs, sanding, snowplowing, ditch maintenance and repair, bridge plank replacement or gravel replacement, slough removal, water bar construction for seasonal erosion control, minor repairs to roads due to slides, eroding or flood damage, dust control, sign maintenance, non-engineered road deactivation, etc.
- road deactivation - all expenditures during the year for permanent, semi- permanent deactivation, and temporary deactivation which includes all functions required to return roadbeds and bridges to a stable state following completion of harvesting.
- road rehabilitation
- access management

**** NOTE****

- If you share the costs of maintaining roads with another organization provide only your company's portion of these costs
- If your company typically accrues the deactivation liability, record the cash expenditures during the year instead of the accrual expense

1.5 Road Construction Costs: INCLUDE all costs for:

- all development/construction costs incurred
- roads, bridges, and all pertinent structures required for new road access construction, upgrade, major resurfacing and major flood damage.
- replacement or repair of a major drainage structure, major road reconstruction, major resurfacing, or major event repairs as per instructions in the Interior Appraisal Manual.
- capitalized road and bridge costs - record the total expenditures recognized in the delivered wood cost statement

1.6 Post Logging Treatment (Contractual): INCLUDE all costs for:

- tree marking,
- landing and roadside burning and fireguards,
- landing and roadside rehabilitation,
- slashing, falling leaners, lop and scatter, mistletoe eradication, 3 meter knockdown and pheromone treatment, done under separate contract, and by licensee's own crews.

1.7 Forest Management Administration Costs (Sch. 3): Transferred from Schedule 3

- Transferred automatically from schedule 03, by the application, no entry

1.8 Stumpage and Royalty: INCLUDE all costs for:

- all stumpage and royalties paid by the licensee for timber delivered to a mill log yard

Schedule 1 - Average Cost of Logging (cont'd)

1.9 Depletion and Amortization: INCLUDE all costs for:

- resource depletion estimates and those development amortization costs NOT included in Development Costs or other cost category,
- depreciation expense NOT included in any other category.

DO NOT INCLUDE:

- depreciation, amortization and depletion for all administrative buildings, equipment, vehicles, which should be reported on Schedule 3 – FMA cost

CLICK “SAVE” before clicking on [Subtotal Other Costs \(2\)](#) so data entered is not lost.

1.10 [Subtotal Other Costs \(2\)](#) : INCLUDE all costs for:

- Costs WHICH HAVE NOT BEEN INCLUDED in Schedule 1, Categories 1-9 referenced above. Enter a brief description for each cost item, applicable timber volume (if any), and costs in the appropriate columns.

1.11 Subtotal Company Logging Cost (no Silviculture): Cost \$ automatically calculated from data above

1.12 Silviculture

- Includes all fiscal year silviculture project costs for prescribed silviculture treatments required to bring the planted area to a "free growing" state and expenditures related to stand improvement, beyond basic free-to-grow responsibilities.

1.13 Actual \$ Spent: INCLUDE all costs for:

- Surveys – direct costs of field assessments, regeneration and survival surveys.
- Site preparation – clearing and preparation of logged over areas using either mechanical, chemical or slash burning methods.
- Brushing and weeding – direct costs of removing unwanted vegetation from the immediate area surrounding the seedlings.
- Planting – all direct costs relating to the planting of a new crop, including seedling storage, transportation to the site, direct labour and supervision.
- Fertilization – all direct costs including cost of fertilizer, direct labour, helicopter, vehicles and supervision.
- Spacing – direct cost of labour (company or contract), supplies, vehicles and supervision.
- Other Treatments – consider seed procurement, seed tree control, sanitation cut, ambrosia control, pruning, etc.
- Incremental Silviculture – any expenditure related to stand improvement. Exclude all expenditures that were reimbursed or recovered.

DO NOT INCLUDE:

- all FIA activities.
- all reimbursed or recovered expenditures related to stand improvement.

1.14 Less Silviculture Admin Costs: calculated automatically from Schedule 11

1.15 Accrued Less Actual \$ Spent: ENTER the accrual calculation:

- Calculate the variance between the accrual amount reported in the financial statement and the actual dollars spent.

1.16 Total Silviculture – As per your Financial Statements: calculated automatically.

1.17 Total Company Logging Costs (including total Silviculture Cost): calculated automatically

Click “Save” and Check Status to confirm completion

Schedule 2 – Purchased/Private Log Costs and Log Sales Description

This schedule records purchased and/or private log costs (POP).

***** Note on Third Party Tenures and POP*****

If you harvest/manage (from planning to silviculture) a 3rd party tenure or CP then include these costs in Sched 1 & 3 of your ILCR report and include the volumes in Crown timber not as POP. In other words treat and report it the same as you do your own licenses.

Please Note ** additional costs (i.e. \$/meter, \$/agreement) paid to harvest the timber is discretionary (not a normal cost if you owned the tenure) therefore not an eligible cost.

It doesn't matter who the 3rd party licensee is with the exception of BCTS and woodlot tenures which are reported in Schedule 2 as purchased logs. For such volume that is not fully managed, any cost incurred and included with FMA costs on schedule 03, must be excluded (record as unacceptable costs).

Instructions

2.1 Purchased/Private Log Costs: **INCLUDE all:**

- Net delivered costs of logs purchased from all sources (e.g., BC Timber Sales, woodlots, agricultural leases, farmers, landowners, etc.) and the licensee's privately owned timber costs.

*** * N o t e * *** volume transferred automatically from Schedule 3.

2.2 Purchased/Private Wood Overhead (Schedule 3, Woodlands Subtotal):

- Volume and costs are transferred automatically from Schedule 3.

2.3 (less) Log Sales: **INCLUDE** all volume and credits received for all log sales.

2.4 Net Purchased Private Log Costs: automatically calculated.

2.5 Total Company Logging Costs (Schedule 1): automatically calculated.

2.6 Total Average Logging Costs: automatically calculated.

Click "Save" and Check Status to confirm completion

Schedule 3 – Forest Management Administration (FMA) Costs

Description

This schedule includes ONLY forest management administration (FMA) costs directly related to supervision and administration of the tenure obligation adjustment activities; forest management administration, road development, road management and basic silviculture (see Appendix 1 of the Interior Market Pricing System, Tenure Obligation Adjustments, dated June 5, 2006 for allowable costs and unacceptable costs, which is attached).

The Harvest \$ column is FMA costs when harvesting Crown timber and the PO&P \$ column is FMA costs when harvesting Privately Owned and Purchased timber.

Allocated costs are no longer acceptable for MPS... (e.g. corporate head office and plant operations (lumber mills, veneer, plywood, OSB, pulp, paper)). Allocated costs are not accepted for MPS. Costs must be directly charged to Forest Management Administration and supported by documentation.

** Note **

- If FMA costs are not recorded separately in company records, estimate the costs attributable to the PO&P volume.
- Scaling costs for PO&P are calculated automatically based on the percent of PO & P volume.

Instructions:

3.1 Licenses, Fees, Insurance: INCLUDE all costs for:

- licenses normally required for carrying on the business,
- fees paid for special use permits,
- water license permits and permit fees of a similar nature.
- association or organization fees, and cost of
- insurance coverage on operational assets (buildings, equipment, inventories – logs in the woods, in the water or in transit).

DO NOT INCLUDE:

- Costs for insurance for “on highway vehicles” which is included in Vehicle Expense (see #5 below).

3.2 Taxes, Leases, and Rentals: INCLUDE all costs for:

- taxes paid to municipal or provincial governments for general and school purposes for:
- Land and improvements relative to camp site(s) and camp buildings, roads and bridges used in logging operations, and immediately adjacent land, if it forms an integral part of the operation.
- Unimproved land used in active logging operations (e.g. sorting grounds, dumping areas, reload areas, etc.).
- land leases, upland consents, right-of-way, or access fees, railway crossing fees and Indian Reservation road permits covering properties or access privileges required for logging.

DO NOT INCLUDE:

- amounts paid to or received from other licensees for road use fees, which are reported on Schedule 6 – Road Management costs

3.3 Annual Rents: INCLUDE all costs for:

- rent paid under Section 111 of the *Forest Act*.

**** Note **** amount entered will automatically transfer to the Unacceptable Cost section.

CLICK the “OK” Button to continue when the message indicating the transfer appears

3.4 Wages/Salaries including Benefits: INCLUDE all costs for:

- administrative support (manager, superintendent, general foreman, accountants, office staff, and personnel manager)
- supervision of FMA activities, and
- general employees (watchmen, etc.).

3.5 Vehicle Expense: INCLUDE all costs for:

- owning, operating and maintaining the service vehicles and pick-ups used by the supervisory and administrative staff.
- vehicle insurance if applicable.

3.6 Office Expense: INCLUDE all costs for:

- operating the administrative or operational support offices.

3.7 Scaling Expense: INCLUDE all costs for:

- scaling of all wood delivered to the mill log yard(s).
- scaling costs for timber harvested under a cruise based sale type

**** Note **** Scaling and Waste and Residue Expenses will be deducted from the total FMA – TOA calculations but should be entered in schedule 3 for reference purposes

DO NOT INCLUDE:

- Costs for log yard, storage and handling costs incurred after the scale.

3.8 Cruising and Layout Expense: INCLUDE all costs for:

- actual cruising and layout costs for the harvesting operation as required for both cruise base and non-cruise based sales.
- surveys and designs required for block and road approvals.

3.9 Residue & Waste Expense: INCLUDE all costs for:

- all residue and waste surveys.

**** Note **** Scaling and Waste and Residue Expenses will be deducted from the total FMA – TOA calculations but should be entered in schedule 3 for reference purposes

Schedule 3 – FMA costs cont'd

3.10 Depreciation Expense: INCLUDE all FMA costs for:

- for buildings, equipment and vehicles, as included in the annual financial statements.

CLICK “SAVE” before clicking on [Subtotal Other Costs \(0\)](#) so data entered is not lost.

3.11 Silviculture Admin Costs: include all volumes relative to silviculture administration

3.12 [Subtotal Other Costs \(0\)](#) (10) (Click & Open): INCLUDE all FMA costs for:

- supervision and administration of the tenure obligation adjustment activities; forest management administration, road development, road management and basic silviculture WHICH HAVE NOT BEEN INCLUDED in Schedule 3, Categories 1 - 11 above. ADD a brief description for each item, TOTAL\$ (crown timber), and PO&P\$ as applicable.

3.13 Subtotal Actual Costs – calculated automatically.

CLICK “SAVE” before clicking on [Included Unacceptable Costs \(0\)](#) so data entered is not lost.

3.14 [Included Unacceptable Costs \(0\)](#) (Click & Open): INCLUDE all FMA costs for:

- adjustments made to deduct costs which are not applicable for appraisal purposes. See Appendix 1 of the Interior Market Selling Price System, Tenure Obligation Adjustment dated June 5, 2006, or Appendix 1 to this document.

3.15 Total Costs – calculated automatically.

Overhead and Cost per Unit Calculation

Total Overhead and Cost Per Unit Calculation			
	Harvest Volume (m ³)	Total Cost \$	Cost per Unit (\$/m ³)
Privately Owned & Purchased (PO&P) Timber:	395,528	603,551	1.53
Crown Timber:	111,050	3,297,753	29.70
Total Overhead:	506,578	3,901,304	7.70

3.16 Privately Owned & Purchased (PO&P) Timber: completed automatically if entered in Schedule 1 (see 1.1 above)

3.17 Crown Timber: completed automatically if entered in Schedule 1 (see 1.1 above)

Click “Save” and Check Status to confirm completion

Schedule 4 – Special Log Transportation Systems

Description: This schedule includes the costs for:

- related log water transportation
- bubble systems
- additional dewatering, and
- related truck rehals
- unique situations such as lake tows and river drives as determined by Region staff.
- transferring logs from off-highway to on-highway logging trucks and subsequent rehals,
- transferring logs from logging trucks to railcars and subsequent rail haul.
- Allocate any depreciation to the appropriate item.

Instructions

Click **“Add New Location”** then enter the description and the appropriate data in 4.1 – 4.15 As applicable

4.1 Lakeside Dry Dump: INCLUDE all costs to:

- dump, sort and store logs when a lake or watercourse is frozen or otherwise inaccessible. Logs are dumped on land and stored until the ice thaws or the water level rises to adequate levels to float the logs.
- to move these logs to the water.

4.2 Water Dump: INCLUDE all costs to:

- dump logs into the water and move the logs to an area for further sorting or storage. Logs are dumped from trucks, adjacent dry land sort(s) or log yard(s) directly into the water. The logs may be loose or bundled.

4.3 Water Boom: INCLUDE all costs to:

- all costs of making up bag or raft booms, and of moving these booms to local tie-up grounds.

CLICK **“SAVE”** before clicking on [Towing Total \(0\)](#) so data entered is not lost.

4.4 Towing Total (0): Click on [Towing Total \(0\)](#) then enter

- A description of the cost for towing booms from local tie-up ground(s), to dewater site(s) or mill storage pond(s).
- the distance (one-way towing distance (to the nearest 0.1 km))
- volume (m³) towed
- cost \$ for the task

then click **“ADD”** and enter: additional towing totals for the location as applicable.

Click **“SAVE”** then **“BACK”** to return to Schedule 4 location screen.

The rate (\$/m³) for each tow is calculated automatically and transferred to main screen

Schedule 4 – Special Log Transportation System cont'd

DO NOT INCLUDE:

- mill storage pond costs, or dewatering wood from the mill pond

4.5 Williston Lake Dewater Only: INCLUDE all costs to:

- move logs from water to land including boom boat costs for loading dewatering device(s).

DO NOT INCLUDE

- Costs of transporting logs to storage yard, mill infeed, or dewatering logs directly to the mill as these are mill costs.

4.6 Dewater and Reload: INCLUDE all costs to:

- move logs from water to land including the costs to load on to trucks.
- boom boat costs for loading dewatering device.

DO NOT INCLUDE:

- storage or dewater costs of logs stored at a mill pond.

CLICK “SAVE” before clicking on [Truck Rehaul –Dewater/Transfer \(0\)](#) so data entered is not lost.

4.7 Truck Re-haul-Dewater/Transfer (0): Click on [Truck Rehaul –Dewater/Transfer \(0\)](#) then enter

- A description to move loaded dewatered logs to the next unloading point - starts at point of reload from initial haul to next unloading
- the distance (to the nearest 0.1 km)
- volume (m³) of logs transported
- cost \$ applicable to the task
- cycle time as per Schedule 8 hauling instruction definition

Then click “ADD” and enter: additional towing totals for the location as applicable.

Click “SAVE” then “BACK” to return to Schedule 4 location screen.

The rate (\$/m³) for each rehaul is calculated automatically and transferred to the main screen.

4.8 Truck Barge/Ferry: Enter the

- The distance (km)- one way distance to the nearest 0.1 km
- Volume (m³) of timber transported
- Costs of operating a truck barge/ferry (which is capable of transporting logging trucks) and pertinent structures, when a truck haul road is interrupted by a body of water and the operation of a barge system is the only efficient means to provide a transportation link to harvesting areas.

4.9 Crew Barge/Ferry: Enter the

- The distance (km)- one way distance to the nearest 0.1 km
- Volume (m³) of timber harvested by crews and transported

Schedule 4 – Special Log Transportation System cont'd

- Costs of operating a barge or ferry which is not capable of carrying loaded logging trucks, and carries crew and light truck only on operating days.

4.10 Hydro Dam Log Transfer: Enter the

- Volume (m³) of timber transported
- Costs for breakup of bag or raft booms for transporting through locks, and subsequent re-boom.

4.11 Truck to Truck Transfer: Enter the

- Volume (m³) of timber transferred
- Costs for unloading, storage and reloading of trucks

4.12 Truck to Rail Transfer: Enter the

- Volume (m³) of timber transported
- Costs for unloading of trucks, intermediate sorting, storage and loading onto railcar.

4.13 Rail Haul: Enter the

- The distance (km)- one way distance to the nearest 0.1 km
- Volume (m³) of timber transported
- Costs of transporting logs on the railway.

4.14 Low Water Bridge: Enter the

- Volume (m³) of timber transported across a bridge
- Costs of annual dismantling and reconstruction and replacement of damaged pilings.

CLICK “SAVE” before clicking on [Other Transportation \(0\)](#) so data entered is not lost.

4.15 Other Transportation (0): Click on [Other Transportation \(0\)](#) then enter

- A description of other transportation type
- the distance (to the nearest 0.1 km)
- volume (m³) of logs transported
- costs for other transportation

then click “ADD” and enter: other transportation totals for the location as applicable.

Click “SAVE” then “BACK” to return to Schedule 4 location screen.

Click “Save” and Check Status to confirm completion

**** Note **** the distance, volume and costs are transferred automatically to the location main screen.

Schedule 5 – Camp Costs

Description

This schedule is used to record the costs of establishing and operating a camp as defined in Chapter 4 of the *Interior Appraisal Manual (IAM)*. The definition of a camp is a permanent structure with cookhouse(s) and bunkhouse(s), which are permanently operated by full-time camp crew during harvesting. Camp costs are the costs for workers who reside in the camp and travel on each day of work during timber harvesting operations between the camp and the cutting authority area.

****Note****

- The costs associated to recreation accommodation (road-side trailer, camper, etc.) are deemed allowances in lieu of travel and are reported in Schedule 8 tree-to-truck additions.
- Fees paid to third parties to stay in a camp are included as additions to Schedule 8.
- If camp costs are rolled together in the licensee's financial statements, it is *not* necessary to split out or allocate these costs unless they contain costs not related to isolated cutting authorities. If costs categories are rolled together, make a note in the comments box.

Instructions

5.1 Click “Add New Camp” then enter

1. **Camp name**
2. **Road Distance to Operating Area** (km)
3. **Size of Camp** (number of persons)
4. **Associated Camp Volume (m3)** - must be directly related to the net costs (total costs less recoveries) reported on this schedule.
5. **Isolated Camp** – Yes or No (drop down arrow)

For each camp enter:

5.2 Catering and Food: enter the

- Volume (m³)
- costs of catering or the cost of food as appropriate.

5.3 Wages and Benefits: enter the

- Volume (m³)
- costs for the camp operating crew ONLY (e.g., caretakers, cooks, etc.). The actual costs (or best estimate) of wages and benefits must be reported, otherwise the camp may be excluded.

5.4 Depreciation and Lease: enter the

- Volume (m³)
- the actual expenses recorded in the financial statements of the licensee.

5.5 General Camp Expenses: enter the

- Volume (m³)
- General camp expenses

Schedule 5 – Camp Costs cont'd

5.6 Other Camp Expenses(0): Click on [Other Camp Expenses \(0\)](#) then enter

- a description
- the total cost \$ for all costs not recorded or allocated in the other camp categories

Click “ADD” and enter: other camp expense totals for the location as applicable.

Click “SAVE” then “BACK” to return to Camp main screen.

NOTE

- The rate (\$/m³) for each item is calculated automatically by the program.
- Amounts deducted from the original TtT rate should be included in this section.
- The program transfers the total costs for all items to the Schedule 5 main screen.

5.7 Camp Sub-Total – automatically calculated by the system

5.8 Recoveries: enter the

- amounts recovered from persons using the camp. (i.e. IWA agreement at \$/man-day times number of days for logging crews; and at average cost per man-day times days for casuals, visitors and other crews).
- All recoveries from detailed engineering cost estimates must also be included in this section.

5.9 Camp Total: – *automatically calculated by the system*

ACCESS EXPENSES:

5.10 Crew Transportation: enter the

- Volume (m³)
- Cost of transporting crews periodically into or out of operations.

5.11 Equipment and Supplies Transportation: as applicable enter the

- Volume (m³)
- Cost of moving equipment and supplies by land, rail link, air, and/or water from a local community to the camp or unloading point

DO NOT INCLUDE:

- The costs of moving equipment and supplies from the camp or unloading point to the operating area shall be recorded in the Additions to Original TtT Rate window for the applicable tree-to-truck sample(s) on Schedule 8.

5.12 Other Access Expenses (0): enter the

- Volume (m³)

5.13 then Click on [Other Access Expenses \(0\)](#) then enter

- description
- the total cost \$ for all costs not recorded or allocated in the other access categories

Click “ADD” and enter other camp expense totals for the location as applicable.

Click “SAVE” then “BACK” to return to Camp main screen.

Click “Save” and Check Status to confirm completion

Schedule 6 – Road Management Costs

Description

This schedule includes all road management costs identified in Chapter 4 of the current IAM including activities related to road maintenance, road deactivation, road rehabilitation, access management and re-freezing.

Only report the costs for roads maintained/managed by your crews or under contract or collective maintenance agreements. Identify other licensees involved in any agreements for which costs are included.

All costs (100%) and all harvest volumes must be reported in the survey. If costs are incurred in a specific supply block, for which there is no harvest volume, you must: Enter the actual costs incurred, enter a harvest volume of 1, and give an explanation in the comment box.

Do not report more than one Supply Block per sample.

If Supply Block specific costs and or volume cannot be identified allocate the costs between constituent blocks based on volumes harvested; supply blocks, within a TSA, can be grouped similar to the *Interior Appraisal Manual* grouping.

Instructions

6.1 Click “Add” then enter

1. Enter TSA number or TFL as applicable
2. Enter Supply block if TSA
3. RMG will be determined automatically by system from the TSA and TFL information
4. Volume m³
5. Cost\$
6. Comments – as applicable
7. Click the “Add Report” button before saving with the “Save” button

Cost \$ include:

6.2 Road maintenance:

- grading
- snowplowing
- sanding
- spot gravelling (less than 300 m continuous distance). Spot gravelling is considered a road maintenance expense only if the road has been used for at least one summer season since construction.
- complete other activities included are as per chapter 4 of the IAM.
- *credit recoveries* received for road maintenance/management from other road users (e.g., Hydro, Highways, etc.).

DO NOT INCLUDE:

- maintenance costs and user fees related to privately owned roads
- Monies paid to private landholders
- Monies paid to First Nation Bands where the Crown cannot acquire title to the land will be dealt with on an individual appraisal basis.
- Basic Silviculture (costs reported in Schedule 11)

6.3 Road deactivation:

- Remove bridges,
- Remove culverts,
- pull back unstable sidecast or road fills,
- cut/fill slope stabilization,
- re-contouring, and
- deep fill removal.

****Note**** Road deactivation is the cost of rendering a road impassable to vehicular traffic.

6.4 Road rehabilitation:

- restore the soil and site to a stable condition (no longer require human intervention to maintain a sustaining production of a crop of trees).

****Note** Road rehabilitation is not basic silviculture**

6.5 Access management:

- temporary removal of a major drainage structure
- the construction of a barrier, including a gate, excavation, or the placement of boulders with the purpose of temporarily eliminating access to all vehicles.

DO NOT INCLUDE: unique costs such as

- Cattle-Guards
- Remedial or Wing Fencing
- Pipeline Crossings

****Note**** these unique costs are reported on Schedule 9.

6.6 Re-Freezing:

- re-freezing previously used and appraised winter roads. The total harvested volumes and the total costs must be reported on a separate line and identified as re-freezing.

Any road management costs netted down from the Tree-to-Truck samples or included in any logging contractors tree-to-truck/stump-to-dump rate(s), including payments made to logging contractors as part of their contract for grading or plowing roads which access their operations, must be included on this schedule.

6.7 Comments – as applicable

Click the “**Add Report**” button to save data and add additional reports then,

Click “**Save**” and “**Check Status**” to confirm completion

Schedule 7a – Single Span Bridge

Description

This schedule includes all costs life to date for materials and installation of all single span bridges, constructed according to pre-determined (stock) design specifications rather than a site specific bridge design.

Instructions

Click “Add” then enter

7A.1 Name/Location of Bridge: Enter licensee contract identity, name, or brief location description

7A.2 Date: Enter the date (month and year) the installation competed

7A.3 New/Used: Select from the drop down list that will activate when you click on the cell as follows;

- **NN** - New installation with a New structure
- **NU** - New installation with a Used structure
- **RN** - Replacement installation with a New structure
- **RU** - Replacement installation with a Used structure

If the bridge sample involves the installation of a used span, note the details in the Comments box. Was this span moved from a previous licensee installation (i.e., the span material costs were capitalized to the licensee's original installation and not reported here) or was a used span purchased for this installation, with the cost included in the reported Total Cost? Did this installation replace a previous structure at this location? What, if any, costs for the removal of the pre-existing structure are included in the reported Total Cost? Was any part of the pre-existing structure retained for use in the current installation (e.g., abutments/footings, approach works, etc. re-used)?

7A.4 Expected Life Span (Yrs): Enter the number of years of use for this bridge in that location.

7A.5 Superstructure Type (Drop Down): Select from the drop down list that will activate when you click on the cell as follows;

- Concrete
- Logs
- Steel
- Other - Note specifics in comments

7A.6 Decking Type (Drop Down): Select from the drop down list that will activate when you click on the cell as follows;

- Treated
- Untreated
- Steel
- Concrete
- Composite
- Other - Note specifics in comments

- 7A.7 Abutments Type (Drop Down):** Select from the drop down list that will activate when you click on the cell as follows;
- Log Sill
 - Log Crib
 - Bin Wall
 - Lock Block
 - Post & Pile
 - Other – Note specifics in comments
- 7A.8 Abutment Ht. (m):** enter the average abutment/footing height, to the nearest 0.1 m, measured from the base of the abutment/footing to the point where the stringer (or superstructure) rests on the abutment/footing at the center line of the bridge.
- 7A.9 Load Rating (Drop Down):** Select from the drop down list that will activate when you click on the cell as follows;
- BCL625
 - L100
 - L150
 - L165
 - Other - Note specifics in comments
- 7A.10 Length (m):** enter the length of the bridge deck measured between two end points along the bridge centerline to the nearest 0.1 m
- 7A.11 Width (m):** enter width of deck (outside to outside) to the nearest 0.1 m
- 7A.12 Distance (km):** enter the distance in kilometers from licensee storage area to the install site. If being moved from an existing site, enter the distance of the move, and indicate it is a move in the comments.

COSTS (\$):

Total cost includes abutment/footing back-fills and all site preparation and protection features such as rip rap; as well as material and equipment supply, delivery, and installation. Only include Rip rap costs to protect the bridge; do not include costs for channel protection.

Cost should be as-built actual costs. If you do not have a complete cost for the component, indicate in the comments which costs are estimates.

7A.13 Site Plan/ Gen. Arr. (\$): record cost of site survey, site plans, and bridge general arrangement drawings

7A.14 Superstructure (\$): – enter costs for each of the following separately;

- Material

- Delivery – FOB licensee storage. If used enter cost to move from existing location
- Install – On site costs

7A.15 Approach Works (\$): enter costs for approach work which is generally 15m either side of the bridge

7A.16 Abutments (\$): record costs for each of the following separately;

- Material
- Delivery – FOB licensee storage.
- Install – On site costs

7A.17 Certification after install (\$): Includes any site visits necessary to certify

7A.18 Other Costs (\$): Other non-forestry equipment not already on site for tabular road construction. Note specifics in comments.

7A.19 Grand Total (\$): Calculated by the system

7A.20 Comments: as applicable

Click “Add Report”

Click “**Save**” then “**Back**” to return to Schedule 7A-Bridge Costs main screen.

Click “**Save**” and **Check Status** to confirm completion

Schedule 7b – Culvert Costs

Description

This schedule includes the costs for materials and installation of **all** culverts **not only those greater than or equal to 950 mm**. The costs for culverts less than 950 mm in diameter are not removed from the sub-grade costs in Schedule 10 as they are collected for use in an expanded table for the Interior Appraisal Manual.

Instructions

Click “Add ” then enter

- 7b.1 Culvert Type:** Arched, Arched Bottomless, Vertical Ellipse, Pipe- Arch, Horizontal Ellipse, Round, Wooden Bottomless, or Other from the drop-down list. If culvert type is “Other” enter a brief description in the highlighted area. If the culvert contains baffles explain the extent and purpose in the Comments box.
- 7b.2 Span (mm):** If the culvert is round, the diameter need only be entered under Span. If two or more culverts are installed side by side instead of one larger diameter culvert; detail the number, type(s), and size(s) of the constituent culverts in the Comments box. For culverts of 950 mm or greater in diameter, indicate in the comments section which road sample they are related to.
- 7b.3 Rise (mm):** If the culvert is round, the diameter need only be entered under Span.
- 7b.4 Length (m):** enter the total length of the culvert to the nearest 0.1 m. If two or more are installed side by side, enter the average length of the constituent culverts.
- 7b.5 No of Pieces:** IMPORTANT Where total costs and lengths for equal sized culverts are summarized, indicate the total number of culverts
- 7b.6 Material Cost (\$):** enter the purchase cost of the culvert(s) to the nearest dollar.
- 7b.7 Installation Costs (\$):** enter all costs, to the nearest dollar, for installation of the culvert(s) to the final subgrade stage; including all costs of transporting the culvert(s) to the job site.
- 7b.8 Comments:** please include any conditions / situations that could have a significant impact on costs. These include, but are not limited to, the following:
- re-use of a previously installed culvert where the material cost was already accounted for (i.e., costs are primarily for transport and installation);
 - costs include the **removal** and replacement of an existing structure;
 - baffled culverts for fish passage;
 - screened rock in culvert for fish passage;
 - extensive use of rip-rap;
 - extensive screening for debris collection;
 - multiple culvert installation (i.e., side by side);
 - retaining walls or other related structures.

****Note**** Record only culverts that cross the road (ditch to ditch), not culverts which are installed parallel to the road (in the ditch line).

Click the “**ADD**” button

Click “**Save**” and “**Check Status**” to confirm completion

Schedule 8 – Tree-to-Truck Phase Description

Description

This schedule includes the costs for cable (grapple, hi-lead), skyline and helicopter samples. **NO** information is required for **ground based yarding system** samples.

In order to reflect actual experienced logging costs for all licensees, cutting authorities which are harvested by company crews may be included in the population from which the sample matrix is selected, and the same logging cost survey Schedule 8 is used to record phase costs. Extra care is required to derive unit costs using total dollars expended and total volume harvested.

Where more than one tree-to-truck sample originates from a cutting authority, (e.g., ground skidding, horse, helicopter or cable logging), please provide rate and volume data separate for each yarding system.

In some cases where data is not required the application may require a dummy entry before it will allow the schedule to be finalized. In these cases, enter “1” or “a”

Instructions

8.1 Click “Add New Page” and enter

1. **Division** - the name of the general location where the licensee operates.
2. **Contact** - the name of the person responsible (e.g., area or zone forester) for completing this Schedule 8 page
3. **Phone** - enter the telephone number of the contact person
4. **Region** (Drop Down) - the forest region (old regions) in which this page’s sample(s) are located.
5. **TSA or TFL** (Drop Down) - the TSA or TFL in which this page’s sample(s) are located
6. **TFL number** - if applicable
7. **Supply Block** - select applicable Supply Block if TSA was selected for this page’s sample(s)
8. **License** - enter the relevant harvesting unit information
9. **Cutting Permit** - enter the relevant harvesting unit information
10. **Support Centre** (Drop Down) - select nearest community
11. **Biogeoclimatic Zone** (Drop Down) - select Biogeoclimatic Zone. See General Instructions for further information.
12. **Comments**

Click “Save”

- report cable yarding (i.e., grapple yarding, highlead, or skyline refer to *Interior Appraisal Manual* for definitions) as a separate samples.
- All cable yarding is required to have separately compiled variables.

Click [TtT Samples\(1\)](#)

Click “Add New Sample” then enter:

8.2 Contract ID - the reference code used by the licensee for identification of the contractor or own crew operation (e.g., timber mark, contractor code, cutting permit number etc.) Do not use the mill # or the licensee name.

8.3 Cut Block

8.4 Skidding Yard System – the (%) percentage of net merchantable volume harvested by the applicable skidding and yarding systems percentage applicable for Ground Base, Grapple or Highlead

8.5 Skyline as applicable

- percentage
- slope distance **Do not** enter a slope distance in this box if not Skyline
- support number
- support avg. distance

****Note**** enter the number of intermediate supports in the comment box

8.6 Helicopter as applicable

- percentage
- Distance - the average total loaded helicopter yarding distance to the nearest 0.1 km. Describe the equipment used in the comment box
- Cycle time - the average round trip cycle time that the sample cost was based on. Record to the nearest 0.1 minute.

8.7 Direction (Drop Down)

8.8 Dump Destination (Drop Down)

8.9 Other (Drop Down)

If the system is not defined in the above list (e.g., longline, skidder swing, out-of-block- skidding etc.) choose “Other” and enter a brief description in the Comment section.

8.10 Other % as applicable

8.11 Total – calculated automatically by the system

8.12 Coniferous – m³ (volume) of timber harvested for which the contractor was paid

8.13 Deciduous – m³ (volume) of timber harvested for which the contractor was paid

****Note**** include an estimate to the nearest m³ for timber undelivered and or unscaled by the survey submission date. Make conversions from a tonne rate if necessary. The harvested timber volume is as per accounting records that may be higher/lower than billed S&R volumes.

8.14 Actual Harvested – calculated automatically by the system

8.15 Original TtT Rate - the actual rate paid (to the nearest 0.01 \$/m³) to the logging contractor(s) or the experienced phase cost if a licensee crew. Record

Click “Save”

8.16 Click [Additions\(1\)](#) then enter

- a. **Additions** (Drop Down) - adjustments by the inclusion of specific items, to calculate the Final (Adjusted) Tree-to-Truck Rate
- b. **Other Addition Description** as required
- c. \$/m³
- d. **Cost type** (Drop Down)

e. **Other Cost Type Description** as required

****Note**** Include in [Additions](#) costs related to Crew Transportation or Travel (including allowance in lieu of travel).

Items to be added to the contract rate, if not already part of contract, include: all landing construction, fuel and equipment moving costs paid by licensee, fringe benefit plan costs, and any sub-contracted phase costs for landings, roadside or skid trails. (e.g. loading, skidding, 3-metre knockdown, slashing, lop and scatter, landing/roadside rehabilitation, grass seeding, skid trail rehabilitation and waterbars, etc.); costs paid to contractors for crew transportation travel or fees or allowances in lieu of travel.

Click “Add” and enter all additional costs as applicable for that TSA/TFL, License and CP

Click “Save”

8.17 Click [Deductions\(1\)](#) then enter

- a.
- b. (Drop Down) - adjustments by the exclusion of specific items, to calculate the Final (Adjusted) Tree-to-Truck Rate
- c. **Other Deduction Description** as required
- d. **\$/M³**
- e. **Cost type** (Drop Down - estimated, actual, or company average)
- f. **Other Description** as required

****Note****

Specific items to be deducted from the contract rate include road construction, road maintenance, hauling, off-loading/log transfer, and any other costs already included in other phase cost or special cost estimates.

Click “Add” and enter all additional deductions as applicable for that TSA/TFL, License and CP

Click “Save”

8.18 Final TtT (Tree-To-Truck) Rate: this is the total of all phase costs after inclusion/exclusion of specific items and is calculated automatically.

****Note****

- Costs for operating a ferry or barge should be reported in Schedule 4.
- If the costs associated with Camp or any allowances for accommodation are included in the original tree-to-truck rate, comment, and deduct that amount in the deductions.
- If in doubt whether to adjust the contract rate, describe the specific item and record it in the appropriate category, and the Forest Service auditor will discuss it with you to determine if it should be used.
- All road construction deducted from or netted out of TtT must be transferred to Schedule 10; otherwise sample may not be used.

Click “Save” and Check Status to confirm completion

Schedule 9 – Miscellaneous Unique Logging Costs Description

Description

This schedule may be used to record supplementary information on the costs for harvesting activities considered to be unique by the licensee. “Unique” costs are not restricted to post logging treatments, but may include costs reported in tree-to-truck, road construction, road management, forest planning administration.

Some examples of “unique” costs are costs for; water quality monitoring stations, root disease control, fencing, cattleguards, and pipeline crossings.

Instructions

Click “Add” and enter

- 9.1 **Company Identity:** enter the reference code used by the licensee for identification of the contractor, own crew operation, or the contractual area (e.g. timber mark, contractor code, cutting permit number, etc.).
- 9.2 **Contractual Item:** select one of the categories from the drop down list.
- 9.3 **Item Other Description:** Brief description of “Other” Contractual Item
- 9.4 **Side Slope (%):** as applicable
- 9.5 **Number of Units:** number of items applicable to the contractual item(s)
- 9.6 **Unit Type:** select the type of unit applicable from the drop down list

**** Note**** If none of the specific unit types are applicable select “Other”

- 9.7 **Unit Other Description:** Brief description of “Other” Unit Type
- 9.8 **Biogeoclimatic Zone:** select one from the drop down list
- 9.9 **Cost:** enter the total cost of the item(s) sampled
- 9.10 **\$/Unit:** calculated automatically by the system
- 9.11 **Source:** select one from the drop down list

****Note**** If “Included in Original TtT Rate” is selected, enter, in the comment box, the Tree-to- Truck sample page(s) where this cost is included.

- 9.12 **Source Other Description:** Brief description of “Other” Source Type

Click “Add Report”

Click “Add” to enter another Contractual Work Report

****Note**** For all costs reported on Schedule 9, use the comment box to add additional information such as:

- Cattle guards – add the load rating (“not rated” if no rating) and if certified or not. Also indicate if the cattleguard is new or previously used
- Pipelines – add the number of pipelines crossed, the pipe diameter of each pipe, and the length of each pipeline crossing
- Fencing – add the material type of the fencing (for example 3 stand wire, stone, wooden post and rail, etc.), and other relevant information about the type of fencing that would affect the cost
- Stumping - the equipment and configuration used

Click “Save” and Check Status to confirm completion

Schedule 10 – Road Construction

Description

This schedule is the actual experienced “as built” costs, whether constructed under contract, using rented equipment, or built by own crews and equipment. These roads are generally a single lane width for logging related traffic, with turnouts as required. These roads may or may not be stabilized (ballasted or surfaced) with trucked-in gravel or rock.

Report roads only where the subgrade is completed to the stage where it is ready to be stabilized, if so planned, or could be used under favourable weather conditions (e.g., winter) by logging related traffic. If subgrade construction activities started in the previous year(s) (e.g., rough subgrade, etc.), report the total costs.

The road reported must be:

1. a “contract” with a stated road length or
2. have both the length and the pertinent costs recorded on the company records separating subgrade and stabilization costs.

All costs for subgrade and stabilization incurred within the first summer season are considered road construction costs.

Those licensees who operate in more than one Region must complete a separate Schedule for each Region, identifying the Region and TSA.

When road construction costs are deducted from the TtT phase they **must be reported** on ‘Schedule 10 – Road Construction,’ regardless of the year built; or the TtT data *will not be used* in the data compilation.

Aggregate all road sections less than 0.1 km with other adjacent roads making appropriate adjustments to average site conditions, and include the total as a sample.

Subgrade, additional stabilization and/or bridge costs must be recorded separately. Use the distance-weighted averages for the variables for the road reported.

Instructions

10.1 Click “Add” and enter

1. **Division:** enter the name of the logging division or enter the name of the general location where the licensee operates.
2. **Period Surveyed:** enter of the period during which roads on this page were completed.
3. **Region:** select, from the drop down list, the forest region in which this page’s sample(s) are located.
4. **TSA:** from the drop down list select the TSA in which this page’s sample(s) are located; or “Tree Farm License”
5. **Supply Block:** If TSA was selected click on the specific Supply Block from the drop down list. If the supply block is located in more than one forest district, use the comments box to record the districts.
6. **TFL:** If “Tree Farm License” was selected enter the TFL number.
7. **Road Group:** Will be automatically populated by the system.

SPECIAL INSTRUCTIONS FOR ROAD SECTION/SAMPLE DETAILS:

When recording the road specific data for each sample, it is important to use “as-built” data. Specific information about a road sample such as slope, material, length, width, and other characteristics should be recorded as built, not as originally appraised or estimated. In analysis of road data, one of the goals is to determine the relationship, if any, between actual cost and the actual characteristics of the constructed road.

For additional information on reporting road costs, refer to Appendix 2.

Click [Details](#) then enter

Click the Yes box confirming data entered has been saved.

Click “Add” then enter:

10.2 Road Name: enter the name of the road, road permit number, cutting permit number, or construction contract number to properly identify the road sample and its location.

10.3 Road Type: select from the drop down list the appropriate road type

Definition of Road Type

Long Term: A long term road is a road with a continuous raised sub-grade and ditch line (the raised sub-grade and ditch line may be interrupted for short sections <100 m (e.g., when crossing a short section of rock or at the crest of a hill). In flat terrain the ditch line may simply be the depression created when subgrade material is excavated to create a raised subgrade.

Snow/Ice Roads: a single lane seasonal road including turnouts, with a flat road profile that is built with a combination of snow, ice and dirt, on a surface that may or may not have been stumped. The driving surface is built up using multiple layers of snow and ice such that extra stabilizing material costs are not applicable. A flat road profile means the side slope is less than or equal to 15% and there is minimal side cut. Minimal means, cuts into mineral or organic soil must not exceed 0.5 m in depth for distances up to 0.1 km. Seismic lines being used for roads, that have not previously been used as roads, will be considered as new construction and qualify as snow/ice roads provided they fall within the above criteria.

Short Term Road: A short term road is a road with the stumps removed and a bladed running surface. There may be elements of ditching and elevated grade, particularly around wet areas but these features are not continuous.

10.4 Soil Moisture Code: Select Dry, Moist or Wet, as defined by referring to the ‘[Relative Soil Moisture to Absolute Soil Moisture Conversion Table](#)’ (Appendix III of the *Interior Appraisal Manual*). Determine the Absolute Soil Moisture Code by using Appendix III to cross reference the Relative Soil Moisture regime class (0-7 along the top of Appendix III) and the BEC-Subzone (on the left hand side of Appendix III), for each road sample.

Schedule 10 – Continued

The Soil Moisture Regime Class (from 0-VERY XERIC to 7-SUBHYDRIC), should be determined using site plan information, reference to the appropriate field guide, and by physical observation. The chart “Soil Moisture Regime Classes and Characteristics” can be referenced, and is available at the following link:

<http://www.for.gov.bc.ca/hre/forprod/fordyn/projects/referenc/moisture.htm>

Absolute Soil Moisture Code	ILCR entry
ED, VD, or MD	Dry
SD or F	Moist
M, VM, or W	Wet

10.5 BEC/Sub-zone/Variant: enter the Biogeoclimatic, Sub-zone and variant i.e. ESSF-dc1-4.

This entry point is populated from a table in the system. Enter the first letter of the BEC zone and a dropdown list will be populated that allows the correct BEC-Subzone-variant combination to be selected. As each letter of the correct BEC combination is selected, the list will revised to match.

10.6 ASM Code (Absolute Soil Moisture Code); enter the **ASM Code**, that was determined in the process described in section 10.4 above. The correct ASM code can be selected from the drop down list

10.7 Side Slope Percent: enter the average uphill side slope percent for the road reported.

Uphill side slope percent represents all slopes in the section and may show a range of variation (± 15 percent about the average) within any section length. To derive a meaningful average for uphill side slope percent, several representative cross-section measurements are taken along the section length and the sum of one-half of the distance on each side of the measurement is applied as a weight against the measurement at that cross-section. The uphill side slope is measured at right angles to the road centerline and is recorded to the nearest integer. Where the road is located on a bench, the uphill side slope of the bench is used.

To derive a meaningful average for each item, (side slopes, materials type, etc.) several representative cross-section measurements are taken along the road and the sum of one-half of the distance on each side of the measurements is applied as a weight against the measurement at the cross section.

e.g., uphill slope % =
$$\frac{X1(0.5d1) + X2(0.5d1 + 0.5d2) + \dots Xn (0.5dn)}{D}$$

where: D is road length
d1...dn is distance between cross sections
X1...Xn is the slope percent at each cross section along the road.

Schedule 10 – Continued

10.8 Boulder area percent: this refers to surface boulders over 0.5 m in diameter not requiring breaking or drilling and blasting. Record percent of area covered within the cleared right-of-way width.

****Note**** Materials Type (Percent of total Road Prism volume): enter the best estimate of soil materials percentages that constitute the total road prism volume for each type that are representative for the road reported. The sum of rock, coarse grained, fine grained and organic (peat) soils must total 100%.

10.9 Solid (Hard) Rock: including large boulders, greater than 1.5m average diameter, requiring breaking or drilling and blasting,

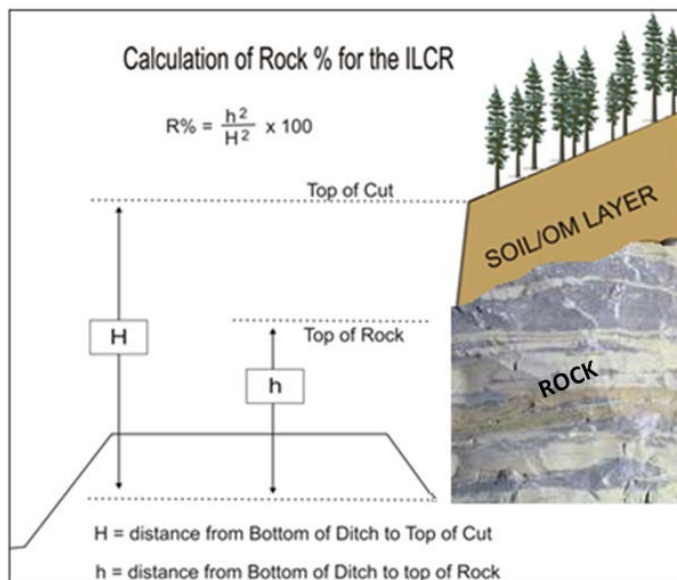
10.10 Rippable Rock: (does not include boulders)

The % of total road prism volume that is rock (R%) which includes both solid hard and rippable rock, can be estimated as follows:

$$R\% = \frac{h^2}{H^2} \times 100$$

Where: h = vertical cut height of all rock measured from the bottom of the ditch

H = vertical total cut height of all materials (including overburden) above the bottom of the ditch



Schedule 10 – Continued

10.11 Coarse: enter the combined percent of gravel, sand and imbedded small boulders (1.5m average diameter or less).

10.12 Fine: enter the combined percent of silt, clay, and loam soils.

10.13 Organic: enter the combined percent of partly or completely decomposed organic materials.

10.14 Total: automatically calculated by the system

10.15 Includes Detailed Engineering Costs: Yes or No from drop down

- **Enter Yes** if the road section meets one or more of the specific situations that are considered for detailed engineering cost estimates **and** the costs are included in the Total amount. If Yes is entered, the sample will not be used for tabular cost estimation.
- **Enter No**, if there are no detailed engineering cost estimates (ECE) or if the total cost of the ECE has been entirely (100%) removed from the total amount. If No is entered the sample will be used in the tabular cost estimates where rock and slope percentages are up to 50%. Samples with rock and/or slope greater than 50% may also be used as required.

SPECIAL INSTRUCTIONS FOR SUBGRADE:

10.16 Length: record the road section length to the nearest meter (example 5.555 km).

10.17 Surface Width: record the average surface width for the road section to the nearest m (example 5.0 m) the average road width is to exclude pullouts and is to be measured as shown in Figures 3, 4 and 5 of the *Forest Practices Code of British Columbia* publication entitled *Forest Road Engineering Guidebook*.

10.18 Actual Costs(\$): enter the total costs from accounting records. Subgrade construction costs include: clearing, grubbing, stripping, stump removal, ditch construction, turnout construction, material costs, and installation of culverts with diameters less than 950 mm, or the equivalent cross sectional area, or a single log abutment culverts up to 3.4 m span. Right-of-way felling and logging is excluded. When it is necessary to refreeze a winter-only road several times, enter the aggregate cost for that road for the survey period.

10.19 TtT (Tree-to-Truck) Transfers (\$): record all costs deducted from Schedule 8: Tree-to-Truck sample(s). Note relevant tree-to-truck page and sample numbers in the comments box.

10.20 Other Transfers(\$): record all costs that were included in contractor rates including those for which no Schedule 8 TtT samples were requested.

10.21 Total Costs (\$): are automatically calculated as follows: Actual Costs (3) + TtT (Tree-to-Truck) Transfers (4) + Other Transfers (5).

10.22 Less Bridges (\$): enter the costs of bridges included in Actual Costs, TtT Transfers, and/or Other Transfers above. All bridge costs should be transferred to and reported on Schedule 7: Single Span Bridge and Culvert Costs.

10.23 Less Culverts (\$): enter the costs of *large* culverts (i.e., over the limits defined in item #3 above) included in Actual Costs, TtT Transfers, and/or Other Transfers above. All culvert costs should be transferred to and reported on Schedule 7: Single Span Bridge and Culvert Costs.

Schedule 10 – Continued

- 10.24 Less Landings (\$):** enter the costs for landing construction included in Actual Costs, TtT Transfers, and/or Other Transfers above. All landing costs must be reported on Schedule 8: Tree-to-Truck if the landing(s) service a harvested area that is sampled for tree-to-truck phase.
- 10.25 Less End Haul(\$):** enter the costs for the removal of excavated material from a road or landing right-of-way to a separate spoil area to avoid side casting on steep and or sensitive sites. If costs are entered, you will also be required to enter the average distance (km) to the spoil area and the volume (m³) of material removed.
- 10.26 Less Overland (\$):** enter the costs for developing and trucking in material for extensive filling to develop a roadbed. If costs are entered, you will also be required to enter the average distance (km) to the gravel pit or rock quarry and the volume (m³) of fill material brought in. Unless the pit or quarry was developed and used exclusively for the sample being reported **DO NOT INCLUDE** the costs for initial development of the gravel pit or quarry should not be assigned to a single road construction sample,. They should be reasonably allocated on a unit basis (\$/m³ of fill material) over the expected life of the pit or quarry.
- 10.27 Less Other Eng (\$):** enter the costs for any of the other specific situations that are considered for detailed engineering cost estimates. These specific situations are listed in Section 4.3.3 “Detailed Engineering Cost Estimates” of the current *Interior Appraisal Manual*.
- 10.28 Total:** automatically calculated as follows:

Actual Costs + TtT (Tree-to-Truck) Transfers + Other Transfers – Less Bridges – Less Culverts – Less Landings – Less End Haul – Less Overland – Less Other Engineering Costs

SPECIAL INSTRUCTIONS FOR ADDITIONAL STABILIZATION (BALLASTING):

Additional Stabilization is defined in the *Interior Appraisal Manual*.

DO NOT INCLUDE: placement of additional stabilizing material where geotextile, corduroy, crushed and/or screened rock/gravel are used.

- 10.29 Code:** select the method of stabilizing required from the drop down list.

Continuous Ballasting generally required for operation and block roads depending on soil material and season of use. Depth may be variable but the entire road subgrade is covered, except for minor sections (i.e. short rock cut)

Due at a later date if additional stabilizing materials to be trucked in at a later date

None Required no additional stabilizing (ballasting) required

- 10.30 Length:** enter the length, to the nearest 0.1 km, of stabilized/ballast road section.

- 10.31 Surface Width:** enter the average surface width for the road section to the nearest 0.1 m. If entered, the Subgrade Surface Width automatically transferred. The average road width is to exclude pullouts and is to be measured as shown in the most recent Forest Practices Code of British Columbia publication entitled Forest Road Engineering Guide Book.

10.32 Type: select the applicable additional stabilization (ballast) material type from the drop down list as follows:

Gravel

Ripped Rock - rock not requiring drilling and blasting.

Quarried Rock - rock that requires drilling and blasting.

10.33 Depth: enter the estimated average compacted material depth to the nearest 0.1m. The distance weighted average depth is estimated along the road length reported.

10.34 Distance to Source: enter truck haul distance to the material source, to the nearest 0.1 km. The distances are measured from the quarry and/or borrow pit(s) to the mid-point of the section where the stabilizing material is used. If several borrow pits were used, enter the weighted average haul distance.

10.35 Actual Costs (\$): enter the total costs from accounting records.

10.36 TtT (Tree-to-Truck) Transfer (\$): record all costs that were deducted from Schedule 8: Tree-to-Truck sample(s). Note relevant tree-to-truck page and sample numbers in the comments box.

10.37 Other Transfers (\$): record all costs that were included in contractor rates for which no samples were requested.

10.38 Totals (\$): are calculated automatically and will include actual costs plus transfers. Costs for additional stabilization (ballast) includes borrow pit preparation, rock drilling explosives, loading of explosives, blasting, loosening and/or pushing materials in borrow pits when required (e.g., compacted or cemented gravel, oversize material, etc.), loading gravel trucks, truck hauling, and spreading and compacting the material.

10.39 \$/km: calculated automatically as $\$/\text{km} = \text{Totals } (\$) / \text{Length (km)}$

10.40 End Haul Details: Enter distance km and Volume(m^3) - $\$/\text{m}^3/\text{km}$ calculated automatically

10.41 Overland Details: Enter distance km and Volume(m^3) - $\$/\text{m}^3/\text{km}$ calculated automatically

Click "Save" and Check Status to confirm completion

Schedule 11 – Basic Silviculture

Description

Schedule 11 of the ILCR enables licensees to report the summary data previously reported on the Excel Silviculture Survey used for years prior to the 2018 cost collection year. It is recommended that that excel sheet continues to be used and the summary data on tab 4 be reproduced, in Schedule 11 of the ILCR. The supporting detail for tab 3 will still be required on request.

Instructions below are reproduced from the old excel survey tab 1 Introduction. Also refer to the excel survey tab 3 Explanation for additional direction

1. Report cost data for all (**100%**) of blocks/CP's where **clear cut** (See IAM definition, Section 4.5) harvesting was fully completed in the calendar years **2013 to 2017** inclusive. Do NOT include blocks or CPs which still have area remaining to harvest. For example, do not report a block that is only 80% ground skidding with 20% cable left to go
2. There must be two identified costs: (1) cumulative actual costs spent to date on basic silviculture up to the current status of the CP/Block; and (2) planned costs required to be expended on blocks to attain Free Growing status (FG).
3. Actual costs reported should be as up to date as possible, i.e. if **this field season's (2018)** actual cost information has been summarized and is available for treatments on areas harvested between **2013 and 2017** please use it and adjust your planned costs accordingly. To avoid the potential for bias, only years where 100% of the block/CP actual plus planned cost info has been summarized will be accepted.
4. Licensees need to document in their backup materials the rationale for their "planned" cost estimates (i.e. Required costs to FG based on historical treatment data and/or database information or ...). The rationale may be called upon if audited. Enter planned cost estimates under the second section.
5. Do NOT include in-house salary costs. Rather, report these in Schedule 3 of the ILCR (Interior Log Cost Report) under 'administration.'
6. Temporary access structure rehabilitation costs are reported in the access management portion of the ILCR.
7. There are four years of overlap with the **previous survey (2012-2016)**, and these years must be reported again with updated actual and planned costs.
8. If you use the Tab 3 of the previous excel worksheet survey to assemble your data it is recommended that one backup sheet be done per BEC/Subzone/Variant (i.e. one backup sheet per reporting line in the summary reporting form under Tab 4).

Instructions

Enter:

11.1 Location: Description of where reforestation was completed.

11.2 BEC/Subzone/Variant:

- Enter dominant subzone/variant for a Block or CP.
- Example: For 1 Block/CP with 3 subzones having 40%, 35% and 25% of the area, enter the 40% dominant subzone.
- Enter full BGC zone/subzone/variant **without spaces**. Do not insert extra columns for each element in the BEC label. This is required for the transfer of information to the last spreadsheet ('4. Mandatory Data Submission'). One BGC zone/variant/site series per line

11.3 NAR(ha)

- Net Area to be Reforested as per Site Plan
- Area harvested less the roads and landings

11.4 Actual Cost (\$)

- **ACTUAL COSTS and PLANNED COSTS TO FREE GROWING;** Enter costs as total \$ in the applicable columns. Reported NAR is used to calculate \$/ha in the spreadsheet
- **SITE PREP;** Do **NOT** include costs for de-stumping for root disease control. They are specified operations cost estimates applied in each appraisal. Report these on schedule 09 of the ILCR
- **BRUSH;** This should include costs for mistletoe eradication if incurred
- **OTHER;** Other costs related to achieving free growing that have not been included in previous columns. Please provide specific comments.

DO NOT INCLUDE:

- overhead costs such as initial field inspection, planning and prescription, site delineation, general supervision of project and final inspection to check quality.
- reconnaissance and drainage surveys.

11.5 Planned Costs (\$) – enter planned reforestation costs

- Future Costs related to achieving free growing categorized as per guidelines above for actual costs. Please provide specific comments.

Click “Add” to save data and enter another location

Click “Save” and Check Status to confirm completion

Appendix 1 – Forest Management Administration Costs

Forest Management Administration Costs are only those costs directly related to administration and supervision of the tenure obligation adjustments (TOA), which are forest management, road development, road maintenance and basic silviculture.

These costs do not include harvesting costs (direct or indirect), business related or corporate costs, discretionary costs, director's fees and expenses, unless portions of these costs are directly attributable to the management of the forest, nor do they include sales expenses, restructuring expenses or other expenses, which have been deemed unacceptable.

Allowable Costs include:

Licenses, Fees, Insurance:

License Permits/Water/Special Use Permits Environmental Fees
Membership Fees/Dues and Subscriptions to Associations Insurance on
Building/Office Equipment/Supplies

Taxes, Leases, Rentals:

Business Property and Municipal Tax Land Leases
Office Building Rents/Leases Property Rentals

Wages, Salaries, Benefits:

Wages Salaries and Benefits Bonuses
(management and staff) Relocation Costs

Vehicle Expense:

Fuel and Lubricants
Insurance and Licenses Repairs and
Maintenance Leases

Office Expenses:

Audit Fees
Corporate Aircraft (directly charged to forest planning only) Information
Technology/Data Processing/Service Agreements Fire Protection Supplies
Human Resources/Training Development/Recruitment Costs Legal Fees (forest
planning only)
Meals and Entertainment
Office Building Repairs/Cleaning/Maintenance Office
Equipment Repairs/Rentals/Leases Office and Computer
Supplies/Postage/Courier Safety Supplies
Travel and Accommodation/Room and Board
Telephone/Telex/Radio Communication
Utilities/Light/Heat/Power

Consulting Services:

Archaeological Studies and Reports
Certification (ISO etc.)
Cruising
Contractual Beetle (beetle detection, beetle planning, probing and baiting Development
Engineering (includes road layout, geo-technical and design, excluding engineering cost estimates)
Environmental Protection Forest Protection
Planning/Layout/Mapping/Drafting/Inventory Right of Way
Easements
Stream Classification/Terrain Analysis

Depreciation (administration only):

Office Building and Equipment Vehicles

Basic Silviculture:

Include any administration and supervision cost, which is included in basic silviculture

Unacceptable Costs include:

The following “administrative and overhead cost items” are unacceptable unless portions of these costs are directly attributable to the management of the forest:

Allocated Costs

Corporate Head Office and Plant Operations (lumber mills, veneer, plywood, OSB, pulp, paper etc.) Costs must be directly charged to “Forest Planning Administration” and supported by relevant and reliable audit evidence.

Annual Rents (Section 111 of the *Forest Act*)**Corporate Aircraft****Executive Bonuses****Freight Charges/Leased Car Costs** (all deducted from Average Market Values (AMVs))**Income Taxes and Logging Taxes****Loss/Gain on Disposal of Fixed Assets/Investments****Privately Owned/Purchased/Sold/Logs****Legal Fees**

Depreciation or Amortization on Harvesting, Road Management and Road Construction buildings, vehicles and equipment

Penalties and fines**Interest (finance and overdue charges)****Political/Corporate Donations****Restructuring Expenses (accounting and consulting)****Research and Development****Scaling Costs****Selling Expenses/Export Duty/Entry Charges** (deducted from AMVs)**Shareholder Expenses** (dividends, notices, transfer agent costs etc.)**Share Purchase Plans****Stumpage Fees and Royalties****Waste and Residue Costs**

Appendix 2a – Tools for Road Construction Cost Collection

In 2009 a working subgroup of the Operating Cost Subcommittee (OCS) of Interior Appraisal Advisory Committee (IAAC) was formed to look into ways to improve the integrity of cost data collected in the annual Interior Log Cost Report (ILCR). One of the concepts investigated is the need to ensure that data collected is relevant, consistent, and representative of actual operational activity. It is important to ensure that costs reported are actual costs and specific to the sample reported.

In the case of road costs reported on schedule 10 of ILCR, it is important that the cost and operational characteristics report are on an actual or as-built basis, rather than based on averages, or appraisal estimates prior to construction. To facilitate the collection of as-built data in the field, the sub-group developed a sample template that could be used by licensees to collect relevant road sample data.

Also attached is a summary of the data collection points (data entry boxes) for schedule 10 of the ILCR, indicating the recommended source of data for each data point. Since a large degree of variability exists in woodlands accounting and management systems, licensees must assess which sources are best supported by their individual systems, but should consider the points recommended.

The excel templates are available on the ILCR website at this link:

<http://www2.gov.bc.ca/gov/content/industry/forestry/competitive-forest-industry/timber-pricing/interior-timber-pricing/interior-logging-cost-report-ilcr-tool>

Appendix 2b – Sample – Data Collection Field Card

Interior Log Cost Report						
On-Site Construction Data Collection Card						
		1	2	3	4	5
Admin	Road Name					
	Section (label or chainage)					
	Section Length					
	Is there continuous raised subgrade and ditch line? (Y/N)?					
	CP/Block					
Site Condition	On-Block or Access (OB or A)					
	BEC (zone/subzone/variant)					
	Moisture					
	Average uphill side slope					
	Large Boulders (>1.5 m) that require moving					
	Average Cutbank Height (bottom of ditch to top of bank)					
	Average Rock Height (bottom of ditch to top of rock in cut)					
	½ Blasted Rock / ½ Ripped Rock					
	Average Coarse Material Ht. (bottom of ditch to top of bank)					
Average Fine Material Ht. (bottom of ditch to top of bank)						
Average Organic Material Ht. (bottom of ditch to top of bank)						
Subgrade	Width					
	Engineered Costs (Y or N)					
	Contractors					
	Hourly or Contract per/km payment (H or C)					
	Account Code					
	Invoice number or month invoiced					
	Culverts -total cost or number and size used					
	Other Cost #1 -					
	Other Cost #2 -					
Ballast	Length if no subgrade or different than subgrade					
	Width					
	Distance to Source (km)					
	Depth (m)					
	Type- Gravel (G) or Rock (R or Q)					
	Contractors					
	Hourly or Contract per/km payment (H or C)					
	Account Code					
	Invoice number or month invoiced					
	Other Cost #1 -					
	Other Cost #2 -					

<p>Notes:</p> <p>1) Road Type Options: Long Term (LT) - continuous dike/ditch and raised subgrade Short Term (ST) - intermittent or no dike/ditch and raised subgrade</p> <p>2) Section Length: Road section can either be recorded as identified on map, or broken down into sections with similar characteristics.</p> <p>3) Moisture Code: Wet (W) - Soil Moisture Code "5" or wetter, needs fabric or gravel in dry summer conditions Moist (M) - Soil Moisture Code "2" - "4", would do without gravel in dry conditions Dry (D) - Soil Moisture Code "1" - "1", usually doesn't require gravel</p>	<p>4) Engineered Costs - Indicate "Y" if the subgrade construction meets any of the formal engineered cost estimate criteria, such as road-banking of subgrade material in or from erosion, overloading over original ground line with fabric, > 50% side fill, > 50% rock, etc.</p> <p>5) Ballast Type: Gravel (G) Ripped Rock (R) - rock used for ballast that requires no drilling and blasting Quarry Rock (Q) - rock used for ballast that required drilling and blasting</p>
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Appendix 2c – Recommended Schedule 10 Data Source

Interior Log Cost Report		
Recommended data sources for Schedule 10 - Road Construction		
Input:	Source	Comments
General:		
Road Type	Onsite inspection after construction	determine the extent of continuous raised subgrade and continuous ditching
Soil Moisture Code	Site Plan and BEC maps, confirmed by onsite inspection	
BEC zone/subzone	Site Plan and BEC maps, confirmed by onsite inspection	
Side Slope %	Road design documents, confirmed by onsite measurement & inspection	
Boulder Area %	Estimated by construction supervisor	
Rack %	Measured after/during construction, verified by construction supervisor	refer to instructions for calculation
Rack Type	Measured after/during construction, verified by construction supervisor	
Soil Type break-down	Measured after/during construction, verified by construction supervisor	
Included ECEr	Refer to Appraisal to identify where ECEr are used	Where the ECE portion of a sample can not be reported separately sample natured
Subgrade:		
Length	Actual, measured and confirmed after construction	
Surface Width	Actual (average), measured/confirmed after construction	
Actual Cartr	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	Review highflow cartr for potential coding errors
TtT Transfer	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	If transfers are not actually recorded in the system, but are known to exist, an estimate of cartr should be made
Other Transfer	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	If transfers are not actually recorded in the system, but are known to exist, an estimate of cartr should be made
Bridges	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	Review highflow for potential coding errors / If cartr not coded separately estimate of cartr must be made
Large Culverts	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	Review highflow for potential coding errors / If cartr not coded separately estimate of cartr must be made
Landing	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	Review highflow for potential coding errors / If cartr not coded separately estimate of cartr must be made
End Haul	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	Review highflow for potential coding errors / If cartr not coded separately estimate of cartr must be made
Overland	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	Review highflow for potential coding errors / If cartr not coded separately estimate of cartr must be made
Other Engineering Cartr	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	Review highflow for potential coding errors / If cartr not coded separately estimate of cartr must be made
Additional Stabilization:		
Code	Appraisal, verified by construction supervisor	
Length	Actual Construction, Verified by construction supervisor	
Surface Width	Actual Construction, Verified by construction supervisor	
Type	Actual Construction, Verified by construction supervisor	
Depth	Actual Construction, Verified (estimated) by construction supervisor	
Distance to Source	Measured after construction, verified by construction supervisor	
Actual Cartr	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	
TtT Transfer	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments)	If transfers are not actually recorded in the system, but are known to exist, an estimate of cartr should be made
Other Transfer	Actual cartr reported in the company financial accounting and reporting system (invoices or contract payments).	If transfers are not actually recorded in the system, but are known to exist, an estimate of cartr should be made