



ROAD PERMIT NO. *R22569 & R22638*



ISSUANCE DATE: *[Issuance Date]*

PURSUANT TO SECTION 115 OF THE *FOREST ACT*, THIS ROAD PERMIT IS ISSUED TO:

Permittee Name: *[Name]*
(the "Permittee")

Permittee Address: *[Street Address]*
[City], British Columbia
Canada *[Postal Code]*

1.00 INTERPRETATION

1.01 Definitions of terms not defined in this Road Permit shall have the same meaning as that given in British Columbia forest legislation and regulations. In cases of conflict, the definition in the legislation shall govern.

1.02 In this Road Permit:

- (a) "Clearing Area" means that area of Crown land bounded by the outer limits of the clearing width as described in British Columbia forest legislation and regulations, over the length of road shown on attached map(s);
- (b) "Timber Sales Manager" means a Timber Sales Manager appointed under the *Ministry of Forests Act*, for a BC Timber Sales business area in which all or part of the permit area is situated;
- (c) "Landing" means an area modified by equipment that is designed for accumulating logs before they are transported;
- (d) "Schedule" means the Schedule(s) attached to this Road Permit or amendment to this Road Permit;

2.00 GRANT OF RIGHTS

2.01 In consideration of the Permittee's right to harvest timber under Licence *TA0568* and to provide access to that timber, subject to all British Columbia forest legislation and regulations as amended from time to time, the Timber Sales Manager grants to the Permittee

- (a) a non-exclusive right to enter on the Permit Area and construct within that Permit Area a road, including such landings, gravel/sand pits, rock quarries and waste areas as are necessary for construction of the road or for access to the timber and
 - (b) the right to use and maintain that road, or to use and maintain a road, within the Permit Area described in paragraph 3.01, in accordance with the conditions/specifications described in the attached Schedules.
- 2.02 Where it is necessary to harvest Crown timber from the Clearing Area in order to construct or maintain the road, including landings, gravel/sand pits and rock quarries within the Permit Area, the Timber Sales Manager grants to the Permittee the right to harvest that Crown timber in the Permit Area. The Permittee shall comply with the timber merchantability specifications provided in Licence **TA0568** or associated cutting permits.
- 2.03 In accepting this Road Permit, the Permittee acknowledges that the provisions of this Road Permit and British Columbia forest legislation and regulations bind it.
- 2.04 The Schedules form an integral part of the Road Permit.
- 2.05 Any amendment to this Permit forms an integral part of the Permit.
- 2.06 There is reserved to the Crown
 - (a) the right to grant rights-of-way across, through or over the Permit Area to other parties, on such terms and conditions as the Timber Sales Manager determines,
 - (b) the right of employees and agents of the Crown to use and to cross the road and the Permit Area, and
 - (c) the right to grant timber harvesting rights to others with respect to the timber located outside the "Clearing Area," but within the "Permit Area."
- 2.07 The exercise of the Crown's rights under paragraph 2.06 shall not unreasonably impede or obstruct the Permittee's reasonable use of the road.
- 2.08 Waste assessments must be conducted in accordance with the *Provincial Logging and Waste Measurement Procedures Manual*, as amended from time to time.

3.00 PERMIT AREA AND TERM

- 3.01 The Permit Area is that area of Crown land described and shown on the Exhibit 'A' attached to this Road Permit.
- 3.02 The term of this Road Permit shall begin on ***[Issuance Date]***, and shall terminate on the date when the Crown notifies the Permittee in writing; that
 - (a) the road has been deactivated to the satisfaction of the Timber Sales Manager, or
 - (b) future use of the road by others will preclude the need for deactivation, or

(c) the Road Permit is cancelled in accordance with the *Forest Act*.

- 3.03 Upon termination or cancellation of this Road Permit, title to all improvements that are located on the Crown land under this Road Permit, will vest in the Crown without compensation to the Permittee, unless otherwise permitted by prior written consent of the Timber Sales Manager or where other arrangements are described in a Schedule to this Permit.

4.00 TIMBER MARKS AND REPORTING

- 4.01 For purposes of the *Forest Act*, the timber mark for this Road Permit shall be that mark specified in the Schedules.

5.00 FINANCIAL

- 5.01 In addition to other money payable by the Permittee under the *Forest Act* and in respect of this Permit, the Permittee shall pay to the Crown, immediately on receipt of a notice, statement or invoice issued on behalf of the Crown:
- (a) stumpage under Part 7 of the *Forest Act* in respect of timber harvested under this Permit, at rates determined, re-determined, and varied under that Act; and
 - (b) waste assessments for merchantable Crown timber that could have been cut and removed under this Permit but at the Permittee's discretion was not cut and removed, as determined in accordance with the provisions of the *Provincial Logging Residue and Waste Measurement Procedures Manual*.

6.00 APPROVALS

- 6.01 Prior to constructing, maintaining and using the road permitted under this Road Permit, the Permittee shall, unless the Timber Sales Manager authorizes otherwise in writing:
- (a) obtain all necessary permits or authorizations for crossing alienated lands including powerlines, pipelines, railroads, public roads, and agricultural land reserves; and
 - (b) obtain all necessary permits or authorizations from other resource agencies and any authorized third-party occupiers or users of the Clearing Area.
- 6.02 The Timber Sales Manager authorizes the Permittee to construct a junction, where necessary, with a Forest Service road.

- 6.03 If the Permittee constructs a junction with a Forest Service Road, the Permittee shall construct the junction such that it
- (a) has sufficient junction angle and suitable road grade for the expected traffic;
 - (b) has at least a minimum sight distance commensurate with the design speed of that Forest Service Road; and
 - (c) contains a culvert, as required, to maintain drainage patterns.

7.00 OTHER RIGHTS

- 7.01 The Permittee's rights under this Permit are subject to any other rights of use and occupation over the Permit Area and the Clearing Area, which the Crown has granted to third parties and the Permittee covenants not to obstruct or impede a third party in its authorized use or occupation of these areas.
- 7.02 Except where a mineral reserve established under the *Mineral Tenure Act* allows otherwise, the Permittee covenants and agrees not to obstruct or impede the use of tenures which have been, or which may be, issued to third parties under the *Mineral Tenure Act*.
- 7.03 In consideration of the foregoing, the Permittee agrees to indemnify and save harmless the Crown from and against all claims for loss or damage, whether caused by the Permittee's acts or omissions, including losses or damages arising out of the Permittee's interference or obstruction of a third party's authorized use, or occupation of the Permit Area or Clearing Area.

8.00 MISCELLANEOUS

- 8.01 The Permittee shall ensure that any access control structure erected to restrict motor vehicle traffic shall
- (a) not be, or become, a hazard to the users of the road,
 - (b) be placed in a conspicuous location, with any gates adequately marked with permanent reflective material to be clearly visible to the operator of a motor vehicle from a safe stopping distance, and
 - (c) include warning signs to give vehicle operators adequate warning of the obstruction.
- 8.02 This Road Permit shall enure to the benefit of, and be binding on, the parties and their respective heirs, executors, successors and permitted assigns.
- 8.03 Where a Permittee wishes to communicate with his company vehicles by means of radio, the Permittee shall post the radio frequency at the start of the road and kilometre markers, and will ensure that all of his company vehicles and those of his subcontractors shall use the posted radio frequency in an appropriate manner.

9.00 NOTICE

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

***George Edney, RPF,
A/Timber Sales Manager
Kootenay Business Area***

SCHEDULE "R"

ROAD AND STRUCTURE ENGINEERING REQUIREMENTS

1.00 TIMBER MARK

The timber mark for timber cut and removed from the clearing area of the roads authorized for construction under this Permit, and as shown on the Exhibit "A" of this Permit, shall be:

A 0 5

6 8

2.00 GENERAL ROAD CONSTRUCTION, MAINTENANCE, DEACTIVATION, REHABILITATION, AND LOCATION REQUIREMENTS

2.01 The Permittee is authorized to construct, use, maintain and deactivate roads or to rehabilitate the area occupied by those roads that are

- (a) shown on the Exhibit "A" of this Permit, and,
- (b) described in column 1 of Table 1 of this Schedule.

Table 1: Road Sections

1	2	3	4	5	6	7
Road Name	Road Section Length (m)	Start Station	Stop Station	Road Location	Applicable Construction Specification	Permittee Responsible Maintenance/ Deactivation/ Rehabilitation
ARR22569Sec1	187	0	187	May Vary	General and Detailed	Maintenance
ARR22569Sec2	134	187	321	May Vary	General and Detailed	Maintenance
ARTSLTA0568Blk3Spur1	403	321	724	May Vary	General and Detailed	Rehabilitation
ARR22638Sec3	1134	0	1134	Existing	N/A	Maintenance
ARR22638Sec3 (ECE)	365	1134	1499	May Vary	General and Detailed	Maintenance
ARR22638Sec3 (ECE)	275	1499	1774	May Vary	General and Detailed	Rehabilitation

2.02 Where in Table 1 of this Permit:

- (a) the words “must follow location” in column 5 appear opposite the road name in column 1, the Permittee must construct that road in the location as identified in the field by the Timber Sales Manager,
- (b) the words “may vary from location” in column 5 appear opposite the road name in column 1, the Permittee may vary the location of minor sections of that road from the location as identified in the field by the Timber Sales Manager,
- (c) the word “deactivate” in column 7 appears opposite the road name in column 1, the Permittee must deactivate that road,
- (d) the word “rehabilitate” in column 7 appears opposite the road name in column 1, the Permittee must deactivate that road and rehabilitate the area occupied by that road.

2.03 The Permittee must maintain all roads constructed or used under this Permit in accordance with the specifications set out in Part 5.00 of this Schedule.

3.00 ROAD CONSTRUCTION SPECIFICATIONS

3.01 Where in Table 1 of this Schedule:

- (a) the word “general” in column 6 appears opposite the road name in column 1, the Permittee must construct that road in accordance with the General Construction Specifications set out in Part 4.00 of this Schedule;
- (b) the word “detailed” in column 6 appears opposite the road name in column 1, the Permittee must construct that road in accordance with the Detailed Construction Specifications set out in Appendix I to this Schedule.

4.00 GENERAL CONSTRUCTION SPECIFICATIONS

4.01 Subject to paragraph 3.01(a), the Permittee must

- (a) construct curves according to the following curvature specifications:

Curvature Specifications

Radius of Curve (m)	180	90	60	45	35	25	20	15
Minimum Stabilized Surface Width (metres)	4.3	5.3	5.8	6.0	6.5	7.5	8.0	9.0

- (b) ensure that each road constructed under this Licence conforms to
 - (i) subject to clause (ii), the Ministry of Forests, Lands and Natural Resource Operations *CL-625* standard design load vehicle configuration, or

- (ii) any variation from the Ministry of Forests, Lands and Natural Resource Operations *CL-625* standard design load vehicle configuration authorized by the Timber Sales Manager before the commencement of construction of the road,
- and
- (c) ensure that each road constructed under this Permit conforms to the General Construction Specifications set out below:

Other General Construction Specifications

Other General Construction Specifications	ROAD IDENTIFIER		
	All Temp Rd sections that require Rehab	All perm. Rd. sections with no Rehab.	
Stumps/roots/logs allowed in road prism outside the road subgrade width (YES/NO)	Yes	Yes	
Stumps/Roots/Logs allowed under the road subgrade width (YES/NO)	Yes	No	
Minimum road subgrade width other than curves (metres)	4m	4m	
Maximum road subgrade width other than curves (metres)	5m	5m	
Maximum distance between turnouts (metres)	500m	500m	
Useable length /width of turnouts	30m X 8m	30m X 8m	
Maximum sustained grade			
Adverse (%)	-5	-5	
Favourable (%)	15	15	
Maximum short pitch grade			
Adverse; for a maximum of 50 meters (%)	-9	-9	
Favourable: for a maximum of 50 meters with slack grade preceding or following on a straight runout (%)	18	18	
Switchback maximum gradient (%)	12	12	
Ditch depth (0.3/0.5 metres)	0.3 (Rock) 0.5 (O.M.)	0.3 (Rock) 0.5 (O.M.)	
Minimum cross-drain culvert diameter (round pipe) (mm)	450mm	450mm	
Other shapes (opening size) (mm)	N/A	N/A	
Stabilizing required of road surface, with rock ballast or pit-run gravel (YES/NO)	No	No	

5.00 ROAD MAINTENANCE SPECIFICATIONS

- 5.01 The Permittee must regularly maintain and repair all roads used or constructed and used under this Permit to ensure safe industrial use of those roads, including the use by third parties, in a timely manner and fashion by doing the following:

Drainage systems:

- (a) ensuring that road surface and slope drainage systems (including ditches, culverts and road crowning, in-sloping and out-sloping) are functional at all times;

Brushing:

- (b) cutting all vegetative growth, including trees and other vegetation on roadway surfaces and roadsides such that
 - (i) sight distances are consistent with the road design speed,
 - (ii) snow removal and placement is accommodated without impeding sight distance,
 - (iii) usable road widths will permit the safe passage of vehicles at road widenings or turnouts;
- (c) identifying and felling all hazard trees adjacent to all rights-of-way before commencing industrial operations;

Surface grading:

- (d) utilizing a grader to perform surface grading to the road, except for those roads with ballast rock surfaces, to
 - (i) thoroughly loosen surfacing material, by cutting, scarification or other methods to address the depth of potholes, rutting or wash-boarding, without causing contamination of the surfacing with the subgrade material or with unsuitable ditch materials,
 - (ii) provide proper road surface drainage and prevent water pooling on the road by shaping the surface crown or sloping the road surface as indicated by the character of the existing surface, and removing grader berms, and
 - (iii) produce a surface that is smooth, uniform, consistent to grade, all to provide haul speeds commensurate with road alignment;
- (e) grading only when moisture content is suitable, or with the addition of water;
- (f) placing or replacing surface aggregate where necessary to achieve the objectives in subparagraph (d) above;

Turnouts:

- (g) ensuring that turnouts are either inter-visible or of a sufficient number and size to accommodate both the traffic volumes and vehicle sizes commonly using that road;

Sign maintenance:

- (h) cleaning, replacing, and reconditioning signs, posts, and markers, including but not limited to, radio frequency call signs, information signs, kilometer markers, traffic control signs, and bridge delineators;

Winter maintenance:

- (i) ceasing all industrial use on the road or sections of the road that display any of the following conditions:
 - (i) rutting to the point that subgrade material mixes with surfacing material;
 - (ii) damage to the subgrade is occurring;
 - (iii) erosion of surfacing material;
- (j) requesting the district manager to authorize closure of the road temporarily while the risk of damage to the road is unacceptably high;
- (k) conducting winter maintenance in a manner such that
 - (i) snow is removed from all or part of the traveled way, including sufficient turnouts, when operations become inefficient, and/or the road would be otherwise unsafe for industrial use,
 - (ii) cut slopes are not undercut,
 - (iii) surfacing material and gravel is not bladed off the road,
 - (iv) snow is removed only from the usable road surface having roadbed support, including turnouts,
 - (v) snow banks are breached or “winged” backed to facilitate drainage at a sufficient number of locations to reduce water flow along road surfaces during periods of melt,
 - (vi) roadbed drainage ditches, drainage dips, and culverts are functional during periods of melt;
 - (vii) sand is applied to the bladed road surface as needed to provide proper traction for industrial vehicles where chains will not be suitable or sufficient, and
 - (viii) roads are closed to wheeled vehicles at times when use would be unsafe or when damage to the road could occur.

5.02 The Permittee is exempt from the maintenance requirements of paragraph 5.01(d)(iii) in respect of those roads scheduled for deactivation.

Completion of use:

- 5.03 Upon completion of timber harvesting operations, for all roads constructed under this Permit and for which the Permittee is not responsible to deactivate or rehabilitate, the Permittee must
- (a) immediately before relinquishing its rights under this Permit, leave the road in a condition that conforms to the maintenance specifications stated in paragraph 5.01, or
 - (b) if necessary, return to the Permit area after breakup or snowmelt to complete road maintenance obligations in accordance with the maintenance specifications in paragraph 5.01.

6.00 ROAD DEACTIVATION

- 6.01 Where, in Table 1 of this Schedule, the word “deactivate” in column 7 appears opposite the road name in column 1, the Permittee must, before the expiry of the Timber Sale Licence, deactivate those sections of road identified and must ensure that the deactivation conforms with
- (a) section 82 of the *Forest Planning and Practices Regulation*,
 - (b) every other provision of the *Forest Planning and Practices Regulation* that regulates road deactivation, either specifically or by reference to primary forest activities, and
 - (c) any specifications provided in Part 8.00 of this Schedule.

7.00 REHABILITATION OF AREAS OCCUPIED BY ROADS

- 7.01 Where, in Table 1 of this Schedule, the word “rehabilitate” in column 7 appears opposite the road name in column 1, the Permittee must, before the expiry of the Timber Sale Licence, rehabilitate the area occupied by that road by
- (a) de-compacting compacted soils,
 - (b) returning displaced surface soils, retrievable side-cast and berm materials onto the area occupied by that road,
- and either
- (c) placing woody debris on the exposed soils, or
 - (d) revegetating the exposed mineral soils.

8.00 SPECIAL CONDITIONS – Not Applicable

APPENDIX I

DETAILED CONSTRUCTION SPECIFICATIONS

N/A

Table 4: Culvert Requirements

ROAD SUMMARY TABLE						
Road Section	Road Station	Reference Point #	Distance (m)	Culvert/ Bridge	Size (mmXm)	Stream Class
AR7874.08American FSR	R19	-	3+253	Culvert	450X9	X-Drain
AR7874.08American FSR	R16	-	3+709	Culvert	450X9	X-Drain
AR7874.08American FSR	R13	-	3+899	Culvert	450X9	X-Drain
AR7874.08American FSR	R9	-	4+144	Culvert	450X9	X-Drain
ARR22569Sec1	R1	RP1	0+000	Culvert	400X9	X-Drain
ARR22569Sec1	R4	RP4	0+187	Culvert	400X9	X-Drain
BDTA0568BLK3SPUR1	R7	RP7	0+124	Culvert	400X9	X-Drain
BDTA0568BLK3SPUR1	R9	RP9	0+251	Culvert	400X9	X-Drain
BDTA0568BLK3SPUR1	R11	RP11	0+403	-	-	-

ARR22638Sec3	R1	RP1	1+134	Culvert	450X9	X-Drain
ARR22638Sec3	R5	RP5	1+361	Culvert	450X9	NCD
ARR22638Sec3	R8	RP8	1+503	Culvert	450X9	X-Drain
ARR22638Sec3	R10	RP10	1+677	Culvert	450X9	X-Drain
ARR22638Sec3	R11	RP11	1+735	Culvert	450X9	X-Drain
ARR22638Sec3	R12	RP12	1+774	-	-	-