

	<p>Peace-Liard Business Area BC Timber Sales Standard Operating Procedures</p> <p>ATTENTION: BCTS PEACE-LIARD STAFF</p>	<p>SUBJECT: Road Deactivation Standards</p>

Purpose:

The purpose of this SOP is to meet BCTS's commitment towards the protection of ungulates by reducing/eliminating the ability of prey animals and hunters to easily travel some of the roads constructed within a BCTS timber sale (TSL) and/ or a Road Permit (RP) by using advanced road deactivation techniques where required.

Overview:

This SOP is to be used by BCTS staff when planning, preparing, and executing a Timber Sale Licence (TSL) and associated Road Permit (RP). All blocks within a TSL and associated Road Permit will receive one of the two levels of deactivation described below unless there is a documented rationale on file to override this deactivation requirement.

Level 1: Prescribed where the roads are located within a First Nation Critical Use Area. This applies to all roads under BCTS authority contained within the block and within 500m of the block.

Level 2: Prescribed where the roads are located outside a First Nation Critical Use Area. This applies to all tertiary in-block roads.

Refer to the attached Process Map (Appendix #3) to determine the level of deactivation to prescribe.

The requirement for advanced road deactivation techniques will be specified in the TSL and applicable RP documents. The licensee will be required to complete standard and advanced road deactivation techniques as prescribed. Standard road deactivation is defined in the TSL and applicable RP documents.

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Definitions:

Standard Road Deactivation:

Works completed to place a road in a self-maintaining state that will indefinitely protect adjacent resources. Re-establishment of natural drainage patterns are critical in achieving this condition.

Requirements would typically include removing bridges and stream culverts, stabilising the road prism, and barricading the road surface width in a clearly visible manner to prevent access by motorised vehicles (other than all-terrain vehicles).

Barricades are required unless exempted. Location will be indicated on deactivation map.

The location of any signage should be indicated on the deactivation map.

Advanced Road Deactivation:

In addition to standard road deactivation requirements:

Mineral soil ditch(s) to be infilled with sufficient mineral soil to account for settling. All strippings to be pulled back over exposed mineral soil with the exception of the cut slope. Stumps and logs to be placed randomly to act as physical barriers. Logging debris can additionally be placed on the road right of way if it does not create a fire hazard.

The road right of way shall be planted with seedlings after advanced road deactivation has occurred if works are executed prior to the block being planted.

The advanced road deactivation techniques will maintain the stable road prism.

The advanced road deactivation techniques will maintain natural surface and subsurface drainage patterns.

Re-contouring or subsoiling will not be techniques implemented.

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Procedure:

Planning Team:

The Planning department will document the following on the Due Diligence and Consultation Checklist (DDCC):

- 1.) Any specific road deactivation commitments made to First Nations and / or stakeholders.
- 2.) Identify future needs to use any of the planned roads to access volume within the next 5 years.
- 3.) Whether the block is within a First Nation Critical Use Area (CUA).

Pre-Award Team:

The pre-award team will perform the following tasks:

- 1.) Review the planning DDCC for any commitments previously made by planning in consultation with the pre-award supervisor.
- 2.) Use the SOP Process Map to determine the level of deactivation to prescribe (attached).
- 3.) Review Silviculture Site Plan with the Post Award Supervisor to determine if the plan may cause a delay in the timing of any advanced road deactivation techniques being prescribed (ex: block is going to be site prepped).
- 4.) Discuss tree planting access with the Post-Award Practices Forester. There may need to be a rationale to conduct the advanced road deactivation techniques post-planting. Should the decision be made to delay deactivation until after planting is to occur the road permit section (if applicable) must be converted into a Forest Service Road (FSR) to ensure that BCTS can fund, and execute deactivation works on a legal binding tenure.
- 5.) Ensure the TSL Licence, associated Road Permit (if applicable) and TSL Highlights document reflect who (Licensee or BCTS) is responsible for road deactivation and to what standard.

TSL Highlights, TSL Document, and Road Permit

Pre-award staff will include the statement below in all three locations of TSL package where relevant.

SPECIAL CONDITIONS

The licensee will be required to infill the ditches with mineral soils with sufficient material to

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accommodate settling. Once the mineral soil work is complete, the strippings are to be pulled back evenly dispersed across the road surface. This material includes all stumps, organic soils, and woody debris. Permanent road deactivation measures that re-established natural drainage patterns must not be compromised. Refer to Table1.


TSL Highlights Documents shall identify any advanced road deactivation requirements.

MAPS

A Road Deactivation map shall be included in the TSL and associated Road Permit package. The map must show every block and highlight where standard and advanced road deactivation techniques are being prescribed. The comment section of the map will describe the standard of work that is required.

ATTACHMENTS

- Sketch of works
- Example of a Level 2 Map
- Process Map



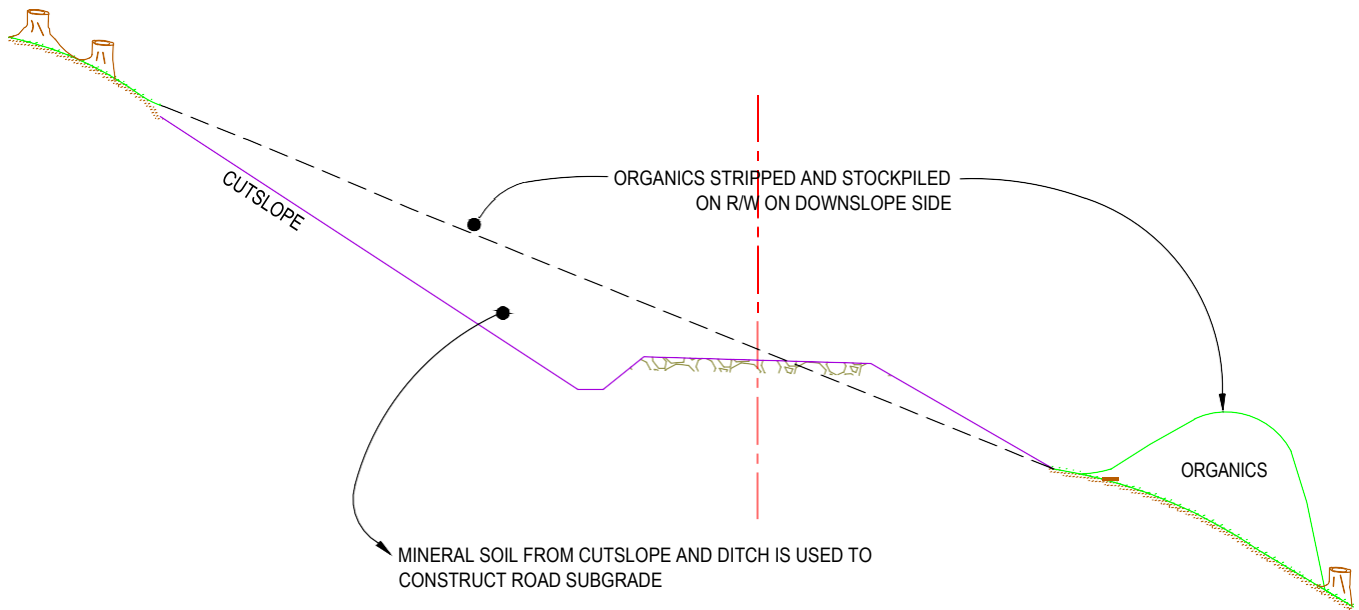
SHAWN SULLIVAN

Shawn Sullivan
Timber Sales Manager
Peace-Liard Business Area

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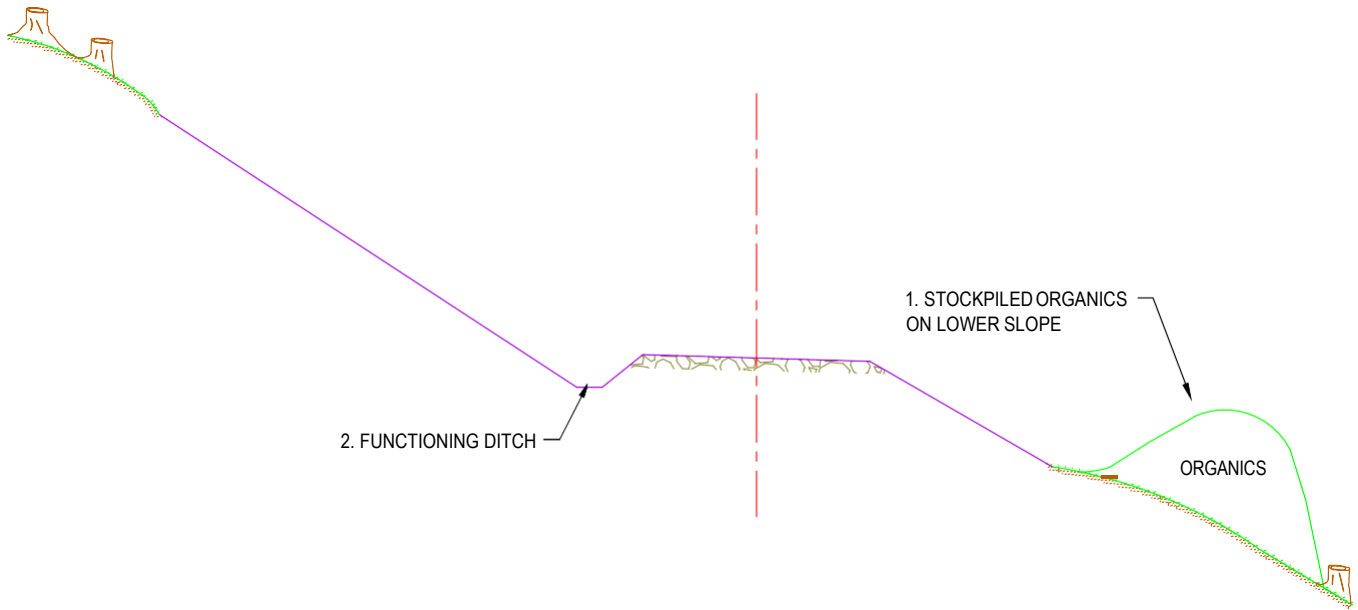
PEACE LIARD BUSINESS AREA - ADVANCED ROAD DEACTIVATION

PRIOR TO ROAD CONSTRUCTION SKETCH 1



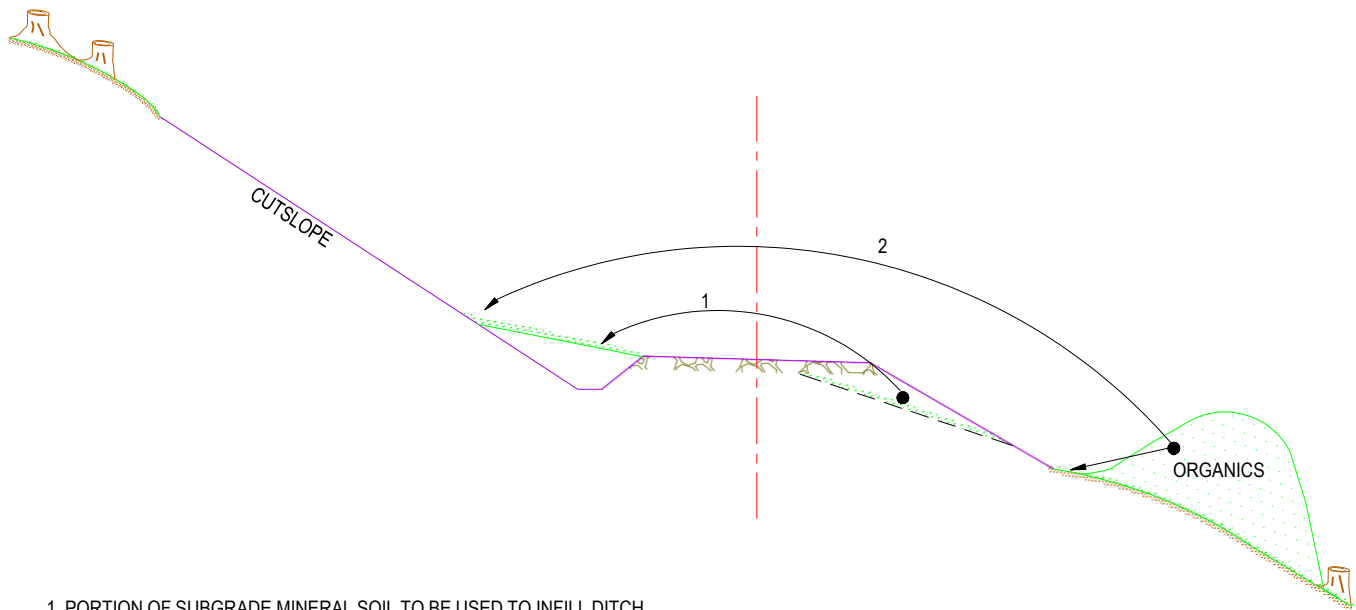
PEACE LIARD BUSINESS AREA - ADVANCED ROAD DEACTIVATION

PRIOR TO ADVANCED ROAD DEACTIVATION SKETCH 2



PEACE LIARD BUSINESS AREA - ADVANCED ROAD DEACTIVATION

WORKS TO BE COMPLETED ON CONSTRUCTED ROAD SKETCH 3



1. PORTION OF SUBGRADE MINERAL SOIL TO BE USED TO INFILL DITCH

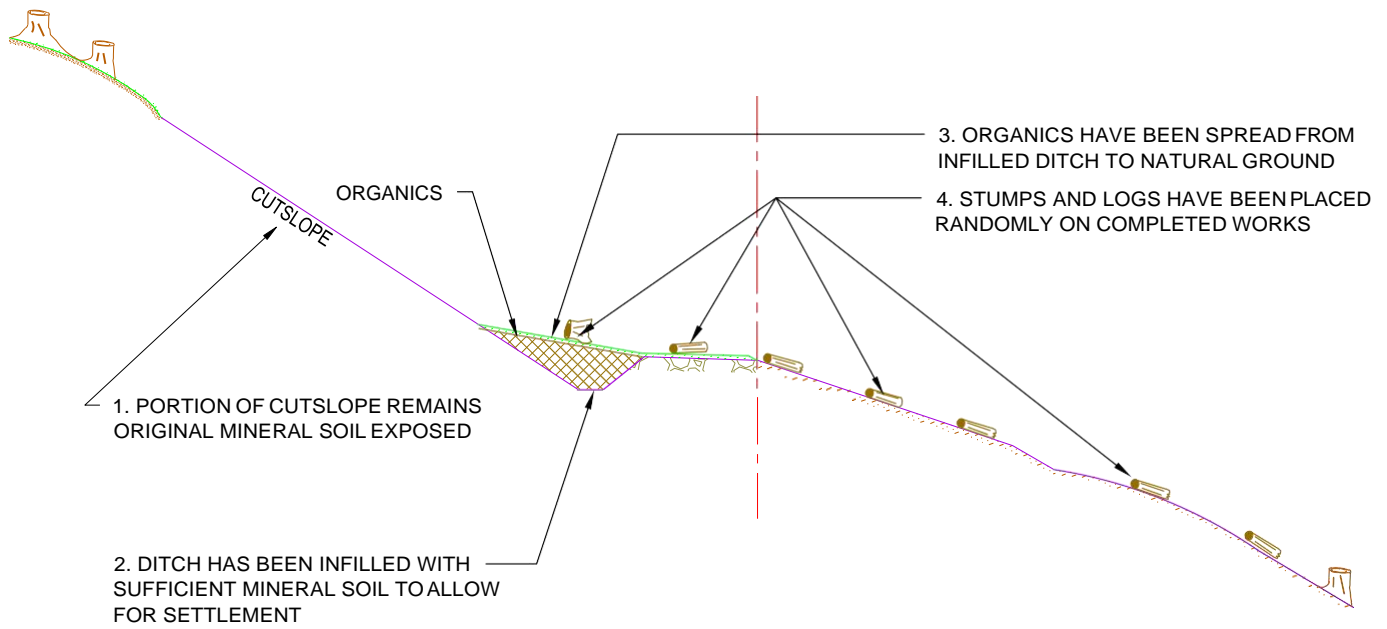
NOTE A: MOVE SUFFICIENT MATERIAL TO ALLOW FOR SETTLING WITHOUT LEAVING A DEPRESSION THAT WILL HOLD MOISTURE

2. SPREAD STRIPPINGS EVENLY FROM NATURAL GROUND TO THE EXTENT OF THE NEWLY PLACED MINERAL SOIL IN THE FORMER DITCH

NOTE B: IT IS NOT NECESSARY TO SPREAD STRIPPINGS ON THE ENTIRE CUTSLOPE

PEACE LIARD BUSINESS AREA - ADVANCED ROAD DEACTIVATION

COMPLETED ADVANCED DEACTIVATION WORKS SKETCH 4

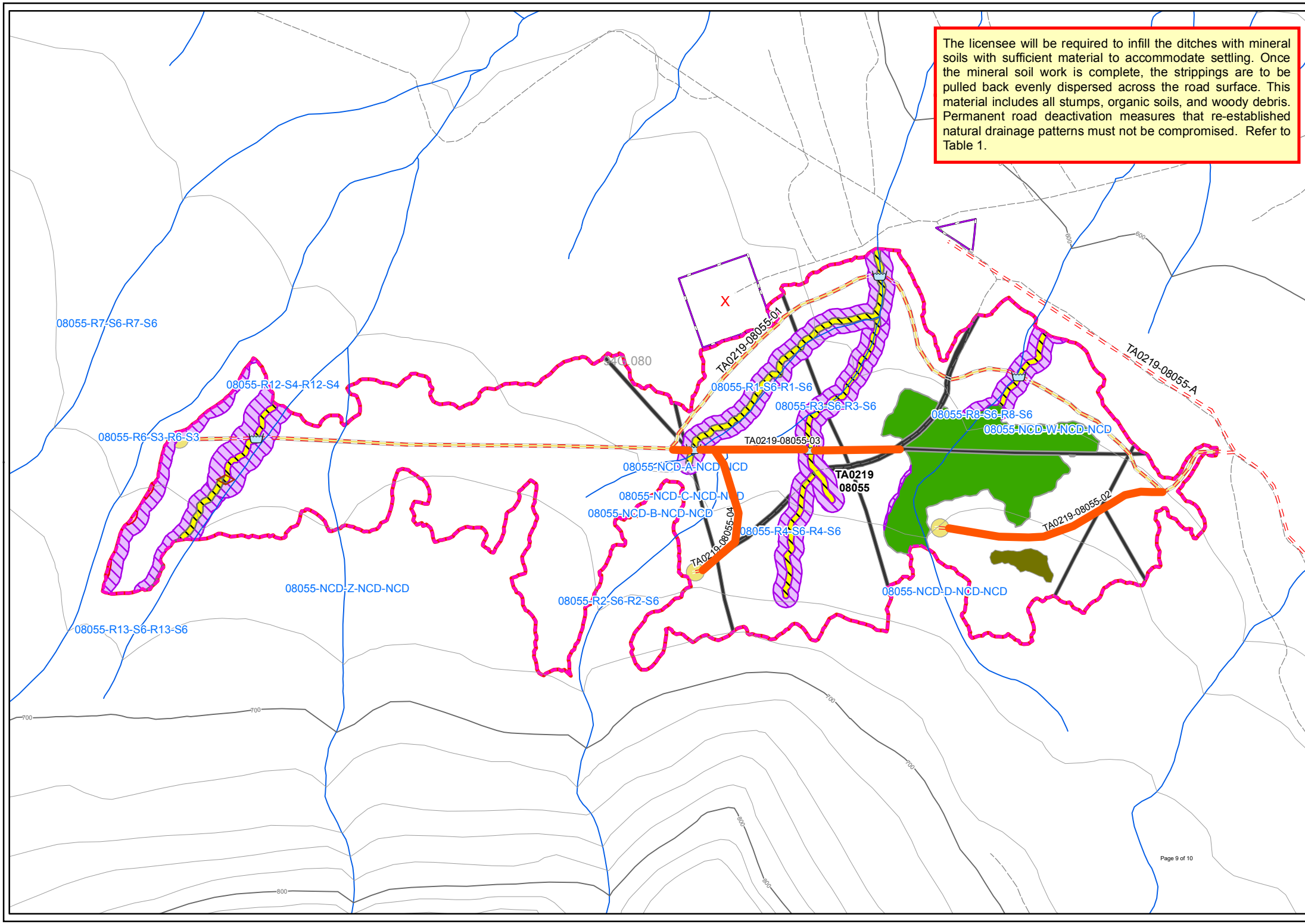


Business Area Peace-Liard		Field Team Ft St John
Operating Area Tommy Lakes		Management Unit Fort St John
Timber Sale Licence: TA0219	Block: 08055	Mapsheet

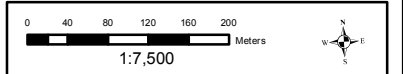
Roads with Advanced Deactivation:	Start:	End:
TA0219-08055-02	0+000	0+402
TA0219-08055-03	0+000	0+374
TA0219-08055-04	0+000	0+257

Turn arounds to be left open

The licensee will be required to infill the ditches with mineral soils with sufficient material to accommodate settling. Once the mineral soil work is complete, the strippings are to be pulled back evenly dispersed across the road surface. This material includes all stumps, organic soils, and woody debris. Permanent road deactivation measures that re-established natural drainage patterns must not be compromised. Refer to Table 1.



Block of Interest	Snow Fill
Planned Deactivation	Fish Barrier
Deactivate No Access	Transportation Lines 20K (TRIM)
BCTS Roads - Road State	Gravel or Unimproved Road
Deactivated Road	Riparian Features
Existing Road	Machine Sensitive Zone
Proposed Road	Riparian Management Zone
Unknown/NULL	Riparian Reserve Zone
Roads (FTEEN)	Standard Unit Type
Road Permit	Reserve
Forest Service Road	Non-Prod Natural
Mapsheet Grid 1:20,000	Non-Prod Permanent Access
Contour Line (TRIM)	Non-Prod Unnatural
Contour - Index	Wellsite
Contour - Intermediate	Pipeline RoW Surveyed
River or Stream - Definite	
River or Stream - Dry/ Indefinite	
Flooded Land	
Marsh	
Swamp	
Tailing Pond	
Lake	
Reservoir	
Watercourse	
Proposed/Planned Cut Block	
Regen; Freegrow; NSR	



Advanced Road Deactivation Process Map

5/6/2020

