

HARVEST INSTRUCTIONS MAP

BLOCK: K585

OPERATION: Nootka

TENURE: TFL19

CUTTING PERMIT: 388

MAP DATE: 15/01/2019

PRODUCED BY: Colin McKenzie



1:5,000

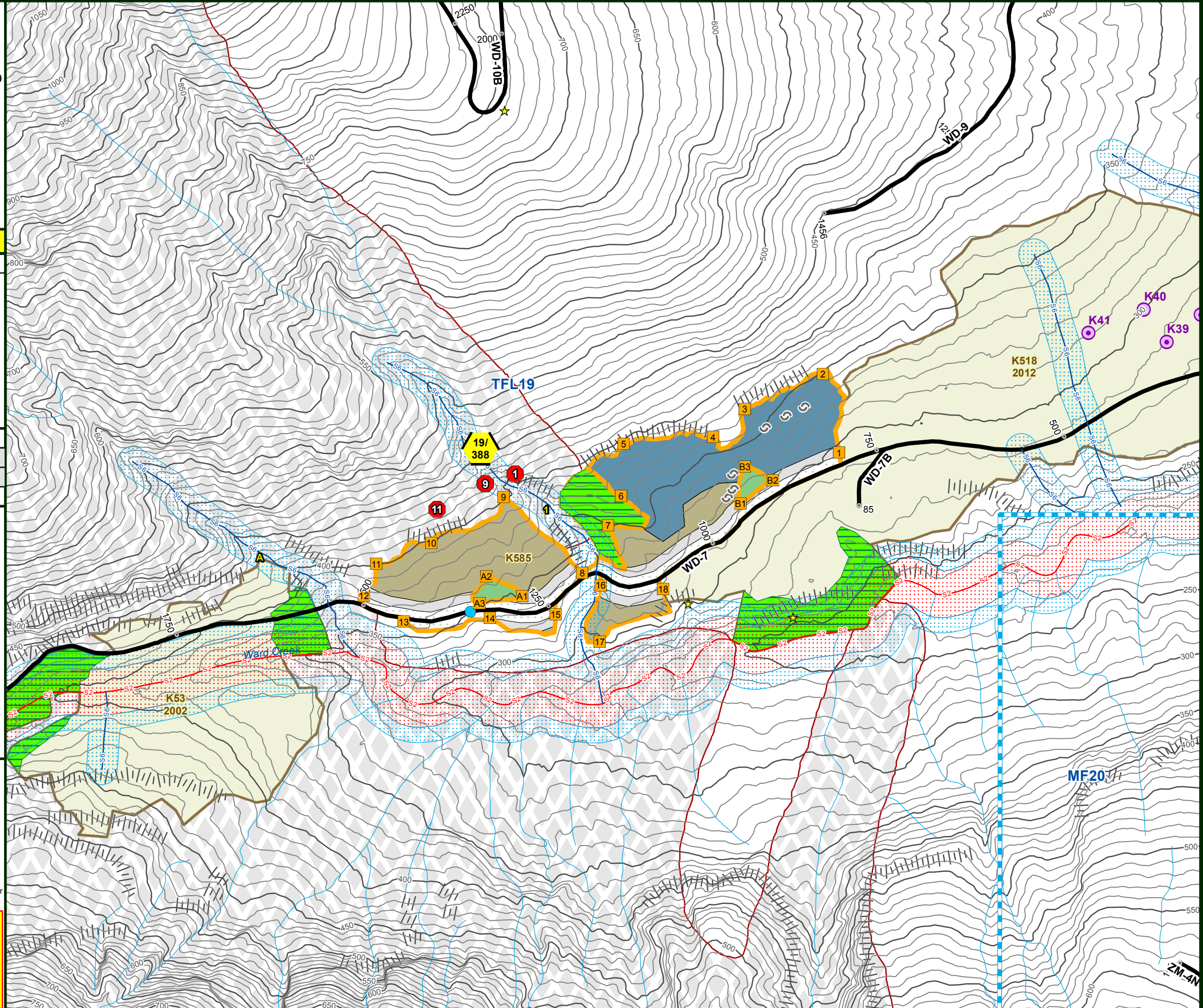
SAFETY COORDINATES: LAT: 49 47 11 / LONG: 126 06 04

Harvest Systems	Area	Volume m³	Timbermark	Area	Volume m³
GY	2.8	1938	19/388	6.5	4500
HC	2.8	1938			
WRW	0.9	623			

Species %								Net Harvest Area		6.5	4500
Cw	Cy	Fd	Hw	Ba	Ss	Other	Decid	Retention Areas		0.9	
0	0	54	46	0	0	0	0	Non Merch Areas		1.2	
OG %: 0		SG %: 100		Vol/Ha: 692.3		Gross Area		8.6	4500		

Base Features			Natural Features			Helicopter Features			Wildlife Features		
	Permanent Sample Plots Research Plots			10m Index Contour			Ground Access			Den Tree	
	Falls			10m Intermediate Contour			Hover Access			Other	
	Beaver Dam / Debris Jam			Research Polygons			Pad			Ungulate Winter Range	
	Reach Break			Karst Feature			Heli Land Drop Zone			Old Growth Mgt. Area	
	Non Fish Stream / ID			Landslide Initiation Point			Heli Water Drop Zone				
	Fish/Community Watershed Stream / ID			Rock			Log Handling				
	Unclassified Stream			Snags			Service Landing				
	Non-Classified Drainage			Wet Ground			Heli Flight Line				
	Fish Sensitive Feature			Windthrow							
	Stream Gully			Rock Bluff							
	Riparian Mgt. Area			Sensitive Soils							
	Riparian Res. Zone			Rock							
	Lake / Ocean			Sensitive Terrain							
	Wetland / Swamp / Marsh			Avalanches							
	Building Footprint			Recreation Trails							
	Tenure Boundaries			GAR Order Rec Line							
				GAR Order Rec Poly							

Block Features			Road Features			Cultural Features			Safety Features		
	Falling Corner			CMP Planned			Cultural Cedar (LCC)			Hydro Structure	
	Falling Boundary			CMP Existing			Archaeology Site Gov			Hazard Identification - See Back of Map for Specifics	
	Crown Modification			CMP Existing						Hydro Line	
	Planned Block			Bridge Planned						Safety Trail	
	Harvest Complete (Gross)			Bridge Existing						Hazard Line	
	Harvest Complete (Prod)			Bridge Removed						Hazard Area	
	Wildlife Tree Retention										
	Retention										
	Partial Retention										
	Non-Productive										
	Other										
	Yarding Corridor										
	Pole Removal										
	Single Tree Removal										
	Single Tree Retention										
	Big Tree Retention										
	Deflection Lines										



SEE INSTRUCTIONS ON REVERSE →

"DEFINING A HIGHER STANDARD"

HARVEST INSTRUCTIONS MAP

BLOCK: K585



All employees, supervisors and contractors associated with these Harvest Instructions shall be fully advised of their content requirements and be aware and knowledgeable of WFP's Environmental Management Systems (EMS) and appropriate Standard Operating Procedures (SOPs).

SAFETY	ENVIRONMENTAL	GENERAL INSTRUCTIONS	BLOCK SPECIFIC INSTRUCTIONS																																																																																																																			
<p>Hazard Identification: Refer to Workplace Safety Plan - Known Hazards & Controls section for description of hazards and controls in place. Any new identified permanent hazards must be reported back to WFP Planning Dept. using a Hazard Report Form.</p> <p>Identified hazards highlighted below, See map for locations.</p> <table><tr><td>1</td><td>1. Avalanche Zone</td></tr><tr><td>2</td><td>2. Blasting Zone</td></tr><tr><td>3</td><td>3. Communication Issues</td></tr><tr><td>4</td><td>4. Metal Debris/Cable</td></tr><tr><td>5</td><td>5. Danger Tree(s) / Snags</td></tr><tr><td>6</td><td>6. Karst / Cave</td></tr><tr><td>7</td><td>7. No Entry Zones</td></tr><tr><td>8</td><td>8. Powerlines</td></tr><tr><td>9</td><td>9. Loose Boulders</td></tr><tr><td>10</td><td>10. Rock bluffs</td></tr><tr><td>11</td><td>11. Rock Fall Hazard</td></tr><tr><td>12</td><td>12. Safe Work Zone ID'd</td></tr><tr><td>13</td><td>13. Sensitive Terrain</td></tr><tr><td>14</td><td>14. Sink Holes</td></tr><tr><td>15</td><td>15. Steep Grade</td></tr><tr><td>16</td><td>16. Steep Terrain</td></tr><tr><td>17</td><td>17. Windfall Areas</td></tr><tr><td>18</td><td>18. Other:</td></tr><tr><td>19</td><td>19. Overhead Hazard</td></tr><tr><td>20</td><td>20. Wildlife</td></tr><tr><td>21</td><td>21. High public use / recreation</td></tr><tr><td>22</td><td>22. Stream Hazard</td></tr></table> <p>1. Avalanche Zone. 8. Power lines located at the start of Ward M/L 9. Loose boulders scattered throughout block 11. Rockfall hazard located above block.</p> <p>Signage: Post signage warning of operational activities and restricted access when necessary.</p> <p>Steep Grades: There are no steep grades associated with block K585</p> <p>Before hauling commences on any road section >18%, a steep grade assessment must be conducted by a qualified supervisor. Monitor conditions continually and adjust hauling activities to suit the traction conditions (See Safety Map for Haul Restriction Sections and Refer to Attached Steep Grade Assessment for hauling limitations). In the event any additional in block hazards (temporary or permanent) are encountered/developed during harvest phases must be reported back to WFP Planning Dept.</p>	1	1. Avalanche Zone	2	2. Blasting Zone	3	3. Communication Issues	4	4. Metal Debris/Cable	5	5. Danger Tree(s) / Snags	6	6. Karst / Cave	7	7. No Entry Zones	8	8. Powerlines	9	9. Loose Boulders	10	10. Rock bluffs	11	11. Rock Fall Hazard	12	12. Safe Work Zone ID'd	13	13. Sensitive Terrain	14	14. Sink Holes	15	15. Steep Grade	16	16. Steep Terrain	17	17. Windfall Areas	18	18. Other:	19	19. Overhead Hazard	20	20. Wildlife	21	21. High public use / recreation	22	22. Stream Hazard	<p>Rainfall Shutdown Area/Station: Gold River</p> <p>Shutdown Criteria Wet/Very Wet Zone: Activities must shut down if: The total rainfall reaches 100mm in 24 hours or less, 75mm of rain has fallen since the start of the shift and rain is continuing, or the water balance is equal to or greater than 100mm, whichever occurs first.</p> <p>Start-up Criteria Wet/Very Wet Zone: Activities may start-up when: The total rainfall is equal to or less than 50mm in 48 hours, or the water balance falls below 100mm. Soil drainage rate is 50mm in 24 hours.</p> <p>Riparian: PRIMARY OBJECTIVE: TO PROTECT WATER QUALITY - MAINTAIN STREAM BANKS AND THEIR NATURAL WATERCOURSE</p> <p>High stump non merchantable and saplings along in-block streams to provide visual reference for subsequent yarding phases. A 5 meter machine-free zone will be maintained except at designated crossings, or as required for other prescribed activity such as creek cleaning. Crossings on map are approximate and indicate that machine crossing of creek is permitted. Construct temporary crossings on streams using puncheon to protect stream banks and channel where necessary. All puncheon introduced at crossings on backspar trails shall be removed once trail is no longer required Logs will not be decked in stream channels unless bridge logs suspend the channel and support the decked logs and flow is maintained at all times. Any introduced material at crossings will be removed immediately after loading. Equipment should not be fueled or serviced within the riparian management area (RMA) of a stream, lake or wetland.</p> <table><thead><tr><th>Class</th><th>Width</th><th>RRZ (m)</th><th>RMZ (m)</th><th>RMA (m)</th></tr></thead><tbody><tr><td>S1</td><td>>20</td><td>50</td><td>20</td><td>70</td></tr><tr><td>S2</td><td>>5 ≤20</td><td>30</td><td>20</td><td>50</td></tr><tr><td>S3</td><td>1.5 ≤5</td><td>20</td><td>20</td><td>40</td></tr><tr><td>S4</td><td>< 1.5</td><td>0</td><td>30</td><td>30</td></tr><tr><td>S5</td><td>>3</td><td>0</td><td>30</td><td>30</td></tr><tr><td>S6</td><td>≤3</td><td>0</td><td>20</td><td>20</td></tr></tbody></table> <p>*Fish/Community Watershed Stream</p> <table><thead><tr><th colspan="4">STREAM PRESCRIPTIONS</th></tr><tr><th>Stream ID</th><th>Stream Class</th><th>GULLY</th><th>Riparian Management Strategies.</th></tr></thead><tbody><tr><td>Ward Creek</td><td>S2</td><td>N</td><td>Outside block. Fall and Yard Away. No Cleaning required.</td></tr><tr><td>A</td><td>S6</td><td>N</td><td>Outside block. Fall and Yard Away. No cleaning required.</td></tr><tr><td>1</td><td>S6</td><td>N</td><td>Outside block. Fall and yard across. No cleaning required</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></tbody></table> <p>Debris Size: Fine = twigs, needles, leaves; V. Small = < 3"x6"; Small = < 12"x6", Large = > 12"x6".</p>	Class	Width	RRZ (m)	RMZ (m)	RMA (m)	S1	>20	50	20	70	S2	>5 ≤20	30	20	50	S3	1.5 ≤5	20	20	40	S4	< 1.5	0	30	30	S5	>3	0	30	30	S6	≤3	0	20	20	STREAM PRESCRIPTIONS				Stream ID	Stream Class	GULLY	Riparian Management Strategies.	Ward Creek	S2	N	Outside block. Fall and Yard Away. No Cleaning required.	A	S6	N	Outside block. Fall and Yard Away. No cleaning required.	1	S6	N	Outside block. Fall and yard across. 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If an unidentified cultural heritage resource is encountered, operations will cease in the immediate vicinity of the feature and WFP Planning shall be notified immediately.</p> <p>Wildlife Resources: In the event any unidentified bear dens or raptor nest trees are encountered during falling, but before the tree has been cut, the faller will go elsewhere for the day and report this potential wildlife tree to a WFP Supervisor. Fallers are not to return to the vicinity of the wildlife tree until notification from WFP Planning has been given. If the discovery of a bear den or potential nest tree occurs while the tree is being felled, the decision to proceed is at the faller's discretion in regards to safety and Worksafe BC requirements. If it is unsafe to leave the tree partially cut, the faller will complete falling the tree and report the incident to WFP Planning.</p> <p>Retention: Internal retention not specified on the map requires review with WFP Planning prior to implementing and necessitates a 'change in plan'. Individual trees along boundary edges may be left standing due to safety or operability issues and do not require documentation unless they pose hazard to subsequent phases. Groups of trees left along boundary edges for safety and/or operability issues need to be reported to WFP Planning.</p> <p>Timbermarking Requirements: All decked timber must be sufficiently marked (at least 10%) when the setting is in-active. Right-of-way timber will be marked 19/0R1 Setting timber to be marked to the block cutting permit.</p> <p>Professional Seal and Signature:</p> <div></div> <p>I certify that I have reviewed this document, and I while I did not personally supervise the work described, I have determined that this work has been done to the standards expected of a member of the Association of BC Forest Professionals.</p>	<p>Risk Category: LOW</p> <p>Power Lines: Maximum Allowable Load Heights</p> <table><thead><tr><th>Road Name</th><th>Allowable Load Height</th></tr></thead><tbody><tr><td>Headbay Road</td><td>36 Feet/11m</td></tr><tr><td></td><td></td></tr></tbody></table> <p> Special Management Instruction:</p> <p> Harvest Instruct Poly:</p> <p>Terrain: The block has a low to very low landslide initiation.</p> <p>Recreation: There are no known recreation sites in or adjacent to the block.</p> <p>Invasive Plants: There are no known invasive plants in or adjacent to the harvest area.</p> <p>Big Tree: Any Big Trees discovered during falling are to be left standing. If Big Tree(s) poses a safety risk and cannot be left, stop work and notify WFP Planning and go work elsewhere for the day. Direction will be given from WFP Planning in regards on how to proceed.</p> <p>Leave Trees: There are no individual leave trees associated with this block.</p> <p>Visuals: Block is not located in a visual polygon.</p> <p>WTRA, Retention, OGMA: Block boundary is adjacent to WTRA, Retention Areas, and/or OGMA in several locations. Danger trees fell from within this areas are to remain in place where operationally feasible. Tail holds and guyline tiebacks may be established in these areas.</p> <p>Haul Distances</p> <table><tr><td>Gold River</td><td>18.1km</td></tr></table> <p>Field Work Completed By: J. Lauzon Checked By: C. McKenzie</p> <p>Signoff:</p> <p>_____ Date: _____</p> <p>_____ Date: _____</p>	Road Name	Allowable Load Height	Headbay Road	36 Feet/11m			Gold River	18.1km
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