

Site Plan

Tolko Industries Ltd.

Okanagan Woodlands

☒ Original:

☐ Amendment #

TENURE IDENTIFICATION

Region: RTO	District: DOS	TSA: 22	TSB: 5	License No.: FL A18672	Timbermark(s): ER9494	Cutting Permit: 494	Block: LV3104	Mapsheet/Opening No.: 082L027
Area Under Tenure (ha): 56.7	Location: Hesketh			UTM East: 382594	UTM North: 5571806	UTM Zone: 11	Licensee:	
	Latitude: 50°17'12			Longitude: 118°38'53			Tolko Industries Ltd.	

SAFETY

Weather Station
Mabel

Other Safety Comments:

- 1)Access is from Sugar Lake Road to Sihils Road onto the Connector road to Hesketh road where block access is available.
- 2) The location and presence of steep slopes, 30% or greater, is estimated on the block summary map. It is possible that not all steep slopes and/or short steep pitches have been identified. It is the responsibility of the logging and/or silviculture contractor(s) to ensure they are operating on steep slopes with proper safe work procedures.
- 3) Several standing snags exist within the cut-block, along timbered edges, and within WTR. These should be considered as a safety hazard. These stems may possess wildlife tree attributes and could be included in retention patches where practicable and safe to do so.
- 4) Recommend improved signage and /or increased road user awareness along road systems to identify road names and to notify other resource users.

OPERATIONAL COMMENTS

HARVEST SYSTEM BREAKDOWN:

- SU A: Road side dangle head, no seasonal restrictions

AREAS OF CONCERN, SEDIMENT DELIVERY, NON-CONFORMANCE TO SOP’S

- Sediment Delivery potential is Low
- Block contains slopes ranging from 5-45%
- Minor adverse skidding will be needed along WD

BLOCK ROAD SUMMARY AND/OR CONCERNS

- LV3104-01, LV3104-02, LV3104-03, and LV3104-04 will be constructed as a TAS Perm Deact roads. These roads generally have good decking with side slopes reaching 30%.
- Decking along the LV3104-01 road near R3 to R7 is marginal due to side slopes of 25-35%.
- There is a 50m wet section near R22 on LV3104-04 Road that may require some fabric and/or puncheon

DESCRIPTION OF WOOD QUALITY/POTENTIAL FOR VALUE ADDED

- This block is composed primarily of Pl and Fdi with lesser amounts of Cw and Hw. The Gross volume of the block is 19,889m3 and the net volume is 16,216m3 the average DBH is 25cm and the average tree height is 20m3.

TOPICS FOR DISCUSSION AT PREWORK

- 400m of debris fencing will be needed along the West Boundary from B30+50m to B32+50m. A new cattle guard with a slip gate is also required near B30 with 50m of wing fencing either side, this wing fencing on the north side will tie into the debris fencing at B30+50m
- Another cattleguard and 50m of wing fence either side is required at the south end of LV3042 to prevent cattle from moving down Sihils Road. See the CP494 Range Map in the CP E-filing folder for the exact location.
- Stumping is required where safe and practicable
- No refueling near NCDs, avoid skidding down NCDs
- Several Steep slopes exist within the block
- Retain Cw>47.5cm DBH, Fdi>67.5cm DBH, and Lw>57.5cm DBH where safe and practicable to do so

NET AREA TO BE REFORESTED INCLUDING RESERVES WITH MODIFICATIONS (ha)		
SU	SU Area Description	Net Area to Be Reforested
A	SU A is comprised of Pl and Fdi with lesser amounts of Cw and Hw. This block is located in the upper elevational range of ICHmk1 with an 01 site series. The block is located mid slopes with slopes ranging from 5-45%. Soils are moderately well drained with Sandy Loam soils.	51.2
	This block will be harvested using a roadside dangle head method.	

ECOLOGICAL INFORMATION AND SITE CHARACTERISITCS

ECOLOGY AND CRITICAL SITE CONDITIONS												
SU	AREA	BEC	ELEVATION (m)			SLOPE (%)			SITE SERIES		ASPECT	SITE TYPE
			Low	High	Avg	Min	Max	Avg	Dominant (%)	Related (%)		
A	51.2	ICHmk1	1245	1429	1337	5	45	20	01		S	

SU	Critical site conditions that affect the timing of operations, and how they affect the timing
A	<div><div></div><div>There are no critical site conditions for LV3104</div></div>

SOIL CONSERVATION

SITE DISTURBANCE							
HAZARD RATING (if logging methods other than cable or aerial are proposed)				SOIL CHARACTERISITICS (if temporary access structures are proposed)		SOIL DISTURBANCE LIMITS	
Soil				UNFAVOURABLE SUBSOIL		Max. allowable within the NAR (%)	Max. limits may be exceeded for Temp Access Structures (%)
SU(s)	Compaction	Displacement	Surface Erosion	Depth to (cm-cm)	Type		
A	Moderate	Low	Moderate	N/A	None to note	10%	5%

ROADSIDE SOIL DISTURBANCE: 25.0 %

Max Proportion of Total Area Under the Prescription Allowed for Permanent Access:	7.0%
Actual Permanent Access Calculated:	2.3%

Permanent Access Comments:

- There are no new proposed permanent access structures within or associated with this block.

REHABILITATION TIME FOR TEMPORARY ACCESS STRUCTURES	
Maximum Allowable Time to Complete Rehabilitation (measured from completion of harvest):	2.0 years

SLOPE INSTABILITY INDICATORS:	No	Measures required to address terrain instability:	No	Bladed trails restricted:	No
<div><div></div>Based on the Terrain Hazard Management Model (THMM), a Terrain Stability Assessment (TSA) was not required. THMM is on file. Natural drainage patterns have been identified based on observations during field development. Culverts have been proposed along the roads as indicated on the map in a manner that will maintain natural drainage patterns. If conditions encountered during road construction or operations are different than noted here, culverts should be added or moved to ensure natural drainage patterns are maintained.</div>					

TEMPORARY ACCESS MANAGEMENT					
SU(s)	General Location (also refer to map)	Sediment Delivery Risk (in Community Watershed or above Domestic Intakes)	Max. Allowable Height of Cutbanks (m)	Average Height of Cutbanks (m)	Equipment to be Used (if other than Excavator)
A	Roads and trails designated as per map.	Low	1.5	0.6	Skidder or Dozer

Total Temp Access: 1.0ha

% of Net Area: 2.0%

Temp Access Strategies	
<div><div></div>Road LV3104-01, LV3104-02, LV3104-03 and LV3104-04 are planned temporary roads that requires permanent deactivation (TAS-Deact). These roads will require minimal construction, will not require extensive ditching and all but 4m width of these roads will contribute to the NAR. Planting will be prescribed at a minimum to the edge of a 4m road prism and within the road prism where practicable.</div> <div><div></div>All TAS roads are to be constructed in a manner that maintains natural drainage (does not intercept, divert or concentrate drainage). If a structure other than a culvert is used for crossings, they must be removed following harvest completion and prior to freshet.</div> <div><div></div>All trails are to be constructed in a manner that maintains natural drainage (does not intercept, divert or concentrate drainage). These trails are to be rehabilitated within 2 years following harvesting completion. If this rehabilitation is not completed immediately after harvest completion, these structures are to be seasonally deactivated to ensure natural drainage is maintained, and that the deactivation does not create a condition of instability or sedimentation to riparian features.</div> <div><div></div>Short sections of bladed or excavated trails may be required in areas of isolated steep slopes, designated crossings, and/or repeated machine traffic to access roadside decking areas.</div> <div><div></div>Short sections of bladed or excavated trails may not be rehabilitated if they are less than 30m in length and cumulatively add up to less than 1% of a cutblock area and have not created a condition that is unstable or likely to cause sedimentation of a stream.</div>	

FOREST MANAGEMENT

RIPARIAN MANAGEMENT				
Riparian ID	Riparian Class	RRZ Width (m)	RMZ Width (m)	Description and strategy for the Riparian Zone including purpose and extent of removal or modification of trees and residual basal area or density.
NCD-A NCD-B NCD-C NCD-D NCD-E NCD-F	NCD			Several NCD’s have been marked in the field as per ribboning SOP. <div><div>i.</div>limit the number of crossings and maintain natural drainage post-harvest / site prep</div> <div><div>ii.</div>do not skid down the identified NCD</div> <div><div>iii.</div>retain stubs along the NCD for future reference</div> <div><div>iv.</div>fall away / yard away from the identified NCD where safe to do so</div> <div><div>v.</div>do not pile slash or site prep over the identified NCD</div> <div><div>vi.</div>crossing rehabilitation to include: scattering large CWD to minimize potential for cattle congregating and/or off-road vehicle damage</div>

LEAVE TREE CHARACTERISTICS					
SU(s)	Layer	Species	Total Stems	% of Stems	Description
A	1	Cw	100-150 (2.4 stems/ha)	95%.	<div><div></div>Retain Cw ≥ 47.5cm at dbh where available, safe and practicable to do so. If these stems are to be removed for safety, access or silviculture, they are to be left on site as CWD. These leave trees are retained due to poor quality.</div>

A	1	Fdi	70-120 (1.8 stems/ha)	95%	<ul style="list-style-type: none">Retain Fdi ≥ 67.5cm at dbh where available, safe and practicable to do so. If these stems are to be removed for safety, access or silviculture, they are to be left on site as CWD. These leave trees are retained for biodiversity.
A	1	Lw	130-180 (3 stems/ha)	95%	<ul style="list-style-type: none">Retain Lw ≥ 57.5cm at dbh where available, safe and practicable to do so. If these stems are to be removed for safety, access or silviculture, they are to be left on site as CWD. These leave trees are retained for biodiversity.
A	All	Deciduous	All	95%	<ul style="list-style-type: none">Retain all deciduous where available, safe and practicable to do so. If these stems are to be removed for safety, access or silviculture, they are to be left on site as CWD. These leave trees are retained for biodiversity.

Leave Tree Comments:

- All proposed leave trees were picked up by the cruise.
- The distribution of the retention is not expected to be even throughout the block as there are > 1ha areas that may not have any of these species.
- The estimated ranges are only offered for guidance to operations and they attempt to consider field observations, statistical error in the cruise data, and the amount of NAR that is required to be clear-cut for required access (skidding, roads and processing), silviculture and safety. The final in-block retention is intended to meet the % retention stated by species but the actual amount may vary upward or downward from these estimated ranges.

COARSE WOODY DEBRIS MANAGEMENT STRATEGIES	Coarse Woody Debris Requirement
<p>Basic CWD includes all of 1 through 5.</p> <p>1) Basic Coarse Woody Debris that is to be retained at the conclusion of harvesting is to include, to the extent practicable:</p> <p>a) having preference for CWD >25cm;</p> <p>i) Timber grade firmwood reject & poor quality Grade 4 or other grades if these stems have a higher value as wildlife trees or CWD; that is either; distributed over the cutblock or Riparian Management Area; or if piled, located near the edges of the cutblock or of a Riparian Management Area in or adjacent to the block, and focuses on all classified and non-classified riparian areas when cattle use is expected to be high.</p> <p>AND (for the portion of the block harvested by Conventional Ground Based Harvesting Method)</p> <p>b) a minimum average per hectare of:</p> <p>i) two mature standing trees or two stubs (or combination of) preference is given to species other than Spruce or Douglas Fir);</p> <p>2) Where loose debris piles (not roadside or landing accumulations) have been created as a result of mechanical piling, 1-4 piles/ha adjacent to the timber edge, RMA or WTP will be left unburned.</p> <p>3) When practicable/available, mature deciduous trees used to meet section 1) b) i) above will be reserved from cutting in clumps. Deciduous that is harvested for safety, access or silviculture will be left on site for CWD. On Stumping Areas, do not use Birch or individual Aspen to meet section 1) b) i) above, however, Cottonwood and clumps of Aspen may be used.</p> <p>4) Advanced conifer regeneration may be reserved, (<i>where it exists and it is reasonably expected that merchantable trees can be felled and skidded without damaging the residual stems that may contribute to reforestation requirements</i>).</p> <p>5) Additional Strategies outlined in the section "LEAVE TREE CHARACTERISTICS" may also help to achieve the requirements for CWD.</p>	

MANAGEMENT STRATEGIES FOR ARCHAEOLOGICAL SITES
<ul style="list-style-type: none">An office Archaeological Overview Assessment was completed for this block by Ian Cameron on Dec 3, 2016. Ian Cameron commented that “Terrain is sloping with no landscape features commonly associated with archaeological sites. No further archaeological work is recommended”. No concerns remain.

Other Management Requirements

Other Wildlife Management & Species at Risk

- No occurrences of the following Species at Risk were noted during fieldwork; however, elements of suitable habitat have been noted: These species are not covered under a Section 7 Notice or the “Wildlife in the Okanagan Shuswap” FSP Section 5.2.3 or. If any of these species are encountered during operations, it should be reported to the harvesting supervisor immediately.
 - Badger*: The early/late seral stages in the adjacent area may provide potential habitat in this area.

See the block file for the remainder of the Species at Risk associated with this BEC zone, which have been determined to be not applicable.

Range:

- This block was referred to known range tenure holder Rod Hesketh under Information Sharing Referral #14-FN-01. As a result of this referral Mark Hesketh (Rod’s son) commented that this block may breach or render ineffective a natural range barrier. As a result of this referral Rod Hesketh indicated a concern in regards to:
 - Road breaching natural range barrier (forest),
 - Harvest breaching natural range barrier,
- Through discussions with the rancher it was decided that:
 - A cattle guard with a slip gate and wing fencing will be installed near B30 on Hesketh Rd
 - Debris fencing will be established along B30 to B32 to prevent cattle from going around cattle guard
 - An additional cattleguard and 50m of wing fence either side is required at the south end of LV3042 to prevent cattle from moving down to Sihils Rd via the new Connector road required to haul LV3104.
- See email correspondence on file and the Range Map in the CP494 E-filing folder for cattleguard and fencing locations, no concerns remain.

Guide Outfitters & Trappers:

- This block was referred to trapline holder (TR0823T052) under Information Sharing Referral #14-FN-01. No comments were received.

Actions/Obligations Related to GAR Orders:

- Grizzly Bear Specified Area. (GAR Order #8-232)
 - No specific measures are required as a result of this block being located within this GAR order area.

Silviculture Considerations

Soils/Terrain:

Soils are moderately well drained with deep soils with rooting depth reaching >60cm. Soils are composed of Sandy Loams containing 10% coarse Fragments. Steep slopes exist within the block, these areas are highlighted on the Block Summary Map and will not require stumping due to safety reasons.

Forest Health:

- Given the typical presence of root rot in the ICH, stumping is recommended where operationally feasible. 41.9ha has been appraised for stumping excluding the steep areas, the R/W areas and wet areas.
- This block is located in high cattle use area, this will likely impact regeneration.

- Other:
- Grizzly Bear Specified Area. (GAR Order #8-232)
 - No specific measures are required as a result of this block being located within this GAR order area.

FOREST HEALTH MANAGEMENT STRATEGIES			
Comments: Although this block is located within the ICHmk1 which is typically not prescribed for stumping, this block has been scheduled for stumping based on local knowledge of the area. Discussions were had with Krista Copeland, RPF (Silviculture Forester) and it was determined that this block should be stumped due to known root rot issues in this area and adjacent blocks LV3043 and 558-2.			
Pest Codes			
SU(s)	Pest Code	% Percent	Management Strategies
A	Armillaria	5%	<ul style="list-style-type: none">Where operationally feasible this block will be stumped to address root rot concerns in the stand.

VEGETATION MANAGEMENT STRATEGIES	
Livestock to be used for vegetation management: No	

STOCKING REQUIREMENTS

FREE GROWING STOCKING REQUIREMENTS FOR SILVICULTURAL SYSTEMS									
SU	Layer Name	Preferred Species/Free Growing Ht. (cm)	Acceptable Species/Free Growing Ht. (cm)	Post Spacing Density (sph)		Max Coniferous (sph)	Regen Date (years)	Free Growing (years)	
				Min	Max			Early	Late
A		Fdi / 140 Lw / 200 Pli / 200 Sx / 100	Bl / 100 Cw / 100				7		20

SU	Standards ID	Layer Name	Target Stocking (TSS) (wsph)	Minimum Stocking (MSSpa) (wsph)	Minimum Preferred (MSSp) (wsph)	Minimum Horizontal Distance (m)	Minimum Pruning Height (m)	Residual Stand Structure		Height Relative to Comp.
								BA (m2/ha)	Density (sph)	
A	1005573		1200	700	600	2.0				

GENERAL STOCKING STANDARDS COMMENTS AND APPROVED VARIANCES	
7.4 (b) the minimum inter-tree distance will be:	
(i) 1.0 metre on:	
(A) cutblocks that are developed as Silvo-Pastures;	
(ii) 1.6 metres on sites that:	
(A) are hygric or sub-hydric; or	
(B) are within the following ESSF subzones:	
(I) dc1, dc2, vc, vv, wc2 and wc4; and	
(A) to utilize preferred microsites, surveyors may utilize this MITD on no more than 20% of the survey plots in a block; and	
(B) such use will be clearly recorded on the survey cards;	
(ii) 2.0 metres on all other sites;	

SU	Standards ID	Standards ID Footnotes	Other Required Information
A	1005573	Additional FSP approved footnotes include: Fdi9; restricted to southerly aspects (SSE to WSW) for upper elevations Lw9; restricted to southerly aspects (SSE to WSW) for upper elevations Sx13; restricted to upper elevations of biogeoclimatic unit unless superseded by FSP section 7.4(h) Bl13; restricted to upper elevations of biogeoclimatic unit unless superseded by FSP section 7.4(h) Cw13; restricted to upper elevations of biogeoclimatic unit unless superseded by FSP section 7.4(h) CwE; Cw may be moved to preferred if present >15% volume of mature stand and planted in a mix with other preferred species up to 35%.	<p>This block is located within the ICHmk1 biogeoclimatic zone which has an elevational range of 1100 m - 1500m (median elevation 1300).</p> <p>The block is located on a South facing aspect with an elevational range of 1245m - 1429m (median block elevation 1337m) putting it in the upper elevational range of this BEC zone.</p> <p>Fdi9 is applicable. Fdi is a preferred species.</p> <p>Lw14 is applicable. Lw is a preferred species.</p> <p>Sx13 is applicable. Sx is a Preferred species.</p> <p>Bl13 is applicable. Bl is an acceptable species.</p> <p>Cw13 is applicable. Cw is an acceptable species.</p> <p>CwE is not applicable. CW will be maintained as an acceptable species not a preferred species.</p>

FSP RESULTS AND STRATEGIES MANAGEMENT

ID	Plan Name	Term Years	Commencement Date
FSP 034_2.1	Tolko-Stella-Jones-Selkirk-UNIB-WBFN-LSIB-NKIB FSP	5	2/2/2012

Applicable FDU (s)	Okanagan
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This Site Plan is consistent with the above noted FSP, section 10 of the FRPA and the prescribed requirements of section 34(1) of the FPPR. This Cutblock Site Plan also covers all applicable Cutting Permit Road Sections and Road Permit Sections associated with this block.

The term “Drilldown” when used in this site plan means the procedure used by Tolko Industries Ltd. to compare the spatial location of this cutblock/road with the spatial location attributes associated with the objectives set by the government. A current Drilldown report and maps are attached to this SP file.

Biodiversity

Green up and Adjacency, Wildlife Tree Retention, Old Growth Management Areas, Biodiversity Emphasis Option and Coarse Woody Debris
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R/S/M ID	R/S/M Title	Applicable	How Results, Strategies or measures apply to the Site (Include Rationale if No)
5.5.1	Biodiversity – Landscape Level	Yes ☒	<ul style="list-style-type: none">The maximum allowable cutblock size is 40 hectares within the Okanagan FDU. The green up requirement is 2m.
How is this SP consistent with the Results, Strategies, or Measures?		<ul style="list-style-type: none">LV3104 (52.5ha gross opening area) along with existing LV3043 (18.6ha gross opening area) will create an opening >40ha (71ha).The non-greened up opening that will be created is consistent with FPPR section 64(2)(a)(ii). A patch size analysis was completed by Forsite in September 2, 2016 and indicates that there will still be 345ha of harvest opportunity available in the NDT 3b within the Mabel LU for medium class blocks (40-80ha) once the approved blocks (including LV3104) have been harvested.This block is also consistent with FPPR 64(2)(b). It has been designed to resemble the structural characteristics of an opening that would result from a natural disturbance. The following attributes have been considered and incorporated to meet this objective: (select all that apply, modify as required, delete others and add any additional statements that may be required):<ul style="list-style-type: none">Irregular cutblock boundariesPlacement of WTP of varying sizes and shapes representing a variety of different stand elementsAdjacent un-prescribed areas that serve to leave representation of mature stands within the larger aggregate opening (including previously harvested openings).Retention of Cw ≥ 47.5cm at dbh, Fdi ≥ 67.5cm dbh, Lw ≥ 57.5cm as per Leave Tree section of this SP.Retention of 2 mature trees or stubs per hectare as per CWD section of this SP.	

R/S/M ID	R/S/M Title	Applicable	How Results, Strategies or measures apply to the Site (Include Rationale if No)
5.5.2	Biodiversity Emphasis Option	Yes ☒	<ul style="list-style-type: none">This block is located in the Mabel Landscape Unit which has a BEO of Low.
How is this SP consistent with the Results, Strategies, or Measures?		Coarse woody debris will be addressed as detailed in the sections titled 5.6.4 “Basic CWD” and/or 5.6.5 “Enhanced CWD”. Draft Old Growth Management Areas have been designated within this Landscape Unit in congruence with the provincial OGMA order. WTRA’s have been established consistent with section 5.6.2.	

R/S/M ID	R/S/M Title	Applicable	How Results, Strategies or measures apply to the Site (Include Rationale if No)
5.6.2	Wildlife Tree Retention (WTR)	Yes ☒	<ul style="list-style-type: none">This block is located within the ICHmw2 (BEC V.3) in the Mabel Landscape Unit which has a minimum Wildlife Tree Retention Level of 3.5% at the cutblock level and 8% retention at the cutting permit level.
How is this SP consistent with the Results, Strategies, or Measures?		<ul style="list-style-type: none">Wildlife Tree Patches have been specified for this block, totaling representation of 8% (4.2ha), which meets the requirement for wildlife tree retention at the cutblock and cutting permit level.	

Coarse Woody Debris - Okanagan

In the Okanagan Shuswap Forest District FDU’s CWD is based on the LUO Order and is either Basic or Enhanced or a combination of these two levels depending on the drilldown report triggered requirements.
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R/S/M ID	R/S/M Title	Applicable	How Results, Strategies or measures apply to the Site (Include Rationale if No)
5.6.4	Basic CWD	Yes ☒ No ☐	<ul style="list-style-type: none">Basic levels of CWD apply to this block. Ground based harvest systems will be utilized and the retention requirements for blocks >20ha applies.
How is this SP consistent with the Results, Strategies, or Measures?		<ul style="list-style-type: none">See CWD Management Strategies under the ‘Forest Management’ heading.	

Wildlife – Okanagan Shuswap

Requirements for Marten, Fisher, Bighorn Sheep and Williamson’s Sapsucker as per the LUO Order
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R/S/M ID	R/S/M Title	Applicable	How Results, Strategies or measures apply to the Site (Include Rationale if No)
5.2.3.2	Marten Areas	Yes ☒ No ☐	<ul style="list-style-type: none">This block is located within a marten high habitat suitability area.
How is this SP consistent with the Results, Strategies, or Measures?		<ul style="list-style-type: none">The habitat features required to trigger ECWD are not found within this block. However; the Wildlife Tree Retention required under the FSP in respect of this cutblock is associated with:<ul style="list-style-type: none">Wildlife Tree Patches;	

Cultural Heritage Resources

Cultural Heritage Resources Information Sharing Referral Results with First Nations			
R/S/M ID	R/S/M Title	Applicable	How Results, Strategies or measures apply to the Site (Include Rationale if No)
<u>5.8.1</u>	Cultural Heritage Resources	Yes ☒	<ul style="list-style-type: none">This block was referred under Information Sharing Referral #14-FN-01 to the applicable First Nations.
How is this SP consistent with the Results, Strategies, or Measures?		<ul style="list-style-type: none">As a result of this referral, ALIB indicated that a field assessment was required to determine the presence of cultural heritage resources. ALIB conducted a field review on July 26, 2016 and indicated there were no concerns, the final report is to follow. No other block specific responses from First Nations were received. No concerns remain.	

Soils

Soil Disturbance Limits and Permanent Access Structures			
R/S/M ID	R/S/M Title	Applicable	How Results, Strategies or measures apply to the Site (Include Rationale if No)
<u>5.1.1</u>	Soils	Yes ☒	<ul style="list-style-type: none">This cutblock has been assessed as not having sensitive soils as defined by regulation. The maximum amount of Permanent Access Structures is 7% and maximum amount of additional soil disturbance is 10%. The allowable soil disturbance for roadside work areas is 25%.
How is this SP consistent with the Results, Strategies, or Measures?		<ul style="list-style-type: none">Soil Disturbance and Permanent Access Structures are within limits. Refer to the Soil Conservation section and C.1 Ecology and Critical Site Conditions.	

Visual Quality

Scenic Areas with established Visual Quality Objectives			
R/S/M ID	R/S/M Title	Applicable	How Results, Strategies or measures apply to the Site (Include Rationale if No)
<u>5.7.1</u>	Visual Quality – Scenic Areas	Yes ☒ No ☐	<ul style="list-style-type: none">This block is mapped as having 56.7ha within a known scenic area with a visual quality objective of partial retention.
How is this SP consistent with the Results, Strategies, or Measures?		<ul style="list-style-type: none">This block will achieve the characteristics of alteration of the visual quality objective of Partial Retention by being:<ul style="list-style-type: none">i. Easy to see;ii. Small to medium in scale; andiii. Natural and not rectilinear or geometric in shapeA visibility analysis was conducted by Tolko. Both a line of sight analysis and a Google Earth Visual Impact Assessment were completed and indicate that this block may be visible from several viewpoints along Hwy 6 in Cherryville. The following attributes have been considered and incorporated to help achieve the Visual Quality Objective of Partial Retention:<ul style="list-style-type: none">i. It has been designed to resemble the structural characteristics and spatial distribution of an opening that would result from a natural disturbance with irregular cutblock boundariesii. Retention of Cw > 47.5 cm, Fd > 67.5cm, Lw > 57.5cm and all deciduous will soften edgesiii. Adjacent unprescribed areas serve to leave representation of mature stands (including adjacent previously harvested openings)iv. The adjacent previously harvested openings (558-2 and the 40-50year old logging to the South East of the block have reached a green up of 2m.	

Invasive Plants

Invasive Plant Identification and Management			
R/S/M ID	R/S/M Title	Applicable	How Results, Strategies or measures apply to the Site (Include Rationale if No)
<u>6.1.2</u>	Invasive Plants	Yes ☒ No ☐	<ul style="list-style-type: none">This area is not known as a high hazard site and no high risk species were noted within or adjacent to the proposed roads; therefore, non-high hazard measures apply.
How is this SP consistent with the Results, Strategies, or Measures?		<ul style="list-style-type: none">Areas of mineral soil >0.1ha exposed by forest operations outside the NAR and bladed or excavated skid trails comprised of at least 50% exposed mineral soil over a minimum of 100m established by forest operations will be seeded within 1 year of completion of operations with a mixture of seed that meets or exceeds the Canada Commons #1 Specification in the Seeds Act R.S.C 1985.	

Range

Natural Range Barrier Identification and Mitigation			
R/S/M ID	R/S/M Title	Applicable	How Results, Strategies or measures apply to the Site (Include Rationale if No)
<u>6.2.1</u>	Natural Range Barriers	Yes ☒ No ☐	<ul style="list-style-type: none">This block was referred to known range tenure holder Rod Hesketh under Information Sharing Referral #14-FN-01. As a result of this referral Mark Hesketh (Rod’s son) commented that this block may breach or render ineffective a natural range barrier.
How is this SP consistent with the Results, Strategies, or Measures?		<ul style="list-style-type: none">As a result of this referral Mark Hesketh indicated a concern in regards to:<ul style="list-style-type: none">i. Harvest breeching natural range barrier,Through discussions with the rancher it was decided that:<ul style="list-style-type: none">i. A cattle guard with a slip gate and 50m of wing fencing either side will be installed near B30 on hesketh Rd. The wing fencing will tie into the debris fencing on B30+50m.	

	<div><div>ii.</div><div>400m of debris fencing will be established along the west boundary from B30+50m to B32+50m to prevent cattle from going around the cattle guard. See email correspondence with Mark Hesketh on file.</div></div> <div><div>iii.</div><div>An additional cattleguard and 50m of wing fence either side is required at the south end of LV3042 to prevent cattle from moving down to Sihils Rd via the new Connector road required to haul LV3104.</div></div> <div><div></div><div>No concerns remain.</div></div>
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GENERAL WILDLIFE MEASURES UNDER GAR

GAR ID	GAR Title	Applicable	How General Wildlife Measures Apply to the Site (Include Rationale if No)
8-232	Grizzly Bear Specified Area - OKTSA	Yes ☒ No ☐	<div><div></div><div>This block falls within the identified Grizzly Bear Specified Area #8-232 by the GAR order for this species.</div></div>
How the SP is consistent with this GAR order and GWM’s		<div>General Wildlife Measures (GWM) for GRIZZLY BEAR SPECIFIED AREA # 8-232 in the Okanagan.</div> <div>1) - Forest practices will result in at least 10% of each management unit containing forest stands that exhibit a height of at least 19.5m in patches that are at least 5ha. A landscape analysis conducted by Forsite Forest Management Specialists September 6 2016 concluded that, for the approved scenario (all current and proposed harvest), 59.7% of the ICHmw2 (V3 Drilldown) will be >19.5m height in patches that are at least 5ha for the Mabel Landscape Unit.</div> <div>2) N/A - There are no avalanche tracks present in or near the block.</div> <div>3) N/A - This block is not located on an important berry producing site.</div> <div>4) N/A - There is no riparian site series located in the block for planting tree seedlings.</div> <div>5) N/A – There are no main haul roads associated with this block</div>	

ADMINISTRATION

PREPARED BY (RPF SIGNATURE AND SEAL):

Prepared by:

Allie Affleck

Name (Printed)

R.P.F.’s Approval

Riley Kelly

R.P.F Name (Printed)

Dec 13, 2016

Date Signed (YMD)

4971

R.P.F. Number



R.P.F. SIGNATURE AND SEAL

RPF LEGAL STATEMENTS AND COMMENTS

RPF Reviewed this Site Plan:

Legal Statements and Comments:

I certify that I have reviewed this document and, 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 British Columbia Forest Professionals.