BCTS
BC Timber Sales

SP/HP MAP - AMENDMENT #1

BCTS TSL A95528
(LICENCEE & #)

BLOCK: 1 PRE: EK G33 1312
UBI: BF67X
LOCATION: ROCKY CREEK

Map Reference: 082G.033
Air Photos:
Forest Region: Southern Interior
District: Rocky Mountain
TSA: Cranbrook
UTM Coordinate:

Zone	Easting	Northing
11	615536	5468424
Lat.	49° 21' 27" N	Long. 115° 24' 32" W

Mag. 15.4° E of T.N.
Date: Sep 01, 2021
Land District: Kootenay
Elevation range: 900 - 1000m
Scale: 1:7,500
Drawn By: D.Michel

N

SP/HP Legend

- Subject Block
- Right of Way
- Riparian Reserve Zone
- Slope Area (>35%)

Management Zones
- MFZ
- RMZ
- SMZ
- WMZ

Harvest Method
- Cable
- Ground

Standard Unit
- 1
- 2
- Non Productive
- PAS
- Reserve - Other
- WTP
- WTRA

- P / E Permanent Landing; Proposed/Existing
- Culvert; Existing/Proposed
- Block GPS Station
- Road GPS Station
- BC Block Center
- Major Culvert
- HVS W Wildlife Feature -High Value Snag
- Road Permit
- Forest Service Road
- Existing Road
- Proposed Road
- Unknown Road
- Deactivated Road
- Skid Direction
- Yarding Direction

Adjacent Blocks
(Planning Status, Block Status)
- PP and (Info or 196)
- PP and PROP
- PP and OPC
- WIP and (Info or 196)
- WIP and PROP
- WIP and OPC
- ADV
- HB
- LC
- RG
- GU
- FG
- Deferred
- Intermediate Contours
- Index Contours
- Fence
- Transmission Lines
- Pipeline
- Existing Trails
- Pipe Line
- Paved Road, Divided
- Gravel Road
- Slide
- Slope Break
- Gully, Draw
- Fence Line
- Stream - Unclassified
- Stream classified
- NCD/NVC
- Waterbody
- Wetland
- BEC Zone
- Inoperable
- Recreation Area
- WMA
- VRI Polygon
- Indian Reserve
- Woodlots
- National Park
- Provincial Park
- Protected Area
- Ecological Reserve

0 50 100 200 300 400 Meters

VAST RESOURCE SOLUTIONS

CR9921.06 Wardner; ECE#1; Upgrade; 4219m
CRR23576Sec2; New Short Term; 2020m
CRR23576Sec3; New Short Term; 683m
Road Permit
Forest Service Road

End Upgrade

R07408 1
R23576 2
R23576 3
R12172 2
R15809 1
R15809 3
R15809 4
9921 6

A95528
1
G33-1312

A38568
1

IDFdm2

WTRA1
WTRA2
WTRA3
WTRA4

W0855

SU	Area	NAR	Silv System	Harvest Method	BEC/Site Series	Stocking Standard
1	54.4	54.4	CC/Res	SK- Ground Based	IDFdm2 101	1062276
PAS	0.3					
WTRA	6.44					
Reserve Other	0					
NP	0					
TAUP	61.1					

614500 615000 615500 616000 616500
5469500 5469000 5468500 5468000

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Safety Highlights:

Rock outcrops and short steep pitches (>40%) were noted during layout. Prior to working on steep slopes, operators must complete a steep slope hazard assessment if slopes exceed the maximum slope limit of the machine stated by the manufacturer. If the manufacturer's stated slope limit is unknown, operators must follow slope guidelines stated in *WCB Guideline G26.16 Slope limitations- Safework Procedures* and complete a steep slope hazard assessment if they are to operate on slopes exceeding the limits stated in the guideline. A slope map showing areas exceeding 35% is to be provided to operators at commencement of work.

Dead snags of various height and diameter classes occur within the block. Some have been subject to armillaria root disease and have compromised root systems. Snags may fall suddenly as result of disturbance by machinery. Many snags have been flagged for retention as they have value to wildlife. They are to be retained where deemed safe to do so. All hazardous snags within 1.5 tree lengths of roads and decking areas are to be removed unless assessed as safe by a certified danger tree assessor.

Note that the existing access road adjacent to Lake Koocanusa is part of the TransCanada Trail Network. Expect possible public traffic and use especially during summer months. Signage indicating that active logging and/or hauling is taking place are to be posted along this route and signage indicating that active logging is taking place is to be placed at the entry of the block. Signage is to indicate radio frequencies in use and the name of the contractor and site foreman.

Leave Tree Specifications:

Table 1 – Layer 1 Reserve Timber[1]

SU	Selection Priority	Species	Size	Stems per Hectare to Retain			Distribution[2]			
				Target	Min	Max	S	G	I	R
1	1	Py	≥17.5cm	All	All	All	X	X	X	
1	2	Lw / Fd	≥ 45 cm dbh	35 (Py contributes to target.)	25	40	X	X	X	X
1	-	At/Ac/ Ep/Py	N/A	All	N/A	N/A	X	X	X	X
1	High Value Wildlife Trees	All	All	All (where safe to do so)	N/A	N/A	X	X	X	X

Additional Requirements/ Comments:

1. Total target conifer leave-tree density is 35sph (min 25sph/max: 40sph.)
2. Selection Priority 1: Retain all Py ≥ 17.5cm dbh. Trees left will contribute to target conifer leave-tree density of 35sph. Very few across block.
3. Selection Priority 2: Retain Lw and/or Fd ≥ 45cm dbh to overall target of 35 sph. These reserve stems are to target the largest diameter stems available. Where available and deemed safe with consideration of WCB requirements, leave-tree selection is to favor live trees with signs of internal decay (Wildlife Tree Class #2) in effort to meet best management practices for Williamson Sapsucker. If not available, leave live healthy trees. Select Lw over Fd where available.
4. The layout crew has identified trees that have value to wildlife. They have been flagged with triple "wildlife tree patch" ribbon in the field. These are to be retained where deemed safe to do so giving consideration to WCB requirements. .
5. Retain all deciduous trees. Very few observed during field work.
6. BCTS reserves the right to pre-mark reserve stems as per the above leave tree specifications.
7. Due to the stand structure leave tree voids < 1ha may exist post-harvest.

Wildlife Tree Class #2: Live/unhealthy trees with evidence of internal decay or growth deformities (including insect damage, conks, heart rot, broken tops etc); dying trees

[1] Refer to *Appendix 1* for *Table of Reserve timber Abbreviations and Definitions*
[2] Distribution types: S: Single Tree, G: Group of trees, I: Irregularly distributed, R: Regularly distributed

Note: Safety is a priority when conducting operations near reserved timber. Refer to TSL Schedule "A", Section 2.00 regarding Dangerous trees.

Table 2- Other Reserved Timber

Non Merch				
SU	**Location**	**Species**	**Size**	**Stems/ha**
1	Retain all good quality advanced understory, preferably in patches or clumps throughout the harvest area. Retain advanced regen, deciduous vegetation around any retained wildlife trees where available.	Fd, Lw, Py	<17.5 cm dbh and >1.3m height	Up to 3 clumps/ha

Coarse Woody Debris							
SU	**Size**	**# per Hectare**	**Distribution**				
			S	**G**	**I**	**R**	
1	≥ 2m in length and ≥ 7.5cm in diameter at one end	Minimum: 4	x	x	x		• This is the minimum required under the *Forest Planning and Practices Regulation*
Dead Trees to be stubbed (where Mechanical Falling is utilized)							
1	All	>30 cm dbh	x	x	x		• 2 – 5 m stubbing Height • Target 3 sph, range 0 – 5sph

Harvest / Operational Constraints:

- Avoid primary forestry activities during periods of excessive moisture such as during spring freshet or after periods of heavy rainfall.
- Maintain natural drainage patterns during and at completion of harvest. .
- This block is sensitive to encroachment by invasive species. Ensure that all equipment entering the site is inspected for invasive plant material and washed if material is found. Document inspections and actions taken.
- Exposed cutbanks of permanent constructed roads, new landings and deactivated/rehabbed areas are to be re-seeded with a suitable seed mix (as directed by a qualified professional otherwise Canada #1 Forage Mix or better) within 1 year of soil exposure to mitigate the spread of invasive plants and to limit soil erosion.

RIPARIAN ASSESSMENT

Block	Riparian I.D. and Class	RMA	SU	Width (m)	BA or SPH Retained	Comments (Indicate if in a Community Watershed)
1	Stream 2 (S6)	20m RMZ with >1% pre-harvest stems retained	-	15	100% Placed in WTRA	To meet RMZ retention requirements for this stream, a WTRA with 100% retention has been designated.

Management Strategies:

Kootenay Business Area Field Marking Standards

	Ribbon	Paint
Harvest Boundary	BCTS Block Boundary	
Falling Corners		FC#
WTRA Boundary	Reserve	
Reserve Boundary	Reserve	
Riparian Reserve Zone	Reserve	
Riparian Management Zone	Riparian Mgmt. Zone	
Management Zone	Management Zone	
Treatment Unit Boundary	Treatment Unit Boundary	
Reserve Trees		
Machine Free Zone	//// Machine Free Zone ////	
Cruising	Cruise Line	Plot Trees
Traverse Stations		
SP Plot Location		

	Ribbon	Paint
NCD & Stream Centers	Water Course	
Road P-Line		
Road Center Line	Road Centerline	
Landings	Landing	
Road Right of Way	R/W Boundary	
Road RP		
Culverts	Culvert	
Designated Crossing	Crossing	
Culvert RP Outside Right of Way		
Tail Holds / Guyline / Intermediate Supports		
Skid Trail / Back Spar Trail / Forwarding Trail	/ / / / / / Trail / / / / / /	
Recce Ribbon / D-Line / Skyline Roads	/ / / / / / / / / / / / / / /	

I certify that the work described herein fulfills standards expected of a member of the Association of British Columbia Forest Professionals, and that I did personally supervise the work.

Chris Lovesey, RPF # 4803

RPF PRINTED NAME

September 3, 2021

DATE SIGNED

RPF'S SIGNATURE and SEAL

REGISTERED PROFESSIONAL FORESTER
PROVINCE OF BRITISH COLUMBIA
CHRISTOPHER LOVESEY
NO. 4803