Harvest Plan Map Amendment #1

BCTS BC Timber Sales

TSL **A94326**	Block ID **1**
Business Area Kootenay	UBI BF61A
Operating Area Boundary TSA	Location North Gloucester
Management Unit Boundary	FIZ E
Gross Block Area (ha) 14.0	Geographic Center Latitude 49° 33' 26" Longitude -118° 21' 34"

Unit	Area	Season	Method	Strategy
1	9.5	Any Season	Ground	No Special Conditions

Harvest Unit ID: 1; Clearcut; 2; Retention

Harvest Method: Ground

Non Productive SU: Reserve; Non-Prod Permanent Access; WTRA

BCTS All Blocks
Block of Interest
BCTS RG Block
BCTS FG Block

BCTS GPS Stations
GPS Station
Block Bdy Hub
Falling Corners
Reference Trees

BCTS Layout Points
Block Centre
Woody Debris
Slump/Slide Area
Stub Tree
Tower Settings
Fish Barrier
Reach Breaks
Road Barrier
Rock Outcrops
Gate
Cattle Guard
Pipeline Crossing

Prop Skid Bridge
Prop Skid Crossing
Existing Culvert
Proposed Culvert
Drain Culvert
Snow Fill
Bridge
Cave/ Den
Mineral Lick
Nest
Wildlife Tree
Wildlife Feature
Mine Adit

BCTS Line Features
Cat Trail
Back Spar Trail
Bladed Skid Trail
Forwarding Trail
Deflection Line
PP Temp Skid Trail
Non-Bladed Skid Trail
Skid Trail
Other Trail
Pipe Line
Seismic Line
Cultural/Heritage
Rec Trail
Fence Line

Cliff
Draw
Embankment
Gully
Ridge
Seepage
Slide
Slope Break
Rest. Side Decking
Stubbed Boundary
Road Permit
Skid/Yarding Direction
Wildlife Trail

TRIM Features
River/Stream-Def
River/Stream-Indef
Contour - Index
Contour - Intermediate
Road Permit
Forest Service Road
Highway/Main/Paved Road
Gravel/Resource Road
Trail
Snow Shed (Railway)
Tunnel
Bridge
Airstrip
Rail Line
Pipeline / Wellsite

Proposed Temporary Landing
Area of Concern
Slope Area (>35%)
SAR Cliff
SAR Forested
SAR Rare Ecosystems
Special Mgmt Area
Special Forest Mgmt Area
Biodiversity, Mining and Tourism Areaa
Private Land
Conservancy Areas
Protected Areas /Parks
Tailing Pond
Lake/Watercourse
Marsh
Swamp

BCTS Roads
Deactivated Road
Existing Road
Proposed Permanent Road
Proposed Temporary Road

Riparian Features
MFZ / MSZ
RMZ
RRZ

BCTS Streams Class
Unknown
INT;NCD;NVC
S1;S2;S3;S4
S5;S6

BCTS Cruise Features
Slope

0 30 60 90 120 150 Meters
1:5,000

Date 8/19/2021 **User** MHAYHURS
Template Name HarvestPlanMap_11x17L
Coordinate System NAD 1983 UTM Zone 11N

	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	//////////////	

401100 401400 401700 402000
118°22'0"W 118°21'40"W 118°21'20"W
5491000 5490700 5490400 5490100 5489800 5489500
49°33'40"N 49°33'20"N 49°33'0"N

NCD-2 NCD-3 NCD-1 S6-1 S6-2
RRZ PAS WTRA
50% 30% 40% 60% 20% 10%
STN 8 = 450mm x 10m
STN 5.1 = 400mm x 10m
BDUnionMine2300
Franklin Heritage Recreation Trail
BD8973.03UnionMine
W3
BDUnionMine2218

1.5 RIPARIAN ASSESSMENT						
Block	Riparian I.D. and Class	RMA	SU	Width (m)	BA or SPH Retained	Comments (Indicate if in a Community Watershed)
1	S6 1-2	RRZ	1	20+	1153 (100%)	Riparian reserve zone, 100% retention, no harvesting
1	NCD 1-3	RRZ	1	10		Riparian reserve zone, 100% retention, no harvesting
1	NCD 1-3	RMZ	1	18+	577 (50%)	Retention strategy for all three NCD RMZs will be 577 SPH (50% of 1153 SPH). The strategy is to retain 50% of all stems of all species in all diameter classes. Retain all non-merchantable stems where there is no conflict with harvesting activities.

Management Strategies:

There are three internal NCD's (centerlines are flagged) and two internal S6 streams. Basal area retention for all RMZ's will be 577 SPH (50% of 1153 SPH). The strategy is to retain 50% of all stems of all species in all diameter classes. Retain all non-merchantable stems where there is no conflict with harvesting activities.

Safety Highlights:

- Snags scattered throughout the block.
- Slopes >35% are scattered throughout the block and specialized steep slope equipment or harvest methods may be required.
- Steep draw in the mid-section of NCD 3
- Mine pit with MFZ ribbon established around it

Leave Tree Specifications:

SU 1

- Layer 1 trees: Retain, where available, all live conifers >/= 52.5 cm dbh
- Retain all PyPw and deciduous
- Layer 2, 3 and 4 trees:
  Reserve where practicable, small patches of saplings and non-merchantable poles that exhibit good form and vigor.

Harvest / Operational Constraints:

- Limit machine use on slopes as per WorkSafe BC OHS regulation Part 26-16 (slope limitations). This map shows areas of the block with slopes >35%.

COURSE WOODY DEBRIS MANAGEMENT STRATEGY INFORMATION

- Large snags, >35cm may be stubbed and left on site for CWD. Retain existing CWD that is already on the ground prior to harvest.
  Avoid placing large CWD in slash piles. Trees felled in WTRA's for safety concerns are to be left.

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.

Jeff Reyden

RPF PRINTED NAME

March 16, 2017

DATE SIGNED

RPF'S SIGNATURE and

REGISTERED PROFESSIONAL FORESTER PROVINCE OF BRITISH COLUMBIA JEFFERY REYDEN NO. 4897

SEAL