



SP/HP MAP

BCTS TSL TA0904

BLOCK: 3 PRE: EK K10 1325

UBI: BF78Z

LOCATION: LAVINGTON FIRE 1

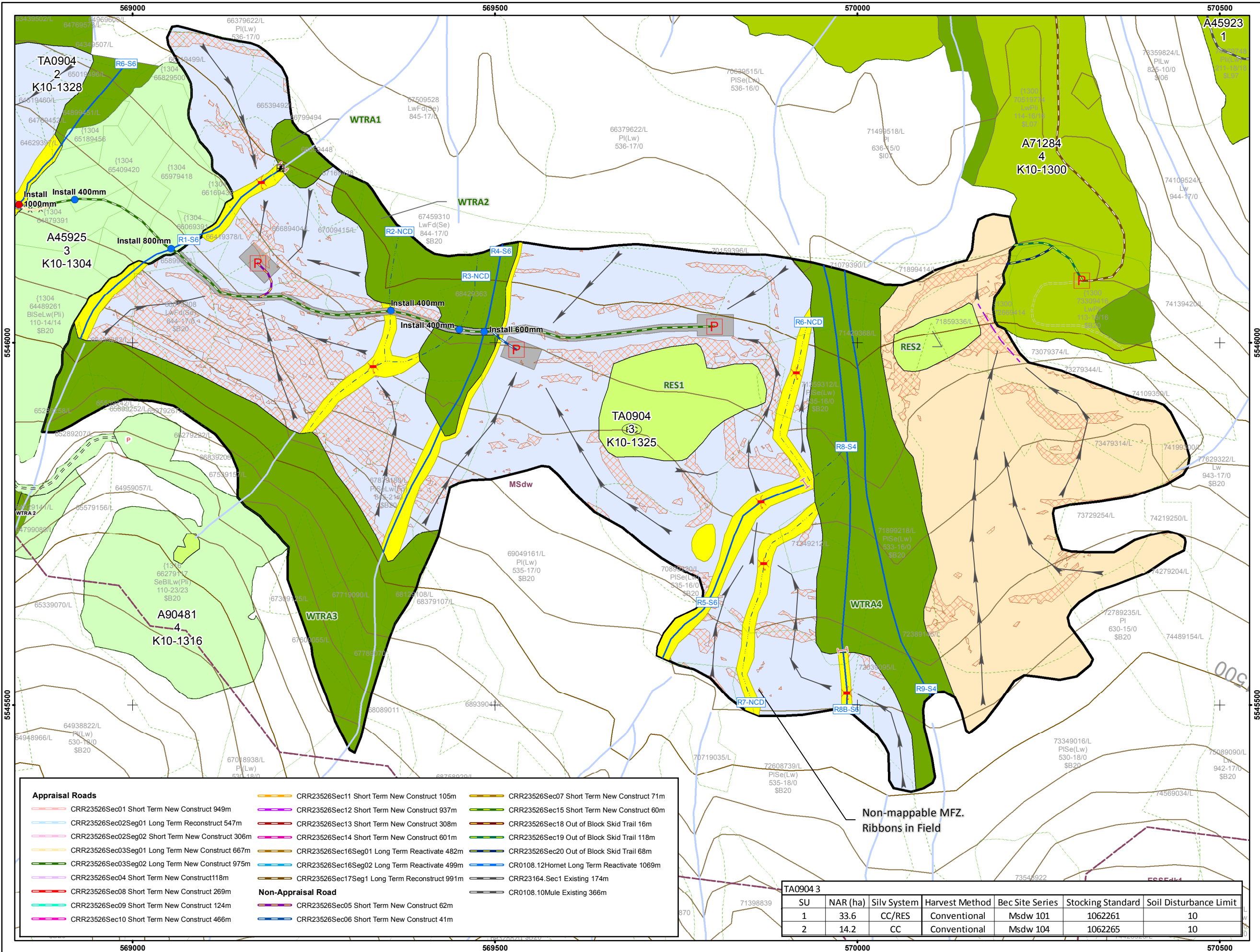
Map Reference: 082K.010 Mag. 15.4° E of T.N.
Air Photos: Date: Jun 13, 2021
Forest Region: Southern Interior Land District: Kootenay
District: Rocky Mountain Elevation range: 1370 - 1570m
TSA: Invermere Scale: 1:5,000
UTM Coordinate: Drawn By: D.Michel

Zone	Easting	Northing
11	569688	5546448
Lat.	50° 03' 40" N	Long. 116° 01' 35" W

SP/HP Legend

- Subject Block**
Right of Way
- Management Zones**
MFZ
RMZ
SMZ
WMZ
Harvest Method
Cable
Ground
- Standard Unit**
1
2
3
Non Productive
PAS
Reserve - Other
WTP
WTRA
- Harvest Method**
Cable
Ground
- Permanent Landing; Proposed/Existing**
Culvert; Existing/Proposed
Block GPS Station
Road GPS Station
Block Center
Major Culvert
- Pipeline Crossing**
Ecology Plot
Cattleguard
Gate
Skid Direction
Yarding Direction
Gully, Draw
Cliff
Designated Crossing
- 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
Paved Road, Divided
Gravel Road
Reach Break
- 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
Fish Barrier

0 25 50 100 150 200 250 Meters



Appraisal Roads

- CRR23526Sec01 Short Term New Construct 949m
CRR23526Sec02Seg01 Long Term Reconstruct 547m
CRR23526Sec02Seg02 Short Term New Construct 306m
CRR23526Sec03Seg01 Long Term New Construct 667m
CRR23526Sec03Seg02 Long Term New Construct 975m
CRR23526Sec04 Short Term New Construct 118m
CRR23526Sec08 Short Term New Construct 269m
CRR23526Sec09 Short Term New Construct 124m
CRR23526Sec10 Short Term New Construct 466m

CRR23526Sec11 Short Term New Construct 105m

- CRR23526Sec12 Short Term New Construct 937m
CRR23526Sec13 Short Term New Construct 308m
CRR23526Sec14 Short Term New Construct 601m
CRR23526Sec16Seg01 Long Term Reactivate 482m
CRR23526Sec16Seg02 Long Term Reactivate 499m
CRR23526Sec17Seg1 Long Term Reconstruct 991m
CRR23526Sec05 Short Term New Construct 62m
CRR23526Sec06 Short Term New Construct 41m

Non-Appraisal Road

- CRR23526Sec07 Short Term New Construct 71m
CRR23526Sec15 Short Term New Construct 60m
CRR23526Sec18 Out of Block Skid Trail 16m
CRR23526Sec19 Out of Block Skid Trail 118m
CRR23526Sec20 Out of Block Skid Trail 68m
CR0108.12Hornet Long Term Reactivate 1069m
CRR23164.Sec1 Existing 174m
CR0108.10Mule Existing 366m

Non-mappable MFZ.
Ribbons in Field

TA0904 3

SU	NAR (ha)	Silv System	Harvest Method	Bec Site Series	Stocking Standard	Soil Disturbance Limit
1	33.6	CC/RES	Conventional	Msdw 101	1062261	10
2	14.2	CC	Conventional	Msdw 104	1062265	10

RIPARIAN ASSESSMENT						
Block	Riparian I.D. and Class	RMA	SU	Width (m)	BA or SPH Retained	Comments (Indicate if in a Community Watershed)
3	R1, R8B- S6	≥5m MFZ on S6 and NCDs	-	-	Min on S6 and NCD due to fire damage	Completion of stream and RMZ assessments revealed that in the case of all identified reaches, timber within RMZs is damaged by wildfire. Severity of damage is variable, however in all cases, both safety and blowdown concerns were noted. Throughout the block, many trees have damaged roots systems resulting in poor stability and high risk of windthrow. Safety of workers is of concern as trees may fall suddenly. Windthrow resulting from fire damage was noted by layout crews throughout the block.
	R2, R3, R4, R6, R7- NCD	20m RMZ on S6			S4- All timber within proximity of stream channels reserved	To mitigate the hazard to workers and the possibility of damage to stream channels as result of adjacent trees being windthrown, minimal retention within the RMZ's of all identified reaches is prescribed. All damaged overstory trees within the RMZ's are to be removed. Where roots are embedded into the stream channel, trees are to be stubbed to reduce the risk of windthrow.
	R8A, R9 – S4	S4 reaches have been placed in reserves with 100% retention				Within 20m of all S6 stream reaches, retain all green-topped Lw and/or Fd that are structurally sound and have >50% of the root system intact and that do not present a hazard to crews. Retain any trees that do not meet utilization standards for pulp or sawlogs due to large defect where structurally intact and roots are >50% intact and do not pose a hazard to field crews.
						Suspected Fish bearing reaches (R8A, R9 – S4) are included within a 30m+ width reserve where harvesting will be prohibited except where required to address a safety concern.
Management Strategies:						
<u>Designated Crossings</u> In all cases, the crossing of streams are to be only at designated locations as marked on the SP/HP map. Harvesting supervisors are to verify that mapped crossing locations remain suitable at time of harvest and if not, choose an alternative suitable location. The number of crossing locations is to be minimized with random crossing locations prohibited. Skid crossings acceptable to BCTS must be used at all designated crossing locations.						
<u>Drainage Structures</u> Culverts of the sizes indicated in the Road site plan are to be installed at specified locations to ensure maintenance of drainage patterns. Additional cross drains are to be installed where necessary following guidance provided in the FLNRO Engineering manual. Culverts installed on any temporary road or permanent road prescribed for deactivation after completion of operations are to be removed and cross ditches installed to ensure maintenance of natural drainage patterns. Deactivation must be in accordance with a deactivation plan prepared by a QRP.						
<u>Trail Management</u> All bladed skid trails are to be rehabilitated at completion of operations where soil conditions permit. To mitigate possible erosion, roughing of the soil surface and mixing of organic debris with soil is desirable to assist in water infiltration and faster reestablishment of natural vegetation.						
<u>Stream Clean Out</u> Any slash or debris introduced into a stream channel must be carefully removed concurrent (prior to freshet or demobilization of equipment, whichever is earlier) with harvesting. Remove all introduced debris >1m in length. Remove all introduced segments of tree stems or log ends of any length resulting from processing that enters a stream channel. Place removed debris where it will not re-enter the stream as result of downslope movement or stream peak flows. Do not remove pre-harvest embedded debris or large natural woody debris. All fine debris is to be hand cleaned. Do not use machinery where streambanks or natural large woody debris will be disturbed.						

Safety Highlights:						
Fire Damaged Stands: Block has been damaged by wildfire. Trees have been structurally compromised. Fire damaged trees pose high risk of tree-fall due to damaged root systems. Increasing wind speeds elevate the risk of sudden tree fall posing a danger to workers and machinery. In areas of greater fire severity, trees may suddenly break due to burnt out boles, damaged branches creating widowmakers/overhead hazards. Dangers trees must be removed a safe distance from all landings/decking areas where they cannot strike workers. Steep Slopes: Harvesting on slopes >35% will be required in limited areas of the block. Prior to machinery working on steep slopes, a steep slope hazard assessment is to be completed and documented in accordance with WCB regulations and requirements. Areas >35% slope are identified on the harvest plan map. Heavy Windthrow: Windthrow has occurred throughout the block with localized areas where it is severe. Boulders/Rolling Hazard: Boulders are present in the block and may be a hazard to machinery and workers. On steeper ground machinery and/or workers must not work directly downslope of one another where a hazard of rolling debris exists.						

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	Lw/Fd	≥30cm dbh	30sph	0sph	30sph	X	X	X	
2	1	Lw/Fd	≥30cm dbh	10sph	0sph	10sph	X	X	X	
1,2	1	Lw/Fd	≥45cm dbh	5sph	0sph	5sph	X	X	X	
Additional Requirements/ Comments:										
<ol style="list-style-type: none">Minimum is to be left only where leave-trees of identified species, size class, and structural integrity do not exist within areas of the SU. Leave as many trees meeting the retention requirements as available up to the maximum amount.The above cutspecs include trees that are dead or alive, with selection preference to be given to live trees (green tops/ minor bark char).Trees that do not meet utilization standards for sawlog or pulp due to large defect are to be retained onsite where safe to leave and not posing a safety hazard. If felled as result of presenting a safety hazard, retain onsite as large woody debris.All stems retained must be structurally sound, have >50% of the root system intact and not present a hazard to crews on the ground.Voids >1ha may exist post-harvest dependent on pre-existing stand structure and available leave-trees.Patches of up to 0.2ha in size may be reserved from harvesting as result of excessive rock/boulders that impede machinery.										

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					
1,2	Where possible, retain clusters of green advanced regen.	Fd, Lw, Sx, Bl	>1.3m height	Up to 3 clusters/ha					
Coarse Woody Debris									
SU	Size	# per Hectare	Distribution				<ul style="list-style-type: none"> This is the minimum required as per the 2017-2022 FSP for the MSdw 		
1, 2	Min 2m length (≥5m if available) Min 20cm diameter at one end Target larger logs where they occur and are not suited as sawtimber.	Min 4 logs/ha 1.24m3/ha	S	G	I	R			
			x	x	x				
Dead Trees to be stubbed (where Mechanical Falling is utilized)									
1,2	Stub trees embedded into stream banks where it is safe to do so (ie within MFZ's) and will not pose a hazard to the integrity of the stream channel	all	x	x	x		<ul style="list-style-type: none"> 2 – 5 m stubbing Height No target. 		