

SUPPORT DOCUMENT

LICENCE #	LOCATION	OPERATING PLAN #	BLOCK #	BLOCK PRE #	ROAD
TA0167	Mark Creek	19	1	82G071-1357	FSR0252.23 Mark Main Spur 8000
			1	82G071-1357	CRPL TA0167 Sec. 1
			2	82G071-1359	FSR0252.70 Mark Main Spur 8100
			2	82G071-1359	CRPL TA0167 Sec. 2

1. ASSESSMENT INFORMATION

1(a). VISUAL IMPACT ASSESSMENT

The proposed development does not overlap a visual sensitivity unit in the LRDW visual landscape inventory (VLI) (April 1, 2004) and it is not visible from LRDW VLI viewpoints. However, the Mark Creek Integrated Watershed Management Plan, Sept 15, 2017 specifies a VQO of partial retention for areas of Mark Creek watershed that are visible from specified viewpoints (IWMP sec. 4.4.3, pg 56).

A preliminary assessment conducted using the viewpoints from the Mark Creek IWMP determined that the blocks are not visible. A full VIA is not required.

1(b). PEST INCIDENCE SURVEY

Pest Specific Comments:

IBM - Mountain Pine Beetle. Infestation level (current, red, and grey attacks) was reported at <1% incidence during field development activities. All mature lodgepole pine within the harvest area will be removed as per the strategy to mitigate potential IBM outbreaks in PI-dominated stands within the watershed (Mark Creek Integrated Watershed Management Plan Sec. 4.8.6).

DMP/DML – Dwarf Mistletoe (pine/larch). DMP and DML risk is high for age class 8 forest cover types surrounding the blocks, but incidence was observed at <1%. All mature lodgepole pine within the harvest area will be removed, which will help minimize the spread of DMP.

Forest Health Comments:

The cutblock is overlapped by the Kimberley Watershed Beetle Management Unit (C08). The Cranbrook TSA Bark Beetle Management Strategy (2015) lists the BMU as having a “Suppression” strategy for Mountain Pine Beetle, Douglas Fir Beetle, and Spruce Beetle. The plan is consistent with standard mitigation measures for bark beetle control.

1(c). FIRST NATIONS STRENGTH OF CLAIM ASSESSMENT

The Rocky Mountain Resource District follows the Strategic Engagement Agreement (SEA).

1(d). CULTURAL HERITAGE ASSESSMENT

The Rocky Mountain Forest Stewardship Plan, Operating Plan #19 was referred to First Nations; no traditional use or cultural heritage values were identified for the proposed development.

1(e). ARCHAEOLOGICAL OVERVIEW / IMPACT ASSESSMENT

The development does not overlap any Archaeological Sites. An Archaeological Impact Assessment (AIA) is not required.

1(f). TERRAIN STABILITY / AVALANCHE ASSESSMENT

No steep areas of concern or indicators of slope instability were reported for the proposed development. No areas of the block are mapped as unstable or potential unstable.

1(g). RIPARIAN ASSESSMENT

One stream occurs within block 2 (R1/S4) and is a tributary to Mark Creek. No fish barriers were identified during block recce and planning phases, so the stream is determined to be fish bearing. R1/S4 is in a Wildlife Tree Retention Area (WTRA) with 2 tree lengths of reserve established on either side of the stream as per the Integrated Watershed Management Plan Sec. 3.4, Table 6.

Three NCDs were also identified in block 2; NCD1 is in the same WTRA as R1/S4, while NCD2 & NCD3 are outside of the block.

No riparian features were identified in Block 1.

See Block Site Plan/Harvest Plan Maps for locations of each stream and NCD.

1(h). SOIL ASSESSMENT

HAZARD RATINGS					SOIL CHARACTERISTICS			
Block #	SU	Soil Comp.	Soil Erosion	Soil Disp.	Depth to Unfavourable Subsoil		Type of Unfavourable Subsoil	Sediment Delivery Risk (Community Watersheds)
					Min. (cm.)	Max. (cm.)		
1	1	H	M	M	N/A	N/A	NA	L
2	1	H	M	H	N/A	N/A	NA	L (south of stream) & M (north of stream)

Comments: N/A

1(i). WINDTHROW ASSESSMENT

Windthrow hazard class was assessed as medium. Block boundaries have been established along more windfirm forest cover type lines and slope breaks while wind firm species are to be retained where practicable.

1(j). WATERSHED / HYDROLOGICAL ASSESSMENT

Refer to Alan Bates' hydrological report dated September 15, 2017; blocks are consistent with recommendations.

1(k). WILDLIFE ASSESSMENT

Block 1 overlaps Migratory Bird Risk Ranking polygons (likelihood of finding a nest) of Rank 2 and 4. To conform to Migratory Bird Strategies for Rank 4 polygons, the following Best Management Practices (BMP's) with Degree of Protection (DoP) Rank 2 will be applied to the development as per the harvest plans:

1. Retention of individual trees, snags, and creation of stub trees suitable for cavity nesting bird species (leave trees and stub trees will be retained);
2. Avoid high value features and habitats during block design phase (e.g. create reserve areas where there are a high number of snags suitable for cavity nesters).

Block 2 overlaps with a Migratory Bird Risk polygon of Rank 2 which requires no additional management steps, though it will incorporate the same BMPs as block 1.

The Migratory Bird Convention Act (MBCA) of Canada and its regulations protect migratory birds and prohibit the disturbance or destruction of migratory bird nests and eggs in Canada. Section 34 of the BC Wildlife Act makes it an offense to injure, molest or destroy a bird or its egg, an occupied nest (with bird or eggs), or the nest of an eagle, peregrine falcon, gyrfalcon, osprey, heron or burrowing owl.

The development does not overlap with Ungulate Winter Range (UWR) or Wildlife Habitat Area (Proposed or Active) polygons.

1(l). FISHERIES ASSESSMENT

The proposed development is not within a fisheries sensitive watershed.

1(m). SPECIES AT RISK ASSESSMENT

A Species at Risk (SAR) inventory was conducted using the BC Conservation Data Centre (CDC); search results showed the buffer for scarlet globe-mallow (*Sphaeralcea coccinea*) overlapping the development. The plant was observed in 1947 in Kimberley; it tends to grow in desert, semi-desert, prairies, grasslands, and on disturbed sites. It was not observed in the development area and is not expected to be encountered given its preferred habitat and date of observation. There are no management concerns related to the development.

Whitebark pine (*Pinus albicaulis*), a BC Blue Listed species and federal Species at Risk Act endangered species, have been identified in block 2. Whitebark pines have been marked with three orange "Reserve" ribbons and are identified on the Harvest Plan/Site Plan map. Information sheets for the species are included within the site plan package.

1(n). OTHER ASSESSMENTS

N/A

2. RESERVE / RETENTION INFORMATION

2(a). WTRAs (Inside or attributed to the block)

Block	I.D.#	Area	Inventory Label	Description
1	1	1.56	SeBl(Pl) 935-0/6	Majority of Reserve includes OGMA KOR_C08_16.
2	2	4.84	Pl(SeLw) 846-0/21	Reserve includes R1/S4, an NCD, and whitebark pine regen.

2(b). Group WTRA Calculations (To be retained on the first block of the licence only)

(Double-click on Excel spreadsheet below to enter data)

Block #	Total Block Area* (Ha.)	Total WTRA Area (Ha.)	WTRA % of Block Area
1	211	16	7.6%
2	20.2	5.0	24.6%
TOTAL (all Blocks):	41.3	6.6	15.9%

Green Cells Auto-Calculate

Comments: (e.g., How dispersed retention contributes to WTRA%, if applicable, etc.)

Dispersed retention is not included in the WTRA% calculation.

* Note:

- 1) Arrow & Boundary Field Teams:
Total Block Area = NAR+PAS+NP+Reserves (but not including WTRA area)
- 2) Kootenay Lake & East Kootenay Field Teams:
Total Block Area = NAR+PAS+NP+Reserves (including WTRA area)

3. OTHER SUPPORTING INFORMATION

3(a). HLP / FSP CONSIDERATIONS
Range Comments:
The proposed development is not overlapped by any range tenures. No range improvement features or natural range barriers were identified through the FSP advertising and referral process.
Recreation Comments:
There are no recreation features associated with the proposed development.
Invasive Species Comments:
Invasive plants were observed along roadways in the vicinity of the block and include sulphur cinquefoil, bull thistle, and blueweed. No invasive plants were identified along the existing roads used to access the proposed blocks or within the blocks themselves. No invasive plants were reported in the provincial invasive plant inventory and mapping database (December 19, 2019).
Measures to be carried out to prevent the introduction or spread of invasive plants, as required by the Timber Sales Manager:
a. vehicles, mechanized equipment, culverts, bridges and cattle-guards are to be inspected for the presence of soil or plant material, including documentation on inspection forms, prior to being transported to or from work sites and, if present, plant and soil materials are to be removed;
b. to reduce the available seedbed for invasive plants:
i. grass seed exposed mineral soils on cut and fill slopes of new roads and trails during the first available spring or fall and not more than 12 months following construction; and
ii. grass seed exposed soils on all new landings and rehabilitated areas during the first available spring or fall and not more than 12 months following the time of mineral soil exposure, except if the rehabilitated areas are to be revegetated through the planting of trees; and
c. where grass seeding is undertaken, utilize high quality seed (a mix recommended by a MFLNRO range specialist, if available; otherwise Canada Common #1 Forage mix or better grade) to ensure that the introduction of invasive plant seed is minimized.
Guide Outfitters / Trappers Comments
The development is overlapped by Trapline Area Identifier TR04200T008. No Guide Outfitter license overlaps the development.
Other Resources Comments
Resource tenure holders were contacted through the FSP advertising and referral process, and no issues were identified regarding the proposed development.

3(b). ADDITIONAL COMMENTS
None.

4. ADMINISTRATION

☒ ORIGINAL	☐ AMENDMENT#	
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RPF PRINTED NAME	RPF SIGNATURE and SEAL
Scott Blissett, RPF- #3318	
DATE SIGNED	
September 4, 2020	
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 standards acceptable of a Registered Professional Forester.	