

Land Use and Highway Access Permit Application for the Quill Creek Bench HPA Development Plan

INTRODUCTION

This submission has been prepared for joint regulatory application purposes, to clarify and detail the proposed development standards, use, maintenance and de-activation of the temporary access required for harvesting within the Quill Creek Bench Harvest Planning Area (HPA) in the Haines Junction District.

The Quill Creek Bench HPA is designated as an Interim Wood Supply for Haines Junction while the Strategic Forest Management Plan for the Champagne and Aishihik Traditional Territory (SFMP for the CATT) is being completed. The Development Plan for the Quill Creek Bench HPA meets the direction of strategic planning for the CATT, and is in many respects the test case for future forest development planning throughout the Yukon.

The Quill Creek Bench HPA is located south of Haines Junction along the Haines Road. Several access points are proposed in the Forest Development Plan (FDP) to allow for single use resource extraction of timber products.

As shown on the enclosed maps, five (5) access locations are required between kilometers 227 and 240 adjoining the east side of the Haines Road. Two (2) of the proposed locations already exist and three (3) new locations will be required.

Forest Management Branch (FMB) is applying for Access to Highway and Land Use Permits in order to provide control over the standards of construction, road use limitations and de-activation measures needed for good resource stewardship.

The following is the Access Management section from the Quill Creek DP.

1.0 ACCESS MANAGEMENT

As directed by the SFMP, existing access from points along the Haines Road have been used whenever possible and existing trails are incorporated into access planning where feasible. Table 1 provides a breakdown of access required for each operating unit in the HPA. Information is taken from GIS data used in the FDP preparation.

Access points on the Haines Road will require an access application and approval from Highways and Public Works to perform the work.

Branch roads may remain usable for several years, until harvesting is completed on all blocks accessed. Once all harvesting permit conditions have been completed, branch roads will be de-activated.

Access spurs for in-block development are all classed as temporary with full rehabilitation required upon completion of harvesting operations.

Opportunities also exist where the developed road and skid trail systems may be integrated into a recreational land use plan after completion of harvesting operations. The opportunity has not been formally pursued but remains an option. Existing quad trails in the HPA shall be restored to pre-harvest condition.

Discussions on access policy and the rationale for restricting public access on resource roads continue within FMB and the SFMP planning groups.

Table 1: Existing, Located and Proposed access requirements.

OU	ROADS/TRAILS (km)					TOTAL	OPERATING UNIT TOTAL
	Existing*	Located**		Proposed***		New Located & Proposed	
		on existing	new	inter-block	in-block		
1	2.6			1.8	5.7	7.5	10.1
2	3.3	1.2	2.2	0.5	4.5	7.2	10.5
3	7.2	3.6	0.0	0.0	2.1	2.1	9.3
4	15.3	2.2	3.6	0.0	6.1	9.7	25.0
6	3.1	2.9	3.1	0.0	6.4	9.5	12.6
7	1.5		3.1	0.0	3.2	6.3	7.8
TOTALS	33.0	9.9	12.0	2.3	28.0	42.3	75.3
AREA(ha)	16.5	5.0	6.0	1.2	14.0	21.2	37.7

*Existing - amount of road and trails currently in operating units.

**Located - access that has been ground checked and flagged with ribbon. Of the located access 9.9 km use existing trails and 12.0 km is new development.

***Proposed – access that has not been flagged in the field but will be required to complete operations. The majority of this development is within harvest blocks so will be seasonal and requires full rehabilitation.

The FDP for the Quill Creek Bench estimates a potential harvesting and transportation volume of +/- 180,000 m³ of timber over the life of the plan. As explained in the preamble of the FDP, depending on demand for timber products this could supply current local industry for five or more years, but with the potential for additional industrial development, the operating window may be substantially reduced.

All access points to the Haines Road, require crossing of the newly installed NW Tel fibre-optic cable. No excavating of material will be allowed in the vicinity of the cable and a request for location of the cable will be made to NW Tel, prior to the time of access installation, for individual crossing requirements.

TIMBER PERMITTING

FMB will be offering multi-year permits to operators under Class F Timber Permits. (Timber Regulation – Sec 6(2)) Class F permitting allows FMB to provide engineered and environmentally assessed harvest areas to proponents for normal stumpage and reforestation fees plus “the cost to develop the permit area, including layout costs”. It is interpreted that access development, maintenance and de-activation is included in the cost to develop the area.

There is a potential for several operators to be using common access points and development corridors during operations. From past experience, this has created some problems with operators that have no equipment living off those that have the equipment to build, maintain and de-activate roads. To level the playing field, FMB is proposing to provide access development, maintenance and de-activation services for operators sharing common access. This cost of this work will be included in the timber permit fees and be based on an estimated cost per cubic meter per kilometer of development.

Additional benefits that accrue by providing development services in exchange for fixed costs to the operators include:

- Reduced complaints between operators regarding access use and maintenance,
- Fixed costs per unit for operators, for better operational budgeting,
- Development and maintenance standards will equal for all operators in the same operating units,
- Construction, use, maintenance and de-activation standards for all development will be set by FMB, according to the Land Use and Highway Access Permits, and enforced through timber permit terms and conditions.

There is the possibility that only one operator will be provided harvesting rights in a specific development area, where access will not be shared. In this case, and prior to permitting, FMB will discuss standards and allow the operator to perform their own development, maintenance and de-activation, at their own expense.

OPERATIONAL STANDARDS

The Timber Harvest Planning and Operating Guidebook (THPOG) outlines standards for construction of forest resource access. Table 2 outlines the classes of access..

Table 2: Access Management Guidelines – Engineering and Construction

CLASS	DEFINITIONS & LENGTH OF USE (YEARS)	MAXIMUM R/W WIDTH (m)	GRADE	DISPOSAL	RUNNING SURFACE WIDTH
1	All Weather 5+	20	7 - 12	Total	10
2	Dry Weather 0 – 5	20	7 – 12	Total	8
3	Seasonal Winter Mainline 0 – 5	14	7 – 12	Partial	6
4	Seasonal Winter Branch 0 – 2	14	7 – 15	Partial	6
5	Seasonal Winter Spur 0 - 2	10	8 - 18	Partial	4

The objective of access management is to plan access that is safe and economical to use, minimizes impact on terrestrial and aquatic environments, and meets defined construction standards. The definitions within the table do not provide details for smaller, dry weather corridors, which in the context of the Champagne and Aishihik Strategic Forest Management Plan, is preferred and may be suitable for smaller equipment operators. The goal is to minimize visual impacts of wide right-of-ways by developing access to “just” meet operational need. For this reason, FMB will be designing dry weather roads within the planning area that meet Class 4 and 5 right-of-way widths with associated running surfaces. However, the reduction in the widths of right-of-ways and running surfaces reduces the safety margin on narrow and winding access with limited alignment and visibility. This issue is addressed in the following section on access.

ACCESS MANAGEMENT

The control of access into operating areas is of importance for several reasons:

- The public are a substantial safety risk on industrial, radio-controlled single lane access,
- Wildlife managers consider the use of new access by the public as a threat to wildlife populations by increasing hunting pressure,
- Public access into new areas creates the additional risk of human caused fire,
- Environmental damage occurs when uncontrolled access is used during the wrong season,
- Increased costs associated with repair and maintenance of damaged access, infrastructure and equipment from improper public use or mischief.

To control highway vehicle access into the Quill Creek Bench HPA, FMB proposes to install locking gates at new access points. Operators with a valid timber permit will be provided keys for the gates in order to access their permit area and be required to keep the gates locked at all times.

CONSTRUCTION SCHEDULING

The FDP for the Quill Creek Bench HPA proposes to develop a limited number of operating units at one time, based on demand, thereby focusing operations on specific access corridors until all timber permits expire. As operating units are completed, de-activation will be performed and access points will be removed.

There is no defined schedule for specific development activities, as timber removal is dependant upon the demand for permits and the rate of extraction.

Currently, the existing access into Operating Unit 3 and 4 along the Quill Creek Branch, located at kilometer 235.7 of the Haines Road will be the first area to be permitted:

- The highway access will need to be upgraded to accommodate highway logging trucks. This will require a culvert extension and additional fill to meet the turning radius required for longer vehicles,
- The initial 3.5 km of the access through Operating Unit 3 will require upgrading to meet the alignment and grade requirements for larger vehicles. The re-aligned right of way width will vary, but will average Class 3 standards for width and grade. The access will remain dry weather and/or winter,
- Operating Unit 4 is located at the end of the Quill Creek Branch and will utilize the same highway access point,
- Existing access corridors within Operating Unit 4 are utilized whenever possible, accounting for 2.2 km of development with an additional 3.6 km of new temporary access required to develop all harvest blocks,
- Refer to Table 1 on page 2 for length and area estimates.

Direction, from the CATT planning group, has given priority to access areas closest to Haines Junction for fire abatement activities. The Auriol Branch, located at 239.1 km of the Haines Road, into Operating Units 2 and 1, is scheduled for development when Operating Units 3 and 4 are completed or fully permitted:

- New highway access construction will require ditch line filling and the installation of a double length culvert to accommodate highway logging trucks,
- The Auriol Branch uses an existing recreational trail right of way that will require upgrading for the first kilometer and the installation of a culvert to allow seasonal drainage for the ephemeral stream shown on the map. Immediately, after the culvert location the required access divides into three corridors. The Auriol Branch will require new construction to dry weather standards to access harvest blocks 2C and 2E, before continuing through to Operating Unit 1. The existing recreational trail provides dry weather access to Block 2F. A new seasonal winter spur is required to access blocks 2H and 2I,
- Refer to Table 1 on page 2 for length and area estimates.

The Crescent Branch, developing the northern section of Operating Unit 6, and located at 232.8 km of the Haines Road is likely to be the last access developed in the planning area:

- Highway access is proposed for an existing gated location at a YG, Highways and Public Works gravel pit. Upgrading will be necessary to accommodate logging trucks and improve the grade onto the highway,
- The proposed access skirts the developed portion of the pit and stock piled gravel and continues along an existing recreational trail into the harvesting areas, Approximately 1 km from the highway, re-alignment is proposed to minimize haul distance. At 1.5 km the Crescent North Branch turns north to access harvest blocks 6F, 6G, 6J and 6M. The Crescent North and Crescent Main Branch will be constructed to dry weather Class 4 standards,
- The Crescent Main Branch continues east along the existing trail towards block 6N. At 2 km, the Crescent Branch crosses a narrow drainage, which restricts development and operations in Block 6N and all of Operating Unit 7 to seasonal winter only, and will be built to seasonal Class 4 standards,
- Refer to the Table 1 on page 2 for lengths and area of development.

The Central Branch and Spur to Block 6O are proposed as new highway access and are located at 231.2 km and 227.5 km of the Haines Road, respectively. Timber values and volumes are conducive to single permit fuelwood operations, hence development will likely be conducted by the harvesting proponent. These two access points will be developed as demand and permitting dictates:

- Highway access will require some ditch line filling and culvert installation. Construction will be to standards required for the size and type of equipment proposed by the harvesting proponent,
- These two small proponent harvest areas will be permitted to the Haines Road right-of-way. Additional Land Use Permits, will not be required as construction, maintenance and de-activation standards will be part of the commercial Timber Permit.

DE-ACTIVATION (DE-COMMISSIONING)

De-activation of all on-block access will be a requirement of harvesting permits. This may require the rolling back of overburden stripped during construction, scarification and loosening of compacted soils, burning of debris or spreading slash piles across access to discourage skidoo and quad use along these corridors.

Main Branch access into operating areas developed by FMB will be performed after all permits have expired and conditions satisfied. The intent is to de-activate the roads by pulling culverts and de-constructing highway access points, thereby denying access to highway vehicles. Post-harvest silviculture surveys will be scheduled immediately after harvesting and final de-activation plans will be implemented upon completion of any re-forestation or re-habilitation work deemed necessary.