

Draft
North Fork Timber Harvest Plan
within
Tr'ondëk Hwëch'in Traditional Territory

**FOREST MANAGEMENT BRANCH
ENERGY MINES AND RESOURCES
YUKON GOVERNMENT**

Prepared: August 2010

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Date

North Fork Timber Harvest Plan

Executive Summary

The North Fork Timber Harvest Plan (THP) is designed to meet the needs of the Dawson fuel wood industry. Under the *Forest Resources Act*, all harvesting over 25 m³ must be conducted under an approved THP. The North Fork Area is a traditional harvest area for Dawson's fuel wood and thus, was selected for the creation of a THP. This THP proposes the harvesting of five blocks for a total of 220 ha and an estimated 18,230 m³ of fuel wood. This THP is consistent with both the Draft Dawson Forest Resources Management Plan¹ (October, 2009) and direction provided in the Planning Regulation of the *Forest Resources Act*.

¹ The Draft Dawson Forest Resources Management Plan was released in the spring of 2010.

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North Fork Timber Harvest Plan

1.0 Introduction

1.1 Background

The North Fork area has been a traditional harvest area for Dawson City residents for several years. The North Fork Timber Harvest Plan (THP) is designed to help meet the social and economic forest product demands of Dawson City, while ensuring that environmental and other values are protected.

The selection of areas appropriate for fuel wood harvesting used the following approach:

- Stage 1 Investigate current harvest sites and identification of potential fuel wood harvest blocks through aerial photo interpretation.
- Stage 2 Conduct field reconnaissance and verification of potential fuel wood harvest areas. This project component also included identification of non-timber values and preliminary road locations.
- Stage 3 Finalize proposed fuel wood harvest blocks and preliminary access strategies.

North Fork was chosen as the location for a THP due to its fuel wood suitability, history as a fuel wood area, medium priority planning rating and its recommended short term development time frame (Draft FRMP 2009).

1.2 Eco-region and Drainages

The THP is located within the Boreal Cordillera Eco-zone and located in the Klondike Plateau Eco-region. Characteristic terrain features include smooth, unglaciated, rolling plateau topography with moderate to deeply incised valleys and large structural basins composed of level to undulating glaciated terrain. Leading species within the region consist of Black Spruce, White Spruce, Trembling Aspen and White Birch. Understory species are generally comprised of suckering species such as willow and there is a minor component of deciduous (Trembling Aspen) regeneration.

1.3 Socio-economic Values

Dawson City is home to approximately 1,300 people. The major economic drivers in the region are tourism and gold mining. The current annual demand in Dawson is approximately 3500m³ for sawlog and 1500m³ for fuel wood. The industry consists primarily of one sawmill and several fuel wood operators. The forests in the Dawson region provide significant ecological and aesthetic values, cultural and heritage values, recreational, and other non-timber values. Dawson's forests can sustain a vibrant, small-scale forest industry that provides timber for local markets, energy, economic opportunity, and employment for the region's residents (Draft SFMP 2009). Many of the residents of Dawson rely on fuel wood harvesting as an economical heating alternative throughout the winter.

North Fork Timber Harvest Plan

2.0 Planning Area Identification

The total identified area across five blocks is 220 ha with a total estimated volume of 18230 m³ (see table below)

TABLE 1: Area and Volume Summary

Proposed Blocks	Volume/Hectare (m ³ /ha)	Block Size (ha)	Total Estimated Volume (m ³)	Species Composition	Average Stem Height (m)
NF1	90	87.5	7,875	50% White Spruce 30% Aspen 20% White Birch	14.5
NF2	90	63	5,670	50% White Spruce 40% Black Spruce 10% Aspen	12.7
NF3	75.5	30.5	2,150	60% White Birch 20% Black Spruce 20% Aspen	11.2
NF4	65	9	585	50% White Spruce 40% Black Spruce 10% Aspen	12
NF5	65	30	1,950	70% Black Spruce 20% White Spruce 10% Aspen	11
Totals		220	18,230		

2.1 Wildlife

All site plans and operational development must be consistent with the most current wildlife standards² available from the Forest Management Branch (FMB). These standards have been developed to ensure well thought-out and balanced planning occurs with respect to wildlife and forest resources. Throughout the preliminary reconnaissance and consultation, no significant wildlife concerns were noted. There are no conflicts with wildlife values identified in fish and wildlife planning for this area.

² The FMB standards are located in the Timber Harvesting Planning and Operating Guidebook 1999 with new standards currently under development and expected to be completed by the winter of 2010.

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2.2 Riparian and Water Resources

All riparian management must follow the most current FMB riparian management standards². No riparian features were noted within the harvest areas during the reconnaissance of the areas. Three small drainages were given 20m riparian reserve buffers on the edges of blocks NF -1 (two places) and NF-2.

2.3 Heritage and Archaeological Sites

The Yukon Archaeological Sites Inventory and the Yukon Historic Sites Inventory did not identify any known historic or archaeological sites in the North Fork harvest area. All cut-blocks have been impacted by forest fires which suggest a low potential for historic era artifacts and structures. As per the Heritage Resource Assessment recommendations, the following mitigations will be implemented for the North Fork blocks:

- The western perimeter of NF-1 and the eastern perimeter of NF-2 will be inventoried for archaeological sites;
- With the exception of winter roads, new road construction will buffer any archaeological sites found by a minimum of 30 metres;
- No mechanical scarification will be permitted within 30 m of an archaeological site. (*Historic Resources Overview Assessment: Six Proposed Harvest Areas in the Dawson Region, February, 2010*).

2.4 Soils Conservation

All harvesting operations must follow current FMB soil conservation standards². These standards will ensure that the integrity of soils is maintained across all sites. Harvesting will only be permitted during dry summer or winter conditions in order to mitigate any risks to soil. Utilizing existing access in the area will help minimize any soil compaction in the harvest areas. All new roads and landings should be situated to minimize the risk of compaction, erosion, and rutting.

2.5 Traditional Land Users

This area is known as a traditional hunting, berry picking and fuel wood harvest area. There is also an active trapline in the region. These activities were considered throughout the planning process and are considered compatible with the THP.

3.0 Silviculture System

3.1 Harvesting

Ten percent in-block retention is required; made up of merchantable mature trees and snags. A large component of the stand's mature stems are unmerchantable and will also be retained. This retention will provide structure as standing snags and in the future as coarse woody debris. Harvesting operations shall minimize unnecessary damage to any

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regeneration. Harvesting the majority of the merchantable stems is necessary to increase the economic viability of the harvesting and decrease the number of areas needed to be accessed.

Harvesting methods include both hand and mechanical falling. Harvesting activities are eligible to begin in dry weather conditions and last until break up in the spring of the following year. Harvesting is expected to continue in the area within the seasonal restrictions until harvesting is completed.

3.2 Reforestation

Natural regeneration is the preferred option with artificial regeneration being used to supplement natural regeneration when necessary. The schedule for a post-harvest establishment survey(s) will be outlined as part of the site plan for each harvest block. The results of this survey(s), the silviculture regulation and the silviculture standards will guide the decision-making towards regenerating these harvest blocks.

4.0 Access Management Considerations

The primary objective of access management for the area is to minimize the creation of long-term access. Where possible, existing access will be utilized and integrated with other land users. Appendix 1 illustrates the proposed access into the North Fork blocks. The area will continue to utilize dry weather access as it has in the past. The access is expected continue to have an extremely light footprint with the large majority of access consisting of low stumping for pickup truck trails and small skidoo and quad trails.

5.0 References

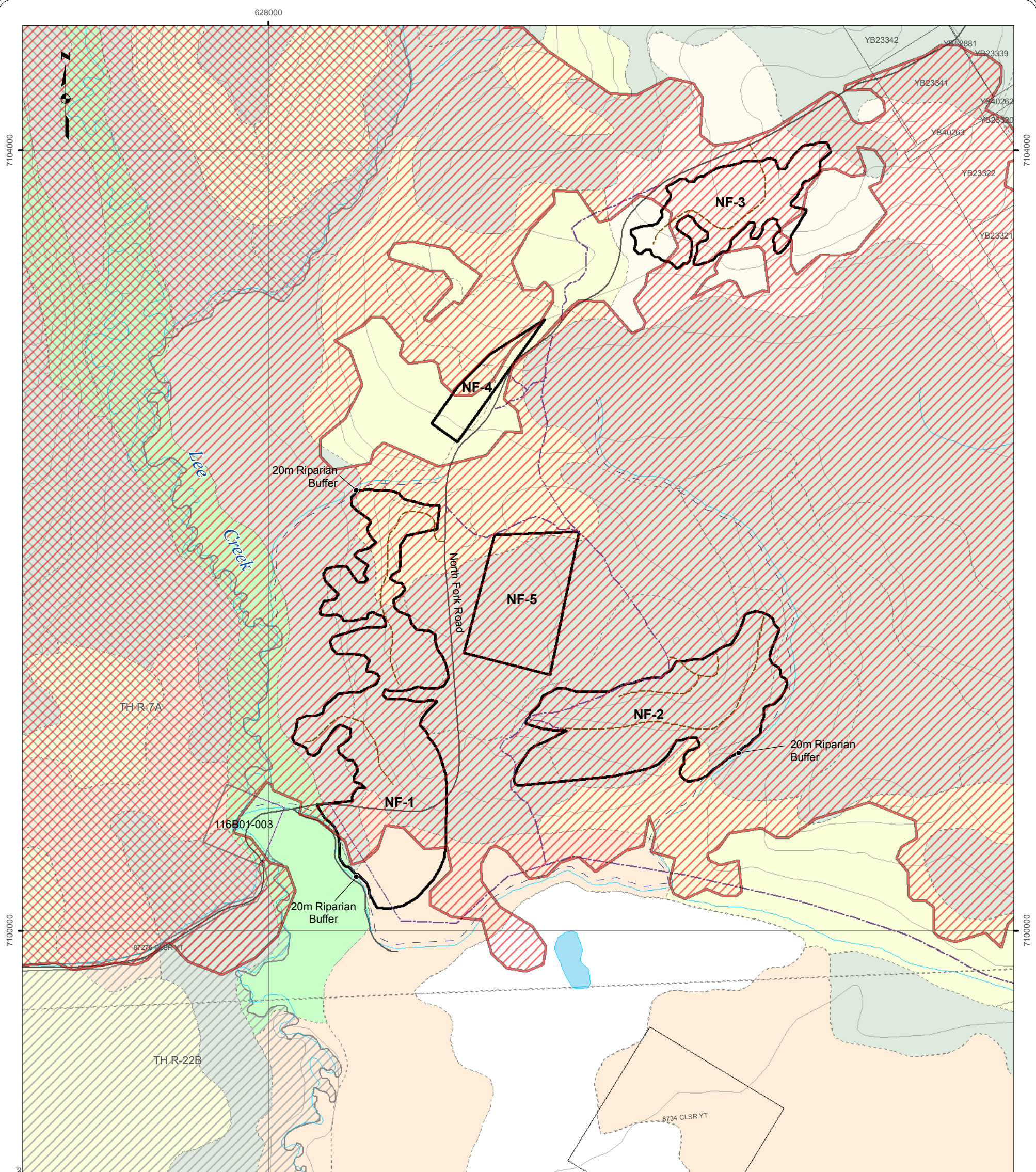
Environmental Dynamics Inc. Report "*Phase 1 Reconnaissance of Fuelwood Areas the Dawson City/Klondike Region.*" December, 2009.

Dawson Forest Management Planning Team "*Dawson Forest Resources Draft Management Plan.*" October, 2009.

6.0 Appendices

Appendix 1: North Fork THP Map

Appendix 2: North Fork Overview Map



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- Project Specific Features**
- Existing Access Route
 - Proposed Access Route
 - Riparian Reserve
 - Fire 2004
 - Harvest Blocks
- Administrative Features**
- First Nation Settlement Lands
 - Category A
 - Category B
 - Fee Simple
 - Surveyed Parcel
 - Agriculture Tenure
 - Land Disposition
- Forest Cover**
- Non Forested Polygons
 - White Spruce
 - Lodgepole Pine
 - Alpine Fir
 - Black Spruce
 - Balsam Poplar
 - Trembling Aspen
 - White Birch
 - Larch

Date: September 01, 2010
 Projection: NAD 1983 UTM Zone 7

Digital Data Sources

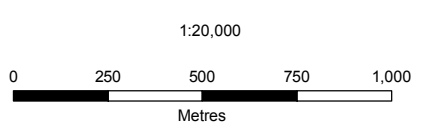
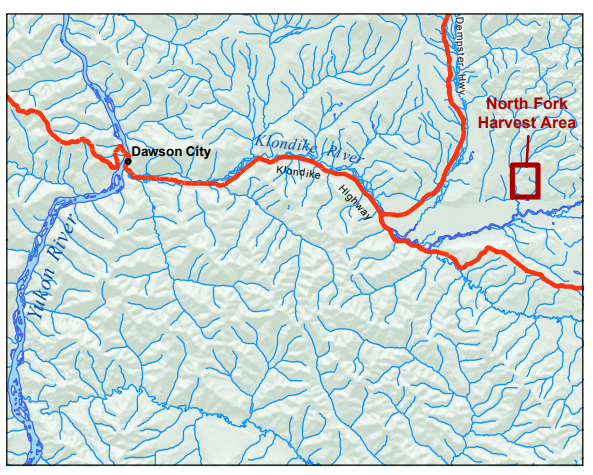
1:50,000 Canvec features downloaded from spatial data warehouse - www.geogratis.gc.ca. Her Majesty the Queen in Right of Canada, Department of Natural Resources. All rights reserved.

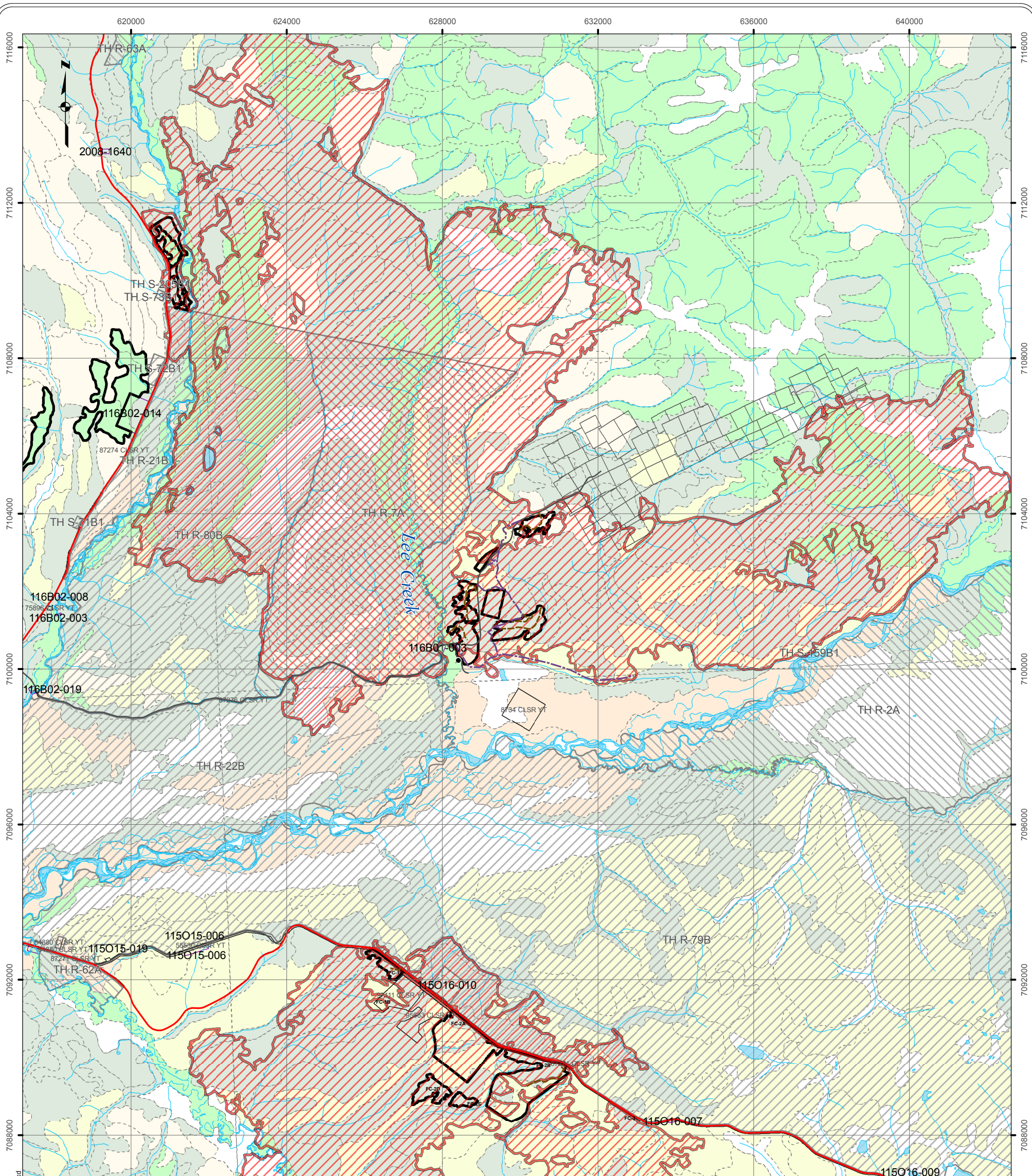
Project specific features such as Existing and Proposed Access Routes and Proposed Harvest Areas were derived/digitized by EDI Environmental Dynamics Inc. Fall 2009.

Digital Elevation Models (30 metre and 90 metre) provided by Yukon Government Geomatics spatial data warehouse - www.geomaticsyukon.ca.

**Appendix 1
 Timber Harvest Plan Area
 Dawson City / Klondike Region**

North Fork Fuelwood Area





Project Specific Features

- Existing Access Route (dashed line)
- Proposed Access Route (solid line)
- Harvest Blocks (black outline)
- 2004 Fire (red hatched area)

Administrative Features

- Surveyed Parcel (thin black outline)
- Agriculture Tenure (yellow outline)
- Land Disposition (purple outline)
- First Nation Settlement Lands (grey hatched area)
- Category A (diagonal hatched area)
- Category B (cross-hatched area)
- Fee Simple (horizontal hatched area)

Forest Cover

- Non Forested Polygons (white)
- White Spruce (light green)
- Lodgepole Pine (medium green)
- Alpine Fir (dark green)
- Black Spruce (grey-green)
- Balsam Poplar (orange)
- Trembling Aspen (yellow)
- White Birch (light yellow)
- Larch (light green)

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Scale: 1:100,000

0 500 1,000 2,000 Metres

**Appendix 2
 Timber Harvest Plan Area
 Dawson City / Klondike Region**

North Fork Fuelwood Area

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