

Draft
Flat Creek 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

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Date

Executive Summary

The objective of the Flat Creek Timber Harvest Plan (THP) is to provide Dawson City with a sustainable supply of economical fuel wood in an integrated and balanced approach to forest management. Under the new *Forest Resources Act*, all commercial harvesting must be conducted under an approved THP. Flat Creek has been a traditional harvest area for Dawson's fuel wood since a 2004 wildfire in the area. This THP proposes the harvesting of five blocks for a total of 343ha and an estimated 16250m³ of fuel wood. This THP is consistent with both the draft Dawson Forest Resources Management Plan¹ (October, 2009) and direction provided in the draft Planning Regulation of the *Forest Resources Act*.

¹ The Draft Dawson Forest Resources Management Plan is anticipated to be released in the spring of 2010.

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1.0 Introduction

1.1 Background

Flat Creek is located approximately 60 km southeast of Dawson. The region was almost entirely burned by a 2004 wildfire. All proposed blocks are located within fire-killed areas. The selection of areas appropriate for fuel wood harvesting used the following approach (EDI 2009):

- Stage 1 Investigate current harvest sites and identify 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.

Flat Creek was chosen as the location for this 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

This 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. The harvest blocks are heavily dominated by Black Spruce with a larger component of White Spruce in blocks FC-2C and FC-2D (see section 2.0 for block details).

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 values, 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.

2.0 Planning Area Identification

The total identified area across four blocks is 343ha with a total estimated volume of 16250m³ available to harvest (see Table 1).

TABLE 1: Attributes of Flat Creek THP Blocks

Proposed Blocks	Volume/Hectare (m ³ /ha)	Slope (%)	Aspect	Block Size (ha)	Total Estimated Volume (m ³)	Species Composition	Average Stem Height (m)
FC-1A	50	2	West	25	1250	90% Black Spruce 10% Aspen	8
FC-2A	28	2	South	175	4,900	90% Black Spruce 10% Aspen	10
FC-2B	30	6	Southwest	189	5,670	90% Black Spruce 10% Aspen	7.5
FC-2C	82	15	South	15	1,230	50% White Spruce 40% Black Spruce 10% Aspen	12
FC-2D	82	15	Southwest	39	3,198	50% White Spruce 40% Black Spruce 10% Aspen	12
Totals				343	16250		

2.1 Wildlife

All site plans and operational development must be consistent with current wildlife standards² available from 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. This area does not conflict with any fish or wildlife management plans.

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

2.2 Riparian and Water Resources

All riparian management must follow the most current FMB riparian management standards². Blocks FC-2A, and FC-2D have ephemeral draws located in the block. The draws will require a 5 m machine-free zone, directional falling, and limited skid crossings. The machine-free zone may be decreased during frozen ground conditions.

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 Flat Creek area. The Flat Creek blocks have been impacted by forest fires; which suggests a low potential for aboveground historical artifacts and structures. However, portions of blocks FC-2B, FC-2C, and FC-2D are located near enough to water to indicate there is elevated potential for the presence of buried archaeological remains. As per the Heritage Resource Assessment recommendations, the following mitigations will be implemented for the Flat Creek Harvest Area:

- 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 metres of an archaeological site.

(Historic Resources Overview Assessment: Six Proposed Harvest Area 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

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

3.0 Silviculture System

3.1 Harvesting

10% in-block retention is required; made up of merchantable mature trees and snags. A large component of the stands 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 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. The estimated completion date is 2020.

3.2 Reforestation

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 standards² will guide decision-making with respect to regenerating these harvest blocks. Natural regeneration is the preferred option with artificial regeneration being used to supplement natural regeneration when necessary.

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. The map in Appendix B illustrates the proposed access into the Flat Creek blocks. Harvesting will occur in dry weather and winter only. 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

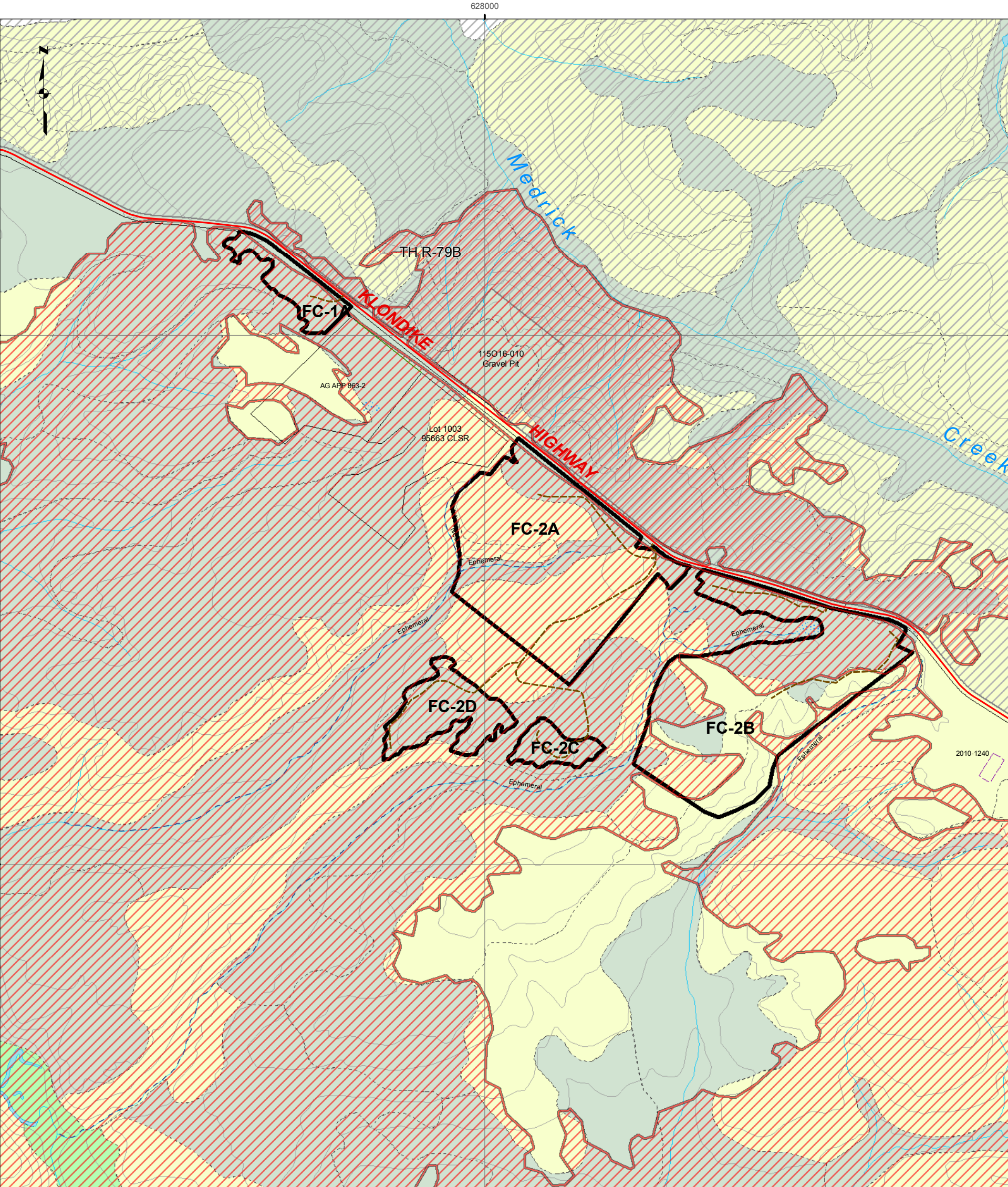
Environmental Dynamics Inc. Report “*Phase 1 Reconnaissance of Fuelwood Areas the Dawson City/Klondike Region*”. December, 2009.

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

6.0 Appendices

Appendix A: Overview Map

Appendix B: Flat Creek Timber Harvest Plan Map



- Project Specific Features**
- Existing Access Route
 - Proposed Access Route
 - Ephemeral Drainage
 - Harvest Blocks
 - 2004 Fire
- 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

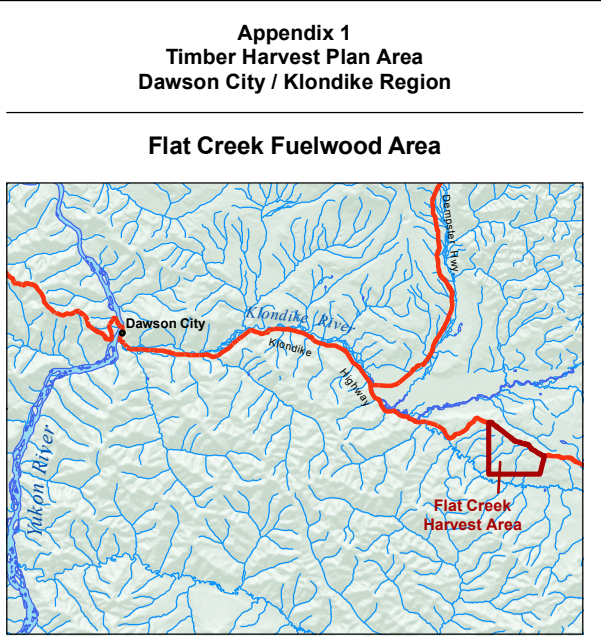
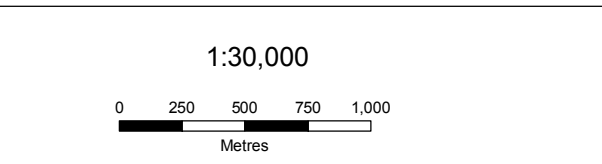
Digital Data Sources

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.

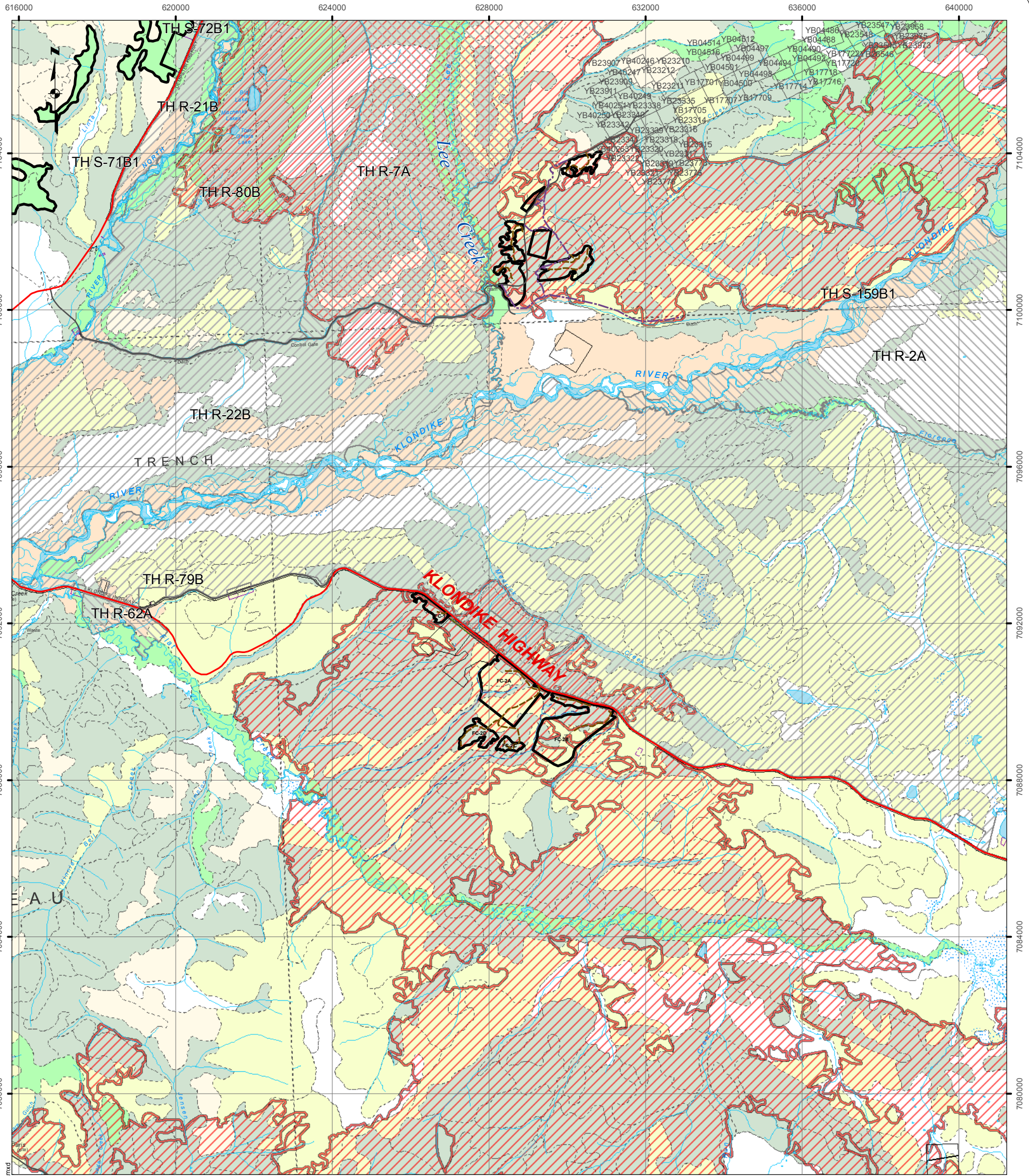
Project specific features such as Existing and Proposed Access Routes and Proposed Harvest Areas were derived/digitized by EDI Environmental Dynamics Inc. Fall 2009.

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

Map scale 1:20,000 when printing on 11"x17" paper.

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- Project Specific Features**
- Existing Access Route (dashed line)
 - Proposed Access Route (dotted line)
 - Harvest Blocks (black outline)
 - Ephemeral Drainage (dashed line)
 - 2004 Fire (red hatched pattern)
- Administrative Features**
- First Nation Settlement Lands (white circle)
 - Category A (diagonal hatched)
 - Category B (horizontal hatched)
 - Fee Simple (vertical hatched)
 - Surveyed Parcel (black outline)
 - Agriculture Tenure (green hatched)
 - Land Disposition (purple outline)
- Forest Cover**
- Non Forested Polygons (white)
 - White Spruce (light green)
 - Lodgepole Pine (medium green)
 - Alpine Fir (dark green)
 - Black Spruce (light blue-green)
 - Balsam Poplar (orange)
 - Trembling Aspen (yellow-green)
 - White Birch (yellow)
 - Larch (light green)

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

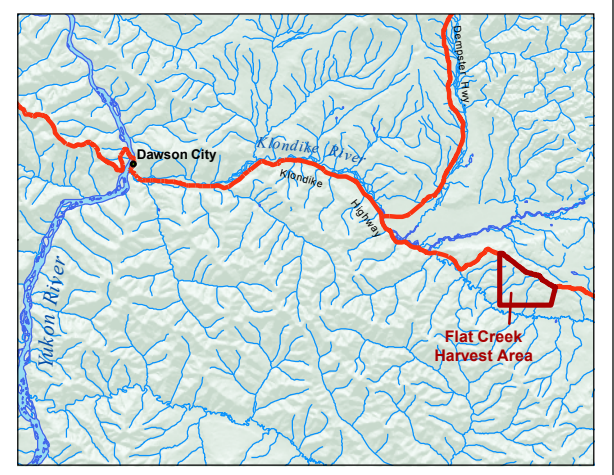
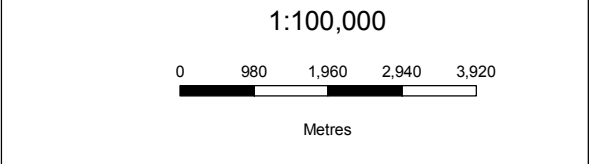
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1:50,000 Canvec features downloaded from spatial data warehouse - www.geogratis.gc.ca. Her majesty the Queen in Right of Canada, Department of Natural Resources. All rights reserved.

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

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