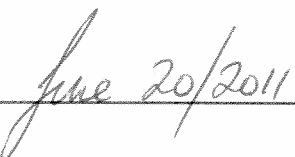


# Watson Lake Fuelwood Timber Harvest Plan




## FOREST MANAGEMENT BRANCH

  
\_\_\_\_\_  
Submitted by  
Greg Cowman, Area Forester  
Forest Management Branch

  
\_\_\_\_\_  
Date

  
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Approved by  
Director Forest Management Branch

  
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Date

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## Executive Summary

This proposed Timber Harvesting Plan (THP) has been identified as a potential source of fuel wood for commercial woodcutters in the Town of Watson Lake and vicinity.

There are no large scale areas of natural disturbance located within a reasonable distance of the community that would serve as a single source of fuelwood salvage. This THP identifies a number of small areas with pockets of dead wood and existing access.

The THP proposes harvesting at a scale of relatively light impact in a number of locations, utilizing existing access as much as possible. The THP identifies four operating units, with an estimated total of 7,500 cubic metres (m<sup>3</sup>) of fuel wood potentially available. The THP also sets operational goals and objectives for the submission of harvesting rights within the planning area.

Two of these operating units are very close to the community, one of which lies within the town boundary. The other two units are approximately 100 km north of Watson Lake along the Robert Campbell Highway and have been identified as potential sources for fuel wood to supply to territorial campgrounds and local needs in that area.

Implementation of the *Forest Resources Act* requires that commercial timber harvesting licences may only be issued where a THP is in place. The objective of this THP is to provide opportunities for small scale commercial fuel wood harvesting which assist in satisfying the local demand and provide for mitigation that protects identified values.

The THP has been prepared to supply an immediate need, but will not be the last plan of this nature prepared for the community.

All applications for licences under the new *Forest Resources Act*, must meet regulatory requirements for content and will be subjected to a notification process where the public and local First Nations will be provided an opportunity to review and comment.

## **1.0 Introduction**

### **1.1 Background**

The proposed THP is being planned to contribute to a wood supply for the Town of Watson Lake (and surrounding area) in accordance with the *Forest Resources Act*. Reconnaissance work during spring and summer of 2010 led to the view that there is no specific area of disturbance that could reasonably serve as a primary source of fuel wood for local residents. A variety of small areas, with volumes of dead standing wood within reasonable proximity to Watson Lake and outlying hamlets, were located to provide opportunity for development of small scale commercial activities. It is hoped that an adequate timber supply (with particular focus on fuel wood) can be developed to meet the needs of local residents. One benefit of this approach is the utilization of existing access in the proposed harvesting areas.

A number of local wood cutters contributed to identifying potential harvest sites, including the areas identified in this THP.

The THP does not identify specific cut blocks, but rather, general areas where licences may be developed. The THP also sets forest management objectives and boundaries for cumulative effects for the issuance of small fuel wood licences.

This draft THP is meant to be an interim measure to supply immediate needs for the community. As areas are utilized and demand continues additional fuel wood THP's are anticipated.

There are four Operating Units (OU) identified in this draft THP. OU 1 is near the Watson Lake Campground; OU 2, the Microwave Tower; OU 3, Tuchtua, and; OU 4, Nahanni Range Road. In total, areas proposed will provide approximately 7500m<sup>3</sup> of timber for the community.

A number of stakeholders have been notified of the Government of Yukon's intention to do THP planning in the identified areas. This includes Liard First Nation, the Town of Watson Lake, and the Watson Lake Outdoor Recreation Association. In addition, the Forest Management Branch has referred the plan to other government agencies including Department of Environment, Highways and Public Works, Heritage and Community Services.

Responses received through discussions with stakeholders have been incorporated and further comments and concerns may be raised during the 30 day review period of this THP.

Subject to approval of the THP, the Forest Management Branch will entertain applications for licences in these areas. Individual license applications will be subject to a 30 day notification period as required by the *Forest Resources Act*.

## **1.2 Ecoregion and Drainages**

All operating areas identified in this draft THP are located within the Liard Basin Ecoregion which lies within the Boreal Cordillera Ecozone. This ecoregion is characterized by low hills separated by broad plains and surrounded by mountains and plateaus<sup>1</sup>. The low elevation, moderate precipitation and relatively long, warm summers result in vigorous forest growth<sup>1</sup>. The ecoregion is underlain by a thick mantle of unconsolidated glacial sands and gravel over fluvial sediments<sup>1</sup>. The geology is described as complex owing to two major faults which juxtapose contrasting rock assemblages<sup>1</sup>. The ecoregion was subject to several glaciations, with surface deposits resulting from the most recent. Glacial till can be thicker than 30m on lower slopes<sup>1</sup>. This is a mixture of cobbly sand, silt and minor clay, which drains well to moderately well<sup>1</sup>. This ecoregion is described as containing prime habitat for moose, marten, snowshoe hare and lynx<sup>1</sup>. In addition to this, sandhill cranes are known to follow the Frances and Liard valleys during seasonal migrations<sup>1</sup>. The western portion of the ecoregion also contains important winter habitat for the Little Rancheria caribou herd. All operating units identified here are located within the basin of the Liard River which flows into the Mackenzie River in the Northwest Territories.

## **1.3 Socio-Economic Considerations**

The Town of Watson Lake is referred to as the “Gateway to the Yukon” and has a long history as a supply and accommodation centre for Southeast Yukon.<sup>2</sup> The town is located at the junction of the Alaska Highway and the Robert Campbell Highway, and is also very close to the Junction with the Stewart Cassiar Highway. The population of the community is 1,200 people, many of whom are members of Liard First Nation<sup>3</sup>.

There are currently no large saw mills operating in the community and the decline in North American lumber markets in the 2000's has resulted in a dramatic decline in this sector locally. The local demand for timber is very small scale, predominantly portable saw mills as well as fuel wood. Fuel wood consumption in the community is estimated at approximately 400 – 800 cords (1,100 – 1,800 m<sup>3</sup>) annually, of which as much as half is believed to be supplied through commercial sales.

## **2.0 Planning Area Identification**

The following paragraphs provide short descriptions of the four operating areas identified by this draft THP. Refer to Appendix A for an overview showing the geographical locations of all Operating Units covered by this THP.

### **Operating Unit 1 – Watson Lake Small Volume Fuelwood Area**

The operating unit is located within the boundary of the Town of Watson Lake and immediately to the south of Watson Lake (the lake). It is adjacent to and between the Watson Lake Campground and the municipal dump. A parks reserve lies immediately to the north of the proposed THP, covering the south shore of the lake. There are adjacent tracts of land identified as “interim protected” with respect to Kaska land claims. The ‘Two Mile’ subdivision also lies to the east. This operating unit contains openings from previous logging in the 1990’s.

Refer to Appendix B: 1:25,000 map of the Watson Lake Small Volume Fuel Wood Area.

### **Operating Unit 2 – Microwave Tower**

The operating unit lies just outside the town boundary and is approximately six kilometers to the east of town centre. There are two parallel access routes into the area. One is the maintained road leading to the tower and the other is the Rainbow Scurry road which is an old logging/mining road. There is one existing opening from previous logging within the THP and several more adjacent to the operating unit, to the west along the Garden Creek road and are part of the historic ‘Garden Creek’ timber harvest area.

Refer to Appendix C: 1:5,000 map of the Microwave Tower Fuel Wood Area.

### **Operating Unit 3 – Tuchitua**

The operating unit lies approximately between km 118 and 120 of the Robert Campbell Highway, on the east side, approximately eight km north of the Tuchitua highway maintenance camp. This area is located within a 2004 burn and covers a Government of Yukon land reserve for gravel, within which there is one developed pit and another small clearing with an existing road. The Department of Highways and Public Works has expressed a willingness to allow the use of their roads and openings for small scale fuel wood operators.

Refer to Appendix D for the 1:50,000 map of the Tuchitua Fuel Wood Area.

### **Operating Unit 4 – Nahanni Range Road**

The operating unit lies at approximately 10 km of the Nahanni Range Road, on the south side and east of the Frances River. This area is located within a 2009 burn and is accessed by the Nahanni Range Road which leads to the Cantung Mine.

Refer to Appendix E for the 1:50,000 map of the Nahanni Range Road Fuel Wood Area.

## **2.1 Landscape Issues**

### **2.1.1 Wildlife**

No significant concerns related to wildlife have been identified in relation to this proposed THP. The scale of operations, and previous disturbance leads to an expectation that the various species of wildlife will not be significantly impacted by proposed harvesting activity.

Past reconnaissance has not identified wildlife use or sign requiring special mitigation. During operations or site plan layout, should indicators warrant, mitigation for wildlife concerns shall meet the guidelines and standards identified with the Timber Harvest Planning and Operating Guidebook (THPOG, 99) or new planning standards in place at the time of permit issuance.

Much of the harvesting activity within operating units 1 and 2 will not result in new forest openings, as dead standing trees targeted for fuel wood are sporadically located throughout the THP. Harvesting of dead and down timber for salvage will be authorized only.

Operating units 3 and 4 are located within large recent burns and the proposed salvage harvest will reserve any green timber from harvesting.

### **2.1.2 Biodiversity**

Operating Unit #1 has been identified as the location of a rare plant species (*Carex lapponica* – Lapland sedge). The buffering of wetlands will provide suitable protection for this species. (DOE comment)

A salvage harvesting approach for dead and down timber only, in operating units 1 and 2 will ensure the maintenance of values and factors contributing to biodiversity, including soils and representative forest cover adjacent to existing openings which are naturally regenerating and provide habitat for a variety of flora and fauna. Operations within operating unit 1 are prescribed to target a light footprint given the location within the town boundary and heavy equipment use will not be permitted.

Harvesting of fire killed trees in operating units 3 and 4 will ensure protection of green trees and woodcutters will be encouraged to leave small trees and perform limbing and topping at the stump to provide on site coarse woody debris.

### **2.1.3 Riparian and Water Resources**

All classification and riparian management guidelines are taken from the THPOG, but new approved standards in place at the time of application will be used.

#### **Operating Unit 1 – Watson Lake Small Volume Fuelwood Area**

There is one wetland riparian feature within the boundary of the Operating Unit. The wetland contains seasonal pockets of standing water and is 1.5 ha which makes it a Class 2 wetland. It is 100m from the nearest proposed harvest area, which is the required riparian management area buffer for this class of wetland.

There are two wetlands outside the northern boundary of the THP. They are approximately 15 ha and 3 ha in size. The THP boundary is located with a buffer protecting these features from disturbance.

Watson Lake and a small tributary east of the THP should not be impacted as they are well removed from harvesting activity.

#### **Operating Unit 2 – Microwave Tower**

There are no riparian issues within the boundary of the Operating Unit.

An assessment<sup>5</sup> was done on the unnamed creek to the east of the unit along with two tributaries. The tributaries were determined to be non-classified drainages while the main channel is assumed to be fish-bearing and is a Class 3 stream. The stream is 700m from the harvest area and will not be impacted by harvesting activity.

#### **Operating Unit 3 – Tuchtua**

This area contains one unnamed Class 3 stream which bisects the operating unit, flowing generally from southwest to northeast. The stream is naturally buffered with green timber and thus, will not be impacted by harvest operations which target fire-killed timber. An assessment<sup>6</sup> was done on a 400m segment of this stream near the Robert Campbell Highway which determined that there are no impediments to fish presence.

#### **Operating Unit 4 – Nahanni Range Road**

This operating area is adjacent to King Creek, which is a tributary to Frances River. An assessment<sup>6</sup> was completed and determined that King Creek is a fish bearing Class 2 stream and Sequence Creek<sup>6</sup>, which flows into King Creek near the eastern edge of the operating unit is a Class 3 stream which should also be assumed to be fish-bearing. The southern boundary of the operating unit has been set back 100m from both creeks along the topographic break that drops into the stream valleys.

No negative impacts to water or fish habitat are anticipated in this area.



## **2.1.4 Recreation and Visual Impact**

### **Operating Unit 1 – Watson Lake Small Volume Fuelwood Area**

Recreation is a particularly important consideration in planning for the development of fuel wood extraction in this Operating Unit. The primary concern is the network of trails throughout the area. While these trails have provided opportunities for cross country skiing, in recent years the primary use has been for recreation with ATV's by residents of the community. A certain amount of maintenance has been carried out to keep the trails from growing over with shrubs. Hunting is prohibited in this area because it is within the town boundary. Licences will require any trails used for the extraction of fuelwood to be returned to their pre-harvest condition.

Visual impacts are primarily focused on the viewscape for ATV operators travelling along the trails, as well as for people travelling along the road into the Watson Lake Campground. The Forest Management Branch has had discussions with the Departments of Community Services and Environment about fuels mitigation along the road leading to the campground. The salvage nature, for dead and down timber only, of the proposed harvesting is not expected to result in a negative change in the viewscape.

This area is situated such that it is not visible from the Alaska Highway, the developed portion of the community, or from the lake.

### **Operating Unit 2 – Microwave Tower**

Recreational use of this area is primarily related to hunters, and possibly berry pickers, using the Rainbow Scurry Road with trucks and ATV's. There is a gun range south of the operating unit, along the road leading to the Northwestel microwave tower. This gun club is managed by the Watson Lake Outdoor Recreation Association who have advised that wood cutters must respect the land designated as a buffer surrounding the gun range (see map of Microwave Tower operating unit – land disposition polygon # 2004-0347) and no harvesting will be permitted in this area.

A salvage harvest system targeting dead standing and blow-down timber will not result in a noticeable effect on the viewscape from the community.

### **Operating Unit 3 – Tuchitua**

The operating unit is situated adjacent to the Robert Campbell Highway and thus the effects of harvesting may be partially visible to motorists. This is not expected to significantly have an effect on the viewscape as the area, at this time, is primarily covered by (burnt) small diameter poles. The contour of the land in this location is favourable as it gently slopes away from the highway.

### **Operating Unit 4 – Nahanni Range Road**

Visual considerations for this operating unit are very similar to that of the Tuchitua unit described above. This unit is situated adjacent to the Nahanni Range Road and is covered by small diameter (burnt) poles. There is a trail located within this unit leading to a wall tent frame which is believed to have been constructed in 2010 (after the fire of 2009) related to mushroom picking activity. Several people were known to have used this area for mushroom picking during the summer of 2010. Licenses will require the trail will be maintained and provide 30m buffer around the tent frame as this infrastructure may be of use to the local trapline concession holder.

#### **2.1.5 Cultural Values**

The cultural values in this area include pursuits such as ATV use and fuelwood extraction on existing access networks, as well as hunting and trapping by first nation people as well as other outdoor enthusiasts.

Traditional pursuits of local First Nations in regard to the harvesting of forest resources within the THP, do not require permitting as per Section 43 of the Forest Resources Regulation.

#### **2.1.6 Other Values**

OU 2, the Microwave Tower, contains a forestry permanent sample plot (PSP) which must be protected. The PSP is marked in the field with orange paint and is noted on the operating unit map. A 100m reserve zone to protect the integrity of the plot shall be located prior to harvesting activity in the vicinity.

## **2.2 Stand Level Issues**

All operating units identify general areas in which there are opportunities to provide harvesting licences. Prior to the issuance of a license the *Forest Resources Act* requires the submission of an application and preparation of site specific plans. Site Plans will provide the detailed additional information required under the *FRA, Regulation, Division 4*.

### **2.2.1 Ecosystem and Stand Composition**

#### **Operating Unit 1 – Watson Lake Small Volume Fuelwood Area**

The OU consists of primarily pine dominated stands with varying content of spruce. The forest stands vary in volume and percentage of dead wood composition with the greatest opportunity for salvage of dead wood along the edges of existing openings where there is 20% dead timber in some locations. The operating unit is relatively flat with gentle slopes.

#### **Operating Unit 2 – Microwave Tower**

The OU contains pine leading forests with varying amounts of spruce as well as minor amounts of birch and aspen. The unit is centered on a hill crest with rolling topography and a variety of slopes up to 35%.

#### **Operating Unit 3 – Tuchitua**

The OU is situated within a 2004 burn. The area lies on relatively flat ground with slopes in some areas up to 15%.

#### **Operating Unit 4 – Nahanni Range Road**

The OU is located in a 2009 burn. This unit sits atop a bench beyond a steep slope reaching down toward King Creek. The operating area is on flat ground and there are no ecological impediments to development.

### **2.2.2 Cultural Heritage and Archeological Sites**

Heritage overview assessments were conducted by the Government of Yukon, Cultural Services Branch, for each of the four operating units identified. The assessments determine whether known archaeological values exist on the sites and also identify areas with elevated potential where the presence of heritage values are likely to exist. The following information summarizes the findings.

Layout of licence areas will either avoid the locations as indicated by the overview assessment or the recommendations will be followed prior to any harvesting activity in the areas of identified heritage potential.

#### **Operating Unit 1 – Watson Lake Small Volume Fuelwood Area**

The overview assessment<sup>7</sup> found that there is elevated potential for the presence of heritage values within 100m of small ponds and wetlands throughout the THP, with highest potential surrounding the wetland feature along the northern boundary of the THP. A surface feature inventory is recommended where any harvesting may occur in these areas and an archaeological site inventory is recommended if road construction is planned in such areas.

#### **Operating Unit 2 – Microwave Tower**

The overview assessment<sup>8</sup> found that there are no known archaeological sites within this area and no locations with elevated potential for heritage resources exist. No further work is necessary.

#### **Operating Unit 3 – Tuchitua**

The overview assessment<sup>9</sup> identified no known archaeological sites, but elevated potential within 100m of the unnamed creek passing through the planning area and along a small wetland on the eastern boundary. A surface feature inventory is recommended where any harvesting may occur in these areas and an archaeological site inventory is recommended if road construction is planned in such areas.

#### **Operating Unit 4 – Nahanni Range Road**

The overview assessment<sup>10</sup> identified no known archaeological sites, but elevated potential within 100m of the terrace which overlooks the King Creek drainage. A surface feature inventory is recommended where any harvesting may occur in these areas and an archaeological site inventory is recommended if road construction is planned in such areas.

### **2.2.3 Traditional Land Users**

The Forest Management Branch provided information to all trapping concession holders within the THP areas.

#### **Operating Unit 1 – Watson Lake Small Volume Fuelwood Area**

The Forest Management Branch provided information to the local trapping concession holder/land steward but has not received detailed feedback relevant to site specific concerns.

#### **Operating Unit 2 – Microwave Tower**

The Forest Management Branch provided information to the local trapping concession holder/land steward but has not received detailed feedback relevant to site specific concerns. The Branch contacted another trapper whose concession lies next to this OU and no concerns were expressed in relation to the proposed activity. There is a trail which passes through a portion of this OU but it is unknown who might be using this trail, and for what purpose. Any site plans developed for timber licences must ensure that the trail is in a useable condition following harvest activities.

#### **Operating Unit 3 – Tuchitua**

The Forest Management Branch provided information to the local trapping concession holder/land steward but has not received feedback.

#### **Operating Unit 4 – Nahanni Range Road**

The Forest Management Branch provided information to the local trapping concession holder/land steward but has not received feedback.

### 3.0 Harvesting Section

#### 3.1 Operating Unit Areas and Volume Summaries

All areas, identified in this THP, target the salvage of dead and down (wind-thrown) timber only. Green standing timber harvesting will not be permitted, although it is understood that there may be an incidental take of green timber damaged during operations.

Table 1 provides a summary of estimated timber volumes in the four operating units.

Table 1 – Area and Volume Summary

Operating Unit	Est. Net Operable Area	Estimated Volume/ha	Potential Volume
1 – Watson Lk	220 ha	Variable, selective harvest of dead timber & blowdown	600 m <sup>3</sup>
2 – Tower*	300 ha	Variable, selective harvest of dead timber & blowdown	3,000 m <sup>3</sup>
3 - Tuchitua	60 ha	40 m <sup>3</sup> /ha	2,400 m <sup>3</sup>
4 - Nahanni	35 ha	43 m <sup>3</sup> /ha	1,500 m <sup>3</sup>
<b>Totals</b>	<b>615 ha</b>		<b>7,500 m<sup>3</sup></b>

*Volumes identified are estimates only and as such the final salvage volumes will be dictated by site specific conditions.*

#### 3.2 Harvest Scheduling and Season

Each of the operating units contains suitable, coarse textured soils which will enable harvesting during dry summer and fall as well as frozen winter conditions.

Operations will not be allowed during spring break-up or at other times when soils may be subject to compaction and rutting due to wet conditions.

#### 3.3 Silviculture Systems and Reforestation

True silviculture systems do not apply as these THP are targeting dead and down material in a strategy to salvage fuelwood for community use, in areas that have been naturally disturbed.

It is anticipated that natural regeneration will occur, or has already started so the protection of regeneration and retention of green standing timber is required for all harvesting in this THP.

#### **4.0 Access Management**

Existing roads shall be used as the primary access into all OU of this THP.

Any new development proposed with forest resource applications shall be required to minimize road width and landing size and will be built to standards recognized by the Forest Resources Act for construction, maintenance and decommissioning.

Newly bladed trails, roads and landings used during frost free conditions (summer, fall) may require scarification to reduce compaction and aid in the re-establishment of vegetation within the harvest area during decommissioning.

##### **Operating Unit 1 – Watson Lake Small Volume Fuelwood Area**

Considering the location of this operating unit within the boundary of the community and the recreational value of the local trails, no new roads are proposed to be built in this unit. Operators may develop small access trails from the existing road in order to facilitate removal of the wood with small equipment such as snow machine or ATV. Heavy equipment such as feller-bunchers and skidders will not be permitted in this OU. The main access proposed for use is the road which passes through the Government of Yukon gravel pit located on the Alaska Highway. The road is gated which will restrict use to licensed operators.

##### **Operating Unit 2 – Microwave Tower**

This operating area contains two existing, parallel roads which pass through the centre of the unit. There should be little need to develop new road access into the area. Depending on the licence area and layout, skid trails may be created leading back to the main road or short spur roads to landings may be needed to facilitate timber removal.

##### **Operating Unit 3 – Tuchitua**

There are two existing access points into the burn where the Government of Yukon has developed portions of a gravel reserve parallel to the Robert Campbell Highway. Wood cutters may use these access points, and may forward wood to them. There will likely be a need to develop new access through the southeaster portion of the operating unit. The exact location of the access, and any necessary landings, will be identified when a licence is being developed in the area.

##### **Operating Unit 4 – Nahanni Range Road**

There is one existing access point along the Nahanni Range Road in this operating unit, but it does not extend in any length, into the burn. The exact location of the access, and any necessary landings, will be identified when a licence is being developed in the area.

## 5.0 References

1 – Ecoregions of the Yukon Territory Part 2, Liard Basin: Ecoregion 181. Government of Yukon. Retrieved online at:  
[http://www.emr.gov.yk.ca/oilandgas/south\\_east\\_yukon.html](http://www.emr.gov.yk.ca/oilandgas/south_east_yukon.html)

Socio-economic considerations

2 – Yukon Community Profiles  
<http://www.yukoncommunities.yk.ca/communities/watsonlake/>

3 – Yukon Bureau of Statistics, 2006 Census  
<http://www.eco.gov.yk.ca/stats/census.html>

4 – Adamczewski, J.Z., Flokiewicz, R.F., and Loewen, V. 2003. Habitat management in the Yukon winter range of the Little Rancheria Caribou Herd. Department of Environment, Government of Yukon. Whitehorse, Yukon, Canada.

5 – Hooper, J. Government of Yukon. 2010. Stream classification report – Tower Road Timber Harvest Plan east of Watson Lake.

6 – Hooper, J. Government of Yukon. 2010. Stream classification report – km 119 Robert Campbell Highway and km 10 Nahanni Range Road – Timber Harvest Plan Areas.

7 – Thomas, C. 2010. Heritage Resources Overview Assessment Report for Watson Lake Small Volume Fuel Wood Area. Cultural Services Branch, Department of Tourism and Culture, Government of Yukon.

8 – Thomas, C. 2010. Heritage Resources Overview Assessment Report for Microwave Tower Fuel Wood Area. Cultural Services Branch, Department of Tourism and Culture, Government of Yukon.

9 – Thomas, C. 2010. Heritage Resources Overview Assessment Report for Tuchitua Fuel Wood Area. Cultural Services Branch, Department of Tourism and Culture, Government of Yukon.

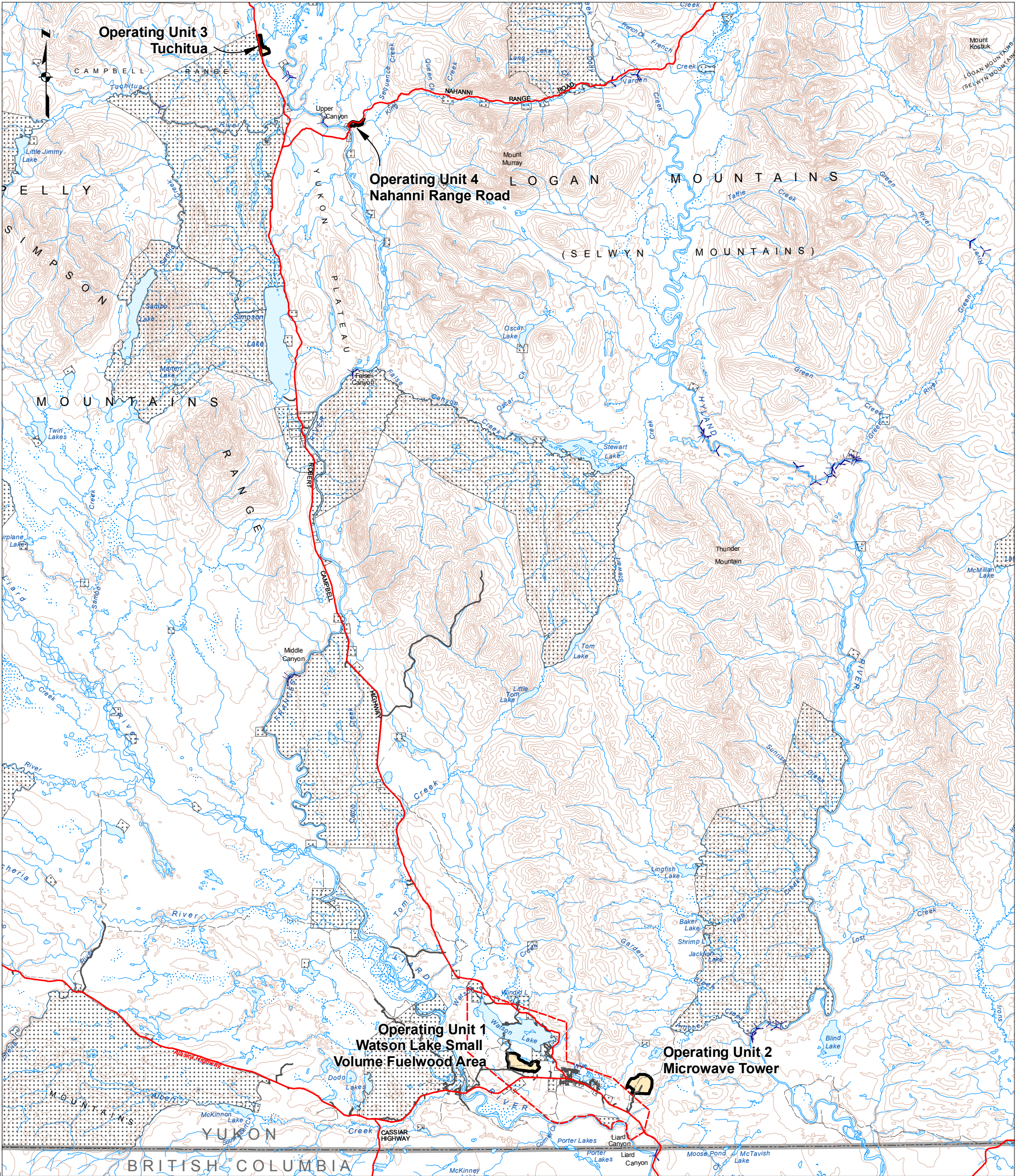
10 – Thomas, C. 2010. Heritage Resources Overview Assessment Report for Nahanni Range Road Fuel Wood Area. Cultural Services Branch, Department of Tourism and Culture, Government of Yukon.



## **APPENDIX A**

### **1:400,000 Overview Map**





Project Specific Features

- Operating Unit
- Municipal Boundary
- Unsurveyed Interim Protected FN Lands

Topographic Features

- 100 m contour lines
- Watercourse
- Highway
- Water disturbance
- Primary Roads
- Dam
- Local Roads
- Dyke/levee
- Resource / Recreation
- Wetland
- Alley / Service Lane
- Waterbody
- Winter Access

Contact: Forest Management Branch  
Phone: 456-3999  
Date: January 13, 2011  
Projection: NAD 1983 UTM Zone 9

DRAFT

Digital Data Sources

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

Original map design by EDI Environmental Dynamics Inc. Fall 2009.

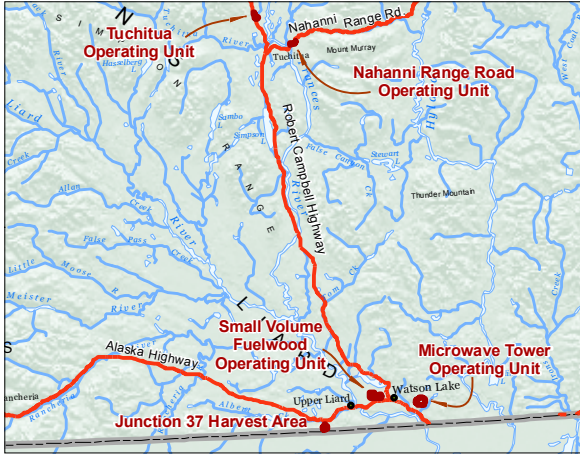
Digital Elevation Models (30 metre and 90 metre) provided by Yukon Government Geomatics spatial data warehouse - [www.geomatics.yukon.ca](http://www.geomatics.yukon.ca).

Map scale 1:400,000 when printing on 11"x17" paper.

Appendix A

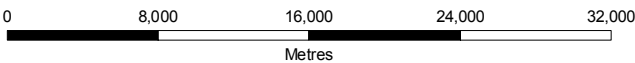
Overview

Timber Harvest Plan Area  
Watson Lake



**Yukon**  
Energy, Mines and Resources

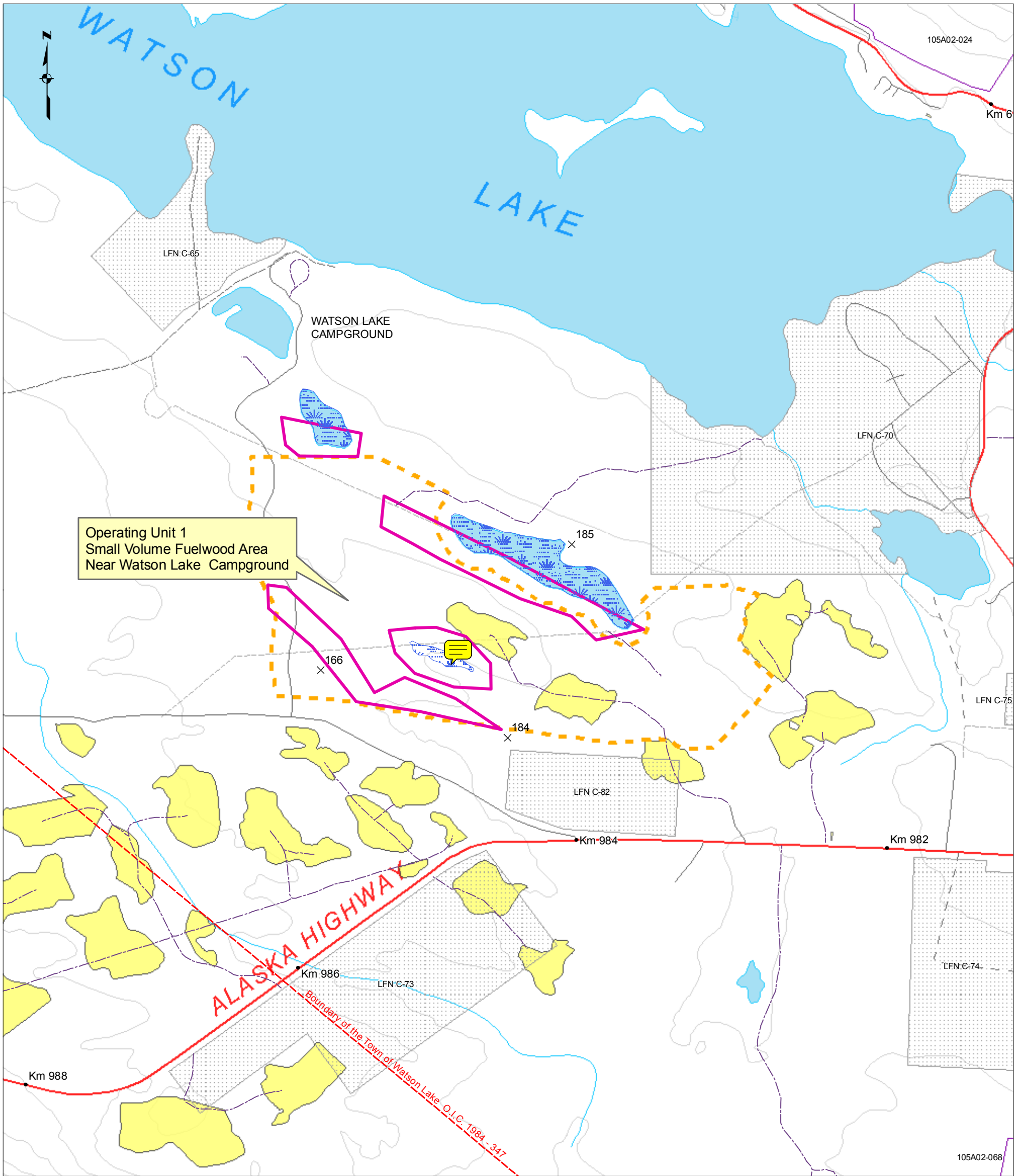
**Forest  
Management  
Branch  
Yukon Territory**





## **APPENDIX B**

**1:25,000 Operating Unit 1 – Watson Lake Small Volume  
Fuelwood Area**



J:\Operations\Forest Practices\Timber\_Harvest\_Project\Kaska\Watson Lake\Map\Watson\_Lake\_Campground\_THP

**Project Specific Features**

- .....Existing Access Routes
- .....Proposed Access Route
- × Permanent Sampling Plots
- .....Operating Unit
- Opening from Historic Logging
- Heritage Resource Potential

**Administrative Features**

- .....Agriculture Tenure
- .....Land Disposition
- .....Land Applications
- .....Unsurveyed Interim Protected FN Lands
- Municipal Boundary



Contact:  
Phone:  
Date:  
Projection:

Forest Management Branch  
456-3999  
January 14, 2011  
NAD 1983 UTM Zone 9

**DRAFT**

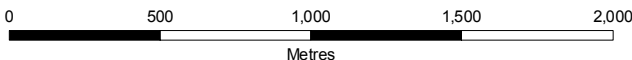
**Digital Data Sources**

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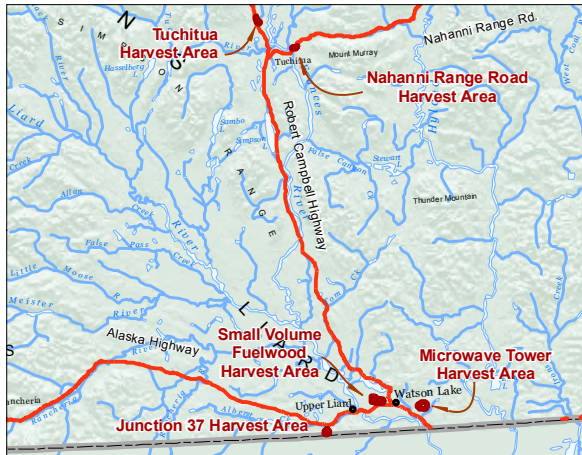
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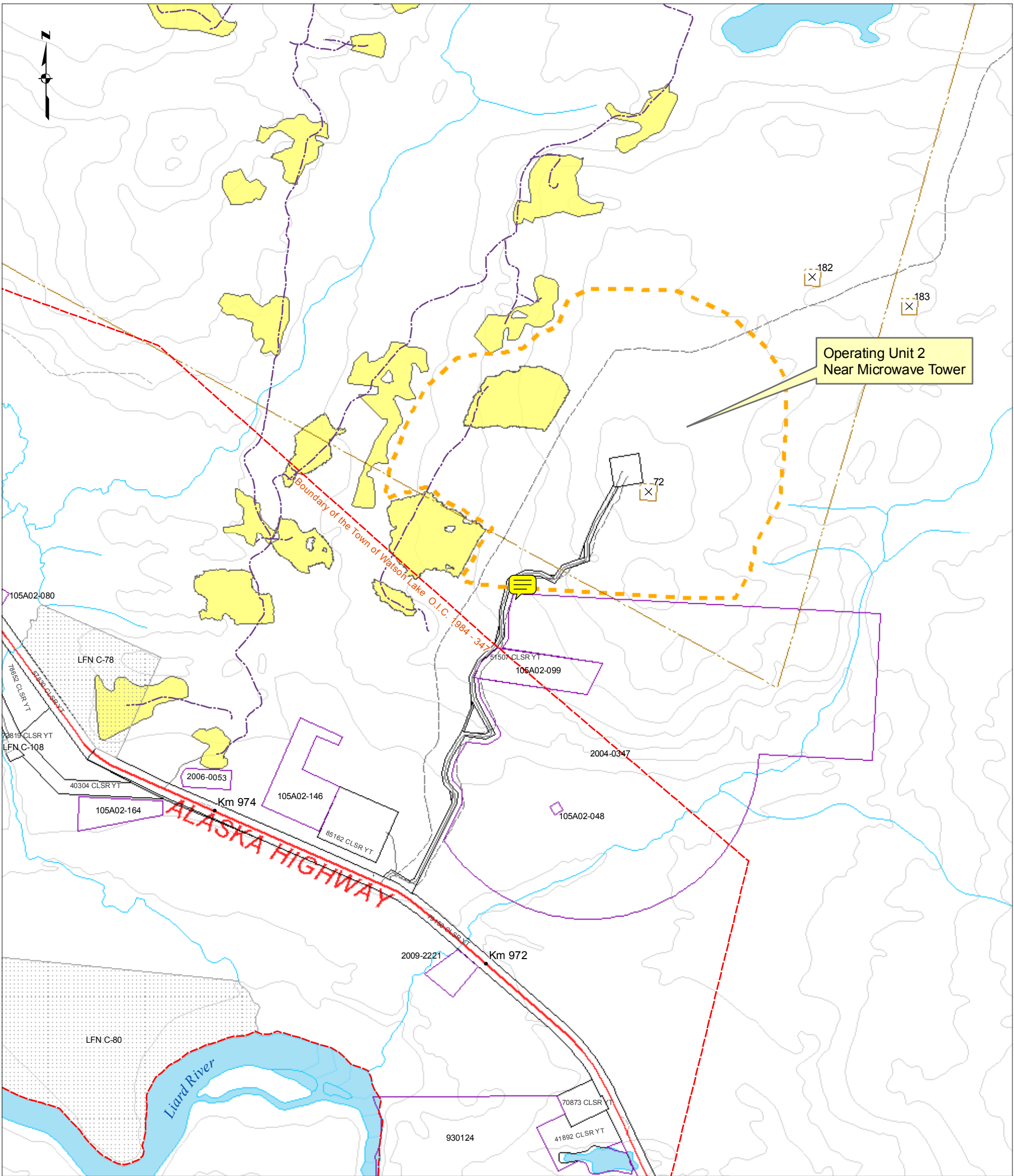
**Appendix B**

**Operating Unit 1: Watson Lake  
Small Volume Fuelwood Area  
Timber Harvest Plan Area  
Watson Lake**



## **APPENDIX C**

**1:25,000 Operating Unit 2 – Microwave Tower**



**Project Specific Features**

- × Permanent Sample Plot
- ..... Existing Access Routes
- ..... Proposed Access Route
- ..... Operating Unit
- ..... Opening from Historic Logging

**Administrative Features**

- First Nation Settlement Lands
- ..... Category A
- ..... Category B
- ..... Fee Simple
- ..... Unserved Interim Protected FN Lands
- ..... Surveyed Parcel
- ..... Agriculture Tenure
- ..... Land Disposition
- Land Applications
- Municipal Boundary

Contact: Forest Management Branch  
Phone: 456-3999  
Date: January 14, 2011  
Projection: NAD 1983 UTM Zone 9

**DRAFT**

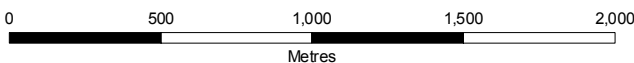
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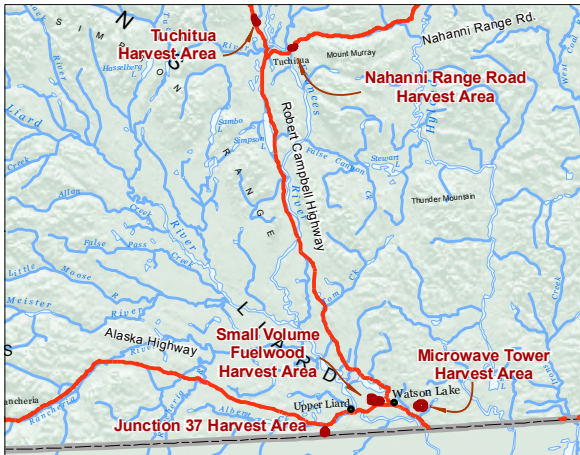
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**Appendix C**

**Operating Unit 2: Microwave Tower**

**Timber Harvest Plan Area  
Watson Lake**



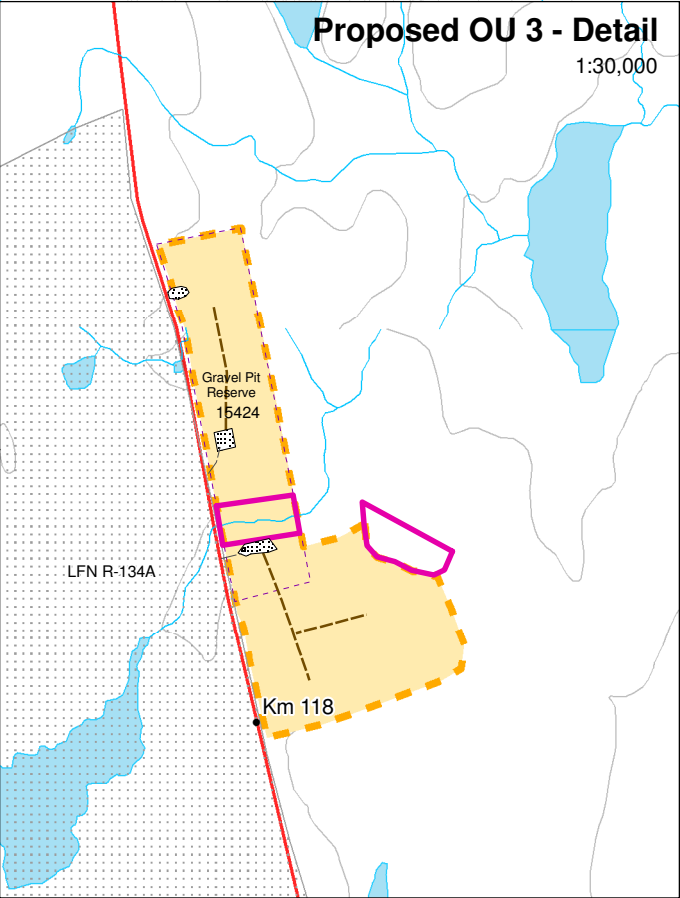
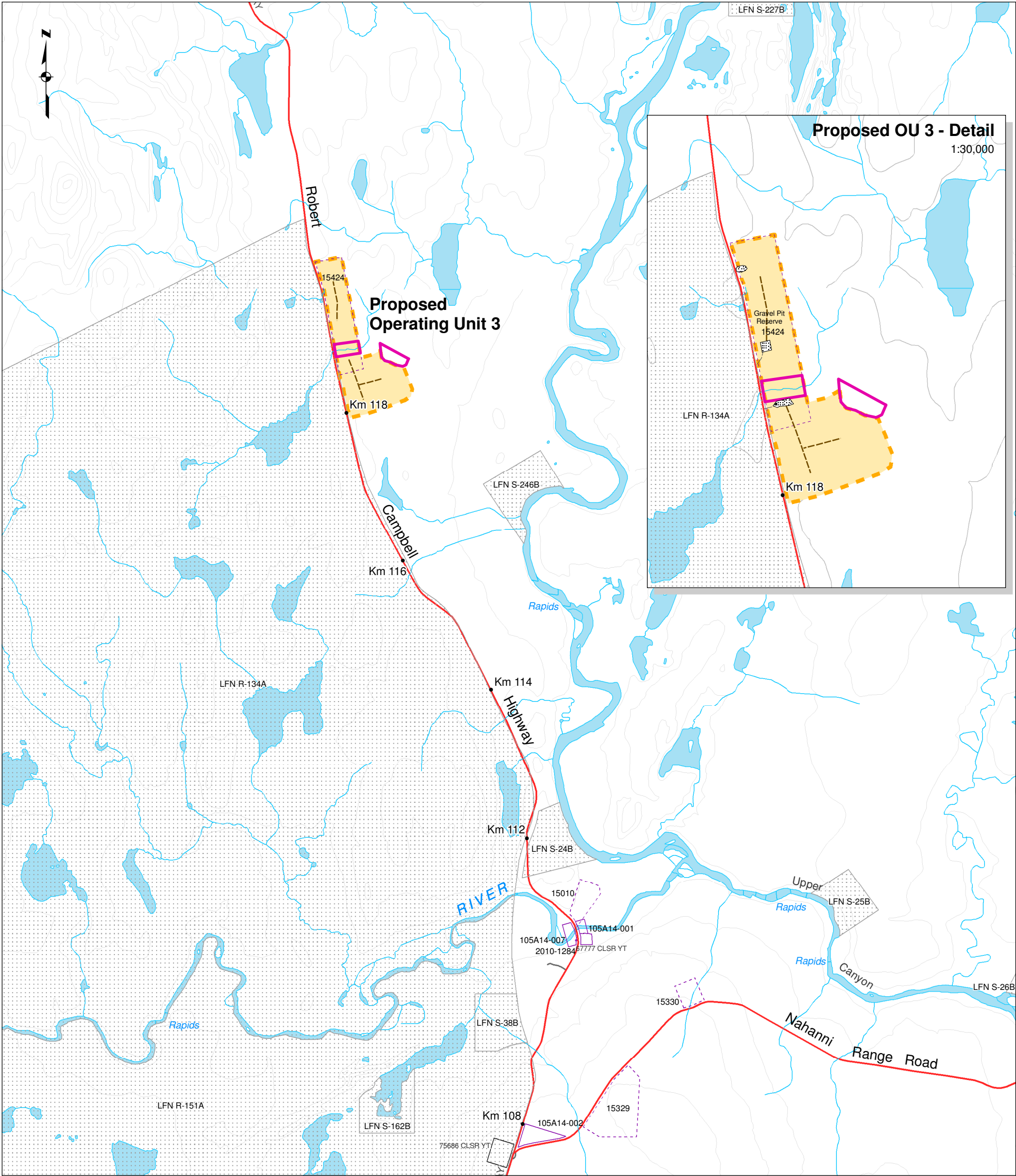
**Yukon**  
Energy, Mines and Resources

**Forest  
Management  
Branch  
Yukon Territory**

## **APPENDIX D**

**1:50,000 Operating Unit 3 – Tuchitua**





### Project Specific Features

- .....Existing Access Routes
- .....Proposed Access Route

### Administrative Features

First Nation Settlement Lands

- .....Category A
- .....Category B
- .....Fee Simple
- .....Unsurveyed Interim Protected FN Lands

### Operating Unit 3: Tuchtutia

Timber Harvest Plan Area  
Watson Lake

### Appendix D

#### Operating Unit 3: Tuchtutia

##### Timber Harvest Plan Area Watson Lake

Contact:  
Phone: 456-3999  
Date: January 14, 2011  
Projection: NAD 1983 UTM Zone 9

Forest Management Branch

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**Yukon**  
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**Forest Management Branch**  
**Yukon Territory**

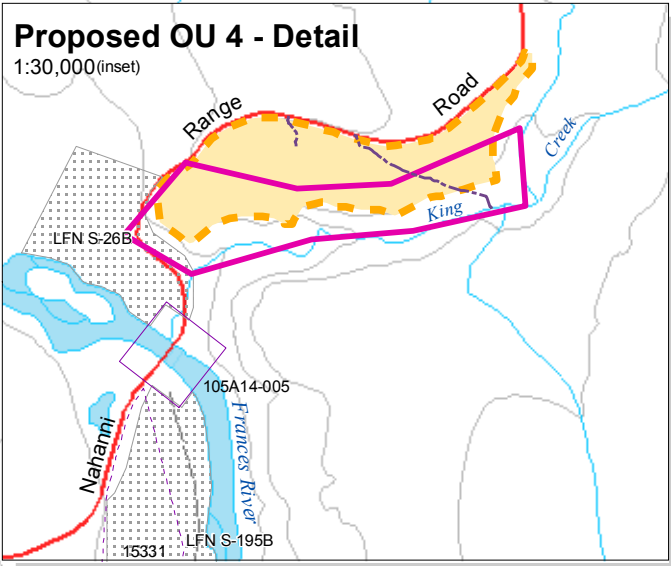
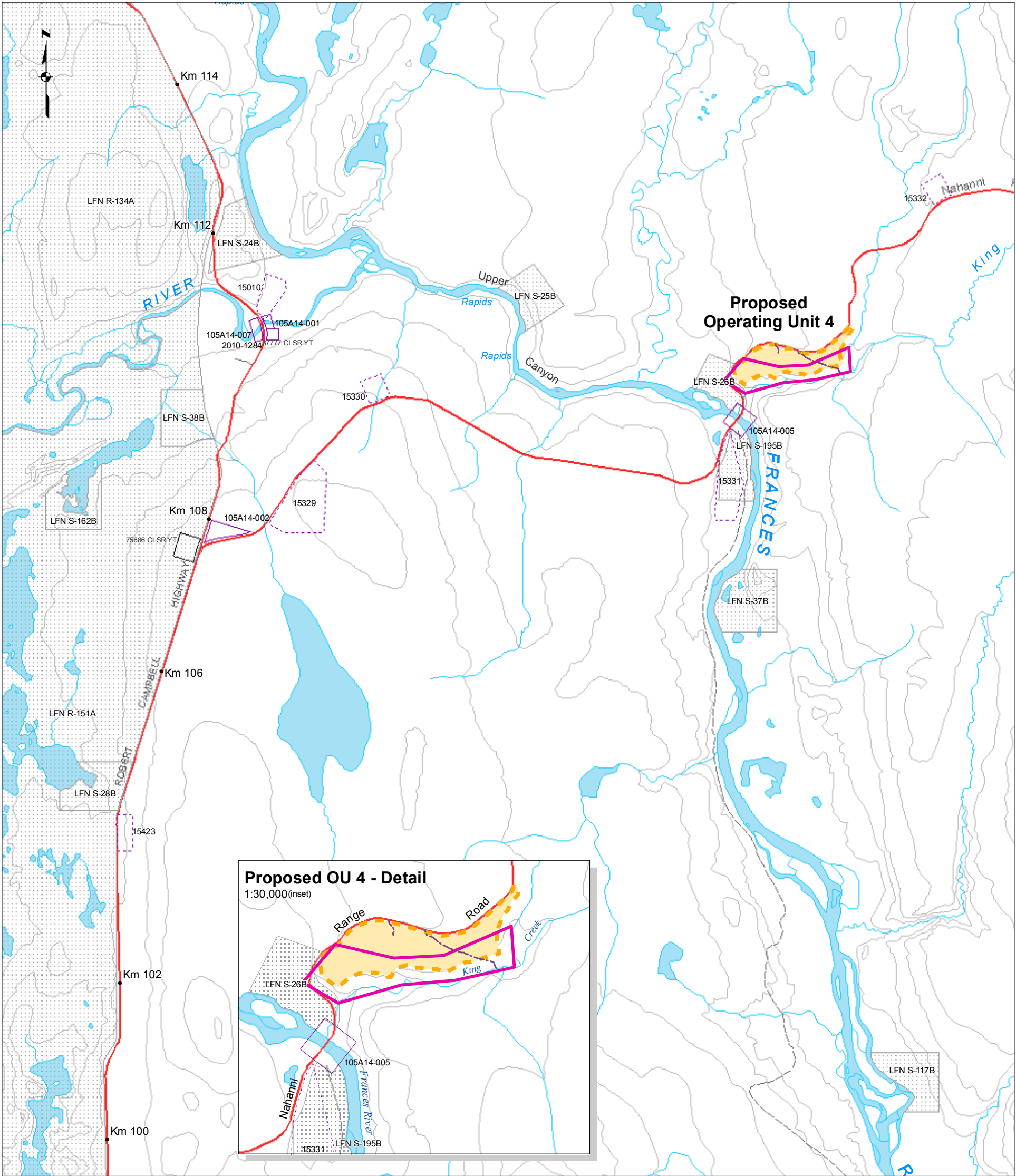
0 1,000 2,000 3,000 4,000

Metres



## **APPENDIX E**

**1:50,000 Operating Unit 4 – Nahanni Range Road**



**Project Specific Features**

- .....Existing Access Routes
- .....Proposed Access Route
- .....Operating Unit
- .....Heritage Resource Potential

**Administrative Features**

- First Nation Settlement Lands
- .....Category A
- .....Category B
- .....Fee Simple
- .....Unsurveyed Interim Protected FN Lands
- .....Surveyed Parcel
- .....Agriculture Tenure
- .....Land Disposition
- .....Land Applications

Contact: Forest Management Branch  
Phone: 456-3999  
Date: January 14, 2011  
Projection: NAD 1983 UTM Zone 9

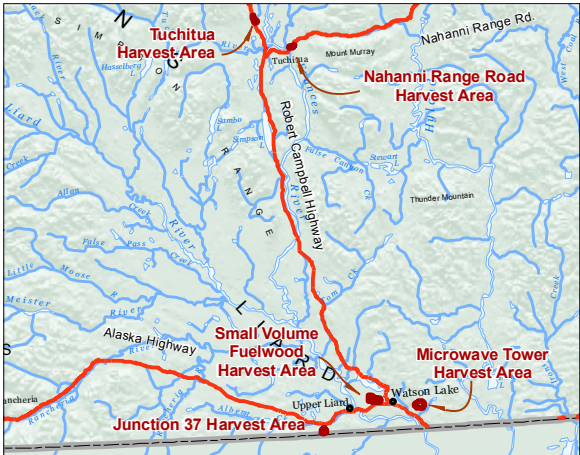
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**Appendix E**

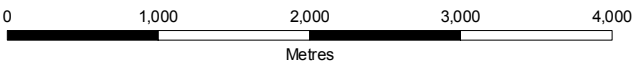
**Operating Unit 4: Nahanni Range Road**

**Timber Harvest Plan Area  
Watson Lake**



**Yukon**  
Energy, Mines and Resources

**Forest  
Management  
Branch  
Yukon Territory**



**Appendix F:**  
**Representation Summary**

Name of Plan	Watson Lake Fuelwood Timber Harvest Plan
Prepared Date	June, 2011
Prepared by	Greg Cowman, Area Forester
Review Period	May 13 to June 13, 2011

Comments were received from:

- YG, Department of Environment

The following table contains a summary of the comments received, with responses to the comment and how the comment has been addressed.

# **Watson Lake Fuelwood Timber Harvest Plan**

June 2011

Topic	Name/ Organization	Comment	Consultation Comment Response	How comment/s have been addressed.
General				
Site Photo Addition	Dept of Environment	If there are photos of the proposed blocks showing stand composition these would make a nice addition to the plan.	Agree, although pictures add significantly to size of electronic files, which can limit or hinder transferability. FMB prefers to limit photo content in plans to minimize file size.	No, pictures added.
Specific				
Section 4.0 – Access Management	Dept of Environment	Clarification that road construction, maintenance and decommissioning will follow Forest Resources Act standards.	Whether stated or not, Forest Resource Act standards must be followed.	Wording changed in Section 4 for clarity.
Operating Unit #1 – Watson Lake Fuelwood Area	Dept of Environment	A rare plant species ( <i>Carex lapponica</i> – Lapland sedge) identified in the Environment Conservation Data Centre database has been found in the general vicinity of the THP. This species inhabits wetlands and sedge meadows. It is likely that the plant is distributed within the THP area.	Buffering of wetland areas within the Operating Unit will eliminate disturbance and impact of harvesting on this rare plant species.	Comment noted in Section 2.1.2 Biodiversity.
Operating Unit #2 - Tower	Dept of Environment	No concerns		
Operating Unit #3 - Tuchitua	Dept of Environment	No concerns		
Operating Unit #2 – Nahanni range Road	Dept of Environment	No concerns		