



Northland Forest Products Ltd.  
and  
Alberta Pacific Forest Industries Inc.

## Forest Harvest Plan

Compartment: "Pierre River – A15-D"

Planning Unit: "098124"

FMA 9100029 & CTLA150004

**Forest Harvest Plan – 098124(20-25)**

Date Submitted: **2020/10/29**

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# Forest Harvest Plan

**PU098124**

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Block Maps

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# Report

## 1.0 Introduction

Alberta – Pacific Forest Industries Inc. (Alberta – Pacific) and Northland Forest Products Ltd. (Northland) have prepared a Forest Harvest Plan (FHP) for the harvest of deciduous and coniferous stands within Planning Unit 098124.

Planning Unit 098124 is comprised of 21 proposed coniferous cutblocks and 4 proposed deciduous cutblocks with a total area of 430.0 ha, within Forest Management Unit (FMU) A15.

The companies have identified a potential camp locations for logging operations within this Planning Unit. The temporary camp is in blocks NB09812402914

(Lat 6370585.2638, Long 450946.9329), with an area of 0.5 hectares and can be viewed in the FHP Overview Map. The campsite will be reclaimed as indicated in Section 11.3.4.4 of the Northeast Alberta Timber Harvesting Planning and Operating Ground Rules (OGRs).

Copies of this Forest Harvest Plan are available on the Alberta – Pacific website, at [www.alpac.ca](http://www.alpac.ca)

## 2.0 General Planning Unit Information /Design Considerations

This FHP has been validated by Registered Forestry Professionals employed by Alberta-Pacific and Northland.

This FHP includes maps and reports that clearly show and document the planned harvest area boundaries, roads and water crossings within the Planning Unit.

This plan is being submitted for appraisal, for a 5-year FHP approval under the 2020-21 Alberta-Pacific and Northland Annual Operating Plan (AOP).

### 2.1 Operating Ground Rules

Planning Unit 098124 has been designed in accordance with the Northeast Alberta Operating Ground Rules (OGRs), revised 2018. Alberta – Pacific and Northland are requesting certain deviations from the OGRs, due to field verified factors. These requests, along with corresponding information are listed under the section *OGR Deviations*.

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### **3.0 Maps**

Individual block maps have been included in the submission package, outlining the information pertinent to these blocks. A Planning Unit overview map and a Spatial Harvest Sequence (SHS) Planning Unit map have been included in the submission package. These maps can be viewed in the *Appendices* of this document.

### **4.0 Block Information**

A *Block Summary Table* has been included in Appendix A outlining the expected volumes of the area.

#### **4.1 Utilization**

Alberta – Pacific and Northland adheres to the 15/10 utilization standard for coniferous and deciduous trees, this includes the incidental.

#### **4.2 Field Verification**

The proposed blocks were ground verified by a field layout team. The layout team provided planning support to assess timber quality, sensitive and historical sites, operability of the harvest area, and classification of water courses within the Planning Unit boundary. Where applicable, the variance findings of the layout team have been noted in the corresponding section of this report.

#### **4.3 Understory Assessment**

For this Planning Unit there was very little understory observed during the block and road layout process. If white spruce understory is encountered within deciduous blocks during operations it will be protected utilizing the avoidance method.

#### **4.4 Structure Retention**

Alberta – Pacific will leave an average of 5% merchantable volume as structure retention throughout the FMU and Northland will leave an average of 3%. This retention will be left in the following methods:

- Laid out patches
- Mapped patches (planned with GIS desktop)
- Individual trees
- Small clumps left at the operators' discretion

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#### 4.5 Debris Management

Debris management of the Planning Unit will be accomplished in a manner consistent with Section 7.3 of the OGRs.

#### **5.0 Watercourse Protection**

Where harvest blocks are in proximity to any potential watercourses, the field layout team conducted field assessments utilizing the methodology and classification standards outlined in Section 6.0 of the OGRs. Any confirmed watercourses have been buffered in accordance with the OGRs Section 6.0, Table 2.

Any deviations from the OGRs in relation to the watercourse buffers are noted in this report; please refer to the *OGR Deviations* section of the report for further information. The list of watercourse crossings can be found in Appendix B – *Watercourse Crossing Summary Table*.

#### **6.0 Road Information**

Overview maps have been attached showing roads in accordance with Section 3.4.6. of the OGRs; all spatial data requirements have also been included with this submission.

Roads will be constructed, maintained, and reclaimed in a manner consistent with Section 11.3 of the OGRs.

When new access is necessary, reclamation processes will adhere to Section 11.3.4 of the OGRs. To enable for silviculture activities, all-terrain vehicle (ATV) access may be left throughout the harvest area. The list of roads can be found in Appendix C – *Road Attributes Table*.

#### **7.0 Land Use Information**

A search of the Geographic Land Information Management Planning System (GLIMPS) and Digital Integrated Dispositions (DIDs) yielded active dispositions within the FHP harvest area. Any necessary agreements with the disposition holder will be in place prior to the commencement of harvest operations. None of the dispositions within the FHP harvest area will restrict harvest operations in the FHP.

The FHP design incorporates pipeline crossings for temporary class 4 roads. The agreements will be in place prior to the construction of these crossing. Below is a land use table with the various disposition holders in the area.

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### Land Use Summary Table

Disposition Number	Disposition Holder	Disposition Type
LOC070539	BP CANADA ENERGY GROUP ULC	LOC
LOC942561	CANADIAN NATURAL RESOURCES LIMITED	LOC

## 8.0 Integration with Other Forest Users

### 8.1 Integration with Other Harvest Operators

This is an integrated plan between the FMA holder and CTL holder; both companies have validated the plan.

### 8.2 Registered Fur Management Areas (RFMAs)

There are 3 RFMAs within the FHP who will be affected by operations. Notification letters were sent to the respective RFMA holders, any requests from any RFMA holder have been considered, and, where possible, the harvest design has been planned to accommodate the request.

### Registered Fur Management Areas Table

RFMA ID	Notification Method	Contact Method
2016	Letter	Mail
94	Letter	Mail
850	Letter	Mail

### 8.3 Wildlife Management Unit(s) (WMU)

Planning Unit 098124 is location within WMU 531. The Guides and Outfitters operating within this unit have been sent notification, via registered mail, on the FHP design, as well as a timeline for the commencement of harvest operations. Any requests from Guides and Outfitters have been considered, and, where possible, the harvest design has been planned to accommodate the request.

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## 8.4 Indigenous Groups

During the General Development Plan (GDP) process, Alberta – Pacific and Northland completes a consultation with indigenous groups every year. There have not been any issues identified for the Planning Unit 098124 FHP submission.

## 8.5 Other Forest Users

There are no other forest user groups operating within the Planning Unit area.

## 8.6 Forest Aesthetics

As outlined in Section 5.5. of the OGRs, Alberta – Pacific and Northland follow the objective to mitigate the impact of timber operations on the visual quality of the forest landscape. This FHP is not adjacent to any park or recreational areas, and no other aesthetics concerns have been noted to date by other forest users. Alberta – Pacific and Northland will strategically locate retention areas adjacent to Class I, II, and III roads, minimizing line of sight where possible.

# **9.0 Species and Areas of Concern**

## 9.1 Woodland Caribou

None of the planned cutblocks in this FHP are within mapped Caribou Ranges.

## 9.2 Key Wildlife and Biodiversity Zone (KWBZ)

Planning Unit 098124 is located within a Key Wildlife and Biodiversity Zone and will adhere to section 7.7.5 of the OGRs. The following table is a list of blocks that are within the KWBZ.

**Key Wildlife and Biodiversity Zone Table**

<b><i>Source ID</i></b>	<b><i>Opening Number</i></b>	<b><i>Block Area</i></b>
FB09812411701	4120981170	23.6
FB09812412041	4120981204	6.9
FB09812412561	4120981256	8.3
FB09812412974	4120981297	5.0
NB09812401324	4120980132	22.1
NB09812401474	4120980147	20.0



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NB09812401634	4120980163	17.7
NB09812401864	4120980186	12.9
NB09812401924	4120980192	12.2
NB09812402144	4120980214	69.9
NB09812402534	4120980253	49.6
NB09812402764	4120980276	8.0
NB09812402914	4120980291	39.5
NB09812403274	4120980327	20.0
NB09812403674	4120980367	4.8
NB09812403974	4120980397	9.8
NB09812404214	4120980421	33.5
NB09812404644	4120980464	19.3
NB09812404884	4120980488	15.6
NB09812411514	4120981151	4.3
NB09812411914	4120981191	8.5
NB09812412244	4120981224	7.0
NB09812412264	4120981226	2.2
NB09812412544	4120981254	6.5
NB09812412664	4120981266	2.7

### 9.3 Other Species

All known sensitive wildlife sites have been buffered in accordance with Section 7.7.5.2 of the OGRs.

### 9.4 Sensitive Sites

A review of the block design and landscape of the FHP was completed by professional archaeologists. Any sites identified as being of high or moderate historical significance (historical resource sites), have been removed from the harvest design.

Upon completion of cutblock and road layout, a second review of the harvest blocks, and temporary class 4 roads is completed to identify potential conflicts, and to determine if any further changes are required to the Planning Unit.

There were no signs of rare plants, or diseases identified, including signs of terrestrial lichen.

If any sites are identified post submission, Alberta – Pacific and Northland will take the appropriate action to protect these sites.

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## 9.5 Forest Health

During the layout stage and field verification stage, a team evaluated the current state of the forest health in the FHP area and found varying levels of blowdown damage. It is estimated that 20% volume loss on average can be expected within this Planning Unit.

### **10.0 SHS Information / Variance Summary**

Variances from the Spatial Harvest Sequence (SHS) within the Planning Unit boundary are shown in Appendix D – *SHS Variance Summary Table*.

### **11.0 Silviculture Information**

No watercourse crossings will be left in for silviculture.

### **12.0 OGR Deviations**

#### 12.1 Road Deviations

The first of the following tables outlines the blocks which are greater than 7 hectares, with potentially more than 5% road disturbance. The second table goes into detail where the roads go within 100m of a large permanent creek due to operational constraints.

### Road Percent Deviations Table

Source ID	Opening Number	Block Area (ha)	Harvest Season (Frozen/ Non-Frozen)	Road Percentage	Road Percentage Reason
FB09812412561	4120981256	8.3	Frozen	10.5	Narrow/Irregular block shape
NB09812401864	4120980186	12.9	Frozen	5.8	Narrow/Irregular block shape
NB09812401924	4120980192	12.2	Frozen	6.1	Required due to land use
NB09812403274	4120980327	20.0	Frozen	5.2	Access to other blocks

### Roads, Landings, and Bared Areas Deviations Table

Source ID	Harvest Season (Frozen/ Non-Frozen)	Buffer	Reason
NB09812412264	Frozen	Large Perm	Main block road comes within 100m of creek for 99m due to operational constraints.

### 13.0 Validation by Registered Forest Practitioner

Plan prepared and submitted on behalf of Alberta-Pacific and Northland.



**Dennis Froese, RPF**

**ALBERTA-PACIFIC FOREST INDUSTRIES INC.**



**Darcy Sulz, RPF**

**NORTHLAND FOREST PRODUCTS LTD**

Appendix A: Block Summary Table

Coniferous Blocks - NFPL							
Source ID	Opening Number	Harvest Season (Frozen/ Non-Frozen)	Area (ha)	Conifer Volume (m <sup>3</sup> )	Aris Code	Incidental Deciduous Volume (m <sup>3</sup> )	Total Volume (m <sup>3</sup> )
NB09812401324	4120980132	Frozen	22.1	4,602	Sw	1,368	5,970
NB09812401474	4120980147	Frozen	20.0	2,894	AwS	2,905	5,799
NB09812401634	4120980163	Frozen	17.7	3,605	Sw	1,176	4,780
NB09812401864	4120980186	Frozen	12.9	2,534	SAw	845	3,379
NB09812401924	4120980192	Frozen	12.2	2,425	Sw	950	3,374
NB09812402144	4120980214	Frozen	69.9	10,391	AwS	8,013	18,403
NB09812402534	4120980253	Frozen	49.6	9,457	SAw	3,648	13,105
NB09812402764	4120980276	Frozen	8.0	937	AwS	1,435	2,372
NB09812402914	4120980291	Frozen	39.5	5,380	AwS	6,189	11,569
NB09812403274	4120980327	Frozen	20.0	3,929	Sw	1,597	5,526
NB09812403674	4120980367	Frozen	4.8	1,089	Sw	222	1,311
NB09812403974	4120980397	Frozen	9.8	2,192	Sw	446	2,637
NB09812404214	4120980421	Frozen	33.5	5,813	SAw	3,766	9,579
NB09812404644	4120980464	Frozen	19.3	3,838	SAw	1,410	5,249
NB09812404884	4120980488	Frozen	15.6	3,126	SAw	1,234	4,360
NB09812411514	4120981151	Frozen	4.3	744	SAw	427	1,171
NB09812411914	4120981191	Frozen	8.5	1,632	SAw	651	2,282
NB09812412244	4120981224	Frozen	7.0	672	AwS	1,027	1,698
NB09812412264	4120981226	Frozen	2.2	363	Sw	193	555
NB09812412544	4120981254	Frozen	6.5	1,049	SAw	323	1,372
NB09812412664	4120981266	Frozen	2.7	532	Sw	171	704
		<b>Total</b>	<b>386.1</b>	<b>67,202</b>		<b>37,996</b>	<b>105,198</b>

Appendix A: Block Summary Table

Deciduous Blocks - ALPac						
Source ID	Opening Number	Harvest Season (Frozen/Non-Frozen)	Area (ha)	Deciduous Volume (m <sup>3</sup> )	Incidental Conifer Volume (m <sup>3</sup> )	Total Volume (m <sup>3</sup> )
FB09812411701	4120981170	Frozen	23.6	5,435	569	6,004
FB09812412041	4120981204	Frozen	6.9	1,446	298	1,745
FB09812412561	4120981256	Frozen	8.3	1,725	222	1,947
FB09812412974	4120981297	Frozen	5.0	1,198	228	1,426
		<b>Total</b>	<b>43.9</b>	<b>9,805</b>	<b>1,317</b>	<b>11,122</b>

**Appendix B: Watercourse Crossing Summary Table**

<b>Road ID</b>	<b>Road Crossing Number</b>	<b>Stream Class</b>
CNRL0147	0157	Intermittent
CNRL0192	0601	Ephemeral
CNRL0214	0214	Small Perm
	0367	Small Perm
	0372	Ephemeral
CNRL0327	0328	Ephemeral
CNRL0397	0386	Small Perm
CNRL0421	0300	Intermittent
	0301	Intermittent
	0310	Intermittent
	0312	Transitional
	0314	Transitional
	0315	Transitional
CNRL0464	0465	Intermittent
	0466	Ephemeral
	0477	Intermittent
CNRL0488	0487	Intermittent
CNRL1256	1234	Ephemeral
		Intermittent
	1245	Intermittent
CNRL2000	2689	Beaver Pond
LOC070539	0148	Intermittent
	0149	Intermittent
	0345	Small Perm
	0346	Ephemeral
	0440	Ephemeral
	0472	Intermittent
LOC942561	1244	Ephemeral

**Appendix C: Road Attributes Table**

Road ID	Road Classification	Haul Season	FCODE	Class	Length, m
DLO961526	Temp	Frozen	Winter Road	4	333
LOC070539	Temp	Frozen	Winter Road	4	6,877
LOC942561	Temp	Frozen	Winter Road	4	2,644
CNRL0132	Temp	Frozen	Winter Road	4	1,218
CNRL0147	Temp	Frozen	Winter Road	4	923
CNRL0163	Temp	Frozen	Winter Road	4	858
CNRL0186	Temp	Frozen	Winter Road	4	757
CNRL0192	Temp	Frozen	Winter Road	4	842
CNRL0214	Temp	Frozen	Winter Road	4	2,144
CNRL0253	Temp	Frozen	Winter Road	4	732
CNRL0276	Temp	Frozen	Winter Road	4	468
CNRL0291	Temp	Frozen	Winter Road	4	773
CNRL0327	Temp	Frozen	Winter Road	4	1,864
CNRL0367	Temp	Frozen	Winter Road	4	210
CNRL0397	Temp	Frozen	Winter Road	4	521
CNRL0421	Temp	Frozen	Winter Road	4	2,456
CNRL0464	Temp	Frozen	Winter Road	4	958
CNRL0488	Temp	Frozen	Winter Road	4	629
CNRL1170	Temp	Frozen	Winter Road	4	1,106
CNRL1191	Temp	Frozen	Winter Road	4	610
CNRL1224	Temp	Frozen	Winter Road	4	126
CNRL1226	Temp	Frozen	Winter Road	4	456
CNRL1254	Temp	Frozen	Winter Road	4	447
CNRL1256	Temp	Frozen	Winter Road	4	692
CNRL1266	Temp	Frozen	Winter Road	4	279
CNRL1297	Temp	Frozen	Winter Road	4	397
				Total	29,319