



20-Oct-21

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# Forest Harvest Plan

PU071104b



**ALBERTA  
PACIFIC**  
FOREST INDUSTRIES INC



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## **Appendices**

**Appendix 1- FHP Block Maps**

**Appendix 2- FHP Overview Maps**

**Appendix 3- Spatial Harvest Sequence Summary Tables**

**Appendix 4- Spatial Harvest Sequence Summary Map**

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# Report

## **1.0 Introduction**

Alberta – Pacific Forest Industries Inc. (Alberta–Pacific) has prepared a Forest Harvest Plan (FHP) for the harvest of stands within Planning Unit 071104b.

The Planning Unit is located within Forest Management Unit (FMU) L01.

Copies of this Forest Harvest Plan will be 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 a Registered Forestry Professional from Alberta-Pacific.

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 2021-2022 Alberta-Pacific Annual Operating Plan (AOP).

### 2.1 Operating Ground Rules

This Planning Unit is designed in accordance with the Northeast Alberta Operating Ground Rules (OGRs). Alberta–Pacific is requesting certain deviations from the OGRs, due to field verified factors. These requests, along with corresponding information are listed under the section “OGR Deviations”.

## **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 below outlining the expected volumes of the harvest area.

### 4.1 Utilization

Deciduous and coniferous stands will adhere to the 15/10 utilization standard.

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## 4.2 Field verification

Field verification was conducted to assess the timber quality, potential sensitive and historical sites, operability of the harvest area, and classification of water courses within the Planning Unit boundary. Where applicable, the findings of the layout team have been noted in the corresponding section of this report.

## 4.3 Understory Assessment

White Spruce understory within deciduous landbase will be protected utilizing high effort understory protection in stands identified as greater than 600 stems/ha by the Alberta Vegetation Inventory (AVI), as well as any potential areas found to have understory present that is not identified by the AVI. Any deciduous blocks found to have understory amounting to between 400 stems/ha and 600 stems/ha will be protected utilizing the avoidance method.

Blocks requiring understory are noted within the *Block Summary Table*.

## Block Summary Tables

(Values rounded to whole numbers)

**Table 1: Block Summary Tables**

This table provides a brief description of the proposed harvest blocks within the Planning Unit.

Deciduous Blocks							
SOURCEID	OPENINGNUM	Harvest Season	Detailed Block Plan Reason	Area (ha)	Deciduous Volume (m <sup>3</sup> )	Incidental Conifer Volume (m <sup>3</sup> )	Total Volume (m <sup>3</sup> )
FC07010433281	4100703328	Frozen	NONE	3	422	80	502
FC07109406781	4090710678	Frozen	NONE	27	3,409	3,159	6,568
FC07109407291	4090710729	Frozen	NONE	8	1,771	583	2,354
FC07109409681	4090710968	Frozen	NONE	8	1,976	213	2,189
FC07109409941	4090710994	Frozen	NONE	4	978	123	1,101
FC07110401001	4100710100	Frozen	NONE	9	1,008	1,362	2,370
FC07110403551	4100710355	Frozen	NONE	3	543	161	704
FC07110403981	4100710398	Frozen	NONE	8	1,204	470	1,674
FC07110404631	4100710463	Frozen	NONE	5	898	281	1,179
<b>Total</b>				<b>75</b>	<b>12,209</b>	<b>6,432</b>	<b>18,641</b>

Any blocks found to have understory amounting to between 400 stems/ha and 600 stems/ha will be protected utilizing the avoidance method.

Coniferous Blocks							
SOURCEID	OPENINGNUM	Harvest Season	Detailed Block Plan Reason	Area (ha)	Conifer Volume (m <sup>3</sup> )	Incidental Decid Volume (m <sup>3</sup> )	Total Volume (m <sup>3</sup> )
FC07010432691	4100703269	Frozen	NONE	11	2,002	882	2,884
FC07109405051	4090710505	Frozen	NONE	16	3,301	742	4,043
FC07109405491	4090710549	Frozen	NONE	12	2,532	546	3,078
FC07109407141	4090710714	Frozen	NONE	3	552	173	725
FC07109407461	4090710746	Frozen	NONE	76	11,737	8,442	20,179
FC07109408541	4090710854	Frozen	NONE	32	5,578	2,974	8,552
FC07109408901	4090710890	Frozen	NONE	23	3,144	2,638	5,782
FC07109409151	4090710915	Frozen	NONE	18	3,223	1,533	4,756
FC07109409351	4090710935	Frozen	NONE	17	2,770	1,536	4,306
FC07110401611	4100710161	Frozen	NONE	6	809	572	1,381
FC07110402621	4100710262	Frozen	NONE	27	5,092	1,816	6,908
FC07110402971	4100710297	Frozen	NONE	44	7,756	3,636	11,392
FC07110403201	4100710320	Frozen	NONE	2	333	78	411
FC07110403951	4100710395	Frozen	NONE	6	948	561	1,509
FC07110412801	4100711280	Frozen	NONE	10	1,491	880	2,371
<b>Total</b>				<b>303</b>	<b>51,268</b>	<b>27,009</b>	<b>78,277</b>

#### 4.4 Structure Retention

For Alberta-Pacific and Commercial Timber Permits, an average of 5% representative of all harvested area at the FMU level by stewardship reporting period will be retained. A harvest area may have zero structure but the FMU average shall be 5%. Non merchantable structure is not to be tracked as part of the 5%. Structure retention will be left in the following methods:

- Laid out patches
- Individual trees
- Small clumps left at the operators' discretion

#### 4.5 Debris Management

The Planning Unit is situated within Alberta's Fire Control Zone number 42 as identified by Alberta Agriculture and Forestry (AAF).

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

#### 4.6 Camp Location

The companies have identified a camp location for logging operations within this Planning Unit. 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).

Table 1: Camp Location

SourceID	Opening Number	GRID	LATITUDE	LONGITUDE
FC07010432691	4100703269	0410	55.11121	-111.492
FC07110402971	4100710297	0286	55.1221	-111.412

## **5.0 Watercourse Protection**

During the potential watercourses were identified during preliminary planning using wet areas mapping, LiDAR data, aerial imagery, as well as the available AVI data.

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.

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.



## Watercourse Crossing Summary Table

**Table 3: Watercourse Crossing Summary**

A list of road crossings over field verified watercourses within the Planning Unit.

Road Name	Crossing Number	Watercourse Classification
RC07109407141	1285	Small Permanent
RC07109407461	0744	Intermittent
RC07109407461	0755	Intermittent
RC07109407461	0765	Ephemeral
RC07109408541	0804	Transitional
RC07109409151	0906	Small Permanent
RC07109409351	0934	Small Permanent
RC07109409351	0935	Small Permanent
RC07109409351	0946	Small Permanent
RC07109409351	0955	Ephemeral
RC07109409351	0964	Ephemeral
RC07109409351	0965	Ephemeral
RC07109409681	0978	Ephemeral
RC07110401611	3579	Ephemeral
RC07110402621	0206	Transitional
RC07110402621	0272	Ephemeral
RC07110402971	0276	Small Permanent
RC07110402971	1240	Transitional
RC07110403201	0311	Ephemeral
RC07110403981	0376	Transitional
RC07110403981	0397	Transitional
RC07110404631	0464	Ephemeral
RC07110412801	1282	Intermittent

### 6.0 Road Information

Overview maps have been attached showing roads in accordance with Section 3.4.7. 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, Section 11.3.4.3 and Section 11.3.4.4 of the OGRs. To enable for silviculture activities, all-terrain vehicle (ATV) access may be left throughout the harvest area.

## Road Attributes Table

(Values rounded to whole numbers)

**Table 4: Road Attributes**  
Summary of the proposed inter-block roads of the Planning Unit.

Road Name	Road Class	Haul Season	Length (m)	Crossing Number	Watercourse Classification
RC07010433281	Temp	Frozen	3,457		
RC07109405051	Temp	Frozen	136		
RC07109405491	Temp	Frozen	2,183		
RC07109406781	Temp	Frozen	291		
RC07109407141	Temp	Frozen	1,246	1285	SP
RC07109407291	Temp	Frozen	1,555		
RC07109407461	Temp	Frozen	3,646	0744	I
				0755	I
				0765	E
RC07109408541	Temp	Frozen	1,976	0804	T
RC07109408901	Temp	Frozen	2,104		
RC07109409151	Temp	Frozen	1,397	0906	SP
RC07109409351	Temp	Frozen	4,907	0934	SP
				0935	SP
				0946	SP
				0955	E
				0964	E
				0965	E
RC07109409681	Temp	Frozen	469	0978	E
RC07109409941	Temp	Frozen	561		
RC07110401611	Temp	Frozen	2,249	3579	E
RC07110402621	Temp	Frozen	4,130	0206	T
				0272	E
RC07110402971	Temp	Frozen	3,098	0276	SP
				1240	T
RC07110403201	Temp	Frozen	705	0311	E
RC07110403551	Temp	Frozen	1,356		
RC07110403951	Temp	Frozen	221		
RC07110403981	Temp	Frozen	703	0376	T
				0397	T
RC07110404631	Temp	Frozen	645	0464	E
RC07110412801	Temp	Frozen	1,453	1282	I
<b>Total</b>			<b>38,488</b>		

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## 7.0 Land Use Information

A search of the Geographic Land Information Management and Planning System (GLIMPS) and Digital Integrated Dispositions (DIDs) yielded active dispositions within the FHP. 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 will restrict harvest operations in the FHP.

### Land Use Summary Table

Table 5: Land Use Summary Table  
Active dispositions in the Planning Unit

Disposition Number	Disposition Holder	Disposition Type
LOC851651	IMPERIAL OIL RESOURCES LIMITED	License Of Occupation
LOC810572	CANADIAN NATURAL RESOURCES LIMITED	License Of Occupation
MSL792143		Mineral Surface Lease
LOC791369		License Of Occupation
LOC810573		License Of Occupation

The FHP design incorporates pipeline crossings, for temporary roads. The agreements will be in place prior to the construction of these crossings.

## 8.0 Integration with Other Forest Users

### 8.1 Integration with Other Harvest Operators

This FHP is not an integrated between the FMA and a CTL holder.

### 8.2 Registered Fur Management Areas (RFMAs)

Notification letter were sent to RFMAs within the FHP who will be affected by operations. Any requests from the RFMA holders have been considered, and, where possible, the harvest design has been planned to accommodate the request.

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## Trapper Areas Table

Table 6: Trapper Areas Table

RFMA Number	Notification Method
177	Mail
601	Mail
1543	Mail

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

Planning Unit 071104b is located within WMU 515 . 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. A table with the active Guides and Outfitters in the WMU is included below.

## Guide and Outfitters Table

Table 7: Guide and Outfitters

Outfitter / Guide Name	Date	Contact Method
Dale Mckinnon Alberta Guide & Outfitter	October 19th, 2020	Letter
North Point Outfitters Inc	October 19th, 2020	Letter
Limb Driven Outfitting Ltd.	October 19th, 2020	Letter
Avenir Guiding & Outfitting	October 19th, 2020	Letter
North Country Outfitting Inc.	October 19th, 2020	Letter
Sherwood Outfitters Inc.	October 19th, 2020	Letter

### 8.4 Indigenous Groups

During the General Development Plan (GDP) process, Alberta – Pacific conducts consultations with indigenous groups every year. Alberta-Pacific is currently working with First Nation Communities in the area to address their concerns.

### 8.5 Other Forest Users

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

### 8.6 Forest Aesthetics

As outlined in Section 5.5. of the OGRs, Alberta – Pacific follows the objective to mitigate the impact of timber operations on the visual quality of the forest landscape.

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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.

## **9.0 Species and Areas of Concern**

### 9.1 Woodland Caribou

Planning Unit 071104b is located within the Cold Lake caribou range and will adhere to section 7.7.1 of the OGRs.

### 9.2 Key Wildlife and Biodiversity Zone (KWBZ)

Planning Unit 071104b is not located within a Key Wildlife and Biodiversity Zone; all operations will be consistent with Section 7.7.5 of the OGRs.

### 9.3 Other Species

All known sensitive wildlife sites have been buffered in accordance with Section 7.7.5 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 historical significance (historical resource sites) have been removed from the harvest design.

Upon completion of harvest block and road layout, a second review of the harvest blocks, and temporary 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, including signs of terrestrial lichen found within the Planning Unit.

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

### 9.5 Forest Health

During the field verification, a team evaluated the current state of the forest health in the FHP area, as outlined in Section 10.1 of the OGRs.

If any sites are identified post submission, Alberta – Pacific will take the appropriate action to protect these sites as per Section 10.1.2 of the OGRs.

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

Variances from the Spatial Harvest Sequence (SHS) within the Planning Unit boundary are shown in Appendix 3 - *Spatial Harvest Sequence Summary Table*.

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## 11.0 OGR Deviations

**Table 8: Road Percent Deviations Table**

Road deviations which contain blocks that are greater than 7 hectares, with potentially more than 5% road disturbance.

SOURCEID	OPENINGNUM	Area (ha)	Harvest Season	Road Percentage	Road Percentage Reason
FC07010432691	4100703269	11	Frozen	5.0	ACCS
FC07109405491	4090710549	12	Frozen	5.6	ACCS
FC07109406781	4090710678	27	Frozen	5.1	TERR
FC07109407461	4090710746	76	Frozen	5.2	TERR
FC07109408541	4090710854	32	Frozen	5.0	NARR
FC07109409151	4090710915	18	Frozen	7.0	ACCS
FC07109409351	4090710935	17	Frozen	8.4	ACCS
FC07109409681	4090710968	8	Frozen	8.9	TERR
FC07110401001	4100710100	9	Frozen	5.3	NARR
FC07110402621	4100710262	27	Frozen	5.2	ACCS
FC07110402971	4100710297	44	Frozen	5.1	ACCS
FC07110412801	4100711280	10	Frozen	5.9	NARR

ACCS = Additional roading required to access other blocks

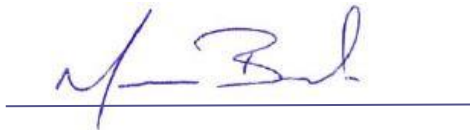
NARR = Narrow and/or Irregular shaped block

TERR = Additional road required due to terrain

## 12.0 Validation by Registered Forest Practitioner

This plan is being prepared and submitted on behalf of Alberta-Pacific Forest Industries Inc.

### **ALBERTA-PACIFIC FOREST INDUSTRIES INC.**



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