## Planning Unit 084035 Forest Harvest Plan

#### 1. Introduction

This Forest Harvest Plan (FHP) for Planning Unit 084035 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 acceptance for a 5-year FHP approval under the 2014-15 Alberta-Pacific Forest Industries Inc. (Alberta-Pacific) Annual Operating Plan (AOP).

## 2. Planning Unit Specific Comments

Planning Unit 084035 is located southeast of Trout Lake.

The planning unit is located in Forest Management Unit (FMU) S11. Alberta-Pacific has rights to D and D(C) as deciduous landbase.

This plan contains both laidout and non-laidout blocks. The laidout blocks are being submitted for a five-year approval. These blocks will be referred to as FHP blocks. The non-laidout blocks are contained within this plan for information purposes only. The non-laidout blocks will be referred to as Spatial Harvest Sequence (SHS) blocks. These blocks will have a number 2 at the end of the block number. These blocks will be harvested in integration with the coniferous operator when they are harvesting in the area in the future.

The harvest design utilizes the 2006 SHS. The plan and SHS were designed to remove second pass timber within the area. The coniferous design (coniferous SHS) is shown for landbase integration purposes. Detailed coniferous block and road design, variances to the coniferous SHS and coniferous profile reporting will be completed by the coniferous operator during their planning process in accordance with the approved Operating Ground Rules (OGRs). The affected coniferous operator has reviewed and agreed to the deciduous design.

#### **Integration**

This FHP is in FMU S11 has been reviewed and approved by Alberta Plywood division of West Fraser Mills Ltd. on behalf of S11 Logging Ltd.

S11 Logging has been allocated a portion of the coniferous Annual Allowable Cut (AAC) from the C and CD cover groups.

Currently, there are no active timber permits or licenses held by other users within this planning unit.

#### Watershed

Hospital Creek and the Trout River are fish bearing and will be buffered accordingly. They have also been identified as navigable water ways.

The creek crossed by the mainline access at grid location 2922 in Twp. 084-03-5 has been surveyed and is fish bearing.

All unsurveyed creeks have been buffered and crossed as though they were fish bearing.

#### **Stand Structure**

An average of 5% of the merchantable volume will be left in stand structure over the FMU. The structure will be left as laidout patches, and as single trees and small clumps of timber at the operators' discretion.

Stand structure has been planned (delineated) in the larger blocks to create some larger (> 1 ha) residual areas. These areas are identified as Retention Areas (RAs) within the lists and on the maps. These blocks have a 9 at the end of the block number.

#### **Debris Management**

All of the blocks in this unit are outside FireSmart Community Zones as identified by Alberta Environment and Sustainable Resource Development (ESRD). One or more of the following debris management strategies apply for blocks within this planning unit:

- Methods described in the Forest and Prairie Protection Act and Regulations, and/or
- Thinly spread slash throughout the block, and/or
- Stump side processing.

The deciduous utilization standard will be 15/10. The coniferous utilization standard will be 15/11.

#### **Design Comments**

During the layout phase of this operation, Alberta-Pacific looked for signs of insect or disease infestations. No areas of concern were found.

#### **3. Block Information**

The following table summarizes the volumes within S11 Logging and Alberta-Pacific's FHP blocks.

**Landbase Volume Summary** 

Company	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
S11 Logging	1,856	102,871	284,665	0	387,536
Alberta-Pacific	1,416	256,156	164	14,864	271,184

The following Alberta-Pacific FHP block will have its coniferous volume hauled as quota (CTL) chargeable: 08403536981.

Alberta-Pacific Deciduous First Entry Block Listing (Values Affected by Rounding)

Source Id	Harvest	Conif	Detail	Area	Decid	Conif	Inc Conif	Total
	Season	Charge	Plan	(ha)	(m3)	(m3)	(m3)	(m3)
08402519231	NF	INC	U	18	2,826	0	235	3,061
08402519391	NF	INC		12	2,439	0	215	2,654
08403520271	F	INC		5	1,129	0	136	1,265
08403522371	NF	INC		12	2,909	0	106	3,015
08403523771	NF	INC		3	547	0	157	704
08403524181	NF	INC		17	3,560	0	904	4,464
08403524581	NF	INC		1	192	0	21	213
08403526111	T	INC		3	873	0	27	900
08403526331	T	INC		9	2,169	0	83	2,252
08403526651	NF	INC		2	266	0	105	371
08403527611	NF	INC		41	10,112	0	467	10,579
08403527871	F	INC		39	9,583	0	708	10,291
08403528131	NF	INC		4	898	0	133	1,031
08403528531	T	INC		78	18,684	0	1,911	20,595
08403529741	NF	INC		2	368	0	38	406
08403530381	NF	INC		33	8,016	0	259	8,275
08403530861	NF	INC	U	110	24,734	164	904	25,802
08403531431	NF	INC		13	3,351	0	119	3,470
08403532211	F	INC		4	1,058	0	71	1,129
08403533831	F	INC		27	6,463	0	944	7,407
08403536981	F	CTL		17	3,375	0	167	3,542
08404523431	F	INC		13	1,753	0	509	2,262
08404523761	F	INC		25	5,464	0	220	5,684

## Alberta-Pacific Deciduous First Entry Block Listing (Cont.)

(Values Affected by Rounding)

Source Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
08404524631	F	INC		21	4,011	0	249	4,260
08404524941	NF	INC	U	175	36,054	0	2,449	38,503
08404525411	F	INC		9	1,484	0	68	1,552
08404526771	T	INC	U	714	103,164	0	3,584	106,748
08503501641	F	INC		4	674	0	75	749
Total				1,416	256,156	164	14,864	271,184

The block in the above table with a CTL for Conif Charge will be considered White Spruce cover type.

## **Alberta-Pacific SHS Block Listing**

(Values Affected by Rounding)

Source Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
08403534962	F			12	2,670	0	667	3,337
08403535312	NF			12	2,405	0	602	3,007
08403535332	NF			21	4,663	0	1,166	5,829
08403535712	NF			10	2,225	0	555	2,780
08403536222	F			1	321	0	10	331
08403536722	F			15	3,277	0	818	4,095
Total				71	15,561	0	3,818	19,379

## **Retention Area Listing**

(Values Affected by Rounding)

Block Id	Harvest Season	Status	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
19229			4	757	0	23	780
22369			27	6,993	0	224	7,217
22679			2	359	0	21	380
23299			12	1,659	0	51	1,710
26499			33	5,648	0	174	5,822
26739			10	1,483	0	46	1,529
27949			10	1,373	0	43	1,416
35479			11	1,569	0	48	1,617
Total			110	19,841	0	630	20,471

#### 4. Access and Road Information

Landuse agreements will be in place prior to use of any third party dispositions being used.

## **Planning Unit Temporary Road Information**

Existing access has been utilized where possible to minimize the clearing of new Right of Way (RoW).

New access and channelled watercourse crossings will be reclaimed as per Section 11.3.4 of the Northeast Alberta Operating Ground Rules (OGRs). Road reclamation and abandonment details are listed in the AOP when the blocks and roads are scheduled. All terrain vehicle (ATV) access may be left to facilitate silviculture activities.

**Main Access and Crossings** 

Road	Class	Length	Construction	Crossing	Field	Navigability
No.		(Km)	Season	Location	Call	
01641	4W	0.34	Frozen	0173	SP	U
19231	4S	0.10	Non-Frozen			
20271	4S	0.28	Non-Frozen	2922	SP	U
20271	4W	0.64	Frozen			
22371	4S	0.74	Non-Frozen			
23431	4W	1.06	Frozen	2366	E	U
23761	4W	0.62	Frozen	2367	E	U
23771	4S	0.24	Non-Frozen	2368	I	U
24181	4S	0.77	Non-Frozen			
24581	4S	0.02	Non-Frozen			
24631	4W	1.54	Frozen			
24941	4S	4.80	Non-Frozen	1916	E	U
				2436	E	U
				2445	E	U
25411	4W	0.19	Frozen			
26111	4S	0.18	Non-Frozen	2299	T	U
26331	4S	0.77	Non-Frozen	2633	SP	U
				2643	E	U
				2644	E	U
26651	4S	0.23	Non-Frozen	2674	E	U
26771	4S	9.73	Non-Frozen	2359	E	U
				2388	E	U
				2397	E	U
				3488	E	U
27611	4S	3.59	Non-Frozen	2624	E	U
				2634	T	U
				2743	E	U
				2753	E	U
				2762	E	U
				2773	E	U
27871	4W	0.24	Frozen			

### **Main Access and Crossings (Cont.)**

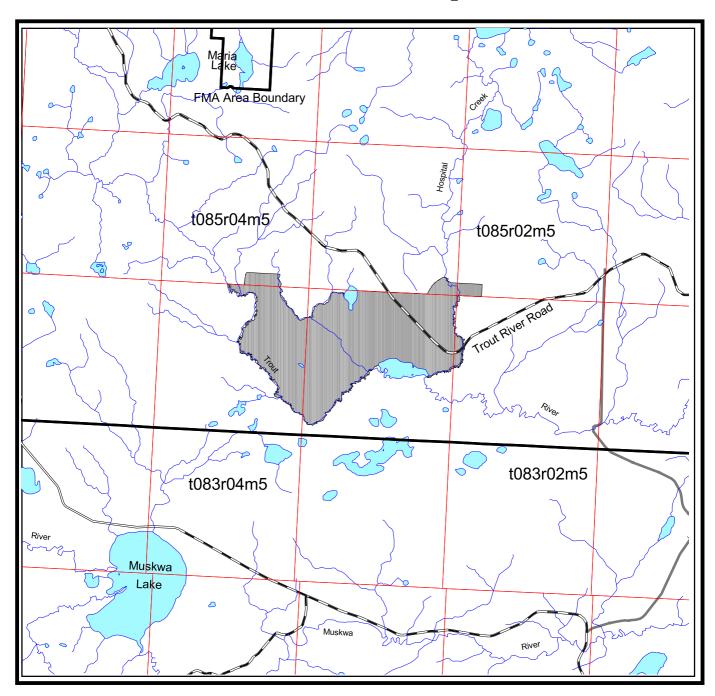
Road No.	Class	Length (Km)	Construction Season	Crossing Location	Field Call	Navigability
28131	4S	0.21	Non-Frozen			
28531	4S	1.77	Non-Frozen	2834	E	U
				2844	E	U
				2854	E	U
29741	4S	0.09	Non-Frozen			
30381	4S	0.72	Non-Frozen	3059	E	U
30861	4S	3.86	Non-Frozen	2924	E	U
				2933	E	U
				2955	E	U
				2975	E	U
				2985	E	U
31431	4S	0.03	Non-Frozen	3141	E	U
32211	4W	0.07	Frozen			
33831	4W	1.13	Frozen	3446	SP	U
36981	4W	4.62	Frozen	3687	SP	U
Total C	lass 4W:	10.45				
Total C	lass 4S:	28.13				
Total C	lass 4P:	0.00				

#### **Skid Trail Crossings**

Road No.	Crossing Location	Base Info	Field Call	Navigability
26111	2611	UM	Е	U
30861	2956	UM	I	U

In the above tables, possible "Base Info" watercourse classifications are indefinite (E), intermittent (I), perennial (P) or unmapped (UM). The possible "Field Call" channelled watercourse classifications are ephemeral (E), intermittent (I), transitional (T), small permanent (SP), large permanent (LP), lake < 4 ha (SL), lake  $\ge$  4 ha (LL) beaver pond (B), spring (S), saturated soils (SS) or no channelled watercourse (NW). The "Navigability" rating identifies channelled watercourse as being potentially navigable (N) or potentially unnavigable (U) based on the possibility of traveling the stream with a vessel. The "Field Call" channelled watercourse classifications in the above table are based on Table 1 of the OGRs at the time, and during the conditions, when layout was conducted.

# Planning Unit 084035 Access Map



1:250000





#### 5. Non Timber Values

#### **Public Involvement**

Copies of this harvest plan will be available for viewing at the Athabasca, Fort McMurray and Lac La Biche libraries, TimberNorth-Athabasca, the Alberta-Pacific Wabasca field office and the Alberta-Pacific mill site.

The Public Involvement for this plan was completed during the previous year's GDP (General Development Plan) review meetings.

No concerns have been identified through the public involvement process to date.

## **Aboriginal Consultation**

The Aboriginal Consultation for this plan was completed during the previous year's GDP review meetings.

No concerns have been identified through the Aboriginal Consultation process to date.

## **Trappers**

The holders of the following Registered Fur Management Areas (RFMA) have been contacted regarding harvesting activities within Planning Unit 084035 and their concerns have been noted below:

- 0047
- 0053
- 2240

The operator of RFMA 0053 is a subsistence trapper within this planning unit. Alberta-Pacific has agreed to place deciduous stands adjacent to a cabin site into a retention area. There is another specific site that was requested not be disturbed near the cabin. The site is not near any deciduous blocks or roads but the harvest operators will be notified of this site and cautioned to avoid it.

#### **Guides and Outfitters**

The holders of the following permits within Wildlife Management Unit (WMU) 542 have been notified of Alberta-Pacific's harvest plans within Planning Unit 084035:

- 0066 0869 - 0163 - 0995 - 0490 - 1060
- 0729

No concerns have been identified through the Guide and Outfitter Consultation process to date.

### **Forest Recreation Groups**

There are currently no active forest recreation groups with interests within this planning unit.

#### **Grazing Lease Operators**

There are currently no grazing leases within this planning unit.

#### **Historical Resources**

No known historical resource sites are located within this unit. Lands on which historical resource sites are likely to occur will be checked prior to commencement of operations.

#### Forest Aesthetics

There are no forest aesthetics concerns within this planning unit.

#### **Land Use**

As per a Land Status Automated System (LSAS) land standing report dated October 23, 2014, there are currently no dispositions within this planning unit that restrict harvesting timber. MSL 033962 has been removed from the harvest design.

The following dispositions have been reviewed and contain no restrictions for timber removal at this time: SME 130124, SME 130199 and SME 140157.

PNT 130055 contains restrictions for Trumpeter Swan Habitat, this is addressed below in the Wildlife Section.

#### Wildlife

The south boundary of this planning unit borders the Caribou Range. No deciduous blocks are within the Range. Operations will adhere to the Alberta-Pacific wildlife plan submitted annually in the fall.

No areas of concentrated terrestrial lichens were identified during layout.

Previously identified and field identified Trumpeter Swan Habitat lakes have been buffered for summer harvest and haul operations as per section 7.7.4 of the OGRs. The following summer blocks were buffered to 800m:

08403522371 08403527611

08403528531

All known sensitive wildlife sites have been buffered according to section 7.7.6.2 of the OGRs. Some of these buffers have been placed into RAs.

The following blocks have been buffered according to section 7.1.1 of the OGRs:

08403530381

08403531431

#### **Block Design**

Areas of timber to be used as stand structure have been strategically chosen to break up the line of sight in larger blocks. These have been delineated on the maps as RAs.

### Access and Access Management

Existing access has been utilized where possible to minimize the clearing of new RoW.

Continuous flow roads have been utilized in larger blocks to reduce skidding distances and cycle times. Their use outside of blocks has been minimized to control access and reduce potential wildlife disturbance.

The following policies have been implemented to mitigate access management concerns:

- Temporary road systems will be closed as soon as possible after the harvesting, hauling, and silviculture activities have been completed.
- Sight lines were considered while designing the harvest blocks and roads. Methods that might have been used are blending blocks and roads into contour levels, terrain features, vegetation cover types, and retained stand structure.

The following access control practices will also be implemented:

- If a significant delay occurs between harvesting and hauling, temporary access controls on roads will be utilized to prevent access by motorized vehicles. These controls may include the placement of logs on the road, snow berms, and/or removal of creek crossings.
- Slash rollback at strategic points (such as at the ends of the block or at the junction of the temporary road and permanent road) will be completed as soon as possible after logging to discourage access by all terrain or four wheel drive vehicles.

## **6.** Integration with Affected Forest Companies

Alberta Plywood signed off on behalf of S11 Logging February 3, 2015 regarding this plan.

**S11 Logging Block Listing** (Values Affected by Rounding)

Block Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
30234	F	CTL		3	91	789	0	880
30314	F	CTL		1	5	174	0	179
31194	F	CTL		1	115	50	0	165
07224	F	CTL		1	2	82	0	84
07264	F	CTL		1	1	35	0	36
07484	F	CTL		3	13	439	0	452
07514	F	CTL		3	6	233	0	239
07574	F	CTL		1	5	175	0	180
08464	F	CTL		2	6	184	0	190
13884	F	CTL		0	13	113	0	126
16364	F	CTL		6	11	395	0	406
17264	F	CTL		3	21	192	0	213
17284	F	CTL		3	369	534	0	903
17624	F	CTL		10	0	925	0	925
18194	F	CTL		4	8	255	0	263
18484	F	CTL		7	723	310	0	1,033
18624	F	CTL		535	3,419	62,144	0	65,563
19814	F	CTL		1	24	416	0	440
19974	F	CTL		33	2,172	7,531	0	9,703
20314	F	CTL		5	618	957	0	1,575
20464	F	CTL		1	35	205	0	240
20484	F	CTL		1	65	261	0	326
20664	F	CTL		2	87	345	0	432
21344	F	CTL		14	113	3,300	0	3,413
21744	F	CTL		25	1,483	6,099	0	7,582
21864	F	CTL		2	315	130	0	445
21884	F	CTL		2	37	404	0	441
22164	F	CTL		8	182	2,121	0	2,303
22284	F	CTL		0	43	19	0	62
22464	F	CTL		2	178	268	0	446
22864	F	CTL		41	2,166	9,550	0	11,716
23224	F	CTL		1	9	303	0	312

## S11 Logging Block Listing (Cont.) (Values Affected by Rounding)

Block Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
23334	F	CTL		3	31	972	0	1,003
23684	F	CTL		6	345	1,346	0	1,691
23864	F	CTL		2	132	526	0	658
23884	F	CTL		3	209	833	0	1,042
24224	F	CTL		5	10	318	0	328
24264	F	CTL		3	183	644	0	827
24424	F	CTL		7	44	1,415	0	1,459
24444	F	CTL		1	8	247	0	255
24554	F	CTL		9	642	2,076	0	2,718
24624	F	CTL		4	22	697	0	719
24914	F	CTL		1	69	245	0	314
25444	F	CTL		258	32,039	44,155	0	76,194
25864	F	CTL		2	59	524	0	583
25884	F	CTL		12	1,255	2,396	0	3,651
26224	F	CTL		2	56	348	0	404
26424	F	CTL		8	0	715	0	715
26444	F	CTL		4	5	347	0	352
26474	F	CTL		5	145	1,301	0	1,446
26644	F	CTL		4	93	842	0	935
26844	F	CTL		11	542	2,171	0	2,713
27224	F	CTL		10	1,715	1,221	0	2,936
27444	F	CTL		0	0	37	0	37
27644	F	CTL		5	272	1,086	0	1,358
27684	F	CTL		9	313	2,129	0	2,442
27824	F	CTL		3	192	768	0	960
28244	F	CTL		1	89	355	0	444
28464	F	CTL		2	74	664	0	738
28544	F	CTL		3	29	924	0	953
28824	F	CTL		6	973	853	0	1,826
28864	F	CTL		2	402	268	0	670
29244	F	CTL		1	27	240	0	267
29264	F	CTL		2	15	445	0	460
29844	F	CTL		1	131	186	0	317
30164	F	CTL		145	16,874	23,571	0	40,445
30424	F	CTL		15	2,318	2,100	0	4,418
30644	F	CTL		2	433	185	0	618
31424	F	CTL		1	143	60	0	203
31644	F	CTL		10	1,147	759	0	1,906
31924	F	CTL		14	2,395	1,457	0	3,852
33614	F	CTL		2	4	138	0	142

## S11 Logging Block Listing (Cont.) (Values Affected by Rounding)

Block Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
33634	F	CTL		1	150	150	0	300
33664	F	CTL		4	448	572	0	1,020
33844	F	CTL		6	55	521	0	576
34244	F	CTL		3	0	231	0	231
34284	F	CTL		5	135	1,324	0	1,459
34394	F	CTL		0	1	20	0	21
34464	F	CTL		5	36	1,153	0	1,189
34484	F	CTL		2	280	420	0	700
34644	F	CTL		226	20,097	42,731	0	62,828
34674	F	CTL		1	4	129	0	133
34684	F	CTL		5	142	1,284	0	1,426
34864	F	CTL		1	10	310	0	320
35224	F	CTL		4	35	1,172	0	1,207
35444	F	CTL		10	643	2,375	0	3,018
35514	F	CTL		3	8	229	0	237
35644	F	CTL		6	38	338	0	376
35744	F	CTL		8	184	2,156	0	2,340
35994	F	CTL		0	61	26	0	87
36284	F	CTL		9	79	709	0	788
36444	F	CTL		7	429	1,535	0	1,964
36684	F	CTL		8	45	532	0	577
36744	F	CTL		7	732	925	0	1,657
36844	F	CTL		2	262	464	0	726
40834	F	CTL		4	22	535	0	557
12934	F	CTL		38	263	3,152	0	3,415
13464	F	CTL		3	46	410	0	456
13684	F	CTL		20	130	2,218	0	2,348
14464	F	CTL		1	37	147	0	184
14884	F	CTL		1	19	168	0	187
22664	F	CTL		21	5	1,928	0	1,933
22684	F	CTL		3	385	392	0	777
22824	F	CTL		1	1	31	0	32
23324	F	CTL		19	168	1,730	0	1,898
23344	F	CTL		2	6	207	0	213
23444	F	CTL		3	5	168	0	173
23524	F	CTL		1	9	260	0	269
23844	F	CTL		51	220	5,922	0	6,142
23964	F	CTL		2	62	136	0	198
24324	F	CTL		5	147	485	0	632
24824	F	CTL		11	74	874	0	948

## S11 Logging Block Listing (Cont.)

(Values Affected by Rounding)

Block Id	Harvest Season	Conif Charge	Detail Plan	Area (ha)	Decid (m3)	Conif (m3)	Inc Conif (m3)	Total (m3)
25574	F	CTL		29	1,254	7,125	0	8,379
34194	F	CTL		4	41	374	0	415
34374	F	CTL		2	290	124	0	414
35864	F	CTL		1	24	93	0	117
36324	F	CTL		1	10	90	0	100
36424	F	CTL		2	9	287	0	296
Total				1,856	102,871	284,665	0	387,536

## 7. Spatial Harvest Sequence Summary

The table below summarizes the variance (in area) from the SHS, for Alberta-Pacific harvesting.

**SHS Tracking** 

SHS Tracking	Decid. Cover Type	Sw Cover Type	Sb Cover Type	Pj Cover Type	Total Cover Type
Total SHS in Planning Unit	1,726.6	0.0	0.0	0.0	1,726.6
FHP SHS Harvest ha.	1,389.4	0.0	0.0	0.0	1,389.4
Deleted SHS ha. (reportable	132.9	0.0	0.0	0.0	132.9
Deferred SHS ha. (reportabl	e) 32.7	0.0	0.0	0.0	32.7
Variance % (1) (reportable)	9.6%	0.0%	0.0%	0.0%	9.6%
Addition ha.	96.5	0.0	0.0	0.0	96.5
Bypassed ha.	68.5	0.0	0.0	0.0	68.5
Total Harvest ha. (2)	1,485.9	0.0	0.0	0.0	1,485.9

<sup>(1)</sup> Variance % is the Deleted and Deferred SHS ha. expressed as a percentage of the Total SHS in the Planning Unit.

<sup>(2)</sup> Total Harvest ha. is the sum of FHP SHS Harvest ha. and Additions ha.

#### 8. Silviculture Information

The following table outlines the initial silviculture declarations for FHP blocks within Planning Unit 084035. Cover group balanced declarations will be submitted post harvest.

**Alberta-Pacific Silviculture Declarations** 

Source Id	A was	Std	Onon	Species_	Silv
Source 1d	Area (ha)	Sta_ Mod	Open_ Desig	Species_ Gr	Suv_ Harv
08402519231	18.0	D	PC	DE	UP
08402519391	12.4	D	CC	DE	CC
08403520271	5.4	D	CC	DE	CC
08403522371	12.2	D	CC	DE	CC
08403523771	2.7	D	CC	DE	CC
08403524181	16.9	D	CC	DE	CC
08403524581	0.8	D	CC	DE	CC
08403526111	3.4	D	CC	DE	CC
08403526331	9.1	D	CC	DE	CC
08403526651	2.0	D	CC	DE	CC
08403527611	40.8	D	CC	DE	CC
08403527871	39.5	D	CC	DE	CC
08403528131	4.0	D	CC	DE	CC
08403528531	78.4	D	CC	DE	CC
08403529741	2.3	D	CC	DE	CC
08403530381	33.4	D	CC	DE	CC
08403530861	110.2	D	PC	DE	UP
08403531431	12.8	D	CC	DE	CC
08403532211	4.4	D	CC	DE	CC
08403533831	27.2	D	CC	DE	CC
08403536981	17.0	D	CC	DE	CC
08404523431	13.3	D	CC	DE	CC
08404523761	24.8	D	CC	DE	CC
08404524631	21.3	D	CC	DE	CC
08404524941	175.5	D	PC	DE	UP
08404525411	8.8	D	AV	DE	CC
08404526771	714.5	D	PC	DE	UP
08503501641	4.3	D	CC	DE	CC

In the above table, the codes for "Std\_Mod", "Open\_Type", "Species\_Gr" and "Silv\_Harv" are as per the Alberta Regeneration Information System (ARIS) domain codes. "AV" under "Open\_Desig" is not an ARIS code but is used internally for the tracking of understorey avoidance blocks. If a block contains adequate amounts of Balsam Fir, so that fir is an acceptable coniferous regeneration species, a code of FA is used in the "Species\_Gr". All deciduous blocks will be Leave for Natural (LFN).

## 9. OGRs Variances

#### **Blocks**

The following is a list of Openings (blocks of the same pass sharing a common boundary) within this planning unit whose combined size exceeds 500 ha. This is a variance to the opening size restrictions in the Detailed Forest Management Plan. The block types are D = deciduous and U = coniferous understorey protection.

**Combined Blocks** 

Source Id	Block Type	Source Id	Block Type	Area (ha)
08404526771	U	08404523761	D	739

Winter access using an existing LOC is planned through Retention Area 19229, which is a sensitive site buffer.

The following table identifies blocks greater than 7.0 ha that may exceed 5 % road disturbance once turnabouts are constructed.

**Road Percent** 

Source Id	% Road Class	Comments	
08402519231	6	Extra road required for understorey concerns.	
08403522371	6	Extra road required; Access to other blocks.	
08403524181	6	Narrow block and/or irregular shaped block.	
08403526331	6	Narrow block and/or irregular shaped block.	
08403527611	5	Extra road required; Access to other blocks.	
08403527871	6	Extra road required due to rugged terrain.	
08403531431	6	Narrow block and/or irregular shaped block.	
08403533831	6	Narrow block and/or irregular shaped block.	
08403536981	5	Narrow block and/or irregular shaped block.	
08404523761	5	Narrow block and/or irregular shaped block.	
08404524631	5	Narrow block and/or irregular shaped block.	

The percent road class values have been achieved by rounding the road disturbance percent to the nearest whole number.

#### **Roads**

#### **Roads Close to Watercourses**

Road No.	Grid Location	Base Info	Field Call	Distance of Watercourse From Road	Habitat Rating
01641	0173	P	LP	100	SF

The "Distance of Watercourse From Road" is the minimum distance allowed in Table 2 of the OGRs without ESRD approval. The roads listed are within those minimum distances. Please refer to the FHP map and layout block maps for more information.

In the above table, possible "Base Info" watercourse classifications are indefinite (E), intermittent (I), perennial (P), unmapped (UM) ), lake < 4 ha (SL) or lake  $\ge$  4 ha (LL). The possible "Field Call" watercourse classifications are intermittent (I), transitional (T), small permanent (SP), large permanent (LP), lake < 4 ha (SL), lake  $\ge$  4 ha (LL). The "Habitat Rating" identifies watercourses surveyed as fish bearing or potentially fish bearing (SF), surveyed as non-fish bearing (SN) or unsurveyed (U). The "Field Call" watercourse classifications in the above table are based on Table 1 of the OGRs at the time, and during the conditions, when layout was conducted.

The spur road within block 08402519231 comes within 100m of Hosiptal Creek at grid location 1936.