

IAN002/ Tr2515

☒ Site Plan

(Development Areas & Damaged Timber Salvage ≥1ha)

☐ Salvage Plan

(Damaged Timber Salvage <1ha)

A. Tenure Information

☒ **Original:** 07/31/2016 (mm/dd/yyyy)
☐ **Amendment #** (mm/dd/yyyy)

Forest Region	Forest District	License	Cutblock or Road ID	
Coast	Haida Gwaii	TFL60	Cutblock: IAN002 Roads: Tr2515 Stn 0+450 to 1+041	
CP #	Timbermark(s)	Division	Geographic Location	
Cutblock: 401	Cutblock: 60/401 Road: 60/OR1	Haida Gwaii – Dinan Bay	Ian Lake3 Watershed Sub Units 176 and 179	
Authorizing FSP	Approval Date	Expiry Date	Amended Date	FDU
Haida Gwaii	November 18, 2011	November 18, 2016	As applicable on date of SP	A
Landscape Unit	Watershed ID	Sub Unit ID #		
Ian	Ian Lake3	176 and 179		
Silviculture System				
☒ Clearcut ☐ Clearcut w/ Reserve ☐ Retention ☐ Other:				

B. Site Details

SU Description (Site Plan only)			
ID	NAR (ha)	Description (BEC, Site Series, Elevation, Slope position, aspect, etc.)	
1	28.7	Eco-unit 1: The unit is classified as CWHwh1 01(90%) and 05(10%). The pre-harvest stand consists primarily of old growth Hw, Cw and Ss with a minor amount of Cy. The terrain consists of moderately sloping ground. The slopes range from 0% to 60% (average 30%). The microtopography consists of smooth ground, with timber growing evenly throughout the unit. Expect high natural Hw. Understory consists of several mosses including step moss, lanky moss, Oregon beaked moss and running club moss. Present in the stand are some ferns and several types of vaccinium. The soils are well drained. Soil texture is primarily a silty loam and coarse fragment content is between 5 to 20%. The humus is a Moder which ranges in depth from 15 to 25cm. Rooting depth ranges from 30 to 50cm. The site class is II and the site index is 24.	
Stocking Standards (Site Plan only)		Soil Disturbance Limits	
SU	Stocking Standard ID#	Maximum Allowable Soil Disturbance within the NAR	Maximum Extent Soil Disturbance may be Temporarily Exceeded
1	1039574	5%	5%
Maximum allowable soil disturbance within NAR for roadside work area: 25%			
Special Forest Products Stocking Standards rationale: N/A			
Single Entry Dispersed Retention System Stocking Standards: (maximum level permitted is 10% of AAC each year): N/A			

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C. FSP Results & Strategies				
Results and Strategies Applicable to the Site (for amendments, the listed R/S apply only to the amended areas, unless otherwise stated. Refer to the original SP/ Salvage Plan to see how the R/S apply to the original harvest area).				
R/S ID#	R/S Title	Applicable (Y/N)		How Results or Strategies apply to the site (include rationale for not applicable, where required.)
Cedar Stewardship Areas (CSA)				
6.1	no harvesting	☐ Y	☒ N	There are no CSA within 2 tree lengths of the IAN002 TAUP.
6.2, a-d	harvesting with limitations	☐ Y	☒ N	<p>If harvesting is proposed within a CSA, R/S 6.2 a through e must be addressed.</p> <p>☐ a. intergovernmental process completed by group Plan Holders; and</p> <p>☐ b. proposed harvesting is <10% of total and <250ha in 10 years; and</p> <p>☐ c. proposed harvesting is proportional across LUs; and</p> <p>☐ d. group ledger reviewed (updated annually minimum).</p> <p>N/A. See section 6.1.</p>
6.2e	consultation with adjacent tenure holders	☐ Y	☒ N	<p>Where CSAs overlap adjacent tenures outside of the plan area, consultation is required to ensure harvest limits are not exceeded.</p> <p>N/A. See section 6.1.</p>
Cultural Feature Identification				
6.3 and 6.4a	Cultural Feature Identification Survey	☒ Y	☐ N	<p>Required prior to commencing harvesting or road construction activities in a development area.</p> <p>The site plan and associated plans have been developed in accordance with the results of the CFI survey. The CFI survey was completed by P. Bruce of Watchmen Forest Products. The report was completed on December 5, 2014.</p> <p>HTHFs: 0</p> <p>HTFFs</p> <p>Class 1: 1 including Devil's Club. This feature was found in 2 locations.</p> <p>Class 2: 1 including Indian Hellebore. This feature was found in 4 locations in patches ranging from groups of 10 to 30 stems. There are 30 stems within the harvest area and 55 stems outside the harvest area but within the TAUP.</p> <p>Class 3: 10 including Labrador Tea, Licorice Fern, Northern Maiden-Hair, Oregon beaked moss, Oval leaf blueberry, Running club moss, snake liverwort, spiny wood fern, sword fern and thimbleberry.</p> <p>CMTs:0</p> <p>Monumental Cedar</p> <p><120cm dbh:0</p> <p>>120cm dbh:0</p> <p>Cultural cedar stands: 0</p> <p>Yew Patches/Stems: 1/ 94</p>
Haida Traditional Heritage Feature (HF)				
6.4b, c	potential HF – AIA required	☐ Y	☒ N	<p>☐ b. AIA completed; and</p> <p>☐ c. HF confirmed to be present and of continued importance</p> <p>Refer to R/S 6.5 and 6.6 for applicable requirements/ management requirements.</p> <p>No Haida Traditional Heritage Features were found during the</p>

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				CFI survey.
6.5	Class 1 HF – 500m no harvest zone	☐ Y	☒ N	N/A. See section 6.4b,c
6.5, a-b	Class 1 HF – reduction to no harvest zone	☐ Y	☒ N	☐ a. Intergovernmental Process required. Reduction required for road access, other infrastructure, or to address a safety concern and no other practicable option exists; or ☐ b. Reduction up to 0.5 tree lengths, provided no net loss. N/A. See section 6.4b,c
6.6	Class 2 HF – 100m (avg. width) no harvest zone	☐ Y	☒ N	Where a Class 2 HTHF Karst Feature is identified, R/S 6.79 also applies. N/A. See section 6.4b,c
6.6, a-b	Class 2 HF – alteration, removal or reduction to no harvest zone	☐ Y	☒ N	☐ a. Intergovernmental Process completed. Reduction required for road access, other infrastructure, or to address a safety concern and no other practicable option exists; or ☐ b. reduction up to 0.5 tree lengths provided no net loss. N/A. See section 6.4b,c
	tree height method	☐ Y	☒ N	☐ a. Site series ☐ b. Tallest tree N/A. See section 6.4b,c
Haida Traditional Forest Features (FF)				
6.7	Class 1 FF – 1.0 tree length (avg. width) no harvest zone	☒ Y	☐ N	One class I Haida Traditional Forest Feature (Devils Club in two locations) was found during the CFI survey. The feature has a 1 tree length (average width) no harvest zone established around it in both locations.
6.7	Class 1 FF – 1.0 tree length (avg. width) management zone	☒ Y	☐ N	A one tree length (average width) management zone has been established around the class I feature in both locations.
6.7a	Class 1 FF – reductions to management zone	☐ Y	☒ N	☐ a. up to 0.5 tree lengths, provided no net loss; or ☐ b. Intergovernmental Process required. Reduction required for road access, other infrastructure, or to address a safety concern and no other practicable option exists. Integrity of the FF must be maintained. If a portion of a management zone is proposed for harvest. It has been relocated so that there is no net loss of management zone around the class I feature.
6.8	Class 2 FF – retain >50% and maintain integrity	☒ Y	☐ N	Focus stand level retention areas on Class 2 FF, adjust operational boundaries or consider modifying harvest practices in the vicinity to protect integrity. One Class II Haida Traditional Forest Feature (Indian Hellebore) was found during the CFI survey. 30 stems are located within the harvest area and 55 stems are located outside the harvest area and within the TAUP.
6.9	Class 3 FF – retain and protect to extent practicable	☒ Y	☐ N	Where practicable, focus stand level retention on Class 3 FF. Ten Class 3 Haida Traditional Forest Features (see CFI report) were found during the CFI survey. To the extent practicable, based upon road location and economic viability, these features have been retained in the identified reserves. These features were found within the proposed harvest area as well as within the identified reserves.

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	tree height method	☒ Y	☐ N	☒ a. Site series ☐ b. Tallest tree The reserve and management zones referred to in section 6.7 are based upon the dominant site series in the block. The dominant site series is CWHwh1 01 which has a tree height of 45m according to schedule 5 of the LUO.
Cedar Retention				
6.10, (i), (ii)	cedar retention required	☒ Y	☐ N	Where development areas are calculated per the FSP to be: ☒ (i) >10ha, pre-harvest cedar >30%; or ☐ (ii) ≤10ha, pre-harvest cedar >60% If (i) or (ii) applies, then refer to 6.10 a through d. A cedar analysis for the IAN002 block was completed on Feb 2, 2015 by Silvacare. The cedar analysis compares the weighted cedar component of the forest polygon stands to calculate the total percentage of cedar. The cedar analysis calculated the cedar to be 17.95ha of the total area or 36.5% of the development area.
6.10, a-d	retain 15% cedar composition	☒ Y	☐ N	☒ a. Prioritize allocation of retention requirements to no harvest zones, management zones and stand level retention areas designated for other objectives ☐ b. Additional areas are required beyond existing no harvest zones to meet the 15% requirement (if yes, refer to 6.10c and d). ☒ c. Minimum patch size is 1.0ha. Where practicable, cedar areas are large and contiguous. ☒ d. retain a range of pre-harvest diameters. The cedar analysis completed for IAN002 indicated a weighted cedar retained in the identified reserves as 4.11ha. This exceeds the 2.69ha required to be retained.
6.11	cedar regeneration – pre-harvest cedar >20%	☒ Y	☐ N	Pre-Harvest cedar is calculated using cruise compilation measured in percent of cedar sph, not including dead potential or dead useless. Where pre-harvest composition is >20%, the following regeneration strategies apply: ☒ Minimum post harvest cedar composition is based on the pre-harvest composition as calculated according to the FSP. ☒ a. strive to meet commitment through natural regen or planting ☒ b. Where deer browse hazard is mod-high, planted cedar will be protected ☐ c, d, e. these requirements are not applicable at the SP level, they refer to regeneration criteria, due dates, fill plant requirements, etc. The cruise compilation for IAN002 indicates the cedar and yellow cypress stems per hectare is 176.3 and the total sph for the harvest area is 403.7 for a percentage of 43.7%. This is greater than the 20% minimum sph required for cedar and cypress regeneration. According to table 8 of the FSP, a minimum of 175sph of cedar and cypress will be planted in the block.
6.12	cedar regeneration – pre-harvest cedar >20%	☐ Y	☒ N	The cedar regeneration thresholds may be lower than those established in R/S 6.11 Table 9, provided the new requirement is consistent with the outcome of a completed intergovernmental process. Taan will follow 6.11 above and will not need to lower the standards.
6.13	yew patches - stand level retention	☐ Y	☒ N	There was one yew patch identified during the CFI survey. It is located outside the TAUP.
6.13a	yew patches - reduced retention rationale	☐ Y	☒ N	Alteration or removal is permitted to accommodate operational requirements for road and bridge construction and no practicable alternative exists. The Yew patch identified in section 6.13 will not be reduced since it is located outside the TAUP.

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6.14	yew (not patches) – stand level retention	☒ Y	☐ N	<p><i>Incorporate retention of yew (not in patches) into existing retention areas, where practicable.</i></p> <p>There were 94 individual yew trees during the CFI survey. 51 of these have been retained in the identified retention and reserve areas, 43 are located within the harvest area..</p>
Cultural Cedar Stands, CMTs & Monumental Cedar				
6.15	0.5 tree length no harvest zone	☐ Y	☒ N	There were no monumental trees, CMT's or Cultural Cedar Stands identified during the CFI survey.
6.15b	reduction to no harvest zone	☐ Y	☒ N	<p><i>Intergovernmental Process required. Reduction required for road access, other infrastructure, or to address a safety concern and no other practicable option exists. Integrity of the cultural cedar stand, CMT or monumental cedar must be maintained.</i></p> <p>N/A. See section 6.15.</p>
6.15	1.0 tree length (avg. width) management zone	☐ Y	☒ N	N/A. See section 6.15.
6.15a	alteration or removal of cultural cedar stand, CMT or monumental cedar	☐ Y	☒ N	<p><i>Intergovernmental Process required. Reduction required for road access, other infrastructure, or to address a safety concern and no other practicable option exists. Logs must be provided to the Haida Nation.</i></p> <p>N/A. See section 6.15.</p>
6.15c	reduction to management zone	☐ Y	☒ N	<p><i>Intergovernmental Process required. Reduction is required to address operational constraints or a safety concern. Integrity of the management zone must be maintained.</i></p> <p>N/A. See section 6.15.</p>
6.16, a-b	Monumental Cedar <120cm not within cultural cedar stand –removal	☐ Y	☒ N	<p>☐ If removal is planned, the greater of 10% (measured in stems per hectare) or one monumental cedar must be retained in the development area.</p> <p>☐ a. Intergovernmental Process is completed and confirms not required for cultural use; or</p> <p>☐ b. Intergovernmental Process completed. Reduction required for road access, other infrastructure, or to address a safety concern. Logs must be offered to the Haida Nation or other special measures may be identified though the IGP</p> <p>N/A. See section 6.15.</p>
	tree height method	☐ Y	☒ N	<p>☐ a. Site series</p> <p>☐ b. Tallest tree</p> <p>N/A. See section 6.15.</p>
Type I Fish Habitat				
6.17	2.0 tree length no harvest zone	☒ Y	☐ N	A two tree length no harvest zone has been established along the Type I sections of Ian Lake, Donna Creek and stream 8 located within the IAN002 TAUP.
6.17a, b (i-iii)	alteration or removal of no harvest zone	☒ Y	☐ N	<p>☒ a. +/- 0.5 tree length provided no net loss</p> <p>☐ b. up to 5% alteration or removal:</p> <p>☐ (i)-(ii) provided maintain the integrity of the Type I fish habitat and alteration or removal is required for road or bridge construction or to address a safety concern and no other practicable option exists; or</p> <p>☐ (iii) alteration or removal is for other reason than those listed under 6.16(i) and Intergovernmental Process completed.</p> <p>A small portion of the no harvest zone (0.1ha) along Ian Lake will be removed and reallocated so there is no net loss of no harvest area.</p>

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	tree height method	☒ Y	☐ N	☒ a. Site series ☐ b. Tallest tree The tree height in section 6.17 is based upon the dominant site series in the IAN002 block. This site series is CWHwh1 01 and has a tree height of 45m for old growth blocks.
Type II Fish Habitat				
6.18	1.0 tree length no harvest zone	☒ Y	☐ N	A one tree length no harvest zone has been established along 8A, 9 and the Type II section of Donna Creek.
6.18a	up to 5% alteration or removal of no harvest zone	☐ Y	☒ N	<i>Must maintain the integrity of the Type II fish habitat.</i> There is no plan to alter or remove any of the no harvest zones that has been established along the Type II sections of streams 8A, 9 or Donna creek.
6.18	0.5 tree length (avg. width) management zone	☒ Y	☐ N	A 0.5 tree length management zone has been established along the Type II section of streams 8A, 9 or Donna creek
6.18b	up to 20% alteration or removal	☐ Y	☒ N	<i>Percentage removal is to be measures in hectares.</i> There is no plan to alter or remove any of the management zones that has been established along the Type II sections of streams 8A, 9 or Donna creek.
6.18c	management zone windthrow management	☒ Y	☐ N	<i>Retention of trees in the management zone considers likelihood of damage to no harvest zone caused by windthrow.</i> The Type II sections of streams 8A or Donna creek are not adjacent to the proposed harvest boundary so there is no windthrow risk assigned to the streams. The Type II section of stream 9 is adjacent to the proposed harvest area. The portion of the management zone adjacent to the harvest area is rated as high so tree crown modification is recommended.
6.19 (a-d)	further reductions to combined area of no harvest zone or management zone	☐ Y	☒ N	<i>If further reductions beyond those permitted under 6.17, then Intergovernmental Process is required, the total amount of mature and old forest in the Type II habitat no harvest zone and management zones within the development area is reduced by ≤20% (measured in hectares), the integrity of the Type II habitat is maintained and an adaptive management plan is developed, documented and implemented prior to reducing the no harvest and management zones.</i> There is no plan to reduce the management zones along the Type II sections of streams 8A or Donna creek. A portion of the management zone along stream 9 will be removed and relocated so there is no net loss of management zone.
	tree height method	☒ Y	☐ N	☒ a. Site series ☐ b. Tallest tree The tree height in section 6.18 is based upon the dominant site series in the IAN002 block. This site series is CWHwh1 01 and has a tree height of 45m for old growth blocks.
Active Fluvial Units				
6.20	1.5 tree length management zone	☐ Y	☒ N	There are no fluvial units within or adjacent to the IAN002 block.
6.21	up to 10% alteration or removal of management zone	☐ Y	☒ N	<i>Amount of mature and old forest within the AFU may be reduced by 10% (measured in hectares).</i> N/A. See section 6.20.

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6.22 (a, b)	additional 10% alteration or removal of management zone	☐ Y	☒ N	<p>Amount of mature and old forest within the AFU may be reduced by additional 10% (measured in hectares) provided sufficient functional riparian forest is retained to protect the integrity of the AFU and adaptive management plan is developed, documented and implemented prior to reducing the AFU management zone by the additional 10%.</p> <p>N/A. See section 6.20.</p>
	tree height method	☐ Y	☒ N	<p>☐ a. Site series</p> <p>☐ b. Tallest tree</p> <p>N/A. See section 6.20.</p>
Upland Stream Areas				
6.24 (a-c)	Plan Holder agreement	☒ Y	☐ N	<p>Prior to development activities within a sub-unit, Plan Holders form an agreement outlining analysis, harvesting allocations and tracking.</p> <p>An agreement between all plan holders has been signed off on September 13, 2012.</p> <p>There are no overlapping sub-units in the proposed development area with other plan holders.</p> <p>All activities within the sub unit overlapping the IAN002 cutblock will be tracked within the FSP ledger for Upland streams.</p>
6.23, a-c	watershed analysis for sub-unit and ≥70% hydrologically recovered	☒ Y	☐ N	<p>☒ a. watershed analysis complete; and</p> <p>☒ b. proposed harvest rates consistent with analysis and ≥70% forest (measured in ha) in upland stream area is hydrologically recovered; and</p> <p>☒ c. group ledger reviewed (updated minimum annually).</p> <p>IAN002 has 11.4ha of the proposed harvest area within sub unit 176. This sub unit is 352.8ha and 273ha is hydrologically recovered (per the analysis completed by Taan Forest in June 2014). There is 26ha remaining within this sub unit for harvesting until the 70% threshold is reached. The harvest of IAN002, along with IAN001, will reduce the ECA in the sub unit to 71.3%.</p> <p>IAN002 has 20.2ha of the proposed harvest area within sub unit 179. This sub unit is 473.1ha and 417ha is hydrologically recovered (per the analysis completed by Taan Forest in June 2014). There is 85.8ha remaining within this sub unit for harvesting until the 70% threshold is reached. The harvest of IAN002, along with IAN001, will reduce the ECA in the sub unit to 83.1%.</p> <p>Harvesting within this sub unit will be updated within the upland stream FSP ledger.</p>
6.25 (a-d) 6.26 (a-c)	<70% hydrologically recovered	☐ Y	☒ N	<p>☐ 6.25 a-e. If proposing to reduce upland stream retention area within a watershed sub-unit to below 70% hydrologically recovered, Plan Holders form an agreement outlining responsibility for watershed assessment, allocation of harvest and tracking; and</p> <p>☐ 6.24 a-d. Intergovernmental process required. A Watershed Assessment is required, harvesting must be consistent with assessment and an adaptive management plan is completed, documented and implemented prior to reducing upland stream area below 70%.</p> <p>N/A. See section 6.23, a-c,</p>
6.27	direct tributaries - stream bank and channel stability	☒ Y	☐ N	<p>Where upland streams are direct tributaries to Type I or Type II Fish Habitat, sufficient vegetation, which may include trees, are retained to maintain stream bank and channel stability.</p> <p>Streams 4, 5, 6, 6A and 11 are direct tributaries to Type I or Type II fish habitat. Retention of trees are not required to be retained to maintain bank and channel stability. All streams have a 7m machine free zone established along them except for approved stream crossings.</p>

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6.28	stream channels incised, steep gradients and high-humidity micro-climates	☐ Y	☒ N	<p><i>Retain sufficient trees and vegetation to maintain the plant communities.</i></p> <p>There are no streams that are incised, have steep gradients or have high micro climates located within the IAN002 harvest area.</p>
Sensitive Watersheds				
6.31	Plan Holder agreement	☐ Y	☒ N	<p><i>Prior to development activities within a Sensitive Watershed, Plan Holders will form an agreement that documents responsibility for watershed analysis and updates, allocation of harvest and tracking.</i></p> <p>IAN002 is located within the Ian Lake3 watershed which has not been classified as sensitive watersheds under the LUO.</p>
6.29 a, b	watershed analysis & group ledger	☐ Y	☒ N	<p>☐ a. Watershed analysis complete that indicates ECA condition.</p> <p>☐ b. Group ledger maintained on an on-going basis to track development activities and ensure current ECA.</p> <p>Not applicable. IAN002 is not located in a sensitive watershed.</p>
6.30c	ECA ≥ 20%, no harvesting	☐ Y	☒ N	<p><i>No harvesting is permitted in SW if ECA is ≥ 20% (calculated under 6.28a and recorded in ledger under 6.28b).</i></p> <p>Not applicable. IAN002 is not located in a sensitive watershed.</p>
6.30a, b, d	ECA <20% - harvesting permitted	☐ Y	☒ N	<p><i>If ECA <20%:</i></p> <p>☐ a. watershed ≥ 500ha then up to 5% of the watershed may be harvested in a 5- year period; or</p> <p>☐ b. watershed <500ha, up to 10% of the watershed may be harvested in a 10-year period; and</p> <p>☐ d. proposed harvesting rates and ECA are consistent with the watershed analysis completed under R/S 6.28.</p> <p>Not applicable. IAN002 is not located in a sensitive watershed.</p>
6.32a-d 6.33	ECA ≥ 20%, harvesting proposed	☐ Y	☒ N	<p><i>Despite R/S 6.29, In the event that harvesting is proposed that exceeds the allowable harvest rate and/ or ECA thresholds:</i></p> <p>☐ 6.32. Plan Holders form an agreement on who is responsible for completing required assessments and adaptive management plans, harvest rate allocation and tracking; and</p> <p>☐ 6.31 a-d. intergovernmental process completed, watershed sensitivity assessment completed and rate of harvest is consistent with assessment, and an adaptive management plan is developed, documented and implemented prior to increasing the rate/ ECA.</p> <p>Not applicable. IAN002 is not located in a sensitive watershed.</p>
Forested Swamps ≥0.25ha				
<i>Forested Swamps refer to the following BEC types: CWH wh1 – 12; CWH wh2 – 06; CWH vh2 – 13 (referred to as western redcedar-Sitka spruce/ skunk cabbage ecological communities under the LUO</i>				
6.34	1.5 tree length (avg. width) management zone	☐ Y	☒ N	There are no forested swamps within or adjacent to IAN002.
6.35	management zone >70% mature and old forest	☐ Y	☒ N	<p><i>70% measures in hectares.</i></p> <p>N/A. See section 6.34.</p>
6.36a, b	management zone >60% mature and old forest	☐ Y	☒ N	<p><i>Despite 6.34, amount of mature and old forest may be reduced to 60% provided amount retained is sufficient to maintain integrity of the forested swamp and an adaptive management plan is developed, documented and implemented prior to reducing the amount below 70%.</i></p> <p>N/A. See section 6.34.</p>
	tree height method	☐ Y	☒ N	<p>☐ a. Site series</p> <p>☐ b. Tallest tree</p> <p>N/A. See section 6.34.</p>
Ecological Representation				

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6.37b (i-iv)	Plan Holder agreement	☒ Y	☐ N	<p>Prior to development activities, Plan Holders will form an agreement outlining who is responsible to complete the ecological analysis, allocation of retention and recruitment across each LU and tracking.</p> <p>An agreement between plan holders has been signed off on September 13, 2012.</p> <p>An analysis has been completed in June 2014.</p> <p>Spatial data is currently developed up to May 2014 using TEM</p>
6.37a, c	ecological representation analysis & group ledger	☒ Y	☐ N	<p>☒ a. Analysis indicates current inventory of old forest by site series and LU</p> <p>☒ c. Group ledger updated annually (minimum) to track depletions and additions to the old forest inventory by site series and LU.</p> <p>An analysis has been completed in June 2014.</p> <p>A group ledger has been developed and is being used by all tenure holders to track and update the analysis results in relation to the proposed harvesting. See section 6.38 for analysis results completed by Taan Forest.</p>
6.38	rare or common site series targets	☐ Y	☒ N	<p>Retain an amount (in hectares) of old forest greater than or equal to the applicable target listed for the identified site series consistent with R/S 6.36.</p> <p>IAN002 is located within the Ian landscape unit.</p> <p>Common site series found within the TAUP include:</p> <p>CWHwh1 01. Total Old forest area = 3938ha. 2103 ha is currently within LUO reserves and 778ha is required.</p> <p>CWHwh1 05. Total Old forest area = 231ha. 99 ha is currently within LUO reserves and 20ha is required.</p>
6.39	consideration of wildlife habitat	☐ Y	☒ N	<p>Where practicable, when establishing ecological representation areas, consider wildlife habitat for species at risk and regionally important wildlife, including but not limited to northern goshawk nesting and foraging habitat, MAMU or great blue heron nesting habitat, northern saw-whet owl core nesting areas and bear dens/ habitat.</p> <p>Section 6.39 is not applicable at the site plan level. This is being addressed by the Taan planning department at the landscape level. See section 6.38 for analysis results.</p>
6.40a, b	recruitment strategies	☐ Y	☒ N	<p>Where insufficient old forest available to meet ecological representation targets, identify, retain and recruit old forest by: choosing older stands given priority over younger stands; identifying mature stands of appropriate site series already constrained for other reasons and designating for ecological representation; and if not enough mature stands constrained for other reasons, select other suitable unconstrained areas.</p> <p>N/A. Ecological representation targets are met. See section 6.38.</p>
6.40 (i, ii)	recruitment intervention	☐ Y	☒ N	<p>Where mature stands are set aside for recruitment, consider fertilization of stand thinning treatments to promote old forest characteristics.</p> <p>N/A. Ecological representation targets are met. See section 6.38.</p>
Red and Blue Listed Ecological Communities ≥0.25ha				
6.41	retain all areas >0.25ha red and blue listed	☐ Y	☒ N	<p>There are no red or blue listed ecological communities within or adjacent to IAN002.</p>
6.42	up to 5% alteration or removal of red listed	☐ Y	☒ N	<p>If required for road access or to address a safety concern.</p> <p>N/A. See section 6.41</p>
6.43a, b	up to 30% alteration or removal of blue listed	☐ Y	☒ N	<p>☐ a. If required for road access or to address a safety concern; or</p> <p>☐ b. If required for another reason and harvesting is consistent with outcome of intergovernmental process.</p> <p>N/A. See section 6.41</p>

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Black Bear Dens				
6.44	20m no harvest zone	☐ Y	☒ N	There are no identified black bear dens within or adjacent to IAN002.
6.45a-c	alteration or removal of den and/ or no harvest zone	☐ Y	☒ N	Intergovernmental process required. Alteration or removal is required for road access or to address safety concern and does not occur during winter hibernation season. N/A. See section 6.44.
6.44	1.0 tree length (avg. width) management zone	☐ Y	☒ N	N/A. See section 6.44.
6.47a-c	Alteration or removal of management zone outside hibernation season	☐ Y	☒ N	Alteration takes place outside of hibernation season: and ☐ a. Alteration is required to accommodate operational requirements for road or bridge construction and no practicable alternative exists; or ☐ b. Alteration is required to accommodate road maintenance/brushing etc. on an existing tenured road for safety purposes; or ☐ c. Alteration is required to mitigate windthrow. N/A. See section 6.44.
6.46a, b	recruitment	☒ Y	☐ N	☐ a. Retain suitable cedar in the management zone, where practicable; and ☐ b. Retain trees, snags, stumps and logs >80cm in diameter in stand level retention, where practicable. There are numerous cedar trees, including snags and downed trees, outside the IAN002 block and in the identified retention and reserve areas, suitable for recruitment of black bear dens in the near future.
	tree height method	☐ Y	☒ N	☐ a. Site series ☐ b. Tallest tree N/A. See section 6.44.
Marbled Murrelet Nesting Habitat				
6.49, a-b	nesting habitat inventory analysis and agreement	☒ Y	☐ N	Prior to development activities: ☒ a. a nesting habitat retention inventory will be completed; and ☒ b. Plan Holders will form an agreement that documents how the nesting habitat retention will be allocated and tracking. An agreement between plan holders has been signed off on September 13, 2012. An analysis for MAMU habitat has been completed on June 13, 2013 by Taan Forest.
6.48 (a-c)	retain nesting habitat	☒ Y	☐ N	Within each LU where development areas are proposed: ☒ a. retain an amount of nesting habitat within each LU $\geq$ LU Target; and ☒ b. ensure the nesting habitat is within the areas shown in Sched. 11; or ☐ b. ensure the nesting habitat is within Class 1 or 2 as identified by a qualified professional ☒ c. group ledger is maintained that tracks depletions and additions to nesting habitat inventories (updated minimum annually). Within the Ian landscape unit, 1253ha of MAMU habitat is required. Currently there is 1670ha of nesting habitat within the LU and 1258ha is in reserves. In June 2013, Taan completed a landscape level planning exercise to allocate areas to satisfy the spatial areas required for MAMU habitat and ecological representation by landscape unit. Mamu habitat targets for the Ian LU have been fulfilled, with a significant surplus of Mamu habitat being reserved. There is no MAMU habitat identified in schedule 11 that

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				overlaps the IAN002 block.
Northern Goshawk Habitat				
6.50	reserve areas	☐ Y	☒ N	<p>Retain all reserves per Sched. 12.</p> <p>IAN002 does not overlap with the Goshawk reserves identified in schedule 12.</p>
6.51, a, b, d	nests identified outside of reserve areas	☒ Y	☐ N	<p>Where discover a potential nest outside of the Sched. 12 reserves:</p> <p>☒ a. cease harvesting and road-building activities within 800m of the potential nest immediately and report the location of the potential nest to the Council of the Haida Nation and the Province of BC as soon as practicable; and</p> <p>☒ b. have the nest and surrounding area assessed by a qualified professional; and</p> <p>☒ d the location of the confirmed nest will be reported to the Council of the Haida Nation and the Province of BC as soon as practicable.</p> <p>If a new nest is discovered, the procedures for reporting are located within the road and harvest instructions.</p>
6.51 c, e	200ha no harvest zone; 800m restricted activity zone	☐ Y	☒ N	<p>Where the qualified professional determines the nest to be a Northern Goshawk nest:</p> <p>☐ c. a 200ha no harvest zone is established that maximizes the best available nesting and foraging habitat available, to protect the integrity of the nest site, consistent with the assessment and recommendations of a qualified professional; and</p> <p>☐ d. unless the nest is confirmed by a qualified professional to be inactive during the Northern Goshawk breeding season (reconfirmed annually), a restricted activity zone will be maintained during the breeding season, with a minimum radius of 800m around the nest site.</p> <p>N/A</p>
6.52 a-d	reductions to reserves and no harvest zones	☐ Y	☒ N	<p>Despite R/S 6.49 and 6.50, reserves and no-harvest zones may be reduced provided the reduction is consistent with the results of intergovernmental process, reduction is required for road access where no practicable alternative exists or to address a safety concern, the reduction does not occur during breeding season and there is no net loss to the reserve area.</p> <p>N/A</p>
Great Blue Heron Nesting Habitat				
6.54 a, b, d	potential nest sites	☒ Y	☐ N	<p>Where a plan holder identifies a potential nest site:</p> <p>☒ a. cease harvesting and road-building activities within a 350m radius of the potential nest immediately and report the location of the potential nest to the CHN and the Province of BC as soon as practicable; and</p> <p>☒ b. have the nest and surrounding area assessed by a qualified professional; and</p> <p>☒ d. report the location of the confirmed nest to the CHN and province of BC as soon as practicable</p> <p>There were no new potential great blue heron nests identified during the layout of IAN002. If a new nest is discovered, the procedures for reporting are located within the road and harvest instructions.</p>
6.53, 6.54 c	350m and ≥45ha no harvest zone	☐ Y	☒ N	<p>Retain confirmed nest sites with 350m no harvest zone. No harvest zones must also be ≥45 ha in size.</p> <p>N/A</p>
6.54e	150m breeding season restricted activity zone	☐ Y	☒ N	<p>Unless confirmed by a qualified professional to be inactive three consecutive years during the breeding season (reconfirmed annually).</p> <p>N/A</p>
Northern Saw-whet Owl Habitat				

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6.55	reserve areas	☐ Y	☒ N	<p>Retain all reserves per Sched. 12.</p> <p>IAN002 does not overlap with any saw-whet owl habitat as identified in schedule 12 of the LUO.</p>
6.55, a, b, d	nests identified outside of reserve areas	☒ Y	☐ N	<p>Where discover a potential nest outside of the Sched. 12 reserves:</p> <p>☒ a. cease harvesting and road-building activities within 180m of the potential nest immediately and report the location of the potential nest to the Council of the Haida Nation and the Province of BC as soon as practicable; and</p> <p>☒ b. have the nest and surrounding area assessed by a qualified professional; and</p> <p>☒ d the location of the confirmed nest will be reported to the Council of the Haida Nation and the Province of BC as soon as practicable.</p> <p>If a new nest is discovered, the procedures for reporting are located within the road and harvest instructions.</p>
6.56 c 6.57	10ha no harvest zone, centered on nest site	☐ Y	☒ N	<p>Where the qualified professional determines the nest to be a Northern Saw-whet owl nest:</p> <p>☐ c. a 10ha no harvest zone is established and is centered around the nest site.</p> <p>N/A</p>
6.57	core nesting areas	☐ Y	☒ N	<p>Where practicable, Northern Saw-whet Owl core nesting areas will be identified and retained within stand level retention and other no-harvest or management zone areas and distributed across the landscape, with a target maximum inter-patch spacing of 1,400m.</p> <p>N/A</p>
Forest Reserves				
6.58	reserves	☐ Y	☒ N	<p>Retain all forest reserves per Sched. 8</p> <p>IAN002 does not overlap with any forest reserves as identified in schedule 8 of the LUO.</p>
6.59 a-c (i-iii)	up to 5% reduction of forest reserve	☐ Y	☒ N	<p>Despite R/S 6.57, up to 5% of the area of an individual forest reserve may be reduced provided:</p> <p>☐ a. target requirements for ecosystem representation (R/S 6.37) and MAMU (R/S 6.47) have been met; and</p> <p>☐ b. the remaining forest reserve is ≥ 5ha; and</p> <p>☐ c. the reduction is necessary to:</p> <p>☐ (i) accommodate operational requirements for road or bridge construction and no practicable alternative exists; or</p> <p>☐ (ii) accommodate road maintenance, deactivation, removal of danger trees, brushing and clearing of R/W or for safety purposes on any existing road under tenure; or</p> <p>☐ (iii) to mitigate impact from windthrow</p> <p>N/A. See section 6.58.</p>
6.60 (a-f)	moving portion of forest reserve	☐ Y	☒ N	<p>Despite R/S 6.57, a portion of a forest reserve may be moved to another location in the same LU provided:</p> <p>☐ a. the alteration is consistent with the outcome of a completed intergovernmental process; and</p> <p>☐ b. target requirements for ecosystem representation (R/S 6.37) and MAMU (R/S 6.47) have been met; and</p> <p>☐ c, d, e. the portion removed is ≤ 20ha, the areas retained are >200m wide and the relocation does not result in any forest reserve that is <5.0ha; and</p> <p>☐ f. the relocation follows the recommendations of an assessment completed by a qualified professional which focuses on identifying candidate reserve areas consistent with meeting the LUO objectives established for Marbled Murrelet nesting habitat and ecological representation.</p> <p>N/A. See section 6.58.</p>
Recruitment				

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6.61	recruitment in no harvest zones, management zones and stand level retention areas	☐ Y	☒ N	<p>Where some or all of the not harvest zones, management zones or stand level retention requirements under the LUO (cross ref R/S 6.4, 6.6-6.9, 6.14, 6.16, 6.17, 6.19, 6.33, 6.49, 6.50) have been previously altered or harvested, Plan Holders will provide for recruitment of mature and old forest through passive or active treatments (refer to the FSP and table 8 for details):</p> <p> ☐ Class 1 HF ☐ Class 2 HF ☐ Class 1 FF ☐ Class 2 FF ☐ Class 3 FF ☐ Cultural cedar stand, CMT, Monumental Cedar (90% mature and old forest) ☐ Type 1 Fish Habitat ☐ Type II Fish Habitat ☐ Active Fluvial Unit ☐ Forested Swamps ☐ Northern Goshawk Reserves ☐ New Northern Goshawk nests </p> <p>There is no recruitment required for this area. All of the no harvest and management zones associated with the identified features are old growth.</p>
Annual Reporting and Data Submission				
6.62	annual reporting and data submission	☒ Y	☐ N	<p>Annual reporting and data submissions are required for many R/S refer to FSP Table 9, cross ref R/S 6.4, 6.6-6.9, 6.11-6.21, 6.33, 6.37, 6.40-6.43, 6.58, 6.59.</p> <p>Note: at the Site Plan level, the only applicable item related to this R/S is as follows:</p> <p>☒ GIS Layers properly identified</p> <p>Taan Forest will report all activities within the IAN002 block during annual reporting submission the December after harvesting of IAN002 commences.</p>
FPPR Practice Requirements				
6.63	soils (FPPR 35, 36)	☒ Y	☐ N	<p> ☒ s35. Soil disturbance limits for each SU are listed on page 1. ☒ s36. Permanent access limits ≤7%; or ☐ s36. PAS >7% but no other practicable option exists related to size, topography and engineering constraints, safety of road users or the excess is related to selection harvesting and use of trails ☐ s36. PAS >7% but the additional PAS is required to provide access beyond the block. </p> <p>The soil disturbance limits are noted on page 1 and the PAS is noted on the site plan map. The PAS is 2.23ha and the TAUP is 58.7ha which equates to 3.8%.</p>
6.64	wetlands (FPPR 48)	☐ Y	☒ N	<p>Wetlands not classified as Type I or Type II fish habitat are managed per FPPR classes and minimum reserve and management zone widths.</p> <p>There are no wetlands within or adjacent to the IAN002 development unit.</p>
6.65	lakes (FPPR 49)	☐ Y	☒ N	<p>Lakes not classified as Type I or Type II fish habitat are managed per FPPR classes and minimum reserve and management zone widths.</p> <p>There are no lakes, which are not classified as Type I or Type II habitat, associated with the IAN002 cutblock.</p>
6.66	restrictions in RMA (FPPR 50)	☒ Y	☐ N	<p>Upland streams, wetlands and lakes not classified as Type I or Type II habitat, are managed per FPPR 50 restrictions in an RMA:</p> <p>For the purposes of Upland streams, the applicable RMZ is 30m.</p> <p>There are six upland streams within the planned harvest area of the IAN002 block. Portions of the RMA along these streams are planned for removal. Trees will be felled and yarded away where safe to do so. All planned stream crossings are noted on the maps. The streams will be cleaned of any introduced debris concurrent with harvesting.</p>

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6.67	restrictions in wetland or lake reserve zone (FPPR 51)	☐ Y	☒ N	Wetlands and lakes not classified as Type I or Type II fish habitat are managed per FPPR restrictions within a riparian reserve zone. There are no wetlands or lakes, which are not classified as Type I or Type II habitat, associated with the IAN002 cutblock.
6.68 b, c	retention of trees within RMZ (FPPR 12(3))	☒ Y	☐ N	For the purposes of Upland streams, the applicable RMZ is 30m. Upland stream BA retention 0-100%. For wetlands and lakes not classified as Type I or Type II habitat BA retention ranges from 0-100%, considering potential for windthrow damage to feature or reserve zone. There are six upland streams located within the harvest area of the IAN002 block. Where the RMA of these streams overlap the harvest area it is planned for removal. The basal area retained along these sections of the streams within the harvest area is 0%.
6.70	community watersheds (FPPR 8(2))	☐ Y	☒ N	Prior to development activities within a community watershed, Plan Holders will form an agreement that documents who is responsible for completing watershed assessments and any updates that might be required; allocation of harvesting rates and tracking. IAN002 is not located within a community watershed.
6.69 a-d	community watersheds (FPPR 8(2))	☐ Y	☒ N	Proposed harvesting is within one of the following CWs: ☐ Honna River ☐ Slarkedus Creek ☐ Tarundl Creek ☐ QC City ☐ a. watershed assessment completed by qualified professional ☐ b. primary forest activities are consistent with the recommendations of the assessment ☐ c. assessment is updated every 5-years by qualified professional, unless no additional primary forest activities are proposed. ☐ d. group ledger is maintained (updated minimum annually) to track development activities. IAN002 is not located within a community watershed.
6.71	maximum cutblock size (FPPR 64)	☒ Y	☐ N	☒ Net Area to be Reforested (NAR) ≤ 40 ha; or ☐ harvesting is to recover timber damaged by fire, insect infestation, wind or other similar event and is designed to be consistent with natural disturbance; or ☐ Basal area retention is $\geq 40\%$; or ☐ no point in the cutblock is $>$ two tree lengths from boundary, retention patch >0.25 ha; or ☐ not point in the cutblock is more than one tree length from group of trees in patches <0.25 ha. IAN002 has a NAR less than 40ha.
6.72	adjacency (FPPR 65)	☐ Y	☒ N	Must not harvest timber on a new area unless the existing cutblocks meet the green-up requirements specified in FPPR 65 (3) or the combined area of the existing cutblock, including any areas not greened up, have NAR ≤ 40 ha. IAN002 is not adjacent to any proposed or recently harvested blocks that have not met green up status.
6.73	adjacency (FPPR 65)	☐ Y	☒ N	This R/S only applies to the Eden Lake Landscape Unit which is not located in Taan's tenure areas.
6.74	wildlife tree retention (FPPR 66, 67)	☒ Y	☐ N	Each block minimum 3.5%, 12 month average of blocks minimum of 7%. Each licensee is responsible for tracking. A WTRA may relate to multiple cutblocks if collectively, they meet the requirements. No harvesting within a WTRA unless the NAR to which the WTRA relates have developed attributes consistent with mature seral condition. The WTRA for IAN002 is 2.5ha or 8.1% of the Gross Harvest Area (30.9ha). The gross harvest area includes all cleared areas within the development unit. This includes the NAR (28.7ha) and the PAS (2.2ha).
6.75	cultural heritage resources – information sharing	☒ Y	☐ N	A minimum of once annually, FSP holders will provide the CHN with opportunity to share information regarding cultural heritage resources: proposed activities, request information, keep records and document management activities to accommodate or rationale why efforts to accommodate not made.

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	(FPPR 10)			Information sharing is undertaken in association with cutting permit submission.
6.76	development area referral (FPPR 10)	☒ Y	☐ N	<i>FSP Holders will submit maps for all proposed development areas to the CHN 30 days prior to cutting authority submission.</i> Referral to the CHN is undertaken in association with cutting permit submission, and will occur 30 prior to CP submission..
Government Action Regulation (GAR) requirements				
6.77, a-b	visual quality (GAR 7(2), FRPA 180, 181)	☒ Y	☐ N	IAN002 is located within a known scenic area. The VQO for the block is modification. A digital terrain model has been created on January 26, 2015. The DTM indicated a portion of IAN002 will be visible from two viewpoints. The modification visual quality objective states that blocks within this category of alteration must be very easy to see and large in scale and natural in appearance or small to medium in scale and some angular characteristics. IAN002 can be seen from viewpoint 410. The total area from viewpoint 410 that includes IAN002 (410-3), is 117.55cm ² and the IAN002 block takes up 0.18cm ² . These represent 0.15% of the DTM from this viewpoint. This is less than the 18% alteration for modification limit guide set by the Haida Gwaii Forest District in April 2013. IAN002 can be seen from viewpoint 411. The total area from viewpoint 411 that includes IAN002 (411-3), is 122.52cm ² and the IAN002 block takes up 1.29cm ² . This represents 1.1% of the DTM from this viewpoint. This is less than the 18% alteration for modification limit guide set by the Haida Gwaii Forest District in April 2013. The IAN002 block meets these objectives according to the DTM.
6.78	recreation resources/ trails (FRPA 180, 181)	☐ Y	☒ N	<i>Proposed harvesting or road construction adjacent to a designated recreation site or trail, Plan Holder will consult with agency responsible to ensure proposed activity conducted in accordance with established objectives.</i> <i>Rec Sites:</i> ☐ Rennel Sound ☐ Kagan Bay ☐ Clapp Basin ☐ Small Lake ☐ Moresby <i>Trail:</i> ☐ Riley Beach ☐ Five Mile Beach ☐ Slatechuck Mountain ☐ Sleeping Beauty IAN002 is not adjacent to any designated recreation sites or trails.
6.79	recreation resources/ trails (FRPA 180, 181)	☐ Y	☒ N	☐ <i>established objective is for "non-motorized access";and</i> ☐ <i>proposed new road construction will provide motorized access to the recreation site or trail</i> <i>Plan holder will deactivate the road within one year following completion of primary activities or obtain written approval from the government agency to maintain access and access will be established per the approval.</i> IAN002 is not adjacent to any designated recreation sites or trails.
6.80	Karst (GAR 5)	☐ Y	☒ N	☐ <i>Resource Features include karst caves, significant surface karst feature and very high or high vulnerability karst terrain (and Class 2 HF under LUO).</i> <i>Management strategies will follow R/S 6.6; and regardless of the outcome of an intergovernmental process, Karst Resource Features will not be damaged or rendered ineffective.</i> IAN002 does not overlap nor is it adjacent to any known Karst features.

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6.81	WHA-MAMU (FPPR 9, 69)	☐ Y	☒ N	<p>Plan Holders will comply with the established General Wildlife Measures under the Order (6-041 and 6-046): including variance required to build road, operational timing restrictions, constraints to recreation and silviculture, including salvage activities, fire protection priority and stand treatments in 2nd growth stands to promote old growth characteristics.</p> <p>IAN002 complies with the established GWM under the order (6-041 and 6-046). There are no established WHA in the vicinity of the development area.</p>
6.82	WHA-QC/Northern Goshawk (FPPR 9, 69)	☐ Y	☒ N	<p>Plan Holders will comply with the established General Wildlife Measures under the Order (6-001 and 6-002): including seasonal constraints to activities in vicinity, no road construction within 200m of active nest unless variance approved, no blasting within 1km of active nest during breeding season as determined and confirmed with MoE, no harvesting or salvage within QHA except stand treatments to promote old growth characteristics. Also some specific restrictions for foraging areas (variable retention harvesting, maintain CWD, etc).</p> <p>IAN002 complies with the established GWM under the orders (6-001 and 6-002). The GWM refer to activities within the two identified WHA's on Haida Gwaii. IAN002 is not close to either WHA.</p>
Measures – Invasive Plants				
7.1	training	☒ Y	☐ N	<p>The SP Forester (Hyland Fraser) who conducted the field work was trained in the identification of invasive plants on June 1, 2013.</p>
7.2	monitoring & reporting	☒ Y	☐ N	<p>Monitor for the presence of invasive plant species during forest development fieldwork, silviculture surveys, routine inspections and general travel. Where new invasive plant incidences are identified, they will be reported within 30 days to the NWIPC, or by filing a report in the IAPP application directly.</p> <p>Identification of previously unidentified invasive plants will be made known to Taan Representatives by surveyors, forest technicians, foresters or other trained personnel during site surveys and other silviculture or additional fieldwork within or around the area.</p>
7.3	monitoring & reporting	☒ Y	☐ N	<p>Where new occurrences of invasive plants are detected (either a newly introduced plant species, or a new location of a plant species known to already exist within the Plan Area), the site will be assessed by trained personnel. Where practicable, an appropriate action plan will be prepared and implemented to address the invasive plant occurrence. Action plans may include working with government agencies to develop and implement an eradication or management plan.</p> <p>Indication of previously unidentified invasive plants will be made known to Taan Representatives by surveyors, forest technicians, foresters or other trained personnel during site surveys and other silviculture or additional fieldwork within or around the area. Taan will follow the assessment and action plan procedures indicated above.</p>
7.4	sanitation and disposal	☒ Y	☐ N	<p>Recommend their logging and road building contractors to inspect vehicles and equipment, particularly tracks and undercarriages, for the presence of plant parts and that equipment be cleaned prior to leaving an area that is known to contain priority invasive plant species.</p> <p>Contractors, road builders, brushers and other logging contractors are encouraged to wash equipment before moving from an area of known invasive plants before moving into a new area (refer to Harvest Instructions, Road Instructions and/ or Salvage Instructions for details).</p>
7.5	sanitation and disposal	☒ Y	☐ N	<p>Where invasive plant material is disposed of it will be disposed of in a landfill or by burning, to the extent practicable</p> <p>Where plant parts are actually removed from machines it is encouraged that the plant parts be disposed of by burning to</p>

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				avoid spread in land fill areas. If necessary plant parts should be disposed of in land fill areas (refer to Harvest Instructions, Road Instructions and/ or Salvage Instructions for details).
7.6 a-c	re-vegetation	☒ Y	☐ N	<p>For newly developed areas (roads and cutblocks) that result in exposed mineral soils (where contiguous area is greater than 0.1ha, with a contiguous minimum width of 5m, excluding the running surface of a road), the Plan Holder will do the following:</p> <p>☒ a. re-vegetate the exposed area as climatic and soil conditions allow and within one year of disturbance, if:</p> <ul style="list-style-type: none"> -the disturbed area is not to be reforested and is not the running surface of a road; and -the soil disturbance is likely to result in the introduction or spread of the established invasive plants; and -re-vegetating the site will materially reduce that likelihood of the spread of the invasive plants. <p>☒ b. monitor the seeded areas for one year from the date of initial seeding to determine if the seed germinates to the extent necessary to occupy the areas of exposed soil; and</p> <p>☒ c. if within one year of the area being initially seeded, the seed does not germinate to the extent necessary to occupy the areas of exposed soil, the Plan Holder will re-seed the area as soon as practicable. Where seeding alone is not successful, fertilization and scarification treatments will be considered, where feasible</p> <p>Cut blocks are planned in Cengea for grass seeding of exposed soils from logging activities. The cut block is first entered as part of the silviculture regime. This is completed by Taan's Operations Forester.</p>
7.7	re-vegetation	☒ Y	☐ N	<p>Use Common No. 1 Forage Mixture (according to Canada's seed regulations). Or better.</p> <p>All grass seed ordered will be Canada # 1 Forage or better.</p>
7.8	roadside brushing	☒ Y	☐ N	<p>Where practicable, Plan Holders will modify roadside brushing treatment methods/ procedures to minimize the spread of established invasive plants (e.g., alter timing or method).</p> <p>Invasive Plants found in the area? ☐ Yes ☐ No</p> <p>Where scotch broom is present: schedule brushing mainline roadsides leading to the block(s) for winter/ early spring (before broom flowers). This will help reduce the amount of seed matured and spread.</p> <p>Where bull thistle is present: avoid brushing during times when seed can become airborne (generally mid to late summer).</p>

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D. FSC Certification Requirements

FSC certification requirements do not form part of the legal Site Plan content, commitments are voluntary under third party certification.

The following is provided for informational/ planning purposes and does not form part of the legal content of the Site Plan.

FSC Requirement ID	Title	Applicable?		Description
FSC 1	conflicts with LUO/ FSP	☐ Y	☒ N	<i>Note, that legal requirements under the LUO and the FSP take precedence over FSC certification requirements. In the event of an identified conflict between legal requirements and FSC, notify a member of the Planning Team promptly.</i> N/A, the FSC Management Plan notes that there are no identified conflicts.
FSC 2	consultation	☐ Y	☒ N	<i>LWI, Community Watersheds</i> <i>RE: planning notifications when proposed operations are in the vicinity of known LWIs or CW. In the event that any concerns raised can't be successfully resolved with the other party, contact the CMS Administrator promptly to initiate the FSC Dispute Resolution Process.</i> N/A. The cutblock is not within or adjacent to a community watershed and is not located within the vicinity of a licensed water intake (confirmed by GIS layers). <i>Mount Moresby Adventure Camp (MMAC) – Mosquito Lake area: Planning notifications and consultation when proposed operations are in the vicinity. Review GIS layers for key sites identified as important to MMAC (e.g., visuals, karsts, bear dens, rare plants, trails, campsites, historical sites, old growth, etc.)</i> The cutblock is not in close proximity to the MMAC or Mosquito Lake area.
FSC 3	riparian budgets	☒ Y	☐ N	<i>FSC Riparian Budgets Tracking Sheet completed and budgets met (rationale documented).</i> Type I: 0 ha Type 2: 0 ha S5a: 0 ha S5b: 0 ha S6a: 2.07 ha S6b: 0.16 ha
FSC 4	stand level retention	☒ Y	☐ N	<i>Within each cutblock area (>200 m wide or 100 ha in aggregate), the retention of dominant and co-dominant green trees and snags as patches and/or single trees, and exceeds the following minimum levels (stems/ha, of which a minimum of 25% are snags where present): NDT 1 – 8 stems per hectare</i> <i>Confirm whether LUO reserve areas meet the FSC requirement, establish additional reserves where required.</i> Retention: 400 sph (min. req'd = 8sph) Snags: 20 sph (min. req'd = 2sph) Estimates for retention and snags are based field observations by the SP Forester and the layout crews as well as information from the timber cruise. The cruise for the block indicates a stand density of 403sph. The identified LUO reserve areas have similar qualities when compared to the block. Field review = 20sph snags (10sph large dbh Hw, Cw, Ss, Cy; 10sph small dbh Hw, Cw, Ss, Cy).
		☐ Y	☒ N	<i>For the Skidegate LU, the target is to achieve an average of at least 20% stand level retention (in long term retention areas), as measured on an annual basis.</i> The proposed harvest area is not located within the Skidegate LU.

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FSC 5	stand level retention inventory	☒ Y	☐ N	<p>Provide a description of all reserves and retention patches associated with the proposed development area:</p> <p>-species representation (%) and dbh (min, max and average). Include in the description the percent representation of live wildlife trees and snags in general.</p> <p>-% of <u>large</u> snags (large snag is $\geq 30\text{cm}$ dbh and $\geq 10\text{m}$ height within the patch and compared to the % in the proposed harvest area (e.g., 20%/30%)</p> <p>-estimated # of pieces/ ha large CWD ($\geq 20\text{cm}$ dbh and $\geq 10\text{m}$ long) within retention area and compared to the estimated occurrence in proposed harvest area (e.g., 10/12).</p> <p>The retention areas have been established to meet the requirements of the FSP/LUOO. Retention areas have some portions similar to the proposed harvest area.</p> <p>Patch east of FC31 to FC37 and outside boundary from FC81 to FC73</p> <p>Spp & dbh avg (min-max): HW₅₀CW₂₃ SS₁₉Cy₈ – 0.55m (0.4m-0.7m)</p> <p>% live wildlife trees & % snags: 15%/15%</p> <p>% Large snags vs. harvest area: 15%/15%</p> <p>CWD # vs. harvest area: 20/20</p> <p>Description: The LUO reserve area has similar characteristics when compared to the harvest area. The reserve area consists of primary old growth Hw, Cw, Ss and Cy.</p>
FSC 6	HCVF – unique ecosystems	☐ Y	☒ N	<p>FSC MP - Sitka Spruce Riparian Forest, Sitka Spruce Sea Spray/ Fog Forest, Limestone Areas:</p> <p>N/A. There are no HCVF unique ecosystems within this proposed development area.</p>
FSC 7	HCVF – species at risk	☐ Y	☒ N	<p>FSC MP – high priority species not addressed under LUO: Barrow's goldeneye, Brown creeper, Steller's jay, Hairy woodpecker, ancient murrelet, keen's myotis, Western cowbane, Sphagnum subobesum, Haida Gwaii slug:</p> <p>There were no high priority species at risk within or in close proximity to the proposed development area.</p>
FSC 8	HCVF – large intact forests	☐ Y	☒ N	<p>Where proposed development area is located within one of the identified HCVF Large Landscape Intact Forest polygons, the existing plus proposed development (cutblock and road area) are within the established thresholds.</p> <p>The proposed development area is not associated with a HCVF large intact forest.</p>
FSC 9	NTFP	☐ Y	☒ N	<p>Mushroom study and habitat mapping reviewed and considered in block planning/ layout (e.g., Skidegate Lake and Mosquito Lake areas).</p> <p>The cutblock is not located within the Skidegate or Mosquito Lake areas.</p>
		☐ Y	☒ N	<p>Notification to Haida regarding potential cedar bark stripping areas prior to harvesting (preferably after roads are constructed). Typical season is March to end of July for red cedar and August to "first frost" for yellow cedar. General description of good candidate trees include large enough diameter to "hug", for red cedar, between 70-150 years old (similar in size to what is being harvested for the pole plant) and for yellow, >70 years old:</p> <p>☐ Marlene Liddle – marlene.liddle@mhtv.ca</p> <p>The cutblock has a poor potential for bark stripping. The block is old growth with 31% of the volume as cedar and cypress.</p>
FSC 10	access management	☒ Y	☐ N	<p>Consider access management and potential or deactivation to limit access to sensitive areas (e.g., WHAs, sensitive wildlife habitat, LWIs, Community Watersheds, etc).</p> <p>The roads wholly contained within the block (Tr2515, IAN002-1, IAN002-2 and IAN002-3) will be temporarily deactivated upon the completion of logging. These roads will have small cross ditches installed to control water runoff. There are no identified sensitive areas as noted above in the general vicinity of the proposed area.</p>

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		☒ Y	☐ N	<p>Minimize new road construction and use existing roads to the best extent practicable in the following LUs: Skidegate & Masset</p> <p>The PAS for the block is 3.8% and will be using a portion of the previously built Tracy Main to harvest a portion of the block.</p>
FSC 11	max ECA 25%	☒ Y	☐ N	<p>Despite LUO requirements for Sensitive Watersheds and Upland Streams, the maximum permitted ECA under FSC is 25% (unless a hydrological assessment is completed that permits otherwise, and the assessment is publically available).</p> <p>The watershed analysis, completed in Sept 2014, for The Ian Lake 3 watershed, which includes IAN002, calculated an ECA of 12.9%. The harvest of IAN002, along with IAN001, will increase the ECA to 15.0%.</p>
FSC 12	forest influence	☒ Y	☐ N	<p>Report the forest influence for the proposed cutblock.</p> <p>The total area of the forest influence is 30.9ha or 62.80% of the TAUP (49.2ha).</p>
FSC 13	landscape level connectivity	☐ Y	☒ N	<p>Considerations for landscape level connectivity within the Sewell and Honna LUs (e.g., consideration of connections for stand level reserves to adjacent forested area or reserve networks):</p> <p>The cutblock is not located within the Sewell or Honna LU's.</p>
FSC 14	important recreation areas	☐ Y	☒ N	<p>Considerations for key recreation sites of importance to locals and the Haida:</p> <p>☐ Massett Inlet ☐ Papa Johns ☐ Mosquito Lake</p> <p>There were no known important recreation sites within or adjacent to the proposal.</p>
FSC 15	important bird areas	☐ Y	☒ N	<p>Considerations if any Important Bird Areas (refer to GIS layers) are located in the vicinity of the proposed development.</p> <p>☐ IBA 147 Lawn Point ☐ IBA 145 Skidegate Inlet ☐ IBA 144 Cumesheewa Inlet to Sheldens Bay</p> <p>The cutblock is not located in vicinity of any important bird areas.</p>
FSC 16	landslide hazard	☐ Y	☒ N	<p>Typically, "likelihood" is noted as "hazard" in TSFAs.</p> <p>Road Construction and Harvesting not permitted:</p> <p>☐ High likelihood landslide</p> <p>☐ Very high potential for snow avalanche</p> <p>*If appropriate measures can be applied that reduce the high likelihood/ very high potential, then harvesting and road construction may occur.</p> <p>Measures to reduce likelihood:</p> <p>There are no areas of high likelihood of landslide or very high likelihood for snow avalanche located along the proposed roads.</p> <p>Operations permitted IF measures implemented to reduce risk or prevent sedimentation and erosion:</p> <p>☐ Moderate likelihood landslide and high-very high landslide induced stream sedimentation hazard</p> <p>☐ Moderate likelihood of landslide and high-very high likelihood of reaching areas of human habitation</p> <p>☐ High potential for snow avalanche initiation</p> <p>☐ High-very high road/ditch/surface erosion hazard and high-very high sediment delivery</p> <p>Measures to reduce risk:</p> <p>There are no areas of moderate likelihood of landslide, which could impact streams, located within the harvest area.</p> <p>☐ Harvesting adjacent to areas of high likelihood of landslide or within/ adjacent to areas with moderate likelihood of landslide initiation does not significantly increase windthrow hazard in those areas.</p> <p>There are no areas of high likelihood of landslide located adjacent to the harvest area.</p>

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FSC 17	permanent sample plots	☐ Y	☒ N	<p><i>Are there any known PSPs in the vicinity of the planned development that will be impacted and if so, provide sufficient rationale to support the development (e.g., harvesting approved by MFLNRO, PSP is not deemed to be required, etc.)</i></p> <p>There are no PSP's in the vicinity of the planned development.</p>
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IAN002/ Tr2515

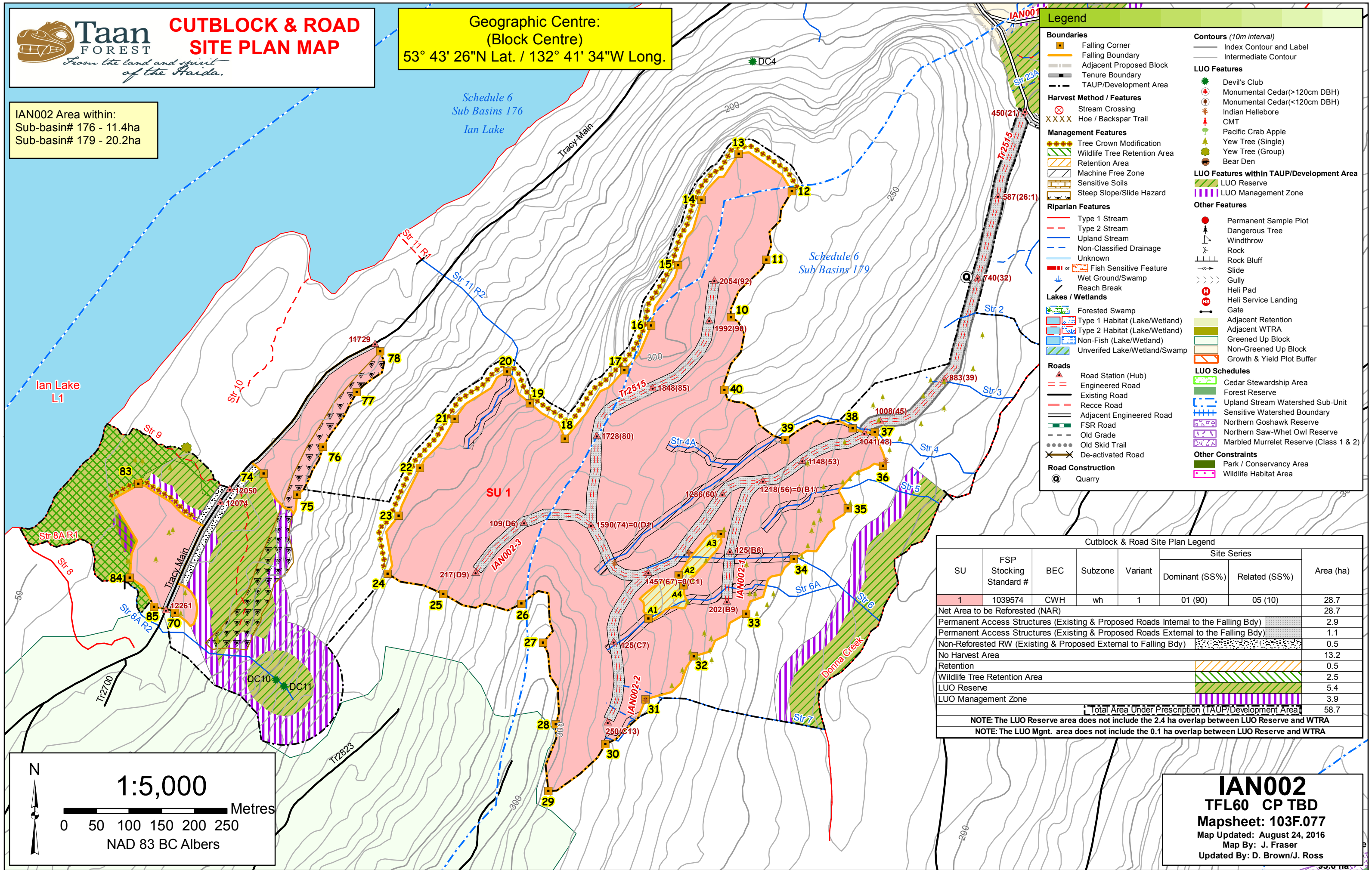
E. Supporting Information								
Soil Assessment:								
Hazard Ratings					Soil Characteristics			
SU	Soil Comp.	Soil Displ.	Surface Erosion	Forest Floor Displ.	Depth to Unfavorable Subsoil		Type of Unfavorable Subsoil	Sediment Delivery Risk (Community Watershed)
					Min (cm)	Max (cm)		
1	H	M	M	M	30	50	Bedrock	N/A
Amendment Description/ Notes: ☐ N/A								
Attachments: (completed and reviewed, results incorporated into plans)								
Site Plan or Salvage Plan Map:							☒	
Other (specify):							☐	
Assessments:								
Riparian - Y ☒ / Not req. ☐			Terrain - Y ☒ / Not req. ☐					
Fish - Y ☒ / Not req. ☐			Visual - Y ☒ / Not req. ☐					
Windthrow - Y ☒ / Not req. ☐			Cultural Features ID - Y ☒			Arch. - Y ☐ / Not req. ☒		
Gully - Y ☐ / Not req. ☒			Karst - Y ☐ / Not req. ☒					
Administration:								
Prepared By: Hyland Fraser Name (Printed)					 			
Signing RPF: Hyland Fraser RPF Name (Printed)								
07/31/2016		3780			RPF Signature and Seal			
Date Signed (mm/dd/yyyy)		RPF Number						
☐	"I certify that the work described herein fulfills the standards expected of a member of the Association of British Columbia Forest Professionals and that I did personally supervise the work."							
☒	"I certify that I have reviewed this document and, while I did not personally supervise the work described, I have determined that this work has been done to the standards expected of a member of the Association of British Columbia Forest Professionals."							



CUTBLOCK & ROAD SITE PLAN MAP

IAN002 Area within:
Sub-basin# 176 - 11.4ha
Sub-basin# 179 - 20.2ha

Geographic Centre:
(Block Centre)
53° 43' 26"N Lat. / 132° 41' 34"W Long.



Legend

Boundaries

- Falling Corner
- Falling Boundary
- Adjacent Proposed Block
- Tenure Boundary
- TAUP/Development Area

Harvest Method / Features

- Stream Crossing
- Hoe / Backspar Trail

Management Features

- Tree Crown Modification
- Wildlife Tree Retention Area
- Retention Area
- Machine Free Zone
- Sensitive Soils
- Steep Slope/Slide Hazard

Riparian Features

- Type 1 Stream
- Type 2 Stream
- Upland Stream
- Non-Classified Drainage
- Unknown
- Fish Sensitive Feature
- Wet Ground/Swamp
- Reach Break

Lakes / Wetlands

- Forested Swamp
- Type 1 Habitat (Lake/Wetland)
- Type 2 Habitat (Lake/Wetland)
- Non-Fish (Lake/Wetland)
- Unverified Lake/Wetland/Swamp

Roads

- Road Station (Hub)
- Engineered Road
- Existing Road
- Recce Road
- Adjacent Engineered Road
- FSR Road
- Old Grade
- Old Skid Trail
- De-activated Road

Road Construction

- Quarry

Contours (10m interval)

- Index Contour and Label
- Intermediate Contour

LUO Features

- Devil's Club
- Monumental Cedar(>120cm DBH)
- Monumental Cedar(<120cm DBH)
- Indian Hellebore
- CMT
- Pacific Crab Apple
- Yew Tree (Single)
- Yew Tree (Group)
- Bear Den

LUO Features within TAUP/Development Area

- LUO Reserve
- LUO Management Zone

Other Features

- Permanent Sample Plot
- Dangerous Tree
- Windthrow
- Rock
- Rock Bluff
- Slide
- Gully
- Heli Pad
- Heli Service Landing
- Gate
- Adjacent Retention
- Adjacent WTRA
- Greened Up Block
- Non-Greened Up Block
- Growth & Yield Plot Buffer

LUO Schedules

- Cedar Stewardship Area
- Forest Reserve
- Upland Stream Watershed Sub-Unit
- Sensitive Watershed Boundary
- Northern Goshawk Reserve
- Northern Saw-Whet Owl Reserve
- Marbled Murrelet Reserve (Class 1 & 2)

Other Constraints

- Park / Conservancy Area
- Wildlife Habitat Area

Cutblock & Road Site Plan Legend							
SU	FSP Stocking Standard #	BEC	Subzone	Variant	Site Series		Area (ha)
					Dominant (SS%)	Related (SS%)	
1	1039574	CWH	wh	1	01 (90)	05 (10)	28.7
Net Area to be Reforested (NAR)							28.7
Permanent Access Structures (Existing & Proposed Roads Internal to the Falling Bdy)							2.9
Permanent Access Structures (Existing & Proposed Roads External to the Falling Bdy)							1.1
Non-Reforested RW (Existing & Proposed External to Falling Bdy)							0.5
No Harvest Area							13.2
Retention							0.5
Wildlife Tree Retention Area							2.5
LUO Reserve							5.4
LUO Management Zone							3.9
Total Area Under Prescription (TAUP/Development Area)							58.7
NOTE: The LUO Reserve area does not include the 2.4 ha overlap between LUO Reserve and WTRA							
NOTE: The LUO Mgmt. area does not include the 0.1 ha overlap between LUO Reserve and WTRA							

N

1:5,000

0 50 100 150 200 250 Metres

NAD 83 BC Albers

IAN002

TFL60 CP TBD

Mapsheet: 103F.077

Map Updated: August 24, 2016

Map By: J. Fraser

Updated By: D. Brown/J. Ross