BCTS
BC Timber Sales
Chinook

SITE PLAN
CHINOOK
BC TIMBER SALES

Report Date 2017/07/05

ORIGINAL

TENURE IDENTIFICATION

LICENCE #	CP	BLOCK	UBI	OPENING NUMBER	FDU	LOCATION	LATITUDE / LONGITUDE
A85374	-	LAW719	BB2M0		A	Lawn North FSR	53 25 41 / 131 58 25

AREA UNDER THE PLAN

GROSS AREA (TAUP)	PAS	NP	WTRA / WTP	RESERVES	OTHER	NAR
39.6	1.8	0.0	7.8	0.0	0.0	30.0

ADDITIONAL COMMENTS

SOIL DISTURBANCE

SU	Max. Allowable Soil Disturbance (%)	Max. Amount TAS May Exceed MASD Prior To Rehab (%)	Max. Allowable Soil Disturbance For Roadside Work Areas (%)	Maximum Permanent Access Structures (%)
1	5.0	5.0	25.0	4.6

SU	CRITICAL SITE CONDITIONS THAT AFFECT THE TIMING OF OPERATIONS, AND HOW THEY AFFECT THE TIMING
1	The critical site condition impacting the plan area is the moist to very moist soil moisture regime. The soils are moist year-round and require protection from rutting and compaction. Ground based machinery such as feller bunchers and hoe forwarders must use puncheon to protect soils. Avoid working in the block during/immediately after heavy rain events. Soils in the block are sensitive soils as per FPPR Section 35.

RESULTS AND STRATEGIES

Annual Reporting and Data Submission	
Result or Strategy Description	Where applicable features prescribed under the LUO are identified (refer to Table 10, attached), and associated no-harvest zone (including cedar reserves), management zones and stand level retention are established or managed by a Plan Holder, the feature(s) and associated no-harvest zones, management zones and stand level retention will be documented and the digital spatial data will be submitted by said Plan Holder by December 31st of each year to the Council of the Haida Nation and to the Province of BC.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	Where applicable, features prescribed under the LUO are identified (refer to Schedule 10), associated no-harvest zones, management zones, and stand level retention will be documented and the digital spatial data will be submitted by BC Timber Sales by December 31st of each year to the Council of the Haida Nation and the Province of BC.
Aquatic Habitats	
Result or Strategy Description	Prior to development activities within a watershed sub-unit, the applicable Plan Holders will form an agreement that documents: a) who is responsible for completing the watershed analysis and any updates that may be required; and b) how the rates of harvesting will be allocated, consistent with the watershed sub-unit analysis; and c) who is responsible for tracking the rates of harvest within the watershed sub-unit.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	Chartwell Consultants Ltd. completes the watershed analysis and updates it for the proposed development areas. Chartwell also tracks rates of harvest. Zimmfor Management Services Ltd. tracks and maintains the records and publishes them annually. Cut blocks are identified and licensees are apportioned forest area available for development in excess of 70% hydrologically recovered forest in each watershed sub-unit.
Result or Strategy Description	Within each watershed sub-unit indicated on LUO Schedule 6, and where development areas are proposed by a Plan Holder, the Plan Holders will do the following, subject to Section 6.24, below: a) a watershed analysis will be completed by a qualified person that indicates the watershed condition and the upland stream area; and b) Plan Holders will ensure that rates of harvesting within a watershed sub-unit are consistent with the watershed analysis results and that >70% of the forest, measured in hectares, in the upland stream area is hydrologically recovered; and c) the Plan Holders will maintain a group ledger, updated annually at a minimum, that tracks the development activities within watershed sub-units.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	Chartwell Consultants Ltd. completes and updates the hydrological rate of cut analysis for each watershed sub-unit. The analysis for this development area was completed in August 2016. Zimmfor Management Services Ltd. maintains and annually updates the group tracking ledger. The rate of harvest within the Lower Tlell 5 watershed sub-unit 314 is consistent with the watershed analysis results and >70% of the forest, measured in hectares, in the upland stream area is hydrologically recovered.

Result or Strategy Description	Despite Section 6.18 above, the combined area of the Type II habitat no-harvest and management zones may be further reduced, provided: a) the reduced area is consistent with the outcome of a completed intergovernmental process; and b) the total amount of mature and old forest in the Type II habitat no-harvest and management zones within the development area is reduced by <= 20%, measured in hectares; and c) the integrity of the Type II habitat is maintained; and d) an adaptive management plan is developed, documented and implemented prior to reducing the size of the Type II reserve and management zones under Section 6.19.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No Type II fish habitat occurs within or adjacent to the development area.
Result or Strategy Description	Despite Section 6.20 above, within an individual development unit, the amount of mature and old forest within the AFU management zone(s) may be reduced by up to 10%, measured in hectares.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No active fluvial units occur within or adjacent to the development area.
Result or Strategy Description	Despite Section 6.23, <70% of the forest, measured in hectares, in the upland stream area maybe retained, provided that the Plan Holders ensure the following, subject to Section 6.26, below: a) the revised upland stream area retention percentage is consistent with the outcome of a completed intergovernmental process; and b) a watershed assessment is completed by a qualified professional that indicates the watershed sub- unit sensitivity to forest development and disturbance; and the amount, type and distribution of forest cover that is required to sustain natural hydrological and fluvial process; and c) the rates of harvesting within a watershed sub-unit are consistent with the watershed assessment results provided in Sub-section 6.25b); and d) an adaptive management plan is developed, documented and implemented prior to reducing the upland stream area retention percentage below 70%, measured in hectares.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The rate of harvest within the watershed sub-unit containing the development area is consistent with the watershed analysis results and greater than 70% of the forest, measured in hectares, in the upland stream area is hydrologically recovered.
Result or Strategy Description	Despite Section 6.30 above, for a given sensitive watershed, Plan Holders may maintain a rate of harvest and/ or an ECA that exceeds the thresholds indicated, provided the Plan Holder ensure the following: a) the revised rate of harvest and/ or ECA threshold is consistent with the outcome of a completed intergovernmental process; and b) a watershed sensitivity assessment is completed by a qualified professional that indicates the watershed sensitivity to past, current and proposed forest development and disturbance; and the amount, type and distribution of forest cover that is required to sustain natural hydrological and fluvial process; and c) the rates of harvesting within a watershed sub-unit are consistent with the watershed assessment results provided in Sub-section b), above; and d) an adaptive management plan is developed, documented and implemented prior to increasing the rate of harvest and/ or ECA for the watershed.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is within the Tlell Watershed which is not considered a sensitive watershed as per HGLUOO Schedule 7.
Result or Strategy Description	In addition to Section 6.21 above, within an individual development unit, the amount of mature and old forest within the AFU management zone(s) may be reduced by an additional 10%, measured in hectares, provided that: a) sufficient functional riparian forest is retained to protect the integrity of the AFU; and b) an adaptive management plan is developed, documented and implemented prior to reducing the size of the AFU management zone(s) under Section 6.22 above.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No active fluvial units occur within or adjacent to the development area.
Result or Strategy Description	In upland stream areas, where stream channels are incised, have steep gradients and support riparian plant communities that are dependent on high-humidity microclimates, sufficient trees and vegetation will be retained to maintain said riparian plant community.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No upland stream areas within the development area have incised, steep gradient channels.
Result or Strategy Description	Prior to development activities within a sensitive watershed, the applicable Plan Holders will form an agreement that documents: a) who is responsible for completing the watershed analysis and any updates that may be required; and b) how the rates of harvesting will be allocated, consistent with Section 6.30; and c) who is responsible for tracking the rates of harvest within the sensitive watershed.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within a sensitive watershed as per Schedule 7 of the HGLUOO.
Result or Strategy Description	Where Plan Holders are proposing to increase the rate of harvest and/or the ECA, within a given sensitive watershed, prior to undertaking the steps required under Section 6.32 above, the applicable Plan Holders will form an agreement that documents: a) who is responsible to complete the process outlined in Sub-sections 6.32a) through 6.32d) above; and b) how the rates of harvesting will be allocated, consistent with the assessment; and c) who is responsible for tracking the rates of harvest within the watershed.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within a sensitive watershed as per Schedule 7 of the HGLUOO.

Result or Strategy Description	Where Plan Holders are proposing to reduce the upland stream retention within a watershed sub-unit, prior to reducing the upland stream area below 70%, measured in hectares, the applicable Plan Holders will form an agreement that documents: a) who is responsible to complete the process outlined in Sub-sections 6.25a) through 6.25d) above; and b) how the rates of harvesting will be allocated, consistent with the assessment; and c) who is responsible for tracking the rates of harvest within the watershed sub-unit.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The upland stream retention in the Lower Tlell 5 watershed sub-unit 314 containing the development area will not be reduced below 70% as a result of this development. According to the watershed analysis conducted by Chartwell Consultants Ltd in August 2016 The ECA is 27.5% including this development area.
Result or Strategy Description	Where upland streams are direct tributaries to Type I or II fish habitat, sufficient vegetation, which may include trees, will be retained to maintain stream bank and channel stability, as determined by a qualified professional.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	Upland streams within the block are not direct tributaries to Type I or II fish habitat.
Result or Strategy Description	With reference to individual development areas, where naturally occurring AFUs occur, any forest located within in the AFU will be retained and a 1.5 tree-length (minimum width) management zone, measured from the outer edge of the AFU, will be established to protect the AFU.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No active fluvial units occur within or adjacent to the development area.
Result or Strategy Description	With reference to individual development areas, where Type I fish habitat occurs,it will be retained and a 2.0 tree-length (minimum width) riparian no-harvest zone, measured from the outer edge of the Type I habitat, will be maintained to protect the Type I fish habitat, subject to all of the following: a) Where necessary to address site specific values, the Type I no-harvest zone identified under Section 6.17 above, may be increased or decreased by up to 0.5 tree-lengths, measured from the outer edge of the no-harvest zone, provided that there is no net loss of Type I no-harvest zone area within the development area. b) Within an individual development area, up to 5% of the total area of the Type I habitat no-harvest zone may be altered or removed, provided that: i) the integrity of the Type I fish habitat is maintained; and ii) the alteration or removal is required for road or bridge construction, or to address a safety concern and no practicable alternative exists; or iii) the alteration or removal may be for a purpose other than those listed in Sub-section ii) above, provided the reasons are consistent with the outcome of a completed intergovernmental process.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not contain and is not adjacent to any Type I fish habitat.
Result or Strategy Description	With reference to individual development areas, whereType II fish habitat occurs, it will be retained and a 1.0 tree-length (minimum width) riparian no-harvest zone, measured from the outer edge of the Type II habitat, will be maintained to protect the Type II fish habitat. Adjacent the no-harvest zone a 0.5 tree- length (average width) management zone will be established to protect the no-harvest zone, subject to all of the following: a) Within an individual development area, up to 5% of the total area of the Type II habitat no-harvest zone may be altered or removed, provided that the integrity of the Type II fish habitat is maintained. b) Within an individual development area, the total area of the Type II habitat management zone may be reduced by up to 20%, measured in hectares. c) The retention of trees within the management zone will be based on consideration of the likelihood of damages to the no-harvest zone caused by windthrow.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No Type II fish habitat occurs within or adjacent to the development area.
Result or Strategy Description	Within each sensitive watershed indicated on LUO Schedule 7, and where development areas are proposed by a Plan Holder, harvest rates will be consistent with the following: a) For watersheds >= 500ha, up to 5% of the watershed area may be harvesed in a 5-year period. b) For watersheds < 500ha, up to 10% of the watershed area may be harvested in a 10-year period. c) Despite Sub-sections a) and b) above, no harvesting will occur in sensitive watersheds with an ECA >= 20% d) Harvest rates and ECAs will be based on the watershed analysis required under Section 6.29, above.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within a sensitive watershed as per Schedule 7 of the HGLUOO.
Result or Strategy Description	Within each sensitive watershed indicated on LUO Schedule 7, and where development areas are proposed by a Plan Holder, the Plan Holders will do the following: a) A watershed analysis will be completed by a qualified person that indicates the watershed ECA condition. b) The Plan Holders will maintain, on an ongoing basis, a group ledger which tracks the development activities within the sensitive watersheds.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within a sensitive watershed as per Schedule 7 of the HGLUOO.
Biodiversity Objectives	
Result or Strategy Description	Where development activities are proposed within a forest area that is classified as a rare or common site-series, consistent with LUO Schedule 10, Plan Holders will retain an amount (measured in hectares) of old forest greater than or equal to the applicable target listed for said site-series in Schedule 10, consistent with Section 6.37 above.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is within the Tlell Landscape Unit, leading site series is CWHwh1-04. 04ss is a common site series as per Schedule 10 of the HGLUOO. While the old forest retention target for the 04 site series has not been met within designated reserves, the available old forest area within the landscape unit is in well excess of the Schedule 10 retention target. The block does not contain old forest and does not reduce the available old growth forest area below levels required to meet the targets set in Schedule 10. BCTS will continue to monitor old forest availability at the landscape unit level to ensure that Schedule 10 targets are achieved.

Result or Strategy Description	Within each Landscape Unit indicated in LUO Schedule10, and where development areas are proposed by a Plan Holder, prior to development activities the Plan Holders will do the following: a) An ecological representation analysis will be completed by a qualified person that indicates the current inventory of old forest by site series and LU. b) For each LU, the applicable Plan Holders will form an agreement that documents: i) who is responsible for completing the ecological representation analysis; and ii) how the required old forest retention will be allocated; and iii) how any required old forest recruitment, consistent with Section 6.40 below, will be allocated; and iv) who is responsible for tracking the old forest retention. c) The Plan Holders will maintain a group ledger, updated annually at a minimum, which tracks the depletions and additions to the old forest inventory by site series and LU.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	Zimmfor Management Services Ltd. has completed an ecological representation analysis indicating the inventory of old forest by site series and LU. Zimmfor maintains the group ledger, tracks old forest retention, depletions, and additions to the old forest inventory on an annual basis. The most recent available data is from September 2015. Old forest retention and recruitment allocation is determined by tenure area of each licensee within each landscape unit.
Result or Strategy Description	Despite Section 6.35 above, the amount of mature or old forest retained in the management zone may be reduced to 60%, measured in hectares, provided that: a) the amount of mature and old forest retained is sufficient to maintain the integrity of the forested swamp; and b) an adaptive management plan is developed, documented and implemented prior to reducing the percentage of mature and old forest below 70%, measured in hectares.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within or adjacent to a forested swamp.
Result or Strategy Description	Despite Section 6.41above, up to 30% of the area of each blue-listed ecological community occurring in a development area may be altered or harvested if: a) the harvesting is required for road access or to address a safety concern; or b) the harvesting is required for another reason than specified in Sub-section a) above, provided that the harvesting is consistent with the outcome of a completed intergovernmental process.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not contain any blue-listed ecological communities.
Result or Strategy Description	Despite Section 6.41above, up to 5% of the area of each type of red-listed ecological community occurring in a development area may be altered or harvested if required for road access or to address a safety concern.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not contain any red-listed ecological communities.
Result or Strategy Description	Where practicable,old forest areas that are retained consistent with Section 6.37 above,will include habitat for local species at risk and regionally important wildlife, including, but not limited to: a) Northern Goshawk nesting and foraging habitat; and b) Marbled Murrelet nesting habitat, Great Blue heron nesting habitat, and Northern Saw-whet Owl core nesting areas; and c) Black Bear dens and denning habitat.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	This objective is not applicable because the block does not contain or retain any old forest area.
Result or Strategy Description	Where there is insufficient old forest available to meet the requirements under Section 6.38 above, Plan Holders will identify, retain and recruit old forest stands where necessary, through natural processes (passive) and may implement voluntary interventions (active), to meet the representation requirements in the shortest possible timeframe. In order to meet the objective in the shortest possible timeframe, older stands will be chosen before younger stands when identifying recruitment areas. Strategies that will be used to identify, retain and recruit old forest stands include: a) Identifying mature stands (of the appropriate site-series) in the LU that are already constrained for other reasons, and designating them as reserves set aside to meet the ecological representation requirements. b) Where there are not enough mature stands (of the appropriate site-series) in the LU that are already constrained for other reasons, unconstrained stands will be identified and designated as reserves set aside to meet the ecological representation requirements. Where mature stands have been designated as reserves set aside to meet the ecological representation requirements, voluntary management intervention strategies to be used to help recruit old forest stands in the earliest possible timeframe include: i) Fertilization treatments, to help accelerate rates of growth and promote old-growth characteristics. ii) Stand thinning or stand modification treatments to help accelerate rates of growth and promote old-growth characteristics.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	This objective is not applicable because the development area is second growth/mature timber and does not contain any old forest.
Result or Strategy Description	With reference to individual development areas, where forested swamp areas >=0.25ha occur, they will be retained and a 1.5 tree-length (average width) management zone will be established to protect the forested swamp.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within or adjacent to a forested swamp.
Result or Strategy Description	With reference to individual development areas, where red or blue-listed ecological communities >= 0.25ha occur, they will be retained.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not contain any blue-listed ecological communities.
Result or Strategy Description	Within management zone established under Section 6.34 above, >70% of the forest, measured in hectares, will be retained as mature or old forest.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within or adjacent to a forested swamp.

Community Watershed	
Result or Strategy Description	Prior to development activities within a community watershed, the applicable Plan Holders will form an agreement that documents: a) who is responsible for completing the watershed assessment and any updates that may be required; and b) how the rates of harvesting will be allocated, consistent with the watershed analysis; and c) who is responsible for tracking the rates of harvest within the community watershed.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within a Community Watershed.
Result or Strategy Description	Prior to proposing primary forest activities within a community watershed to which section 8.2 of the FPPR applies, the Plan Holders will do all of the following: a) ensure a watershed assessment is completed by a qualified professional that assesses the current watershed condition; the potential impacts on water quality, water quantity, including risks to public health, and timing of water flows from primary forest activities; and provides a potential schedule for harvesting within the community watershed that maintains the community watershed¿s values; and b) ensure that primary forest activities are consistent with any recommendations made in the watershed assessment, and c) ensure the watershed assessment indicated in Sub-section a) above, is updated by a qualified professional at least every five years, unless no additional primary forest activities are proposed; and d) maintain a group ledger, updated annually at a minimum, which tracks the development activities within the community watershed.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within a Community Watershed.
Cultural Heritage Resources	
Result or Strategy Description	The FSP Holders will submit maps for all proposed development areas to the Council of the Haida Nation, 30 days prior to cutting authority submission, or 30 days prior Timber Sale posting/approval by the BC Timber Sales Manager.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	BCTS has submitted this development to the CHN prior to cutting authority submission or Timber Sale posting / approval. The development area was reviewed at the CHN/BC Solutions Table in December 2016 and February 2017 - where a consensus was not reached. Accordingly, a non-consensus briefing note was documented on February 23, 2017 and provided to the decision maker.
Result or Strategy Description	The FSP Holders will,at a minimum of once annually, provide the Council of the Haida Nation with an opportunity to share information regarding cultural heritage resources that are the focus of traditional use and continued importance to the Haida Nation. Plan Holders will: a) identify areas where harvesting and/ or road construction activities are planned and request information respecting cultural heritage resources that are the focus of traditional use and continued importance within the identified areas; and b) keep a record of any information provided by the Haida First Nation on cultural heritage resources that are the focus of traditional use and continued importance within the Plan Area; and c) document how management activities will attempt to accommodate cultural heritage resources that are the focus of traditional use and continued importance, or why efforts to accommodate the traditional use were not made.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	BCTS provides the CHN the opportunity to share information regarding cultural heritage resources at minimum, once annually. BCTS records and documents information in accordance with this section of the FSP.
Cultural Objectives	
Result or Strategy Description	Plan Holders will not harvest within CS Areas (as identified in the LUO, Schedule 3).
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within any CS Areas as identified within HGLUOO Schedule 3.
Result or Strategy Description	Prior to commencing harvesting or road construction activities in a development area, the applicable FSP Holder will ensure that a Cultural Features Identification Survey has been completed for the proposed area by a surveyor certified by the Council of the Haida Nation.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	A Cultural Features Identification Survey was completed by Jay Nichol, TFT, a surveyor certified by the Council of the Haida Nation in November 2016.
Result or Strategy Description	Where Class 2 HTFFs are identified within a development area, >= 50% of the identified occurrences will be retained and their integrity protected. Stand level retention will be retained where required, to maintain the integrity of the HTFF. Additional strategies for preserving the integrity of HTFFs include the following: a) adjusting operational boundaries to exclude HTFF areas; and b) modifying harvesting practices in the vicinity of HTFFs.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	Pacific crab apple was identified within the development area. >=50% of the identified occurrences will be retained and their integrity protected. Operational boundaries have been adjusted to exclude the HTFF areas and retention has been allocated to maintain the integrity of the Features.
Result or Strategy Description	Where Class 3 HTFFs are identified within a development area, they will be retained and protected within established stand level retention to the extent practicable. The percentage of HTFF occurrences that are protected within a given development area will range from 0-100%, depending on the location of the HTFFs and the location of stand level retention that is established to meet other objectives.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	Class 3 HTFFs are identified within the development area. Class 3 HTFFs will be retained and protected within stand level retention areas to the extent practicable.

Result or Strategy Description	Where development areas are either: i) > 10ha and the pre-harvest cedar (western redcedar and yellow cedar) content >30%; or ii) <= 10ha and the pre-harvest cedar (western redcedar and yellow cedar) content >60%; then Plan Holders will retain a minimum of 15% of the combined pre-harvest cedar composition of the development area, measured in hectares. The pre-harvest cedar composition will be determined by calculating the weighted average cedar content for the entire development area as indicated on the inventory mapping for the polygons in the development area. The areas that contribute to the cedar retention requirements will be calculated by summing the weighted cedar content for the contributing areas, in hectares, based on the inventory mapping for the applicable polygons. Plan Holders will meet the 15% cedar retention requirement using all of the following strategies: a) Areas designated to contribute to the cedar retention requirements will be first be located within no-harvest zones, management zones and stand level retention areas already designated for other objectives. b) Where existing cedar reserves are insufficient to meet the cedar retention requirements, then additional cedar retention areas will be retained. c) Cedar retention areas will located such that the retention areas are large and contiguous to the extent practicable. Cedar retention areas that contribute to meeting the 15% retention requirement will be > 1.0ha in size. d) Within the areas that contribute to the cedar retention requirement, a range of diameters of redcedar and yellow cedar will be retained which are representative of the pre-harvest area, as documented by the signing Forester in the Site Plan documents.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The block is >10ha with pre-harvest cedar content >30%. The block retains a minimum of 15% of the combined pre-harvest composition of the development area, measure in hectares. Cedar retention is consistent with strategies (a) to (d) where applicable.
Result or Strategy Description	Where development areas have pre-harvest cedar (western redcedar and yellow cedar)composition greater than 20% in the harvested area, as indicated in the cruise compilation (measured in percent of cedar sph, not including dead potential or dead useless), then the Plan Holder will regenerate the area according to the minimum post-harvest cedar composition and strategies listed below (see Table 8 attached), subject to Section 6.12. The cedar commitment will be determined on a cutblock by cutblock basis. The cedar regeneration requirement for a cutblock will be calculated by multiplying the NAR times the appropriate Minimum Post-Harvest Cedar Composition, as indicated in Table 8, below. Location of planted cedar within the cutblock will be at the discretion of the prescribing Forester, and consistent with approved stocking standards. Plan Holders will use the following strategies to meet the objective: a) Plan Holders will strive to meet the cedar commitment through planting and/ or natural regeneration. b) Where deer browse hazard is moderate to high, planted cedar trees will be protected. Protection measures may include coning, scented deterrents, or caging. c) For areas that have been planted with cedar, where the cedar content falls below 80% of the Minimum Post-Harvest Cedar Composition requirement, the area will be fill-planted once. The cedar content will be assessed using Plan Holder survey information. d) Cedar acceptability criteria will be as follows: i) Regenerated cedar will only be accepted if they are of good form and vigour (refer to Appendix B). ii) Regenerated cedar will only be accepted if they are >= 1.2m tall. e) The cedar regeneration obligation due-date will be no sooner than 6 years, and no later than 20 years, post-harvest commencement. Plan Holders will complete cedar obligation surveys and data will be declared within the Ministry of Forests RESULTS system. Should the full cedar regen obligation not be fully met at the time of assessment, the amount of cedar regenerated will be accepted, provided that a) through c) from above have been completed, and the obligation will be deemed to have been met, with no further actions required.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The pre-harvest cedar composition is greater than 20% in the harvest area. As indicated in the cruise compilation, the cedar composition is 38.99%. According to FSP Table 8 the minimum post-harvest cedar composition is 150sph, the cedar regeneration requirement for the block is 4503 stems at free growing. To meet the cedar regeneration target, 300sph Cw is planned to be planted and protected from deer browse using plastic cones. Further details regarding the reforestation strategy plan can be found as part of the Silviculture Plan.
Result or Strategy Description	"Haida Traditional Heritage Features" are defined in the LUO as being those features listed in Schedule 2 of the LUO. However, in order to be measureable in the context of the FSP approval process, the features listed as HTHFs (Class 1 and Class 2) in the LUO are considered to be those that are of continued cultural significance to the Haida Nation, determined by using the following strategies: a) Potential HTHFs will be identified and assessed through the Cultural Features Identification Survey, completed by qualified surveyors. b) Where potential HTHFs are identified, AIAs will be completed, and the significance of the identified feature will be determined. c) Where identified features are deemed to be of continued cultural significance in the AIA, they will be classed as HTHFs and managed accordingly.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No Haida Traditional Heritage Features, or potential HTHFs were identified within or adjacent to the development area during the CFI survey. No AIA is required.
Result or Strategy Description	Despite Section 6.1 above, circumstances may arise where harvesting within Cedar Stewardship Area(s) (CS Area) for commercial purposes is desired. Where harvesting is proposed within a CS Area, the Plan Holders will ensure all of the following: a) any proposed harvest activities with CS Areas are consistent with the outcome of an intergovernmental process, completed by the Plan Holders as a group; and b) ensure the total CS Area area harvested is less than or equal to 10% of the total of all CS Areas (2,536.3ha, as indicated in Table 8, below), and that no more than 250ha is harvested in a 10 year period; and c) the CS Area harvest within a given Landscape Unit, for each 10 year period, will be proportional to the occurrence of CS Areas within the LU (see Table 7, below); and d) the Plan Holders will maintain a group ledger, updated annually at a minimum, which tracks any CS Area harvest activities; and e) where CS Areas overlap tenures outside of the Plan Area, the Plan Holders will make reasonable efforts to consult with the relevant tenure holder(s) to ensure that CS Area harvest level do not exceed the limits described in b) and c), above. Tables 7 and 8 are attached.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not impact any Cedar Stewardship areas.

Result or Strategy Description	The cedar regeneration requirement for a given cutblock may be lower than those set in Section 6.11 above, provided that the new requirement is consistent with the outcome of a completed intergovernmental process.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The cedar regeneration requirement is not lower than what is required in Section 6.11 of the FSP.
Result or Strategy Description	Where Class 1 HTFFs are identified, they will be retained and a 1.0 tree-length (average width) no-harvest zone, measured from the edge of the HTHF, will be maintained to protect the HTFF. Adjacent the no- harvest zone a 1.0 tree-length (average width) management zone, measured from the edge of the no- harvest zone, will be established to protect the no-harvest zone, subject to a) and b), below. a) Where necessary to address site specific values, the Class 1 HTFF management zone identified under Section 6.7 above, may be decreased by up to 0.5 tree-lengths from the outer edge of the management zone, provided that there is no net loss of management zone area within the development area. b) The area of the management zone may be reduced, if necessary for road access, other infrastructure or to address safety concerns, provided that: i) the integrity of the HTFF is maintained; and ii) the size of the management zone is consistent with the outcome of a completed intergovernmental process.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No Class 1 Haida Traditional Forest Features were identified within or adjacent to the development area.
Result or Strategy Description	Where Class 1 HTHFs are identified, they will be retained and a 500m (minimum width) no-harvest zone, measured from the edge of the HTHF, will be maintained to protect the HTHF, subject to a) and b), below. a) Where a reduction in the no-harvest zone is required for road access, other infrastructure, or to address a safety concern and no practicable alternative exists, a Plan Holder may reduce the size of the no-harvest zone consistent with the outcome of a completed intergovernmental process. b) Where necessary to address site specific values, the no-harvest zone may be decreased by up to 0.5 tree-lengths from the outer edge of the zone, provided that there is no net loss of no-harvest zone area within the development area. Site specific values will be determined by the signing Forester and documented within the Site Plan.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No Class 1 Haida Traditional Heritage Features were identified within or adjacent to the development area.
Result or Strategy Description	Where Class 2 HTHFs are identified, they will be retained and a 100m (average width) no-harvest zone, measured from the edge of the HTHF, will be maintained to protect the HTHF, subject to a) and b), below. a) Where alteration, removal or reduction of the Class 2 HTHF or no-harvest zone is required for road access, other infrastructure, or to address a safety concern and no practicable alternative exists, a Plan Holder may alter, remove or reduce the HTHF and/ or the size of the no-harvest zone consistent with the outcome of a completed intergovernmental process. b) Where necessary to address site specific values, the no-harvest zone may be decreased by up to 0.5 tree-lengths from the outer edge of the zone, provided that there is no net loss of no-harvest zone area within the development area. Site specific values will be determined by the signing Forester and documented within the Site Plan. Where the Class 2 HTHF is a "Karst Feature", it will be also be subject to Section 6.80, below.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No Class 2 Haida Traditional Heritage Features were identified within or adjacent to the development area.
Result or Strategy Description	Where cultural cedar stands, CMTs, or monumental cedar greater than 120cm (measured at dbh) are identified, they will be retained and a 0.5 tree-length (minimum width) no-harvest zone will be maintained to protect identified feature. The no-harvest zone will be protected by establishing a 1.0 tree-length (average width) management zone, measured from the outer boundary of the no-harvest zone, subject to a), b) and c), below. a) Where alteration or removal of a cultural cedar stand, CMT or monumental cedar is required for road access, other infrastructure, or to address a safety concern, and no practicable alternative exists, a Plan Holder may alter or remove the cultural cedar stand, CMT or monumental cedar consistent with the outcome of a completed intergovernmental process, and the harvested CMT or monumental cedar is made available to the Haida Nation. b) Where a reduction in the size of the no-harvest zone is required for road access, other infrastructure, or to address a safety concern, and no practicable alternative exists, a Plan Holder may reduce the area of the no-harvest zone(s) consistent with the outcome of a completed intergovernmental process, and provided the integrity of the cultural cedar stand, CMT or monumental cedar is maintained. c) Where a reduction in the size of the management zone is necessary to address operational constraints or a safety concern, a Plan Holder may reduce the area of the management zone(s) consistent with the outcome of a completed intergovernmental process, and provided the integrity of the management zone is maintained.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No cultural cedar stands, CMTs, or monumental cedars were identified within or adjacent to the development area.
Result or Strategy Description	Where monumental cedar are identified in a development area, and are not located within a cultural cedar stand and are < 120cm (measured at dbh), they may be harvested, subject to: a) the applicable Plan Holder completing an intergovernmental process confirming that the monumental cedar is not required for cultural use; or b) the applicable Plan Holder completing an intergovernmental process confirming that harvesting the monumental cedar is required for road access, other infrastructure, or to address a safety concern and the Plan Holder will make the monumental cedar available to the Haida Nation, or other specific measures will be identified. Where monumental cedar are harvested under Section 6.16, the greater of 10% (measured in stems per hectare), or one monumental cedar will be retained within the development area.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No monumental cedars were identified within or adjacent to the development area.
Result or Strategy Description	Where western yew patches are identified within a development area,they will be protected by establishing stand level retention areas, subject to: a) western yew patches may be altered or removed to accommodate operational requirements for road and bridge construction, where no practicable alternative exists.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No western yew patches were identified within or adjacent to the development area.

Result or Strategy Description	Where yew trees are identified within a development area and do not meet the definition of a western yew patch, the trees will be incorporated within stand level retention areas, where practicable.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No western yew trees were identified within or adjacent to the development area.
Forest Reserves	
Result or Strategy Description	Plan Holders will retain all the Forest Reserves, as shown on LUO Schedule 8.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not impact any Forest Reserves as shown in HGLUOO Schedule 8.
Result or Strategy Description	Despite Section 6.58 above, the area of an individual Forest Reserve may be reduced by up to 5%, provided that: a) applicable results and strategies within this FSP address the target requirements indicated in LUO Schedules 9 and 10; and b) the remaining Forest >= 5.0ha; and c) the reduction is necessary to: i) accommodate operational requirements for road or bridge construction, where no practicable alternative exists; or ii) accommodate road maintenance, deactivation, removal of danger trees, brushing and clearing within a right-of way, or for safety purposes, on any existing road under active tenure; or iii) to mitigate the impact of windthrow.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not impact and Forest Reserves.
Result or Strategy Description	Despite Section6.58 above, a portion of a Forest Reserve may be moved to another location within the same Landscape Unit, provided that: a) the alteration of the Forest Reserve is consistent with the outcome of a completed intergovernmental process; and b) applicable results and strategies within this FSP (i.e., Marbled Murrelet and Ecological Representation) address all of the target requirements indicated in LUO Schedules 9 and 10 for the applicable LU; and c) the portion removed is <=20 ha; and d) the areas retained are > 200m in width; and e) the relocation does not result in any Forest Reserve that is < 5.0ha; and 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.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not impact and Forest Reserves.

Measures for Preventing the Introduction or Spread of Invasive Plants	
Result or Strategy Description	7.0 Measures for Invasive Plants FRPA s. 47; FPPR s. 17 Sections 7.1 through 7.8 apply to FDU A. Table 11: Invasive Plants known to occur in the Plan Area, including high-priority species Common Name Scientific Name High Priority Invasive Plant Species on the Haida Gwaii? Gorse Ulex europaeus Y Scotch Broom Cytisus scoparius Y Japanese Knotweed Polygonum cuspidatum Y Yellow Flag Iris Iris pseudacorus Y Common Tansy Tanacetum vulgare Y Meadow Hawkweed Hieracium pilosella Y Orange Hawkweed Hieracium aurantiacum Y Marsh Plume Thistle Cirsium palustre Y Tansy Ragwort Senecio jacobaea Y Himalayan Knotweed Polygonum polystachyum Y Spotted Hawkweed Hieracium maculatum Y Canada Thistle Cirsium arvense Bull Thistle Cirsium vulgare Common Burdock Arctium minus Oxeye Daisy Chrysanthemum leucanthemem Where the introduction or spread of invasive plants is likely the result of forest practices of a Plan Holder, the Plan Holder will do the following, unless the Plan Holder deems the area to be an active running surface: Training 7.1 Provide appropriate personnel training in the recognition of invasive plants that are, or may potentially be within (i.e., known to occur in adjacent areas) the Plan area. Training will include the use of the provincial IAPP application, map display and Report-A-Weed form and procedures. Monitoring & Reporting 7.2 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. 7.3 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. Sanitation & Disposal 7.4 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. 7.5 Where invasive plant material is disposed of it will be disposed of in a landfill or by burning, to the extent practicable. Re-vegetation 7.6 For newly (after the date of Plan commencement) 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: a) re-vegetate the exposed area as climatic and soil conditions allow and within one year of disturbance, if: i) the disturbed area is not to be reforested and is not the running surface of a road; and ii) the soil disturbance is likely to result in the introduction or spread of the established invasive plants; and iii) re-vegetating the site will materially reduce that likelihood of the spread of the invasive plants. 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 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. 7.7 For re-vegetation, Plan Holders will use Common No. 1 Forage Mixture (according to Canada¿s Seeds Regulations), or better. Roadside Brushing 7.8
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No high-priority invasive plants were identified within or immediately adjacent to the development area. In the case that new high-priority invasive plant species are identified, the measures identified in FSP Section 7 will be followed.
Recreation Resources	
Result or Strategy Description	Prior to proposing timber harvest or road construction in an area adjacent to a designated recreation site or trail with established objectives, the Plan Holder will consult with the government agency responsible for the recreation site or trail, to ensure that the proposed activity will be conducted in accordance with the established objectives applicable to the area.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not adjacent to any designated recreation sites or trails.
Result or Strategy Description	Where "non-motorized access" is the applicable established objective for the designated recreation site or trail, and proposed new road construction will provide motorized access to the recreation resource, the Plan Holder will: a) deactivate the road, within one year following completion of primary forest activities, to a condition which re-establishes the degree of motorized access similar to that which existed prior to harvest operations; or b) obtain written approval from the government agency responsible for the recreation site or trail, to maintain access for further operations or activities, and the access will be established as per the approval.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not adjacent to any designated recreation sites or trails.

Recruitment in No-harvest Zones, Mgmt Zones and Stand Level Retention	
Result or Strategy Description	Where some or all of the no-harvest zones, management zones or stand level retention areas established under the applicable LUO objectives (refer to Table 9, attached) have been previously altered or harvested, the Plan Holders will provide for recruitment of mature and old forest (functional riparian forest for Sections 6.17, 6.18, 6.20) in the no-harvest zone, management zone or stand level retention area, as applicable, through natural processes (passive recruitment) and may promote recruitment through voluntary interventions (active recruitment). For the management zones associated with Cultural Cedar Stands, CMTs and Monumental Cedar, the Plan Holders will maintain or recruit, in the shortest possible timeframe, at least 90% of the forest as mature and old forest, through natural processes (passive) and may promote recruitment through voluntary interventions (active). Where the recruitment strategy is to use natural processes (passive), Plan Holders will not harvest any of the existing mature or old forest in the management zone until the 90% threshold has been attained.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not impact any previously established no-harvest zones, management zones, or stand level retention.
Resource Features	
Result or Strategy Description	Where karst Resource Features are encountered during primary forest activities, they will be managed as per Section 6.6 above. Regardless of the outcome of the inter-governmental process, karst Resource Features will not be damaged or rendered ineffective, consistent with FPPR s. 70 (1).
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No karst resource features were identified within or adjacent to the development area.
Riparian Management	
Result or Strategy Description	For Type I fish habitat, Type II fish habitat, upland streams, and wetlands and lakes that do not meet the definition of Type I or II fish habitat, as defined in the LUO; Plan Holders adopt the FPPR requirements in relation to restrictions within a riparian management area.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The FPPR requirements to restrictions within a riparian management area are adopted.
Result or Strategy Description	For wetlands and lakes that do not meet the definition of Type I or II fish habitat, as defined in the LUO, Plan Holders adopt the FPPR requirements in relation to restrictions within a riparian reserve zone.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The wetland to the north of the block and outside the development area is classified as a W3 and has a 0m riparian reserve zone as per FPPR. There are no lakes within or adjacent to the development area.
Result or Strategy Description	Retention of trees within riparian management zones will be as follows: a) For Type I and Type II fish habitat, the retention of trees within riparian management zones is detailed in Sections 6.17 and 6.18, above, respectively. b) For Upland Streams, the retention of trees within riparian management zones, measured in basal area, will range from 0-100%, as deemed appropriate by the signing Forester and documented within the Site Plan. Additional factors for riparian retention for Upland Streams are detailed in Section 6.27 and 6.28, above. c) For wetlands and lakes that do not meet the definition of Type I or II fish habitat, as defined in the LUO, with respect to FPPR s. 12(3), unless specific wildlife and/ or biodiversity values are identified in the riparian management area of a wetland or lake, retention of trees within the RMZ will be based on consideration of the likelihood of damages to the riparian feature or RRZ caused by windthrow. Basal area retention will range from 0-100%, as deemed appropriate by the signing Forester and documented within the Site Plan.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	There is no Type I or II fish habitat within or adjacent to the block. FSP Sections 6.27 and 6.28 do not apply to the Upland streams within the block. The upland streams within the block do not flow into any of the features listed in FPPR Section 52(2)a, b or c. Therefore the upland streams do not any require basal area retention. W3 to the north of the block and outside of the development area. No specific wildlife or biodiversity values have been identified. The W3 does not have an RRZ (0m), and specific basal area retention is not required.
Result or Strategy Description	Where a lake meets the definition of Type I or II fish habitat, as defined in the LUO, then the lake is classed as Type I or II Fish habitat and managed accordingly, otherwise Plan Holders adopt the FPPR requirements in relation to lake riparian classes and minimum zone widths.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	There are no lakes within or adjacent to the development area.
Result or Strategy Description	Where a wetland meets the definition of Type I or II Fish Habitat, as defined in the LUO, then the wetland is classed as Type I or II Fish habitat and managed accordingly, otherwise, Plan Holders adopt the FPPR requirements in relation to wetland riparian classes and minimum zone widths.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No wetlands within or adjacent to the development area meet the definition of Type I or II fish habitat.
Soil Objectives	
Result or Strategy Description	The Plan Holders undertake (FPPRs.12.1(1)) to comply with the legislated requirements setting limits for soil disturbance and for permanent access structures as outlined in FPPR s. 35 and 36.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area complies with FPPR Sections 35 and 36. The PAS is <7% and maximum allowable soil disturbance is 5% as the development area is predominantly covered by sensitive soils. Any soil rehabilitation that may take place is to be in accordance with FPPR Section 36(3).

Visual Objectives	
Result or Strategy Description	The Plan Holders will conduct road construction or timber harvesting activities within Scenic Areas such that they conform to the established VQO¿s, unless it is for the following exceptional circumstances beyond the control of the Plan Holders: a) it is to recover timber damaged from natural causes and the action must be completed expeditiously; or b) the activities are otherwise required by government. If harvesting and/ or road building occurs and the VQO is exceeded, as per subsections a), or b) above, then the Plan Holder will ensure that good design principles are followed and the VQO is exceeded to the minimum amount required.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within a Scenic Area or subject to any established visual quality objectives.
Wildlife & Biodiversity - Landscape Level	
Result or Strategy Description	The Plan Holders undertake (FPPR s.12.1(3)) to comply with the legislated requirements in relation to harvesting adjacent to another cutblock (FPPR s. 65), subject to Section 6.73, below.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area complies with FPPR Section 65. Nearby blocks are sufficiently distanced so that they are not impacted by activities within the development area.
Result or Strategy Description	The Plan Holders undertake (FPPRs.12.1(3)) to comply with the legislated requirements in relation to maximum cutblock size (FPPR s. 64).
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area complies with FPPR Section 64, the net area to be reforested is <40ha.
Result or Strategy Description	As per FPPR sec.12.4(2), the Plan Holders will adhere to FPPR s.65 for all areas within FDU A,with the following exceptions, which will only apply to the Plan Area within the Eden Lake Landscape Unit, as shown on LUO Schedule 1: a) Section 65 (3)(a) is replaced with: at least 75% of the net area to be reforested of the existing cutblock is stocked such that the average height of the well-spaced trees is a minimum of the free growing height as specified in the approved Stocking Standards, located in Appendix C; and b) Section 65 (3)(b)(ii) is stocked such that the average height of the well-spaced trees is a minimum of the free growing height as specified in the approved Stocking Standards, located in Appendix C.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area is not within the Eden Lake LU.
Wildlife & Biodiversity - Stand Level	
Result or Strategy Description	The Plan Holders undertake (FPPR s.12.1(4)) to comply with the legislated requirements in relation to wildlife tree retention (FPPR. s. 66) and restriction on harvesting in a wildlife tree retention area (FPPR. s. 67). In regards to the FPPR requirements for wildlife tree retention, each Plan Holder is individually responsible for meeting the requirements and tracking their wildlife tree retention areas.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The WTRA associated with the development area complies with FPPR s.66 and 67.
Wildlife Habitat Areas and General Wildlife Measures	
Result or Strategy Description	In respect of the WHAs, the Plan Holders will comply with the applicable GWMs, as per FPPR s.69.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No WHAs are found within or adjacent to the development area.
Result or Strategy Description	In respect of the WHAs, the Plan Holders will comply with the applicable GWMs, as per FPPR s.69.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No WHAs are found within or adjacent to the development area.
Wildlife Objectives	
Result or Strategy Description	For each LU, and where development areas are proposed by a Plan Holder, the applicable Plan Holders will do the following, prior to development activities within the applicable LU: a) a Marbled Murrelet nesting habitat retention inventory will be completed; and b) Applicable Plan Holders will form an agreement that documents how the required Marbled Murrelet nesting habitat retention will be allocated and who is responsible for tracking the nesting habitat retention within the LU, as indicated in Section 6.48c), above.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not overlap areas designated as suitable Marbled Murrelet nesting habitat. A landscape level analysis of MaMu habitat was completed by Chartwell Consultants Ltd. in August 2016 and the target MaMu habitat for the Tlell LU has been retained.
Result or Strategy Description	Plan Holders will retain all Northern Goshawk reserves as shown on LUO Schedule 12.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not impact any Northern Goshawk reserves as shown in HGLUOO Schedule 12.
Result or Strategy Description	Plan Holders will retain all Northern Saw-whet Owl reserves, as shown on LUO Schedule 12
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not impact and Northern Saw-whet Owl reserves as shown in HGLUOO Schedule 12

Result or Strategy Description	Within each Landscape Unit ,and where development areas are proposed by a Plan Holder, prior to development activities, the Plan Holders will: a) retain an amount of Marbled Murrelet nesting habitat within each LU greater than or equal to the LU target area listed in LUO Schedule 9; and b) ensure the nesting habitat referred to in Sub-section a) above, is within the areas shown in LUO Schedule 11; or may be a different area than identified in LUO Schedule 11, provided the nesting habitat is Class 1 or 2, as identified by a qualified professional; and c) maintain a group ledger, updated annually at a minimum, which tracks the depletions and additions to the Marbled Murrelet nesting habitat retention inventory, by LU.
Applies:	YES
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The amount of MaMu habitat to be retained in the TIell LU has been met by the Plan Holder. The development area does not impact any MaMu habitat. Chartwell Consultants Ltd. completed a LU analysis of MaMu habitat in August 2016. Zimmfor Management Services Ltd. updates the group ledger annually.
Result or Strategy Description	Despite Section 6.44 above, alteration or removal of a Black Bear den or its no-harvest zone, or both may occur, provided that: a) the alteration and, or removal is consistent with the outcome of a completed intergovernmental process; and b) the alteration and/ or removal is required for road access or to address a safety concern; and c) the alteration or removal does not occur during the winter hibernation season.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No black bear den sites identified within or adjacent to the development area.
Result or Strategy Description	Despite Section 6.44 above, alteration or removal of trees within the management zone may occur, outside of the winter hibernation season, consistent with any of the following: a) the alteration and/ or removal is required to accommodate operational requirements for road or bridge construction and no practicable alternative exists; or b) for any existing road under active tenure, the alteration and/ or removal is required to accommodate: road maintenance, deactivation, the removal of danger trees, brushing and clearing within a right-of-way, for safety purposes; or c) the alteration and/ or removal is required to mitigate the impact of windthrow.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No black bear dens were identified within or adjacent to the development area.
Result or Strategy Description	Despite Sections 6.50 and 6.51above, Northern Goshawk reserves (LUOSch.12) and no-harvest zones may be reduced, provided that: a) the reduction is consistent with the outcome of a completed intergovernmental process; and b) the reduction is required for road access, where no practicable alternative exists, or to address a safety concern; and c) the reduction does not occur during Northern Goshawk breeding season; and d) there is no net loss to the Northern Goshawk reserve area.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	The development area does not impact any Northern Goshawk reserves.
Result or Strategy Description	For the purposes of recruiting future Black Bear den sites, where practicable: a) suitable western redcedar or yellow-cedar will be retained within the management zone identified in Section 6.44 above; and b) trees, snags, stumps and logs >80cm in diameter will be retained within stand level retention associated with the development area.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	Black bear dens were not identified in the development area. Suitable red/yellow cedar trees are not found within the development area.
Result or Strategy Description	Where a Plan Holder discovers a new potential Great Blue Heron nest site, the Plan Holder will: 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 Council of the Haida Nation and the Province of BC as soon as practicable; and b) have the nest and surrounding area assessed by a qualified professional; and c) where the qualified professional determines the nest to be a Great Blue Heron nest, a no-harvest zone will be established consistent with 6.53 above; and 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; and e) unless confirmed by a qualified professional to be inactive three consecutive years during the Great Blue Heron Breeding season (reconfirmed annually), a restricted activity zone will be maintained during the breeding season, with a minimum radius of 150m measured from the edge of the no- harvest zone.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No new potential Great Blue Heron nest sites were identified within or adjacent to the development area. Should new nests be discovered during subsequent phases, work in the area should immediately cease and BCTS and a qualified professional should be notified.
Result or Strategy Description	Where a Plan Holder discovers a new potential Northern Saw-whet Owl nest that is outside of the LUO Schedule 12 reserves, the Plan Holder will: a) cease harvesting and road-building activities within a 180m radius 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 b) have the nest and surrounding area assessed by a qualified professional; and c) where the qualified professional determines the nest to be a Northern Saw-whet Owl nest, a no- harvest zone will be established around the nest site that is a minimum of 10ha and centred on the nest; and 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.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No new potential Northern Saw-whet Owl nest sites were identified within or adjacent to the development area. Should new nests be discovered during subsequent phases, work in the area should immediately cease and BCTS and a qualified professional should be notified.

Result or Strategy Description	Where a Plan Holder discovers a potential Northern Goshawk nest that outside of the LUO Schedule12 reserves, the Plan Holder will do all of the following: 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 b) have the nest and surrounding area assessed by a qualified professional; and c) where the qualified professional determines the nest to be a Northern Goshawk nest, a no-harvest zone will be established around the nest site, that is a minimum of 200ha and 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 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; and e) 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.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No new northern goshawk nests have been discovered within or immediately adjacent to the plan area. Should new nests be discovered during subsequent phases, work in the area should immediately cease and BCTS and a qualified professional should be notified.
Result or Strategy Description	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.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No Northern Saw-whet owl core nesting areas identified within or adjacent to the development area.
Result or Strategy Description	With reference to individual development areas, where Black Bear dens occur,they will be retained and a 20m (minimum width) no-harvest zone will be maintained to protect the den. The no-harvest zone will be protected by establishing a 1.0 tree-length (average width) management zone, measured from the outer edge of the reserve zone.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No black bear den sites identified within or adjacent to the development area.
Result or Strategy Description	With reference to individual development areas, where Great Blue Heron nest sites occur they will be retained and a 350m (minimum width) no-harvest zone, measured from the edge of the nest site, will be maintained to protect the nest site. Additionally, the no-harvest zone will be >= 45ha in size.
Applies:	NO
How Result or Strategy Applies to the Site (or Rationale if it does not apply)	No Great Blue Heron nest sites identified within or adjacent to the development area.

STOCKING REQUIREMENTS

SU	NAR	STANDARDS ID #	OTHER PERFORMANCE STANDARDS
1	30.0	1039578	MITD for Dr is 1.5m. Sitka Spruce: On marginal sites: CHWwh1 04 where Ss is accepted, it will only be accepted to a maximum of 50% of the minimum stocking density. Furthermore, on these sites, Ss will be limited in terms of its acceptance at regen and Free-Growing to microsites that are medium or better, in terms of productivity (Soil Nutrient Regimes C-E). Sitka spruce will be targeted on elevated and productive microsites. In terms of elevation, Ss will be focused on lower elevation sites (especially in the MH subzone) and planted within the applicable elevation range for the stock.yLodgepole Pine: On marginal sites: CHWwh1 04 where Plc is accepted, it will only be accepted to a maximum of 50% of the minimum stocking density. Furthermore, on these sites, Plc will be limited in terms of its acceptance at regen and Free-Growing to microsites that are medium or poorer, in terms of productivity (Soil Nutrient Regimes A-C). Lodgepole pine will be targeted on depressional, folisolic and other poor productivity microsites. yNatural red alder ingress will be defaulted to a preferred species on all sites within 3 metres of any stream banks where harvesting is permissible.
COMMENTS	Reforestation prescription: The pre-harvest stand composition of cedar (Cw+Yc) as determined by the cruise compilation is 38.99%. According to FSP Table 8, the minimum post-harvest cedar composition is 150sph. Preferred reforestation strategy: Plant Cw at 300 sph, Hw at 300sph, and Plc at 200sph. Protect all Cw with plastic cones. Plant Cw on raised microsites where possible, Plc in areas of poor drainage/depressions. Alternative reforestation strategy: In the absence of Plc availability, plant Cw 300sph, Ss 150spp, and Hw 300sph. Protect all Cw with plastic cones. Only plant Ss on raised microsites with good drainage. Planting SU 1 (30.02ha) Cw = 300 stems/ha (9006 stems total) Hw = 300 stems/ha (9006 stems total) Plc = 200 stems/ha (6004 stems total) Density = 800 stems/ha Season = Spring	

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL		NO

RPF PRINTED NAME	RPF'S SIGNATURE and SEAL
Cynthia Lu, RPF	Cynthia Lu, RPF 2017.07.06 13:27:00 -07'00'
DATE SIGNED	
I certify I personally completed the work described herein.	

Map attached forms an integral part of the site plan.

© 2012 Cengea Solutions Inc.

TSL A85374 - LAW719

Site Plan - Area Breakdown

Block	Standards Unit	Eco Unit	BioGeo Subzone	Site Series	Silviculture System	Standards ID	Area Summary (ha)						
							Gross Area	PAS	NP	WTRA	Reserves	Other	NAR
LAW719	1	1	CWHwh1	04(70%) 10(10%) 05(10%) 11(10%)	Clearcut w/ Reserves	1039578	39.55	1.77	0.00	7.76	0.14*	0.00	30.02

*Retention polygon is less than 0.25 ha so it is included in SU1 and included as part of the NAR.

BCTS
BC Timber Sales

SITE PLAN MAP

Block: LAW719

Forest Region: RWC
Forest District: DQC
Mapsheet: 103G.041
Location: Lawn Hill
TSA: Queen Charlotte TSA #25
FDU: Tlell-A
BEC: NDT1 CWHwh1

UTM Zone: 9
UTM Easting: 302,466
UTM Northing: 5,923,872
Latitude: 53°25'37"N
Longitude: 131°58'24"W
Author: dkim
Print Date: Friday, April 28, 2017

Map Legend

- Net Block Boundary
- Gross Block Boundary
- Falling Corner
- Quarry
- Designated Crossing - Proposed
- Culvert - Proposed
- Landing - Temp
- Geographic Centre
- Existing Road
- Proposed Road
- Index Contour
- Intermediate Contour
- WTRA
- Retention Area
- Ground-Based Yarding Area
- Road Right-of-Way
- Existing Opening
- Existing Reserve
- Machine Free Zone
- VLI
- Private Land
- VRI

Riparian Feature

- NCD
- Upland
- Block Wetland

LUO Feature

- Pacific Crab Apple
- Conservancy Area

Scale: 1:5,000

0 25 50 100 150 200 m

NAD 1983 UTM Zone 9N

Infinity-Pacific Stewardship Group

Field Ribboning

Falling Boundary: Orange Printed	Boundary
Riparian Reserve Zone: Orange Printed	Riparian
Right of Way Boundary: Orange Printed	R/W
Retention Patch: Orange / Black Stripe	
Road Reconnaissance: Yellow	
Road Centre Line: Pink Printed	
Landing Location: Pink "Landing"	Location
Skid/Bladed Trail Location: Pink Printed	Landing
Deflection Line/Base Line: Green / White Stripe	Trail
Fish Stream: Red / White Stripe	
Non-Fish Stream: Blue / White Stripe	
Machine Free Zone: Red Printed	MFZ
Traverse Station Marks: White	
Cruise Strip Lines: Blue	
Cruise Plot Centre: Blue and Yellow	
Treatment Area Boundary: Green Printed	Treatment
Retention Tree: Three Orange Dots	

Magnetic Declination: 18° 21' East

Riparian Area Summary Table

Stream Reach ID	L.U.O. Class	Reserve Zone Width (m)	Mgmt. Zone Width (m)	Machine Free Zone Width (m)
A-1	Upland	-	-	7
A-2	NCD	-	-	-
B-1	Upland	-	-	7

Stocking Standards I.D. # 1039578

Preferred Species / Min Free Growing Ht		Well Spaced Stocking (sph)		Regen / Free Growing date (Years)	Min. intertree distance (m)	Minimum Cedar Content	
		Target	Min.			Pre-Harvest % of Total Live sph	Post-Harvest Well Spaced sph
Cw / 1.20	Plc / 1.30	900	500	6 / 20	2.0	39%	150
Dr / 4.00	Ss / 2.0						
Yc / 1.20	Hw / 1.30						

Map 1 of 1

Y:\LAW719\Mapping\GIS\A85374_i3_map_SP_BK#LAW719.mxd