Yukon
Energy, Mines and Resources

FOREST MANAGEMENT BRANCH

SITE AND HARVEST PLAN

1. LOCATION

District	GEOGRAPHIC LOCATION NAME		MAPSHEET
Watson Lk	Cosh Creek		095-D-04
FMU	LATITUDE	LONGITUDE	SIS #
Y02	60 deg. 03' 12"	127 deg. 47' 34"	
DEVELOPMENT AREA	BLOCK NUMBER		AIR PHOTO NUMBERS
East Hyland	C9		IAS(03) 54509 #283

2. ECOLOGY AND SITE CONDITION

ECO-REGION	VEGETATION TYPE	SOIL TYPE
LIARD BASIN	V16, V22	S3/S4/S5 (minor SS5)

ELEV	SLOPE %	ASPECT	TERRAIN	SLOPE POSITION	MOIST REGIME	SOIL DRAINAGE	LFH(OM) DEPTH	SOIL TEXTURE
900-1035m	5-45%	N-NE-SE-S	EVEN-HUMMOCK	MID-UPPER	3-4//B-C	WELL TO MODWELL	9-15cm	L-SiCL

3. BLOCK AREA SUMMARY IN HECTARE

TOTAL AREA	NP NAT	IMMATURE PATCHES	MERCHANT. AREA	RESERVES	PERM. ROADS,	NET AREA TO
88.7	0	0	44.2	44	0.5	44.2

4. HARVEST STAND DESCRIPTION

STAND NUMBER	MERCH. AREA	SPECIES	CROWN CLOSURE	AGE	HEIGHT	AVG. DBH	EST. VOL/HA
V16(FP)	36.90	F6P2SW2	30.00%	126	20	22.40	186.00
V16(FSW)	2.30	F8SW2	35.00%	131	17	27.00	242.00
V22	5.00	P6F3SW1	25.00%	129	17	23.60	215.00

Yukon
Energy, Mines and Resources

FOREST MANAGEMENT BRANCH

SITE AND HARVEST PLAN

5. RIPARIAN MANAGEMENT

RIPARIAN ID #	CLASS (STREAM, WETLAND, LAKE)	RESERVE ZONE WIDTH (M)	RATIONALE FOR RESERVE	MNGMT. ZONE WIDTH (M)	STRATEGIES FOR MANAGEMENT ZONE
J	Class 4 stream	30.00	as per the Yukon Forest Management Branch THP&O Guidebook	70.00	The harvest area boundary has been located to exclude the majority of the Riparian Management Zone (RMZ).

6. STAND MANAGEMENT OBJECTIVES

HIGHER LEVEL AND OTHER PLANS
Identify any higher level plans, Resource Reports or other plans with which this prescription must be consistant.
This plan is consistent with the INTERIM WOOD SUPPLY PLAN for FOREST MANAGEMENT UNITS Y02, Y03 and Y09 in the KASKA YUKON TRADITIONAL TERRITORY (September 30th, 2003).
STAND-LEVEL OBJECTIVES
Discuss non-timber values that may be affected by the proposed treatment and measures proposed to accommodate these.
TRADITIONAL OR FIRST NATION
Crewmembers from the local First Nation community assisted in all operational field stages of this project. No observations were made by any of the field crews that would suggest cultural, archaeological, or historical sites were within the vicinity of this block. However, as no formal archaeological assesment has been carried out, harvesting supervisors must be aware of the potential for such sites and cease operations immediately should any be discovered during harvest.

Wildlife_Values:
The contiguous landscape level Forest Ecosystem Network (FEN) will provide interior forest habitat for late seral species (Marten, Boreal Owls, etc.), while internal reserves and/or dispersed on-block retention provdes stand structural diversity, visual screening, and "edge effect" throughout the harvest area for early seral species (Moose, Bear, etc.). In addition, both dispersed and aggregated retention will provide for biodiversity through "lifeboating", "enrichment" and "connectivity" at the stand level until this block returns to mature forest. Dispersed and aggregated retention also provides transitional elements between late and early seral stand structures that has been shown to increase utility of an area to both early and late seral species.

Fish_Water_Values:
In addition to any specific actions outlined in section 4.0 (RIPARIAN MANAGEMENT) of this SP, the following general conditions will be applied during harvest: 1) Culverts have been proposed for all non-classifiable drains (NCDs), draws, and streams for road crossings as shown on the SP Map. 2) Narrow draws or NCDs will not be used as skid routes, and skidding will be away from such features, as much as possible. 3) The preferred harvest season will be winter to minimize the overall impact of harvesting on the hydrology of the area.

Recr_Visual_Values:
Variable Retention harvesting using dispersed and aggregated retetion will minimize the visual impact of this block as shown in the post harvest Visual Impact Simulations of the Cosh Creek area.

Other_Values:
As the Trapper appears to have been using the Cosh Mainline as a trapping route, this and other harvest blocks should be reviewed with the Trapper so that he can adjust his "sets" accordingly before harvesting commences.

7. SILVICULTURE SYSTEM DESCRIPTION

STAND NUMBER	SILVICULTURE SYSTEM	SEASON	RATIONALE
All Other Stands	Variable Retention harvest with even-age stand management. Total aggregated retention in internal reserves is 48.3% of the gross block area. Dispersed retention throughout the harvest area is approximately 2% of the current basal area/ha.	Winter	Rationale described in Section 5.2 of the INTERIM WOOD SUPPLY PLAN for FOREST MANAGEMENT UNITS Y02, Y03 and Y09 in the KASKA YUKON TRADITIONAL TERRITORY (September 30th, 2003).

Dispersed Retention Leave-Tree Specs

Dispersed Retention Leave-Tree Specs: To meet the variable retention objectives on the harvest area, the following mature trees must be left: 1) Leave all aspen and birch regardless of condition. 2) Leave large diameter standing snags unless they are a worker safety hazard, in which case a 3m stub can be left. 3) Leave 10-20 conifers per hectare uniformly across the entire opening using the following parameters: a) All trees will be dominant or co-dominant. B) Species preference will be Subalpine Fir>White Spruce>Lodgepole Pine. C) All trees will be single or in small aggregates of 2-3 trees. D) All trees will be above average diameter for the stand, and preferably some of the largest diameter trees will be included (low height to diameter ratio for windfirmness). E) Spacing will vary to allow operational flexibility but will be roughly 20 to 30m between trees or aggregates. F) Most of the trees will be of good form and vigor (straight with healthy crowns). To supplement this mature tree retention the following non-merchantable trees will be left in V16 types: 1) Leave random clumps of Subalpine Fir advanced regeneration (<7m tall & <13.6cm DBH), where operationally feasible. These clumps will preferably be associated with the mature leave trees or aggregates for maximum effect and ease of harvesting (i.e., minimize the amount of non-merchantable Subalpine Fir slash by retaining the natural clumps of trees that currently exist in these stand types). In addition, the following non-merchantable trees will be left in V22 types: 1) Leave any scattered White Spruce (<7m tall, >40% live crown, and 13.5cm DBH) of good form and vigor where it is operationally feasible to do so.

Yukon
Energy, Mines and Resources

FOREST MANAGEMENT BRANCH

SITE AND HARVEST PLAN

8. SOIL CONSERVATION

ON BLOCK PERMANENT DISTURBANCE CALCULATION TAB

DISTURBANCE TYPE (ROAD/LANDING)	IDENTIFICATION (NAME/NUMBER)	ROAD STANDARD	LENGTH (M)	WIDTH (M)	TOTAL AREA L x W / 10,000 (HA)
ROAD	C9 BRANCH ROAD	CLASS4	500.00	10.00	0.50
			0.00	0.00	0.00
			0.00	0.00	0.00
			0.00	0.00	0.00

ROAD AREA	LANDING AREA	TOTAL AREA	BLOCK GROSS AREA	BLOCK NET AREA	% DISTURB. OF GROSS AREA
0.50	0.00	0.00	88.70	44.20	0.60%

	HAZARD RATINGS			PERMAFROST OR FROST HEAVING	PROPOSED HARVEST SEASON
DEPTH OF OM	COMPACTION	SURFACE EROSION	DISPLACEMENT		
15cm	VERY HIGH	HIGH	HIGH	LOW	WINTER

PROPORTION OF TEMPORARY ACCESS WITHIN NET AERA TO BE REFORESTED: (explain rehabilitation measures)

Temporary access is 3.0% of the NAR. Rehabilitation will include, as required: 1) Removal of culverts, cleaning of ditches, and restoration of natural drainage. 2) Ripping of excessively compacted areas. 3) Re-spreading of over-burden & Replanting.

FIRE HAZARD ABATEMENT: (explain measures for slash abatement)

CWD: Leave 2-5 small piles (approx. 3mX3mX3m) randomly in the block for small furbearer habitat. In addition, leave slash scattered throughout the block as widely dispersed as possible to simulate wildfire debris while maintaining reasonable plantibility . Minimize slash piles at the landings by processing at the stump or re-distributing some slash from the landings back over the block. Burn any remaining landing accumulations, as required, to abate the potential fire hazard.

FOREST HEALTH: (explain measures to reduce current and future risk of forest to disease and insects)

No significant forest health issues were noted in this block. Diverse stand structure and ecologically suitable species mixes will, in general, reduce the potential for post-harvest stand health concerns. Windfirmness of the residual stand edges has been considered in the location of all block boundaries.

Yukon
Energy, Mines and Resources

FOREST MANAGEMENT BRANCH

SITE AND HARVEST PLAN

9. REFORESTATION DESCRIPTION

SIS #	STAND #	NET AREA TO REFOREST	RESTOCKING		TARGET STOCKING (SPH)	ASSESSMENT DATES		
			PREF. SPECIES	ACC. SPECIES		DELAY TO TREAT	REGEN SURVEYS	
							EARLY STOCKING	LATE PERFORMANC
	V16 (FP)	36.90	F, P	SW	1200	H +3	H +5	H +10
	V16 (FSW)	2.30	F, P	SW	1200	H +3	H +5	H +10
	V22	5.00	P	SW, F	1200	H +2	H +5	H +10

REFORESTATION PLAN:

Site Preparation V16 & V22 type: Preparation objectives would be to create plantible spots, promote soil warming and retain or mixing in organic material. Suitable alternatives would be chain drag, disc trench, screef & raw plant. Excavator rake/pile or spot burning would be options if slash levels are excessive. Microsite plant pine and spruce 2+0 310 or equivalent stock. If raw planting, obstacle plant for soil warmth.

ESTABLISHMENT TO ASSESSMENT DATE CONCERNS:

V16 & V22 type: Brush competition is not expected to be a concern on these types.

ADDITIONAL COMMENTS:

Evaluate dispersed slash levels ASAP after harvest to confirm site prep requirements, if any. In general, the groups of trees, were the forest cover is totally undisturbed by harvest, should be considered stocked. On all other partially or fully disturbed areas, an intensive (100x100m grid) Post Harvest Survey can be used to delineate stocked and plantable portions for subsequent silviculture activities and to determine planting stock amounts. Short root stock is preferred on due to the patches of coarse shallow soils in this block.

FMB
Approval by: _____ Date: _____

Position: _____ Signature: _____

Yukon
Energy, Mines and Resources

FOREST MANAGEMENT BRANCH

SITE AND HARVEST PLAN

10. ATTACHMENTS

SITE PLAN MAP @ 1:_____

HARVEST PLAN MAP @ 1:_____