



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cost Summary Elkhorn Ridge No. 6 Sale 341-07-05

District: Coos

Date: 7/6/06

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,293,093.64	\$5,122.39	\$1,298,216.03
		Project Work	(\$68,664.00)
		Advertised Value	\$1,229,552.03



Timber Sale Appraisal Timber Description Elkhorn Ridge No. 6 Sale 341-07-05

"STEWARDSHIP IN FORESTRY"

District: Coos

Location: Portions of Sections 13 and 24, T23S, R11W, W.M., Coos County, Oregon.

Date: 7/6/06

Stand Stocking: 80%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	26	0	95
Western Hemlock / Fir	16	0	90
Alder (Red)	14	0	85

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Alder (Red)	Total
3P	87	0	0	87
SM	138	0	0	138
2S	2,188	0	3	2,191
3S	161	6	2	169
3S 12"+	223	9	0	232
4S	0	0	8	8
Total	2,797	15	13	2,825

Comments: Pond Values Used: 2nd Quarter Calendar Year 2006.

Western Red Cedar Stumpage Price = Local Pond Value minus Logging Costs.
 $\$725/\text{MBF} = \$845/\text{MBF} - \$120/\text{MBF}$

Hauling costs adjusted to make equivalent to \$700 daily truck cost.

Hauling Cost Calculation:

$\$700 - \% \text{ Profit \& Risk } (\$700 / 1.15) = \$608 \text{ Daily Truck Cost.}$

$\$608 \text{ Daily Truck Cost} / (2 \text{ trips per day} \times 4.5 \text{ mbf per load}) = \$67.55/\text{MBF} \text{ Gross Hauling Cost.}$

$\$67.55/\text{MBF} \text{ Gross Hauling Cost} - \text{Recovery Percentage Adjustment}$

$(\$67.55 - \$3.38 [5\%]) = \$64.17/\text{MBF} \text{ Net Hauling Cost.}$

Summary of Other Costs (See Attached Sheet)



Timber Sale Appraisal

Logging Conditions

Elkhorn Ridge No. 6

Sale 341-07-05

"STEWARDSHIP IN FORESTRY"

Combination#: 1	Douglas - Fir	100.00%	
	Western Hemlock / Fir	100.00%	
	Alder (Red)	100.00%	
Yarding Distance:	Long (1,500 ft)		Downhill Yarding: No
Logging System:	Cable: Large Tower >=70		Process: Manual Delimiting
Tree Size:	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF		
Loads/Day:	9		Bd. Ft./Load: 4,500
Cost/MBF:	\$87.65		
Machines:			
	Log Loader (A)		
	Tower Yarder (Large)		



Timber Sale Appraisal

Logging Costs

Elkhorn Ridge No. 6

Sale 341-07-05

"STEWARDSHIP IN FORESTRY"

Date: 7/6/06

Operating Seasons: 0.5

Profit & Risk: 15%

Project Costs: \$68,664

Other Costs (P/R): \$13,701

Slash Disposal: \$0

Other Costs: \$0

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.3	0.7	0.0	0.0

Road Maintenance: \$0.00

Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$64.17	2.0	4.5
Western Hemlock / Fir	\$64.17	2.0	4.5
Alder (Red)	\$64.17	2.0	3.5



Timber Sale Appraisal Logging Costs Breakdown Elkhorn Ridge No. 6 Sale 341-07-05

"STEWARDSHIP IN FORESTRY"

Costs	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
Logging	87.65	87.65	87.65
Road Maintenance	0.48	0.50	0.53
Fire Protection	0.48	0.48	0.48
Hauling	67.55	71.30	75.49
Other (P/R appl.)	4.85	4.85	4.85
Profit & Risk	24.15	24.72	25.35
Slash Disposal	0.00	0.00	0.00
Scaling	2.00	2.00	2.00
Other	0.00	0.00	0.00
Total	187.16	191.50	196.35

Amortization	0.00	0.00	0.00
Pond Value	648.78	321.00	590.38
Stumpage	461.62	129.50	394.03
Amortized	0.00	0.00	0.00



Timber Sale Appraisal Summary Elkhorn Ridge No. 6 Sale 341-07-05

"STEWARDSHIP IN FORESTRY"

Amortized

	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
MBF	0.00	0.00	0.00
Value	0.00	0.00	0.00
Total	0.00	0.00	0.00

Unamortized

	Douglas - Fir	Western Hemlock / Fir	Alder (Red)
MBF	2,797.00	15.00	13.00
Value	461.62	129.50	394.03
Total	1,291,151.14	1,942.50	5,122.39

Gross Timber Sale Value

Recovery \$1,298,216.03

Prepared by: Matthew Leise

Date: 7/6/06

District: Coos

Phone: (541) 267-4136

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Elkhorn Ridge No. 6

Additional "Other Cost" with additional profit and risk to be added:

	<u>Units</u>	<u>Quantity</u>	<u>Cost/unit</u>	<u>Total Cost</u>
Felling				
Felling of unmerch material	MBF		\$ 1.00	\$ -
Directional Felling	MBF	1890	\$ 2.00	\$ 3,780.00
				\$ -
Yarding and Loading				
Artificial guyline support	anchor	2	\$ 500.00	\$ 1,000.00
Brand and paint logs	MBF	3261	\$ 1.00	\$ 3,261.00
Loader time for firewood stacking	Hours	9	\$ 75.00	\$ 675.00
Tree Topping				
	Trees	22	\$ 100.00	\$ 2,200.00
Fish Log Stockpile				
Yarding and Decking	MBF	40	\$61.63	\$2,465.20
Special Handling	MBF	40	\$8.00	\$320.00
Miscellaneous Costs				
Maintenance rock per section 5	Cubic Yards		\$ 18.00	\$ -
Safety Flagging and/or signing	per day		\$ 150.00	\$ -

Total additional "Other Cost" with additional profit and risk to be added

\$ 13,701.20



**SUMMARY OF CONSTRUCTION COST
Elkhorn Ridge No. 6**

Project 1A: Road and Landing Construction

Points: A to B Length: 600' Type: 14' subgrade no ditch

Clearing and Grubbing

Clear and Grub	0.7	acres at	\$870.00	per acre	\$609.00
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Total Clear and Grub \$609.00

Excavation

Excavator	25	hrs at	\$120.00	per hr	\$3,000.00
Cat time	25	hrs at	\$120.00	per hr	\$3,000.00
Drill and Shoot	489	yds at	\$3.00	per yd	\$1,467.00
Dump Truck	2,335	yds at	\$0.80	per yd	\$1,868.00
Dump Truck to haul stumps to Pt H	2	hrs at	\$75.00	per hour	\$150.00
Laborer	25	hrs at	\$30.00	per hour	\$750.00

Total Excavation \$10,235.00

Grader

Grader to smooth road surface	1	hrs at	\$75.00	per hour	\$75.00
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Total Grader \$75.00

Total Project 1A \$10,919.00

Project 1B: Road and Landing Construction

Points: C to D Length: 600' Type: 14' subgrade no ditch

Clearing and Grubbing

Clear and Grub	0.7	acres at	\$870.00	per acre	\$609.00
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Total Clear and Grub \$609.00

Excavation

Excavator	100	hrs at	\$120.00	per hr	\$12,000.00
Cat time	50	hrs at	\$120.00	per hr	\$6,000.00
Drill and Shoot	1646	yds at	\$3.50	per yd	\$5,761.00
Dump Truck	7,700	yds at	\$1.02	per yd	\$7,854.00
Dump Truck to haul stumps to Pt H	2	hrs at	\$75.00	per hour	\$150.00
Laborer	40	hrs at	\$30.00	per hour	\$1,200.00

Total Excavation \$32,965.00

Culvert Installation

Install 18" culvert	40	ft at	\$18.36	per ft	\$734.40
18" band	1	band at	\$10.80	per band	\$10.80

Total Culverts \$745.20

**SUMMARY OF CONSTRUCTION COST
Elkhorn Ridge No. 6**

Grader

Grader to smooth road surface	<u>1</u>	hrs at	<u>\$75.00</u>	per hour	<u>\$75.00</u>
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Total Grader \$75.00

Total Project 1B \$34,394.20

Project 1C: Road and Landing Re-Construction

Points: E to F Length: 200' Type: Jump up spur

Excavation

Excavator	<u>10</u>	hrs at	<u>\$120.00</u>	per hr	<u>\$1,200.00</u>
Cat time	<u>10</u>	hrs at	<u>\$120.00</u>	per hr	<u>\$1,200.00</u>

Total Excavation \$2,400.00

Total Project 1C \$2,400.00

Project 1D: Waste Areas Preparation

Points: G and H Length: n/a Type: n/a

Excavator (clear area and build short spur)	<u>5</u>	hrs at	<u>\$120.00</u>	per hr	<u>\$600.00</u>
Cat (Pt G - prep/shape waste area, standby)	<u>45</u>	hrs at	<u>\$120.00</u>	per hr	<u>\$5,400.00</u>
Cat (Pt H - prep/shape waste area, standby)	<u>20</u>	hrs at	<u>\$120.00</u>	per hr	<u>\$2,400.00</u>

Total Project 1D \$8,400.00

Move-In (includes lowboy return trip for next piece of equipment)

Equipment	Miles	hrs	Lowboy Rate/hr	Total
Excavator	35	3	\$95.00	\$285.00
Cat	35	5	\$95.00	\$475.00
Grader	35	5	\$95.00	\$475.00
Drill & Comp	35	5	\$95.00	\$475.00
Dump Truck	35	5	\$95.00	\$475.00
Dump Truck	35	5	\$95.00	\$475.00

Total Move-in: \$2,660.00

Project 1 Total \$58,774.00

**SUMMARY OF CONSTRUCTION COST
Elkhorn Ridge No. 6**

Project 2A: Road Surfacing

Points: 9300 Rd Length: n/a Type: n/a

1 1/2" rock for 9300 rd after new rd const.	<u>360</u>	yds at	<u>\$21.31</u>	per yd	<u>\$7,671.60</u>
Grader time for rock surfacing	<u>3</u>	hrs at	<u>\$75.00</u>	per hour	<u>\$225.00</u>

Total Project 2A \$7,897.00

Project 2B: Road Surfacing

Points: 9300 Rd Length: n/a Type: n/a

1 1/2" rock for 9300 rd after logging Pt F	<u>90</u>	yds at	<u>\$21.31</u>	per yd	<u>\$1,917.90</u>
Grader time for rock surfacing	<u>1</u>	hrs at	<u>\$75.00</u>	per hour	<u>\$75.00</u>

Total Project 2B \$1,993.00

Project 2 Total \$9,890.00

Total Project Costs \$68,664.00

TIMBER SALE SUMMARY

Elkhorn Ridge No. 6

1. Type of Sale: Final Harvest, Recovery, Sealed Bid

2. Boundary Lines: Sale boundaries are marked on the ground with "Timber Sale Boundary" posters, red flagging, and red paint at locations shown on the Exhibit "A".

3. Revenue Distribution: 100% CSL; 100% Coos County

4. Sale Acreage: The sale is comprised of approximately 41 acres. Sale acreage was determined by using GPS units to record the location of posted boundaries, and electronic digitizing using the ArcView GIS program. Deductions were made for an existing pocket of mortality.

Posted Acres	Mortality Acres	Net Cruise Acres	Net Harvest Acres
41.4	.4	41.0	41.0

5. Volume by Species, Fund and County. See Attached table.

6. Grade: (by Percent)

Species	3 Peeler %	Spec. Mill %	2 Saw %	3 Saw %	4 Saw/Camprun %
Douglas-fir	3 %	4.7 %	79 %	13.3 %	0 %
Hemlock			0 %	100 %	0 %
Hardwoods			26 %	18 %	56 %

7. Cruise: The sale area was variable plot cruised using a nested Big BAF plot method. The Big BAF method is a combination of count plots and individually measured trees. The plots were spaced 70 feet apart on cruise lines spaced 330 feet apart. A 360 BAF full plot at Form point (16 feet) was taken to determine which Douglas-fir trees would be fully measured. A total of 52 Douglas-fir trees were fully measured for DBH, height, grade and defect. A 40 BAF full plot at form point was used to determine tree counts and to measure minor species. A total of 72 count plots were measured. The cruise was performed in January 2006 by ODF foresters M. Leise, N. Morris, J. Haynes, R. Greco, and N. Kline.

A. Summary data:

Diam	Ht. Stand	Form Pt.	Form Factor	CV %	SE %
D4H	Total Ht.	Conifer: 16' Hardwood: 16'	Recorded for all cruised trees by estimate and measure	51.93 %	6.12 %

B. Defect and Breakage Summary:

BY PERCENT

SPECIES	CRUISED DEFECT	HIDDEN DEFECT	BREAKAGE	TOTAL %
DOUGLAS FIR	2.2	5	8	15.2
HEMLOCK	2	2	2	6
HARDWOODS	4	6	5	15

C. Stand Data:

SPECIES	DBH	TREES/ACRE	BASAL AREA/AC	NET MBF/ACRE
DOUGLAS FIR	26	76	272	69
HEMLOCK	16	1	4	.3
HARDWOODS	24	7	10	.3

D. Green Tree Retention: There are five (5) green tree retention areas associated with this sale. The reserve areas consist primarily of trees left along the one perennial and three seasonal drainages. The retention trees along the perennial stream are within the posted buffer. The retention trees along the seasonal drainages have each been marked with red paint, and their volume has been removed from the cruise.

GTR Area	D-fir Count	D-fir MBF	Hemlock Count	Hemlock MBF	Hdwd Count	Hdwd MBF
AREA A	21	33.6	1	.1	4	.4
AREA B	57	65.1	2	.26		
AREA C	10	18				
AREA D	18	26.8	2	.5		
AREA E	12	12.6	1	4.4	5	.8

8. Timber Description: Timber in sale area is even-aged and fully stocked with mature 117 year-old Douglas-fir saw timber, and minor amounts of western hemlock and patches of red alder. Timber quality is good.

9. Topography: The sale area consists of moderate to steep slopes ranging primarily from 60% to over 75%. Predominately east and west aspects are present within the sale area. The sale area contains the headwaters of one unnamed perennial and three unnamed seasonal Type N tributaries to the West Fork Millicoma.

10. Logging Method: The sale area will be cable logged from new landings at Points B and D, and a landing to be improved at point F. New short spurs will be constructed to access Points B and D, and a short spur will be improved to reach point F. Full suspension will be required while yarding over drainages and stream buffers, and full suspension will be maintained where possible over the remainder of the sale. Single end suspension will be utilized where full suspension is not possible.

11. Access: From Coos Bay travel approximately 12 miles west along the Coos River Hwy to the 1000 Rd. Then head north along the 1000 Rd to the 9000 Rd, just past the 10 mile marker. Next, head northwest on the 9000 Rd to the 9300 Rd, just past the 3.5 mile marker. Finally, head west then north along the 9300 Rd past the 2 mile marker to the timber sale.

12. Projects: See attached "Project Cost Summary Sheet"

Project No. 1: Construct and/or improve roads, landings, and waste areas

Project No. 2: Road Surfacing

NET VOLUMES AND ACREAGE

SALE AREA & SPECIES		Tree cnt. 100% Units	NET VOLUMES (MBF)							Total Vols.	Vol. per Acre
			By County and Fund								
			Coos			Douglas					
Area	Spec		CSL	BOF	Total	CSL	BOF	Total			
I	D-fir		2731		2731			0	2731	66.61	
	Hem		14		14			0	14	0.341	
	Cedar				0			0	0		
	Hdwd		12		12			0	12	0.302	
II- ROW	D-fir		66		66			0	66	66	
	Hem		1		1			0	1		
	Cedar				0			0	0		
	Hdwd		1		1			0	1	1	
TOTALS			2825	0	2825	0	0	0	2825		

TOTAL SALE VOLUME BY SPECIES

Douglas-fir	2797	MBF
Hemlock	15	MBF
RedCedar	0	MBF
Hardwoods	13	MBF

Report by: Matthew Leise

Date: 06/20/2006

Unit For: None Date June 21, 06

Asst. Dist. For: Greg Kreimeyer Date 6.21.2006

UTILITY VOLUME NOT SHOWN TO PROVIDE FOR RETENTION OF DOWN LOGS
NO INGROWTH INCLUDED

ACREAGE BY COUNTY (to nearest acre)

Sale Area	Coos County						Douglas County						TOTAL ACRES
	CSL		BOF		Hard woods	CSL		BOF		Hard woods			
	cc	pc	cc	pc		cc	pc	cc	pc				
I	41												41
II	1												1
SUM	42	0	0	0	0	0	0	0	0	0	0	0	42

cc- clearcut

pc- partial cut

BOF - Board of Forestry

CSL - Common School Land

CRUISE VOLUME COMPUTATION REPORT

SALE NAME: Elkhorn Ridge No. 6

DATE: 02/17/2006

BY: M. Leise

<u>GROSS VOLUME MBF *</u>				
SPECIES>>	Doug-fir	Hemlock	Hardwds	TOTAL
AREA				BY AREA
I	3330	15	15	3360.0
less retention vol	62		1	63.0
unit total	3268	15	14	3297
2 (ROW)	73	1	1	75.0
Unit Total	73	1	1	75
TOTAL	3341.0	16.0	15.0	3372.0

DEFECT AND BREAKAGE *

AREA I			
Species	Doug-fir	Hemlock	Hardwds
Field cull	2.2	2	4
Hidden cl	5	2	6
Breakage	8	2	5
Total	15.2	6	15

AREA II (ROW)			
Species	Doug-fir	Hemlock	Hardwds
Field cull	1	0	0
Hidden cl	2	4	6
Breakage	6	2	5
Total	9	6	11

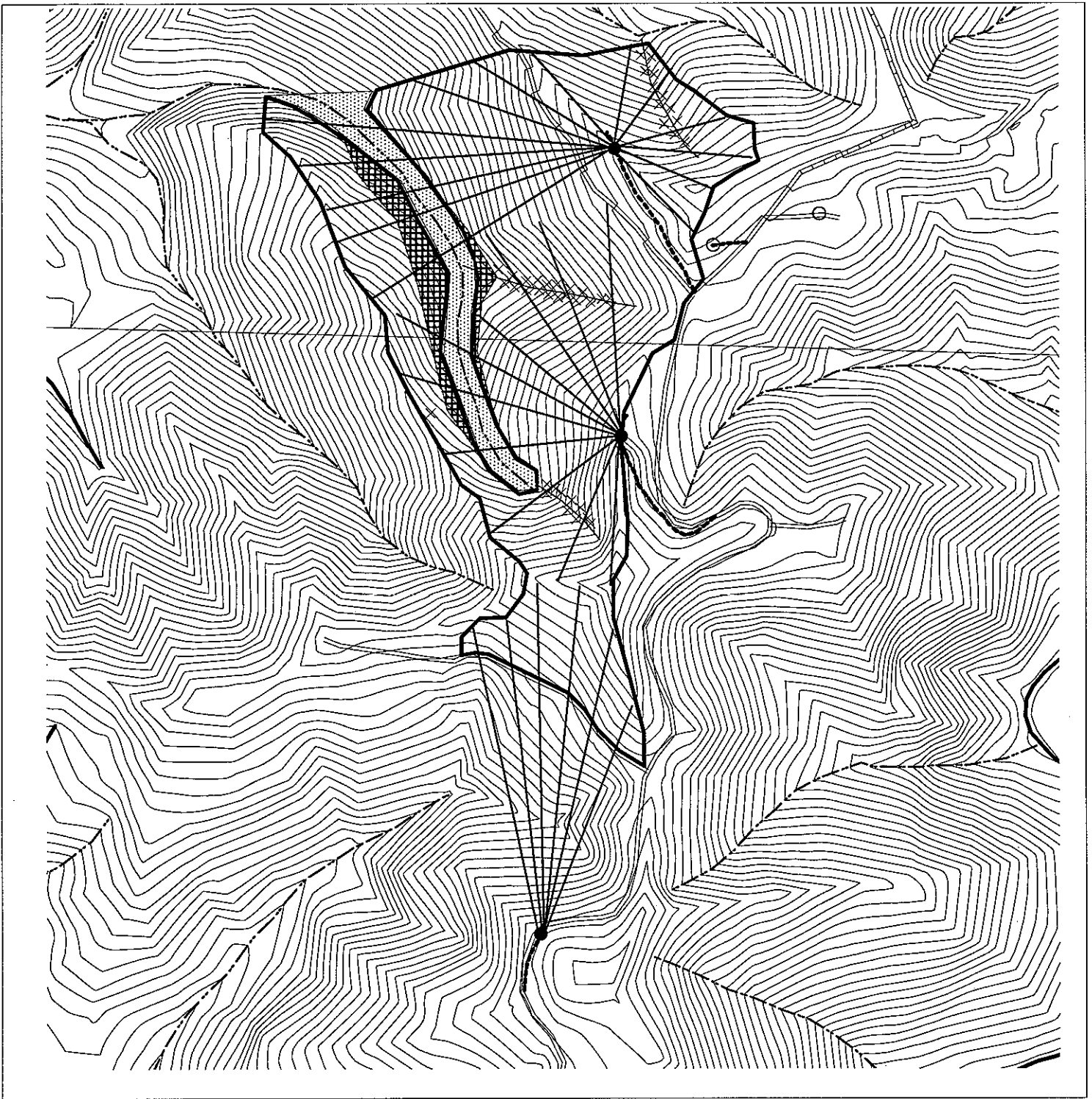
NET VOLUME BY MBF BY AREA*				
SPECIES	Doug-fir	Hemlock	Hardwds	TOTALS
AREA				BY AREA
I	2771	14	12	2797
2	66.0	1	1	68
TOTALS	2837	15.0	13	2865

NET VOLUME BY GRADE AND MBF * (Area 1)							
Grade >>>>>>>>>>>>	2 PEE	3 PEE	SM	2 SAW	3 SAW	4 SAW/CR	
Doug-Fir	0	83	130	2189	369	0	
Hemlock					14		
Hdwds				3	2	7	

GRADE DISTRIBUTION BY PERCENT (Area 1)							
Grade >>>>>>>>>>>>	2 PEE	3 PEE	SM	2 SAW	3 SAW	4 SAW	
Doug-fir		0.03	0.047	0.79	0.133		
Hemlock					1.00		
Hdwds				0.26	0.18	0.56	

NET VOLUME BY GRADE AND MBF * (Area 2 ROW)							
Grade >>>>>>>>>>>>	2 PEE	3 PEE	SM	2 SAW	3 SAW	4 SAW/CR	
Doug-Fir	0	4	8	39	15	0	
Hemlock					1		
Hdwds				0	1	0	

GRADE DISTRIBUTION BY PERCENT (Area 2 ROW)							
Grade >>>>>>>>>>>>	2 PEE	3 PEE	SM	2 SAW	3 SAW	4 SAW	
Doug-fir		0.065	0.115	0.59	0.23		
Hemlock					1.00		
Hdwds				0	1	0	



- ⊕ Waste Area
- Landing
- New Roads
- Seasonal Stream
- Type N Perennial
- Type F Streams
- ▨ Riparian Buffer
- × Retention Tree
- ▩ Green Tree Retention
- Purchaser Maintained Road
- State Maintained Road
- Timber Sale Boundary

Logging Plan

Timber Sale No. 341-07-05
Elkhorn Ridge No. 6

500 0 500 Feet



Approximate Scale 1" = 500'
Contour Interval 20'

