"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Ash Valley Overlook
Sale 341-14-52

District: **Coos** **Date:** **March 13, 2014**

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$1,827,919.18	$49,042.72	$1,876,961.90
		Project Work:	$(38,745.00)
		Advertised Value:	$1,838,216.90

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Ash Valley Overlook
Sale 341-14-52

District: **Coos** **Date:** **March 13, 2014**

timber description

Location: Portions of Sections 23 and 24, T23S, R10W, W.M., Douglas County, Oregon.

Stand Stocking: 60%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	25	0	95
Western Hemlock / Fir	16	0	95
Red Cedar	30	0	95
Alder (Red)	13	0	90
Maple	18	0	90

Volume by Grade	10" - 11"	12"+	2S	3P	3S	3S 12"+	6" - 7"	8" - 9"	SM	Total
Douglas - Fir	0	0	2,548	158	609	65	0	0	222	3,602
Western Hemlock / Fir	0	0	252	0	271	0	0	0	0	523
Red Cedar	0	0	134	0	123	0	0	0	0	257
Alder (Red)	0	0	0	0	0	0	90	52	0	142
Maple	42	18	0	0	0	0	12	0	0	72
Total	42	18	2,934	158	1,003	65	102	52	222	4,596

"STEWARDSHIP IN FORESTRY"

District: **Coos** **Date:** **March 13, 2014**

comments:

Pond Values Used: 4th Quarter Calendar Year 2013 +
Local Pond Values for 2S, 3S, and Big3S Douglas-fir and 2S and 3S Western Hemlock.

Regeneration harvest of approximately 106 acres of mature second growth Douglas-fir sawtimber with some western hemlock and redcedar, and 18 acres of 36-45 year old Douglas-fir and hardwood mix.

Maple Pond Value = Red Alder Pond Value minus $100.

SCALING COST ALLOWANCE = $5.00/MBF

FUEL COST ALLOWANCE = $4.00/GALLON

HAULING COST ALLOWANCE
Hauling costs equivalent to $780 daily truck cost.

Other Costs (with Profit & Risk to be added):
FELLING:
Directional Felling/Tree Jacking: $2/MBF x 100 MBF = $200
YARDING AND LOADING:
Brand and Paint Logs: $1/MBF x 4,596 MBF = $4,596
Cull Sorting and Landing Slash Piling: $125/landing x 7 landings = $875
Transport Culls to B - M for Firewood: $100/hour x 6 hrs = $600
Rig Tail/Lift Trees: $150/lift tree x 10 lift trees = $1,500
Artificial Guy Anchors: $500/anchor x 1 anchor = $500
Cover Landing Slash Piles: $50/pile x 15 piles = $750
Skid Road Layout for Ground Ops: $5/MBF x 250 MBF = $1,250
Equipment Wash for Ground Ops: $65/hr x 6 hrs = $390
MISCELLANEOUS COSTS
Maintenance Rock (Section 2130): $28/yard x 50 yards = $1,400
Tree Topping @60 feet+: $100/tree x 27 trees = $2,700
Tree Girdling @60 feet+: $125/tree x 26 trees = $3,250
Equipment Move Between Areas: $125/hr x 2 hrs = $250
TOTAL Other Costs (with Profit & Risk to be added) = $18,261

Other Costs (No Profit & Risk added):
None.

"STEWARDSHIP IN FORESTRY"

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Ash Valley Overlook
Sale 341-14-52

District: Coos **Date: March 13, 2014**

logging conditions

combination#: 1

Douglas - Fir	40.00%
Western Hemlock / Fir	40.00%
Red Cedar	40.00%
Alder (Red)	40.00%
Maple	40.00%

yarding distance: Medium (800 ft) **downhill yarding:** No
logging system: Cable: Large Tower >=70 **Process**: Manual Delimbing
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 8.0 **bd. ft / load:** 4,800
cost / mbf: $96.18

machines: Log Loader (A)
Tower Yarder (Large)

combination#: 2

Douglas - Fir	46.00%
Western Hemlock / Fir	46.00%
Red Cedar	46.00%
Alder (Red)	46.00%
Maple	46.00%

yarding distance: Medium (800 ft) **downhill yarding:** No
logging system: Shovel **Process**: Manual Delimbing
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 10.0 **bd. ft / load:** 4,800
cost / mbf: $52.18

machines: Shovel Logger

combination#: 3

Douglas - Fir	14.00%
Western Hemlock / Fir	14.00%
Red Cedar	14.00%
Alder (Red)	14.00%
Maple	14.00%

yarding distance: Medium (800 ft) **downhill yarding:** No
logging system: Cable: Large Tower >=70 **Process**: Manual Delimbing
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 8.0 **bd. ft / load:** 3,500
cost / mbf: $131.91

machines: Log Loader (A)
Tower Yarder (Large)

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Ash Valley Overlook
Sale 341-14-52

District: Coos **Date:** March 13, 2014

logging costs

Operating Seasons:	2.00	**Profit Risk:**	20.00%
Project Costs:	$38,745.00	**Other Costs (P/R):**	$18,261.00
Slash Disposal:	$0.00	**Other Costs:**	$0.00

Miles of Road

Road Maintenance: $0.00

Dirt	Rock (Contractor)	Rock (State)	Paved
2.0	5.0	0.0	0.0

Hauling Costs

Species	$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	$0.00	2.0	4.8
Western Hemlock / Fir	$0.00	2.0	4.0
Red Cedar	$0.00	1.0	4.0
Alder (Red)	$0.00	2.0	3.5
Maple	$0.00	2.0	3.5

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Ash Valley Overlook
Sale 341-14-52

District: **Coos** **Date:** **March 13, 2014**

Local Pond Values

Date	Specie	Grade	Value
3/13/14	Douglas - Fir	2S	$600.00
3/13/14	Douglas - Fir	3S	$590.00
3/13/14	Douglas - Fir	3S 12"+	$330.00
3/13/14	Western Hemlock / Fir	2S	$545.00
3/13/14	Western Hemlock / Fir	3S	$540.00
3/13/14	Maple	10" - 11"	$530.00
3/13/14	Maple	12"+	$580.00
3/13/14	Maple	6" - 7"	$280.00

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Ash Valley Overlook
Sale 341-14-52

District: Coos **Date:** March 13, 2014

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
$80.94	$6.62	$1.91	$71.10	$3.97	$32.91	$0.00	$5.00	$0.00	$202.45
Western Hemlock / Fir									
$80.94	$6.62	$1.91	$85.31	$3.97	$35.75	$0.00	$5.00	$0.00	$219.50
Red Cedar									
$80.94	$6.62	$1.91	$170.62	$3.97	$52.81	$0.00	$5.00	$0.00	$321.87
Alder (Red)									
$80.94	$6.93	$1.91	$102.15	$3.97	$39.18	$0.00	$5.00	$0.00	$240.08
Maple									
$80.94	$6.93	$1.91	$102.15	$3.97	$39.18	$0.00	$5.00	$0.00	$240.08

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$612.87	$410.42	$0.00
Western Hemlock / Fir	$0.00	$542.41	$322.91	$0.00
Red Cedar	$0.00	$1,025.00	$703.13	$0.00
Alder (Red)	$0.00	$453.24	$213.16	$0.00
Maple	$0.00	$500.83	$260.75	$0.00

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Ash Valley Overlook
Sale 341-14-52

District: Coos **Date:** March 13, 2014

summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	$0.00	$0.00
Western Hemlock / Fir	0	$0.00	$0.00
Red Cedar	0	$0.00	$0.00
Alder (Red)	0	$0.00	$0.00
Maple	0	$0.00	$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	3,602	$410.42	$1,478,332.84
Western Hemlock / Fir	523	$322.91	$168,881.93
Red Cedar	257	$703.13	$180,704.41
Alder (Red)	142	$213.16	$30,268.72
Maple	72	$260.75	$18,774.00

Gross Timber Sale Value

Recovery: $1,876,961.90

Prepared by: Jon Haynes **Phone:** 541-267-1758

Summary of "Other Costs" for Timber Sale Appraisals

Sale Name: Ash Valley Overlook

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

	Units	Quantity	Cost/unit	Total Cost
Felling				
Directional Felling/Tree Jacking	MBF	100	$ 2.00	$ 200.00
Yarding and Loading				
Brand and paint logs	MBF	4596	$ 1.00	$ 4,596.00
Cull sorting/slash piling on landings	landing	7	$ 125.00	$ 875.00
Transport culls to B - M for firewood	hrs	6	$ 100.00	$ 600.00
Rig tail/lift trees	lift tree	10	$ 150.00	$ 1,500.00
Artificial guy anchors(dozer, skidder)	anchor	1	$ 500.00	$ 500.00
Cover landing slash pile w/sheeting	pile	15	$ 50.00	$ 750.00
Skid Road Layout for ground operations	MBF	250	$ 5.00	$ 1,250.00
Equipment wash for ground operations	hrs	6	$ 65.00	$ 390.00
Miscellaneous Costs				
Maintenance rock (Section 2130)	yards	50	$ 28.00	$ 1,400.00
Tree topping @ 60 feet +	per tree	27	$ 100.00	$ 2,700.00
Tree girdling @ 60 feet +	per tree	26	$ 125.00	$ 3,250.00
Equipment move between areas	per hr	2	$ 125.00	$ 250.00

Total additional "Other Cost" with additional profit and risk to be added **$ 18,261.00**

Additional "Other Cost" with no additional profit and Risk

	Units	Quantity	Cost/unit	Total Cost
Non-required road construction	Stations			$ -
Non-required road rocking	Cubic Yards			$ -
Stream clearance	Feet			$ -
Scaling (high piece count)	MBF		$ 2.00	$ -
				$ -

Total additional "Other Cost" with no additional profit and Risk **$ -**

Operating Periods Restrictions Matrix for
Ash Valley Overlook
341-14-52

Harvesting	January		Febuary		March		April		May		June		July		August		September		October		November		December	
					1st		1st		15th	16th			7th	8th	5th	6th	15th	16th	14th	15th				
Ground-based Yarding																								
Cable Yarding on unsurfaced roads																								

Hauling	January		Febuary		March		April		May		June		July		August		September		October		November		December	
					1st		1st		15th	16th					5th	6th	15th	16th		15th				
Log or Rock Hauling on mile 0.0 to 5.0 of 1000 rd (Marlow Creek) or mile 0.0 to 1.5 of 7500 rd (Footlog Crk Rd.)																								
Log Hauling on Unsurfaced Roads																								

Project Work	January		Febuary		March		April		May		June		July		August		September		October		November		December	
					1st		1st		15th	16th					5th	6th	15th	16th		15th				
Projects 1 & 2 or Non-Project Operations																								

Operations Allowed

Activity Restricted 2 hours before sunset through 2 hours after sunrise

Operations Prohibited - T & E

Operations Prohibited for weather conditions: unless otherwise approved in writing by STATE

~~~~~~~~~~ Operating Matrix represents the seasonal restrictions contained within the body of the timber sale contract. See the contract for further information on seasonal restrictions. ~~~~~~~~~~
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SUMMARY OF CONSTRUCTION COST
Ash Valley Overlook

Project 1A: Road and Landing Construction

Points: C to D Length: 200' Type: 14' no ditch

Excavator	5	hrs at	$140.00	per hour	$700.00
Cat time	10	hrs at	$140.00	per hour	$1,400.00
Grader	1	hrs at	$85.00	per hour	$85.00
Laborer	10	hrs at	$38.00	per hour	$380.00

Total Project 1A: **$2,565.00**

Project 1B: Road and Landing Construction

Points: G to H Length: 550' Type: 14' no ditch

Excavator	10	hrs at	$140.00	per hour	$1,400.00
Cat time	20	hrs at	$140.00	per hour	$2,800.00
Grader	1	hrs at	$85.00	per hour	$85.00
Laborer	20	hrs at	$38.00	per hour	$760.00

Total Project 1B: **$5,045.00**

Project 1C: Road and Landing Construction

Points: K to L Length: 500' Type: 14' no ditch

Excavator	20	hrs at	$140.00	per hour	$2,800.00
Cat time	20	hrs at	$140.00	per hour	$2,800.00
Grader	1	hrs at	$85.00	per hour	$85.00
Laborer	20	hrs at	$38.00	per hour	$760.00

Total Project 1C: **$6,445.00**

Project 1D: Road and Landing Construction

Points: N to O Length: 400' Type: 14' no ditch

Excavator	20	hrs at	$140.00	per hour	$2,800.00
Cat time	20	hrs at	$140.00	per hour	$2,800.00
Grader	1	hrs at	$85.00	per hour	$85.00
Laborer	20	hrs at	$38.00	per hour	$760.00

Total Project 1D: **$6,445.00**

Move-in

Equipment	Miles	hrs/RT	Lowboy Rate/hr	Total
Excavator	45	6	$100.00	$600.00
Cat	45	6	$100.00	$600.00
Grader	45	5	$100.00	$500.00

Extra time for Equipment to walk in to Project Area (3 mi)

Excavator	1.5	hrs at	$140.00	per hour	$210.00
Cat time	1.5	hrs at	$140.00	per hour	$210.00

Total Move-in: **$2,120.00**

Project 1 Total **$22,620.00**

SUMMARY OF CONSTRUCTION COST
Ash Valley Overlook

Project 2A: Road Improvement

Points: A to B Length: 16,320' Type: 14' w/ditch

Grader time - clean ditches, blade road	15	hrs at	$85.00	per hour	$1,275.00	
				Total Project 2A:		**$1,275.00**

Project 2B: Road Improvement

Points: B to P Length: 4290' Type: 14' w/ditch

Excavator - pick up small slide, pile material on outside edge of road	2	hrs at	$140.00	per hour	$280.00	
Cat time - remove waterbars	5	hrs at	$140.00	per hour	$700.00	
Grader time - blade road	5	hrs at	$85.00	per hour	$425.00	
				Total Project 2B:		**$1,405.00**

Project 2C: Road Improvement

Points: B to C Length: 2120' Type: 14' no ditch

Cat time - remove tank trap, smooth road	3	hrs at	$140.00	per hour	$420.00	
Grader time - blade road	1	hrs at	$85.00	per hour	$85.00	
				Total Project 2C:		**$505.00**

Project 2D: Road and Landing Improvement

Points: E to F Length: 750' Type: 14' no ditch

Excavator - remove brush, open road	15	hrs at	$140.00	per hour	$2,100.00	
Cat time - open road, prepare landing area	20	hrs at	$140.00	per hour	$2,800.00	
Grader time - blade road	1	hrs at	$85.00	per hour	$85.00	
				Total Project 2D:		**$4,985.00**

Project 2E: Road and Landing Improvement

Points: I to J Length: 900' Type: 14' no ditch

Excavator - remove brush, open road	10	hrs at	$140.00	per hour	$1,400.00	
Cat time - open road, prepare landing area	20	hrs at	$140.00	per hour	$2,800.00	
Grader time - blade road	1	hrs at	$85.00	per hour	$85.00	
				Total Project 2E:		**$4,285.00**

Project 2F: Road Improvement

Points: M to N Length: 720' Type: 14' no ditch

Excavator - remove brush, open road	5	hrs at	$140.00	per hour	$700.00	
Cat time - open road	5	hrs at	$140.00	per hour	$700.00	
Grader time - blade road	1	hrs at	$85.00	per hour	$85.00	
				Total Project 2F:		**$1,485.00**

SUMMARY OF CONSTRUCTION COST
Ash Valley Overlook

Project 2G: Road and Landing Improvement

Points: P to Q Length: 615' Type: 14' no ditch

Excavator - remove brush, open road	5	hrs at	$140.00	per hour	$700.00	
Cat time - open road	10	hrs at	$140.00	per hour	$1,400.00	
Grader time - blade road	1	hrs at	$85.00	per hour	$85.00	
				Total Project 2G:		**$2,185.00**
				Project 2 Total		**$16,125.00**
				Total Project Costs		**$38,745.00**

TIMBER SALE SUMMARY

Ash Valley Overlook

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

2. Boundary Lines: Timber sale boundaries are marked on the ground with white "Timber Sale Boundary" posters, red flagging, and red paint at locations shown on the Exhibit "A". Property boundaries along the south line of Area 1 and the east line of Area 2 are marked with fluorescent orange blazing, orange flagging, and orange-topped stakes.

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

4. Sale Acreage: The total sale area is approximately 124 acres divided into two separate sale areas. Sale acreage was determined from LIDAR imagery using electronic digitizing with the ArcMap 10.1 GIS program. The cruise expansion acres were stratified into mature and young types and include only the timbered acres and not existing interior roads or landings.

Acreage by Sale Area

	Posted Acres	Interior Roads/Landings	Non-Stocked Acres	Net Cruise Acres	Net Harvest Acres
Area 1	61.02	2.36	0	58.7	59
Area 2	68.76	3.38	0	65.4	65
Total	129.78	5.74	0	124.1	124

Acreage by Cruise Strata

	Area 1	Area 2	Total Cruise Expansion Acres
Mature Strata	49.6	56.8	106.4
Young Strata	9.1	8.6	17.7
Total	58.7	65.4	124.1

5. Volume by Species

Species	Total Volume (MBF)	Volume (MBF) per Acre
Douglas-fir	3602	29.0
Hemlock	523	4.2
Red Cedar	257	2.1
Red Alder	142	1.1
Bigleaf Maple	72	.6
Total	4596	37.1

6. Grade: (by Percent,)

Species	3 Peeler %	Special Mill %	2 Saw (12"+) %	3 Saw % (10" – 11") %	Big 3 Saw %	4 Saw % (8" – 9") %	6" – 7" % Hardwood
Douglas-fir	4 %	6 %	71 %	17 %	2 %		
Hemlock			48 %	52 %			
Red Cedar			52 %	48 %			
Red Alder						37 %	63 %
Bigleaf Maple			25 %	58 %			17 %

7. Cruise: The sale areas were variable plot cruised using a nested Big BAF plot method. The Big BAF method is a combination of count plots and individually measured trees. Plots were spaced 150 feet apart on cruise lines spaced 415 feet apart. The sale areas were stratified into a mature type and a young type. A 40 BAF full plot was used to determine tree counts for all species. Trees were sighted in at 16 feet in the mature type and at DBH in the young type. A total of 81 count plots were installed. In the mature strata a 360 BAF full plot at 16 feet was taken on every plot to determine which Douglas-fir trees would be fully measured. A total of 35 mature Douglas-fir trees were measured for DBH, height, grade, and defect. In the young strata a 250 BAF full plot at DBH was taken on every plot to determine which Douglas-fir trees would be fully measured. A total of 16 young Douglas-fir trees were fully measured for DBH, height, grade and defect. Minor species were measured on every third plot with a 360 BAF at 16 feet and were not stratified by age. A total of 30 minor species were fully measured. Volume was calculated by preserving cruised log length to maximize grade. Cruise data was compiled using Superace. Cruising was done by ODF Coos District staff Stack, Erb, Haynes, and Hall in June - August 2013.

A. Summary data (Areas 1 - 2):

Diam	Ht. Stand	Form Pt.	Form Factor	CV %	SE %
DBH	6" DIB	Mature DF: 16' Young DF: DBH Minor Species: 16'	Recorded for all cruised trees by estimate and measure	74 %	8.2 %

B. Defect and Breakage Summary (Areas 1- 2):

BY PERCENT

SPECIES	CRUISED	HIDDEN DEFECT	BREAKAGE	TOTAL %
DOUGLAS FIR	1	5	3	9
HEMLOCK	0	3	2	5
REDCEDAR	3	4	3	10
RED ALDER	0	6	6	12
BIGLEAF MAPLE	0	6	6	12

C. Stand Data (Areas 1 - 2):

SPECIES	DBH	TREES/ACRE	BASAL AREA/AC	NET MBF/ACRE
DOUGLAS FIR	25"	47	135	29.0
HEMLOCK	16'	37	49	4.2
REDCEDAR	30"	4	20	2.1
RED ALDER	13"	19	19	1.1
BIGLEAF MAPLE	18"	4	7	.6

D. Green Tree Retention: There are six (6) green tree reserve areas associated with this sale that are reserved from cutting. These areas consist of Type N perennial and Type N seasonal stream buffers posted out of the sale boundary. These areas were not included in the cruise. There are some additional leave trees located along the north and east boundaries of Area 1, the eastern boundaries of both Areas 1 and 2, and scattered interior trees in both Areas 1 and 2. These trees are individually painted with red markings and have been removed from the cruise. The table below summarizes the green tree retention areas and the volume that has been removed from the cruise.

GTR Area	D-fir Count	D-fir MBF removed from cruise	Hemlock Cedar Spruce Count	Hemlock/ Cedar MBF removed from cruise	Alder Maple Myrtle Count	Hdwd MBF removed from cruise
Type N Perennial Stream Buffers	22	--	36	--	237	--
Seasonal Drainages & Scattered Individual Trees	51	17	53	12	129	--
TOTALS	73	17	89	15	366	--

E. Down Wood: The down woody debris requirement of this sale is to leave 265 – 530 cubic feet per acre of hard logs across the sale areas. This will be achieved by retaining hard logs containing a minimum of 20 cubic feet for any individual piece. Existing down wood can be used to achieve this target provided they meet the definition of a hard log (sound wood in decay class 1 or 2 indicated by intact bark and original wood color). Tops from created snags may contribute to this down wood target.

8. Timber Description: The total sale area of 124 acres comprises parts of nine different timber stands ranging in age from 36 to 113 years old. Stands from age 66 to 113 years old have been combined into a mature strata of 106 acres. Stands from age 36 to 45 years old have been combined into a young strata of 18 acres. The mature strata is primarily medium to well stocked Douglas-fir sawtimber with a sizeable component of hemlock and red cedar. The young strata is a hardwood and Douglas-fir mix with some larger residual red cedars scattered throughout. There is also considerable hardwood within the stream buffers. There was some commercial thinning activity in parts of the mature strata approximately 16-17 years ago. Timber quality across the sale areas is generally good although some scattered lower tree bole damage has been detected, most likely from past thinning activity.

9. Topography: Both Areas 1 and 2 are generally characterized by benchy terrain in the west and steep terrain in the east. There is some steeper terrain in the western and northern portions of Area 1. Aspects are primarily southeast and northeast facing with slopes of 10 – 40 percent in the west and 40 – 80 percent in the east. Perennial and seasonal Type N tributaries of Lake Creek flow from the steeper east portions of both areas. Areas 1 and 2 are separated by a 350 foot to 750 foot wide Special, Unique, and Visual (SUV) area due to presence of structures downslope on private ground.

10. Logging Method: Both Areas 1 and 2 are designed to be logged with a combination of ground-based systems in the west and cable-based systems in the east. The north part and a portion of the western part of Area 1 will also require a cable-based system. Existing roads and landings may be improved and some new road construction will be necessary to access new cable landings. Ground-based operations may be done during dry soil conditions. Any cable operations within the SUV areas will require prior STATE approval. Any tailholds located on adjacent private land will need prior landowner authorization. Full suspension will be required while yarding over the posted stream buffers and other drainages shown on Exhibit A. Single end suspension will be maintained over the remainder of the sale areas. In unit lift/tail trees may be necessary to achieve the required deflection. Lift tree cost has been included in the appraisal. All areas are designed for dry season operation.

11. Access: (All miles approximate) To access the timber sale area from State Highway 38 take the Loon Lake County Road (Douglas County Route #3). Proceed south on DCR3 for 10.2 miles to the Elk Ridge road (1000 road). Turn right and proceed up the 1000 road 3.3 miles to the Bickford Creek Road (1900 road). Turn left on the 1900 and proceed down the 1900 road for approximately 4.3 miles to Area 2 of the timber sale area. Continue on the 1900 road through Area 2 and into Area 1. The drivable road ends in the middle of Area 1.

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

Project No. 1: Road and Landing Construction

Project No. 2: Road and Landing Improvement

CRUISE VOLUME COMPUTATION REPORT

SALE NAME: Ash Valley Overlook
LEGAL LOCATION: Sections 23 & 24, T23S, R10W
WM. Douglas County, OR

DATE: 10/31/2013
BY: J. Haynes

FIELD CULL PERCENTAGE

Areas 1-2

Species	Doug-fir	Spruce	Cedar	Hemlock	Red Alder	Bigleaf Maple
Field cull	1%	0	3%	0	0%	0

NET FIELD VOLUME MBF (Gross vol. less field cull)

SPECIES>>>>>	Doug-fir	Spruce	Cedar	Hemlock	Red Alder	Bigleaf Maple	TOTAL
Areas 1-2	3932	0	282	557	161	82	5014
less GTR vol	17	0	6	6	0	0	29
TOTAL	3915	0	276	551	161	82	4985

HIDDEN DEFECT AND BREAKAGE

Species	Doug-fir	Spruce	Cedar	Hemlock	Red Alder	Bigleaf Maple
Hidden cull	0.05	0	0.04	0.03	0.06	0.06
Breakage	0.03	0	0.03	0.02	0.06	0.06
TOTAL	0.08	0.00	0.07	0.05	0.12	0.12

NET VOLUME BY MBF BY AREA

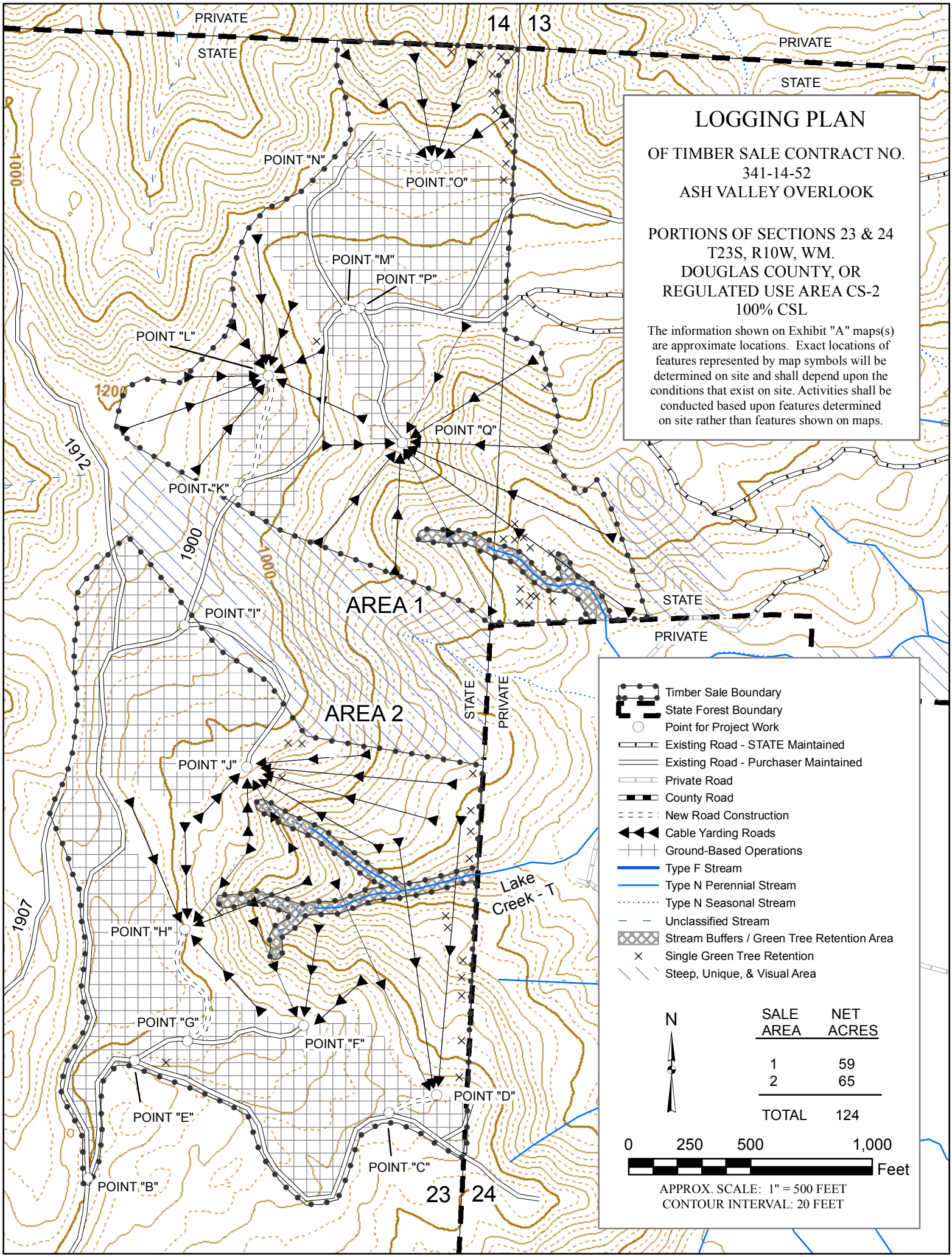
SPECIES>>>>>	Doug-fir	Spruce	Cedar	Hemlock	Red Alder	Bigleaf Maple	TOTALS
Areas 1 - 2	3602	0	257	523	142	72	4596
TOTALS	**3602**	**0**	**257**	**523**	**142**	**72**	**4596**

NET VOLUME BY GRADE AND MBF

Grade >>>>>>>>>>>		2PEE	3PEE	S.M.	2SAW (12"+)	3SAW (10"-11")	Big 3 SAW	4SAW (8"-9")	(6"-7")
Areas 1 - 2	Doug-Fir	0	158	222	2548	609	65	0	0
	Hemlock	0	0	0	252	271	0	0	0
	Red Alder	0	0	0	0	0	0	52	90
	Cedar	0	0	0	134	123	0	0	0
	Maple	0	0	0	18	42	0	0	12

GRADE DISTRIBUTION BY PERCENT

Grade >>>>>>>>>>>		2PEE	3PEE	S.M.	2SAW (12"+)	3SAW (10"-11")	Big 3 SAW	4SAW (8"-9")	(6"-7")
Areas 1 - 2	Doug-fir	0%	4%	6%	71%	17%	2%	0%	0%
	Hemlock	0%	0%	0%	48%	52%	0%	0%	0%
	Red Alder	0%	0%	0%	0%	0%	0%	37%	63%
	Cedar	0%	0%	0%	52%	48%	0%	0%	0%
	Maple	0%	0%	0%	25%	58%	0%	0%	17%



LOGGING PLAN

OF TIMBER SALE CONTRACT NO.
341-14-52
ASH VALLEY OVERLOOK

PORTIONS OF SECTIONS 23 & 24
T23S, R10W, WM.
DOUGLAS COUNTY, OR
REGULATED USE AREA CS-2
100% CSL

The information shown on Exhibit "A" maps(s) are approximate locations. Exact locations of features represented by map symbols will be determined on site and shall depend upon the conditions that exist on site. Activities shall be conducted based upon features determined on site rather than features shown on maps.

- Timber Sale Boundary
- State Forest Boundary
- Point for Project Work
- Existing Road - STATE Maintained
- Existing Road - Purchaser Maintained
- Private Road
- County Road
- New Road Construction
- Cable Yarding Roads
- Ground-Based Operations
- Type F Stream
- Type N Perennial Stream
- Type N Seasonal Stream
- Unclassified Stream
- Stream Buffers / Green Tree Retention Area
- Single Green Tree Retention
- Steep, Unique, & Visual Area

N

SALE AREA	NET ACRES
1	59
2	65
TOTAL	124

0 250 500 1,000 Feet

APPROX. SCALE: 1" = 500 FEET
CONTOUR INTERVAL: 20 FEET