



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Diamond Point  
Sale 341-12-74

District: Tillamook

Date: April 11, 2012

---

**cost summary**

	<b>Conifer</b>	<b>Hardwood</b>	<b>Total</b>
<b>Gross Timber Sale Value</b>	\$397,226.92	\$129,822.17	\$527,049.09
		<b>Project Work:</b>	\$(137,780.00)
		<b>Advertised Value:</b>	\$389,269.09



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
 Diamond Point  
 Sale 341-12-74

District: Tillamook

Date: April 11, 2012

**timber description**

**Location:** Portions of Section 4, T1N, R7W, Sections 30, 32, and 33, T2N, R7W, Sections 25 and 26, T2N, R8W, W.M., Tillamook County, Oregon.

**Stand Stocking:** 80%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	14	0	95
Western Hemlock / Fir	12	0	95
Alder (Red)	13	0	90

Volume by Grade	10" - 11"	12"+	2S	3S	4S	6" - 7"	8" - 9"	Total
Douglas - Fir	0	0	436	1,423	369	0	0	2,228
Western Hemlock / Fir	0	0	0	219	24	0	0	243
Alder (Red)	13	25	0	0	0	483	42	563
Total	13	25	436	1,642	393	483	42	3,034



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Diamond Point  
Sale 341-12-74

District: Tillamook

Date: April 11, 2012

---

comments: Pond Values Used: 1st Quarter Calendar Year 2012.

Western redcedar & Other Cedars Stumpage Price = Pond Value -  
Logging Cost  
 $\$645/\text{MBF} = \$945/\text{MBF} - \$300/\text{MBF}$

Pulp (Conifer and Hardwood) Price =  $\$25/\text{MBF}$

SCALING COST ALLOWANCE =  $\$5.00/\text{MBF}$

FUEL COST ALLOWANCE =  $\$4.00/\text{Gallon}$

HAULING COST ALLOWANCE

Hauling cost equivalent to  $\$780$  daily truck cost

Other Costs (with Profit & Risk to be added):

Brand and Paint:  $\$2/\text{MBF} \times 3,034 \text{ MBF} = \$6,068$

Area 3: cut un-merchantable trees:  $\$250/\text{mile} \times 1.5 \text{ miles} = \$375$

TOTAL Other Costs (with Profit & Risk to be added) =  $\$6,443$

Other Costs (No Profit & Risk added):

Slash Piling and Sorting:  $\$5/\text{acre} \times 189 \text{ (cable) acres} = \$945$

Cover material for piles:  $15 \text{ piles} \times \$5/\text{pile} = \$75$

Snag Creation:  $\$10/\text{snag} \times 198 \text{ snags} = \$1,980$

Falling for down wood:  $\$10/\text{tree} \times 396 \text{ trees} = \$3,960$

Clear Motorcycle Trail in Area 2:  $988' \times \$40/100' = \$395$

TOTAL Other Costs (No Profit & Risk added) =  $\$7,355$

ROAD MAINTENANCE

Road Maintenance: North Fork Wilson and Diamond Mill Roads

Interim Grading:  $\$250/\text{mile} \times 7.2 \text{ miles} \times 2 \text{ times} / 3,034 \text{ MBF} =$   
 $\$1.19/\text{MBF}$

Spot rocking:  $20 \text{ cy}/\text{mile} \times 15.00/\text{cy} \times 3.0 \text{ MMBF} \times 7.2 \text{ miles} / 3,034$   
 $\text{MBF} = \$2.14/\text{MBF}$

Compaction of Diamond Mill Road from its junction with North Fork  
Wilson Road to its junction with Jones Creek Ridge Road: 1.5 miles  
( $79 \text{ stations} \times \$18/\text{station}$ ) +  $\$111 \text{ move-in}$ ) /  $3,034 \text{ MBF} =$   
 $\$0.51/\text{MBF}$

Final Maintenance Grading:  $\$500 \times 7.2 \text{ miles} / 3,034 \text{ MBF} =$   
 $\$1.19/\text{MBF}$

Total Road Maintenance:  $\$5.03/\text{MBF}$



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Diamond Point  
Sale 341-12-74

District: Tillamook

Date: April 11, 2012

logging conditions

combination#: 1      Douglas - Fir      91.50%  
                                  Western Hemlock / Fir      93.00%

yarding distance: Long (1,500 ft)      downhill yarding: No  
 logging system: Cable: Large Tower >=70      Process: Stroke Delimber  
 tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF  
 loads / day: 6.0      bd. ft / load: 3,500  
 cost / mbf: \$182.15

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

combination#: 2

                                 Alder (Red)      92.83%

yarding distance: Long (1,500 ft)      downhill yarding: No  
 logging system: Cable: Large Tower >=70      Process: Stroke Delimber  
 tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF  
 loads / day: 7.1      bd. ft / load: 3,500  
 cost / mbf: \$153.02

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

combination#: 3      Douglas - Fir      6.89%  
                                  Western Hemlock / Fir      7.00%  
                                  Alder (Red)      6.99%

yarding distance: Medium (800 ft)      downhill yarding: No  
 logging system: Track Skidder      Process: Stroke Delimber  
 tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF  
 loads / day: 6.5      bd. ft / load: 4,000  
 cost / mbf: \$55.15

machines: Stroke Delimber (B)

combination#: 4      Douglas - Fir      1.62%  
                                  Alder (Red)      0.18%



Timber Sale Appraisal  
Diamond Point  
Sale 341-12-74

"STEWARDSHIP IN FORESTRY"

**District:** Tillamook

**Date:** April 11, 2012

---

<b>yarding distance:</b>	Short (400 ft)	<b>downhill yarding:</b>	No
<b>logging system:</b>	Shovel	<b>Process:</b>	Manual Falling/Delimiting
<b>tree size:</b>	Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF		
<b>loads / day:</b>	8.0	<b>bd. ft / load:</b>	3,500
<b>cost / mbf:</b>	\$89.45		
<b>machines:</b>	Shovel Logger		



Timber Sale Appraisal  
 Diamond Point  
 Sale 341-12-74

"STEWARDSHIP IN FORESTRY"

District: Tillamook

Date: April 11, 2012

**logging costs**

Operating Seasons:	2.00	Profit Risk:	15.00%
Project Costs:	\$137,780.00	Other Costs (P/R):	\$6,443.00
Slash Disposal:	\$0.00	Other Costs:	\$7,355.00

**Miles of Road**

Road Maintenance: \$5.03

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

**Hauling Costs**

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	3.5
Western Hemlock / Fir	\$0.00	2.0	3.5
Alder (Red)	\$0.00	3.0	3.3



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
 Diamond Point  
 Sale 341-12-74

District: Tillamook

Date: April 11, 2012

**logging costs breakdown**

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
<b>Douglas - Fir</b>									
\$171.91	\$5.28	\$2.89	\$101.73	\$2.12	\$42.59	\$0.00	\$5.00	\$2.42	\$333.94
<b>Western Hemlock / Fir</b>									
\$173.26	\$5.28	\$2.89	\$101.73	\$2.12	\$42.79	\$0.00	\$5.00	\$2.42	\$335.49
<b>Alder (Red)</b>									
\$146.07	\$5.53	\$2.89	\$75.36	\$2.12	\$34.80	\$0.00	\$5.00	\$2.42	\$274.19

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$504.21	\$170.27	\$0.00
Western Hemlock / Fir	\$0.00	\$409.01	\$73.52	\$0.00
Alder (Red)	\$0.00	\$504.78	\$230.59	\$0.00



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Diamond Point  
Sale 341-12-74

District: Tillamook

Date: April 11, 2012

**summary**

**Amortized**

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

**Unamortized**

Specie	MBF	Value	Total
Douglas - Fir	2,228	\$170.27	\$379,361.56
Western Hemlock / Fir	243	\$73.52	\$17,865.36
Alder (Red)	563	\$230.59	\$129,822.17

**Gross Timber Sale Value**

Recovery: \$527,049.09

Prepared by: David Wells

Phone: 503-842-2545





## PROJECT SUMMARY SHEET

Sale: Diamond Point

### CONSTRUCTION

Point	C to D	16+20	stations =	\$23,605.97
Point	E to F	5+20	stations =	\$6,305.24
Point	G to H	13+00	stations =	\$10,570.10
Point	I to J	9+30	stations =	\$3,109.66
Point	Stockpile and Pad			\$61,894.00
<b>SUBTOTAL CONSTRUCTION</b>				<b>\$105,484.97</b>

### IMPROVEMENT

Point	A to B	163+30	stations =	\$14,889.51
Point	K to L	4+70	stations =	\$4,092.29
<b>SUBTOTAL IMPROVEMENT</b>				<b>\$18,981.80</b>

### RECONSTRUCTION

Point	C to D	7+10	stations =	\$10,189.73
<b>SUBTOTAL RECONSTRUCTION</b>				<b>\$10,189.73</b>

### MOVE IN

**\$3,123.50**

**GRAND TOTAL**

**\$137,780.00**

## SUMMARY OF CONSTRUCTION COST

Sale:	<b>Diamond Point</b>	Road: <b>A to B</b>			
Construction -	0+00 stations 0.00 miles	Improvement -	163+30 stations 3.09 miles	Reconstruction -	0+00 stations 0.00 miles

<b>IMPROVEMENT:</b> CLEARING AND GRUBBING -				
Widening	0.099	acres @	\$1,500.00	per acre = <u>\$148.50</u>
				<b>TOTAL CLEARING AND GRUBBING</b>
				<b>\$148.50</b>

<b>IMPROVEMENT:</b> EXCAVATION -				
Widening	611	cy. @	\$3.20	per c.y. = <u>\$1,955.20</u>
				<b>TOTAL EXCAVATION</b>
				<b>\$1,955.20</b>

<b>IMPROVEMENT:</b> ENDHAUL -				
Widening	23+80	to	24+20	17 cy. @
Widening	24+20	to	24+50	19 cy. @
Widening	24+50	to	25+30	98 cy. @
Widening	26+00	to	26+60	174 cy. @
Widening	26+60	to	26+95	127 cy. @
Widening	26+95	to	27+40	55 cy. @
Widening	163+05	to	163+30	<u>121</u> cy. @
Spread & compact				611 cy. @
				\$0.25 per c.y. = <u>\$152.75</u>
				<b>TOTAL ENDHAUL</b>
				<b>\$979.91</b>

<b>CULVERTS - MATERIALS &amp; INSTALLATION</b>				
	<u>Culverts</u>			
	0	LF of 18"	\$0.00	160 LF of 24" <u>\$4,320.00</u>
				\$4,320.00
	<u>Culvert Stakes &amp; Markers</u>			
	5 markers		<u>\$40.00</u>	
			\$40.00	
				<b>TOTAL CULVERTS</b>
				<b>\$4,360.00</b>

<b>ROCK</b>				
Culvert Backfill	5 Locations	100	cy. of	Existing SP @ \$5.70 per c.y. = \$570.00
Spot Rock	160+75 to 161+35	30	cy. of	Crushed @ \$20.11 per c.y. = \$603.30
Riprap Stockpile	0+00	150	cy. of	Riprap @ \$6.59 per c.y. = \$988.50
Junction Rock	Points C & G	40	cy. of	Existing SP @ \$6.01 per c.y. = \$240.40
Energy Dissipators	5 Locations	50	cy. of	Riprap @ \$8.82 per c.y. = \$441.00
Spot Rock	s Marked In Fiel	100	cy. of	Existing SP @ \$7.10 per c.y. = \$710.00
Widening Resurfacing	23+80-27+40	60	cy. of	Existing SP @ \$6.17 per c.y. = \$370.20
Culvert Resurfacing	5 Locations	50	cy. of	Existing SP @ \$7.10 per c.y. = \$355.00
				<b>TOTAL ROCK</b>
				<b>\$4,278.40</b>

<b>SPECIAL PROJECTS</b>				
Construct waste areas -	1.00	hours @	\$130.00	per hour \$130.00
Pull rocky ditch and endhaul -	9.10	stations @	\$150.00	per station \$1,365.00
Clean catch basin @ 129+60 -	1.00	@	\$75.00	each \$75.00
Rock Hammer attachment for ditch -	1.00	week @	\$1,350.00	per week \$1,350.00
Grade and shape road before spot rocking -	5.00	stations @	\$15.50	per station \$77.50
Roll subgrade w/ vibratory roller prior to rocking -	5.00	stations @	\$13.20	per station \$66.00
Grass seed and fertilize -	0.20	acres @	\$220.00	per acre \$44.00
Mulching -	0.100	acres @	\$600.00	per acre \$60.00
				<b>TOTAL SPECIAL PROJECTS</b>
				<b>\$3,167.50</b>

**GRAND TOTAL** **\$14,889.51**

## SUMMARY OF CONSTRUCTION COST

Sale:

**Diamond Point**

Road:

**C to D**

Construction -	16+20	stations	Improvement -	0+00	stations	Reconstruction -	7+10	stations
	0.31	miles		0.00	miles		0.13	miles

**CONSTRUCTION:** CLEARING, GRUBBING, SCATTERING, EXCAVATION, COMPACTION, LOADING, END-HAULING AND SPREADING/COMPACTING AT WASTE AREA -

Station	to	Station	Avg. Sideslope	Avg. Dist. To W.A. (mi.)	Outslope/Ditch	Cost per Station	=		
7+10		10+75	65%	1.1	Outslope	\$2,541	=	\$9,274.65	
10+75		11+40	50%		Outslope	\$459	=	\$298.35	
11+40		17+75	35%		Outslope	\$191	=	\$1,212.85	
17+75		19+75	25%		Outslope	\$165	=	\$330.00	
19+75		21+10	30%		Outslope	\$191	=	\$257.85	
21+10		21+50	25%		Outslope	\$165	=	\$66.00	
21+50		22+60	20%		Outslope	\$139	=	\$152.90	
22+60		23+30	15%		Outslope	\$107	=	\$74.90	
								<b>TOTAL</b>	<b>\$11,667.50</b>

**RECONSTRUCTION:** CLEARING AND GRUBBING -

Widening	0.134	acres @	\$660.00	per acre =	\$88.44	
Endhaul	0.460	acres @	\$1,500.00	per acre =	\$690.00	
					<b>TOTAL CLEARING AND GRUBBING</b>	<b>\$778.44</b>

**RECONSTRUCTION:** EXCAVATION -

Widening	1050	cy. @	\$1.40	per c.y. =	\$1,470.00	
					<b>TOTAL EXCAVATION</b>	<b>\$1,470.00</b>

**RECONSTRUCTION:** ENDHAUL -

Widening	0+50	to	1+25	150	cy. @	\$2.33	per c.y. =	\$349.50	
Widening	1+25	to	2+00	401	cy. @	\$2.33	per c.y. =	\$934.33	
Widening	2+00	to	2+60	320	cy. @	\$2.33	per c.y. =	\$745.60	
Widening	2+60	to	3+10	179	cy. @	\$2.33	per c.y. =	\$417.07	
Spread & compact				1050	cy. @	\$0.25	per c.y. =	\$262.50	
								<b>TOTAL ENDHAUL</b>	<b>\$2,709.00</b>

**ROCK**

0+00	to	23+30	1,750	cy. of	Pit-run	@	\$7.27	per c.y. =	\$12,722.50
Landing Rock		23+30	120	cy. of	Pit-Run	@	\$7.45	per c.y. =	\$894.00
Junction Rock		0+00	30	cy. of	Pit-Run	@	\$7.09	per c.y. =	\$212.70
								<b>TOTAL ROCK</b>	<b>\$13,829.20</b>

**SPECIAL PROJECTS**

Construct waste areas -	2.00	hours @	\$130.00	per hour	\$260.00				
Construct landings @ 11+55 & 23+30 -	2.00	@	\$250.00	each	\$500.00				
Fill roadway @ area of 5+95 -	1.00	hours @	\$130.00	per hour	\$130.00				
Construct turnaround -	1.00	@	\$75.00	each	\$75.00				
Grade and shape road -	23.30	stations @	\$14.00	per station	\$326.20				
Roll subgrade w/ vibratory roller prior to rocking -	23.30	stations @	\$13.20	per station	\$307.56				
Remove large stumps -	1.00	lump sum @	\$1,500.00		\$1,500.00				
Grass seed and fertilize -	0.49	acres @	\$220.00	per acre	\$107.80				
Mulching -	0.225	acres @	\$600.00	per acre	\$135.00				
								<b>TOTAL SPECIAL PROJECTS</b>	<b>\$3,341.56</b>

**GRAND TOTAL** **\$33,795.70**

## SUMMARY OF CONSTRUCTION COST

Sale:

**Diamond Point**

Road:

**E to F**

Construction -	5+20	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.10	miles		0.00	miles		0.00	miles

**CONSTRUCTION:** CLEARING, GRUBBING, SCATTERING, EXCAVATION, COMPACTION, LOADING, END-HAULING AND SPREADING/COMPACTING AT WASTE AREA -

Station	to	Station	Avg. Sideslope	Avg. Dist. To W.A. (mi.)	Outslope/Ditch	Cost per Station	=		
0+00		1+00	35%		Outslope	\$191	=	\$191.00	
1+00		1+70	40%		Outslope	\$243	=	\$170.10	
1+70		2+20	30%		Outslope	\$191	=	\$95.50	
2+20		3+90	40%		Outslope	\$243	=	\$413.10	
3+90		4+70	30%		Outslope	\$191	=	\$152.80	
4+70		5+20	20%		Outslope	\$139	=	\$69.50	
								<b>TOTAL</b>	<b>\$1,092.00</b>

**ROCK**

0+00 to	5+20	430	cy. of	Pit-run	@	\$7.33 per c.y.=	\$3,151.90	
Landing Rock	5+20	120	cy. of	Pit-Run	@	\$7.37 per c.y.=	\$884.40	
Junction Rock	0+00	30	cy. of	Pit-run	@	\$7.29 per c.y.=	\$218.70	
							<b>TOTAL ROCK</b>	<b>\$4,255.00</b>

**SPECIAL PROJECTS**

Construct landing at 5+20 -	1.00	@	\$250.00	each	\$250.00	
Construct turnaround -	1.00	@	\$75.00	each	\$75.00	
Grade and shape road -	5.20	stations @	\$14.00	per station	\$72.80	
Roll subgrade w/ vibratory roller prior to rocking -	5.20	stations @	\$13.20	per station	\$68.64	
Remove large stumps -	1.00	lump sum @	\$450.00		\$450.00	
Grass seed and fertilize -	0.19	acres @	\$220.00	per acre	\$41.80	
					<b>TOTAL SPECIAL PROJECTS</b>	<b>\$958.24</b>

**GRAND TOTAL** **\$6,305.24**

## SUMMARY OF CONSTRUCTION COST

Sale:

**Diamond Point**

Road:

**G to H**

Construction -	13+00	stations	Improvement -	0+00	stations
	0.25	miles		0.00	miles
			Reconstruction -		
				0+00	stations
				0.00	miles

**CONSTRUCTION:** CLEARING, GRUBBING, SCATTERING, EXCAVATION, COMPACTION, LOADING, END-HAULING AND SPREADING/COMPACTING AT WASTE AREA -

Station	to	Station	Avg. Sideslope	Avg. Dist. To W.A. (mi.)	Outslope/Ditch	Cost per Station	=	
0+00		0+30	50%		Outslope	\$459	=	\$137.70
0+30		1+30	Const. Fill		Outslope	\$215	=	\$215.00
1+30		3+35	30%		Outslope	\$191	=	\$391.55
3+35		5+65	75%	0.06	Outslope	\$2,555	=	\$5,876.50
5+65		6+20	50%		Outslope	\$459	=	\$252.45
6+20		10+00	30%		Outslope	\$191	=	\$725.80
10+00		10+65	50%		Outslope	\$459	=	\$298.35
10+65		11+80	30%		Outslope	\$191	=	\$219.65
11+80		13+00	20%		Outslope	\$139	=	\$166.80
								<b>TOTAL</b>
								<b>\$8,283.80</b>

**ROCK**

0+00	to	1+00	80	cy. of	Pit-run	@	\$7.72 per c.y.=	\$617.60
Junction Rock		0+00	30	cy. of	Pit-run	@	\$7.71 per c.y.=	\$231.30
								<b>TOTAL ROCK</b>
								<b>\$848.90</b>

**SPECIAL PROJECTS**

Construct turnaround -	1.00	@	\$75.00	each	\$75.00
Construct waste areas -	1.00	hours @	\$130.00	per hour	\$130.00
Construct landing @ 13+00 -	1.00	@	\$250.00	each	\$250.00
Grade and shape road -	13.00	stations @	\$14.00	per station	\$182.00
Roll subgrade w/ vibratory roller prior to rocking -	13.00	stations @	\$13.20	per station	\$171.60
Remove large stumps -	1.00	lump sum @	\$450.00		\$450.00
Grass seed and fertilize -	0.54	acres @	\$220.00	per acre	\$118.80
Mulching -	0.100	acres @	\$600.00	per acre	\$60.00
					<b>TOTAL SPECIAL PROJECTS</b>
					<b>\$1,437.40</b>

**GRAND TOTAL**

**\$10,570.10**

## SUMMARY OF CONSTRUCTION COST

Sale: **Diamond Point** Road: **I to J**

Construction -	9+30	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.18	miles		0.00	miles		0.00	miles

**CONSTRUCTION:** CLEARING, GRUBBING, SCATTERING, EXCAVATION, COMPACTION, LOADING, END-HAULING AND SPREADING/COMPACTING AT WASTE AREA -

<u>Station</u>	<u>to</u>	<u>Station</u>	<u>Avg. Sideslope</u>	<u>Avg. Dist.</u> <u>To W.A. (mi.)</u>	<u>Outslope/Ditch</u>	<u>Cost per Station</u>			
0+00		2+00	35%			\$191	=	\$382.00	
2+00		3+50	45%			\$269	=	\$403.50	
3+50		5+70	35%			\$191	=	\$420.20	
5+70		7+00	50%			\$459	=	\$596.70	
7+00		9+30	25%			\$165	=	\$379.50	
								<b>TOTAL</b>	<b>\$2,181.90</b>

**SPECIAL PROJECTS**

Construct turnaround -	1.00	@	\$75.00	each	\$75.00
Grade and shape road -	9.30	stations @	\$14.00	per station	\$130.20
Roll subgrade w/ vibratory roller prior to rocking -	9.30	stations @	\$13.20	per station	\$122.76
Remove large stumps -	1.00	lump sum @	\$525.00		\$525.00
Grass seed and fertilize -	0.34	acres @	\$220.00	per acre	\$74.80
					<b>TOTAL SPECIAL PROJECTS</b>
					<b>\$927.76</b>
<b>GRAND TOTAL</b>					<b>\$3,109.66</b>

## SUMMARY OF CONSTRUCTION COST

Sale: **Diamond Point**

Road: **K to L**

Construction -	0+00	stations	Improvement -	4+70	stations	Reconstruction -	0+00	stations
	0.00	miles		0.09	miles		0.00	miles

<b>ROCK</b>								
0+00 to	4+70		200	cy. of	Crushed	@	\$14.43 per c.y.=	\$2,886.00
Junction Rock	0+00 & 4+70		60	cy. of	Crushed	@	\$14.43 per c.y.=	\$865.80
								<b>TOTAL ROCK</b>
								<b>\$3,751.80</b>

<b>SPECIAL PROJECTS</b>								
Construct settlement basin left @ 3+50 -			1.00		@	\$100.00	each	\$100.00
Construct ditchout right @ 3+50 -			1.00		@	\$60.00	each	\$60.00
Grade and shape road -			4.70	stations @		\$15.50	per station	\$72.85
Roll subgrade w/ vibratory roller prior to rocking -			4.70	stations @		\$13.20	per station	\$62.04
Grass seed and fertilize -			0.09	acres @		\$220.00	per acre	\$19.80
Mulching -			0.043	acres @		\$600.00	per acre	\$25.80
								<b>TOTAL SPECIAL PROJECTS</b>
								<b>\$340.49</b>

**GRAND TOTAL** **\$4,092.29**

## ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Existing_SP	Location:	NE 1/4 Sec. 31, T2N, R7W, W.M.
Sale:	<b>Diamond Point</b>	Road:	350 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	350 c.y.
Drill Pct.:	0%	In Place Total:	250 c.y.

Load Dump Truck:	\$0.70	/cu.yd.	x	350	cu.yds.	=	\$245.00
Subtotal							\$245.00

Move in Loader (within area)	1	@	\$80.00	=	\$80.00		
Move in Trucks (within area)	2	@	\$24.00	=	\$48.00		
Change Gradation							
Subtotal							\$128.00

Base Cost=	\$1.07	Per Cu.Yd.	TOTAL PRODUCTION COSTS	\$373.00
------------	--------	------------	------------------------	----------

Road Segment	Haul Cost \$/cu.yd.	Proc Cost \$/cu.yd.	Base Cost. \$/cu.yd.	Cost \$/cu.yd.	Number Cu. Yds	ROCK COST	
A to B Culvert Backfill (Existing SP)	3.58	1.05	1.07	5.70	100	\$570.00	
A to B Junction Rock (Existing SP)	2.49	2.45	1.07	6.01	40	\$240.40	
A to B Spot Rock (Existing SP)	3.58	2.45	1.07	7.10	100	\$710.00	
A to B Widening Resurfacing (Existing SF)	2.65	2.45	1.07	6.17	60	\$370.20	
A to B Culvert Resurfacing (Existing SP)	3.58	2.45	1.07	7.10	50	\$355.00	
Total C.Y.					350	Sub Total	\$2,245.60

TOTAL ROCKING COSTS	\$2,245.60
---------------------	------------



## ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Pit_run	Location:	SW 1/4 SE 1/4 Sec. 25, T2N, R8W, W.M.
Sale:	<b>Diamond Point</b>	Road:	2790 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	2790 c.y.
Drill Pct.:	35%	In Place Total:	1993 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$2,325.06

Drill & Shoot:	\$2.50	/cu.yd.	x	698	cu.yds.	=	\$1,745.00
Rip Rock:	\$1.90	/cu.yd.	x	1295	cu.yds.	=	\$2,460.50
Load Dump Truck:	\$0.70	/cu.yd.	x	2790	cu.yds.	=	\$1,953.00

Subtotal \$8,483.56

Move In and set up Drill and Compressor	1	@	\$601.45	=	\$601.45
Move in Roller and Compactor	1	@	\$601.45	=	\$601.45
Move in Grader	1	@	\$267.91	=	\$267.91
Move in D-8	1	@	\$1,095.39	=	\$1,095.39
Move in Excavator	1	@	\$1,221.30	=	\$1,221.30
Move in Trucks	2	@	\$198.69	=	\$397.38
Move in Water Truck	1	@	\$233.54	=	\$233.54
					Subtotal <span style="border-bottom: 1px solid black;">\$4,418.42</span>

**TOTAL PRODUCTION COSTS \$12,901.98**

Base Cost= \$4.62 Per Cu.Yd.

Road Segment	Haul Cost \$/cu.yd.	Proc Cost \$/cu.yd.	Base Cost. \$/cu.yd.	Cost \$/cu.yd.	Number Cu. Yds	ROCK COST
A to B Riprap Stockpile (Riprap)	1.37	0.60	4.62	6.59	150	\$988.50
A to B Energy Dissipators (Riprap)	2.80	1.40	4.62	8.82	50	\$441.00
C to D 0 2330 (Pit-run)	1.55	1.10	4.62	7.27	1750	\$12,722.50
C to D Landing Rock (Pit-Run)	1.73	1.10	4.62	7.45	120	\$894.00
C to D Junction Rock (Pit-Run)	1.37	1.10	4.62	7.09	30	\$212.70
E to F 0 520 (Pit-run)	1.61	1.10	4.62	7.33	430	\$3,151.90
E to F Landing Rock (Pit-Run)	1.65	1.10	4.62	7.37	120	\$884.40
E to F Junction Rock (Pit-run)	1.57	1.10	4.62	7.29	30	\$218.70
G to H 0 100 (Pit-run)	2.00	1.10	4.62	7.72	80	\$617.60
G to H Junction Rock (Pit-run)	1.99	1.10	4.62	7.71	30	\$231.30
				Total C.Y.	2790	Sub Total <span style="border-bottom: 1px solid black;">\$20,362.60</span>

**TOTAL ROCKING COSTS \$20,362.60**

## ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Crushed	Location:	NW 1/4 Sec. 33, T2N, R7W, W.M.
Sale:	<b>Diamond Point</b>	Road:	490 c.y.
Swell:	1.40	Stockpile:	5000 c.y.
Shrinkage	1.16	Total Truck Loads:	5490 c.y.
Drill Pct.:	100%	In Place Total:	3921 c.y.

Pit Development & Cleanup including clearing and grubbing of waste area and stockpile site, construction of stockpile site and upper face bench and access road. Place overburden in waste area, spread and compact. \$9,466.00

Drill & Shoot:	\$2.50	/cu.yd.	x	3921	cu.yds.	=	\$9,802.50
Rip Rock:	\$1.90	/cu.yd.	x	0	cu.yds.	=	\$0.00
Push Rock:	\$0.70	/cu.yd.	x	5290	cu.yds.	=	\$3,703.00
Load Crusher:	\$0.70	/cu.yd.	x	5290	cu.yds.	=	\$3,703.00
Crush Rock:	\$2.80	/cu.yd.	x	5290	cu.yds.	=	\$14,812.00
Load Dump Truck:	\$0.70	/cu.yd.	x	5490	cu.yds.	=	\$3,843.00

Subtotal \$45,329.50

Move In/Set-up Crusher	1	@	\$3,460.00	=	\$3,460.00
Move In and set up Drill and Compressor	1	@	\$601.45	=	\$601.45
Move in Roller and Compactor	1	@	\$601.45	=	\$601.45
Move in Grader	1	@	\$267.91	=	\$267.91
Move in D-8	1	@	\$1,095.39	=	\$1,095.39
Move in Loader	1	@	\$926.03	=	\$926.03
Move in Excavator	1	@	\$1,221.30	=	\$1,221.30
Move in Trucks	2	@	\$198.69	=	\$397.38
Move in Water Truck	1	@	\$233.54	=	\$233.54

Subtotal \$8,804.45

Base Cost= \$9.86 Per Cu.Yd. TOTAL PRODUCTION COSTS \$54,133.95

Road Segment	Haul Cost \$/cu.yd.	Proc Cost \$/cu.yd.	Base Cost. \$/cu.yd.	Cost \$/cu.yd.	Number Cu. Yds	ROCK COST
A to B Spot Rock (Crushed)	7.80	2.45	9.86	20.11	30	\$603.30
K to L 0 470 (Crushed)	2.12	2.45	9.86	14.43	200	\$2,886.00
K to L Junction Rock (Crushed)	2.12	2.45	9.86	14.43	60	\$865.80
Stockpile (Crushed)	0.96	1.25	9.86	12.07	5000	\$60,350.00
Stockpile Pad (Pit-run)	0.96	1.10	5.66	7.72	200	\$1,544.00
				Total C.Y.	5490	Sub Total

TOTAL ROCKING COSTS \$66,249.10

## Move-In Calculations for Project Work not Involving Rocking/Pit Work

Sale: **Diamond Point**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
48.0	Pavement	30
3.8	Main Lines	7
9.4	Steep Grades	2

No.	EQUIPMENT DESCRIPTION	Move in Cost	Pilot Cars	Within Area Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
1	Excavators (Large)	\$1,258.10	1	\$44.80	0.00	0.00	0	\$0.00	\$1,258.10
1	Tractor (D8)	\$1,168.99	2	\$15.10	0.00	0.00	0	\$0.00	\$1,168.99
2	Dump Truck (10 cy +)	\$497.72		\$2.85	0.00	0.00	0	\$0.00	\$497.72
1	Water Truck (1500 Gal)	\$198.69		\$2.85	0.00	0.00	0	\$0.00	\$198.69
<b>TOTAL MOVE-IN COSTS:</b>								<b>\$3,123.50</b>	



"STEWARDSHIP IN FORESTRY"

## Diamond Point

### Volume Summary

Area 1-Modified Clearcut				
84 acres				
SPECIES	Cruised Net	Cruised Net	Hidden	Net Sale
	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	13.0	1094	5%	1039
Hemlock	2.0	164	5%	156
Spruce	0.0	0	5%	0
Noble Fir	0.0	0	5%	0
Alder	3.8	318	10%	287
<b>TOTAL</b>	<b>18.8</b>	<b>1577</b>		<b>1482</b>

Area 2-Modified Clearcut				
114 acres				
SPECIES	Cruised Net	Cruised Net	Hidden	Net Sale
	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	10.6	1213	5%	1153
Hemlock	0.8	91	5%	87
Spruce		0	5%	0
Noble Fir		0	5%	0
Alder	2.7	305	10%	275
<b>TOTAL</b>	<b>14.1</b>	<b>1610</b>		<b>1515</b>

Area 3-Right of Way				
7 acres				
SPECIES	Cruised Net	Cruised Net	Hidden	Net Sale
	MBF/ Acre	MBF	D&B	MBF
Douglas-fir		38	5%	36
Hemlock		0	5%	0
Spruce		0	5%	0
Noble Fir		0	5%	0
Alder		1	10%	1
<b>TOTAL</b>		<b>39</b>		<b>37</b>

TOTAL SALE VOLUME		198	acres
SPECIES	Cruised Net (MBF)	Net Sale (MBF)	
Douglas-fir	2345	2228	
Hemlock	255	243	
Spruce			
Noble Fir			
Red Alder	624	563	
<b>TOTAL</b>	<b>3224</b>	<b>3034</b>	



## OREGON DEPARTMENT OF FORESTRY CRUISE REPORT *Diamond Point*

### 1. **Type of Sale**

Regeneration harvest/Right of Way harvest, Recovery

### 2. **Legal Description**

Section 4, T1N, R7W, Sections 30, 32, and 33, T2N, R7W, Sections 25 and 26, T2N, R8W, W.M., Tillamook County, Oregon.

### 3. **Sale Acreage**

Sale acreage was determined by GPS and orthophotographs along with GIS.

ACRES		
	<b><u>Gross</u></b>	<b><u>Net</u></b>
<b>Area 1 (Modified Clearcut)</b>	97	84
<b>Area 2 (Modified Clearcut)</b>	120	114
<b>Area 3 (Right of Way)</b>	10	7

#### Gross Acres

Area within the Timber Sale Boundary signs.

#### Net acres

*Used for calculating the advertised volume.*

Gross acres, less green tree retention, roads, Non-required thinning areas, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

### 4. **Cruising Procedures**

#### **A. Cruise Method**

Areas 1 and 2 were variable plot cruised with a total of 46 plots and Area 3 (Right of Way) was strip cruised with 12 plots. The variable plot cruise plots and lines were placed on a rectangular grid of 300' and 700' respectively. On all plots trees were recorded by species, merchantable height, form, and diameter. Diameters were measured to the nearest inch and heights to the nearest foot. Conifers less than 8" DBH and those containing less than 20 net board feet and hardwoods less than 9" DBH containing less than 30 net board feet were not sampled.

#### **B. Plot size**

A basal area factor of 33.61 was used for Areas 1 and 2. The point of observation was 4.5 feet.

For Area 3 all trees in a 52.8' strip for every 528' of road length were measured

resulting in a 10% sample.

### C. Grading System

All trees were graded according to the Columbia River Log Scaling and Grading rules. Tree heights were recorded to a 6" top outside bark for conifers and 7" top outside bark for hardwoods; or three-tenths of DBH for all species whichever was greater. A 40' log length was favored for all species.

## 5. Computation Procedure

Volumes were calculated by the SuperAce cruise program. The statistics for the cruise are shown below based on net board feet per acre.

Area	C.V. (%)	S.E. (%)	# of Plots
1	47.7	10.2	23
2	54.2	11.5	23
3 (Right of Way)	125.4	37.7	12
Total	74.0	9.7	58

## 6. Hidden Defect and Breakage

A hidden defect and breakage of 5% and 10% was applied to the conifer and hardwood volumes respectively. This was in addition to the visual defect deducted during the cruise.

## 7. Timber Description

Areas 1 and 2 were burned in the 1945 Wilson River Fire and were reforested by seeding between 1959 and '6. About 45% of Area 1 and 10% of Area 2 were aerially sprayed to control alder located in the draws in the 1970's. The 2004 sale West Point commercially thinned about 16 and 7 acres of Areas 1 and 2 respectively. The stand is now predominantly a Douglas-fir stand with a scattering of hemlock and alder primarily in the draws.

	Ave DBH	Bole Height	Merch top (or 25% of DBH whichever was greater)
<b>Area 1</b>			
Douglas-fir (70%)	14.8	61	5
Hemlock (10%)	12.0	49	5
Alder (20%)	12.3	42	6
<b>Area 2</b>			
Douglas-fir (76%)	13.7	49	5

Hemlock (6%)	11.9	40	5
Alder (18%)	12.7	35	6
<b>Area 3</b>			
Douglas-fir (98%)	17.3	63	5
Alder (2%)	13.7	35	6

**8. Cruiser Names/Dates**

Areas 1, 2 and 3 were cruised by Tillamook District Personnel in 2008, 2009, and 2012 respectively.

**9. Revenue Distribution**

FDF 100%

Tax Code: 56 - 100%

Deed Numbers: 35, 96

**10. Attachments**

Stand Tables

Volume Summary

Log Stock Tables

Logging Plan

**11. Stand and Log Stock Tables Species Key**

DF – Douglas-fir take

WH – Western hemlock take

RA – Red alder take

DL – Douglas-fir leave

WL – Western hemlock leave

NF– Noble fir Reserved

SS – Sitka spruce Reserved

BM – Big leaf maple Reserved





**Log Stock Table - MBF**  
**Project: DIAMOND**

T02N R08W S25 T100

T02N R08W S25 T100

**Twp Rge Sec Tract Type Acres Plots Sample Trees**  
**02N 08W 25 AREA 1-SALE 100 84.00 23 133**

**Page 2**  
**Date 2/23/2012**  
**Time 10:54:17AM**

Spp	T	S	So	Gr	Log	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches										
										2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39
WH		DO	4M	34		3	5.0	3	1.9		3									
WH		Totals				164	5.0	156	9.5		24	67	26	39						
WL		DO	2M	40		73		73	60.6				26	28		19				
WL		DO	3M	36		5		5	3.8				5							
WL		DO	3M	40		29		29	24.2		6		9	14						
WL		DO	4M	17		1		1	.4		1									
WL		DO	4M	20		9		9	7.4		1		8							
WL		DO	4M	22		2		2	1.7		2									
WL		DO	4M	35		2		2	1.9		2									
WL		Totals				120		120	7.3		6	6		17	44	28	19			
DL		DO	3M	32		9		9	30.0			9								
DL		DO	3M	40		12		12	40.0			12								
DL		DO	4M	20		3		3	10.0			3								
DL		DO	4M	21		2		2	6.7		2									
DL		DO	4M	34		4		4	13.3		4									
DL		Totals				30		30	1.8		6	3	21							
NF		DO	2M	40		11	5.0	11	76.9				11							
NF		DO	3M	32		3	5.0	3	23.1			3								
NF		Totals				15	5.0	14	.8			3		11						
Total All Species						1,741	5.5	1,646	100.0		153	571	263	186	204	114	136	19		

TC		TSTNDSUM														
Stand Table Summary																
Project DIAMOND																
T02N R08W S25 T100										T02N R08W S25 T100						
Twp	Rge	Sec	Tract		Type	Acres	Plots	Sample Trees			Page:	1				
02N	08W	25	AREA 1-SALE		100	84.00	23	133			Date:	02/23/2011				
											Time:	10:51:11AM				
S Spc	T	Sample		Av		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
		DBH	Trees	FF 16'	Ht Tot				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF		10	10	84	88	26.793	14.61	37.51	9.9	43.6	10.55	370	1,634	886	311	137
DF		11	5	84	79	11.071	7.31	15.50	11.8	45.7	5.20	182	709	437	153	60
DF		12	4	84	86	7.442	5.85	13.02	12.6	45.7	4.67	164	595	392	138	50
DF		13	5	84	77	7.927	7.31	12.68	14.9	56.2	5.40	190	713	454	159	60
DF		14	5	83	101	6.835	7.31	16.40	14.6	53.3	6.83	239	875	573	201	73
DF		15	7	82	91	8.335	10.23	16.67	18.2	65.7	8.63	303	1,096	725	254	92
DF		16	5	84	92	5.233	7.31	10.47	21.7	81.0	6.47	227	848	543	191	71
DF		17	4	83	80	3.708	5.85	6.49	25.2	82.9	4.67	164	538	392	138	45
DF		18	5	82	89	4.135	7.31	7.44	29.9	95.6	6.34	223	711	533	187	60
DF		19	2	84	90	1.484	2.92	2.23	39.8	143.3	2.52	89	319	212	74	27
DF		20	5	83	115	3.349	7.31	8.04	35.8	135.8	8.21	288	1,092	690	242	92
DF		21	3	81	94	1.823	4.38	3.65	38.0	126.7	3.95	138	462	331	116	39
DF		22	1	86	136	.554	1.46	1.66	40.9	180.0	1.94	68	299	163	57	25
DF		23	3	82	91	1.519	4.38	3.04	47.1	151.7	4.08	143	461	343	120	39
DF		24	2	83	76	.930	2.92	1.86	45.9	135.0	2.44	85	251	205	72	21
DF		25	1	83	77	.429	1.46	.86	52.3	160.0	1.28	45	137	107	38	12
DF		26	4	85	112	1.585	5.85	3.96	59.8	238.0	6.75	237	943	567	199	79
DF		27	1	84	100	.368	1.46	.74	74.0	265.0	1.55	54	195	130	46	16
DF		28	3	81	93	1.025	4.38	2.05	75.0	240.0	4.39	154	492	368	129	41
DF		29	1	85	122	.319	1.46	.96	59.4	260.0	1.62	57	248	136	48	21
DF		30	2	83	95	.595	2.92	1.49	69.7	274.0	2.96	104	408	248	87	34
DF		Totals	78	83	89	95.459	113.98	166.71	21.1	78.1	100.43	3,524	13,026	8,436	2,960	1,094
RA		9	1	77	70	3.308	1.46	6.62	8.1	40.0	1.46	53	265	123	45	22
RA		10	5	76	67	13.396	7.31	16.08	12.3	48.3	5.44	198	777	457	166	65
RA		11	8	77	82	17.714	11.69	19.93	15.0	51.1	8.24	299	1,019	692	252	86
RA		12	3	78	58	5.582	4.38	5.58	16.5	56.7	2.53	92	316	212	77	27
RA		13	2	71	50	3.171	2.92	3.17	17.8	40.0	1.56	57	127	131	48	11
RA		14	2	78	53	2.734	2.92	2.73	21.4	60.0	1.61	58	164	135	49	14
RA		15	5	79	67	5.954	7.31	7.14	25.5	78.3	5.01	182	560	421	153	47
RA		16	1	80	59	1.047	1.46	1.05	33.3	70.0	.96	35	73	80	29	6
RA		17	1	78	59	.927	1.46	.93	40.7	70.0	1.04	38	65	87	32	5
RA		19	1	78	56	.742	1.46	.74	50.6	90.0	1.03	38	67	87	32	6
RA		21	3	81	87	1.823	4.38	3.04	37.2	118.0	3.11	113	358	261	95	30
RA		Totals	32	77	70	56.397	46.76	67.00	17.4	56.6	31.98	1,163	3,790	2,687	977	318
WH		10	3	80	64	8.038	4.38	8.04	10.6	43.3	2.74	86	348	230	72	29
WH		11	3	84	59	6.643	4.38	6.64	13.6	53.3	2.90	90	354	243	76	30
WH		13	3	83	83	4.756	4.38	6.34	20.2	67.5	4.10	128	428	344	108	36
WH		14	1	85	103	1.367	1.46	2.73	19.9	80.0	1.74	54	219	146	46	18
WH		15	2	83	97	2.382	2.92	4.76	21.2	85.0	3.22	101	405	271	85	34
WH		17	1	85	95	.927	1.46	1.85	29.1	110.0	1.73	54	204	145	45	17
WH		Totals	13	82	73	24.112	19.00	30.37	16.9	64.5	16.42	513	1,958	1,379	431	164
WL		19	2	77	100	1.484	2.92	2.97	35.1	107.5	3.33	104	319	280	87	27
WL		20	2	86	103	1.340	2.92	3.35	33.0	122.0	3.53	110	409	297	93	34
WL		22	1	83	114	.554	1.46	1.66	35.0	130.0	1.86	58	216	156	49	18
WL		24	1	85	97	.465	1.46	.93	57.9	210.0	1.72	54	195	145	45	16
WL		30	1	90	132	.298	1.46	.89	68.4	320.0	1.95	61	286	164	51	24
WL		Totals	7	83	105	4.140	10.23	9.80	39.6	145.4	12.41	388	1,425	1,042	326	120
DL		15	2	79	107	2.382	2.92	5.95	16.2	60.0	2.66	97	357	223	81	30

TC		TSTNDSUM		Stand Table Summary												
Project														DIAMOND		
T02N R08W S25 T100											T02N R08W S25 T100					
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	2		Date:	02/23/2011				
02N	08W	25	AREA 1-SALE	100	84.00	23	133	Time:	10:51:11AM							
Spc	T	Sample DBH	FF Trees	Av Ht 16'	Tot	Trees/Acre	BA/Acre	Logs/Acre	Average Log		Net Tons/Acre	Net Cu.Ft./Acre	Net Bd.Ft./Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DL	Totals	2	79	107	2.382	2.92	5.95	16.2	60.0	2.66	97	357	223	81	30	
NF	20	1	80	104	.670	1.46	1.34	38.1	130.0	1.22	51	174	103	43	15	
NF	Totals	1	80	104	.670	1.46	1.34	38.1	130.0	1.22	51	174	103	43	15	
Totals		133	81	82	183.160	194.35	281.18	20.4	73.7	165.12	5735	20,731	13,870	4,818	1,741	



TC TLOGSTVB

**Log Stock Table - MBF**  
**Project: DIAMOND**

**T02N R08W S25 T100**

**T02N R08W S25 T100**

<b>Twp</b>	<b>Rge</b>	<b>Sec</b>	<b>Tract</b>	<b>Type</b>	<b>Acres</b>	<b>Plots</b>	<b>Sample Trees</b>	<b>Page</b>	<b>2</b>
<b>02N</b>	<b>08W</b>	<b>25</b>	<b>AREA 2-SALE</b>	<b>100</b>	<b>114.00</b>	<b>23</b>	<b>130</b>	<b>Date</b>	<b>2/23/2012</b>
								<b>Time</b>	<b>10:59:51AM</b>

Spp	T	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches									
										MBF	MBF	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19
DL		DO	4M	34		5		5	9.3		5								
DL		DO	4M	38		5		5	9.3		5								
DL					Totals	58		58	3.5		14		45						
BM		DO	3M	32		16		16	100.0			8	8						
BM					Totals	16		16	1.0			8	8						
Total All Species						1,749	5.5	1,653	100.0		227	641	303	285	127	69			

TC		Stand Table Summary														
TSTNDSUM		Project											DIAMOND			
T02N R08W S25 T100											T02N R08W S25 T100					
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1							
02N	08W	25	AREA 2-SALE	100	114.00	23	130	Date:	02/23/2011							
								Time:	10:56:55AM							
S Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits	MBF
DF		9	1	84	21	3.349	1.48	3.35	4.1	20.0	.39	14	67	45	16	8
DF		10	6	83	57	16.276	8.88	16.28	10.0	36.7	4.66	164	597	531	186	68
DF		11	10	85	59	22.419	14.80	26.90	10.3	41.7	7.88	276	1,121	898	315	128
DF		12	9	84	59	16.955	13.32	20.72	12.6	44.5	7.46	262	923	850	298	105
DF		13	9	84	66	14.447	13.32	20.87	14.5	50.0	8.60	302	1,043	981	344	119
DF		14	9	83	68	12.456	13.32	19.38	16.0	50.7	8.84	310	983	1,008	354	112
DF		15	5	82	94	6.028	7.40	10.85	22.4	80.0	6.93	243	868	789	277	99
DF		16	4	84	98	4.239	5.92	8.48	24.1	92.5	5.82	204	784	664	233	89
DF		17	6	84	85	5.632	8.88	10.33	25.8	90.0	7.59	266	929	865	304	106
DF		18	6	84	93	5.024	8.88	10.05	29.1	105.8	8.34	293	1,063	951	334	121
DF		19	4	84	76	3.006	5.92	5.26	31.4	97.1	4.71	165	511	537	189	58
DF		20	1	85	106	.678	1.48	1.36	42.2	150.0	1.63	57	203	186	65	23
DF		21	4	84	87	2.461	5.92	5.54	34.8	117.8	5.49	193	652	626	220	74
DF		22	1	84	117	.560	1.48	1.68	35.4	133.3	1.70	60	224	193	68	26
DF		23	2	84	81	1.026	2.96	2.05	44.1	135.0	2.58	90	277	294	103	32
DF		24	2	84	85	.942	2.96	1.88	50.1	170.0	2.69	94	320	307	108	37
DF		25	1	83	57	.434	1.48	.43	76.0	180.0	.94	33	78	107	38	9
DF		Totals	80	84	67	115.932	118.37	165.40	18.3	64.4	86.26	3,027	10,645	9,833	3,450	1,213
RA		9	1	77	80	3.308	1.46	3.31	10.2	50.0	.93	34	165	106	39	19
RA		11	4	74	62	8.857	5.85	8.86	13.3	42.5	3.23	117	376	368	134	43
RA		12	8	79	53	14.885	11.69	14.88	15.5	50.0	6.36	231	744	725	264	85
RA		13	8	77	61	12.683	11.69	15.85	16.6	48.0	7.24	263	761	826	300	87
RA		14	2	71	48	2.734	2.92	2.73	21.4	45.0	1.61	59	123	184	67	14
RA		15	5	76	49	5.954	7.31	5.95	26.0	58.0	4.26	155	345	486	177	39
RA		16	1	69	40	1.047	1.46	1.05	25.7	40.0	.74	27	42	84	31	5
RA		17	2	78	46	1.854	2.92	1.85	31.7	65.0	1.62	59	121	184	67	14
RA		Totals	31	76	57	51.321	45.30	54.49	17.3	49.1	25.99	945	2,678	2,963	1,078	305
WH		10	1	82	63	2.679	1.46	2.68	11.9	50.0	1.02	32	134	116	36	15
WH		11	1	83	53	2.214	1.46	2.21	13.7	50.0	.97	30	111	111	35	13
WH		12	3	83	61	5.582	4.38	5.58	18.3	56.7	3.27	102	316	373	117	36
WH		13	2	82	48	3.171	2.92	3.17	17.9	50.0	1.82	57	159	207	65	18
WH		14	1	85	60	1.367	1.46	1.37	25.3	60.0	1.11	35	82	126	39	9
WH		Totals	8	83	57	15.013	11.69	15.01	17.0	53.4	8.18	256	802	933	292	91
WL		19	1	83	76	.742	1.46	1.48	30.5	100.0	1.45	45	148	165	52	17
WL		21	2	83	79	1.215	2.92	2.43	37.7	112.5	2.93	92	273	334	104	31
WL		25	1	83	79	.429	1.46	.86	52.9	160.0	1.45	45	137	165	52	16
WL		Totals	4	83	78	2.386	5.85	4.77	38.2	117.1	5.83	182	559	664	208	64
DL		15	3	82	97	3.572	4.38	7.14	20.5	71.7	4.04	147	512	460	167	58
DL		Totals	3	82	97	3.572	4.38	7.14	20.5	71.7	4.04	147	512	460	167	58
BM		15	1	71	52	1.191	1.46	1.19	26.6	60.0	.84	32	71	96	36	8
BM		16	1	72	62	1.047	1.46	1.05	30.8	70.0	.85	32	73	97	37	8
BM		Totals	2	71	57	2.237	2.92	2.24	28.6	64.7	1.69	64	145	193	73	16
NF		45	1	79	98	.132	1.46									
NF		Totals	1	79	98	.132	1.46									
Totals			129	82	64	190.594	189.97	249.06	18.6	61.6	131.99	4620	15,340	15,047	5,267	1,749

**Log Stock Table - MBF**  
**Project: DIAMOND**

T02N R07W S33 T0100

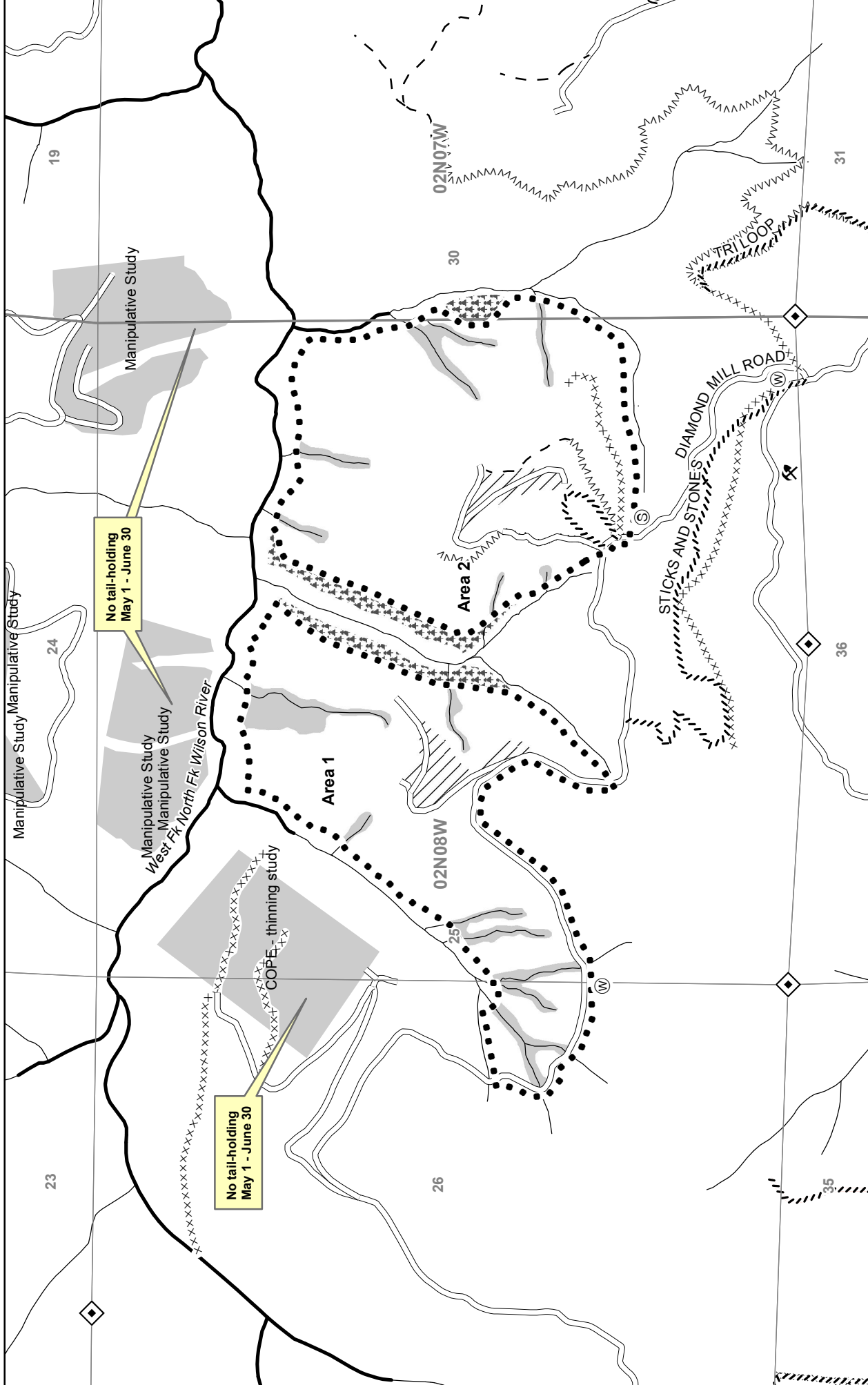
T02N R07W S33 T0100

**Twp Rge Sec Tract Type Acres Plots Sample Trees Page**  
**02N 07W 33 AREA 3-SALE 0100 1.00 12 23 Date 2/13/2012**  
**Time 9:27:45AM**

Spp	T	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches							
										MBF	MBF	2-3	4-5	6-7	8-9	10-11	12-13
DF		C	2M	24		2	5.0	2	4.5					2			
DF		C	2M	40		13	5.0	13	35.5					4	3	5	
DF		C	3M	32		4	5.0	4	10.9		1	1	2				
DF		C	3M	40		12	6.6	11	31.5		2	6	3				
DF		C	4M	15		0	5.0	0	.5		0						
DF		C	4M	17		0	5.0	0	1.1		0						
DF		C	4M	18		0	5.0	0	.5		0						
DF		C	4M	19		0	5.0	0	.5		0						
DF		C	4M	20		1	5.0	1	2.9		0		1				
DF		C	4M	21		0	5.0	0	1.1		0						
DF		C	4M	22		0	5.0	0	.5		0						
DF		C	4M	23		0	5.0	0	.5		0						
DF		C	4M	24		0	5.0	0	.8		0						
DF		C	4M	29		0	5.0	0	.8		0						
DF		C	4M	33		0	5.0	0	1.1		0						
DF		C	4M	38		2	5.0	2	5.1		1						
DF		C	4M	40		1	5.0	1	2.1		1						
DF		Totals				38	5.5	36	98.0		5	3	8	6	4	5	5
RA		H	4M	23		0	10.0	0	37.5		0						
RA		H	4M	35		1	10.0	0	62.5		0						
RA		Totals				1	10.0	1	2.0		1						
Total All Species						39	5.6	36	100.0		5	3	8	6	4	5	5

TC		TSTNDSUM		Stand Table Summary												
Project													DIAMOND			
T02N R07W S33 T0100										T02N R07W S33 T0100						
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1			Date:	02/13/2011			
02N	07W	33	AREA 3-SALE	0100	1.00	12	23	Time:	9:23:35AM							
Spc	S T	Sample		Av		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
		DBH	Trees	FF 16'	Ht Tot				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
DF		12	2	83	77	20.000	15.71	30.00	13.5	43.3	11.52	404	1,300	12	4	1
DF		13	3	84	65	30.000	27.65	40.00	15.5	47.5	17.66	621	1,900	18	6	2
DF		14	2	87	76	20.000	21.38	30.00	18.2	60.0	15.54	545	1,800	16	5	2
DF		16	4	85	72	40.000	55.85	80.00	18.1	63.8	41.40	1,449	5,100	41	14	5
DF		17	3	83	84	30.000	47.29	60.00	23.6	75.0	40.52	1,418	4,500	41	14	5
DF		18	2	84	80	20.000	35.34	40.00	26.5	92.5	30.05	1,059	3,700	30	11	4
DF		19	1	86	98	10.000	19.69	20.00	34.3	120.0	19.54	686	2,400	20	7	2
DF		20	1	84	82	10.000	21.82	30.00	20.8	86.7	17.76	623	2,600	18	6	3
DF		21	1	86	99	10.000	24.05	20.00	41.6	140.0	23.72	832	2,800	24	8	3
DF		22	1	88	118	10.000	26.40	30.00	37.0	166.7	31.62	1,109	5,000	32	11	5
DF		29	1	85	101	10.000	45.87	20.00	84.5	320.0	48.18	1,691	6,400	48	17	6
DF		Totals	21	85	81	210.000	341.05	400.00	26.1	93.8	297.50	10,437	37,500	298	104	38
RA		11	1	88	54	10.000	6.60	10.00	13.0	50.0	3.57	130	500	4	1	1
RA		16	1	82	36	10.000	13.96	10.00	14.6	30.0	4.00	146	300	4	1	0
RA		Totals	2	85	45	20.000	20.56	20.00	13.8	40.0	7.57	276	800	8	3	1
Totals			23	85	78	230.000	361.61	420.00	25.5	91.2	305.08	10713	38,300	305	107	38





**LOGGING PLAN**  
 Timber Sale Contract No. 341-12-074  
 DIAMOND POINT  
 Portions of Sections 25 and 26, T2N, R8W,  
 Sections 30, 32 and 33, T2N, R7W, and  
 Section 4, T1N, R7W, W.M.,  
 Tillamook County, Oregon

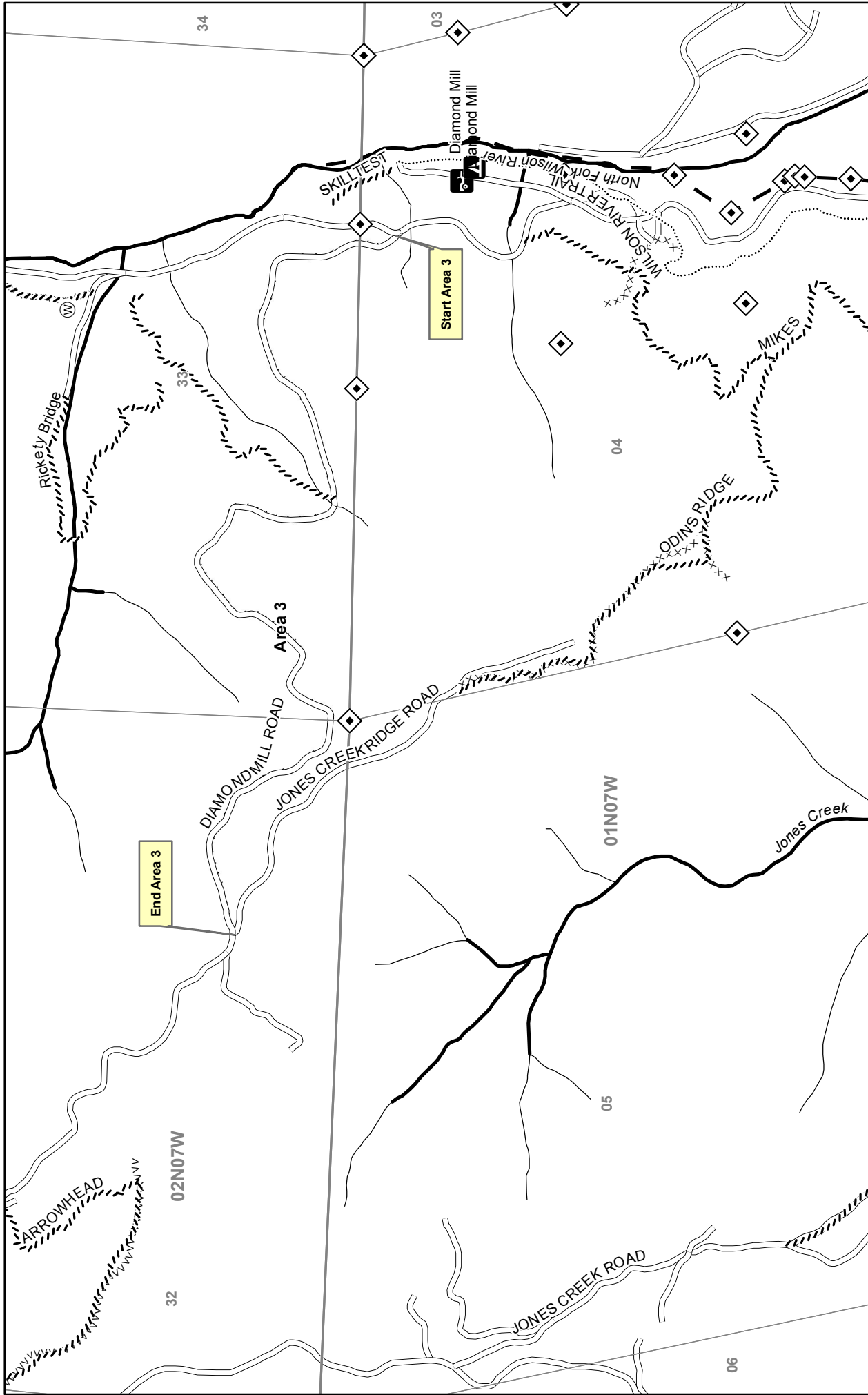
1,000 0 1,000 Feet

Tillamook District GIS  
 02-15-2012  
 This product is for informational use and may  
 not have been prepared or suitable for  
 legal, engineering, or surveying purposes.

Area	Type of Operation	Gross	Net
1	Modified clearcut	102	84
2	Modified clearcut	127	114
3	Right-of-way	10	7
<b>Total</b>		<b>239</b>	<b>205</b>

**Legend:**

- Rock source: Rock pile, Waste area, Bridge, Gate, Survey corner, Domestic water supply intake, Truck turn-around, Helicopter landing zone, Cultural site
- Landing: Landing, Buffer, Non-required thinning, Cable yarding, Ground yarding, Helicopter yarding, Downhill yarding, Green tree retention area
- Restricted area: Restricted area, Area boundary, Sale boundary, Ownership boundary, Perennial Type-F stream, Perennial Type-N stream, Unsurfaced road, Surfaced road, Paved road, Abandoned road
- Roads: Swing road, Non-project road, Blocked road, OHV trail, Non-motorized trail, Transmission line, Railroad
- Other: Manipulative Study, COPE thinning study, No tail-holding May 1 - June 30



### LOGGING PLAN

Timber Sale Contract No. 341-12-074  
**DIAMOND POINT**  
 Portions of Sections 25 and 26, T2N, R8W, and Sections 30, 32 and 33, T2N, R7W, and Section 4, T1N, R7W, W.M., Tillamook County, Oregon

1,000 0 1,000 Feet

Tillamook District GIS  
 02-15-2012

This product is for informational use and may not have been prepared or suitable for legal, engineering, or surveying purposes.

Type of		Acres	
Area	Operation	Gross	Net
1	Modified clearcut	102	84
2	Modified clearcut	127	114
3	Right-of-way	10	7
<b>Total</b>		<b>239</b>	<b>205</b>

**Legend:**

- Rock source: (X) Rock source
- Stock pile: (S) Stock pile
- Waste area: (W) Waste area
- Bridge: (B) Bridge
- Gate: (G) Gate
- Survey corner: (SC) Survey corner
- Domestic water supply intake: (DW) Domestic water supply intake
- Truck turn-around: (T) Truck turn-around
- Helicopter landing zone: (H) Helicopter landing zone
- Cultural site: (C) Cultural site
- Landing: (L) Landing
- Buffer: (B) Buffer
- Non-required thinning: (N) Non-required thinning
- Cable yarding: (C) Cable yarding
- Ground yarding: (G) Ground yarding
- Helicopter yarding: (H) Helicopter yarding
- Downhill yarding: (D) Downhill yarding
- Green tree retention area: (G) Green tree retention area
- Restricted area: (R) Restricted area
- Area boundary: (A) Area boundary
- Sale boundary: (S) Sale boundary
- Ownership boundary: (O) Ownership boundary
- Perennial Type-F stream: (F) Perennial Type-F stream
- Perennial Type-N stream: (N) Perennial Type-N stream
- Unsurfaced road: (U) Unsurfaced road
- Surfaced road: (S) Surfaced road
- Paved road: (P) Paved road
- Abandoned road: (A) Abandoned road
- Swing road: (A) Swing road
- Non-project road: (N) Non-project road
- Blocked road: (X) Blocked road
- OHV trail: (H) OHV trail
- Non-motorized trail: (N) Non-motorized trail
- Transmission line: (T) Transmission line
- Railroad: (R) Railroad