



Timber Sale Appraisal
Hot Plunkett
Sale WO-341-2017-44-

District: West Oregon

Date: November 09, 2016

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$1,704,276.99	\$115,100.44	\$1,819,377.43
		Project Work:	(\$84,357.00)
		Advertised Value:	\$1,735,020.43



Timber Sale Appraisal Hot Plunkett Sale WO-341-2017-44-

District: West Oregon

Date: November 09, 2016

Timber Description

Location: Portions of Sections 15, 21, and 22, T11S, R8W, W.M., Lincoln County, Oregon.

Stand Stocking: 80%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	23	0	90
Port Orford Cedar	12	0	90
Alder (Red)	14	0	90
Maple	20	0	70

Volume by Grade	2S	3S	4S	Camprun	Total
Douglas - Fir	2,925	870	158	0	3,953
Port Orford Cedar	0	0	18	0	18
Alder (Red)	0	0	0	313	313
Maple	0	0	0	21	21
Total	2,925	870	176	334	4,305

Comments: Pond Values Used: 3rd Quarter Calendar Year 2016 + September Local Pond Values.

Western Hemlock and Other Conifers Stumpage Price = Pond Value minus Logging Cost:
 $\$344.93/\text{MBF} = \$526.56/\text{MBF} - \$181.63/\text{MBF}$

Western redcedar and Other Cedars Stumpage Price = Pond Value minus Logging Cost:
 $\$940.24/\text{MBF} = \$1,354.18/\text{MBF} - \$413.94/\text{MBF}$

SCALING COST ALLOWANCE = \$5.00/MBF

BRANDING AND PAINTING COST ALLOWANCE = \$2.00/MBF

Log Haul:

Conifer costed to Eugene.

Hardwood costed to Eugene.

Port Orford cedar costed to Roseburg.

HAULING COST ALLOWANCE:

Hauling costs equivalent to \$780 daily truck cost.

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

Intermediate Supports/Tail Trees: 5 trees @ \$100/tree = \$500

TOTAL Other Costs (with Profit & Risk to be added) = \$500

Other Costs (No Profit & Risk added):

Invasive Species Equipment Cleaning: \$2,000

Firewood Sorting: 10 Landings @ \$100/Landing = \$1,000

Logger's Choice Road/Landing = \$500

TOTAL Other Costs (No Profit & Risk added) = \$3,500

SLASH DISPOSAL

Move-in: \$750

Project Work: \$6,000

TOTAL Slash Disposal = \$6,750



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Logging Conditions

Combination#: 1

Douglas - Fir	58.04%
Port Orford Cedar	35.00%
Alder (Red)	85.03%
Maple	93.00%

Logging System: Cable: Large Tower >=70 **Process:** Stroke Delimber
yarding distance: Medium (800 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 12 **bd. ft / load:** 4600
cost / mbf: \$112.32
machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Large)

Combination#: 2

Douglas - Fir	41.96%
Port Orford Cedar	65.00%
Alder (Red)	14.97%
Maple	7.00%

Logging System: Shovel **Process:** Stroke Delimber
yarding distance: Short (400 ft) **downhill yarding:** No
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 12 **bd. ft / load:** 4600
cost / mbf: \$57.46
machines: Stroke Delimber (B)



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Logging Costs

Operating Seasons: 2.00	Profit Risk: 10%
Project Costs: \$84,357.00	Other Costs (P/R): \$500.00
Slash Disposal: \$6,750.00	Other Costs: \$3,500.00

Miles of Road

Road Maintenance: \$2.69

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	3.0	4.6
Port Orford Cedar	\$0.00	1.0	3.0
Alder (Red)	\$0.00	2.0	3.5
Maple	\$0.00	2.0	3.5



Timber Sale Appraisal
Hot Plunkett
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Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling / Brand & Paint	Other	Total
Douglas - Fir									
\$89.30	\$2.96	\$2.04	\$62.17	\$0.12	\$15.66	\$1.57	\$7.00	\$0.81	\$181.63
Port Orford Cedar									
\$76.66	\$2.96	\$2.04	\$286.00	\$0.12	\$36.78	\$1.57	\$7.00	\$0.81	\$413.94
Alder (Red)									
\$104.11	\$2.96	\$2.04	\$122.57	\$0.12	\$23.18	\$1.57	\$7.00	\$0.81	\$264.36
Maple									
\$108.48	\$3.50	\$2.04	\$144.86	\$0.12	\$25.90	\$1.57	\$7.00	\$0.81	\$294.28

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$612.10	\$430.47	\$0.00
Port Orford Cedar	\$0.00	\$560.00	\$146.06	\$0.00
Alder (Red)	\$0.00	\$625.00	\$360.64	\$0.00
Maple	\$0.00	\$400.00	\$105.72	\$0.00



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Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Port Orford 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	3,953	\$430.47	\$1,701,647.91
Port Orford Cedar	18	\$146.06	\$2,629.08
Alder (Red)	313	\$360.64	\$112,880.32
Maple	21	\$105.72	\$2,220.12

Gross Timber Sale Value

Recovery: \$1,819,377.43

Prepared By: Matt McBride

Phone: 360-929-2366

SUMMARY OF ALL PROJECT COSTS

Sale Name: Hot Plunkett

Date: September 2016

Project #1 - New Construction

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>	
1A to 1B (dirt road)	1.9 sta	\$888	
1C to 1D (dirt road)	3.7 sta	\$1,451	
1E to 1F	2.0 sta	\$3,516	
1G to 1H	2.0 sta	\$3,516	
2A to 2B	5.0 sta	\$7,377	
2C to 2D (dirt road)	5.5 sta	\$2,411	
TOTALS	20.1 sta	\$19,159	\$19,159

Project #2 - Improvements

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>	
I2 to I3	58.0 sta	\$8,815	
I3 to I4	19.0 sta	\$9,583	
I7 to I8	77.9 sta	\$556	
I9 to 2C (dirt road)	16.5 sta	\$886	
I11 to I12 (dirt road)	36.8 sta	\$1,233	
I13 to I14 (dirt road)	2.7 sta	\$67	
TOTALS	210.9 sta	\$21,140	\$21,140

Project #3 - Roadside Brushing

<u>Length</u>	<u>Cost</u>	
12.93 miles	\$14,223	\$14,223

Project #4 - Roadside Spraying

<u>Length</u>	<u>Cost</u>	
13.25 miles	\$2,253	\$2,253

Project #5 - Stockpile Construction

<u>1 1/2-0"</u>	<u>Cost</u>	
1,000 Cy	\$16,772	\$16,772

Project Work Road Maintenance

(Burnt Woods Ridge Rd.) \$5,152

Move in

	<u>Cost</u>	<u>On-site move</u>	
Excavator, C325 or equiv.	\$1,290	\$258	
Dozer, D-8 or equiv.	\$1,406	\$316	
Grader, G14 or equiv.	\$778		
Brush cutter	\$321		
Backhoe	\$321		
Vibratory roller	\$778		
Water Truck	\$190		
TOTAL			\$5,658

GRAND TOTAL \$84,357

Compiled by J. Long

Date 09/22/2016

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 1 LENGTH const 1.9 sta
ROAD 1A to 1B (dirt spur)

CLEARING AND GRUBBING

0.20 acres @ \$1,337.00 /acre = \$267

TOTAL CLEARING AND GRUBBING = \$267

EXCAVATION With D8 dozer or equivalent

Balanced Construction 1.9 sta @ \$122.00 /sta = \$232

Landing Construction 1 Ldg @ \$316.00 /ldg = \$316

Grade/shape surface 1.9 sta @ \$18.35 /sta = \$35

Compact subgrade 1.9 sta @ \$20.19 /sta = \$38

(with vibratory roller)

TOTAL EXCAVATION = \$621

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$888

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 1 LENGTH const 3.7 sta
ROAD 1C to 1D (dirt spur)

CLEARING AND GRUBBING

0.40 acres @ \$1,337.00 /acre = \$535

TOTAL CLEARING AND GRUBBING = \$535

EXCAVATION

With D8 dozer or equivalent

Balanced Construction	3.7 sta	@	\$122.00 /sta	=	\$451
Landing Construction	1 Ldg	@	\$316.00 /ldg	=	\$316
Grade/shape surface	3.7 sta	@	\$18.35 /sta	=	\$68
Compact subgrade (with vibratory roller)	4 sta	@	\$20.19 /sta	=	\$81

TOTAL EXCAVATION = \$916

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$1,451

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 1 LENGTH const 2 sta
ROAD 1E to 1F

CLEARING AND GRUBBING

0.30 acres @ \$1,337.00 /acre = \$401

TOTAL CLEARING AND GRUBBING = \$401

EXCAVATION

Medium size excavator (C325) and D8 cat or equivalent

Balanced Construction 2 sta @ \$190.00 /sta = \$380
Landing Construction 1 Ldg @ \$316.00 /ldg = \$316
(Pt. 1F)

Subgrade Prep

Grade/shape surface 2.0 sta @ \$18.35 /sta = \$37
(with road grader)
Compact subgrade 2.0 sta @ \$20.19 /sta = \$40
(with vibratory roller)

TOTAL EXCAVATION = \$773

SURFACING

		Size	Cost/yd		
Surface rock (8"lift)	88 cy of	Jaw Run	\$15.49	=	\$1,363
Junction rock	20 cy of	Jaw Run	\$15.49	=	\$310
Landing Rock	40 cy of	Jaw Run	\$15.49	=	\$620
Process/compact rock	2.0 sta	@	\$24.28 /sta	=	\$49
(with vibratory roller)					

TOTAL ROCK COST = \$2,342

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$3,516

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 1 LENGTH const 2 sta
ROAD 1G to 1H

CLEARING AND GRUBBING

0.30 acres @ \$1,337.00 /acre = \$401

TOTAL CLEARING AND GRUBBING = \$401

EXCAVATION

Medium size excavator (C325) and D8 cat or equivalent

Balanced Construction 2 sta @ \$190.00 /sta = \$380
Landing Construction 1 Ldg @ \$316.00 /ldg = \$316
(Pt. 1H)

Subgrade Prep

Grade/shape surface 2.0 sta @ \$18.35 /sta = \$37
(with road grader)
Compact subgrade 2.0 sta @ \$20.19 /sta = \$40
(with vibratory roller)

TOTAL EXCAVATION = \$773

SURFACING

		Size	Cost/yd		
Surface rock (8"lift)	88 cy of	Jaw Run	\$15.49	=	\$1,363
Junction rock	20 cy of	Jaw Run	\$15.49	=	\$310
Landing Rock	40 cy of	Jaw Run	\$15.49	=	\$620
Process/compact rock	2.0 sta @	\$24.28 /sta		=	\$49
(with vibratory roller)					

TOTAL ROCK COST = \$2,342

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$3,516

SUMMARY OF CONSTRUCTION COST

SALE	Hot Plunkett	Project #	1	LENGTH	const	5 sta
ROAD	2A to 2B					

CLEARING AND GRUBBING

0.60 acres	@	\$1,337.00 /acre	=	\$802
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TOTAL CLEARING AND GRUBBING = \$802

EXCAVATION

Medium size excavator (C325) and D8 cat or equivalent

Drift earth up to 200'	5 sta	@	\$190.00 /sta	=	\$950
Landing Construction	2 Ldg	@	\$316.00 /ldg	=	\$632

SUBGRADE PREP

Shape subgrade (with road grader)	5.0 sta	@	\$24.83 /sta	=	\$124
Compact subgrade (with vibratory roller)	5.0 sta	@	\$20.19 /sta	=	\$101

TOTAL EXCAVATION = \$1,807

SURFACING

			Size	Cost/yd	
Surface rock (8"lift) (Sta. 0+00 to 5+00)	220 cy of		Jaw Run	\$15.49	= \$3,408
Landing Rock	80 cy of		Jaw Run	\$15.49	= \$1,239
Process/compact rock (with vibratory roller)	5 sta. @		\$24.28 /sta	=	\$121

TOTAL SURFACING = \$4,768

Compiled by:	J. long
Date:	Sep 22, 2016

GRAND TOTAL =====> \$7,377

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 1 LENGTH const 5.5 sta
ROAD 2C to 2D (dirt spur)

CLEARING AND GRUBBING

0.60 acres @ \$1,337.00 /acre = \$802

TOTAL CLEARING AND GRUBBING = \$802

EXCAVATION Medium size excavator (C325) and D8 cat or equivalent

Balanced Construction 5.5 sta @ \$190.00 /sta = \$1,045

Landing Construction 1 Ldg @ \$316.00 /ldg = \$316

Subgrade Prep

Grade/shape surface 5.50 sta @ \$24.83 /sta = \$137
(with road grader)

Compact subgrade 5.50 sta @ \$20.19 /sta = \$111
(with vibratory roller)

TOTAL EXCAVATION = \$1,609

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$2,411

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 2 LENGTH improve 58.0 sta
ROAD I2 to I3

SUBGRADE PREP

Grade/shape surface 58.0 sta @ \$24.83 /sta = \$1,440
(with road grader)

Pull ditch and scatter 30.0 sta @ \$12.41 /sta = \$372
waste material

SUB TOTAL \$1,812

SURFACING

		Size	Cost/yd		
Turnout rock (8)	80 cy of	1½-0"	\$18.15	=	\$1,452

Landing rock (2)	80 cy of	Jaw run	\$15.49	=	\$1,239
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Spot rock	160 cy of	1½-0"	\$18.15	=	\$2,904
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Process/compact rock (with vibratory roller)	58 sta. @	\$24.28 /sta	=	\$1,408
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TOTAL ROCK COST = \$7,003

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$8,815

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 2 LENGTH improve 19 sta
ROAD I3 to I4

Subgrade Prep

Grade/shape surface (with road grader)	19.0 sta	@	\$24.83 /sta	=	\$472	
Compact subgrade	19.0 sta	@	\$20.19 /sta	=	\$384	
			Sub total			\$856

SURFACING

			Size	Cost/yd		
Surface rock (3"lift)	360	cy of	1½-0"	\$18.15	=	\$6,534
Turnout rock (2)	20	cy of	1½-0"	\$18.15	=	\$363
Leveling rock	80	cy of	3-0"	\$16.49	=	\$1,319
Process/compact rock (with vibratory roller)	19	sta. @	\$24.28 /sta	=	\$461	

TOTAL ROCK COST = \$8,677

SPECIAL PROJECTS

Clean out culverts (inlets and outlets)	2 culverts	@	\$25.00 ea	=	\$50	
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TOTAL SPECIAL PROJECTS COST = \$50

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$9,583

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 2 LENGTH improve 77.9 sta.
ROAD 17 to 18

IMPROVEMENT

Clear landing at sta. 28+60 1.0 hr @ \$90.75 /hr = \$91
(with road grader)

\$91

SURFACING

Landing rock (sta. 28+60) 30 cy of Size Cost/yd
jaw-run \$15.49 = \$465

TOTAL ROCK COST = \$465

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$556

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 2 LENGTH improve 16.5 sta.
ROAD I9 to 2C (dirt spur)

IMPROVEMENT

Re-open road 16.5 sta @ \$24.76 /sta = \$409
& landing
(with Dozer)

\$409

SURFACING

		Size	Cost/yd		
Junction rock (0+00 to 0+50)	30 cy of	jaw-run	\$15.49	=	\$465
Grade/compact rock	0.5 sta. @	\$24.28 /sta		=	\$12

TOTAL ROCK COST = \$477

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$886

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 2 LENGTH improve 36.8 sta.
ROAD I11 to I12 (dirt spur)

IMPROVEMENT

Re-open road 36.8 sta @ \$24.76 /sta = \$911
& landing
(with Dozer) \$911

SURFACING

		Size	Cost/yd		
Junction rock (0+00 to 0+50)	20 cy of	jaw-run	\$15.49	=	\$310
Grade/compact rock	0.5 sta. @	\$24.28	/sta	=	\$12

TOTAL ROCK COST = \$322

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$1,233

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett Project # 2 LENGTH improve 2.7 sta.
ROAD I13 to I14 (dirt spur)

IMPROVEMENT

Re-open road 2.7 sta @ \$24.76 /sta = \$67
(with Dozer)

TOTAL IMPROVEMENT = \$67

Compiled by: J. Long
Date: Sep 22, 2016

GRAND TOTAL =====> \$67

**Hot Plunkett Timber Sale
No. 341-17-44**

Project No. 3

Mechanical Brushing Costs

Date: 09/07/16

Road Segment/ Point	Road Name	Length (Feet)	Miles	Brush Density	Cost / Mile	Segment Cost
I2-I29	Burnt Woods	17,090	3.24	Medium	\$1,100.00	\$3,564
I5-I6	Hwy 20 Cutoff	5,550	1.05	Medium	\$1,100.00	\$1,155
I7-I8	E. Cline Rd	7,790	1.48	Medium	\$1,100.00	\$1,628
I15-I16		1,750	0.33	Medium	\$1,100.00	\$363
I18- I19		1,290	0.24	Medium	\$1,100.00	\$264
I20-I21		900	0.17	Medium	\$1,100.00	\$187
I22-I23		5,560	1.05	Medium	\$1,100.00	\$1,155
I24-I25		2,000	0.38	Medium	\$1,100.00	\$418
I26-I27		1,890	0.36	Medium	\$1,100.00	\$396
I28-I29		7,740	1.47	Medium	\$1,100.00	\$1,617
I30-I31		1,470	0.28	Medium	\$1,100.00	\$308
I32-I33		6,930	1.31	Medium	\$1,100.00	\$1,441
I34-I35		7,190	1.36	Medium	\$1,100.00	\$1,496
I36-I37		590	0.11	Medium	\$1,100.00	\$121
I38-I39		550	0.10	Medium	\$1,100.00	\$110
Totals		68,290	12.93			\$14,223

**Hot Plunkett Timber Sale
No. 341-17-44**

Project No. 4

Roadside Spraying

Date: 09/07/16

Segments	Feet	Miles	Cost per Mile	Segment Cost
I1-I26	10,840	2.05	\$170	\$ 348.50
I2-I29	17,090	3.24	\$170	\$ 550.80
I5-I6	5,550	1.05	\$170	\$ 178.50
I7-I8	7,790	1.48	\$170	\$ 251.60
I15-I16	1,750	0.33	\$170	\$ 56.10
I22-I23	5,560	1.05	\$170	\$ 178.50
I24-I25	2,000	0.38	\$170	\$ 64.60
Sta. 26+90-I29	2,690	0.51	\$170	\$ 86.70
I30-I31	1,470	0.28	\$170	\$ 47.60
I32-I33	6,930	1.31	\$170	\$ 222.70
I34-I35	7,190	1.36	\$170	\$ 231.20
I36-I37	590	0.11	\$170	\$ 18.70
I38-I39	550	0.10	\$170	\$ 17.00
Total	70,000	13.25		\$ 2,252.50

Cost include labor, equipment and chemicals.

SUMMARY OF CONSTRUCTION COST

SALE Hot Plunkett
Stockpile Construction

Project # 5

Construct stockpile With C315 Excavator or D4 Cat
4 hr @ \$110.60 /hr = \$442
\$442

ROCK HAUL
1 1/2"-0" Crushed rock 1,000 cy of 1 1/2"-0" Size Cost/yd
\$16.33 = \$16,330
TOTAL ROCK COST = \$16,330

Compiled by: J. Long
Date: Sep 22, 2016
GRAND TOTAL =====> \$16,772

SUMMARY OF MAINTENANCE COST

SALE	Hot Plunkett	- Final Maintenance Cost Estimate <i>(Costed in appraisal, not in project costs)</i>
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Grading	Move-in	Grader	\$	778
		Backhoe	\$	321
		Roller	\$	778
		water truck	\$	190

Road Segment	Length	Cost/Sta	Cost	Mileage
Surfaced Roads				
Burnt Woods Rd. (I1-I2)	35.6	\$24.28	\$864.37	0.67
I2-I3	58.0	\$24.28	\$1,408.24	1.10
I3-I4	19.0	\$24.28	\$461.32	0.36
I5-I6	25.3	\$24.28	\$614.28	0.48
I7 to I8	31.9	\$24.28	\$774.53	0.60
1E-1F	2.0	\$24.28	\$48.56	0.04
1G-1H	2.0	\$24.28	\$48.56	0.04
Sub Total	173.8		\$4,219.86	3.3

Unsurfaced Roads

1A to 1B	1.9	\$11.55	\$21.95	0.04
1C to 1D	3.7	\$11.55	\$42.74	0.07
2C to 2D	5.5	\$11.55	\$63.53	0.10
I9 to 2C	16.5	\$11.55	\$190.58	0.31
I11 to I12	36.8	\$11.55	\$425.04	0.70
Sub Total	64.4		\$743.84	1.2

Maintenance Rock:

1½'-0"	Volume	Cost/CY	Cost
	250	\$18.15	\$4,537.50

Grand Total	\$ 11,568.20
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TS Volume 4,304 MBF

Cost / MBF = \$2.69

NOTES:

Unsurfaced roads: grade out ruts and install waterbars as directed by State with grader or dozer.

Surfaced roads: process and compact with grader and vibratory roller

SUMMARY OF MAINTENANCE COST

SALE Hot Plunkett Rock Haul Road Maintenance

Pt. I1 to Pt. I17

Road Segment	Length	Cost/Sta	Cost	Mileage
Burnt Woods Rd. (I1 to I17)	158.4	\$24.28	\$3,845.95	3.00
Sub Total	158.4		\$3,845.95	3.0

Maintenance Rock:

	Volume	Cost/CY	Cost
1½-0"	80	\$16.33	\$1,306.40

Grand Total \$5,152.35

Rock Haul Cost Computation

SALE NAME: Hot Plunkett
ROAD NAME: Haul route CLASS: Medium
ROCK SOURCE: Rickard 10-12 CY truck
Route: Garrett Ln, Hwy 20, Harlan/Burnt Woods Rd, Burnt Woods Ridge Rd,

TIME Computation:

Road speed time factors:

1.	55 MPH	22.0	MRT	24.0	minutes
2.	50 MPH		MRT	0.0	minutes
3.	45 MPH	4.0	MRT	5.3	minutes
4.	40 MPH		MRT	0.0	minutes
5.	35 MPH	3.0	MRT	5.1	minutes
6.	30 MPH		MRT	0.0	minutes
7.	25 MPH	1.0	MRT	2.4	minutes
8.	20 MPH		MRT	0.0	minutes
9.	15 MPH	0.3	MRT	1.2	minutes
10.	10 MPH		MRT	0.0	minutes
11.	05 MPH	0.1	MRT	1.2	minutes

Dump or spread time per RT 0.50 minutes

Total hauling cycle time for this setting
(100% efficiency) 39.70 minutes

Operator efficiency correction 0.85 46.71 minutes

Job efficiency correction 0.90 51.90 minutes

Truck capacity (CY) 10.00 5.19 min/CY

Loading time, delay time per CY 0.25 min/CY

TIME (minutes) per cubic yard 5.44 min/CY

COST per CY computation

Cost of truck and operator per hour \$79.00 /hr.

Cost of truck and operator per minute \$1.32 /min

Cost per CY \$7.18 /CY

Spread and compact Water truck, Grader & Roller \$1.50 /CY

Size	Cost/Yd (Pit)	Cost Delivered w/o processing	Cost Delivered with processing
1½ - 0"	\$ 10.97	\$18.15	\$19.65
3 - 0"	\$ 9.31	\$16.49	\$17.99
Jaw Run	\$ 8.31	\$15.49	\$16.99
pit-run	7.65	\$14.83	\$16.33

Note: Pit costs January 1, 2014 Rickard Rock Quarry

Rock Haul Cost Computation

SALE NAME: Hot Plunkett
ROAD NAME: Burnt Woods CLASS: Medium
ROCK SOURCE: Rickard 18 CY truck
Route: Garrett Ln, Hwy 20, Harlan, Burnt Woods

TIME Computation:

Road speed time factors:

1.	55 MPH	22.0	MRT	24.0	minutes
2.	50 MPH		MRT	0.0	minutes
3.	45 MPH	4.0	MRT	5.3	minutes
4.	40 MPH		MRT	0.0	minutes
5.	35 MPH	3.0	MRT	5.1	minutes
6.	30 MPH		MRT	0.0	minutes
7.	25 MPH	2.0	MRT	4.8	minutes
8.	20 MPH		MRT	0.0	minutes
9.	15 MPH	0.8	MRT	3.2	minutes
10.	10 MPH		MRT	0.0	minutes
11.	05 MPH	0.2	MRT	2.4	minutes

Dump or spread time per RT	0.50	minutes
Total hauling cycle time for this setting (100% efficiency)	45.30	minutes

Operator efficiency correct:	0.85	53.29	minutes
Job efficiency correction	0.90	59.21	minutes

Truck capacity (CY)	20.00	2.96	min/CY
Loading time, delay time per CY		0.25	min/CY
TIME (minutes) per cubic yard		3.21	min/CY

COST per CY computation

Cost of truck and operator per hour	\$100.00	/hr.
Cost of truck and operator per minute	\$1.67	/min

Cost per CY	\$5.36	/CY
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Spread and compact Water truck, Grader & Roller	\$1.50	/CY
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Size	Cost/Yd (Pit)	Cost Delivered w/o processing	Cost Delivered with processing
1½ - 0"	\$ 10.97	\$16.33	\$17.83
3 - 0"	\$ 9.31	\$14.67	\$16.17
Jaw Run	\$ 8.31	\$13.67	\$15.17
pit-run	7.65	\$13.01	\$14.51

Note: Pit costs January 1, 2014 Rickard Rock Quarry

Rock Haul Cost Computation

SALE NAME: Hot Plunkett
 ROAD NAME: Haul route CLASS: Medium
 ROCK SOURCE: Burnt Woods Stockpile 10-12 CY truck
 Route: Burnt Woods Road stockpile to sale areas

TIME Computation:

Road speed time factors:

1.	55 MPH	MRT	0.0 minutes
2.	50 MPH	MRT	0.0 minutes
3.	45 MPH	MRT	0.0 minutes
4.	40 MPH	MRT	0.0 minutes
5.	35 MPH	MRT	0.0 minutes
6.	30 MPH	MRT	0.0 minutes
7.	25 MPH	7.0 MRT	16.8 minutes
8.	20 MPH	MRT	0.0 minutes
9.	15 MPH	3.0 MRT	12.0 minutes
10.	10 MPH	MRT	0.0 minutes
11.	05 MPH	0.5 MRT	6.0 minutes

Dump or spread time per RT 0.50 minutes

Total hauling cycle time for this setting
 (100% efficiency) 35.30 minutes

Operator efficiency correction 0.85 41.53 minutes

Job efficiency correction 0.90 46.14 minutes

Truck capacity (CY) 10.00 4.61 min/CY

Loading time, delay time per CY 0.25 min/CY

TIME (minutes) per cubic yard 4.86 min/CY

COST per CY computation

Cost of truck and operator per hour \$79.00 /hr.

Cost of truck and operator per minute \$1.32 /min

Cost per CY \$6.42 /CY

Spread and compact Water truck, Grader & Roller \$1.50 /CY

Size	Cost/Yd (Pit)	Cost Delivered w/o processing	Cost Delivered with processing
1½ - 0"	\$ -	\$6.42	\$7.92
3 - 0"	\$ -	\$6.42	\$7.92
Jaw Run	\$ -	\$6.42	\$7.92
pit-run	0.00	\$6.42	\$7.92

Note: Maintenance rock from Salmon Creek Stockpile

**Hot Plunkett (341-17-44)
FY 2017**

TIMBER CRUISE REPORT

1. **Sale Area Location:** Portions of Sections 15, 21, & 22, T11S, R08W, W.M., Lincoln County, Oregon.

2. **Fund Distribution:**

- a. **Fund** BOF 100%
- b. **Tax Code**

3. **Sale Acreage by Area:**

Area	Treatment	Gross Acres	Stream Buffers	Existing Roads	Green Tree Retention Areas	Net Sale Acres	Acreage Comp. Method
1	Modified Clearcut	77	19	2	0	56	Ortho photo, GIS, GPS
2	Modified Clearcut	70	8	3	2	57	Ortho photo, GIS, GPS
Total		147	27	5	2	113	

4. **Cruisers and Cruise Dates:** The sale was cruised by Matt McBride, Jon Long and Carli Morgan in July and August of 2016.

5. **Cruise Method and Computation:** The sale consists of 2 modified clearcut areas that were cruised using variable radius plot sampling. The sale area was cruised using a 40 BAF with plots spaced 2 chains apart on plot lines spaced 5 chains apart in Area 1, and 3 chains apart on plot lines spaced 6 chains apart in Area 2. A total of 73 plots were taken with 47 count plots and 24 cruise plots with 2 blank plots. Cruise plots were measured for DBH, height, form factor, grade, and defect. Data was entered into the Atterbury SuperACE 2008 cruise program to calculate net board feet per acre. Marked wildlife trees and snags were also cruised if they were “in” on cruise plots. Wildlife trees and snags were then deleted from the “Take” volume.

Digital ortho photos, Lidar data, and GPS data from a Garmin GPSmap 64st were used to map the boundaries for the sale, and ArcMap 10.2 was used to determine gross and net acreage.

6. **Measurement Standards:** Heights were measured to the nearest foot, to a top diameter of 7 inches outside bark or to 40% of form factor. Diameters were measured to the nearest inch, and a form point of 16 feet was used to calculate form factor. Most trees were graded in 40 foot log segments unless breakage, defect, or length to top of grade cruise diameter warranted otherwise.

7. **Timber Description:** Timber in the sale areas consists of 53 to 85 year-old Douglas-fir, red alder, big leaf maple, and Port Orford cedar. Western hemlock is reserved from cutting but were only observed in minor amounts scattered through the sale area. The Average Douglas-fir tree size to be harvested is approximately 23 inches DBH, with an average height of 101 feet to a merchantable top. The average red alder is approximately 14 inches DBH, with an average height of 45 feet to a merchantable top. The average big leaf maple is approximately 20 inches DBH, with an average height of 28 feet to a merchantable top. The average Port Orford cedar is approximately 12 inches DBH, with an average height of 28 feet to a merchantable top. Big leaf Maple is a minor component of the stand and the volume was added to the red alder volumes. The average volume per acre to be harvested (net) is 38.1 MBF.

8. Statistical Analysis and Stand Summary: (See attached “Statistics”).

Area	Target CV	Target SE	Actual CV	Actual SE
1	52%	9%	110%	16%
2	37%	11%	46%	9%
1 & 2	50%	9%	84%	10%

Note: Statistics shown are for conifer and hardwood trees combined. Percentages are for net board foot volume.

9. Total Volume (MBF) by Species and Grade: (See attached “Stand Table Summary” and “Species, Sort Grade”).

Species	Gross Cruise Volume	Cruised D & B	Cruised D & B (MBF)	Hidden D & B	Hidden D & B (MBF)	Net Sale Volume
Douglas-fir	4,297	3%	129	5%	215	3,953
Red alder	344	3%	10	6%	21	313
Big leaf maple	26	13%	3	6%	2	21
Port Orford cedar	19	0%	0	5%	1	18
Total	4,686	3%	142	5%	239	4,305

Species	DBH	Net Vol.	2-Saw	3-Saw	4-Saw	Camp Run	% by Species
Douglas-fir	Grade Percentages		74%	22%	4%	--	92%
	23	3,953	2,925	870	158	--	
Red alder	Grade Percentages		--	--	--	100%	
	14	313	--	--	--	313	7%
Big leaf maple	Grade Percentages		--	--	--	100%	
	20	21	--	--	--	21	<1%
Port Orford cedar	Grade Percentages		--	--	100%	--	<1%
	12	18	--	--	18	--	
Total	Grade Percentages		68%	20%	4%	8%	100%
		4,305	2,925	870	176	334	

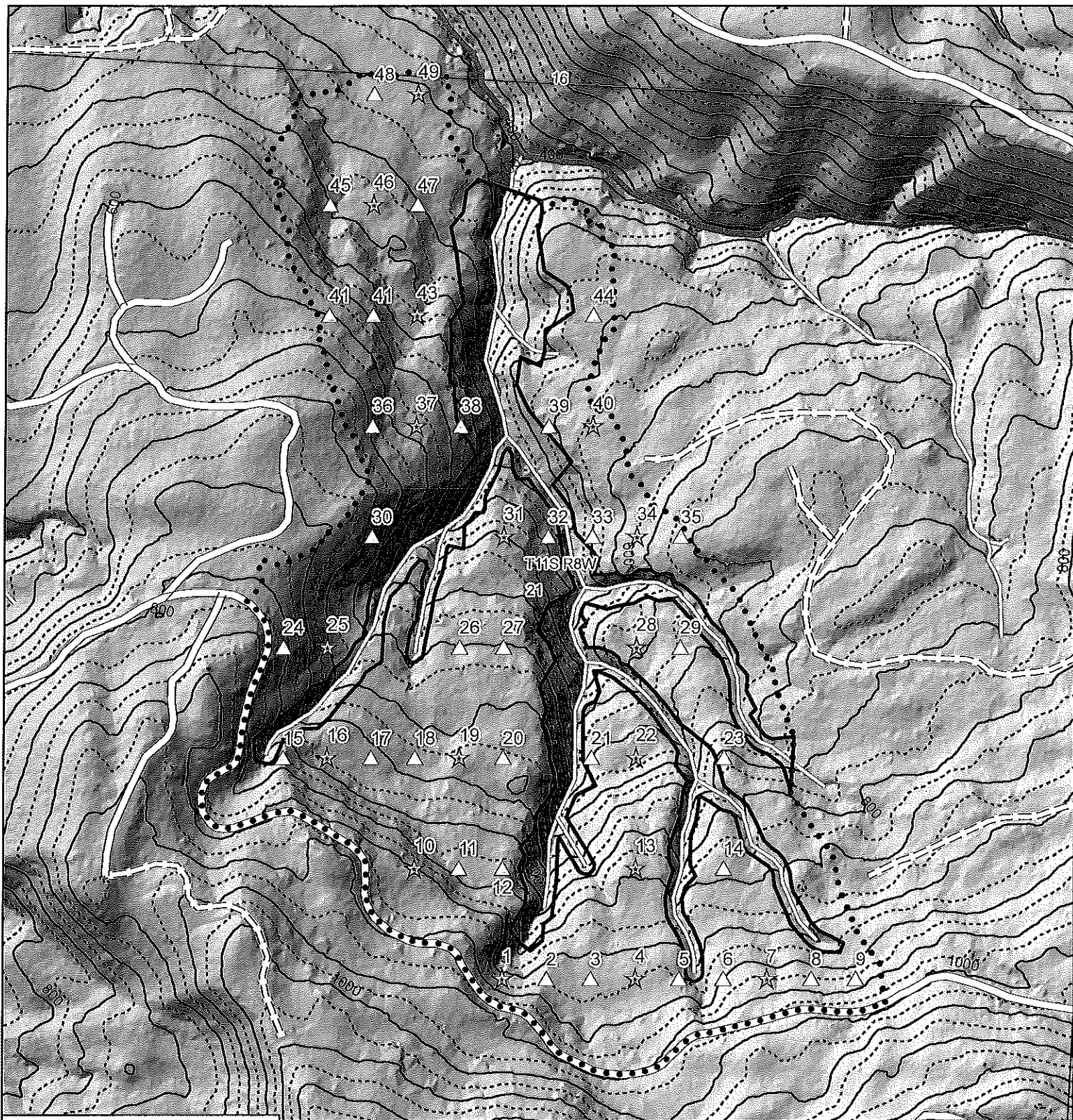
Attachments: Cruise Maps
Species, Sort Grade – Board Foot Volumes
Statistics
Stand Table Summary
Log Stock Table – MBF

Prepared by: Matt McBride

Date: 05/10/2016

Unit Forester: Evelyn Hukari

Date: _____



Hot Plunkett Area 1

PORTIONS OF SECTIONS 15,
21, 22
T11S,R08W,W.M.
LINCOLN COUNTY, OREGON

1:4,800

0 100 200 400 600 800 Feet

Plots - 2 Ch apart
Lines - 5 Ch apart

Count/Measure - 40 BAF @ BH
Measure Plots -
Record DBH, FF, Height,
Grade, & Defect



Date: 07/19/2016

Timber Sale Boundary

Stream Buffer

Plots

☆ Grade

△ Count

Roads

— Surfaced Road

== Unsurfaced Road



Timber Sale Boundary
 Stream Buffer

Plots

Grade
 Count

Roads

Surfaced Road
 Unsurfaced Road

Hot Plunkett Area 2

PORTIONS OF SECTIONS 15,
 21, 22
 T11S,R08W,W.M.
 LINCOLN COUNTY, OREGON

1:4,800

Feet
 0 100 200 400 600 800

Plots - 3 Ch apart
 Lines - 6 Ch apart

Count/Measure - 40 BAF @ BH
 Measure Plots -
 Record DBH, FF, Height,
 Grade, & Defect



Date: 07/19/2016

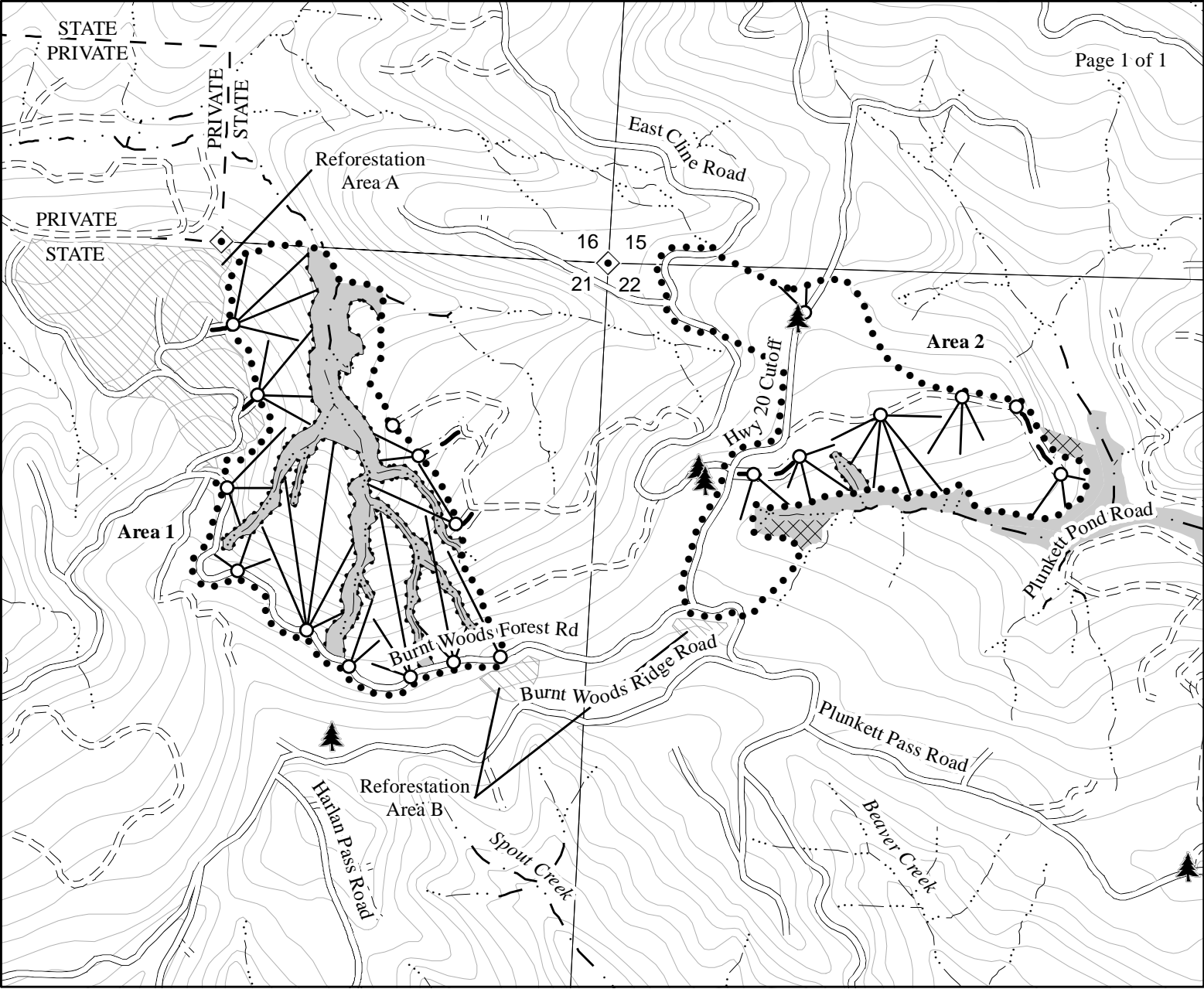
TC PSTATS				PROJECT STATISTICS				PAGE	1		
				PROJECT	HOTPLUNK			DATE	8/18/2016		
TWP	RGE	SC	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt	
11S	08	22	AREA1	A1	113.00		73	348	1	W	
11S	08W	22	AREA2	A2							
				TREES	ESTIMATED		PERCENT				
				PER PLOT	TOTAL		SAMPLE				
					TREES		TREES				
TOTAL			73	348	4.8						
CRUISE			24	103	4.3		10,347		1.0		
DBH COUNT											
REFOREST											
COUNT			47	238	5.1						
BLANKS			2								
100 %											
STAND SUMMARY											
SAMPLE			TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
TREES			/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DF			80	52.5	23.1	101	31.8	152.8	38,025	37,028	8,182
R ALDER			19	31.7	14.3	45	9.3	35.4	3,044	2,942	951
PO CEDAR			1	5.7	12.0	28	1.3	4.5	171	171	74
BL MAPLE			3	1.7	19.5	28	0.8	3.4	231	200	68
TOTAL			103	91.6	19.8	76	44.1	196.1	41,471	40,342	9,276
CONFIDENCE LIMITS OF THE SAMPLE											
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR											
CL	68.1	COEFF		SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15	
DF			65.9	7.4	881	951	1,020				
R ALDER			50.9	12.0	102	116	130				
PO CEDAR											
BL MAPLE			74.4	51.5	125	257	389				
TOTAL			84.8	8.3	703	767	831		287	72	32
CL	68.1	COEFF		TREES/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15	
DF			92.6	10.8	47	53	58				
R ALDER			170.0	19.9	25	32	38				
PO CEDAR			442.1	51.7	3	6	9				
BL MAPLE			449.7	52.6	1	2	3				
TOTAL			66.3	7.7	84	92	99		175	44	19
CL	68.1	COEFF		BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15	
DF			94.1	11.0	136	153	170				
R ALDER			163.7	19.1	29	35	42				
PO CEDAR			442.1	51.7	2	4	7				
BL MAPLE			418.2	48.9	2	3	5				
TOTAL			66.5	7.8	181	196	211		177	44	20
CL	68.1	COEFF		NET BF/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5		10	15	
DF			97.7	11.4	32,799	37,028	41,258				
R ALDER			154.3	18.0	2,412	2,942	3,473				
PO CEDAR			442.1	51.7	83	171	260				
BL MAPLE			419.8	49.1	102	200	298				
TOTAL			84.3	9.9	36,363	40,342	44,321		284	71	32

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																	
<div>T11S R08W S22 TyA156.00 T11S R08W S22 TyA257.00</div>				Project: HOTPLUNK				Acres 113.00				Page 1 Date 8/18/2016 Time 4:02:54PM									
Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre
									Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf	
					4-5	6-11	12-16		17+	12-20	21-30	31-35	36-99								
DF			CU														11	16		0.00	1.2
DF			2M	74	2.5	28,260	27,549	3,113			35	65		0		100	40	16	436	2.28	63.2
DF			3M	22	3.3	8,473	8,194	926		57	22	21	0	6	12	82	37	10	150	1.03	54.6
DF			4M	4	.6	1,292	1,285	145	8	33	41	18	22	67	6	4	25	8	63	0.66	20.4
DF Totals				92	2.6	38,025	37,028	4,184	0	14	32	54	1	4	3	92	36	13	266	1.62	139.4
RA			CU														15	8		0.00	7.6
RA			CR	100	3.3	3,044	2,942	332		94	6		14	12		73	31	8	74	0.77	39.7
RA Totals				7	3.3	3,044	2,942	332		94	6		14	12		73	28	8	62	0.71	47.3
BM			CR	100	13.4	231	200	23		25		75	34	25		41	25	11	121	1.60	1.7
BM Totals				0	13.4	231	200	23		25		75	34	25		41	25	11	121	1.60	1.7
PO			4M	100		171	171	19		100				100			27	6	30	0.48	5.7
PO Totals				0		171	171	19		100				100			27	6	30	0.48	5.7
Totals					2.7	41,471	40,342	4,559	0	20	30	50	2	5	3	90	34	11	208	1.41	194.1

TC		PSTNDSUM		Stand Table Summary										Page		1	
														Date:		8/18/2016	
<div>T11S R08W S22 TyA156.00</div> <div>T11S R08W S22 TyA257.00</div>				Project		HOTPLUNK						Time:		4:02:54PM			
				Acres		113.00						Grown Year:					
S Sp	T	Tot			Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals				
		Sample DBH	FF 16'	Av Ht				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF		
DF		12	1	87	31	1.701	1.34	1.70	11.0	30.0		19	51	21	6		
DF		13	2	92	75	2.899	2.67	2.90	26.0	85.0		75	246	85	28		
DF		15	1	87	107	1.089	1.34	2.18	25.5	100.0		56	218	63	25		
DF		16	2	87	92	1.914	2.67	3.83	25.3	85.0		97	325	109	37		
DF		17	2	89	108	3.153	4.97	6.31	33.7	110.0		213	694	240	78		
DF		18	3	90	113	3.568	6.31	7.14	37.8	120.4		270	860	305	97		
DF		19	2	88	160	1.940	3.82	5.82	37.5	160.5		218	934	246	106		
DF		20	3	88	143	2.890	6.31	8.67	39.2	170.9		340	1,482	385	167		
DF		22	11	88	147	7.743	20.44	22.72	48.6	213.5		1,105	4,851	1,248	548		
DF		23	3	90	191	1.389	4.01	4.17	64.8	350.0		270	1,458	305	165		
DF		24	12	87	149	8.028	25.22	24.08	57.5	254.3		1,386	6,125	1,566	692		
DF		25	2	90	195	.784	2.67	2.35	80.8	463.3		190	1,089	215	123		
DF		26	10	87	147	5.804	21.40	16.38	68.2	312.5		1,118	5,119	1,263	578		
DF		27	4	89	150	1.922	7.64	6.10	70.4	314.3		429	1,918	485	217		
DF		28	4	85	164	2.056	8.79	6.48	79.7	384.0		517	2,488	584	281		
DF		30	6	87	150	2.101	10.31	6.30	91.6	426.6		577	2,689	652	304		
DF		31	1	77	119	.255	1.34	.76	77.0	273.3		59	209	67	24		
DF		32	5	86	154	1.813	10.13	5.88	98.1	469.7		577	2,764	652	312		
DF		34	1	87	158	.394	2.48	1.18	119.7	596.7		141	705	160	80		
DF		35	2	88	231	.400	2.67	1.20	152.0	943.3		182	1,132	206	128		
DF		40	2	85	148	.438	3.82	1.31	155.9	732.4		205	962	231	109		
DF		42	1	84	165	.258	2.48	.77	180.0	916.7		139	710	158	80		
DF		Totals	80	88	136	52.538	152.83	138.24	59.2	267.9		8,182	37,028	9,246	4,184		
RA		11	1	87	35	6.228	4.11	6.23	11.0	30.0		69	187	77	21		
RA		12	3	87	49	6.100	4.79	4.07	21.0	60.0		85	244	97	28		
RA		13	2	87	96	3.465	3.19	6.93	18.0	60.0		125	416	141	47		
RA		14	2	87	66	2.988	3.19	2.99	27.5	75.0		82	224	93	25		
RA		15	3	87	89	3.904	4.79	6.51	27.0	102.0		176	664	199	75		
RA		16	3	87	82	3.431	4.79	5.72	29.2	96.0		167	549	189	62		
RA		17	2	87	77	2.026	3.19	3.04	28.0	83.3		85	253	96	29		
RA		18	1	86	75	.904	1.60	.90	53.0	170.0		48	154	54	17		
RA		20	2	87	49	2.616	5.71	3.35	34.3	75.3		115	252	130	28		
RA		Totals	19	87	64	31.662	35.37	39.73	23.9	74.1		951	2,942	1,075	332		
BM		13	1	86	36	1.247	1.15	1.25	16.0	40.0		20	50	23	6		
BM		32	2	87	47	.412	2.30	.41	116.0	365.0		48	150	54	17		
BM		Totals	3	86	39	1.658	3.45	1.66	40.8	120.7		68	200	76	23		
PO		12	1	82	41	5.709	4.48	5.71	13.0	30.0		74	171	84	19		
PO		Totals	1	82	41	5.709	4.48	5.71	13.0	30.0		74	171	84	19		
Totals			103	87	103	91.567	196.13	185.34	50.0	217.7		9,276	40,342	10,482	4,559		

TC PLOGSTVB		Log Stock Table - MBF																	
<div>T11S R08W S22 TyA156.00</div> <div>T11S R08W S22 TyA257.00</div>				Project: HOTPLUNK Acres 113.00										Page 1 Date 8/18/2016 Time 4:02:55PM					
Spp	S T	So Gr rt de	Log Len	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	40+
DF		2M	24	7		7	.2					7							
DF		2M	38	11	10.5	10	.2					10							
DF		2M	40	3,176	2.5	3,096	74.0					294	498	1508	601	196			
DF		3M	20	5		5	.1					5							
DF		3M	21	2		2	.0			2									
DF		3M	22	8		8	.2					8							
DF		3M	24	5		5	.1				5								
DF		3M	27	2		2	.0			2									
DF		3M	28	3		3	.1		3										
DF		3M	29	36	1.4	35	.8					2		33					
DF		3M	32	96		96	2.3		35	18	3	7			32				
DF		3M	33	9		9	.2		9										
DF		3M	34	6		6	.1		6										
DF		3M	36	11		11	.3		5			6							
DF		3M	37	74		74	1.8		9	30				21	15				
DF		3M	39	28		28	.7				5			23					
DF		3M	40	674	4.6	643	15.4		18	116	264	24	104	45	53	20			
DF		4M	12	1		1	.0			1					10				
DF		4M	16	10		10	.2												
DF		4M	17	13	6.4	12	.3		10	1	1								
DF		4M	19	10		10	.2						10						
DF		4M	22	13		13	.3			2			11						
DF		4M	23	4		4	.1		4										
DF		4M	24	9		9	.2		6	3									
DF		4M	25	13		13	.3							13					
DF		4M	27	40		40	1.0		14		12		14						
DF		4M	28	3		3	.1		3										
DF		4M	29	16		16	.4							16					
DF		4M	32	5		5	.1		5										
DF		4M	33	4		4	.1		4										
DF		4M	40	6		6	.2		6										
DF		Totals		4,297	2.6	4,184	91.8		12	129	172	277	366	645	1658	711	215		
RA		CR	14	11	30.0	8	2.4						8						
RA		CR	16	4		4	1.3		4										
RA		CR	17	2		2	.7		2										
RA		CR	18	19	8.8	17	5.1		4					13					
RA		CR	20	15		15	4.6		10	5									

TC		PLOGSTVB																		Log Stock Table - MBF									
T11S R08W S22 TyA1 T11S R08W S22 TyA2		56.00 57.00		Project: Acres		HOTPLUNK 113.00														Page		2							
																				Date		8/18/2016							
																				Time		4:02:55PM							
Spp	S T	So rt	Gr de	Log Len	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	40+									
RA		CR	24		27		27	8.1			27																		
RA		CR	30		14		14	4.1			14																		
RA		CR	36		7		7	2.1			7																		
RA		CR	38		42	5.0	40	12.1			40																		
RA		CR	40		201	2.1	197	59.3			10	65	122																
RA		Totals			344	3.3	332	7.3			105	84	122		8	13													
BM		CR	20		10	21.4	8	33.9									8												
BM		CR	24		6		6	24.9			6																		
BM		CR	40		11	13.0	9	41.1							9														
BM		Totals			26	13.4	23	.5			6				9	8													
PO		4M	27		19		19	100.0			19																		
PO		Totals			19		19	.4			19																		
Total		All Species			4,686	2.7	4,559	100.0		12	253	261	399	366	653	1681	719	215											



- Legend**
- Boundaries**
- Timber Sale Boundary
 - - - State Forest Property Boundary
 - - - Right of Way (Posted)
- Roads**
- ==== Surfed Road
 - == == Unsurfaced Road
 - — New Construction
- Streams**
- — · Type F Stream
 - — ··· Type N Stream
 - Posted Stream Buffer
 - Stream Buffer
 - ▨ Reforestation Area
- Cable Corridors**
- — Cable Corridors
- Land Survey Monument**
- ◆ Land Survey Monument
- Parent Trees**
- 🌲 Parent Trees
- Green Tree Retention Area**
- ▩ Green Tree Retention Area

LOGGING PLAN

OF TIMBER SALE CONTRACT NO. 341-17-44
HOT PLUNKETT
PORTIONS OF SECTIONS 15, 21 & 22, T11S, R8W, W.M.,
LINCOLN COUNTY, OREGON

This product is for informational use and may not have been prepared for or be suitable for legal, engineering or survey purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of this information.

Scale
1:12,000



AREA	NET ACRES	
	TRACTOR	CABLE
1 (MC)	4	52
2 (MC)	37	20
TOTAL	41	72



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Date: 09/13/2016