



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Minus Phellinus  
Sale FG-341-2018-129-

District: Forest Grove

Date: March 22, 2018

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**Cost Summary**

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$2,255,733.96	\$2,032.60	\$2,257,766.56
		Project Work:	(\$33,540.00)
		Advertised Value:	\$2,224,226.56



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**Timber Description**

**Location:** Portions of Section 30, T2N, R5W, W.M. and Section 25, T2N, R6W, W.M., Washington County, Oregon.

**Stand Stocking:** 20%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	20	0	98
Maple	23	0	95

Volume by Grade	2S	3S & 4S 6"-11"	Camprun	Total
Douglas - Fir	2,386	1,418	0	3,804
Maple	0	0	10	10
<b>Total</b>	2,386	1,418	10	3,814

**Comments:** Pond Values Used: Local Pond Values, January 2018.

Western redcedar and Other Cedars Stumpage Price = Pond Value minus Logging Cost:  
 $\$1,181/\text{MBF} = \$1,430/\text{MBF} - \$249/\text{MBF}$

Western hemlock and Other Conifer Stumpage Price = Pond Value minus Logging Cost:  
 $\$475/\text{MBF} = \$724/\text{MBF} - \$249/\text{MBF}$

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

BRANDING AND PAINTING COST ALLOWANCE =  $\$2.00/\text{MBF}$

FUEL COST ALLOWANCE =  $\$3.00/\text{Gallon}$

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

Other Costs (with Profit & Risk to be added):  
Intermediate Supports: 10 @  $\$200$  ea. =  $\$2,000$

Other Costs (No Profit & Risk added):  
Machine Time to Block/Waterbar Roads, and Skid Trails:  
 $20 \text{ hours} \times \$150/\text{hour} = \$3,000$   
Machine Time to Pile Landing Slash and Sort Firewood:  
 $20 \text{ hours} \times \$150/\text{hour} = \$3,000$   
Recreation Trail Cleaning and Repair: 6750' @  $\$1.00/\text{foot} = \$6,750$   
Equipment Cleaning: 3 pieces x  $\$1,000/\text{Piece} = \$3,000$   
Slash Treatment: 30 acres x  $\$200/\text{acre} = \$6,000$   
Temporary Gate:  $\$1,000$   
TOTAL Other Costs (No Profit & Risk added) =  $\$22,750$

ROAD MAINTENANCE  
Move-in:  $\$4,000$   
General Road Maintenance: 4.94 miles x  $\$1,200/\text{mile} = \$12,480$   
TOTAL Road Maintenance:  $\$16,480/3,814 \text{ MBF} = \$4.32/\text{MBF}$



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**Logging Conditions**

**Combination#: 1**                      Douglas - Fir                      31.62%  
   Maple                      34.00%

**Logging System:** Cable: Medium Tower >40 - <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:** 7                      **bd. ft / load:** 4200

**cost / mbf:** \$204.08

**machines:** Log Loader (A)  
Stroke Delimber (A)  
Tower Yarder (Medium)

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**Combination#: 2**                      Douglas - Fir                      68.38%  
   Maple                      66.00%

**Logging System:** Shovel                      **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:** 9                      **bd. ft / load:** 4200

**cost / mbf:** \$83.91

**machines:** Stroke Delimber (B)

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"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Minus Phellinus Sale FG-341-2018-129-

**District: Forest Grove**

**Date: March 22, 2018**

## Logging Costs

<b>Operating Seasons:</b> 1.00	<b>Profit Risk:</b> 10%
<b>Project Costs:</b> \$33,540.00	<b>Other Costs (P/R):</b> \$2,000.00
<b>Slash Disposal:</b> \$0.00	<b>Other Costs:</b> \$22,750.00

**Miles of Road**

**Road Maintenance:** \$4.32

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	4.5
Maple	\$0.00	2.0	3.5



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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
<b>Douglas - Fir</b>									
\$121.91	\$4.41	\$1.15	\$88.40	\$0.52	\$21.64	\$0.00	\$7.00	\$5.96	\$250.99
<b>Maple</b>									
\$124.77	\$4.54	\$1.15	\$117.00	\$0.52	\$24.80	\$0.00	\$7.00	\$5.96	\$285.74

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$843.98	\$592.99	\$0.00
Maple	\$0.00	\$489.00	\$203.26	\$0.00



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**Summary**

**Amortized**

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Maple	0	\$0.00	\$0.00

**Unamortized**

Specie	MBF	Value	Total
Douglas - Fir	3,804	\$592.99	\$2,255,733.96
Maple	10	\$203.26	\$2,032.60

**Gross Timber Sale Value**

**Recovery:** \$2,257,766.56

**Prepared By:** Eric Foucht

**Phone:** 503-359-7473

**PROJECT COST SUMMARY SHEET**

Work Order Contract: Minus Phellinus

Contract Number: 341-18-129

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**PROJECT NO. 1: ROAD CONSTRUCTION AND IMPROVEMENT**

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**CONSTRUCTION**

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
<u>H to I</u>	<u>14+85</u>	<u>\$8,609.46</u>
	14+85 stations	
	0.28 miles	

**SUBTOTAL CONSTRUCTION = \$8,609.46**

**IMPROVEMENTS**

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>
A to B	53+00	\$4,157.66
B to C	13+25	\$1,004.30
D to E	9+95	\$540.20
F to G	3+85	\$295.60
	80+05 stations	
	1.52 miles	

**SUBTOTAL IMPROVEMENTS = \$5,997.76**

**TOTAL PROJECT NO. 1 COST = \$14,607.22**

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**PROJECT NO. 2: SURFACING**

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<u>Road Segment</u>	<u>Rock Amount</u>	<u>Rock Type</u>	<u>Cost</u>
A to B	48 cy	1 1/2" - 0	\$192.96
	601 cy	3" - 0	\$2,848.74
B to C	280 cy	3" - 0	\$1,170.40
	40 cy	36" Boulders	\$159.20
D to E	150 cy	3" - 0	\$637.50
F to G	150 cy	3" - 0	\$645.00
H to I	48 cy	1 1/2" - 0	\$211.20
	1207 cy	3" - 0	\$6,179.84
	80 cy	Shot Rock	\$364.80
<u>Total</u>	96 cy	1 1/2" - 0	
	2388 cy	3" - 0	
	80 cy	Shot Rock	
	40 cy	36" Bolders	

**TOTAL PROJECT NO. 2 COST = \$12,409.64**

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**PROJECT NO. 3 GRASS SEED, FERTILIZE, & MULCH**

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**TOTAL PROJECT NO. 3 COST = \$375.38**

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**MOVE-IN & EQUIPMENT CLEANING (includes within area move)**

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Grader	\$741.54
Loader	\$636.53
Roller (smooth/grid) & Compactor	\$481.64
Excavator - Equipment Cleaning	\$1,756.28
Dozer - Equipment Cleaning	\$1,800.86
Dump Trucks	\$586.95
Water Truck	\$143.96

**TOTAL MOVE-IN & EQUIPMENT CLEANING COST = \$6,147.76**

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**TOTAL COST \$33,540.00**

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# SUMMARY OF CONSTRUCTION COST

Work Order Contract: Minus Phellinus Contract Number: 341-18-129  
Road Segment: A to B Improvement: 53+00 stations  
1.00 miles

## PROJECT NO. 1

### EXCAVATION

Clean or construct ditch	7.40	sta @	\$60.00	per sta =	\$444.00
Haul waste material	53.43	cy @	\$1.43	per cy =	\$76.40
Shape and compact waste material	53.43	cy @	\$0.30	per cy =	\$16.03
Clean culvert inlet & outlet	8	ea @	\$25.00	per ea =	\$200.00
Haul waste material	10.40	cy @	\$1.43	per cy =	\$14.87
Shape and compact waste material	10.40	cy @	\$0.30	per cy =	\$3.12
Construct Settling Ponds	9	ea @	\$25.00	per ea =	\$225.00
Haul waste material	11.70	cy @	\$1.43	per cy =	\$16.73
Shape and compact waste material	11.70	cy @	\$0.30	per cy =	\$3.51
Grade, ditch, & roll	53.00	sta @	\$36.00	per sta =	\$1,908.00

**TOTAL EXCAVATION COSTS = \$2,907.66**

### CULVERTS - MATERIALS & INSTALLATION

#### Culverts

60 LF of 18" \$1,200.00

#### Culvert Markers

5 markers \$50.00

**TOTAL CULVERT COSTS = \$1,250.00**

**PROJECT NO. 1 TOTAL COST = \$4,157.66**

## PROJECT NO. 2:

SURFACING	6 " deep =	31 cy/sta				
Surfacing 0+00 to 15+00	465	cy of	3" - 0	@	\$4.74	per cy = \$2,204.10
Spot Rock 15+00 to 53+00	100	cy of	3" - 0	@	\$4.74	per cy = \$474.00
Junction	36	cy of	3" - 0	@	\$4.74	per cy = \$170.64
Culvert bedding and backfill	48	cy of	1 1/2" - 0	@	\$4.02	per cy = \$192.96
Rock Total =	649					
	48	cy of	1 1/2" - 0		\$4.02	per cy = \$192.96
	601	cy of	3" - 0		\$4.74	per cy = \$2,848.74

**PROJECT NO. 2 TOTAL COST = \$3,041.70**

## PROJECT NO. 3:

Grass seed & fertilizer	0.01	acres	@	\$425.00	per acre =	\$4.25
Mulch	6	bales	@	\$8.00	per bale =	\$48.00

**PROJECT NO. 3 TOTAL COST = \$52.25**

**TOTAL COST = \$7,251.61**

# SUMMARY OF CONSTRUCTION COST

Work Order Contract:	<u>Minus Phellinus</u>	Contract Number:	<u>341-18-129</u>
Road Segment:	<u>B to C</u>	Improvement:	<u>13+25</u> stations <u>0.25</u> miles

## PROJECT NO. 1

### EXCAVATION

Improve Landing	1	ea @	\$157.00	per ea =	\$157.00
Un-Block road and rebuild road prism (0+00)					
Move and reposition boulders	1	ea @	\$175.00	per ea =	\$175.00
Place fill	7	cy @	\$2.40	per cy =	\$16.80
Compact fill	7	cy @	\$0.50	per cy =	\$3.50
Place Boulders (1+55, 13+25)	1	hr @	\$175.00	per day =	\$175.00
Grade, ditch, & roll	13.25	sta @	\$36.00	per sta =	\$477.00

**PROJECT NO. 1 TOTAL COST = \$1,004.30**

## PROJECT NO. 2:

### SURFACING

	12 " deep				
Spot rock	100	cy of	3" - 0	@	\$4.18 per cy = \$418.00
Landing	180	cy of	3" - 0	@	\$4.18 per cy = \$752.40
Trail Boulders	40	cy of	36" Boulders	@	\$3.98 per cy = \$159.20
Rock Total =	320				
	280	cy of	3" - 0		\$4.18 per cy = \$1,170.40
	40	cy of	36" Boulders		\$3.98 per cy = \$159.20

**PROJECT NO. 2 TOTAL COST = \$1,329.60**

**TOTAL COST = \$2,333.90**

# SUMMARY OF CONSTRUCTION COST

Work Order Contract: Minus Phellinus Contract Number: 341-18-129  
 Road Segment: D to E Improvement: 9+95 stations  
0.19 miles

## PROJECT NO. 1

### EXCAVATION

Clean culvert inlet & outlet	1	ea @	\$25.00	per ea =	\$25.00
Improve Landing	1	ea @	\$157.00	per ea =	\$157.00
Grade, ditch, & roll	9.95	sta @	\$36.00	per sta =	\$358.20

**PROJECT NO. 1 TOTAL COST = \$540.20**

## PROJECT NO. 2:

### SURFACING

	12 " deep					
Landing	150	cy of	3" - 0	@	\$4.25	per cy = \$637.50
Rock Total =	150					
	150	cy of	3" - 0		\$4.25	per cy = \$637.50

**PROJECT NO. 2 TOTAL COST = \$637.50**

**TOTAL COST = \$1,177.70**

# SUMMARY OF CONSTRUCTION COST

Work Order Contract: Minus Phellinus Contract Number: 341-18-129  
 Road Segment: F to G Improvement: 3+85 stations  
0.07 miles

## PROJECT NO. 1

### EXCAVATION

Improve Landing	1	ea @	\$157.00	per ea =	\$157.00
Grade, ditch, & roll	3.85	sta @	\$36.00	per sta =	\$138.60

**PROJECT NO. 1 TOTAL COST = \$295.60**

## PROJECT NO. 2:

### SURFACING

	12 " deep				
Landing	150	cy of 3" - 0	@	\$4.30	per cy = \$645.00
Rock Total =	150				
	150	cy of 3" - 0		\$4.30	per cy = \$645.00

**PROJECT NO. 2 TOTAL COST = \$645.00**

**TOTAL COST = \$940.60**

# SUMMARY OF CONSTRUCTION COST

Work Order Contract:	Minus Phellinus	Contract Number:	341-18-129
Road Segment:	H to I	Construction:	14+85 stations 0.28 miles

## PROJECT NO. 1

### EXCAVATION

Clearing & grubbing (scatter)	1.37	ac @	\$1,078.00	per acre =	\$1,476.86
Balanced road construction	14.85	sta @	\$110.00	per sta =	\$1,633.50
Turnouts	1	ea @	\$66.00	per ea =	\$66.00
Turnarounds	1	ea @	\$82.50	per ea =	\$82.50
Landing	1	ea @	\$314.00	per ea =	\$314.00
Grade, ditch, & roll	14.85	sta @	\$36.00	per sta =	\$534.60

**TOTAL EXCAVATION COSTS = \$4,107.46**

### CULVERTS - MATERIALS & INSTALLATION

#### Culverts

120 LF of 18"	\$2,400.00
40 LF of 36"	\$2,000.00

#### Bands

1 ea of 36"	\$52.00
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#### Culvert Markers

5 markers	\$50.00
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**TOTAL CULVERT COSTS = \$4,502.00**

**PROJECT NO. 1 TOTAL COST = \$8,609.46**

## PROJECT NO. 2:

### SURFACING

12 " deep = 65 cy/sta

H to I	966	cy of	3" - 0	@	\$5.12	per cy =	\$4,945.92
Turnout	29	cy of	3" - 0	@	\$5.12	per cy =	\$148.48
Turnaround	20	cy of	3" - 0	@	\$5.12	per cy =	\$102.40
Junction	12	cy of	3" - 0	@	\$5.12	per cy =	\$61.44
Landing	180	cy of	3" - 0	@	\$5.12	per cy =	\$921.60
Culvert bedding and backfill	48	cy of	1 1/2" - 0	@	\$4.40	per cy =	\$211.20
Subgrade reinforcement	80	cy of	Jaw-Run	@	\$4.56	per cy =	\$364.80
Rock Total =	1,335						
	48	cy of	1 1/2" - 0		\$4.40	per cy =	\$211.20
	1,207	cy of	3" - 0		\$5.12	per cy =	\$6,179.84
	80	cy of	Jaw-Run		\$4.56	per cy =	\$364.80

**PROJECT NO. 2 TOTAL COST = \$6,755.84**

## PROJECT NO. 3:

Grass seed & fertilizer	0.69	acres	@	\$425.00	per acre =	\$291.13
Mulch	4	bales	@	\$8.00	per bale =	\$32.00

**PROJECT NO. 3 TOTAL COST = \$323.13**

**TOTAL COST = \$15,688.43**

**CRUISE REPORT**  
**Minus Phellinus**  
**341-18-129**

**1. LOCATION:** Portions of Section 30, T2N, R5W, W.M., and Section 25, T2N, R6W, Washington County, Oregon.

**2. CRUISE DESIGN:**

Pre-cruise evaluation indicated that the stand's average DBH is approximately 20 inches with a Coefficient of Variation of about 55%. For sales of this size and approximate value, ODF cruise standards require a Sampling Error of 9% at a 68% confidence level, and a minimum sample size of 100 graded trees. Statistical analysis indicated that 37 variable radius plots utilizing a 40 BAF prism would produce an adequate sample size.

**3. SAMPLING METHOD:**

The Timber Sale Area was sampled in March, 2018 with 39 variable radius grade plots laid out on a 5 chain x 5 chain grid. Plots falling on or near existing roads or no-harvest areas were offset 1 chain

**4. CRUISE RESULTS**

204 trees were measured and graded producing a cumulative Sampling Error of 8% on the Basal Area and 8.2% on the Board Foot Volume.

**5. TREE MEASUREMENT AND GRADING:**

All sample trees were measured and graded following Columbia River Log Scale grade rules and favored 40 foot segments.

a) **Height Standards:**

Total tree heights were measured to the nearest foot. Bole heights were calculated to a six inch top.

b) **Diameter Standards:** Diameters were measured outside bark at breast height to the nearest inch.

c) **Form Factors** were measured for each grade tree using a form point of 16 feet.

**5. DATA PROCESSING**

a) **Volumes and Statistics,** Cruise estimates and sampling statistics, were derived from Super Ace 2008 cruise software

b) **Deductions:** Two percent of the volume was subtracted from the computed volumes to account for hidden defect and breakage.

**6. Cruisers:**

The sale was cruised by ODF cruisers Kenton Burns, Mark Savage, and Adrian Torres.

Prepared by:

Erik Fouad 3/29/2018  
Name Date

Reviewed by:

Erik Macey 3/29/18  
Name Date

PROJECT STATISTICS										PAGE 1		
PROJECT MINUSP3										DATE 3/14/2018		
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt		
T2N	R5	30	00MC	00A1		99.00	39	204	S	W		
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL			39	204	5.2							
CRUISE			39	204	5.2	9,513	2.1					
DBH COUNT												
REFOREST												
COUNT												
BLANKS												
100 %												
STAND SUMMARY												
SAMPLE TREES			TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC	
DOUG FIR			201	94.9	20.0	125	46.1	206.2	39,597	39,199	9,034	9,034
NOB FIR-L			2	.9	20.9	123	0.4	2.1	355	355	86	86
BL MAPLE			1	.4	23.0	97	0.2	1.0	103	103	30	30
TOTAL			204	96.1	20.0	125	46.8	209.2	40,055	39,658	9,149	9,149
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			
DOUG FIR			57.0	4.0	523	545	567					
NOB FIR-L			48.1	45.1	258	470	682					
BL MAPLE												
TOTAL			57.0	4.0	521	543	564	130	32	14		
CL 68.1	COEFF		SAMPLE TREES - CF					# OF TREES REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15			
DOUG FIR			53.1	3.7	120	125	129					
NOB FIR-L			49.7	46.5	61	114	167					
BL MAPLE												
TOTAL			53.0	3.7	120	124	129	112	28	12		
CL 68.1	COEFF		TREES/ACRE					# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15			
DOUG FIR			67.5	10.8	85	95	105					
NOB FIR-L			463.3	74.1	0	1	1					
BL MAPLE			624.5	99.9	0	0	1					
TOTAL			67.0	10.7	86	96	106	179	45	20		
CL 68.1	COEFF		BASAL AREA/ACRE					# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15			
DOUG FIR			49.9	8.0	190	206	223					
NOB FIR-L			435.7	69.7	1	2	3					
BL MAPLE			624.5	99.9	0	1	2					
TOTAL			48.7	7.8	193	209	226	95	24	11		
CL 68.1	COEFF		NET BF/ACRE					# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15			
DOUG FIR			51.1	8.2	35,992	39,199	42,407					
NOB FIR-L			435.8	69.7	108	355	603					
BL MAPLE			624.5	99.9	0	103	206					
TOTAL			50.2	8.0	36,475	39,658	42,840	100	25	11		
CL 68.1	COEFF		NET CUFT FT/ACRE					# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH		5	10	15			
DOUG FIR			50.2	8.0	8,309	9,034	9,759					
NOB FIR-L			435.7	69.7	26	86	145					

PROJECT STATISTICS							PAGE	2		
TC PSTATS			PROJECT		MINUSP3		DATE	3/14/2018		
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
T2N	R5	30	00MC	00A1	99.00	39	204	S	W	
CL	68.1		COEFF		NET CUFT FT/ACRE		# OF PLOTS REQ.		INF. POP.	
SD:	1.00		VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
BL MAPLE			624.5	99.9	0	30	60			
TOTAL			49.1	7.9	8,431	9,149	9,868	96	24	11



TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																			
<div>TT2N RR5W S30 Ty00A199.00</div>				Project: MINUSP3														Page 1					
				Acres 99.00														Date 3/14/2018					
																		Time 3:58:49PM					
S Spp	So T	Gr rt	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			
					Def%	Gross	Net		4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99							
DF		CU															15	11		0.00	3.9		
DF		2M		62	1.2	24,887	24,586	2,434			66	34		1		99	40	15	340	1.86	72.3		
DF		3M		35	.7	13,528	13,440	1,331		98	1	1		0	0	7	92	39	8	108	0.69	124.4	
DF		4M		3	.6	1,181	1,174	116		100				34	64	3	21	6	25	0.35	47.7		
DF Totals				99	1.0	39,597	39,199	3,881		37	42	22		1	2	3	94	35	10	158	1.03	248.4	
BM		CU															5	21		0.00	.4		
BM		CR		100		103	103	10		17	83			17		83	35	10	145	1.21	.7		
BM Totals				0		103	103	10		17	83			17		83	25	14	97	1.13	1.1		
NF	L		2M	68		244	244	24			48	52				100	40	14	284	1.65	.9		
NF	L		3M	27		94	94	9		100						100	40	9	109	0.73	.9		
NF	L		4M	5		17	17	2		100				100			15	6	20	0.31	.9		
NF Totals				1		355	355	35		31	33	36		5		95	32	9	138	1.05	2.6		
Totals					1.0	40,055	39,658	3,926		37	42	22		1	2	3	94	35	10	157	1.03	252.0	

TC PLOGSTVB			Log Stock Table - MBF																	
TT2N RR5W S30 Ty00A1 99.00					Project: MINUSP3 Acres 99.00										Page 1 Date 3/14/2018 Time 3:58:49PM					
S T  Spp	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+	
DF		2M	16	5		5	.1									5				
DF		2M	20	8		8	.2										8			
DF		2M	40	2,451	1.2	2,422	62.4					562	744	876	196	44				
DF		3M	18	1		1	.0					1								
DF		3M	20	1		1	.0				1									
DF		3M	26	6	15.7	5	.1				1	4								
DF		3M	28	1		1	.0			1										
DF		3M	32	35		35	.9			35										
DF		3M	34	61		61	1.6			40	20									
DF		3M	36	36		36	.9			32	4									
DF		3M	38	50		50	1.3			44	5									
DF		3M	40	1,149		1,141	29.4			151	224	744	11		11					
DF		4M	12	8		8	.2			8										
DF		4M	14	10		10	.3			9	0									
DF		4M	16	10		10	.3			10										
DF		4M	18	7		7	.2			6	1									
DF		4M	20	5		5	.1			5										
DF		4M	22	15		15	.4			15										
DF		4M	24	7		7	.2			7										
DF		4M	26	11		11	.3			11										
DF		4M	28	21		21	.6			21										
DF		4M	30	19		19	.5			19										
DF		4M	32	4	20.0	3	.1			3										
DF		Totals		3,920	1.0	3,881	98.8			420	256	748	574	744	886	201	52			
BM		CR	30	2		2	17.2			2										
BM		CR	40	8		8	82.8					8								
BM		Totals		10		10	.3			2		8								
NF	L	2M	40	24		24	68.7					11		13						
NF	L	3M	40	9		9	26.5			5	4									
NF	L	4M	14	1		1	3.3			1										
NF	L	4M	16	1		1	1.6			1										
NF		Totals		35		35	.9			2	5	4	11	13						
Total		All Species		3,965		3,926	100.0			423	261	753	594	744	899	201	52			

TC		PSTNDSUM										Stand Table Summary										Page		1				
																						Date:		3/14/2018				
TT2N RR5W S30 Ty00A1 99.00					Project										MINUSP3										Time:		3:58:50PM	
					Acres										99.00										Grown Year:			
S SpC T				Tot					Average Log				Net		Net		T o t a l s											
	DBH	Sample Trees	FF 16'	Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Net Cu.Ft.	Net Bd.Ft.	Tons/ Acre	Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF													
DF	10	3	85	84	5.641	3.08	7.52	9.3	40.0	1.99	70	301	197	69	30													
DF	12	4	84	104	5.224	4.10	9.14	13.3	58.6	3.46	121	535	342	120	53													
DF	14	3	88	105	2.878	3.08	5.76	18.0	78.3	2.96	104	451	293	103	45													
DF	15	5	85	115	4.179	5.13	8.36	23.2	96.0	5.53	194	802	548	192	79													
DF	16	10	86	122	7.346	10.26	17.63	23.3	99.6	11.69	410	1,756	1,158	406	174													
DF	17	17	86	121	11.062	17.44	26.68	25.6	106.1	19.45	683	2,830	1,926	676	280													
DF	18	16	87	130	9.286	16.41	24.96	28.0	115.8	19.93	699	2,890	1,973	692	286													
DF	19	10	88	126	5.209	10.26	13.02	33.6	141.6	12.47	438	1,844	1,235	433	183													
DF	20	17	87	132	7.992	17.44	23.04	34.0	145.9	22.35	784	3,361	2,213	776	333													
DF	21	12	86	137	5.117	12.31	15.35	37.4	163.1	16.35	574	2,503	1,619	568	248													
DF	22	16	87	137	6.216	16.41	18.26	41.8	191.1	21.78	764	3,489	2,156	756	345													
DF	23	20	86	135	7.110	20.51	20.97	44.2	193.2	26.43	927	4,052	2,616	918	401													
DF	24	12	86	136	3.918	12.31	11.75	48.5	211.9	16.24	570	2,491	1,607	564	247													
DF	25	11	85	139	3.310	11.28	10.23	52.1	228.8	15.18	533	2,341	1,503	527	232													
DF	26	13	85	139	3.616	13.33	11.13	57.0	250.0	18.09	635	2,782	1,791	628	275													
DF	27	7	84	134	1.806	7.18	5.42	60.8	259.5	9.39	330	1,406	930	326	139													
DF	28	8	85	137	1.919	8.21	5.76	67.8	297.5	11.12	390	1,713	1,101	386	170													
DF	29	3	85	147	.671	3.08	2.24	68.3	317.0	4.35	153	709	431	151	70													
DF	30	3	84	142	.627	3.08	1.88	79.4	366.7	4.25	149	690	421	148	68													
DF	31	1	84	143	.196	1.03	.59	84.2	316.7	1.41	49	186	139	49	18													
DF	32	1	81	122	.184	1.03	.55	76.3	290.0	1.20	42	160	119	42	16													
DF	33	2	86	142	.345	2.05	1.04	97.6	476.7	2.88	101	494	285	100	49													
DF	34	2	84	137	.325	2.05	1.14	81.4	361.4	2.64	93	412	262	92	41													
DF	35	2	80	140	.307	2.05	.92	91.8	423.3	2.41	85	390	238	84	39													
DF	36	1	83	125	.145	1.03	.44	99.3	450.0	1.23	43	196	122	43	19													
DF	38	1	82	147	.130	1.03	.39	129.3	613.3	1.44	51	240	143	50	24													
DF	39	1	77	125	.124	1.03	.37	116.5	476.7	1.23	43	177	122	43	18													
DF	Totals	201	86	125	94.882	206.15	244.52	36.9	160.3	257.46	9,034	39,199	25,489	8,943	3,881													
NF L	18	1	87	126	.580	1.03	1.74	24.6	103.3	1.03	43	180	102	42	18													
NF L	26	1	85	117	.278	1.03	.83	51.2	210.0	1.03	43	175	102	42	17													
NF L	Totals	2	86	123	.859	2.05	2.58	33.2	137.9	2.05	86	355	203	85	35													
BM	23	1	80	97	.355	1.03	.71	42.2	145.0	.79	30	103	79	30	10													
BM	Totals	1	80	97	.355	1.03	.71	42.2	145.0	.79	30	103	79	30	10													
Totals		204	86	125	96.096	209.23	247.80	36.9	160.0	260.31	9,149	39,658	25,771	9,058	3,926													

**VOLUME SUMMARY**  
(Shown in MBF)  
**Minus Phellinus**  
**341-18-129**  
**March 2018**

**AREA 1: MC (92 ACRES)**

<b>SPECIES</b>		<b>2 SAW</b>	<b>3 SAW</b>	<b>4 SAW</b>	<b>CR</b>	<b>TOTAL</b>
Douglas-fir	Cruise Volume	2,264	1,238	108		3,610
	Hidden D&B (2%)	(45)	(25)	(2)		(72)
	<b>NET TOTAL</b>	2,219	1,213	106		3,538
	% of Total	63	34	3		
Bigleaf maple	Cruise Volume				10	10
	Hidden D&B (2%)				()	()
	<b>NET TOTAL</b>				10	10
	% of Total				100	

**AREA 2: PC-M (7 ACRES)**

<b>SPECIES</b>		<b>2 SAW</b>	<b>3 SAW</b>	<b>4 SAW</b>		<b>TOTAL</b>
Douglas-fir	Cruise Volume	170	93	8		271
	Hidden D&B (2%)	(3)	(2)	()		(5)
	<b>NET TOTAL</b>	167	91	8		266
	% of Total	63	34	3		

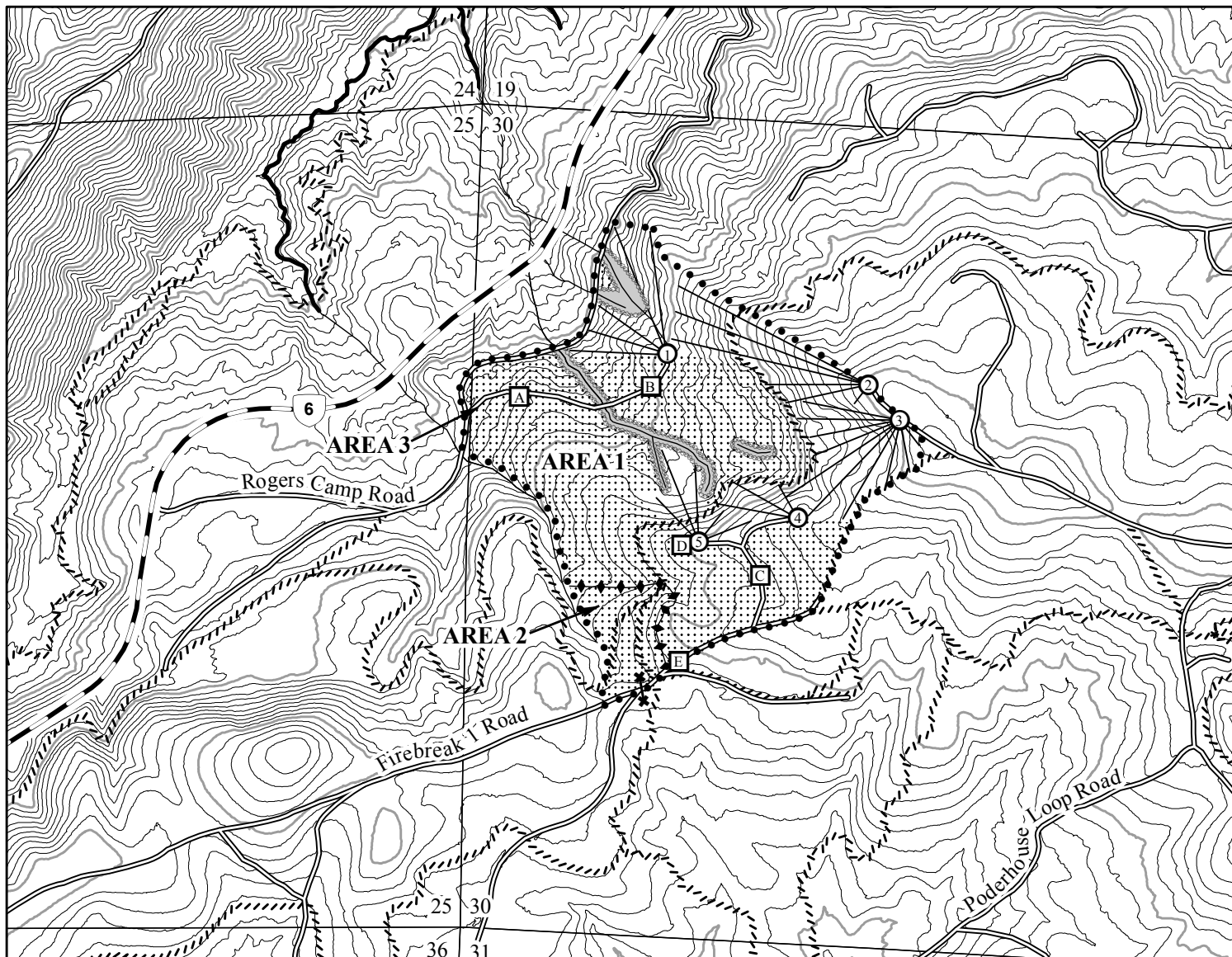
**SALE TOTAL**

<b>SPECIES</b>		<b>2 SAW</b>	<b>3 SAW</b>	<b>4 SAW</b>	<b>CR</b>	<b>TOTAL</b>
Douglas-fir		2,386	1,304	114		3,804
Bigleaf maple					10	10
<b>TOTAL</b>						<b>3,814</b>

**TIMBER SALE SUMMARY**  
**Minus Phellinus**  
**Contract No. 341-18-129**

1. **Location:** Portions of Section 30, T2N, R5W, W.M., and Section 25, T2N, R6W, Washington County, Oregon.
2. **Type of Sale:** This timber sale is 99 net acres of Modified Clearcut on two sale areas. The timber will be sold on a recovery basis at a sealed bid auction.
3. **Revenue Distribution:** 100% BOF, Washington County.
4. **Sale Acreage:** Acres are net of stream buffers and road prisms. Acreage was determined using ESRI ArcMap GIS software.
5. **Cruise:** The Timber Sale was cruised by ODF Cruisers in March of 2018. For more information see Cruise Report.
6. **Timber Description:** The Timber Sale Area consists of a well-stocked 70 year old Douglas-fir stand with minor amounts of noble fir and hardwoods. The stand has an average of 209 ft<sup>2</sup> of basal area (all species), an average Douglas-fir DBH of 20 inches, and an estimated average net Douglas-fir volume of approximately 38.4 MBF per acre.
7. **Topography and Logging Method:** Slopes within the sale areas range from 15% to 60%. The aspect is generally northwest. 66% of the sale area may be yarded with ground-based equipment. The remainder must be yarded with cable systems. Intermediate supports may be necessary to get sufficient lift to effectively yard some portions of the Timber Sale Area. The maximum cable corridor length is 1350' and the average length is 664 feet. Tractor skidding distances are generally less than 800'.
8. **Access:** All access to the Timber Sale Area is on surfaced all-weather roads. From Forest Grove travel northwest 7 miles on Highway 8 to its junction with Highway 6 and turn left. Continue west on Highway 6 for 9.5 miles to Beaverdam Road and turn left. Proceed approximately 1 mile to the Cedar road. Turn left and continue .7 miles to the Firebreak 1 Road. Turn right and continue .4 miles to the southwest corner of the Timber Sale Area. State Forest keys will be needed to gain access through gates on Rogers Road and Powderhouse Loop Road.
9. **Projects:**

Project No. 1: Road Construction & Improvement	\$14,607.22
Project No. 2: Surfacing	\$12,409.64
Project No. 3: Grass Seeding, Fertilize, Mulch	\$375.38
Move in and equipment cleaning:	\$6,147.78
Total Credit for all Projects	\$33,540
10. **Recreation Trails:** Recreation trails on each Sale Area shall be closed during harvest operations. The trail system in Area 2 shall not be closed longer than 21 days. At the conclusion of harvest operations on each Sale Area, all affected trails shall be cleared and restored to pre-sale condition.



## Legend

- Timber Sale Boundary
- ◆◆◆ Area Boundary
- Highway
- Surfaced Road
- //// Recreation Trail
- Type F Stream
- Type N Stream
- Stream Buffer Boundary
- Stream Buffer
- Tractor Yarding Area
- Cable Yarding Area
- Cable Landing
- Tractor Landing
- Section Line
- 20 Foot Contour
- 200 Foot Contour
- ✕✕ Blockage

## LOGGING PLAN

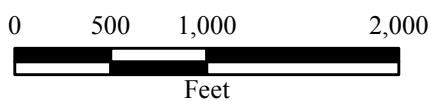
FOR TIMBER SALE CONTRACT 341-18 -129  
MINUS PHELLINUS  
PORTIONS OF SECTION 30, T2N, R5W, W.M.,  
AND SECTION 25, T2N, R6W., W.M.  
WASHINGTON COUNTY, OREGON

Forest Grove District GIS  
March, 2018

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



1:12,000  
1 inch = 1,000 feet



APPROXIMATE NET ACRES		
	TRACTOR	CABLE
AREA 1	58	34
AREA 2	7	0
TOTAL	65	34