Timber Sale Appraisal
Pothole Murphy

Sale TL-341-2023-W00972-01

District: Tillamook

Date: August 09, 2022

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$5,470,037.30	$38,266.84	$5,508,304.14
		Project Work:	($192,700.00)
		Advertised Value:	$5,315,604.14

Timber Sale Appraisal
Pothole Murphy
Sale TL-341-2023-W00972-01

District: Tillamook **Date: August 09, 2022**

Timber Description

Location: Section(s) 22, 23, 26, 27, 28 of T2S R7W W.M.

Stand Stocking: 20%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	20	0	100
Alder (Red)	13	0	100

Volume by Grade	2S	3S & 4S 6"-11"	8" - 9"	10" - 11"	12"+	6" - 7"	Total
Douglas - Fir	6,204	3,101	0	0	0	0	9,305
Alder (Red)	0	0	43	15	14	65	137
Total	6,204	3,101	43	15	14	65	9,442

Comments: Additional Costs – Pothole Murphy
Pond Values Used: August 2022
Region: Astoria, Forest Grove, and Tillamook
Western red cedar and other cedars stumpage price = $1,384/MBF - $351.81/MBF =1,032.19/MBF
Hemlock and other conifer stumpage price = $722/MBF - $351.81/MBF = 370.19/MBF
Pulp (Conifer and Hardwood) Price = $2.50/Ton
FUEL COST ALLOWANCE = $5.00/Gallon
HAULING COST ALLOWANCE ($120.00/hr x 10 hr.= $ 1,200.00) = $1,200/DAY

Other costs with profit and risk added:
BRAND AND PAINT ALLOWANCE = $2.00/ MBF
9,442 MBF x $2.00/MBF = $18,884
Heliport Construction: $500/unit x 3 unit = $1,500
Move-in Machine Cleaning: $1,000/machine x 2 machines x 2 season = $4,000
Landing 1 Non-Project #2 construction: 3+58 x $250 = $895
Landing 2 construction development: 30cy crushed rock = $250
Landing 13 Non-Project #1 construction: 4+70 x $350 = $1,645
Culvert istalation = $608
Road maintenance 22+00 x $22 = $484
Non-Project and Unsurfaced Road Blocking: 5 Closures @ $50/Closure = $250
Lift Trees Unit 2: 6 trees x $300 = $1,800
TOTAL Other Costs with profit and risk to be added = $30,316

Other Costs without Profit and Risk Added:
Slash piling and sorting (Cable Settings): $5/ac x 142 ac. = $710

Ditch Cleaning and Bank Sluff Removal:
Mobilization: two times – dump truck w/ tilt bed & small excavator: $900 x 2 = $1,800
Small excavator (Cat 312 or equivalent): 40 hours @ $135/ hour = $5,400
Dump truck: 40 hours @ $90/ hour = $3,600

TOTAL Other Costs without Profit and Risk added = $11,510

ODF Road Maintenance
Spot Rocking: 20cy/MMBF/mile x 9.442MMBF x $15/cy x 11 miles /9,442 MBF = $3.30/MBF
Interim Grading: $1,150/mile x 11 miles x 2 times/ 9,442 MBF = $2.68/MBF
Final Maintenance Grading: $1,500/mile x 11 miles/ 9,442 MBF = $1.75/MBF
Final Maintenance Compaction: $900/mile x 3 miles/9,442 MBF = $0.29/MBF
Total Road Maintenance: = $8.02/MBF

District: Tillamook **Date: August 09, 2022**

Logging Conditions

Combination#: 1

Douglas - Fir	33.83%
Alder (Red)	33.20%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Harvester Head Delimbing
yarding distance: Short (400 ft) **downhill yarding:** No
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 10 **bd. ft / load:** 4000
cost / mbf: $196.05
machines: Log Loader (A)
Forwarder
Harvester
Tower Yarder (Medium)

Combination#: 2

Douglas - Fir	8.95%
Alder (Red)	14.82%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Harvester Head Delimbing
yarding distance: Medium (800 ft) **downhill yarding:** No
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 7 **bd. ft / load:** 4000
cost / mbf: $280.07
machines: Log Loader (A)
Forwarder
Harvester
Tower Yarder (Medium)

Combination#: 3

Douglas - Fir	34.30%
Alder (Red)	31.80%

Logging System: Shovel **Process:** Harvester Head Delimbing
yarding distance: Short (400 ft) **downhill yarding:** No
tree size: Mature / Partial Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 14 **bd. ft / load:** 4000
cost / mbf: $95.43
machines: Forwarder
Harvester

Combination#: 4

Douglas - Fir	22.92%
Alder (Red)	20.18%

Logging System: Shovel **Process:** Harvester Head Delimbing
yarding distance: Medium (800 ft) **downhill yarding:** No
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 10 **bd. ft / load:** 4000
cost / mbf: $133.60
machines: Forwarder
Harvester

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District: Tillamook **Date: August 09, 2022**

Logging Costs

Operating Seasons:	2.00	**Profit Risk:**	10%
Project Costs:	$192,700.00	**Other Costs (P/R):**	$30,316.00
Slash Disposal:	$0.00	**Other Costs:**	$11,520.00

Miles of Road

Road Maintenance: $8.02

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	4.0
Alder (Red)	$0.00	2.0	3.3

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District: Tillamook

Date: August 09, 2022

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
$154.74	$8.02	$0.93	$150.00	$3.21	$31.69	$0.00	$2.00	$1.22	$351.81
Alder (Red)									
$163.90	$8.02	$0.93	$181.82	$3.21	$35.79	$0.00	$2.00	$1.22	$396.89

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$939.67	$587.86	$0.00
Alder (Red)	$0.00	$676.21	$279.32	$0.00

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District: Tillamook **Date: August 09, 2022**

Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	$0.00	$0.00
Alder (Red)	0	$0.00	$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	9,305	$587.86	$5,470,037.30
Alder (Red)	137	$279.32	$38,266.84

Gross Timber Sale Value

Recovery: $5,508,304.14

Prepared By: Nathan Atchison **Phone:** 503-815-7031

"STEWARDSHIP IN FORESTRY"

PROJECT SUMMARY SHEET

Sale: Pothole Murphy

CONSTRUCTION

Point	A to B	19+75	stations =	$25,757.86
Point	G to H	15+20	stations =	$21,489.75
Point	Q to R	3+40	stations =	$5,341.00
Point	S to T	10+25	stations =	$16,042.83
Point	U to V	13+00	stations =	$6,786.70
Point	W to X	9+60	stations =	$4,580.80
			SUBTOTAL CONSTRUCTION	**$79,998.94**

IMPROVEMENT

Point	A to B	15+60	stations =	$16,315.27
Point	C to D	109+50	stations =	$7,181.65
Point	E to F	30+95	stations =	$2,574.08
Point	I to J	15+60	stations =	$19,604.30
Point	K to L	2+40	stations =	$3,774.20
Point	M to N	4+20	stations =	$1,498.10
Point	O to P	81+00	stations =	$14,567.12
Point	Y to Z	2+90	stations =	$1,834.56
			SUBTOTAL IMPROVEMENT	**$67,349.28**

SPECIAL PROJECTS

Project No. 2			$14,200.00
Brush	21.5	miles of road	$23,650.00
		SUBTOTAL SPECIAL PROJECTS	**$37,850.00**

MOVE IN **$7,501.78**

GRAND TOTAL **$192,700.00**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **A to B**

Construction -	19+75	stations	Improvement -	15+60	stations	Reconstruction -	0+00	stations
	0.37	miles		0.30	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			
15+60		34+90	45%		Outslope	$336	=	$6,484.80	
								TOTAL	**$6,484.80**

IMPROVEMENT: EXCAVATION -

Road Earthwork	15.60	sta. @	$70.00	per sta. =	$1,092.00			
					TOTAL EXCAVATION	**$1,092.00**		

CULVERTS - MATERIALS & INSTALLATION

Culverts								
				30	LF of 24"	$930.00		
	30	LF of 30"	$1,230.00					
Culvert Stakes & Markers								
	2	markers	$16.00					
					TOTAL CULVERTS	**$2,176.00**		

ROCK

0+00	to	35+35	1,890	cy. of	Jaw-Run	@	$16.29	per c.y.=	$30,788.10	
								TOTAL ROCK		**$30,788.10**

SPECIAL PROJECTS

Grade and shape road -	35.35	stations @	$22.00	per station	$777.70	
Roll subgrade w/ vibratory roller prior to rocking -	35.35	stations @	$17.50	per station	$618.63	
Grass seed and fertilize -	0.36	acres @	$280.00	per acre	$100.80	
Mulching -	0.045	acres @	$780.00	per acre	$35.10	
				TOTAL SPECIAL PROJECTS		**$1,532.23**

GRAND TOTAL **$42,073.13**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **C to D**

Construction -			Improvement -			Reconstruction -		
0+00	stations		109+50	stations		0+00	stations	
0.00	miles		2.07	miles		0.00	miles	

CULVERTS - MATERIALS & INSTALLATION

		Culvert Stakes & Markers							
		7	markers		$56.00				
								TOTAL CULVERTS	**$56.00**

ROCK

Spot Rock	0+00 to 109+50	200	cy. of	Crushed	@	$10.75	per c.y.=	$2,150.00	
Corner Leveling	61+60	60	cy. of	Crushed	@	$10.84	per c.y.=	$650.40	
								TOTAL ROCK	**$2,800.40**

SPECIAL PROJECTS

Grade and shape road -	109.50	stations @	$22.00	per station	$2,409.00		
Roll subgrade w/ vibratory roller prior to rocking -	109.50	stations @	$17.50	per station	$1,916.25		
					TOTAL SPECIAL PROJECTS		**$4,325.25**

GRAND TOTAL **$7,181.65**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **E to F**

Construction -	0+00	stations	Improvement -	30+95	stations	Reconstruction -	0+00	stations
	0.00	miles		0.59	miles		0.00	miles

ROCK

Leveling	0+00 to 30+95	80	cy. of	Jaw-Run	@	$15.19	per c.y.=	$1,215.20		
								TOTAL ROCK		**$1,215.20**

SPECIAL PROJECTS

Construct waste area at station 19+45 -	2.00	hours @	$180.00	per hour	$360.00	
Construct loaded log truck turnaround at station 19+05 -	1.00	@	$100.00	each	$100.00	
Grade and shape road -	30.95	stations @	$11.00	per station	$340.45	
Roll subgrade w/ vibratory roller prior to rocking -	30.95	stations @	$17.50	per station	$541.63	
Grass seed and fertilize -	0.06	acres @	$280.00	per acre	$16.80	
				TOTAL SPECIAL PROJECTS		**$1,358.88**

GRAND TOTAL **$2,574.08**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **G to H**

Construction -	15+20	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.29	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		15+15	40%		Outslope	$303	=	$4,590.45	
								TOTAL	**$4,590.45**

CULVERTS - MATERIALS & INSTALLATION

Culverts								
					20	LF of 24"	$620.00	
Culvert Stakes & Markers								
			1	markers	$8.00			
							TOTAL CULVERTS	**$628.00**

ROCK

0+00	to	15+20	860	cy. of	Jaw-Run	@	$15.12	per c.y.=	$13,003.20	
Landing Rock		Point H	100	cy. of	Jaw-Run	@	$13.62	per c.y.=	$1,362.00	
									TOTAL ROCK	**$14,365.20**

SPECIAL PROJECTS

Construct landings at station 6+65 and Point H -	2.00	@	$370.00	each	$740.00	
Construct turnaround within 200ft of landing -	1.00	@	$100.00	each	$100.00	
Grade and shape road -	15.20	stations @	$22.00	per station	$334.40	
Roll subgrade w/ vibratory roller prior to rocking -	15.20	stations @	$17.50	per station	$266.00	
Remove large stumps -	1.00	lump sum @	$360.00		$360.00	
Grass seed and fertilize -	0.28	acres @	$280.00	per acre	$78.40	
Mulching -	0.035	acres @	$780.00	per acre	$27.30	
					TOTAL SPECIAL PROJECTS	**$1,906.10**

GRAND TOTAL **$21,489.75**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **I to J**

Construction -	0+00	stations	Improvement -	15+60	stations	Reconstruction -	0+00	stations
	0.00	miles		0.30	miles		0.00	miles

IMPROVEMENT: EXCAVATION -

Road Earthwork					15.60	sta. @	$70.00	per sta. =	$1,092.00	
								TOTAL	**EXCAVATION**	**$1,092.00**
ROCK										
0+00	to	15+60	870	cy. of	Jaw-Run	@	$16.69	per c.y.=	$14,520.30	
Landing Rock		Point J	140	cy. of	Jaw-Run	@	$15.19	per c.y.=	$2,126.60	
									TOTAL ROCK	**$16,646.90**

SPECIAL PROJECTS

Construct landings at stations 2+10, 9+45, and Point J -	3.00	@	$370.00	each	$1,110.00
Construct turnaround within 200ft of Point J -	1.00	@	$100.00	each	$100.00
Grade and shape road -	15.60	stations @	$22.00	per station	$343.20
Roll subgrade w/ vibratory roller prior to rocking -	15.60	stations @	$17.50	per station	$273.00
Grass seed and fertilize -	0.14	acres @	$280.00	per acre	$39.20
				TOTAL SPECIAL PROJECTS	**$1,865.40**

GRAND TOTAL **$19,604.30**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **K to L**

Construction -	0+00	stations	Improvement -	2+40	stations	Reconstruction -	0+00	stations
	0.00	miles		0.05	miles		0.00	miles

IMPROVEMENT: EXCAVATION -

Road Earthwork					2.40	sta. @	$150.00	per sta. =	$360.00	
								TOTAL	**EXCAVATION**	**$360.00**

ROCK

0+00 to	2+40	130	cy. of	Jaw-Run		@	$16.74	per c.y.=	$2,176.20	
Landing Rock	Point L	50	cy. of	Jaw-Run		@	$15.24	per c.y.=	$762.00	
									TOTAL ROCK	**$2,938.20**

SPECIAL PROJECTS

Construct landing at Point L -	1.00	@	$370.00	each	$370.00
Grade and shape road -	2.40	stations @	$22.00	per station	$52.80
Roll subgrade w/ vibratory roller prior to rocking -	2.40	stations @	$17.50	per station	$42.00
Grass seed and fertilize -	0.04	acres @	$280.00	per acre	$11.20
				TOTAL SPECIAL PROJECTS	**$476.00**

GRAND TOTAL **$3,774.20**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **M to N**

Construction -	0+00	stations	Improvement -	4+20	stations	Reconstruction -	0+00	stations
	0.00	miles		0.08	miles		0.00	miles

IMPROVEMENT: EXCAVATION -

Road Earthwork	4.20	sta. @	$70.00	per sta. =	$294.00	
				TOTAL EXCAVATION		**$294.00**

ROCK

0+00	to	1+00	60	cy. of	Jaw-Run	@	$16.93	per c.y.=	$1,015.80
								TOTAL ROCK	**$1,015.80**

SPECIAL PROJECTS

Grade and shape road -	4.20	stations @	$22.00	per station	$92.40
Roll subgrade w/ vibratory roller prior to rocking -	4.20	stations @	$17.50	per station	$73.50
Grass seed and fertilize -	0.08	acres @	$280.00	per acre	$22.40
				TOTAL SPECIAL PROJECTS	**$188.30**

GRAND TOTAL **$1,498.10**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **O to P**

Construction -	0+00	stations	Improvement -	81+00	stations	Reconstruction -	0+00	stations
	0.00	miles		1.53	miles		0.00	miles

IMPROVEMENT: CLEARING AND GRUBBING -

Widening	0.093	acres @	$860.00	per acre =	$79.98		
				TOTAL CLEARING AND GRUBBING			**$79.98**

IMPROVEMENT: EXCAVATION -

Widening	488	cy. @	$2.00	per c.y.=	$976.00		
				TOTAL EXCAVATION			**$976.00**

IMPROVEMENT: ENDHAUL -

Widening	70+50	to	78+60	488	cy. @	$3.14	per c.y.=	$1,532.32	
Spread & compact				488	cy. @	$0.50	per c.y.=	$244.00	
							TOTAL ENDHAUL		**$1,776.32**

CULVERTS - MATERIALS & INSTALLATION

Culverts				
	30	LF of 18"	$600.00	
Culvert Stakes & Markers				
	1	markers	$8.00	
			TOTAL CULVERTS	**$608.00**

ROCK

66+90 to	80+00	310	cy. of	Jaw-Run	@	$20.34	per c.y.=	$6,305.40	
Culvert Backfill	0+90	20	cy. of	Crushed	@	$8.38	per c.y.=	$167.60	
Rock Ditch Filter	51+10, 56+05	10	cy. of	Crushed	@	$5.11	per c.y.=	$51.10	
Spot Rock	0+00 to 81+00	150	cy. of	Crushed	@	$7.72	per c.y.=	$1,158.00	
							TOTAL ROCK		**$7,682.10**

SPECIAL PROJECTS

Construct waste area at station 21+95 -	1.00	hours @	$180.00	per hour	$180.00	
Grade and shape road -	81.00	stations @	$22.00	per station	$1,782.00	
Roll subgrade w/ vibratory roller prior to rocking -	81.00	stations @	$17.50	per station	$1,417.50	
Grass seed and fertilize -	0.18	acres @	$280.00	per acre	$50.40	
Mulching -	0.019	acres @	$780.00	per acre	$14.82	
				TOTAL SPECIAL PROJECTS		**$3,444.72**

GRAND TOTAL **$14,567.12**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **Q to R**

Construction -	3+40	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.06	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		3+40	20%		Outslope	$174	=		$591.60	
									TOTAL	**$591.60**

ROCK

0+00	to	3+40	180	cy. of	Jaw-Run	@	$18.71	per c.y.=	$3,367.80		
Landing Rock		Point R	50	cy. of	Jaw-Run	@	$17.21	per c.y.=	$860.50		
									TOTAL ROCK	**$4,228.30**	

SPECIAL PROJECTS

Construct landing at Point R -	1.00	@	$370.00	each	$370.00
Grade and shape road -	3.40	stations @	$22.00	per station	$74.80
Roll subgrade w/ vibratory roller prior to rocking -	3.40	stations @	$17.50	per station	$59.50
Grass seed and fertilize -	0.06	acres @	$280.00	per acre	$16.80
				TOTAL SPECIAL PROJECTS	**$521.10**

GRAND TOTAL **$5,341.00**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **S to T**

Construction -	10+25	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.19	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		10+25	40%		Outslope	$303	=		$3,105.75	
									TOTAL	**$3,105.75**

ROCK

0+00	to	10+25	570	cy. of	Jaw-Run	@	$19.20	per c.y.=	$10,944.00	
Landing Rock		Point T	50	cy. of	Jaw-Run	@	$17.70	per c.y.=	$885.00	
									TOTAL ROCK	**$11,829.00**

SPECIAL PROJECTS

Construct landing at Point T -	1.00	@	$370.00	each	$370.00
Construct turnaround within 200ft of landing -	1.00	@	$100.00	each	$100.00
Grade and shape road -	10.25	stations @	$22.00	per station	$225.50
Roll subgrade w/ vibratory roller prior to rocking -	10.25	stations @	$17.50	per station	$179.38
Remove large stumps -	1.00	lump sum @	$180.00		$180.00
Grass seed and fertilize -	0.19	acres @	$280.00	per acre	$53.20
				TOTAL SPECIAL PROJECTS	**$1,108.08**

GRAND TOTAL **$16,042.83**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **U to V**

Construction -	13+00	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.25	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		13+00	40%		Outslope	$303	=	$3,939.00	
								TOTAL	**$3,939.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts							20	LF of 24"	$620.00	
Culvert Stakes & Markers										
			1	markers		$8.00				
									TOTAL CULVERTS	**$628.00**

ROCK

0+00	to	1+00	60	cy. of	Jaw-Run	@	$19.26	per c.y.=	$1,155.60	
									TOTAL ROCK	**$1,155.60**

SPECIAL PROJECTS

Construct turnaround at Point V -	1.00	@	$100.00	each	$100.00	
Grade and shape road -	13.00	stations @	$22.00	per station	$286.00	
Roll subgrade w/ vibratory roller prior to rocking -	13.00	stations @	$17.50	per station	$227.50	
Remove large stumps -	1.00	lump sum @	$360.00		$360.00	
Grass seed and fertilize -	0.24	acres @	$280.00	per acre	$67.20	
Mulching -	0.030	acres @	$780.00	per acre	$23.40	
				TOTAL SPECIAL PROJECTS		**$1,064.10**

GRAND TOTAL **$6,786.70**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **W to X**

Construction -			Improvement -			Reconstruction -		
	9+60	stations		0+00	stations		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 -

Station	to	Station	Avg. Sideslope	Avg. Dist. To W.A. (mi.)	Outslope/Ditch	Cost per Station			
0+00		9+60	35%		Outslope	$239	=	$2,294.40	
								TOTAL	**$2,294.40**

ROCK

0+00	to	1+00	90	cy. of	Jaw-Run		@	$19.52	per c.y.=	$1,756.80	
										TOTAL ROCK	**$1,756.80**

SPECIAL PROJECTS

Construct turnaround at Point X -	1.00	@	$100.00	each	$100.00	
Grade and shape road -	9.60	stations @	$22.00	per station	$211.20	
Roll subgrade w/ vibratory roller prior to rocking -	9.60	stations @	$17.50	per station	$168.00	
Grass seed and fertilize -	0.18	acres @	$280.00	per acre	$50.40	
					TOTAL SPECIAL PROJECTS	**$529.60**

GRAND TOTAL **$4,580.80**

SUMMARY OF CONSTRUCTION COST

Sale: **Pothole Murphy** Road: **Y to Z**

Construction -	0+00	stations	Improvement -	2+90	stations	Reconstruction -	0+00	stations
	0.00	miles		0.05	miles		0.00	miles

IMPROVEMENT: ENDHAUL -									
Culvert Fill Removal	0+75	to	2+10	200	cy. @	$2.11	per c.y.=	$422.00	
Spread & compact				200	cy. @	$0.50	per c.y.=	$100.00	
							TOTAL ENDHAUL		**$522.00**
SPECIAL PROJECTS									
Construct Rolling Dip -				1.00	@	$180.00	each	$180.00	
Construct tank trap at 0+40 -				1.00	hours @	$180.00	per hour	$180.00	
Remove culverts at station 1+00 and 1+85 -				3.00	hours @	$165.00	per hour	$495.00	
Remove culverts from state lands				2.00	@	$422.50	total	$422.50	
Grass seed and fertilize -				0.05	acres @	$280.00	per acre	$14.00	
Mulching -				0.027	acres @	$780.00	per acre	$21.06	
							TOTAL SPECIAL PROJECTS		**$1,312.56**
							GRAND TOTAL		**$1,834.56**

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Jaw_run	Location:	Sec. 22, T2S, R7W, W.M.	
Sale:	**Pothole Murphy**		Road:	5490 c.y.
Swell:	1.40			
Shirinkage	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 @ adjacent to pit, place overburden in Waste Area, spread							$3,300.00
Drill & Shoot:	$3.25	/cu.yd.	x	3921	cu.yds.	=	$12,743.25
Load Crusher:	$1.00	/cu.yd.	x	4970	cu.yds.	=	$4,970.00
Crush Rock:	$3.75	/cu.yd.	x	4970	cu.yds.	=	$18,637.50
Load Dump Truck:	$1.00	/cu.yd.	x	5490	cu.yds.	=	$5,490.00
Oversize Reduction:	$6.00	/cu.yd.	x	785	cu.yds.	=	$4,710.00
					Subtotal		$49,850.75

Move In/Set-up Jaw	1	@	$ 950.00	=	$950.00
Move In and set up Drill and Compressor	1	@	$949.53	=	$949.53
Move in Roller and Compactor	1	@	$754.90	=	$754.90
Move in D-8	1	@	$1,135.83	=	$1,135.83
Move in Loader	1	@	$956.43	=	$956.43
Move in Excavator	1	@	$1,071.43	=	$1,071.43
Move in Trucks	4	@	$284.30	=	$1,137.20
Move in Water Truck	1	@	$284.30	=	$284.30
				Subtotal	$7,239.62

TOTAL PRODUCTION COSTS	$57,090.37

Base Cost= $10.40 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 0 3535 (Jaw-Run)	2.69	3.20	10.40	16.29	1890		$30,788.10
E to F Leveling (Jaw-Run)	1.59	3.20	10.40	15.19	80		$1,215.20
G to H 0 1520 (Jaw-Run)	1.52	3.20	10.40	15.12	860		$13,003.20
G to H Landing Rock (Jaw-Run)	1.52	1.70	10.40	13.62	100		$1,362.00
I to J 0 1560 (Jaw-Run)	3.09	3.20	10.40	16.69	870		$14,520.30
I to J Landing Rock (Jaw-Run)	3.09	1.70	10.40	15.19	140		$2,126.60
K to L 0 240 (Jaw-Run)	3.14	3.20	10.40	16.74	130		$2,176.20
K to L Landing Rock (Jaw-Run)	3.14	1.70	10.40	15.24	50		$762.00
M to N 0 100 (Jaw-Run)	3.33	3.20	10.40	16.93	60		$1,015.80
O to P 6690 8000 (Jaw-Run)	6.74	3.20	10.40	20.34	310		$6,305.40
Q to R 0 340 (Jaw-Run)	5.11	3.20	10.40	18.71	180		$3,367.80
Q to R Landing Rock (Jaw-Run)	5.11	1.70	10.40	17.21	50		$860.50
S to T 0 1025 (Jaw-Run)	5.60	3.20	10.40	19.20	570		$10,944.00
S to T Landing Rock (Jaw-Run)	5.60	1.70	10.40	17.70	50		$885.00
U to V 0 100 (Jaw-Run)	5.66	3.20	10.40	19.26	60		$1,155.60
W to X 0 100 (Jaw-Run)	5.92	3.20	10.40	19.52	90		$1,756.80
				Total C.Y.	5490	Sub Total	$92,244.50

TOTAL ROCKING COSTS	$92,244.50

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Pollard Stockpile	Location:	Sec. 11, T2S, R7W, W.M.
Sale:	**Pothole Murphy**	Road:	440 c.y.
Swell:	1.30	Stockpile:	c.y.
Shirinkage	1.16	Total Truck Loads:	440 c.y.
Drill Pct.:	0%	In Place Total:	338 c.y.

Load Dump Truck:	$1.00	/cu.yd.	x	440	cu.yds. =	$440.00
					Subtotal	$440.00
Move in Loader	1	@		$50.00	=	$50.00
					Subtotal	$50.00
					TOTAL PRODUCTION COSTS	$490.00

Base Cost= $1.11 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
C to D Spot Rock (Crushed)	6.44	3.20	1.11	10.75	200		$2,150.00
C to D Corner Leveling (Crushed)	6.53	3.20	1.11	10.84	60		$650.40
O to P Culvert Backfill (Crushed)	4.07	3.20	1.11	8.38	20		$167.60
O to P Spot Rock (Crushed)	3.41	3.20	1.11	7.72	150		$1,158.00
				Total C.Y.	440	Sub Total	$4,177.10
					TOTAL ROCKING COSTS		$4,177.10

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

Sale: **Pothole Murphy**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
32.2	Pavement	30
13.9	Main Lines	7
2.0	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	Graders	$925.48		$3.65	0.00	4.00	4	$14.60	$940.08
1	Excavators (Med.)	$978.28		$35.50	0.00	4.00	4	$142.00	$1,120.28
1	Excavators (Large)	$1,071.43	1	$44.80	0.00	4.00	4	$179.20	$1,250.63
1	Tractors (D6)	$1,066.49	2	$7.10	0.00	4.00	4	$28.40	$1,094.89
1	Tractor (D8)	$1,135.83	2	$15.10	0.00	4.00	4	$60.40	$1,196.23
2	Dump Truck (10 cy +)	$572.69		$2.85	0.00	0.00	0	$0.00	$572.69
1	Dump Truck (Off Hiway)	$1,042.68	1	$4.75	0.00	0.00	0	$0.00	$1,042.68
1	Water Truck (1500 Gal)	$284.30		$2.85	0.00	0.00	0	$0.00	$284.30
					TOTAL MOVE-IN COSTS:				$7,501.78

OREGON DEPARTMENT OF FORESTRY
CRUISE REPORT
Pothole Murphy

Type of Sale
Regeneration Harvest, Recovery

Legal Description
Section(s) 22, 23, 26, 27, 28 of T2S R7W. Tillamook County, W.M.

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

	ACRES	
	Gross	Net
Unit 1 (Modified Clearcut)	91	61
Unit 2 (Modified Clearcut)	137	112
Unit 3 (Modified Clearcut)	106	91
Total	334	264

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.

Cruising Procedures

A. Cruise Method

Timber sale units 1, 2 and 3 were cruised using variable plot sampling. All units were cruised by ODF Staff in July 2022. All conifers 8" DBH and greater containing 20 board feet and all hardwoods 10" DBH and greater containing 30 board feet were recorded on all plots. Species, DBH (to nearest inch), merchantable bole length (to nearest foot), form factor, and defect were recorded for all measure trees. Merchantable heights were recorded to 6" and 7" outside bark for conifers and hardwoods, respectively.

B. Plot size

Unit	BAF	Spacing
1	40.00	300 x 300
2	27.78	350 x 350
3	40.00	300 x 300

C. Grading System

All trees were graded according to Columbia River Log Scaling and Grading Rules. Log lengths favored 40' lengths.

Computation Procedure

Plot data was entered into SuperAce for computation of basal area, advertised volume, volume summary, log stock table, and stand table for each species and type.

Net sale acreage was used for volume calculation.

	Cruise Statistics (Board Foot Volumes)			
Unit	Acres	Number of Plots	SE (%)	CV (%)
1	61	25	8.9	43.6
2	112	40	6.9	43.6
3	91	41	5.2	33.3
Project Total	265	106	7.0	40.17

Hidden Defect and Breakage

A 2% reduction for conifers and a 2% reduction for hardwood volumes were applied for hidden defect and breakage.

Timber Description

Units 1, 2, and 3 are prescribed modified clearcuts. Unit 1 is a Douglas-fir dominated stand thinned in 1994 Steampot Thin timber sale. Unit 2 is comprised of Douglas-fir and red alder with minor elements of Big Leaf Maple. The west and eastern corners were thinned with Rock'n Murphy timber sale in 2003. Unit 3 is a Douglas-fir dominated stand which was thinned in 1993 Thin Murphy sale.

All three stands were burned in 1933, 1939, and 1945 Tillamook Burn.

Sale Unit	Age	Species	DBH	Merchantable Bole Height (feet)	Merchantable top (inches inside bark)
1	61	Douglas-fir	21.1	93	5
2	64	Douglas-fir	18.3	67	5
		Red alder	12.9	41	6
3	64	Douglas-fir	22.3	100	5
		red alder	15.2	48	6

Above date derived from Statistics (type) report using SuperAce 2008, developed by Atterbury consultants, Inc.

Cruiser /Dates

ODF Staff Cruised; July 2022.

Revenue Distribution

BOF – 100%
Tax Code: 901 (74%), 801 (26%)
Deed Numbers: 169

Attachments

Volume Summary Table
Stand Table (3)
Log Stock Tables (3)
Species, Sort, Grade Table (3)
Logging Plan (1)

Stand and Log Stock Tables Species Key

DF – Douglas-fir take
WH – western hemlock leave
RA – red alder take
BM- big leaf maple leave
OC – Other Conifer

T TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: PM

Date 8/23/2022

Time 3:55:41PM

T02S R07W S27 T0100

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt
02S	07W	27	UNIT 1	0100	61.00	25	140	S	W

T02S R07W S27 T0100

Spp	ST	Sort	Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log Ln Ft	Dia In	Bd Ft	CF/ Lf	Logs Per /Acre
DF		CO	2	69	1.3	34,181	33,747	2,059			40	60		0		100	40	16	401	2.07	84.1
DF		CO	3	18	.8	8,947	8,876	541		79	21		0	1	1	98	39	9	123	0.78	72.2
DF		CO	4	13	.8	6,253	6,203	378	14	17	40	29	9	36	26	29	28	9	99	0.65	62.9
DF	**Totals**			100	1.1	49,381	48,825	2,978	2	17	36	45	1	5	3	90	36	12	223	1.30	219.2
Type Totals					1.1	49,381	48,825	2,978	2	17	36	45	1	5	3	90	36	12	223	1.30	219.2

TC TSTNDSUM

Stand Table Summary

Project PM

T02S R07W S27 T0100 **T02S R07W S27 T0100**

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	07W	27	UNIT 1	0100	61.00	25	140

Page: 1
Date: 08/09/202
Time: 10:30:11AM

Spc	ST	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		12	2	81	82	7.156	5.62	10.73	13.9	46.7	4.27	150	501	260	91	31
DF		13	3	80	113	9.146	8.43	18.29	16.2	56.7	8.45	297	1,037	516	181	63
DF		14	1	81	107	2.629	2.81	5.26	18.1	60.0	2.71	95	315	165	58	19
DF		15	1	80	111	2.290	2.81	4.58	22.5	80.0	2.93	103	366	179	63	22
DF		17	4	84	127	7.132	11.24	17.83	26.5	106.0	13.45	472	1,890	821	288	115
DF		18	3	80	137	4.771	8.43	11.13	31.5	120.0	10.00	351	1,336	610	214	81
DF		19	6	83	133	8.564	16.86	18.55	36.5	148.5	19.32	678	2,755	1,179	414	168
DF		20	6	82	145	7.729	16.86	18.03	40.4	167.9	20.76	729	3,027	1,267	444	185
DF		21	6	83	136	7.010	16.86	18.69	40.3	163.7	21.45	752	3,061	1,308	459	187
DF		22	2	82	132	2.129	5.62	5.32	45.0	186.0	6.83	240	990	416	146	60
DF		23	3	80	166	2.922	8.43	8.77	47.3	207.8	11.81	414	1,821	721	253	111
DF		24	8	85	185	7.156	22.48	20.57	56.9	290.4	33.35	1,170	5,975	2,034	714	365
DF		25	4	87	164	3.298	11.24	9.07	63.4	331.8	16.39	575	3,009	1,000	351	184
DF		26	7	81	193	5.335	19.67	14.48	70.3	357.4	29.03	1,018	5,175	1,771	621	316
DF		27	5	84	229	3.534	14.05	10.60	83.0	506.0	25.06	879	5,365	1,529	536	327
DF		28	5	80	197	3.286	14.05	8.54	83.6	423.1	20.35	714	3,615	1,241	436	220
DF		29	2	85	141	1.225	5.62	3.68	73.1	331.7	7.66	269	1,219	467	164	74
DF		30	3	81	189	1.718	8.43	5.15	91.5	508.9	13.44	471	2,622	820	288	160
DF		31	2	85	185	1.072	5.62	3.22	103.1	615.0	9.45	332	1,978	577	202	121
DF		32	3	84	127	1.510	8.43	4.53	83.3	385.6	10.75	377	1,746	656	230	107
DF		33	1	83	126	.473	2.81	1.42	87.0	393.3	3.52	123	558	215	75	34
DF		37	1	85	108	.376	2.81	.75	142.7	615.0	3.06	107	463	187	66	28
DF		Totals	78	82	144	90.461	219.20	219.21	47.1	222.7	294.03	10,317	48,825	17,936	6,293	2,978
OC		21	1	87	170	.665	1.60									
OC		32	2	89	154	.573	3.20									
OC		Totals	3	88	163	1.238	4.80									
Totals			81	82	144	91.699	224.00	219.21	47.1	222.7	294.03	10317	48,825	17,936	6,293	2,978

TC TLOGSTVB

Log Stock Table - MBF

Project: PM

T02S R07W S27 T0100

T02S R07W S27 T0100

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	07W	27	UNIT 1	0100	61.00	25	140

Page 1
Date 8/9/2022
Time 10:30:10AM

Spp	ST	Sort	Grade	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		CO	2	30	8		8	.3							8					
DF		CO	2	40	2,077	1.3	2,050	68.8						341	361	919	406	23		
DF		CO	3	20	1		1	.0				1								
DF		CO	3	24	4		4	.1				4								
DF		CO	3	28	2		2	.1				2								
DF		CO	3	32	5		5	.2			5									
DF		CO	3	36	6	6.2	6	.2			3	3								
DF		CO	3	40	528	.8	524	17.6			74	144	193	42	32	39				
DF		CO	4	13	7		7	.2				3	4							
DF		CO	4	15	10		10	.3					3		7					
DF		CO	4	16	6	31.6	4	.1		2	2									
DF		CO	4	19	8		8	.3							8					
DF		CO	4	20	6		6	.2		2		3								
DF		CO	4	21	23		23	.8						13		11				
DF		CO	4	23	22		22	.7				4		6		12				
DF		CO	4	24	5		5	.2		2	2	1								
DF		CO	4	25	27		27	.9				8			8	11				
DF		CO	4	26	8		8	.3		4	3									
DF		CO	4	27	22		22	.7							9	13				
DF		CO	4	29	21		21	.7						10		12				
DF		CO	4	30	7		7	.2		7										
DF		CO	4	31	17		17	.6					7	10						
DF		CO	4	32	26	1.8	25	.8		5		8			13					
DF		CO	4	33	16		16	.6								16				
DF		CO	4	35	39		39	1.3								17	22			
DF		CO	4	36	19		19	.6		2						17				
DF		CO	4	37	49		49	1.6		9		9			15	16				
DF		CO	4	38	23	3.1	22	.8				7				15				
DF		CO	4	40	20		20	.7		20										
DF		Totals			3,012	1.1	2,978	100.0		53	90	197	206	422	461	1097	428	23		
Total All Species					3,012	1.1	2,978	100.0		53	90	197	206	422	461	1097	428	23		

T TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: PM

Page 1
Date 8/23/2022
Time 3:57:13PM

T02S R07W S22 T0100

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt
02S	07W	22	UNIT 2	0100	112.00	40	249	S	W

T02S R07W S22 T0100

Spp	ST	Sort	Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log Ln Ft	Dia In	Bd Ft	CF/ Lf	Logs Per /Acre
DF		CO	2	57	.6	12,510	12,440	1,393			47	53	1	1		98	40	16	403	2.27	30.8
DF		CO	3	33	1.0	7,137	7,065	791		92	6	2		0	3	97	40	8	108	0.84	65.2
DF		CO	4	10	1.7	2,203	2,164	242	62	32	6		24	23	14	40	26	6	33	0.42	65.2
DF	**Totals**			98	.8	21,850	21,669	2,427	6	33	29	31	3	3	2	92	34	9	134	1.03	161.3
RA		H	3	12		66	66	7			100					100	40	14	290	2.38	.2
RA		H	4	88		460	460	52		100			1	14	10	75	35	6	57	0.66	8.0
RA	**Totals**			2		526	526	59		88	12		1	12	9	78	35	7	64	0.71	8.3
BM		H	4	100	10.0	28	25	3		100				33	67		30	6	41	0.89	.6
BM	**Totals**			0	10.0	28	25	3		100				33	67		30	6	41	0.89	.6
Type Totals					.8	22,403	22,219	2,489	6	35	29	30	3	3	2	92	34	9	131	1.01	170.1

TC TSTNDSUM

Stand Table Summary

Project PM

T02S R07W S22 T0100

T02S R07W S22 T0100

Page: 1

Date: 08/09/202

Time: 10:35:30AM

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	07W	22	UNIT 2	0100	112.00	40	249

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		9	1	75	20	2.727	1.20	2.73	3.9	10.0	.30	11	27	34	12	3
DF		10	4	80	57	8.836	4.82	8.84	10.8	35.0	2.71	95	309	304	107	35
DF		11	2	78	86	3.651	2.41	5.48	11.3	43.3	1.76	62	237	197	69	27
DF		12	2	79	56	3.068	2.41	3.07	15.4	45.0	1.35	47	138	151	53	15
DF		13	4	84	87	5.229	4.82	10.46	13.5	47.5	4.01	141	497	449	158	56
DF		14	6	80	68	6.762	7.23	9.02	19.8	55.0	5.09	179	496	570	200	56
DF		15	9	79	87	8.836	10.84	14.73	22.8	70.0	9.55	335	1,031	1,070	375	115
DF		16	11	78	84	9.492	13.25	16.40	24.1	75.3	11.26	395	1,234	1,261	442	138
DF		17	5	80	87	3.822	6.02	7.64	25.3	83.0	5.51	193	634	617	216	71
DF		18	9	82	95	6.136	10.84	11.59	31.0	108.8	10.26	360	1,261	1,149	403	141
DF		19	5	83	104	3.060	6.02	7.34	30.5	110.0	6.37	224	808	714	250	90
DF		20	4	86	109	2.209	4.82	5.52	34.9	136.0	5.49	193	751	615	216	84
DF		21	6	84	96	3.006	7.23	6.01	39.7	140.8	6.80	239	847	762	267	95
DF		22	8	85	110	3.651	9.64	9.13	41.6	160.5	10.83	380	1,465	1,213	426	164
DF		23	5	84	112	2.088	6.02	5.01	47.3	184.2	6.76	237	923	757	266	103
DF		24	9	83	110	3.452	10.84	8.44	50.3	192.7	12.10	425	1,626	1,356	476	182
DF		25	5	83	96	1.767	6.02	3.53	57.5	204.0	5.79	203	721	649	228	81
DF		26	6	86	119	1.961	7.23	5.56	55.0	234.7	8.70	305	1,304	974	342	146
DF		27	2	84	129	.606	2.41	1.82	59.6	258.3	3.09	108	470	346	121	53
DF		28	8	86	120	2.254	9.64	5.92	69.9	302.4	11.79	414	1,789	1,320	463	200
DF		29	5	87	117	1.313	6.02	3.41	74.8	346.2	7.27	255	1,182	815	286	132
DF		30	2	84	128	.491	2.41	1.47	74.0	333.3	3.11	109	491	348	122	55
DF		31	5	84	125	1.149	6.02	3.22	82.9	366.4	7.60	267	1,179	851	299	132
DF		32	4	84	135	.863	4.82	2.37	93.4	445.5	6.32	222	1,057	708	248	118
DF		33	1	80	137	.203	1.20	.61	70.7	340.0	1.23	43	207	137	48	23
DF		34	1	82	117	.191	1.20	.57	86.8	363.3	1.42	50	208	159	56	23
DF		35	1	88	111	.180	1.20	.36	135.1	625.0	1.39	49	225	156	55	25
DF		36	2	88	122	.341	2.41	1.02	105.1	538.3	3.06	108	551	343	120	62
DF		Totals	132	81	87	87.345	159.04	161.26	35.0	134.4	160.93	5,647	21,669	18,024	6,324	2,427
RA		10	3	75	77	4.244	2.32	4.24	15.4	53.3	1.80	65	226	201	73	25
RA		11	1	68	64	1.169	.77	1.17	15.2	40.0	.49	18	47	55	20	5
RA		16	1	76	66	.553	.77	.55	38.5	90.0	.59	21	50	66	24	6
RA		17	2	61	75	.979	1.54	.98	50.8	75.0	1.37	50	73	153	56	8
RA		18	1	72	73	.437	.77	.87	28.1	65.0	.68	25	57	76	28	6
RA		25	1	79	80	.226	.77	.45	55.8	160.0	.69	25	72	78	28	8
RA		Totals	9	72	74	7.609	6.95	8.27	24.7	63.5	5.61	204	526	629	229	59
BM		10	1	49	17	1.455	.79									
BM		14	2	50	48	1.485	1.59									
BM		15	1	50	68	.647	.79									
BM		18	1	50	51	.449	.79									
BM		21	1	49	63	.330	.79	.33	22.0	50.0	.19	7	16	22	8	2
BM		23	1	67	36	.275	.79	.28	32.1	30.0	.23	9	8	26	10	1
BM		Totals	7	51	42	4.641	5.56	.61	26.6	40.9	0.43	16	25	48	18	3
CH		18	1	50	75	.393	.69									
CH		Totals	1	50	75	.393	.69									
OC		23	1	78	51	.241	.69									
OC		Totals	1	78	51	.241	.69									
Totals			150	79	84	100.229	172.93	170.14	34.5	130.6	166.97	5867	22,219	18,701	6,571	2,489

TC TLOGSTVB

Log Stock Table - MBF

Project: PM

T02S R07W S22 T0100

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	07W	22	UNIT 2	0100	112.00	40	249

T02S R07W S22 T0100

Page 1
Date 8/9/2022
Time 10:35:30AM

Spp	ST	Sort	Grade	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		CO	2	20	9		9	.4								9				
DF		CO	2	22	12		12	.5									12			
DF		CO	2	36	15		15	.6									15			
DF		CO	2	38	17		17	.7								17				
DF		CO	2	40	1,348	.6	1,340	55.2						199	309	522	246	64		
DF		CO	3	23	1		1	.1				1								
DF		CO	3	32	19	2.1	18	.8			18									
DF		CO	3	34	2		2	.1			2									
DF		CO	3	40	777	1.0	770	31.7			159	223	326	32	7	22				
DF		CO	4	12	1		1	.1		1	1									
DF		CO	4	13	1		1	.0		1										
DF		CO	4	14	5		5	.2		4	1	1								
DF		CO	4	15	1		1	.0			1									
DF		CO	4	16	17	17.7	14	.6		10	3	1								
DF		CO	4	17	6		6	.2				5	1							
DF		CO	4	18	10		10	.4		10										
DF		CO	4	19	8		8	.3		6	1		1							
DF		CO	4	20	12		12	.5		8	3	1								
DF		CO	4	21	6		6	.3		5		1								
DF		CO	4	23	2		2	.1		1	1									
DF		CO	4	24	12		12	.5		10	1									
DF		CO	4	25	4		4	.2		2	1	1								
DF		CO	4	26	9		9	.4		8		1								
DF		CO	4	27	8		8	.3		7	1									
DF		CO	4	28	3		3	.1		3										
DF		CO	4	30	10		10	.4		10										
DF		CO	4	31	5		5	.2		2	2	2								
DF		CO	4	32	2		2	.1		2										
DF		CO	4	33	2		2	.1				2								
DF		CO	4	34	13		13	.6			2	11								
DF		CO	4	35	10		10	.4			10									
DF		CO	4	36	12		12	.5		12										
DF		CO	4	37	36	3.5	35	1.4		20	8	7								
DF		CO	4	39	24		24	1.0		10				15						
DF		CO	4	40	26		26	1.1		20	6									
DF		Totals			2,447		2,427	97.5		149	222	258	329	245	316	570	273	64		
RA		H	3	40	7		7	12.5							7					
RA		H	4	12	0		0	.8			0									
RA		H	4	26	1		1	1.3			1									
RA		H	4	29	6		6	10.8			6									
RA		H	4	31	5		5	8.9			5									
RA		H	4	39	13		13	21.7			13									
RA		H	4	40	26		26	44.0			10	16								
RA		Totals			59		59	2.4			35	16			7					
BM		H	4	24	1	25.0	1	33.3			1									
BM		H	4	35	2		2	66.7			2									
BM		Totals			3	10.0	3	.1			3									
Total All Species					2,509		2,489	100.0		149	260	275	329	245	323	570	273	64		

T TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: PM

Page 1
Date 8/23/2022
Time 3:58:10PM

T02S R07W S23 T0100

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt
02S	07W	23	UNIT 3	0100	91.00	41	257	S	W

T02S R07W S23 T0100

Spp	ST	Sort	Grad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent Net Board Foot Volume: Log Scale Dia. 4-5	6-11	12-16	17+	Log Length 12-20	21-30	31-35	36-99	Average Log Ln Ft	Dia In	Bd Ft	CF/ Lf	Logs Per /Acre
DF		CO	2	70	1.3	32,255	31,842	2,898		0	55	45	1	1	1	97	39	15	371	2.07	85.8
DF		CO	3	24	.3	10,550	10,517	957		81	19			1	2	98	39	10	139	0.88	75.5
DF		CO	4	5	.6	2,523	2,508	228	54	46			18	44	30	8	25	6	32	0.40	77.2
DF		CO	3	1		82	82	7			100					100	40	14	290	2.11	.3
DF Totals				98	1.0	45,411	44,949	4,090	3	22	43	32	2	3	3	92	35	10	188	1.25	238.8
RA		H	2	12		110	110	10			100		100				18	13	102	1.77	1.1
RA		H	3	18		165	165	15		100				46		54	32	10	115	1.22	1.4
RA		H	4	70	5.7	657	620	56		100			9	4	22	65	31	7	60	0.67	10.4
RA Totals				2	4.0	932	895	81		88	12		18	11	16	55	30	8	69	0.79	12.9
WH		CO	2	66		112	112	10			100					100	40	15	360	2.32	.3
WH		CO	4	34		57	57	5	100				78			22	20	5	22	0.36	2.5
WH Totals				0		168	168	15	34		66		26			74	22	6	60	0.74	2.8
Type Totals					1.1	46,512	46,013	4,187	3	23	43	31	2	3	3	91	35	10	181	1.23	254.5

TC TSTNDSUM

Stand Table Summary

Project PM

T02S R07W S23 T0100

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	07W	23	UNIT 3	0100	91.00	41	257

T02S R07W S23 T0100

Date: 08/09/202

Time: 10:36:38AM

Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		10	1	85	53	3.268	1.78	3.27	9.3	30.0	.86	30	98	78	28	9
DF		13	1	83	73	1.934	1.78	3.87	12.1	45.0	1.33	47	174	121	43	16
DF		15	3	85	97	4.358	5.35	8.72	21.4	80.0	5.31	186	697	484	170	63
DF		16	3	86	114	3.830	5.35	8.94	22.5	92.9	5.73	201	830	522	183	76
DF		17	3	92	131	3.393	5.35	10.18	24.8	111.1	7.19	252	1,131	654	230	103
DF		18	4	85	117	4.035	7.13	10.09	28.7	111.0	8.24	289	1,120	750	263	102
DF		19	3	88	124	2.716	5.35	7.24	30.6	123.8	6.32	222	896	575	202	82
DF		20	12	85	120	9.804	21.39	26.15	34.1	132.8	25.43	892	3,472	2,315	812	316
DF		21	7	85	128	5.188	12.48	15.56	35.4	151.4	15.72	552	2,357	1,430	502	214
DF		22	16	85	131	10.804	28.52	32.41	38.9	168.3	35.94	1,261	5,456	3,271	1,148	496
DF		23	12	86	128	7.414	21.39	22.24	43.0	186.1	27.24	956	4,139	2,479	870	377
DF		24	10	85	126	5.674	17.83	16.45	48.0	201.0	22.50	789	3,308	2,047	718	301
DF		25	15	85	133	7.844	26.74	23.53	52.0	227.1	34.88	1,224	5,344	3,174	1,114	486
DF		26	8	85	130	3.868	14.26	11.12	58.1	254.3	18.43	647	2,828	1,677	588	257
DF		27	6	86	138	2.690	10.70	8.07	63.3	288.3	14.56	511	2,327	1,325	465	212
DF		28	7	83	132	2.918	12.48	8.75	62.4	269.5	15.58	546	2,359	1,417	497	215
DF		29	8	85	134	3.109	14.26	9.33	71.4	332.1	18.99	666	3,097	1,728	606	282
DF		30	1	86	131	.363	1.78	1.09	74.8	346.7	2.32	82	378	211	74	34
DF		31	4	80	139	1.360	7.13	4.08	81.2	357.5	9.45	332	1,459	860	302	133
DF		32	4	86	139	1.277	7.13	3.83	91.2	452.5	9.95	349	1,733	906	318	158
DF		33	1	85	129	.300	1.78	.90	92.4	430.0	2.37	83	387	216	76	35
DF		34	2	85	118	.565	3.57	1.70	90.5	415.0	4.37	153	704	398	140	64
DF		35	1	89	115	.267	1.78	.80	94.6	443.3	2.16	76	355	196	69	32
DF		36	1	88	103	.252	1.78	.50	136.2	595.0	1.96	69	300	178	63	27
DF		Totals	133	85	122	87.229	237.07	238.81	43.6	188.2	296.85	10,416	44,949	27,013	9,478	4,090
RA		10	1	70	21	2.146	1.17	2.15	5.9	20.0	.35	13	43	32	12	4
RA		14	3	78	90	3.285	3.51	4.38	25.1	75.0	3.02	110	329	275	100	30
RA		16	1	78	75	.838	1.17	1.68	18.6	60.0	.86	31	101	78	28	9
RA		17	1	79	68	.743	1.17	.74	44.2	110.0	.90	33	82	82	30	7
RA		19	3	81	68	1.784	3.51	2.97	31.7	82.0	2.60	94	244	236	86	22
RA		21	1	64	131	.487	1.17	.97	29.0	100.0	.78	28	97	71	26	9
RA		Totals	10	76	69	9.284	11.71	12.89	24.0	69.4	8.50	309	895	774	281	81
WH		9	1	78	30	2.208	.98	2.21	5.2	20.0	.37	11	44	33	10	4
WH		24	1	79	100	.311	.98	.62	57.2	200.0	1.14	36	124	103	32	11
WH		Totals	2	78	39	2.519	1.95	2.83	16.6	59.5	1.50	47	168	137	43	15
Totals			145	84	115	99.031	250.73	254.53	42.3	180.8	306.86	10772	46,013	27,924	9,802	4,187

TC TLOGSTVB

Log Stock Table - MBF

Project: PM

T02S R07W S23 T0100

T02S R07W S23 T0100

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	07W	23	UNIT 3	0100	91.00	41	257

Page 1
Date 8/9/2022
Time 10:36:37AM

Spp	ST	Sort	Grade	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		CO	2	20	25	3.8	24	.6								8	17			
DF		CO	2	22	14		14	.3									14			
DF		CO	2	26	16		16	.4									16			
DF		CO	2	32	36		36	.9									36			
DF		CO	2	40	2,845	1.3	2,808	68.7					11	464	693	1220	346	74		
DF		CO	3	25	3		3	.1				3								
DF		CO	3	29	2		2	.0			2									
DF		CO	3	32	15		15	.4				15								
DF		CO	3	36	7		7	.2			7									
DF		CO	3	38	16		16	.4					16							
DF		CO	3	40	917	.3	914	22.3			42	236	456	106	73					
DF		CO	4	12	1		1	.0		1										
DF		CO	4	13	2	32.4	1	.0		1	1									
DF		CO	4	14	1		1	.0		1		1								
DF		CO	4	15	8		8	.2		7		1								
DF		CO	4	16	11		11	.3		7	4									
DF		CO	4	17	8		8	.2		3	4	1								
DF		CO	4	19	5		5	.1		2	2									
DF		CO	4	20	7		7	.2		5	2									
DF		CO	4	21	7		7	.2		3	1	3								
DF		CO	4	22	3		3	.1			2	1								
DF		CO	4	23	11		11	.3		1	10									
DF		CO	4	24	9		9	.2		8		1								
DF		CO	4	25	12		12	.3		5	7									
DF		CO	4	26	10		10	.2		8	2									
DF		CO	4	27	18		18	.4		10	3	5								
DF		CO	4	28	3		3	.1		2	1									
DF		CO	4	29	19		19	.5		9	8	2								
DF		CO	4	30	8		8	.2		8										
DF		CO	4	31	17		17	.4		4	9	4								
DF		CO	4	32	25		25	.6		22	3									
DF		CO	4	33	11		11	.3		5	4	2								
DF		CO	4	34	4		4	.1		4										
DF		CO	4	35	13		13	.3		2	5	5								
DF		CO	4	36	13	6.9	12	.3		5	7									
DF		CO	4	37	6		6	.1		2		3								
DF		CO	3	40	7		7	.2							7					
DF		Totals			4,132	1.0	4,090	97.7		124	126	284	484	570	781	1302	346	74		
RA		H	2	16	4		4	4.4						4						
RA		H	2	20	6		6	8.0						6						
RA		H	3	26	7		7	8.4					7							
RA		H	3	40	8		8	10.0					8							
RA		H	4	16	5		5	6.1			5									
RA		H	4	26	2		2	2.8			2									
RA		H	4	34	13		13	15.6			3	10								
RA		H	4	38	6		6	7.3			6									
RA		H	4	40	34	10.0	30	37.4			14	17								
RA		Totals			85	4.0	81	1.9			30	27	15	10						
WH		CO	2	40	10		10	66.4							10					

TC TLOGSTVB

Log Stock Table - MBF

Project: **PM**

T02S R07W S23 T0100

T02S R07W S23 T0100

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees
02S	07W	23	UNIT 3	0100	91.00	41	257

Date **8/9/2022**

Time **10:36:37AM**

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+
WH		CO	4	18	4		4	26.2		4										
WH		CO	4	36	1		1	7.4		1										
WH		Totals			15		15	.4		5						10				
Total All Species					4,233	1.1	4,187	100.0		129		156		310		499		580		791		1302		346		74		

"STEWARDSHIP IN FORESTRY"

Pothole Murphy

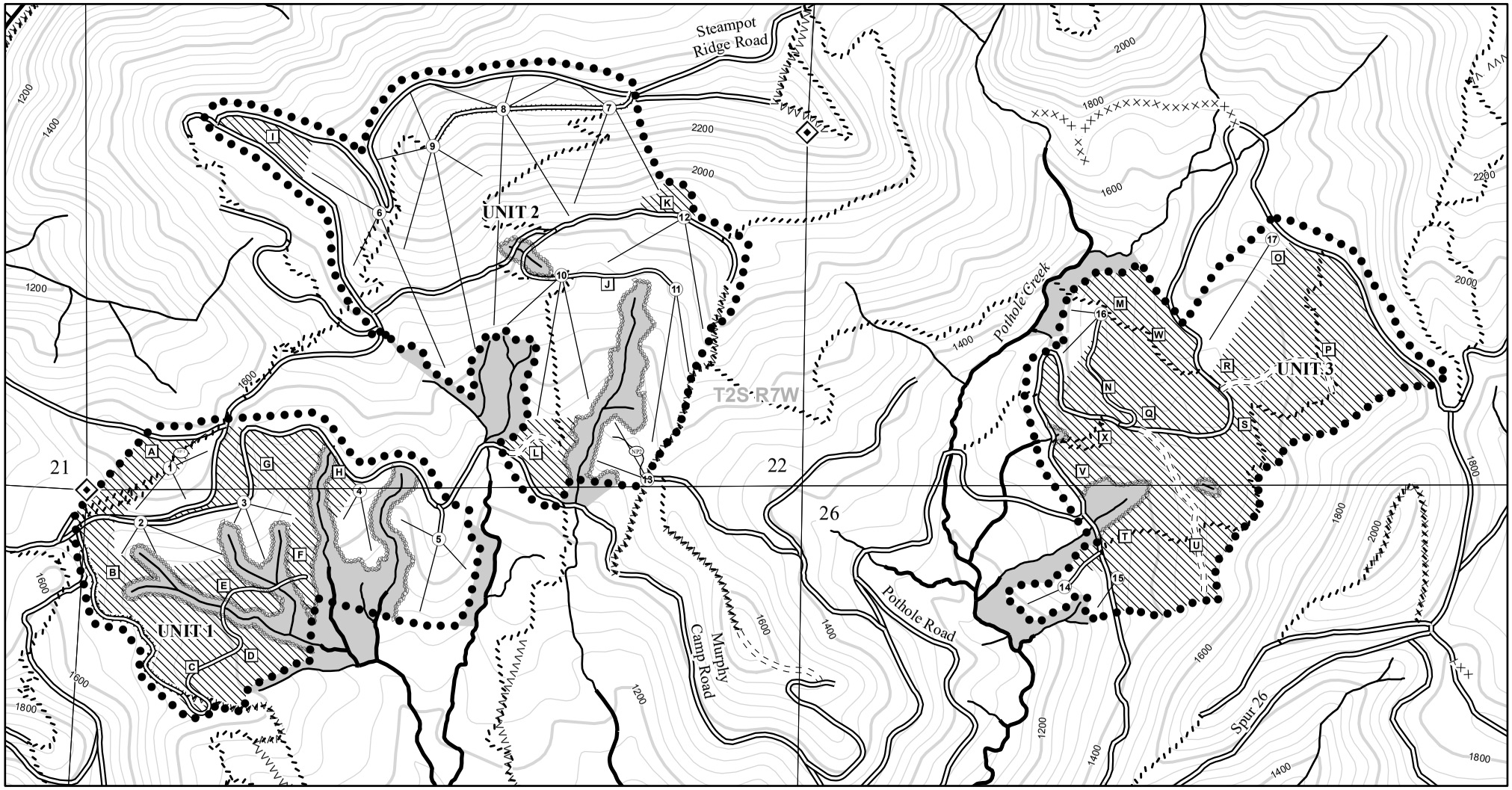
Volume Summary

Unit 1A-Modified Clearcut				
		61 acres		
SPECIES	Cruised Net MBF/ Acre	Cruised Net MBF	Hidden D&B	Net Sale MBF
Douglas-fir	48.8	2978	2%	2918
TOTAL	48.8	2978		2918

Unit 2-Modified Clearcut				
		112 acres		
SPECIES	Cruised Net MBF/ Acre	Cruised Net MBF	Hidden D&B	Net Sale MBF
Douglas-fir	21.67	2427	2%	2378
Red Alder	0.53	59	2%	58
TOTAL	22.2	2486		2436

Unit 3-Modified Clearcut				
		91 acres		
SPECIES	Cruised Net MBF/ Acre	Cruised Net MBF	Hidden D&B	Net Sale MBF
Douglas-fir	44.945	4090	2%	4008
Red Alder	0.9	81	2%	79
TOTAL	45.8	4171		4088

TOTAL SALE VOLUME	**264**	**acres**
SPECIES	Cruised Net (MBF)	Net Sale (MBF)
Douglas-fir	9495	9305
Red Alder	140	137
TOTAL	9635	9442



Legend

- Corners
- Cable Landing
- Tractor Landing
- Cable Logging
- Ground Based
- Recreation Trail
- Surfaced Road
- Unsurfaced Road
- Blocked Road
- Abandoned Road
- Type-F Stream
- Type-N Stream
- Sections
- 200' Contour
- 40' Contour
- Riparian Boundary
- Timber Sale Boundary
- Property Line

LOGGING PLAN

FOR TIMBER SALE CONTRACT TL-341-2023-W00972-01
POTHOLE MURPHY
PORTIONS OF SECTIONS 22, 23, 26, 27, & 28, T2S, R7W, W.M.
TILLAMOOK COUNTY, OREGON

Tillamook District GIS
AUGUST, 2022
This product is for informational use and may not be suitable for legal, engineering, or surveying purposes.

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NET ACRES

	GROUND	CABLE	TOTAL
UNIT 1	36	25	61
UNIT 2	8	104	112
UNIT 3	78	13	91
TOTAL	122	142	264

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

0 1,000 2,000 Feet