Timber Sale Appraisal
Tide Flats
Sale AT-341-2026-W00988-01

District: Astoria

Date: May 28, 2025

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$2,200,537.04	$75,819.15	$2,276,356.19
		Project Work:	($336,605.00)
		Advertised Value:	$1,939,751.19

Timber Sale Appraisal
Tide Flats
Sale AT-341-2026-W00988-01

District: Astoria **Date: May 28, 2025**

Timber Description

Location:

Stand Stocking: 80%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	29	0	97
Western Hemlock / Fir	20	0	95
Sitka Spruce	29	0	95
Alder (Red)	14	0	95

Volume by Grade	2S	3S & 4S 6"-11"	3S 12"+	8" - 9"	10" - 11"	12"+	6" - 7"	Total
Douglas - Fir	724	76	0	0	0	0	0	800
Western Hemlock / Fir	4,366	1,285	0	0	0	0	0	5,651
Sitka Spruce	18	41	160	0	0	0	0	219
Alder (Red)	0	0	0	84	4	137	40	265
Total	5,108	1,402	160	84	4	137	40	6,935

Comments: Expected Log Markets: Warrenton, Forest Grove, Tillamook, Clatskanie, Mist, Wauna, Willamina, Kalama, WA, Randle, WA, Longview, WA, and Chehalis, WA.

PRICING:

Western Red Cedar = pond value - (Hemlock) logging cost.

$948.81/MBF = $1,200/MBF - $251.19/MBF

Special and Peelable Cull = pond value - (Douglas-fir) logging cost.

$300.00/MBF = $521.09/MBF - $221.09/MBF

Chip and Saw short logs = pond value - (Douglas-fir) logging cost.

$100.00/MBF = $321.09/MBF - $221.09/MBF

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

Machine Washing for Invasive Weed Compliance (entering and leaving) = $2,000

Ditch Filters:
10 bales of straw @ $12/bale = $120.00
4 hours of labor (installation/removal) @ $50/hr = $200

Total P&R Cost = $2,320.00

Other Costs (No Profit & Risk added): None

SLASH PILING
(See attached appraisal. Includes move-in and pile materials) = $14,454

ROAD MAINTENANCE
(See attached Road Maintenance Cost Summary Sheet)
TOTAL Road Maintenance: $1.57/MBF = $10,863/6,935MBF

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District: Astoria **Date: May 28, 2025**

Logging Conditions

Combination#: 1

Douglas - Fir	47.00%
Western Hemlock / Fir	47.00%
Sitka Spruce	47.00%
Alder (Red)	47.00%

Logging System: Cable: Medium Tower >40 - <70 **Process:** Manual Falling/Delimbing

yarding distance: Medium (800 ft) **downhill yarding:** No

tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF

loads / day: 11 **bd. ft / load:** 4700

cost / mbf: $154.31

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

Combination#: 2

Douglas - Fir	53.00%
Western Hemlock / Fir	53.00%
Sitka Spruce	53.00%
Alder (Red)	53.00%

Logging System: Shovel **Process:** Feller Buncher

yarding distance: Medium (800 ft) **downhill yarding:** No

tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF

loads / day: 20 **bd. ft / load:** 5000

cost / mbf: $100.00

machines: Feller Buncher w/ Delimber

Timber Sale Appraisal
Tide Flats
Sale AT-341-2026-W00988-01

District: Astoria **Date: May 28, 2025**

Logging Costs

Operating Seasons:	3.00	**Profit Risk:**	12%
Project Costs:	$336,605.00	**Other Costs (P/R):**	$2,320.00
Slash Disposal:	$14,454.00	**Other Costs:**	$0.00

Miles of Road

Road Maintenance: $1.57

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	4.0	5.0
Western Hemlock / Fir	$0.00	3.0	4.8
Noble Fir	$0.00	3.0	4.8
Sitka Spruce	$0.00	2.0	4.8
Alder (Red)	$0.00	3.0	4.5

Timber Sale Appraisal
Tide Flats
Sale AT-341-2026-W00988-01

District: Astoria **Date: May 28, 2025**

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
$125.53	$1.62	$1.90	$64.38	$0.33	$23.25	$2.08	$2.00	$0.00	$221.09
Western Hemlock / Fir									
$125.53	$1.65	$1.90	$91.15	$0.33	$26.47	$2.08	$2.00	$0.00	$251.11
Sitka Spruce									
$125.53	$1.65	$1.90	$136.72	$0.33	$31.94	$2.08	$2.00	$0.00	$302.15
Alder (Red)									
$125.53	$1.65	$1.90	$97.22	$0.33	$27.20	$2.08	$2.00	$0.00	$257.91

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$840.30	$619.21	$0.00
Western Hemlock / Fir	$0.00	$551.14	$300.03	$0.00
Sitka Spruce	$0.00	$346.44	$44.29	$0.00
Alder (Red)	$0.00	$544.02	$286.11	$0.00

Timber Sale Appraisal
Tide Flats
Sale AT-341-2026-W00988-01

District: Astoria **Date: May 28, 2025**

Summary

Amortized

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

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	800	$619.21	$495,368.00
Western Hemlock / Fir	5,651	$300.03	$1,695,469.53
Sitka Spruce	219	$44.29	$9,699.51
Alder (Red)	265	$286.11	$75,819.15

Gross Timber Sale Value

Recovery: $2,276,356.19

Prepared By: Avery Petersen **Phone:** 503-325-5451

Site Prep Appraisal

Sale Name: Tide Flats
Date: 04/29/2025

Vegetation Type/Zone	Vegetation Type/Zone Code	Production Rate (hr/ac)	Estimated Piles/Acre	Landing Production Rate (hrs/30 acres)
Doug-fir	A	0.5	0.5	4
Hemlock/Fir	B	1.0	4.5	6
Hemlock/Spruce	C	1.8	5.0	8
Hemlock	D	1.8	5.0	8
Conifer/Hardwood	E	0.8	2.0	6
Whole Tree Yarding	F	0.5	0.3	10

Sale Area	Harvest Type	Veg Type/Zone	Ground Based Yarding Acres	Estimated Piling Hours/Area	Cost/Hour	Total Cost/Area	
1	MC	B	18	18	$145.00	$2,610.00	
2	MC	B	52	52	$145.00	$7,540.00	
					In-unit Piling	**Sub Total =**	$10,150.00

Sale Area	Number of Landings to be Piled	# cable acres per area	Total Cost/Area	Number of In-Unit Piles	Material Cost/Pile	Total Cost/Area	
1	11	46	$1,334.00	92	$5.00	$460.00	
2	10	0	$0.00	244	$5.00	$1,220.00	
*Cost includes separating firewood					Materials	**Sub Total =**	$1,680.00
					Landing Piling	**Sub Total =**	$1,334.00

Additonal Move-in allowance

Move-In Allowance	Number of Move-In's	Total Move-In Allowance	
$1,290.00	1	$1,290.00	Brush Piler
			Move-In **Sub Total =** $1,290.00

Slash Endhaul Dump Truck hrs	Cost/Hour	Total	Slash piling in Non-Stocked Area Loader hrs	Cost/Hour	Total	
0	$99.00	$0.00	0	$161.00	$0.00	
					Sub Total =	$0.00
					Grand Total =	**$14,454.00**

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale: Tide Flats
Date: April 30, 2025
By: Avery Petersen

MBF: 6,935
$$/MBF: $1.57

Type	Equipment/Rationale	Move-in Rate	Times	Hours	Rate	Cost	
Interim Road Maintenance	Grader 14G	$972	1	5	$126	$1,602	
Final Road Maintenance	Grader 14G	$972	1	12	$126	$2,484	
	Dump Truck 12CY	$205	1	8	$99	$997	
	Rubber tired backhoe	$401	1	4	$97	$789	
	Vibratory Roller	$972	1	12	$97	$2,136	
	Water Truck 2,500 gallon	$238	1	8	$113	$1,142	
	C315 Excavator	$1,005	1	4	$127	$1,513	
	Labor			4	$50	$200	
Total							**$10,863**

Interim Operations Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	2.5	1.5	0.6	5

Final Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	1.5	2.3	1.6	12
Vibratory Roller	1.5	2.1	1.4	11

Process and compact: All crushed rock roads
Fishhawk Creek Road .41 Miles
Cedar Flats Road .13 Miles
Unnamed Spurs 1.56 Miles

Grade & Process Total = 2.1 Miles

SUMMARY OF ALL PROJECT COSTS

SALE NAME: Tide Flats

Project No. 1: ROAD CONSTRUCTION:

Road segment	*Length (Sta)*	*Length (Mile)*	*Cost*	
Surfaced				
1A to 1B, 1C to 1D(0+00 to 7+80),				
1E to 1F, 1G to 1H, 1K to 1L				
2A to 2B, 2C to 2D, 2E to 2F,				
2G to 2H, 2I to 2J	21.70	0.41	$35,776.00	
Unsurfaced				
1C to 1D (7+80 to 14+15)				
1I to 1J	17.80	0.34	$12,055.00	
Road Maint.			$2,853.13	
Move-In			$4,867.58	
TOTALS	39.50	0.75		$55,552

Project No. 2: ROAD IMPROVEMENT:

Road segment	*Length (Sta)*	*Length (Mile)*	*Cost*	
I1 to I2, I3 to I4				
I5 to I6, I7 to I8				
I9 to I10	171.90	3.26	$40,282.70	
Road Maint.			$2,402.87	
Move-In			$4,099.42	
TOTALS		3.26		$46,785

SPECIAL PROJECTS (Move-In and Road Maint. are included separetly as needed, for each Special Project):

Description	*Length/Vol.*	*Cost*	
Proj. 3 Hamilton Creek Quarry		$229,631.00	
Rock Crushing and Stockpiling			
Proj. 4 Road Vacating		$4,637.04	
TOTAL			$234,268

GRAND TOTAL **$336,605**

Compiled By: D. Farner Date: 04/25/2025

Move In and Maintenance Calculator for Construction and Improvement

SALE NAME: Tide Flats

Project No. 1: ROAD CONSTRUCTION:

Road segment	Length/Sta	Length/Mile	Cost	
Surfaced				
1A to 1B, 1C to 1D(0+00 to 7+80),				
1E to 1F, 1G to 1H, 1K to 1L				
2A to 2B, 2C to 2D, 2E to 2F,				
2G to 2H, 2I to 2J	21.70	0.41	$35,776.00	
2E to 2F, 2G to 2H				
2I to 2J	17.80	0.34	$12,055.00	
TOTALS	39.50	0.75		$47,831

Project No. 2: ROAD IMPROVEMENT:

Road segment	Length/Sta	Length/Mile	Cost	
I1 to I2, I3 to I4				
I5 to I6, I7 to I8				
I9 to I10	171.90	3.26	$40,282.70	
TOTALS	171.90	3.26		$40,283

MOVE IN (Construction & Improvement Only)

Equipment	Length/Mile	Cost
Grader (14G)		$972.00
Vibratory Roller		$972.00
Water Truck (2500 gal.)		$238.00
Excavator (C315)		$1,005.00
Front End Loader (C966)		$972.00
Dozer (D8)		$1,755.00
Excavator (C330)		$1,755.00
10-12cy Highway Dump (x4)		$820.00
20cy Highway Dump w/trail (x2)		$478.00
TOTAL		$8,967.00

ROAD MAINTENANCE (Construction & Improvement Only)

	Length/Mile	Cost	
HWY 202 to Hamilton Creek Quarry	2.14	$5,256.00	
TOTAL			$5,256.00

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Tide Flats **NEW CONSTRUCTION:** 39.50 **STATIONS** 0.75 **MILES**

ROAD: 1A-1B(3.0),1C-1D(14.15),1E-1F(2.25),1G-1H(1.0),1I-1J(11.45),1K-1L(0.9)

POINTS: 2A-2B(2.35),2C-2D(1.0),2E-2F(1.0),2G-2H(1.0),2I-2J(1.4)

CLEARING & GRUBBING

	Method	Acres/amount	x	Rate	=	Cost
Surfaced		2.00	x	$ 1,669	=	$3,338.00
1A-1B,1C-1D(0+00-7+80),						
1E-1F,1G-1H,1I-1J						
2A-2B,2C-2D,2E-2F						
2G-2H,2I-2J						
Unsurfaced						
1C-1D(7+80-14+15)						
1I-1J		1.63	x	$ 1,669	=	$2,720.47
All road segments	Additional time to Clear & Grubb OG stumps($/hr w330)	10.00	x	$ 195	=	$1,950.00

SUB TOTAL FOR CLEARING & GRUBBING $8,008

EXCAVATION

	Material	Cy/amount	x	Rate	=	Cost
1A-1B	Balanced construction ($/sta)	3.0	x	$154.00	=	$462.00
	Landing construction ($/ldg)	1	x	$487.00	=	$487.00
1C-1D	Common drift up to 200' ($/sta)	14.15	x	$238.00	=	$3,367.70
	Embankment compaction ($cy)	1,113	x	$0.50	=	$556.50
	Cutslope rounding ($/sta)	5.00	x	$54.39	=	$271.95
1E-1F	Balanced construction ($/sta)	2.25	x	$154.00	=	$346.50
	Landing construction ($/ldg)	1	x	$487.00	=	$487.00
1G-1H	Balanced construction ($/sta)	1.0	x	$154.00	=	$154.00
	Landing construction ($/ldg)	1	x	$487.00	=	$487.00
1I-1J	Common drift up to 200' ($/sta)	11.45	x	$238.00	=	$2,725.10
	Embankment compaction ($cy)	1,636	x	$0.50	=	$818.00
	Cutslope rounding ($/sta)	5.00	x	$54.39	=	$271.95
	Landing construction ($/ldg)	1	x	$487.00	=	$487.00
1K-1L	Balanced construction ($/sta)	0.9	x	$154.00	=	$138.60
	Landing construction ($/ldg)	1	x	$487.00	=	$487.00
2A-2B	Balanced construction ($/sta)	2.35	x	$154.00	=	$361.90
	C330 time to remove OG stumps($/hr)	1.0	x	$195.00	=	$195.00
2C-2D	Balanced construction ($/sta)	1.0	x	$154.00	=	$154.00
2E-2F	Balanced construction ($/sta)	1.0	x	$154.00	=	$154.00
	C330 time to remove OG stumps($/hr)	0.5	x	$195.00	=	$97.50
2G-2H	Balanced construction ($/sta)	1.0	x	$154.00	=	$154.00
2I-2J	Balanced construction ($/sta)	1.0	x	$154.00	=	$154.00

SUB TOTAL FOR EXCAVATION $12,818

CULVERT MATERIALS AND INSTALLATION

Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost
1C to 1D									
2+80	18"cpp	30	$29.73	$891.90					
6+80	18"cpp	30	$29.73	$891.90					
1I to 1J									
5+25	18"cpp	40	$29.73	$1,189.20					

	Description	Quantity	Rate	Cost
Other/miscellaneous:				
Culvert stakes & markers:	6' x 2 1/2" white fiberglass posts	2	$25.53	$51.06

SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION $3,024

Subtotal of Clearing, Exc., Culv. ***$23,850***

SURFACING

Subgrade prep:

Description	Stations/ amount	x	Rate/ sta/amt	Cost
Grade, Shape and Ditch 16'	22.70	x	$30.98	$703.25
Grade, Shape and outslope 14'	16.80	x	$22.89	$384.55
Subgrade Compaction	39.50	x	$25.19	$995.01

ROAD SEGMENT	1A to 1B			POINT TO POINT		Sta. to Sta.					
				1A to 1B		0+00 to 3+00					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 3+00	10	station	63	stations	3.0	189	$8.49	$1,605	
Junction Rock	6"-0" jr	0+00	10	junctions	33	junctions	1	33	$8.49	$280	
Landings	6"-0" jr	3+00	N/A	landing	88	landings	1	88	$8.49	$747	
Total Rock for Road Segment:			1A to 1B					310			$2,632

ROAD SEGMENT	1C to 1D			POINT TO POINT		Sta. to Sta.					
				1C to 1D		0+00 to14+15					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 7+80, 13+15 to 14+15	10	station	63	stations	8.80	555	$8.49	$4,707	
Junction Rock	6"-0" jr	0+00	10	junctions	33	junctions	1	33	$8.49	$280	
Turnout Rock	6"-0" jr	4+00	10	turnout	33	turnouts	1	33	$8.49	$280	
Traction Rock	1 1/2" -0" cr	0+00 to 2+75, 4+85 to 7+50	2	station	13	stations	5.40	70	$8.49	$596	
Junction Rock	1 1/2" -0" cr	0+00	2	junctions	11	junctions	1	11	$8.49	$93	
Total Rock for Road Segment:			1C to 1D					702			$5,957

ROAD SEGMENT	1E to 1F			POINT TO POINT		Sta. to Sta.					
				1E to 1F		0+00 to 2+25					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 2+25	10	station	63	stations	2.25	142	$8.49	$1,203	
Junction Rock	6"-0" jr	0+00	10	Junctions	22	junctions	1	22	$8.49	$187	
Traction Rock	1 1/2" -0" cr	0+00 to 1+00	2	station	13	stations	1.00	13	$8.49	$110	
Landings	6"-0" jr	2+25	N/A	landing	88	landings	1	88	$8.49	$747	
Total Rock for Road Segment:			1E to 1F					265			$2,248

ROAD SEGMENT	1G to 1H			POINT TO POINT		Sta. to Sta.					
				1G to 1H		0+00 to 1+00					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 1+00	10	station	63	stations	1.0	63	$8.49	$535	
Junction Rock	6"-0" jr	0+00	10	junctions	22	junctions	1	22	$8.49	$187	
Landings	6"-0" jr	1+00	N/A	landing	88	landings	1	88	$8.49	$747	
Total Rock for Road Segment:			1G to 1H					173			$1,469
ROAD SEGMENT	1I to 1J			POINT TO POINT		Sta. to Sta.					
				1I to 1J		0+00 to 11+45					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 1+00	10	station	63	stations	1.0	63	$8.49	$535	
Total Rock for Road Segment:			1I to 1J					63			$535
ROAD SEGMENT	1K to 1L			POINT TO POINT		Sta. to Sta.					
				1K to 1L		0+00 to 0+90					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 0+90	10	station	63	stations	0.90	57	$8.49	$481	
Junction Rock	6"-0" jr	0+00	10	junctions	33	junctions	1	33	$8.49	$280	
Landings	6"-0" jr	0+90	N/A	landing	88	landings	1	88	$8.49	$747	
Junction Rock	1 1/2" -0" cr	0+00	2	junctions	11	junctions	1	11	$8.49	$93	
Total Rock for Road Segment:			1K to 1L					189			$1,602
ROAD SEGMENT	2A to 2B			POINT TO POINT		Sta. to Sta.					
				2A to 2B		0+00 to 2+35					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 2+35	10	station	63	stations	2.35	148	$8.49	$1,257	
Junction Rock	6"-0" jr	0+00	10	junctions	33	junctions	1	33	$8.49	$280	
Junction Rock	1 1/2" -0" cr	0+00	2	junctions	11	junctions	1	11	$8.49	$93	
Total Rock for Road Segment:			2A to 2B					192			$1,631
ROAD SEGMENT	2C to 2D			POINT TO POINT		Sta. to Sta.					
				2C to 2D		0+00 to 1+00					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 1+00	10	station	63	stations	1.00	63	$8.49	$535	
Junction Rock	6"-0" jr	0+00	10	junctions	33	junctions	1	33	$8.49	$280	
Junction Rock	1 1/2" -0" cr	0+00	2	junctions	11	junctions	1	11	$8.49	$93	
Total Rock for Road Segment:			2C to 2D					107			$908
ROAD SEGMENT	2E to 2F			POINT TO POINT		Sta. to Sta.					
				2E to 2F		0+00 to 1+00					
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 1+00	10	station	63	stations	1.00	63	$8.49	$535	
Junction Rock	6"-0" jr	0+00	10	junctions	33	junctions	1	33	$8.49	$280	
Junction Rock	1 1/2" -0" cr	0+00	2	junctions	11	junctions	1	11	$8.49	$93	
Total Rock for Road Segment:			2E to 2F					107			$908

ROAD SEGMENT	2G to 2H			POINT TO POINT		Sta. to Sta.					
Application	Rock Size and Type	Location	Depth of Rock (inches)	2G to 2H Volume (CY) per		0+00 to 1+00 Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 1+00	10	station	63	stations	1.00	63	$8.49	$535	
Junction Rock	6"-0" jr	0+00	10	junctions	33	junctions	1	33	$8.49	$280	
Junction Rock	1 1/2" -0" cr	0+00	2	junctions	11	junctions	1	11	$8.49	$93	
Total Rock for Road Segment:			2G to 2H					107			$908
ROAD SEGMENT	2I to 2J			POINT TO POINT		Sta. to Sta.					
Application	Rock Size and Type	Location	Depth of Rock (inches)	2I to 2J Volume (CY) per		0+00 to 1+40 Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Base Rock	6"-0" jr	0+00 to 1+40	10	station	63	stations	1.40	88	$8.49	$749	
Junction Rock	6"-0" jr	0+00	10	junctions	33	junctions	1	33	$8.49	$280	
Junction Rock	1 1/2" -0" cr	0+00	2	junctions	11	junctions	1	11	$8.49	$93	
Total Rock for Road Segment:			2I to 2J					132			$1,122

Processing:

Description	No.sta	Rate/sta	Cost
Grade, Shape, & Compact Base Rock (6"-0"jr):	22.7	$39.35	$893.25
Water, Process & Compact Base Rock (1 1/2"-0"):	6.4	$70.47	$451.01

		6"-0"jr	4"-0" crushed	1 1/2"-0" crushed		Total		
SUB TOTAL FOR SURFACING		2,186		160		2,346	2,346	**$23,347**

SPECIAL PROJECTS

	Description	Cost
1C to 1D (sta. 7+80)	Temporary gate (2-12'x50") & Posts (2-6"x6"x10')	$380.00
	Temporary gate Installation w/315 ($/hr) 2hrs x $127	$254.00

SUB TOTAL FOR SPECIAL PROJECTS $634

Subtotal of Surfacing & Spec. Proj. *$23,981*

Subtotal of Clearing, Exc.,Culv. *$23,850*

GRAND TOTAL **$47,831**

Compiled By: Kraig Kirkpatrick

Date: 04/23/2025

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Tide Flats
ROAD: I1 to I2 (69.8 sta.), I3 to I4 (75.7 sta.), I5 to I6 (12.8 sta.)
POINTS: I7 to I8 (1.2 sta.), I9 to I10 (12.4 sta.)

NEW CONSTRUCTION: 39.50 **STATIONS** 0.75 **MILES**
IMPROVEMENT: 171.90 **STATIONS** 3.26 **MILES**

CLEARING & GRUBBING

Method	Acres/amount	x	Rate	=	Cost
		x		=	$0.00

SUB TOTAL FOR CLEARING & GRUBBING $0

EXCAVATION

	Material		Cy/amount	x	Rate	=	Cost
I1 to I2							
7+70	Remove debris and sod						
	from bridge surface rock	c315 hrs/$	1.0	x	$127.00		$127.00
17+40	Install series of three rock						
	ditch filters	c315 hrs/$	1.0	x	$127.00	=	$127.00
24+40	Install energy dissipator	Dissipator/$	1.0	x	$225.33	=	$225.33
33+20	Construct turnaround	c315 hrs/$	1.0	x	$127.00	=	$127.00
34+80	Install culvert extra c315 hr	c315 hrs/$	1.0	x	$127.00	=	$127.00
	Install energy dissipator	Dissipator/$	1.0	x	$225.33	=	$225.33
64+30	Clean debris off stockpile	c315 hrs/$	1.0	x	$127.00	=	$127.00
69+80	Clean debris off stockpile	c315 hrs/$	1.0	x	$127.00	=	$127.00
I7 to I8							
0+00	Remove exsisting culvert	c315 hrs/$	2.00	x	$127.00	=	$254.00
	Remove culvert from						
	project	Dumptruck hrs/$	1.00	x	$99.00	=	$99.00

SUB TOTAL FOR EXCAVATION $1,566

CULVERT MATERIALS AND INSTALLATION

Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost
I1 to I2					**I3 to I4**				
24+40	18	30	$29.73	$891.90	55+00	18	30	$29.73	$891.90
34+80	18	40	$29.73	$1,189.20	59+50	18	30	$29.73	$891.90
57+80	18	30	$29.73	$891.90					

	Description	Quantity	Rate	Cost
Other/miscellaneous:				
Culvert stakes & markers:	Carsonite culvert markers	5	$25.23	$126.15

SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION $4,883

Subtotal of Clearing, Exc., Culv. ***$6,449***

SURFACING

Subgrade prep:

Description		Stations/ amount	x	Rate/ sta/amt	Cost
Grade, Shape and Ditch 16'	I1 to I2 (69.8 sta.), I3 to I4 (75.7 sta.), I5 to I6 (12.8 sta.)	159.50	x	$30.98	$4,941.31
	I7 to I8 (1.2 sta.)				
Subgrade Compaction	I1 to I2 (69.8 sta.), I3 to I4 (65.60 sta.), I5 to I6 (12.8 sta.)	149.40	x	$25.19	$3,763.39
	I7 to I8 (1.2 sta.)				
Sod Removal	I1 to I2 (5.5 sta.), I5 to I6 (8.7 sta.)	14.20	x	$29.08	$412.94
Scatter w/ backhoe	I1 to I2 (5.5 sta.), I5 to I6 (8.7 sta.)	14.20	x	$11.16	$158.47
Spot Grade w/14G(hrs/$)	I9 to I10 (12.4 sta.)	4.00	x	$126.00	$504.00
Spotgrade Compaction w/ Vibratory Roller (hrs/$)	I9 to I10 (12.4 sta.)	4.00	x	$97.00	$388.00

ROAD SEGMENT: I1 to I2 — POINT TO POINT: I1 to I2 — Sta. to Sta.: 0+00 to 69+80

Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Surfacing	1 1/2"-0" crushed	7+00 to 10+00	2	station	13	stations	3	39	$8.49	$331	
Turnaround	6"-0" jaw-run	33+20	N/A	turnaround	33	turnaround	1	33	$8.49	$280	
Culvert Bedding and Backfill	1 1/2"-0" crushed	24+40, 57+80	N/A	culvert	33	culverts	2	66	$8.49	$560	
Culvert Bedding and Backfill	1 1/2"-0" crushed	34+80	N/A	culvert	44	culverts	1	44	$8.49	$374	
Culvert Energy Dissipator	24"-6" riprap	24+40, 34+80	N/A	dissipator	11	dissipators	2	22	$8.49	$187	
Rock Ditch Filters	6"-4" pit-run	17+40	N/A	3 filter series	11	3 filter series	1	11	$8.49	$93	
Total Rock for Road Segment:			I1 to I2					215			$1,825

ROAD SEGMENT: I3 to I4 — POINT TO POINT: I3 to I4 — Sta. to Sta.: 0+00 to 75+70

Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Surface Leveling Rock	1 1/2"-0" crushed	65+60 to 75+70	N/A	load	11	loads	4	44	$8.49	$374	
Surfacing	1 1/2"-0" crushed	0+00 to 65+60	2	station	13	stations	65.6	853	$8.49	$7,240	
Turnouts	1 1/2"-0" crushed	3+20, 9+05, 14+85, 18+10, 24+10, 28+10, 31+00, 38+10, 47+30, 51+00, 58+90, 64+85	N/A	turnout	11	turnouts	12	132	$8.49	$1,121	
Junctions	1 1/2"-0" crushed	0+00, 39+90	N/A	junction	22	junctions	2	44	$8.49	$374	
Turnaround	1 1/2"-0" crushed	74+20	N/A	turnaround	22	turnaround	1	22	$8.49	$187	
Culvert Bedding and Backfill	1 1/2"-0" crushed	55+00, 59+50	N/A	culvert	33	culverts	2	66	$8.49	$560	
Total Rock for Road Segment:			I3 to I4					1,161			$9,855

ROAD SEGMENT: I5 to I6 — POINT TO POINT: I5 to I6 — Sta. to Sta.: 0+00 to 12+80

Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Surfacing	1 1/2"-0" crushed	0+00 to 12+80	2	station	13	stations	12.8	167	$8.49	$1,418	
Landings	6"-0" jaw-run	12+80	N/A	Landing	66	Landings	1	66	$8.49	$560	
Total Rock for Road Segment:			I5 to I6					233			$1,978

ROAD SEGMENT: I7 to I8 — POINT TO POINT: I7 to I8 — Sta. to Sta.: 0+00 to 1+20

Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Surfacing	1 1/2"-0" crushed	0+00 to 1+20	2	station	13	stations	1.2	16	$8.49	$132	
Junctions	1 1/2"-0" crushed	0+00	N/A	junction	22	junctions	1	22	$8.49	$187	
Culvert Removal Backfill	1 1/2"-0" crushed	0+00	N/A	culvert	33	culverts	1	33	$8.49	$280	
Total Rock for Road Segment:			I7 to I8					71			$599

ROAD SEGMENT: I9 to I10 — POINT TO POINT: I9 to I10 — Sta. to Sta.: 0+00 to 12+40

Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Surface Leveling Rock	6"-0" jaw-run	0+00 to 12+40	N/A	load	11	loads	8	88	$8.49	$747	
Total Rock for Road Segment:			I9 to I10					88			$747

Processing:

Description	No.sta	Rate/sta	Cost
Water, Process & Compac I1 to I2 (0+00 to 33+20)(33.2 sta.)), I3 to I4 (75.7 sta.), I5 to I6 (12.8 sta.),I7 to I8 (1.2 sta.)	122.90	$70.47	$8,661

	24"-6" rr	6"-0" jr	6"-4" pr	6"-0"pr	4"-0" crushed	1 1/2"-0" crushed	2"-1" drainrock	3/4"-0" crushed	Total	
SUB TOTAL FOR SURFACING	22	187	11			1,547			1,767	$33,834

SPECIAL PROJECTS

Description	Cy/Amount	Rate	Cost

SUB TOTAL FOR SPECIAL PROJECTS: $0

Subtotal of Surfacing & Spec. Proj. $33,834
Subtotal of Clearing, Exc.,Culv. $6,449

GRAND TOTAL: $40,283

Compiled By: D. Farner

Date: 04/25/2025

Timber Sale

Vacating Costs 1C to 1D and 1I to 1J

Work Description	Station	Pump	C330	C315	D24 trk	D10/12 trk	D-8	Labor	Straw-bales	Seed-lbs
1C to 1D										
Block Road & begin waterbars	0+00		1.50							
Remove temporary gate	7+80		0.50							
Block Road & end waterbars	14+15		1.50							
1I to 1J										
Block Road & begin waterbars	0+00 to 4+90		1.00							
Remove Fill and culvert	4+90 to 5+50		4.00					8	36	25
Continue waterbars.	5+50 to 11+45		1.50							
Total Quantity (Hours)		0.00	10.00	0.00	0	0	0	8	36	25
Rates		$10.00	$195.00	$127.00	$159.00	$99.00	$198.00	$50.00	$13.39	$2.00
Move In for Vacate			$1,755.00							
Total Dollars		$0	$3,705	$0	$0	$0	$0	$400	$482	$50

Total Cost **$4,637**

Projects Road Maintenance Cost Summary

Sale: Tide Flats
Date: 25-Apr-25
By: D. Farner

Type	Equipment/Rationale			Hours	Rate	Cost	
Project Work	Grader 14G			12	$126	$1,512	
Final Haul	Dump Truck 12CY			6	$99	$594	
Road	FE Loader C966			6	$105	$630	
Maintenance	Vibratory Roller			12	$97	$1,164	
	Water Truck 2,500 gallon			12	$113	$1,356	
Total							$5,256

Production Rates	Miles/day	Distance(miles)	Days
Grader	1.5	2.14	1.4
Vibratory Roller	1.5	2.14	1.4

NOTE: Hwy 202 to Hamilton Creek Quarry 2.14 Miles

Miles

Miles

Miles

TOTAL= 2.14 Miles

CRUSHED ROCK COST

SALE NAME: Tide Flats
PROJECT: No.1 and 2
Quarry: Hamilton

MATERIAL: 6"-0"jr and 1 1/2"-0" riprap and pit-run

DATE: 04/25/2025
BY: K. Kirkpatrick

Road Segment	Stations	Cubic Yards	ONE WAY HAUL IN MILES 50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH	Total Haul
1A-1B	3.00	310	1.00	1.00	0.80	1.10	1.10	1.10	0.15	6.25
1C-1D	14.15	702	1.00	1.00	0.80	1.20	1.20	1.10	0.15	6.45
1E-1F	2.25	265	1.00	1.00	0.80	1.15	1.20	1.10	0.15	6.40
1G-1H	1.00	173	1.00	1.00	0.80	1.20	1.20	1.10	0.15	6.45
1I-1J	11.45	63	1.00	1.00	0.80	1.35	1.30	1.30	0.15	6.90
1K-1L	0.90	189	1.00	1.00	0.80	1.15	1.20	1.10	0.15	6.40
2A-2B	2.35	192	1.00	1.00	0.80	0.85	0.70	0.70	0.15	5.20
2C-2D	1.00	107	1.00	1.00	0.80	0.85	0.60	0.70	0.15	5.10
2E-2F	1.00	107	1.00	1.00	0.80	0.85	0.60	0.70	0.15	5.10
2G-2H	1.00	107	1.00	1.00	0.80	0.90	0.90	0.75	0.15	5.50
2I-2J	1.40	132	1.00	1.00	0.80	1.00	0.95	0.80	0.15	5.70
I1-I2	69.80	215	1.00	1.00	0.80	0.95	0.90	0.80	0.15	5.60
I3-I4	75.70	1,161	1.00	1.00	0.80	1.05	1.00	0.90	0.15	5.90
I5-I6	12.80	232	1.00	1.00	0.80	1.00	0.95	0.80	0.15	5.70
I7-I8	1.20	71	1.00	1.00	0.80	1.10	1.10	1.10	0.15	6.25
I9-I10	12.40	88	1.00	1.00	0.80	1.30	1.35	1.10	0.15	6.70
TOTAL	211.40	4,114								AVERAGE HAUL
	STA./NO.	CU. YD.								
CUBIC YARD WEIGHTED HAUL			**1.00**	**1.00**	**0.80**	**1.07**	**1.04**	**0.96**	**0.15**	**6.02**
								Average Round Trip Distance (miles)	12.04	

ROCK HAUL:

Truck type: D20 No. trucks: 2
Delay min.: 8 Efficiency: 85%

Truck type: D12 No. trucks: 4
Delay min.: 6 Efficiency: 85%

Truck type: D10 No. trucks:
Delay min.: 5 Efficiency: 85%

Ave haul: $6.63 /cy
Load: $0.66 /cy
Spread: $1.20 /cy

Production: cy/day = 781

CRUSHED ROCK HAUL COSTS 4,114 cy @ **$8.49 /cy**

SUMMARY OF ROCK DEVELOPMENT AND CRUSHING COSTS

PROJECT NO. 3 **Timber Sale Name: Tide Flats**

Quarry: Hamilton Creek Swell:

Location: NW 1/4, NW 1/4, Section 28, T6N, R7W, W.M. Shrink: 16%

County: Clatsop

By: C.Bangs Loading Hopper: No

Date: 04/21/2025

ROCK SIZE	REJECT	GRADATION	STOCKPILE CU. YDS.	TRUCK MEAS CU. YDS.	TOTAL CU. YDS.
6"-0" Jawrun		CR		3,373	3,373
1-1/2"-0"	15%	CR	2,000	2,707	5,027
4"-0"	15%	CR	4,000	1,000	5,640
6"-0"		PR			
6"-4"		PR		11	11
24"-6"		RR		22	22
TOTAL CUBIC YARDS OF ROCK:			6,000	7,113	**14,073**

1) MOBILIZATION & SET UP:

EQUIPMENT	QUANTITY	RATE	COST	EQUIPMENT	QUANTITY	RATE	COST
3 Stage Crusher	1	$3,608	$3,608				
Screening Plants	2	$691	$1,382				
Front End Loader	1	$1,755	$1,755				
D6 Cat	1	$972	$972				
Drill & Compressor	1	$1,755	$1,755				
Powder	1	$439	$439				
Off Road Dump Truck	1	$691	$691				
Excavator	1	$1,755	$1,755				

SUB TOTAL FOR MOBILIZATION $12,357

EQUIPMENT SET UP	TIMES	RATE	COST
3 Stage Crusher	1	$4,292	$4,292
Screening Plants	2	$367	$734
Original Calibration	1	$680	$680

SUB TOTAL FOR SET UP COSTS $5,706

TOTAL MOBILIZATION & SET UP COSTS $18,063

2) CLEARING & GRUBBING

DESCRIPTION		QUANTITY	UNIT	RATE	COST
Clear and grub flagged area,	Excavator	30.0	hr	$195	$5,850
pile and burn stumps and debris,					
Waste area prep					

TOTAL CLEARING & GRUBBING COSTS $5,850

3) EXCAVATION

MATERIAL DESCRIPTION		QUANTITY	UNIT	RATE	COST
Overburden Removal (excavate, load	Excavator	30	hours	$195.00	$5,850
haul, spread)	OR Truck	30	hours	$195.00	$5,850
Drill prep, access road construction					

TOTAL EXCAVATION COSTS $11,700

4) DEVELOP ROCK

ROCK SUMMARY

Type	Cu. yd. Vol.	Weight
crushed	14,040	100%
pit run	0	0
rip rap	22	0%
Total	14,062	
reject	1,600	11.4%

METHOD	%	QUANTITY	RATE	COST
Ripping	40%	5,625	$3.80	$21,374
Drill & shoot	60%	9,397	$3.90	$36,649
Oversize red	8%	1,123	$7.70	$8,649
Other				

TOTAL ROCK DEVELOPMENT COSTS $66,672

5) CALIBRATION & TESTING

DESCRIPTION	NO.	$/TEST	COST
Calibrate	2	$558.00	$1,116
Calibrate			
Test	5	$63.60	$318
Test			

TOTAL CALIBRATION & TESTING COSTS $1,434

6) FEEDING & LOADING

DESCRIPTION		CU. YD. QUANTITY		COST CU. YD.		TOTAL COST
Dig & Feed Rock		15,640		$0.96		$15,042
Shot Rock Handling	Excavator	40		$195.00		$7,800

TOTAL FEEDING & LOADING COSTS $22,842

7) ROCK CRUSHING

ROCK SIZE	ROCK TYPE	CU. YD. QUANTITY	CRUSHER TYPE	HOURLY PRODUCTION	RATE CU. YD.	TOTAL COST
6"-0" Jawrun	crushed	3,373	1 stage w/s	180	$1.03	$3,485
1-1/2"-0"	crushed	5,027	3 stage w/s	120	$4.02	$20,192
4"-0"	crushed	5,640	2 stage w/s	140	$3.07	$17,323

TOTAL ROCK CRUSHING COSTS $41,000

8) STOCKPILING

STOCKPILE SITE PREPARATION

Equipment	Hours	Rate	Total
Dozer	4	$180.00	$720.00
Compactor		$97.00	
Grader		$126.00	
Excavator		$195.00	

$720.00

SUB TOTAL $720

Rock for Floor (CY)	$/CY Haul	Total

HAUL & STOCKPILE STOCKPILE LOCATION	SIZE	# of TRUCKS	CU. YDS.	RATE	COST
1. Hamilton Creek	4"-0"	6	2,320	$4.61	$10,703
2. Hamilton Creek	1 1/2"-0"	6	2,320	$4.61	$10,703
3. Hamilton Creek Quarry	6"-0" jawrun	6	1,000	$2.64	$2,636
4. Swede Road	4"-0"	6	1,000	$6.22	$6,222
5. Swede Road	1 1/2"-0"	6	1,000	$6.22	$6,222
6. Slaughters Creek	4"-0"	6	2,320	$9.22	$21,385

SUB TOTAL $57,870

TOTAL STOCKPILING COSTS $58,590

9) MISCELLANEOUS COSTS

DESCRIPTION	COST
Load, Haul, and Spread the reject material at the waste area.	$1,920
$1.20 /CY 1,600 CY	
Final Quarry Dev., Access Road Const., Waterbarring, Drainage,	$1,560
Block Quarry Access	

TOTAL MISCELLANEOUS COSTS $3,480

10) GRAND TOTAL: **$229,631**

$/Cubic Yard $16.36

Footnotes:

HAUL and STOCKPILE COST

SALE NAME: Tide Flats
QUARRY: Hamilton Creek ROCK TYPE: Crushed

Location 1. Hamilton Creek 4"-0"

ONE WAY HAUL IN MILES						
50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
			0.10	0.20	0.20	0.10

Truck type: D20 No. trucks:
Delay min.: 15 Efficiency: 75%
Truck type: D12 No. trucks: 4
Delay min.: 12 Efficiency: 75%
Truck type: No. trucks:
Delay min.: 10 Efficiency: 75%

Ave haul: $2.93 /cy
Load: $0.64 /cy
Stockpile: $1.04 /cy
Production: cy/day = 1,080

Location 1. Hamilton Creek Haul and Stockpile Cost $4.61 /cy

Location 2. Hamilton Creek 1 1/2"-0"

ONE WAY HAUL IN MILES						
50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
			0.10	0.20	0.20	0.10

Truck type: D20 No. trucks:
Delay min.: 15 Efficiency: 75%
Truck type: D12 No. trucks: 4
Delay min.: 12 Efficiency: 75%
Truck type: D10 No. trucks:
Delay min.: 10 Efficiency: 75%

Ave haul: $2.93 /cy
Load: $0.64 /cy
Stockpile: $1.04 /cy
Production: cy/day = 1,080

Location 2. Hamilton Creek Haul and Stockpile Cost $4.61 /cy

Location 3. Hamilton Creek Quarry 6"-0" jawrun

ONE WAY HAUL IN MILES						
50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
						0.10

Truck type: OHT No. trucks: 1
Delay min.: 10 Efficiency: 85%
Truck type: D12 No. trucks:
Delay min.: 12 Efficiency: 75%
Truck type: D10 No. trucks:
Delay min.: 10 Efficiency: 75%

Ave haul: $1.42 /cy
Load: $0.72 /cy
Stockpile: $0.50 /cy
Production: cy/day = 898

Location 3. Hamilton Creek Quarry Haul and Stockpile Cost $2.64 /cy

Location 4. Swede Road 4"-0"

ONE WAY HAUL IN MILES						
50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
2.00	0.60	1.00	0.35	0.40	0.25	0.10

Truck type: D20 No. trucks: 2
Delay min.: 15 Efficiency: 75%
Truck type: D12 No. trucks: 4
Delay min.: 12 Efficiency: 75%
Truck type: D10 No. trucks:
Delay min.: 10 Efficiency: 75%

Ave haul: $5.33 /cy
Load: $0.64 /cy
Stockpile: $0.25 /cy
Production: cy/day = 969

Location 4. Swede Road Haul & Stockpile Cost $6.22 /cy

Location 5. Swede Road 1 1/2"-0"

ONE WAY HAUL IN MILES						
50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
2.00	0.60	1.00	0.35	0.40	0.25	0.10

Truck type: D20 No. trucks: 2
Delay min.: 15 Efficiency: 75%
Truck type: D12 No. trucks: 4
Delay min.: 12 Efficiency: 75%
Truck type: D10 No. trucks:
Delay min.: 10 Efficiency: 75%

Ave haul: $5.33 /cy
Load: $0.64 /cy
Stockpile: $0.25 /cy
Production: cy/day = 969

Location 5. 0 Haul & Stockpile Cost $6.22 /cy

Location 6. Slaughters Creek 4"-0"

ONE WAY HAUL IN MILES						
50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH
4.00	1.30	0.80	0.50	0.50	0.40	0.10

Truck type: D20 No. trucks: 2
Delay min.: 15 Efficiency: 75%
Truck type: D12 No. trucks: 4
Delay min.: 12 Efficiency: 75%
Truck type: D10 No. trucks:
Delay min.: 10 Efficiency: 75%

Ave haul: $6.99 /cy
Load: $0.80 /cy
Stockpile: $1.43 /cy
Production: cy/day = 739

Location 6. 0 Haul & Stockpile Cost $9.22 /cy

Tide Flats
TIMBER CRUISE REPORT
FY 2025

1. **Sale Area Location:** Portions of Section 30 of T6N, R7W and portions of Section 25 of T6N, R8W W.M., Clatsop County, OR.

2. **Fund Distribution:** BOF 100% Tax Code: 8-01 = 34.25%, 1-02 = 65.75%

3. **Sale Acreage by Area:**

Unit	Harvest Type	Gross Acres	Stream Buffer Acres	Reserve Tree Area	Existing R/W Acres	New R/W	Net Acres	Survey Method
1	Clearcut	90	22	1	1	2	64	GIS
2	Clearcut	82	26	-	4	<1	52	GIS
3	R/W	2	-	-	-	-	2	LxW
TOTALS		**174**	**48**	**1**	**5**	**2**	**118**	

4. Cruisers and Cruise Dates: Avery Petersen, John Czarnecki, Ryan Simpson, Michele Huffman and Kevin Berry (04/23/2025-04/24/2025)

5. Cruise Method and Computation:

Unit 1: Unit 1 was variable plot cruised with a 54.45 BAF. A total of 46 plots were sampled on a five chain by three and a half chain spacing with a count to grade ratio of 2:1, resulting in 19 grade plots and 27 count plots.

Unit 2: Unit 2 was variable plot cruised with 40 BAF. A total of 44 plots were sampled on a four and a half chain by three chain spacing with a count to grade ratio of 2:1, resulting in 16 grade plots and 28 count plots.

Unit 3 (R/W): In-unit Right-of-Way consists of new spur roads and landings within Units 1 and 2. Cruise data for Unit 3 was obtained from the U1 cruise.

Data was collected on Allegro 2 data collectors and downloaded to the Atterbury SuperACE 2008 program for computing. See the attached Cruise Designs for more details on the cruise method. The cruise calculations were processed in the Astoria District office.

UNIT(s)	CRUISE	TRACT	TYPE	ACRES
1	TFLAT	U1	00CC	64
2	TFLAT	U2	00CC	52
3 (R/W)	TFLAT	R/W	00CC	2

6. Timber Description:

Unit 1: A clearcut with an average age of 75 years. The stand consists of Douglas-fir and western hemlock, with minor components of red alder, Sitka spruce, and noble fir. The average Douglas-fir is approximately 29 inches DBH and 107 feet to a merchantable top. The average western hemlock is approximately 19 inches DBH and 80 feet to a merchantable top. The average red alder is approximately 10 inches DBH and 26 feet to a merchantable top. The average Sitka spruce is approximatly 31 inches DBH and 87 feet to a merchantable top. The average noble fir is approximately 21 inches DBH and 97 feet to a merchantable top. Average net volume to be harvested per acre is 67 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point.

Unit 2: A clearcut with an average age of 75 years. The stand consists of Douglas-fir and western hemlock, with minor components of red alder, Sitka spruce, and noble fir. The average Douglas-fir is approximately 30 inches DBH and 102 feet to a merchantable top. The average western hemlock is approximately 22 inches DBH and 80 feet to a merchantable top. The average red alder is approximately 18 inches DBH and 59 feet to a merchantable top. The average Sitka spruce is approximatly 27 inches DBH and 89 feet to a merchantable

top. The average noble fir is approximately 34 inches DBH and 112 feet to a merchantable top. Average net volume to be harvested per acre is 49 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point.

Unit 3 (R/W) is similar to the timber description in Units 1 and 2 and contains less than one acre of non-stocked right-of-way adjacent to Unit 1. Average net volume to be harvested per acre is 49 MBF.

7. Statistical Analysis and Stand Summary:

Statistics for Stand B.F. volumes

Type	Estimated CV	Target SE%	Actual CV	Actual SE%
U1	40%	9%	29.8%	4.5%
U2	30%	9%	36.5%	5.5%

8. Volumes by Species and Log Grade:

Volumes by Species and Grade for All Sale Areas: (MBF) Volumes do not include "in-growth."

Conifer

Species	DBH	Net Vol.	2 Saw	3 Saw*	4 Saw	% D & B	% Sale
Western Hemlock	20"	5,618	4,340	1,086	192	1.0%	81%
Douglas-fir	29"	800	724	66	10	1.0%	11%
Sitka Spruce	29"	219	18	195	6	1.0%	3%
Noble Fir	24"	33	26	6	1	0%	1%
TOTALS	--	**6,670**	**5,108**	**1,353**	**209**	--	--

* This sale includes approximately 160 MBF of 12"+ 3S Sitka spruce.

Hardwood

Species	DBH	Net Vol.	12"+	10"-11"	8"-9"	6"-7"	% D & B	% Sale
Red alder	14"	265	137	4	84	40	1.7%	4%
TOTALS	--	**265**	**137**	**4**	**84**	**40**	--	--

TOTAL VOLUME	6,935 MBF

9. Approvals:

Prepared by: Avery Petersen **Date:** 04/28/2025

Unit Forester Approval: [signature] **Date:** 5/27/2025

10. Attachments: Cruise Design and Map (4 pages)
Volume Report (4 pages)
Statistics Report (7 pages)
Log Stock Table (3 pages)
Stand Table Summary (2 pages)

Revised August, 2002

CRUISE DESIGN
ASTORIA DISTRICT

Sale Name: Tide Flats **Unit** U1

Harvest Type: Clear Cut

Approx. Cruise Acres: 59 **Estimated CV%** 40 Net BF/Acre **SE% Objective** 9% Net BF/Acre

Planned Sale Volume: 2,950 MBF **Estimated Sale Area Value/Acre:** $18,750/Acre

A. Cruise Goals: (a) Grade minimum 75 conifer trees.
(b) Sample 46 plots (19 grade / 27 count); (c) Other goals (__ Determine "automark" thinning standards; X Determine log grades for sale value; __ Determine snag and leave tree species and sizes)

B. Cruise Design:

1. Plot Cruises: BAF: 54.45

Unit 1:

Cruise Line Direction: 0°/180°
Cruise Line Spacing 5 (chains) 330 (feet)
Cruise Plot Spacing 3.5 (chains) 231 (feet)
Grade/Count Ratio 1:2

Grade minor species (true fir, spruce, cedar, maple, etc.) on count plots if encountered.

Take plots as marked on cruise map.

DO NOT: record any 22' log lengths, or any 12', 24', or 32' log lengths for hardwoods.

DO NOT: record snags < 15" DBH or record snag measurements on count plots.

C. Tree Measurements:

1. Diameter: Minimum DBH to cruise is 8" for conifers and 8" for hardwoods. Record dbh to nearest ½" for trees < 16", to nearest 1" for trees 16" - 24", and to nearest 2" for trees > 24". If tree diameters are estimated (only estimate on variable plot cruises), then record to closest estimate.

2. Bole Length: Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.

3. Top Cruise Diameter (TCD): Minimum top outside bark is 7" for conifers and 7" for hardwoods or 40 % of dob at 16' form point. Generally, use 7" outside bark for trees < 20" dbh and 40% of dob @ FP for conifer trees > 20" dbh.

4. Form Factors: (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.

5. Tree Segments: Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull

segments can be any length. For conifers, minimum merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree. Hardwoods shall be recorded in 8' and 10' multiples.

6. Species, Sort, and Grade Codes:

A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); GF (Grand fir); SF (Silver fir); A (Red alder); M (Bigleaf maple); SN (Snag). For "leave trees", add an "L" to the species code (such as DL, HL, CL, etc.).

B. Sort: Use code "1" (Domestic).

C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull
Hardwoods: Alder Grades: 12" + = 1 Sawmill; 10"-12" = 2 Sawmill; 10"-8" = 3 Sawmill; and 8"-6" 4 Sawmill, or R = Camp Run; 0 = Cull.
All Maple Camp Run = R

Grade oversized 3-SAW (DIB ≥ 12", knots > 2½" inside scaling cylinder affecting > 50% of log)

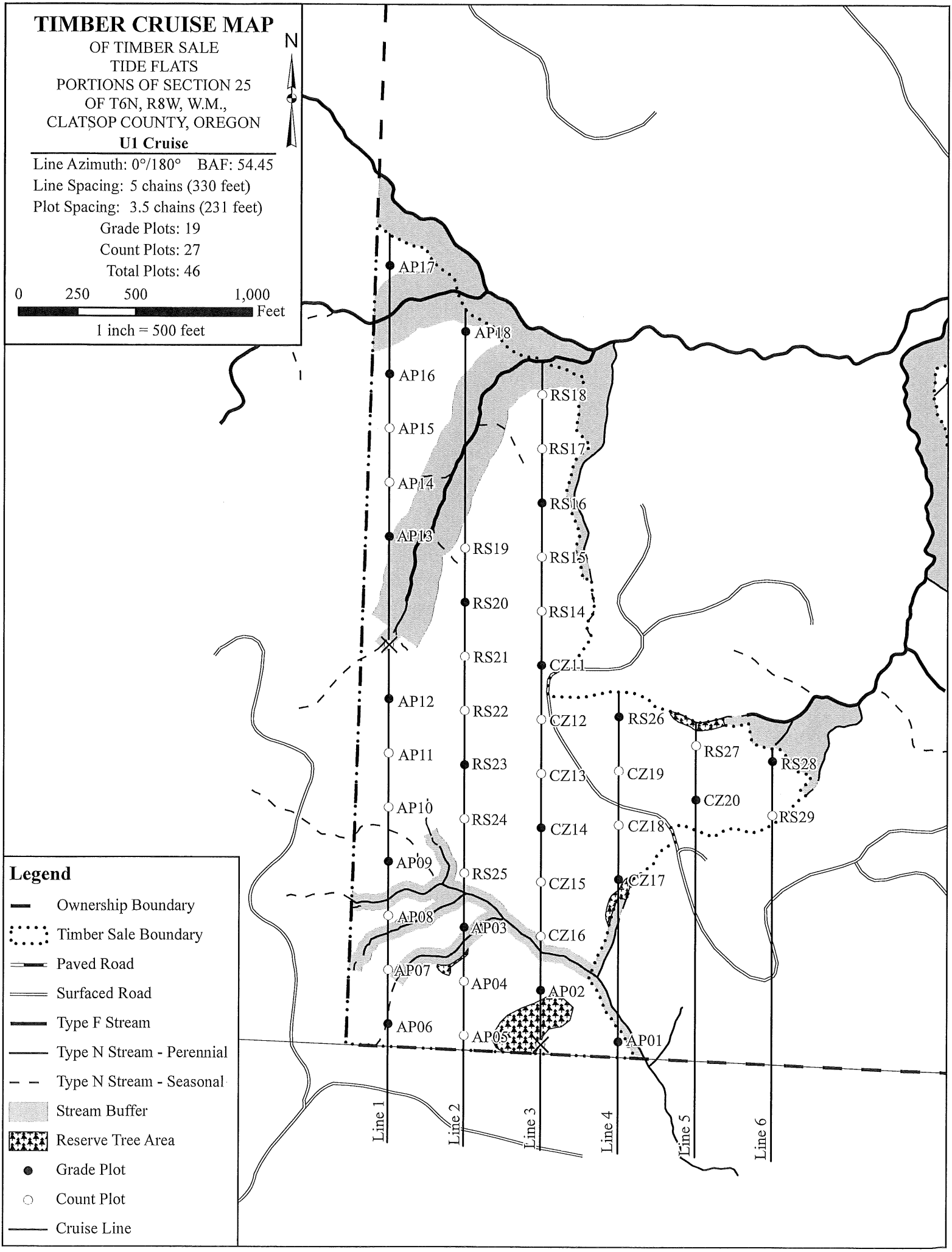
7. Deductions: Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.

8. Standard Field Procedures: Plot Type Cruises: Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at inter-visible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.

9. Cruising Equipment: Relaskop, Rangefinder, Logger's Tape (with dbh on back), Compass, Allegro II Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint, Permanent Marker.

10. Attachments: A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.)

Cruise Design by: Ryan Simpson
Approved by: [signature]
Date: 4/23/2025


TIMBER CRUISE MAP
OF TIMBER SALE
TIDE FLATS
PORTIONS OF SECTION 25
OF T6N, R8W, W.M.,
CLATSOP COUNTY, OREGON
U1 Cruise
Line Azimuth: 0°/180° BAF: 54.45
Line Spacing: 5 chains (330 feet)
Plot Spacing: 3.5 chains (231 feet)
Grade Plots: 19
Count Plots: 27
Total Plots: 46
0 250 500 1,000
Feet
1 inch = 500 feet
N
AP17
AP18
AP16
AP15
AP14
AP13
AP12
AP11
AP10
AP09
AP08
AP07
AP06
AP03
AP04
AP02
AP05
AP01
RS18
RS17
RS16
RS19
RS15
RS20
RS14
RS21
CZ11
RS22
CZ12
RS26
RS23
CZ13
CZ19
RS27
RS28
RS24
CZ14
CZ18
CZ20
RS29
RS25
CZ15
CZ17
CZ16
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6
Legend
Ownership Boundary
Timber Sale Boundary
Paved Road
Surfaced Road
Type F Stream
Type N Stream - Perennial
Type N Stream - Seasonal
Stream Buffer
Reserve Tree Area
Grade Plot
Count Plot
Cruise Line

Revised August, 2002

CRUISE DESIGN
ASTORIA DISTRICT

Sale Name: Tide Flats **Unit** U2

Harvest Type: Clear Cut

Approx. Cruise Acres: 47 **Estimated CV%** 30 Net BF/Acre **SE% Objective** 9% Net BF/Acre

Planned Sale Volume: 1,645 MBF **Estimated Sale Area Value/Acre:** $13,125/Acre

A. Cruise Goals: (a) Grade minimum 70 conifer trees.
(b) Sample 45 plots (17 grade / 28 count); (c) Other goals (__ Determine "automark" thinning standards; X Determine log grades for sale value; __ Determine snag and leave tree species and sizes)

B. Cruise Design:

1. Plot Cruises: BAF: 40

Unit 2:

Cruise Line Direction: 46°/226°
Cruise Line Spacing 4.5 (chains) 297 (feet)
Cruise Plot Spacing 3 (chains) 198 (feet)
Grade/Count Ratio 1:2

Grade minor species (true fir, spruce, cedar, maple, etc.) on count plots if encountered.

Take plots as marked on cruise map.

DO NOT: record any 22' log lengths, or any 12', 24', or 32' log lengths for hardwoods.

DO NOT: record snags < 15" DBH or record snag measurements on count plots.

C. Tree Measurements:

1. **Diameter:** Minimum DBH to cruise is 8" for conifers and 8" for hardwoods. Record dbh to nearest ½" for trees < 16", to nearest 1" for trees 16" - 24", and to nearest 2" for trees > 24". If tree diameters are estimated (only estimate on variable plot cruises), then record to closest estimate.

2. **Bole Length:** Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.

3. **Top Cruise Diameter (TCD):** Minimum top outside bark is 7" for conifers and 7" for hardwoods or 40 % of dob at 16' form point. Generally, use 7" outside bark for trees < 20" dbh and 40% of dob @ FP for conifer trees > 20" dbh.

4. **Form Factors:** (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.

5. **Tree Segments:** Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull

segments can be any length. For conifers, minimum merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree. Hardwoods shall be recorded in 8' and 10' multiples.

6. Species, Sort, and Grade Codes:

A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (Noble fir); GF (Grand fir); SF (Silver fir); A (Red alder); M (Bigleaf maple); SN (Snag). For "leave trees", add an "L" to the species code (such as DL, HL, CL, etc.).

B. Sort: Use code "1" (Domestic).

C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull
Hardwoods: Alder Grades: 12" + = 1 Sawmill; 10"-12" = 2 Sawmill; 10"-8" = 3 Sawmill; and 8"-6" 4 Sawmill, or R = Camp Run; 0 = Cull.
All Maple Camp Run = R

Grade oversized 3-SAW (DIB ≥ 12", knots > 2½" inside scaling cylinder affecting > 50% of log)

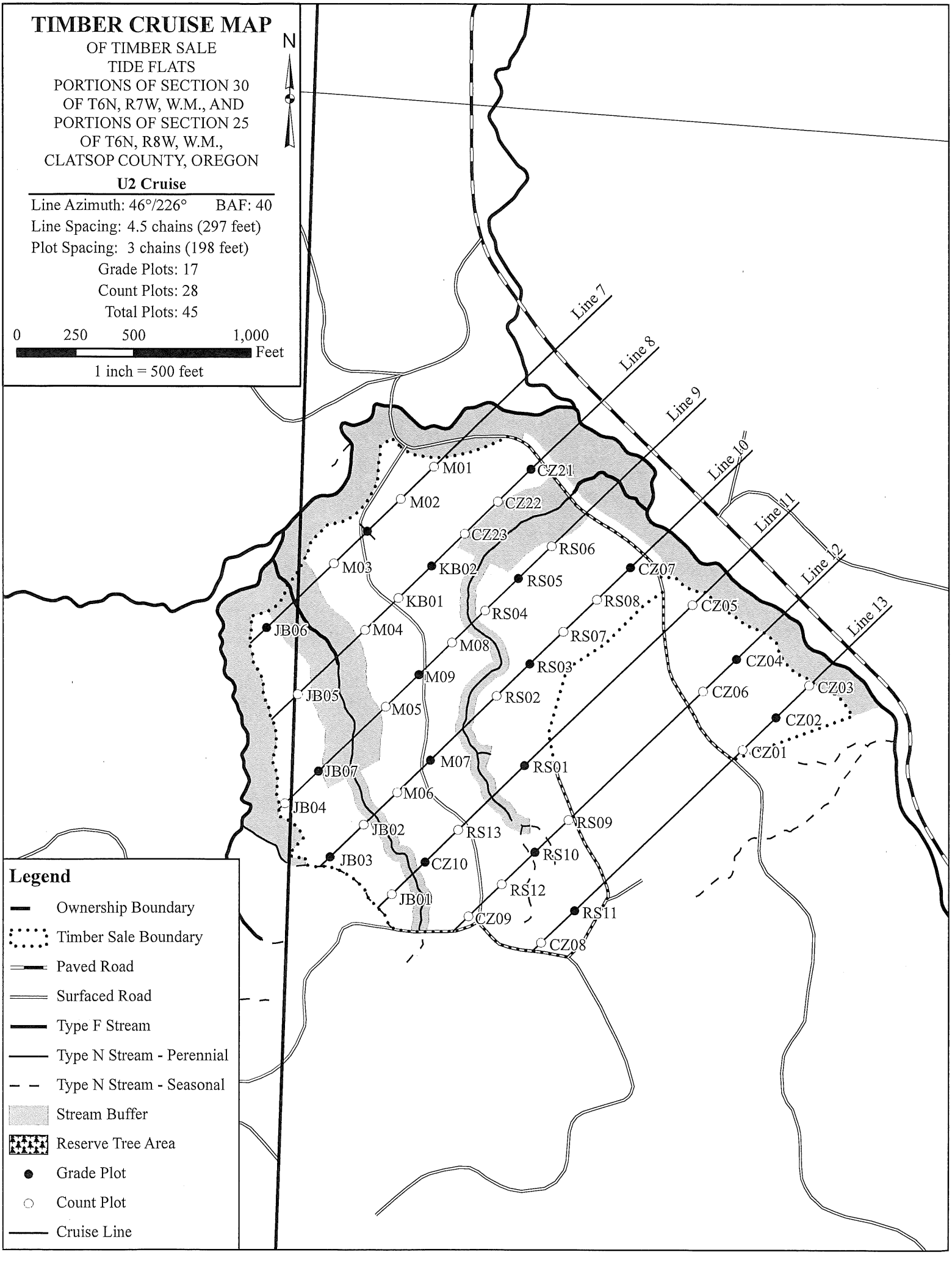
7. Deductions: Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.

8. Standard Field Procedures: Plot Type Cruises: Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On each yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at inter-visible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.

9. Cruising Equipment: Relaskop, Rangefinder, Logger's Tape (with dbh on back), Compass, Allegro II Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint, Permanent Marker.

10. Attachments: A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.)

Cruise Design by: Ryan Simpson
Approved by: [signature]
Date: 4/23/2025


TIMBER CRUISE MAP
OF TIMBER SALE
TIDE FLATS
PORTIONS OF SECTION 30
OF T6N, R7W, W.M., AND
PORTIONS OF SECTION 25
OF T6N, R8W, W.M.,
CLATSOP COUNTY, OREGON
U2 Cruise
Line Azimuth: 46°/226° BAF: 40
Line Spacing: 4.5 chains (297 feet)
Plot Spacing: 3 chains (198 feet)
Grade Plots: 17
Count Plots: 28
Total Plots: 45
0 250 500 1,000 Feet
1 inch = 500 feet
N
Line 7
Line 8
Line 9
Line 10
Line 11
Line 12
Line 13
M01
CZ21
M02
CZ22
CZ23
RS06
M03
KB02
RS05
CZ07
KB01
RS04
RS08
CZ05
JB06
M04
M08
RS07
CZ04
M09
RS03
JB05
M05
RS02
CZ06
CZ03
CZ02
CZ01
JB07
M07
RS01
M06
JB04
JB02
RS13
RS09
JB03
CZ10
RS10
RS12
JB01
CZ09
RS11
CZ08
Legend
Ownership Boundary
Timber Sale Boundary
Paved Road
Surfaced Road
Type F Stream
Type N Stream - Perennial
Type N Stream - Seasonal
Stream Buffer
Reserve Tree Area
Grade Plot
Count Plot
Cruise Line

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T06N R08W S25 Ty00CC	64.00
T06N R08W S25 Ty00CC	52.00
T06N R08W S25 TyCC	2.00

Project: TFLAT
Acres 118.00

Page 1
Date 5/28/2025
Time 3:31:47PM

Spp	S T	So Gr rt ad	% Net BdFt	Bd. Ft. per Acre Def%	Gross	Net	Total Net MBF	Percent of 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
H		DOCU														11	17		0.00	6.8
H		DO2S	77	.4	36,932	36,777	4,340		2	51	47	0	2	4	94	38	15	356	2.08	103.3
H		DO3S	19	.2	9,222	9,204	1,086		95	3	2	3	12	14	71	35	8	94	0.79	97.8
H		DO4S	4	.7	1,642	1,630	192	1	99			70	28	2		20	7	30	0.50	55.1
H	**Totals**		81	.4	47,796	47,610	5,618	0	24	40	37	3	5	6	86	33	11	181	1.34	263.1
S		DOCU														24	20		0.00	.4
S		DO2S	8		150	150	18				100				100	40	17	460	2.92	.3
S		DO3S	89	1.0	1,671	1,655	195		3	15	82		15	1	84	35	16	430	2.77	3.9
S		DO4S	3		49	49	6		100			100				16	9	40	0.81	1.2
S	**Totals**		3	.9	1,870	1,854	219		6	13	81	3	13	1	83	31	15	320	2.42	5.8
D		DOCU														11	24		0.00	.8
D		DO2S	90	1.1	6,206	6,135	724			31	69	1		2	97	39	17	509	2.84	12.1
D		DO3S	8		562	562	66		100			21	27	18	33	28	10	102	1.05	5.5
D		DO4S	2		82	82	10		100			55	45			21	7	31	0.57	2.6
D	**Totals**		12	1.0	6,850	6,779	800		9	28	63	4	3	3	90	33	14	323	2.22	21.0
A		DOCU														8	18		0.00	.5
A		DO1S	51	3.2	1,202	1,163	137		13	77	10			13	87	39	13	228	1.66	5.1
A		DO2S	2		31	31	4		100			100				16	10	60	0.87	.5
A		DO3S	31		711	711	84		100				5	26	69	36	7	73	0.67	9.8
A		DO4S	16		338	338	40		100			63	9		28	20	6	26	0.43	13.2
A	**Totals**		4	1.7	2,283	2,244	265		55	40	5	11	3	15	71	28	8	77	0.83	29.1
NF		DO2S	78		221	221	26			46	54				100	40	17	538	2.54	.4
NF		DO3S	18		51	51	6		100				17	83		33	11	146	1.12	.3
NF		DO4S	4		8	8	1		100			100				20	7	30	0.55	.3
NF	**Totals**		0		281	281	33		21	36	43	3	3	15	79	32	12	270	1.72	1.0
Totals				0.5	59,079	58,767	6,935	0	23	37	40	4	5	6	86	32	11	184	1.38	320.0

T TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: TFLAT

Page 1
Date 5/28/2025
Time 3:27:03PM

T06N R08W S25 T00CC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt
06N	08W	25	U1	00CC	64.00	44	128	1	W

T06N R08W S25 T00CC

Spp	ST	So rt	Gr ad	% 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
H		DO	CU														11	17		0.00	8.2
H		DO	2S	74	.5	43,631	43,426	2,779		3	53	44	0	2	1	97	39	15	346	2.02	125.6
H		DO	3S	22	.2	12,530	12,500	800		95	3	2	2	14	13	71	35	8	92	0.76	135.8
H		DO	4S	4	.7	2,201	2,185	140	1	99			69	28	3		20	7	29	0.48	75.1
H	**Totals**			87	.4	58,362	58,111	3,719	0	26	40	33	3	5	4	88	33	10	169	1.26	344.7
D		DO	2S	90	.5	5,181	5,157	330			32	68				100	40	18	537	2.89	9.6
D		DO	3S	9		476	476	30		100			21	43		36	28	10	105	1.08	4.5
D		DO	4S	1		51	51	3		100			44	56			22	7	30	0.56	1.7
D	**Totals**			8	.4	5,709	5,684	364		9	29	62	2	4		94	34	14	359	2.31	15.8
A		DO	1S	33	4.4	458	438	28			52	48				100	40	14	303	2.00	1.4
A		DO	2S	5		57	57	4		100			100				16	10	60	0.87	.9
A		DO	3S	41		528	528	34		100				4	32	64	36	6	55	0.49	9.5
A		DO	4S	21		266	266	17		100			100				16	6	17	0.31	16.0
A	**Totals**			2	1.5	1,308	1,288	82		66	18	16	25	2	13	60	24	7	46	0.56	27.9
S		DO	CU														24	20		0.00	.7
S		DO	2S	17		270	270	17				100				100	40	17	460	2.92	.6
S		DO	3S	83	2.2	1,300	1,270	81		8	3	89		3	3	94	36	16	498	3.10	2.6
S	**Totals**			2	1.9	1,570	1,541	99		6	3	91		3	2	95	34	17	398	2.66	3.9
NF		DO	2S	66		185	185	12			100					100	40	15	360	1.87	.5
NF		DO	3S	28		77	77	5		100					100		34	11	150	1.06	.5
NF		DO	4S	6		15	15	1		100			100				20	7	30	0.55	.5
NF	**Totals**			0		278	278	18		33	67		6		28	67	31	11	180	1.30	1.5
Type Totals					.5	67,226	66,902	4,282	0	25	38	36	4	5	4	88	32	10	170	1.28	393.8

T TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: TFLAT

Date 5/28/2025

Time 3:23:14PM

T06N R08W S25 T00CC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt
06N	08W	25	U2TAKE	00CC	52.00	44	103	1	W

T06N R08W S25 T00CC

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
H		DO	CU														10	19		0.00	5.2
H		DO	2S	82	.3	28,939	28,844	1,500	0	46	54		1	2	9	88	38	16	376	2.22	76.6
H		DO	3S	15	.1	5,222	5,216	271	97	3			5	9	15	71	35	9	101	0.88	51.9
H		DO	4S	3	.8	966	959	50	100				72	28			19	7	31	0.56	30.8
H	**Totals**			71	.3	35,127	35,020	1,821	18	38	44		3	4	10	83	33	12	213	1.56	164.5
D		DO	CU														11	24		0.00	1.7
D		DO	2S	90	1.7	7,489	7,361	383		30	70		3		4	94	39	17	487	2.80	15.1
D		DO	3S	8		669	669	35	100				22	14	34	31	28	10	100	1.03	6.7
D		DO	4S	2		121	121	6	100				61	39			20	7	32	0.57	3.8
D	**Totals**			17	1.5	8,279	8,151	424	10	27	63		5	2	6	87	32	14	298	2.15	27.4
A		DO	CU														8	18		0.00	1.2
A		DO	1S	60	2.9	2,123	2,061	107	16	84					17	83	39	13	214	1.60	9.6
A		DO	3S	27		938	938	49	100					6	22	72	36	8	93	0.87	10.0
A		DO	4S	13		428	428	22	100				34	16		50	27	7	44	0.58	9.8
A	**Totals**			7	1.8	3,488	3,426	178	50	50			4	4	16	76	33	10	112	1.05	30.6
S		DO	3S	95		2,140	2,140	111		23	77			23		77	35	16	390	2.57	5.5
S		DO	4S	5		110	110	6	100				100				16	9	40	0.81	2.7
S	**Totals**			5		2,250	2,250	117	5	22	73		5	22		73	29	14	273	2.24	8.2
NF		DO	2S	93		267	267	14			100					100	40	23	925	3.99	.3
NF		DO	3S	7		19	19	1	100					100			30	11	130	1.43	.1
NF	**Totals**			1		285	285	15	7		93			7		93	37	19	660	3.29	.4
Type Totals					.6	49,429	49,131	2,555	18	36	46		4	4	9	83	32	12	213	1.58	231.2

T TSPCSTGR

Species, Sort Grade - Board Foot Volumes (Type)

Project: TFLAT

Date 5/28/2025

Time 3:33:13PM

T06N R08W S25 TCC

Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt
06N	08W	25	U3RW	CC	2.00	88	231	1	W

T06N R08W S25 TCC

Spp	ST	So rt	Gr ad	% 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
H		DO	CU														11	18		0.00	5.6
H		DO	2S	77	.4	30,358	30,233	60		2	50	48	0	2	4	93	38	15	358	2.10	84.5
H		DO	3S	19	.2	7,384	7,369	15		96	3	1	3	12	14	71	35	8	95	0.79	78.0
H		DO	4S	4	.7	1,318	1,308	3	1	99			70	28	2		20	7	30	0.50	44.0
H	**Totals**			79	.4	39,059	38,910	78	0	23	40	37	3	5	6	86	33	11	183	1.36	212.1
D		DO	CU														11	24		0.00	.9
D		DO	2S	90	1.3	5,645	5,572	11			31	69	2		2	96	39	17	503	2.83	11.1
D		DO	3S	8		509	509	1		100			21	24	23	32	28	10	101	1.04	5.0
D		DO	4S	2		79	79	0		100			57	43			21	7	31	0.57	2.5
D	**Totals**			13	1.2	6,233	6,160	12		10	28	63	4	2	4	89	33	14	316	2.20	19.5
A		DO	CU														8	18		0.00	.4
A		DO	1S	49	3.4	1,066	1,030	2		11	74	14			12	88	39	13	234	1.69	4.4
A		DO	2S	1		39	39	0		100			100				16	10	60	0.87	.7
A		DO	3S	34		696	696	1		100				5	27	68	36	7	69	0.62	10.1
A		DO	4S	16		335	335	1		100			70	7		23	19	6	23	0.41	14.5
A	**Totals**			4	1.7	2,135	2,100	4		57	37	7	13	3	15	69	27	8	70	0.78	30.1
S		DO	CU														24	20		0.00	.6
S		DO	2S	13		215	215	0				100				100	40	17	460	2.93	.5
S		DO	3S	85	1.7	1,375	1,352	3		6	8	86		8	2	90	36	16	466	2.95	2.9
S		DO	4S	2		17	17	0		100			100				16	9	40	0.81	.4
S	**Totals**			3	1.4	1,608	1,585	3		6	7	87	1	7	2	90	33	16	361	2.55	4.4
NF		DO	2S	82		201	201	0			34	66				100	40	18	605	2.79	.3
NF		DO	3S	15		38	38	0		100				25	75		33	11	144	1.15	.3
NF		DO	4S	3		6	6	0		100			100				20	7	30	0.55	.2
NF	**Totals**			0		245	245	0		18	28	54	2	4	12	82	33	13	313	1.91	.8
Type Totals					.6	49,281	49,000	98	0	22	37	41	4	5	6	86	32	11	184	1.39	266.9

TC PSTATS

PROJECT STATISTICS

PROJECT TFLAT

DATE 5/28/2025

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	08	25	U1	00CC	118.00	176	1,174	1	W
06N	08W	25	U2TAKE	00CC					
06N	08W	25	U3RW	CC					

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	176	1174	6.7		
CRUISE	74	462	6.2	17,070	2.7
DBH COUNT					
REFOREST					
COUNT	102	688	6.7		
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
WHEMLOCK	350	112.1	20.1	80	55.3	248.3	47,796	47,610	11,532	11,532
DOUG FIR	60	6.9	29.4	104	6.0	32.4	6,850	6,779	1,530	1,530
R ALDER	34	22.8	13.6	38	6.2	22.8	2,283	2,244	684	684
S SPRUCE	10	2.1	29.0	88	1.8	9.7	1,870	1,854	432	432
SNAG	4	.4	28.0	61	0.3	1.6				
NOB FIR	4	.3	24.0	100	0.2	1.1	281	281	58	58
TOTAL	*462*	*144.7*	*20.0*	*74*	*70.6*	*315.9*	*59,079*	*58,767*	*14,235*	*14,235*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	SAMPLE TREES - BF LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
WHEMLOCK	87.5	4.7	613	643	673			
DOUG FIR	51.5	6.6	1,055	1,130	1,205			
R ALDER	77.2	13.2	145	168	190			
S SPRUCE	65.4	21.8	814	1,040	1,266			
SNAG								
NOB FIR	66.0	37.7	785	1,260	1,735			
TOTAL	*87.6*	*4.1*	*652*	*680*	*708*	*306*	*77*	*34*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	TREES/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	136.8	10.3	101	112	124			
DOUG FIR	196.4	14.8	6	7	8			
R ALDER	511.0	38.5	14	23	32			
S SPRUCE	328.2	24.7	2	2	3			
SNAG	867.3	65.3	0	0	1			
NOB FIR	1092.7	82.3	0	0	1			
TOTAL	*131.9*	*9.9*	*130*	*145*	*159*	*695*	*174*	*77*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	BASAL AREA/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	125.8	9.5	225	248	272			
DOUG FIR	193.5	14.6	28	32	37			
R ALDER	395.8	29.8	16	23	30			
S SPRUCE	323.7	24.4	7	10	12			
SNAG	789.4	59.5	1	2	3			
NOB FIR	951.3	71.6	0	1	2			
TOTAL	*110.7*	*8.3*	*290*	*316*	*342*	*489*	*122*	*54*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	NET BF/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	126.4	9.5	43,078	47,610	52,142			
DOUG FIR	195.3	14.7	5,782	6,779	7,776			
R ALDER	388.9	29.3	1,587	2,244	2,901			

PROJECT STATISTICS

PROJECT TFLAT

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	08	25	U1	00CC	118.00	176	1,174	1	W
06N	08W	25	U2TAKE	00CC					
06N	08W	25	U3RW	CC					

CL 68.1
SD: 1.00

	COEFF VAR.	S.E.%	NET BF/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
S SPRUCE	331.8	25.0	1,391	1,854	2,317			
SNAG								
NOB FIR	925.3	69.7	85	281	476			
TOTAL	*113.1*	*8.5*	*53,763*	*58,767*	*63,772*	*511*	*128*	*57*

STATISTICS

PROJECT TFLAT

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	08W	25	U1	00CC	64.00	44	284	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	44	284	6.5		
CRUISE	21	128	6.1	11,611	1.1
DBH COUNT					
REFOREST					
COUNT	23	144	6.3		
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
WHEMLOCK	106	147.6	19.3	80	68.4	300.7	58,362	58,111	14,180	14,180
DOUG FIR	9	5.3	29.3	107	4.6	24.8	5,709	5,684	1,261	1,261
R ALDER	8	26.4	10.2	26	4.7	14.9	1,308	1,288	376	376
S SPRUCE	4	1.6	31.4	87	1.5	8.7	1,570	1,541	354	354
NOB FIR	1	.5	21.0	97	0.3	1.2	278	278	63	63
TOTAL	*128*	*181.4*	*18.8*	*73*	*80.7*	*350.2*	*67,226*	*66,902*	*16,234*	*16,234*

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
WHEMLOCK	105.6	10.2	577	643	709			
DOUG FIR	30.9	10.9	1,040	1,167	1,294			
R ALDER	135.2	51.0	60	123	185			
S SPRUCE	75.0	42.8	626	1,095	1,564			
NOB FIR								
TOTAL	*101.5*	*9.0*	*601*	*660*	*720*	*411*	*103*	*46*

CL: 68.1 %	COEFF		**TREES/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK	44.8	6.8	138	148	158			
DOUG FIR	139.4	21.0	4	5	6			
R ALDER	378.3	57.0	11	26	41			
S SPRUCE	238.6	35.9	1	2	2			
NOB FIR	663.3	99.9	0	1	1			
TOTAL	*47.7*	*7.2*	*168*	*181*	*194*	*91*	*23*	*10*

CL: 68.1 %	COEFF		**BASAL AREA/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK	41.6	6.3	282	301	320			
DOUG FIR	138.0	20.8	20	25	30			
R ALDER	338.9	51.0	7	15	22			
S SPRUCE	232.6	35.0	6	9	12			
NOB FIR	663.3	99.9	0	1	2			
TOTAL	*27.3*	*4.1*	*336*	*350*	*365*	*30*	*7*	*3*

CL: 68.1 %	COEFF		**NET BF/ACRE**			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
WHEMLOCK	41.4	6.2	54,485	58,112	61,738			
DOUG FIR	138.2	20.8	4,501	5,684	6,867			
R ALDER	322.1	48.5	663	1,288	1,913			
S SPRUCE	246.8	37.2	968	1,541	2,113			
NOB FIR	663.3	99.9	0	278	555			
TOTAL	*29.8*	*4.5*	*63,900*	*66,902*	*69,904*	*35*	*9*	*4*

STATISTICS

PROJECT TFLAT

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	08W	25	U2TAKE	00CC	52.00	44	303	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	44	303	6.9		
CRUISE	16	103	6.4	5,211	2.0
DBH COUNT					
REFOREST					
COUNT	28	200	7.1		
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
WHEMLOCK	69	69.3	22.1	80	39.4	185.5	35,127	35,020	8,354	8,354
DOUG FIR	21	8.8	29.5	102	7.7	41.8	8,279	8,151	1,866	1,866
R ALDER	9	18.3	18.1	59	7.7	32.7	3,488	3,426	1,064	1,064
S SPRUCE	1	2.7	27.0	89	2.1	10.9	2,250	2,250	530	530
SNAG	2	.8	28.0	61	0.7	3.6				
NOB FIR	1	.1	34.0	112	0.2	.9	285	285	52	52
TOTAL	*103*	*100.2*	*22.5*	*78*	*58.1*	*275.5*	*49,429*	*49,131*	*11,866*	*11,866*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

SAMPLE TREES - BF

CL: 68.1 % SD: 1.0

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
WHEMLOCK	49.4	5.9	606	644	682			
DOUG FIR	59.9	13.4	965	1,115	1,264			
R ALDER	39.5	13.9	179	208	237			
S SPRUCE								
SNAG								
NOB FIR								
TOTAL	*69.6*	*6.9*	*656*	*704*	*752*	*194*	*48*	*22*

TREES/ACRE

CL: 68.1 % SD: 1.0

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	65.8	9.9	62	69	76			
DOUG FIR	110.3	16.6	7	9	10			
R ALDER	239.4	36.1	12	18	25			
S SPRUCE	214.6	32.3	2	3	4			
SNAG	439.3	66.2	0	1	1			
NOB FIR	663.3	99.9	0	0	0			
TOTAL	*51.1*	*7.7*	*92*	*100*	*108*	*104*	*26*	*12*

BASAL AREA/ACRE

CL: 68.1 % SD: 1.0

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	53.7	8.1	170	185	200			
DOUG FIR	107.1	16.1	35	42	49			
R ALDER	239.1	36.0	21	33	45			
S SPRUCE	214.6	32.3	7	11	14			
SNAG	398.3	60.0	1	4	6			
NOB FIR	663.3	99.9	0	1	2			
TOTAL	*36.1*	*5.4*	*260*	*275*	*290*	*52*	*13*	*6*

NET BF/ACRE

CL: 68.1 % SD: 1.0

	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	54.2	8.2	32,160	35,020	37,879			
DOUG FIR	108.8	16.4	6,815	8,151	9,486			
R ALDER	236.6	35.6	2,205	3,426	4,647			
S SPRUCE	214.6	32.3	1,523	2,250	2,977			
SNAG								
NOB FIR	663.3	99.9	0	285	571			

STATISTICS

PROJECT **TFLAT**

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	08W	25	U2TAKE	00CC	52.00	44	303	1	W

CL: 68.1%	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
TOTAL	*36.5*	*5.5*	*46,431*	*49,131*	*51,832*	*53*	*13*	*6*

TC TSTATS

STATISTICS

PROJECT TFLAT

DATE 5/28/2025

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	08W	25	U3RW	CC	2.00	88	587	1	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	88	587	6.7		
CRUISE	37	231	6.2	248	93.2
DBH COUNT					
REFOREST					
COUNT	51	344	6.7		
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
WHEMLOCK	175	90.4	20.3	80	45.1	203.2	39,059	38,910	9,412	9,412
DOUG FIR	30	6.4	29.4	103	5.5	30.0	6,233	6,160	1,396	1,396
R ALDER	17	24.7	12.7	35	6.1	21.8	2,135	2,100	636	636
S SPRUCE	5	1.7	30.4	88	1.6	8.6	1,608	1,585	366	366
SNAG	2	.5	28.0	61	0.4	2.3				
NOB FIR	2	.3	25.3	101	0.2	.9	245	245	49	49
TOTAL	*231*	*124.0*	*19.9*	*72*	*59.9*	*266.8*	*49,281*	*49,000*	*11,859*	*11,859*

CONFIDENCE LIMITS OF THE SAMPLE

68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR

SAMPLE TREES - BF

CL: 68.1 % / SD: 1.0	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
WHEMLOCK	87.6	6.6	601	643	686			
DOUG FIR	51.9	9.6	1,021	1,130	1,239			
R ALDER	78.4	19.6	135	168	200			
S SPRUCE	69.4	34.5	681	1,040	1,399			
SNAG								
NOB FIR	80.8	75.7	307	1,260	2,213			
TOTAL	*87.7*	*5.8*	*641*	*680*	*719*	*307*	*77*	*34*

TREES/ACRE

CL: 68.1 % / SD: 1.0	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	55.4	5.9	85	90	96			
DOUG FIR	129.5	13.8	5	6	7			
R ALDER	310.3	33.0	17	25	33			
S SPRUCE	228.9	24.4	1	2	2			
SNAG	531.6	56.6	0	1	1			
NOB FIR	724.0	77.1	0	0	0			
TOTAL	*59.7*	*6.4*	*116*	*124*	*132*	*142*	*36*	*16*

BASAL AREA/ACRE

CL: 68.1 % / SD: 1.0	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	47.7	5.1	193	203	214			
DOUG FIR	126.7	13.5	26	30	34			
R ALDER	283.4	30.2	15	22	28			
S SPRUCE	227.0	24.2	7	9	11			
SNAG	489.0	52.1	1	2	3			
NOB FIR	659.5	70.2	0	1	2			
TOTAL	*32.5*	*3.5*	*258*	*267*	*276*	*42*	*11*	*5*

NET BF/ACRE

CL: 68.1 % / SD: 1.0	COEFF VAR.%	S.E.%	LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
WHEMLOCK	47.9	5.1	36,924	38,910	40,897			
DOUG FIR	127.3	13.6	5,325	6,160	6,995			
R ALDER	278.9	29.7	1,476	2,100	2,723			
S SPRUCE	230.9	24.6	1,195	1,585	1,975			
SNAG								
NOB FIR	668.8	71.2	70	245	419			

STATISTICS

PROJECT TFLAT

TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	08W	25	U3RW	CC	2.00	88	587	1	W

CL: 68.1% COEFF
SD: 1.0 VAR.

	S.E.%	NET BF/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
TOTAL	*3.6*	*47,235*	*49,000*	*50,765*	*46*	*11*	*5*

TC PLOGSTVB

Log Stock Table - MBF

T06N R08W S25 Ty00CC	64.00
T06N R08W S25 Ty00CC	52.00
T06N R08W S25 TyCC	2.00

Project: TFLAT
Acres 118.00

Date 5/28/2025
Time 3:32:33PM

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+
S		DO	3S	32	2		2	1.1			2									
S		DO	3S	38	4		4	1.9					4							
S		DO	3S	40	162	1.2	160	73.2								86	46	28		
S		DO	4S	16	6		6	2.6				6								
S		Totals			221		219	3.2			2	6	4	29		104	46	28		
D		DO	2S	20	10		10	1.3									10			
D		DO	2S	32	15		15	1.8						3		11				
D		DO	2S	36	17		17	2.1						11	5					
D		DO	2S	38	3		3	.3						3						
D		DO	2S	40	688	1.2	680	85.0						41	53	242	221	123		
D		DO	3S	16	2		2	.3					2							
D		DO	3S	18	1		1	.2					1							
D		DO	3S	20	11		11	1.3				3	7							
D		DO	3S	24	6		6	.7				1	4							
D		DO	3S	30	12		12	1.5				4	8							
D		DO	3S	32	10		10	1.2				5	5							
D		DO	3S	34	2		2	.3					2							
D		DO	3S	38	2		2	.2					2							
D		DO	3S	40	20		20	2.5					20							
D		DO	4S	16	3		3	.4			1	2								
D		DO	4S	18	1		1	.1				1								
D		DO	4S	20	1		1	.1				1								
D		DO	4S	24	1		1	.1				1								
D		DO	4S	26	2		2	.2			2									
D		DO	4S	30	1		1	.2			1									
D		Totals			808	1.0	800	11.5			4	19	52	58	58	254	231	123		
A		DO	1S	32	18		18	6.9							18					
A		DO	1S	40	123	3.7	119	44.9					18	69	19	14				
A		DO	2S	16	4		4	1.4					4							
A		DO	3S	24	4		4	1.6			3	1								
A		DO	3S	32	11		11	4.1				11								
A		DO	3S	34	11		11	4.2			11									
A		DO	3S	36	11		11	4.2			11									
A		DO	3S	40	47		47	17.6			11	36								

TC PLOGSTVB

Log Stock Table - MBF

T06N R08W S25 Ty00CC	64.00
T06N R08W S25 Ty00CC	52.00
T06N R08W S25 TyCC	2.00

Project: TFLAT
Acres 118.00

Date 5/28/2025
Time 3:32:33PM

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+
H		DO	2S	12	9		9	.2						9						
H		DO	2S	16	5		5	.1						5						
H		DO	2S	18	4		4	.1							4					
H		DO	2S	20	3		3	.1									3			
H		DO	2S	24	68	3.6	65	1.2						24	19	23				
H		DO	2S	26	19		19	.3						19						
H		DO	2S	30	9		9	.2							9					
H		DO	2S	32	140		140	2.5					7	41	46	26		19		
H		DO	2S	34	17		17	.3						9	9					
H		DO	2S	36	58		58	1.0						23	35					
H		DO	2S	40	4,026		4,010	71.4				24	62	735	686	1608	763	56	45	30
H		DO	3S	16	4		4	.1					4							
H		DO	3S	18	2		2	.0					2							
H		DO	3S	20	23		23	.4				12	11							
H		DO	3S	24	35		35	.6			3	11	21							
H		DO	3S	26	23		23	.4				13	10							
H		DO	3S	28	23		23	.4			14	8								
H		DO	3S	30	55		55	1.0			3	28	24							
H		DO	3S	32	130		130	2.3			17	70	30		4	9				
H		DO	3S	34	19		19	.3			6		13							
H		DO	3S	36	113	1.2	112	2.0			56	17	39							
H		DO	3S	40	661		661	11.8			177	119	329	20			17			
H		DO	4S	12	4		4	.1		1	1		1							
H		DO	4S	14	1		1	.0					1							
H		DO	4S	16	72		72	1.3			58	14								
H		DO	4S	18	19		19	.3			12	7								
H		DO	4S	20	39		39	.7			16	23								
H		DO	4S	24	13		13	.2			9	4								
H		DO	4S	26	6		6	.1			6									
H		DO	4S	28	11		11	.2			11									
H		DO	4S	30	23		23	.4			23									
H		DO	4S	34	5	20.0	4	.1			4									
H		Totals			5,640		5,618	81.0		1	416	350	555	885	811	1666	784	76	45	30
S		DO	2S	40	18		18	8.1								18				
S		DO	3S	24	3		3	1.3						3						
S		DO	3S	30	26		26	11.8						26						

TC PLOGSTVB

Log Stock Table - MBF

T06N R08W S25 Ty00CC	64.00
T06N R08W S25 Ty00CC	52.00
T06N R08W S25 TyCC	2.00

Project: TFLAT
Acres 118.00

Date 5/28/2025
Time 3:32:33PM

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+
A		DO	4S	12	3		3	1.3			3									
A		DO	4S	16	7		7	2.6			7									
A		DO	4S	20	15		15	5.6			15									
A		DO	4S	26	4		4	1.3			4									
A		DO	4S	36	4		4	1.4			4									
A		DO	4S	40	8		8	2.9			8									
A		Totals			269	1.7	265	3.8			76	48	21	69	37	14				
NF		DO	2S	40	26		26	78.9							12	5		10		
NF		DO	3S	30	1		1	3.0					1							
NF		DO	3S	34	5		5	15.1					5							
NF		DO	4S	20	1		1	3.0			1									
NF		Totals			33		33	.5			1		6		12	5		10		
Total		All Species			6,971		6,935	100.0		1	499	423	638	1040	919	2042	1061	236	45	30

TC PSTNDSUM

Stand Table Summary

Page 1
Date: 5/28/2025

T06N R08W S25 Ty00CC 64.00
T06N R08W S25 Ty00CC 52.00
T06N R08W S25 TyCC 2.00

Project TFLAT
Acres 118.00

Time: 3:32:33PM
Grown Year:

Spc	S T	DBH	Sample Trees	FF 16'	Tot Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
H		10	2	89	55	2.857	1.56	2.86	11.0	40.0		31	114		37	13
H		11	8	86	69	8.908	5.88	11.27	14.3	45.3		161	511		190	60
H		12	10	85	85	9.470	7.44	13.44	18.8	60.0		252	806		297	95
H		13	8	87	79	6.378	5.88	9.38	21.0	71.2		196	668		232	79
H		14	6	86	104	4.373	4.68	10.20	20.0	75.7		204	773		241	91
H		15	6	85	111	3.810	4.68	10.16	18.3	71.2		185	724		219	85
H		16	2	88	116	1.116	1.56	2.23	31.5	125.0		70	279		83	33
H		17	14	86	123	6.471	10.20	18.42	28.9	111.6		532	2,056		628	243
H		18	22	86	103	8.898	15.72	18.88	36.6	130.5		691	2,464		815	291
H		19	14	86	106	4.641	9.14	10.68	38.2	140.0		408	1,496		482	177
H		20	18	87	109	5.942	12.96	15.68	38.8	157.1		609	2,463		718	291
H		21	24	87	114	7.186	17.28	19.61	43.3	173.1		850	3,396		1,003	401
H		22	30	86	113	8.184	21.60	21.41	48.2	198.2		1,033	4,244		1,219	501
H		23	32	87	118	8.151	23.52	22.54	52.3	218.0		1,179	4,913		1,391	580
H		24	16	88	118	3.630	11.40	9.63	58.9	249.1		567	2,398		669	283
H		25	32	86	120	6.587	22.45	17.89	61.8	262.1		1,106	4,689		1,305	553
H		26	22	87	120	4.073	15.02	11.57	65.4	288.8		756	3,339		892	394
H		27	8	87	121	1.300	5.17	3.30	80.0	351.8		264	1,160		311	137
H		28	24	86	117	3.793	16.22	10.17	74.7	335.0		760	3,408		897	402
H		29	14	87	123	2.224	10.20	6.07	85.5	398.9		519	2,421		612	286
H		30	10	85	109	1.299	6.37	3.16	83.9	352.6		265	1,114		313	131
H		31	6	81	117	.689	3.61	1.84	78.6	372.5		144	685		171	81
H		32	2	86	110	.216	1.20	.43	124.5	525.0		54	226		63	27
H		33	8	85	111	.871	5.17	2.35	93.9	443.2		221	1,041		260	123
H		34	4	81	126	.494	3.12	1.48	105.5	471.7		156	699		185	83
H		40	4	82	118	.357	3.12	.89	167.2	760.0		149	679		176	80
H		43	2	82	143	.155	1.56	.46	188.3	936.7		87	434		103	51
H		64	2	82	129	.070	1.56	.21	388.0	1956.7		81	409		96	48
H		Totals	350	86	104	112.141	248.27	256.21	45.0	185.8		11,532	47,610		13,607	5,618
D		19	2	85	115	.454	.89	1.36	28.3	103.3		39	141		46	17
D		23	4	86	128	.833	2.40	2.50	48.3	198.4		121	496		143	58
D		24	2	80	140	.285	.89	.85	50.0	186.7		43	159		50	19
D		26	8	87	128	1.137	4.19	3.41	57.3	240.4		195	820		231	97
D		28	4	85	133	.562	2.40	1.69	71.5	296.7		120	500		142	59
D		29	4	87	142	.524	2.40	1.57	80.1	368.1		126	579		149	68
D		30	4	85	140	.490	2.40	1.47	85.5	389.2		126	572		148	67
D		31	4	79	115	.341	1.79	.85	72.2	300.0		62	256		73	30
D		32	4	85	132	.430	2.40	1.29	93.0	409.3		120	528		142	62
D		33	4	83	124	.301	1.79	.90	91.5	410.0		83	370		98	44
D		34	8	84	133	.762	4.81	2.14	96.6	456.6		207	979		244	116
D		35	4	85	129	.360	2.40	1.08	108.4	492.9		117	532		138	63
D		40	2	86	154	.103	.89	.31	162.7	813.3		50	250		59	30
D		41	4	85	157	.195	1.79	.59	173.7	881.7		102	516		120	61
D		43	2	66	112	.089	.89	.18	114.5	455.0		20	81		24	10
D		Totals	60	85	131	6.865	32.36	20.19	75.8	335.7		1,530	6,779		1,805	800
A		8	6	86	25	8.840	3.09	8.84	5.0	16.7		44	147		52	17
A		10	2	87	64	1.886	1.03	1.89	15.0	50.0		28	94		33	11
A		11	4	87	64	3.117	2.06	3.12	18.5	60.0		58	187		68	22
A		14	2	86	90	1.519	1.62	3.04	21.5	75.0		65	228		77	27
A		15	2	86	61	1.324	1.62	1.32	34.0	90.0		45	119		53	14
A		17	2	86	47	1.030	1.62	1.03	32.0	90.0		33	93		39	11
A		18	2	87	106	.919	1.62	1.84	40.0	130.0		74	239		87	28

Stand Table Summary

Date: 5/28/2025

T06N R08W S25 Ty00CC	64.00
T06N R08W S25 Ty00CC	52.00
T06N R08W S25 TyCC	2.00

Project TFLAT

Acres 118.00

Time: 3:32:33PM

Grown Year:

Spc	S T	DBH	Sample Trees	FF 16'	Tot Av Ht	Trees/ Acre	BA/ Acre	Logs Acre	Average Log Net Cu.Ft.	Average Log Net Bd.Ft.	Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
A		19	4	86	80	1.347	2.65	1.87	46.2	163.2		86	305		102	36
A		20	2	87	83	.744	1.62	1.49	42.0	140.0		63	208		74	25
A		21	2	86	64	.675	1.62	1.35	37.5	130.0		51	176		60	21
A		22	2	86	80	.615	1.62	1.23	48.5	150.0		60	185		70	22
A		24	2	66	107	.517	1.62	1.03	38.0	130.0		39	134		46	16
A		26	2	87	79	.279	1.03	.56	68.5	230.0		38	128		45	15
A		Totals	34	86	55	22.813	22.85	28.60	23.9	78.4		684	2,244		807	265
S		26	2	83	86	.327	1.20	.65	74.0	260.0		48	170		57	20
S		27	2	86	108	1.216	4.84	3.65	64.3	273.3		235	997		277	118
S		33	4	79	108	.405	2.41	.61	129.0	516.7		78	314		93	37
S		37	2	88	132	.161	1.20	.48	145.0	770.0		70	372		83	44
S		Totals	10	84	106	2.110	9.65	5.39	80.0	343.7		432	1,854		509	219
NF		21	2	92	118	.282	.68	.85	40.7	180.0		34	152		41	18
NF		34	2	92	138	.065	.41	.19	120.7	660.0		23	128		28	15
NF		Totals	4	92	122	.347	1.09	1.04	55.6	269.6		58	281		68	33
SN		21	2	88	54	.341	.82									
SN		60	2	89	116	.042	.82									
SN		Totals	4	88	61	.383	1.64									
Totals			462	86	98	144.659	315.85	311.45	45.7	188.7		14,235	58,767		16,797	6,935

LOGGING PLAN MAP

OF TIMBER SALE CONTRACT
NO. AT-341-2026-W00988-01
TIDE FLATS
PORTIONS OF SECTION 25
OF T6N, R8W, W.M., AND
PORTIONS OF SECTION 30
OF T6N, R7W, W.M.,
CLATSOP COUNTY, OREGON

Logging Breakdown

Unit	Cable	Tractor	Acres
Unit 1 (CC)	72%	28%	64
Unit 2 (CC)	0%	100%	52
Unit 3 (R/W)	0%	100%	2
Total	39%	61%	118

0 500 1,000 2,000 Feet

1 inch = 1,000 feet

N

Legend

- Timber Sale Boundary
- Ownership Boundary
- Paved Road
- Surfaced Road
- New Road Construction - Surfaced
- New Road Construction - Unsurfaced
- Existing Landing
- Landing to be Constructed
- Cable Based Yarding
- T Ground Based Yarding
- Type F Stream
- Type N Stream - Perennial
- Type N Stream - Seasonal
- Stream Buffer Removal
- Posted Stream Buffer
- Non-Posted Stream Buffer
- Reserve Tree Area
- Controlled Felling
- Reforestation Area
- Temporary Stream Crossing
- Ⓢ Stockpile Site
- Registered Water Use Site
- Survey Monument