



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal  
Standard Grade South  
Sale TL-341-2026-W01148-01

District: Tillamook

Date: June 16, 2025

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**Cost Summary**

	<b>Conifer</b>	<b>Hardwood</b>	<b>Total</b>
<b>Gross Timber Sale Value</b>	\$3,181,977.90	\$13,558.00	\$3,195,535.90
		<b>Project Work:</b>	(\$471,600.00)
		<b>Advertised Value:</b>	\$2,723,935.90



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**Timber Description**

**Location:** Section(s) 12 of T2N R8W, Section(s) 7, 8, 17, 18 of T2N R7W W.M.

**Stand Stocking:** 60%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	17	0	100
Western Hemlock / Fir	19	0	100
Alder (Red)	14	0	100

Volume by Grade	2S	3S & 4S 6"-11"	Camprun	Total
Douglas - Fir	3,755	3,862	0	7,617
Western Hemlock / Fir	390	175	0	565
Alder (Red)	0	0	200	200
<b>Total</b>	4,145	4,037	200	8,382

**Comments:** Additional Costs – STANDARD GRADE SOUTH  
Pond Values Used: April 2025  
Region: Astoria, Forest Grove, and Tillamook  
Western red cedar and other cedars stumpage price = \$1,285/MBF - \$417.93/MBF = \$867.07/MBF  
Spruce and other conifer stumpage price = \$530/MBF - \$417.93/MBF = \$112.07/MBF  
Conifer Utility SC and PC = \$406.30/MBF x .5 = \$203.15/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  
BRAND AND PAINT ALLOWANCE = \$2.00/ MBF

Other costs with profit and risk added:

Move-in Machine Cleaning: \$1,000/machine x 2 machines x 2 season = \$4,000  
Tailhold OR guybacks dozer move-in: \$1,000/machine x 2 machines = \$2,000  
TOTAL Other Costs with profit and risk to be added = \$0

Other Costs without Profit and Risk Added

TOTAL Other Costs without Profit and Risk added = \$9,550

ODF Road Maintenance

Spot Rocking: 20cy/MMBF/mile x 8.382MMBF x \$9.5/cy x 11.59 miles /8,382 MBF = \$2.20/MBF  
Interim Grading: \$1,150/mile x 12.6 miles x 2 times/ 8,382 MBF = \$3.46/MBF  
Final Maintenance Grading: \$1,500/mile x 19.7 miles/ 8,382 MBF = \$3.53/MBF  
Final Maintenance Compaction: \$900/mile x 12.6 miles/8,382 MBF = \$1.35/MBF  
Total Road Maintenance: = \$10.54/MBF  
Slash piling: \$10/ac x 321 ac. = \$3,210

Notes:

Non-Project Road #1: =\$515  
Non-Project Road #2: =\$1,130  
Non-Project Road #3: =\$370  
Non-Project Road #4: =\$1,725  
Non-Project and Unsurfaced Road Blocking: 4 Closures @ \$50/Closure = \$200  
TOTAL Notes = \$3,940





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### Logging Costs

<b>Operating Seasons:</b> 2.00	<b>Profit Risk:</b> 10%
<b>Project Costs:</b> \$471,600.00	<b>Other Costs (P/R):</b> \$3,940.00
<b>Slash Disposal:</b> \$3,210.00	<b>Other Costs:</b> \$9,550.00

**Miles of Road**

**Road Maintenance:** \$10.54

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

**Hauling Costs**

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	3.0	4.0
Western Hemlock / Fir	\$0.00	3.0	4.0
Alder (Red)	\$0.00	3.0	3.4



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### Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
<b>Douglas - Fir</b>									
\$260.51	\$10.54	\$1.05	\$104.17	\$0.47	\$37.67	\$0.38	\$2.00	\$1.14	\$417.93
<b>Western Hemlock / Fir</b>									
\$243.33	\$10.54	\$1.05	\$104.17	\$0.47	\$35.96	\$0.38	\$2.00	\$1.14	\$399.04
<b>Alder (Red)</b>									
\$251.47	\$10.54	\$1.05	\$122.55	\$0.47	\$38.61	\$0.38	\$2.00	\$1.14	\$428.21

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$824.23	\$406.30	\$0.00
Western Hemlock / Fir	\$0.00	\$553.36	\$154.32	\$0.00
Alder (Red)	\$0.00	\$496.00	\$67.79	\$0.00



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**Summary**

**Amortized**

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

**Unamortized**

Specie	MBF	Value	Total
Douglas - Fir	7,617	\$406.30	\$3,094,787.10
Western Hemlock / Fir	565	\$154.32	\$87,190.80
Alder (Red)	200	\$67.79	\$13,558.00

**Gross Timber Sale Value**

Recovery: \$3,195,535.90

Prepared By: Nathan Atchison

Phone: 971-977-9825



PROJECT SUMMARY SHEET

Sale: Standard Grade South

**CONSTRUCTION**

Point	M to N	5+90	stations =	\$11,910.72
Point	S to T	2+60	stations =	\$9,934.93
<b>SUBTOTAL CONSTRUCTION</b>				<b>\$21,845.65</b>

**IMPROVEMENT**

Point	A to B	494+35	stations =	\$228,595.15
Point	C to D	60+35	stations =	\$6,334.29
Point	I to J	92+50	stations =	\$33,777.51
Point	K to L	5+80	stations =	\$1,820.84
Point	O to P	6+67	stations =	\$11,027.95
<b>SUBTOTAL IMPROVEMENT</b>				<b>\$281,555.74</b>

**RECONSTRUCTION**

Point	E to F	2+00	stations =	\$36,511.40
Point	G to H	2+60	stations =	\$8,979.42
Point	O to P	2+95	stations =	\$4,509.98
Point	Q to R	46+25	stations =	\$90,768.01
<b>SUBTOTAL RECONSTRUCTION</b>				<b>\$140,768.81</b>

**SPECIAL PROJECTS**

Brush	10.3	miles of road	\$9,167.00
Incidental Storm Damage Repairs			\$14,315.00
<b>SUBTOTAL SPECIAL PROJECTS</b>			<b>\$23,482.00</b>

**MOVE IN**

**\$3,947.80**

**GRAND TOTAL** **\$471,600.00**

## SUMMARY OF CONSTRUCTION COST

Sale:	<b>Standard Grade South</b>	Road: <b>A to B</b>			
Construction -	0+00 stations 0.00 miles	Improvement -	494+35 stations 9.36 miles	Reconstruction -	0+00 stations 0.00 miles

<b>IMPROVEMENT:</b> CLEARING AND GRUBBING - Widening	0.162	acres @	\$955.00	per acre =	\$154.71
<b>TOTAL CLEARING AND GRUBBING</b>					<b>\$154.71</b>

<b>IMPROVEMENT:</b> EXCAVATION - Pullback Widening Remove outside berm & waste & ravel & culvert fill	9 2716 1500	cy. @ cy. @ cy. @	\$2.20 \$2.20 \$2.20	per c.y.= per c.y.= per c.y.=	\$19.80 \$5,975.20 \$3,300.00
<b>TOTAL EXCAVATION</b>					<b>\$9,295.00</b>

<b>IMPROVEMENT:</b> ENDHAUL - Pullback Widening Remove outside berm & waste & ravel & culvert fill Spread & compact	286+15 to 415+20 9 2716 1500 4225	to to cy. @ cy. @ cy. @ cy. @	286+30 417+55 9 2716 1500 4225	cy. @ cy. @ cy. @ cy. @ cy. @	\$4.29 \$1.77 \$5.02 \$0.55 per c.y.= per c.y.= per c.y.= per c.y.=	\$38.61 \$4,807.32 \$7,530.00 \$2,323.75
<b>TOTAL ENDHAUL</b>					<b>\$14,699.68</b>	

**CULVERTS - MATERIALS & INSTALLATION(Culverts 36" and above are just the culvert purchase cost)**

<u>Culverts</u>	430	LF of 18"	\$10,857.50	240	LF of 24"	\$9,180.00
	90	LF of 30"	\$4,500.00	50	LF of 36"	\$3,009.14
				70	LF of 48"	\$6,986.42
				80	LF of 60"	\$13,465.82
			\$15,357.50			\$32,641.38
<u>Culvert Stakes &amp; Markers</u>						
37 markers			\$333.00			
<b>TOTAL CULVERTS</b>					<b>\$48,331.88</b>	

<b>ROCK</b>						
0+00 to 253+55	128+40 to 279+05	5,060	cy. of	Crushed	@	\$16.47 per c.y.= \$83,338.20
Spot Rock/Leveling Rock	0+00-279+05	580	cy. of	Crushed	@	\$20.75 per c.y.= \$12,035.00
Spot Rock/Leveling Rock	279+05-494+35	0	cy. of	Crushed	@	\$0.00 per c.y.= \$0.00
Culvert backfill/bedding to	20cu yd each	200	cy. of	Crushed	@	\$7.60 per c.y.= \$1,520.00
Culvert backfill/bedding from	20cu yds each	180	cy. of	Crushed	@	\$16.12 per c.y.= \$2,901.60
Energy Dissipator to 279+0	5cu yd each	260	cy. of	Crushed	@	\$5.65 per c.y.= \$1,469.00
Energy Dissipator from 279	5cu yd each	40	cy. of	Rip Rap	@	\$9.21 per c.y.= \$368.40
Culvert bedding/backfill	1+65	70	cy. of	Rip Rap	@	\$16.11 per c.y.= \$1,127.70
Energy Dissipator	1+65	60	cy. of	Crushed	@	\$13.20 per c.y.= \$792.00
Energy Dissipator	1+65	40	cy. of	Pitrun	@	\$10.89 per c.y.= \$435.60
Energy Dissipator	32+60	10	cy. of	Rip Rap	@	\$10.64 per c.y.= \$106.40
Energy Dissipator	41+60	5	cy. of	Rip Rap	@	\$9.98 per c.y.= \$49.90
Energy Dissipator	45+25	5	cy. of	Rip Rap	@	\$9.79 per c.y.= \$48.95
Backfill, bedding, road surf:	69+45	20	cy. of	Rip Rap	@	\$9.72 per c.y.= \$194.40
Fill	69+45	60	cy. of	Crushed	@	\$14.63 per c.y.= \$877.80
Energy Dissipator	69+45	150	cy. of	Pitrun	@	\$9.45 per c.y.= \$1,417.50
Energy Dissipator	107+90	10	cy. of	Rip Rap	@	\$9.20 per c.y.= \$92.00
Backfill, bedding, road surf:	114+60	5	cy. of	Rip Rap	@	\$8.39 per c.y.= \$41.95
Fill	114+60	70	cy. of	Crushed	@	\$15.59 per c.y.= \$1,091.30
Energy Dissipator	123+60	200	cy. of	Pitrun	@	\$8.50 per c.y.= \$1,700.00
Energy Dissipator Above Cl	125+95	10	cy. of	Rip Rap	@	\$8.25 per c.y.= \$82.50
Turnout	148+30	10	cy. of	Rip Rap	@	\$8.06 per c.y.= \$80.60
Energy Dissipator	150+70	40	cy. of	Crushed	@	\$17.77 per c.y.= \$710.80
Backfill, bedding, road surf:	150+70	5	cy. of	Rip Rap	@	\$7.92 per c.y.= \$39.60
Fill	150+70	60	cy. of	Crushed	@	\$16.35 per c.y.= \$981.00
Energy Dissipator	171+90	60	cy. of	Pitrun	@	\$8.22 per c.y.= \$493.20
Backfill, bedding, road surf:	229+10	10	cy. of	Rip Rap	@	\$7.97 per c.y.= \$79.70
Energy Dissipator	262+30	10	cy. of	Rip Rap	@	\$8.42 per c.y.= \$84.20
Fill	281+80	10	cy. of	Crushed	@	\$16.90 per c.y.= \$845.00
Backfill, bedding, road surf:	288+15	10	cy. of	Rip Rap	@	\$9.63 per c.y.= \$96.30
Fill	288+15	10	cy. of	Rip Rap	@	\$10.33 per c.y.= \$103.30
Energy Dissipator	300+95	60	cy. of	Pitrun	@	\$18.52 per c.y.= \$1,111.20
Backfill	344+20	80	cy. of	Crushed	@	\$7.38 per c.y.= \$590.40
Backfill, bedding, road surf:	344+40	300	cy. of	Pitrun	@	\$18.38 per c.y.= \$5,514.00
Energy Dissipator	397+35	10	cy. of	Rip Rap	@	\$17.68 per c.y.= \$176.80
Crushed Rock Berm	398+75	5	cy. of	Rip Rap	@	\$17.41 per c.y.= \$87.05
Crushed Rock Berm	405+30	30	cy. of	Crushed	@	\$5.98 per c.y.= \$179.40
Crushed Rock Berm	409+35	60	cy. of	Crushed	@	\$16.75 per c.y.= \$1,005.00
Energy Dissipator	413+30	10	cy. of	Rip Rap	@	\$16.05 per c.y.= \$160.50
Widening	416+00	40	cy. of	Jawrun	@	\$16.37 per c.y.= \$654.80
Widening	416+00	10	cy. of	Crushed	@	\$5.04 per c.y.= \$50.40
		10	cy. of	Crushed	@	\$4.90 per c.y.= \$49.00
		5	cy. of	Crushed	@	\$4.82 per c.y.= \$24.10
		5	cy. of	Rip Rap	@	\$14.95 per c.y.= \$74.75
		30	cy. of	Crushed	@	\$6.63 per c.y.= \$198.90
		90	cy. of	Jawrun	@	\$17.18 per c.y.= \$1,546.20
<b>TOTAL ROCK</b>					<b>\$124,626.40</b>	

<b>SPECIAL PROJECTS</b>						
Rock Hammering(207+45 & 213+50)	3.00	hours @	\$255.00	per hour	\$765.00	
Construct waste areas -	3.00	hours @	\$220.00	per hour	\$660.00	
Construct ditchouts -	1.00	@	\$60.00	each	\$60.00	
Improve turnaround @ 397+35	1.00	hours @	\$220.00	per station	\$220.00	
Ditch - Endhaul	30.45	stations @	\$175.00	per station	\$5,328.75	
Grade and shape road -	494.35	stations @	\$24.40	per station	\$12,062.14	
Roll subgrade w/ vibratory roller-45+40-171+60	441.10	stations @	\$19.40	per station	\$8,557.34	
Remove culverts and half rounds from state lands	24.00	@	\$1,978.00	total	\$1,978.00	
Grass seed and fertilize -	2.50	acres @	\$310.00	per acre	\$775.00	
Mulching -	1.25	acres @	\$865.00	per acre	\$1,081.25	
<b>TOTAL SPECIAL PROJECTS</b>					<b>\$31,487.48</b>	

**GRAND TOTAL** **\$228,595.15**

## SUMMARY OF CONSTRUCTION COST

Sale: **Standard Grade South**

Road: **C to D**

<u>Construction -</u>	<u>0+00</u>	stations	<u>Improvement -</u>	<u>60+35</u>	stations	<u>Reconstruction -</u>	<u>0+00</u>	stations
	0.00	miles		1.14	miles		0.00	miles

<b>ROCK</b>							
Spot Rock	As Directed	50	cy. of	Crushed	@	\$9.23 per c.y.=	\$461.50
							<b>TOTAL ROCK</b>
							<b>\$461.50</b>

<b>SPECIAL PROJECTS</b>							
Construct Landings		1.50	hours @	\$220.00	per hour	\$330.00	
Ditch - Endhaul		14.70	stations @	\$150.00	per station	\$2,205.00	
Ravel Removal -		3.00	hours @	\$320.00	per hour	\$960.00	
Grade and shape road -		60.35	stations @	\$20.00	per station	\$1,207.00	
Roll subgrade w/ vibratory roller prior to rocking -		60.35	stations @	\$19.40	per station	\$1,170.79	
							<b>TOTAL SPECIAL PROJECTS</b>
							<b>\$5,872.79</b>

<b>GRAND TOTAL</b>	<b>\$6,334.29</b>
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## SUMMARY OF CONSTRUCTION COST

Sale: **Standard Grade South**

Road: **E to F**

<u>Construction -</u>	<u>0+00</u>	stations	<u>Improvement -</u>	<u>0+00</u>	stations	<u>Reconstruction -</u>	<u>2+00</u>	stations
	0.00	miles		0.00	miles		0.04	miles

**RECONSTRUCTION: EXCAVATION -**

Material Removal	4500	cy. @	\$2.20	per c.y.=	\$9,900.00
<b>TOTAL EXCAVATION</b>					<b>\$9,900.00</b>

**RECONSTRUCTION: ENDHAUL -**

Material Removal	3000	cy. @	\$4.10	per c.y.=	\$12,300.00
Spread & compact	4500	cy. @	\$1.25	per c.y.=	\$5,625.00
<b>TOTAL ENDHAUL</b>					<b>\$17,925.00</b>

**ROCK**

0+00 to	2+00	110	cy. of	Jawrun	@	\$19.77	per c.y.=	\$2,174.70
Approach Widening	0+00	100	cy. of	Jawrun	@	\$19.75	per c.y.=	\$1,975.00
Fill	0+60	20	cy. of	Jawrun	@	\$19.76	per c.y.=	\$395.20
Landing Rock	2+00	170	cy. of	Jawrun	@	\$19.80	per c.y.=	\$3,366.00
<b>TOTAL ROCK</b>								<b>\$7,910.90</b>

**SPECIAL PROJECTS**

Clear Fill Area 0+60 -	1.00	hours @	\$220.00	per hour	\$220.00
Construct waste areas -	2.00	hours @	\$220.00	per hour	\$440.00
Grade and shape road -	2.00	stations @	\$24.40	per station	\$48.80
Roll subgrade	2.00	stations @	\$19.40	per station	\$38.80
Grass seed and fertilize -	0.09	acres @	\$310.00	per acre	\$27.90
<b>TOTAL SPECIAL PROJECTS</b>					<b>\$775.50</b>

**GRAND TOTAL** **\$36,511.40**

## SUMMARY OF CONSTRUCTION COST

Sale: **Standard Grade South**

Road: **G to H**

<u>Construction -</u>	<u>0+00</u>	stations	<u>Improvement -</u>	<u>0+00</u>	stations	<u>Reconstruction -</u>	<u>2+60</u>	stations
	0.00	miles		0.00	miles		0.05	miles

**RECONSTRUCTION: CLEARING AND GRUBBING -**

R/W Scattering	0.119	acres @	\$1,415.00	per acre =	\$168.39	
					<b>TOTAL CLEARING AND GRUBBING</b>	<b>\$168.39</b>

**RECONSTRUCTION: EXCAVATION -**

R/W Plucking	2.00	hours @	\$220.00	per hour	\$440.00	
					<b>TOTAL EXCAVATION</b>	<b>\$440.00</b>

**ROCK**

0+00 to	2+60	140	cy. of	Jawrun	@	\$18.18	per c.y.=	\$2,545.20
Intersection Widening	0+00	70	cy. of	Jawrun	@	\$18.15	per c.y.=	\$1,270.50
Landing Rock	2+60	140	cy. of	Jawrun	@	\$18.20	per c.y.=	\$2,548.00
								<b>TOTAL ROCK</b>
								<b>\$6,363.70</b>

**SPECIAL PROJECTS**

Construct Landings	2.00	hours @	\$220.00	per hour	\$440.00	
Construct waste areas -	2.00	hours @	\$220.00	per hour	\$440.00	
Endhaul stumps from landing -	0.25	hours @	\$385.00	per hour	\$96.25	
Grade and shape road -	2.60	stations @	\$24.40	per station	\$63.44	
Roll subgrade	2.60	stations @	\$19.40	per station	\$50.44	
Rework approach to go uphill -	3.00	hours @	\$220.00	per hour	\$660.00	
Remove large stumps -	2.00	lump sum @	\$110.00		\$220.00	
Grass seed and fertilize -	0.12	acres @	\$310.00	per acre	\$37.20	
					<b>TOTAL SPECIAL PROJECTS</b>	<b>\$2,007.33</b>

**GRAND TOTAL** **\$8,979.42**

## SUMMARY OF CONSTRUCTION COST

Sale: **Standard Grade South**

Road: **I to J**

Construction -	0+00	stations	Improvement -	92+50	stations	Reconstruction -	0+00	stations
	0.00	miles		1.75	miles		0.00	miles

**IMPROVEMENT: CLEARING AND GRUBBING -**

Pullback	0.040	acres @	\$955.00	per acre =	\$38.20
Widening	0.009	acres @	\$955.00	per acre =	\$8.60
<b>TOTAL CLEARING AND GRUBBING</b>					<b>\$46.80</b>

**IMPROVEMENT: EXCAVATION -**

Pullback	216	cy. @	\$2.20	per c.y.=	\$475.20
Widening	29	cy. @	\$2.20	per c.y.=	\$63.80
<b>TOTAL EXCAVATION</b>					<b>\$539.00</b>

**IMPROVEMENT: ENDHAUL -**

Pullback	23+05	to	23+45	35	cy. @	\$1.27	per c.y.=	\$44.45
Pullback	46+45	to	46+85	35	cy. @	\$1.27	per c.y.=	\$44.45
Pullback	70+55	to	71+05	146	cy. @	\$1.27	per c.y.=	\$185.42
Widening	55+75	to	56+70	29	cy. @	\$1.27	per c.y.=	\$36.83
Spread & compact				245	cy. @	\$0.55	per c.y.=	\$134.75
<b>TOTAL ENDHAUL</b>								<b>\$445.90</b>

**CULVERTS - MATERIALS & INSTALLATION (Culverts 36" and above are just the culvert purchase cost)**

<u>Culverts</u>	30	LF of 18"	\$757.50		30	LF of 24"	\$1,147.50
			\$757.50		50	LF of 36"	\$3,361.06
							\$4,508.56

Culvert Stakes & Markers  
3 markers

\$27.00

**TOTAL CULVERTS** **\$5,293.06**

**ROCK**

0+00 to	56+25	1,270	cy. of	Crushed	@	\$7.92	per c.y.=	\$10,058.40
56+25 to	92+50	620	cy. of	Crushed	@	\$10.09	per c.y.=	\$6,255.80
Approach Widening	0+00	30	cy. of	Crushed	@	\$7.32	per c.y.=	\$219.60
Approach Widening	92+50	50	cy. of	Crushed	@	\$9.28	per c.y.=	\$464.00
Culvert bedding/backfill	2+15	20	cy. of	Crushed	@	\$5.42	per c.y.=	\$108.40
Energy Dissipator	2+15	5	cy. of	Rip Rap	@	\$15.72	per c.y.=	\$78.60
Energy Dissipator	2+60	5	cy. of	Rip Rap	@	\$15.71	per c.y.=	\$78.55
Culvert bedding/backfill	14+25	40	cy. of	Crushed	@	\$5.68	per c.y.=	\$227.20
Energy Dissipator	14+25	10	cy. of	Rip Rap	@	\$15.89	per c.y.=	\$158.90
Energy Dissipator	43+20	30	cy. of	Rip Rap	@	\$16.50	per c.y.=	\$495.00
Culvert bedding/backfill	46+45	20	cy. of	Crushed	@	\$6.36	per c.y.=	\$127.20
Energy Dissipator	46+45	5	cy. of	Rip Rap	@	\$16.57	per c.y.=	\$82.85
Energy Dissipator	54+90	5	cy. of	Rip Rap	@	\$16.75	per c.y.=	\$83.75
Energy Dissipator	59+25	10	cy. of	Rip Rap	@	\$16.84	per c.y.=	\$168.40
Leveling Rock	As Needed	100	cy. of	Crushed	@	\$7.92	per c.y.=	\$792.00
Crushed Rock Berm	78+25	5	cy. of	Crushed	@	\$7.03	per c.y.=	\$35.15
<b>TOTAL ROCK</b>								<b>\$19,433.80</b>

**SPECIAL PROJECTS**

Ditch - Endhaul	15.00	stations @	\$150.00	per station	\$2,250.00
Ravel removal -	3.00	hours @	\$315.00	per hour	\$945.00
Grade and shape road -	92.50	stations @	\$24.40	per station	\$2,257.00
Roll subgrade	92.50	stations @	\$19.40	per station	\$1,794.50
Remove culverts from state lands	3.00	@	\$432.20	total	\$432.20
Grass seed and fertilize -	0.40	acres @	\$310.00	per acre	\$124.00
Mulching -	0.250	acres @	\$865.00	per acre	\$216.25
<b>TOTAL SPECIAL PROJECTS</b>					<b>\$8,018.95</b>

**GRAND TOTAL** **\$33,777.51**

## SUMMARY OF CONSTRUCTION COST

Sale: **Standard Grade South**

Road: **K to L**

<u>Construction -</u>	<u>0+00</u>	<u>stations</u>	<u>Improvement -</u>	<u>5+80</u>	<u>stations</u>	<u>Reconstruction -</u>	<u>0+00</u>	<u>stations</u>
	0.00	miles		0.11	miles		0.00	miles

### CULVERTS - MATERIALS & INSTALLATION

<u>Culverts</u>	30	LF of 18"	\$757.50
			\$757.50
<u>Culvert Stakes &amp; Markers</u>			
1 markers			\$9.00

**TOTAL CULVERTS** **\$766.50**

### ROCK

Spot Rock	As Directed	30	cy. of	Crushed	@	\$7.26 per c.y.=	\$217.80
Crushed Rock Berm	2+45	5	cy. of	Crushed	@	\$5.30 per c.y.=	\$26.50
Culvert Bedding//Surfacing	2+45	15	cy. of	Crushed	@	\$5.30 per c.y.=	\$79.50
Energy Dissipator	2+45	5	cy. of	Rip Rap	@	\$15.60 per c.y.=	\$78.00
<b>TOTAL ROCK</b>							<b>\$401.80</b>

### SPECIAL PROJECTS

Ditch - Endhaul	2.45	stations @	\$150.00	per station	\$367.50
Grade and shape road -	5.80	stations @	\$24.40	per station	\$141.52
Roll subgrade w/ vibratory roller prior to rocking -	5.80	stations @	\$19.40	per station	\$112.52
Grass seed and fertilize -	0.10	acres @	\$310.00	per acre	\$31.00
<b>TOTAL SPECIAL PROJECTS</b>					<b>\$652.54</b>

**GRAND TOTAL** **\$1,820.84**

## SUMMARY OF CONSTRUCTION COST

Sale: **Standard Grade South**

Road: **M to N**

Construction -	5+90 0.11	stations miles	Improvement -	0.00	stations miles	Reconstruction -	0+00 0.00	stations miles
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**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 Outslope	Cost per Station	=	Drill & Shoot	Endhaul	
0+00		5+90	20%			\$193				\$1,138.70
									<b>TOTAL</b>	<b>\$1,138.70</b>

**CULVERTS - MATERIALS & INSTALLATION**

<u>Culverts</u>	30	LF of 24"	\$1,147.50		\$1,147.50	
<u>Culvert Stakes &amp; Markers</u>						
1 markers				\$9.00		
					<b>TOTAL CULVERTS</b>	<b>\$1,156.50</b>

**ROCK**

0+00 to	5+90	340	cy. of	Jawrun	@	\$17.23	per c.y.=	\$5,858.20	
Intersection Widening	0+00	30	cy. of	Jawrun	@	\$17.17	per c.y.=	\$515.10	
Energy Dissipator	4+80	5	cy. of	Rip Rap	@	\$15.07	per c.y.=	\$75.35	
Landing Rock	5+90	140	cy. of	Jawrun	@	\$17.30	per c.y.=	\$2,422.00	
								<b>TOTAL ROCK</b>	<b>\$8,870.65</b>

**SPECIAL PROJECTS**

Construct Landings	1.00	hours @	\$220.00	per hour	\$220.00	
Endhaul stumps from landing -	0.25	hours @	\$385.00	per hour	\$96.25	
Grade and shape road -	5.90	stations @	\$24.40	per station	\$143.96	
Roll subgrade w/ vibratory roller prior to rocking -	5.90	stations @	\$19.40	per station	\$114.46	
Grass seed and fertilize -	0.27	acres @	\$310.00	per acre	\$83.70	
Mulching -	0.10	acres @	\$865.00	per acre	\$86.50	
					<b>TOTAL SPECIAL PROJECTS</b>	<b>\$744.87</b>

**GRAND TOTAL** **\$11,910.72**

## SUMMARY OF CONSTRUCTION COST

Sale:	<b>Standard Grade South</b>	Road:	<b>O to P</b>
Construction -	0+00 stations 0.00 miles	Improvement -	6+65 stations 0.13 miles
		Reconstruction -	2+95 stations 0.06 miles

**IMPROVEMENT:** CLEARING AND GRUBBING -

R/W Brush End-Haul - excavator/offroad DT(2+95 to 9+60)	5.00	hours @	\$310.00 per hour =	\$1,550.00
R/W Brush End-Haul - excavator/offroad DT(Other approach)	1.00	hours @	\$310.00 per hour =	\$310.00
			<b>TOTAL CLEARING AND GRUBBING</b>	<b>\$1,860.00</b>

**RECONSTRUCTION:** CLEARING AND GRUBBING -

R/W Brush End-Haul - excavator/offroad DT(0+00 to 2+95)	1.00	hours @	\$310.00 per hour =	\$310.00
Burning	1.00	hours @	\$133.00 per hour =	\$133.00
			<b>TOTAL CLEARING AND GRUBBING</b>	<b>\$443.00</b>

**ROCK**

0+00 to	5+15	280	cy. of	Jawrun	@	\$17.09 per c.y.=	\$4,785.20
Landing Rock	5+15	330	cy. of	Jawrun	@	\$17.10 per c.y.=	\$5,643.00
Landing Rock	9+60	100	cy. of	Jawrun	@	\$17.19 per c.y.=	\$1,719.00
						<b>TOTAL ROCK</b>	<b>\$12,147.20</b>

**SPECIAL PROJECTS**

Construct Landings	2.00	hours @	\$220.00 per hour	\$440.00
Endhaul stumps from landing -	0.25	hours @	\$385.00 per hour	\$96.25
Grade and shape road -	9.60	stations @	\$24.40 per station	\$234.24
Grade and shape road other approach -	2.00	stations @	\$24.40 per station	\$48.80
Roll subgrade w/ vibratory roller prior to rocking -	9.60	stations @	\$19.40 per station	\$186.24
Roll subgrade w/ vibratory roller prior to rocking -	2.00	stations @	\$19.40 per station	\$38.80
Grass seed and fertilize -	0.14	acres @	\$310.00 per acre	\$43.40
			<b>TOTAL SPECIAL PROJECTS</b>	<b>\$1,087.73</b>

**GRAND TOTAL** **\$15,537.93**

## SUMMARY OF CONSTRUCTION COST

Sale: **Standard Grade South**

Road: **Q to R**

Construction -	0+00	stations	Improvement -	0+00	stations	Reconstruction -	46+25	stations
	0.00	miles		0.00	miles		0.88	miles

**RECONSTRUCTION: CLEARING AND GRUBBING -**

Pullback	0.014	acres @	\$955.00	per acre =	\$13.37
Widening	0.033	acres @	\$955.00	per acre =	\$31.52
R/W Brush End-Haul - excavator/offroad DT	16.00	hours @	\$385.00	per hour =	\$6,160.00
<b>TOTAL CLEARING AND GRUBBING</b>					<b>\$6,204.89</b>

**RECONSTRUCTION: EXCAVATION -**

Pullback	87	cy. @	\$2.20	per c.y. =	\$191.40
Widening	120	cy. @	\$2.20	per c.y. =	\$264.00
Ravel removal	130	cy. @	\$2.20	per c.y. =	\$286.00
<b>TOTAL EXCAVATION</b>					<b>\$741.40</b>

**RECONSTRUCTION: ENDHAUL -**

Pullback	6+25	to	6+75	87	cy. @	\$1.97	per c.y. =	\$171.39
Widening	11+80	to	12+85	39	cy. @	\$1.76	per c.y. =	\$68.64
Widening	15+70	to	16+60	52	cy. @	\$1.62	per c.y. =	\$84.24
Widening	27+20	to	28+50	29	cy. @	\$1.35	per c.y. =	\$39.15
Ravel removal	0+00	to	46+25	130	cy. @	\$2.10	per c.y. =	\$273.00
Spread & compact				337	cy. @	\$0.55	per c.y. =	\$185.35
<b>TOTAL ENDHAUL</b>								<b>\$821.77</b>

**CULVERTS - MATERIALS & INSTALLATION(Culvertsare just the culvert purchase cost)**

70	LF of 30"	\$2,253.00		90	LF of 24"	\$2,146.50
<u>Culvert Stakes &amp; Markers</u>						
5	markers	\$45.00				
<b>TOTAL CULVERTS</b>						<b>\$4,444.50</b>

**ROCK**

0+00 to	46+25	2,560	cy. of	Jawrun	@	\$19.34	per c.y. =	\$49,510.40
Intersection Widening	0+00	30	cy. of	Jawrun	@	\$18.85	per c.y. =	\$565.50
Base Rock	3+50	100	cy. of	Jawrun	@	\$17.42	per c.y. =	\$1,742.00
Energy Dissipator	9+15	5	cy. of	Rip Rap	@	\$16.84	per c.y. =	\$84.20
Energy Dissipator	9+50	5	cy. of	Rip Rap	@	\$16.85	per c.y. =	\$84.25
Edge Repair	17+85	10	cy. of	Jawrun	@	\$17.02	per c.y. =	\$170.20
Edge Repair	23+85	10	cy. of	Jawrun	@	\$17.15	per c.y. =	\$171.50
Spot Rock	25+55	50	cy. of	Jawrun	@	\$19.34	per c.y. =	\$967.00
Turnaround	25+55	30	cy. of	Jawrun	@	\$19.38	per c.y. =	\$581.40
Landing Rock	26+90	170	cy. of	Jawrun	@	\$19.42	per c.y. =	\$3,301.40
Energy Dissipator	32+50	10	cy. of	Rip Rap	@	\$17.34	per c.y. =	\$173.40
Energy Dissipator	34+60	5	cy. of	Rip Rap	@	\$17.38	per c.y. =	\$86.90
Landing Rock	42+80	140	cy. of	Jawrun	@	\$19.75	per c.y. =	\$2,765.00
Landing Rock	46+25	170	cy. of	Jawrun	@	\$19.83	per c.y. =	\$3,371.10
Base Rock	9+15	100	cy. of	Jawrun	@	\$17.54	per c.y. =	\$1,754.00
Base Rock	32+50	100	cy. of	Jawrun	@	\$18.04	per c.y. =	\$1,804.00
Base Rock	34+60	100	cy. of	Jawrun	@	\$18.08	per c.y. =	\$1,808.00
Widening	As Directed	50	cy. of	Jawrun	@	\$17.80	per c.y. =	\$890.00
<b>TOTAL ROCK</b>								<b>\$69,830.25</b>

**SPECIAL PROJECTS**

Construct Landings	2.00	hours @	\$220.00	per hour	\$440.00
Construct Fills -	12.00	hours @	\$220.00	per hour	\$2,640.00
Construct waste areas -	2.00	hours @	\$220.00	per hour	\$440.00
Ditch - Endhaul	0.30	stations @	\$145.00	per station	\$43.50
Endhaul stumps from landing -	0.25	hours @	\$385.00	per hour	\$96.25
Grade and shape road -	46.25	stations @	\$24.40	per station	\$1,128.50
Roll subgrade w/ vibratory roller prior to rocking -	46.25	stations @	\$19.40	per station	\$897.25
Remove large stumps -	2.00	lump sum @	\$110.00		\$220.00
Grass seed and fertilize -	2.12	acres @	\$310.00	per acre	\$657.20
Mulching -	2.50	acres @	\$865.00	per acre	\$2,162.50
<b>TOTAL SPECIAL PROJECTS</b>					<b>\$8,725.20</b>

**GRAND TOTAL** **\$90,768.01**

## SUMMARY OF CONSTRUCTION COST

Sale: **Standard Grade South**

Road: **S to T**

Construction -	2+60	stations	Improvement -	0+00	stations	Reconstruction -	0+00	stations
	0.05	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	=	Drill & Shoot	Endhaul	
0+00		2+60	35%		Outslope	\$265	=			\$689.00
									<b>TOTAL</b>	<b>\$689.00</b>

**ROCK**

0+00 to		2+60	140	cy. of	Jawrun	@	\$19.11 per c.y.=		\$2,675.40	
Intersection Widening		0+00	30	cy. of	Jawrun	@	\$19.08 per c.y.=		\$572.40	
Landing Rock		2+60	220	cy. of	Jawrun	@	\$19.14 per c.y.=		\$4,210.80	
									<b>TOTAL ROCK</b>	<b>\$7,458.60</b>

**SPECIAL PROJECTS**

Construct Landings	2.00	hours @	\$220.00	per hour	\$440.00	
Endhaul stumps from landing -	0.25	hours @	\$385.00	per hour	\$96.25	
Grade and shape road -	2.60	stations @	\$24.40	per station	\$63.44	
Roll subgrade w/ vibratory roller prior to rocking -	2.60	stations @	\$19.40	per station	\$50.44	
Remove large stumps -	10.00	lump sum @	\$110.00		\$1,100.00	
Grass seed and fertilize -	0.12	acres @	\$310.00	per acre	\$37.20	
					<b>TOTAL SPECIAL PROJECTS</b>	<b>\$1,787.33</b>

**GRAND TOTAL** **\$9,934.93**

**ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY**

Pit:	<u>Rip Rap Source</u>	Location:	<u>Varies</u>
Sale:	<b>Standard Grade South</b>	Road:	<u>610 c.y.</u>
Swell:	<u>1.40</u>	Stockpile:	<u>c.y.</u>
Shrinkage:	<u>1.16</u>	Total Truck Loads:	<u>610 c.y.</u>
Drill Pct.:	<u>0%</u>	In Place Total:	<u>436 c.y.</u>

Rip Rock:	<u>\$3.35</u> /cu.yd.	x	<u>436</u> cu.yds.	=	<u>\$1,460.60</u>
Sort Rock:	<u>\$1.20</u> /cu.yd.	x	<u>610</u> cu.yds.	=	<u>\$732.00</u>
Load Dump Truck:	<u>\$1.20</u> /cu.yd.	x	<u>610</u> cu.yds.	=	<u>\$732.00</u>

Subtotal \$2,924.60

Move in Excavator	<u>1</u>	@	<u>\$404.64</u>	=	<u>\$404.64</u>
					Subtotal <u>\$404.64</u>

**TOTAL PRODUCTION COSTS** \$3,329.24

Base Cost= \$5.46 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 Energy Dissipator to 279+05 (Rip	2.75	1.00	5.46	9.21	40	\$368.40	
A to B Energy Dissipator (Pitrun)	4.18	1.25	5.46	10.89	40	\$435.60	
A to B Energy Dissipator (Rip Rap)	4.18	1.00	5.46	10.64	10	\$106.40	
A to B Energy Dissipator (Rip Rap)	3.52	1.00	5.46	9.98	5	\$49.90	
A to B Energy Dissipator (Rip Rap)	3.33	1.00	5.46	9.79	5	\$48.95	
A to B Energy Dissipator (Rip Rap)	3.26	1.00	5.46	9.72	20	\$194.40	
A to B Fill (Pitrun)	2.74	1.25	5.46	9.45	150	\$1,417.50	
A to B Energy Dissipator (Rip Rap)	2.74	1.00	5.46	9.20	10	\$92.00	
A to B Energy Dissipator (Rip Rap)	1.93	1.00	5.46	8.39	5	\$41.95	
A to B Fill (Pitrun)	1.79	1.25	5.46	8.50	200	\$1,700.00	
A to B Energy Dissipator (Rip Rap)	1.79	1.00	5.46	8.25	10	\$82.50	
A to B Energy Dissipator Above Culv. (Rip	1.60	1.00	5.46	8.06	10	\$80.60	
A to B Energy Dissipator (Rip Rap)	1.46	1.00	5.46	7.92	5	\$39.60	
A to B Fill (Pitrun)	1.51	1.25	5.46	8.22	60	\$493.20	
A to B Energy Dissipator (Rip Rap)	1.51	1.00	5.46	7.97	10	\$79.70	
A to B Energy Dissipator (Rip Rap)	1.96	1.00	5.46	8.42	10	\$84.20	
A to B Energy Dissipator (Rip Rap)	3.17	1.00	5.46	9.63	10	\$96.30	
A to B Energy Dissipator (Rip Rap)	3.87	1.00	5.46	10.33	10	\$103.30	
Total C.Y.					610	Sub Total	\$5,514.50

**TOTAL ROCKING COSTS** \$5,514.50

**ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY**

Pit:	Firebreak 8 Pit	Location:	Sec. 12, T2N, R8W, W.M.
Sale:	<b>Standard Grade South</b>	Road:	6735 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage:	1.16	Total Truck Loads:	6735 c.y.
Drill Pct.:	0%	In Place Total:	4811 c.y.

Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact.	\$3,080.00
Rip Rock:	\$3.35 /cu.yd. x 6735 cu.yds. = \$22,562.25
Sort Rock:	\$1.20 /cu.yd. x 6735 cu.yds. = \$8,082.00
Load Crusher:	\$1.20 /cu.yd. x 6735 cu.yds. = \$8,082.00
Crush Rock:	\$4.00 /cu.yd. x 6735 cu.yds. = \$26,940.00
Load Dump Truck:	\$1.20 /cu.yd. x 6735 cu.yds. = \$8,082.00

Subtotal \$76,828.25

Move In/Set-up Jaw	1	@	\$2,121.00	=	\$2,121.00
Move in Roller and Compactor	1	@	\$586.50	=	\$586.50
Move in Grader	1	@	\$686.57	=	\$686.57
Move in D-8	1	@	\$893.29	=	\$893.29
Move in Loader	1	@	\$694.29	=	\$694.29
Move in Excavator	1	@	\$809.29	=	\$809.29
Move in Trucks	4	@	\$241.57	=	\$966.28
Move in Water Truck	1	@	\$241.57	=	\$241.57
					Subtotal <u>\$6,998.79</u>

**TOTAL PRODUCTION COSTS** \$83,827.04

Base Cost= \$12.45 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 Energy Dissipator from 279+05 (I	2.66	1.00	12.45	16.11	70	\$1,127.70
A to B Fill (Pitrun)	4.37	1.70	12.45	18.52	60	\$1,111.20
A to B Fill (Pitrun)	4.23	1.70	12.45	18.38	300	\$5,514.00
A to B Energy Dissipator (Rip Rap)	4.23	1.00	12.45	17.68	10	\$176.80
A to B Energy Dissipator (Rip Rap)	3.96	1.00	12.45	17.41	5	\$87.05
A to B Backfill, bedding, road surface (C)	2.60	1.70	12.45	16.75	60	\$1,005.00
A to B Energy Dissipator (Rip Rap)	2.60	1.00	12.45	16.05	10	\$160.50
A to B Turnaround (Jawrun)	1.92	2.00	12.45	16.37	40	\$654.80
A to B Energy Dissipator (Rip Rap)	1.50	1.00	12.45	14.95	5	\$74.75
A to B Widening (Jawrun)	1.53	3.20	12.45	17.18	90	\$1,546.20
E to F Approach Widening (Jawrun)	4.10	3.20	12.45	19.75	100	\$1,975.00
E to F Fill (Jawrun)	4.11	3.20	12.45	19.76	20	\$395.20
E to F Landing Rock (Jawrun)	4.15	3.20	12.45	19.80	170	\$3,366.00
G to H 0 260 (Jawrun)	2.53	3.20	12.45	18.18	140	\$2,545.20
G to H Intersection Widening (Jawrun)	2.50	3.20	12.45	18.15	70	\$1,270.50
G to H Landing Rock (Jawrun)	2.55	3.20	12.45	18.20	140	\$2,548.00
I to J Energy Dissipator (Rip Rap)	2.27	1.00	12.45	15.72	5	\$78.60
I to J Energy Dissipator (Rip Rap)	2.26	1.00	12.45	15.71	5	\$78.55
I to J Energy Dissipator (Rip Rap)	2.44	1.00	12.45	15.89	10	\$158.90
I to J Energy Dissipator (Rip Rap)	3.05	1.00	12.45	16.50	30	\$495.00
I to J Energy Dissipator (Rip Rap)	3.12	1.00	12.45	16.57	5	\$82.85
I to J Energy Dissipator (Rip Rap)	3.30	1.00	12.45	16.75	5	\$83.75
I to J Energy Dissipator (Rip Rap)	3.39	1.00	12.45	16.84	10	\$168.40
K to L Energy Dissipator (Rip Rap)	2.15	1.00	12.45	15.60	5	\$78.00
M to N 0 590 (Jawrun)	1.58	3.20	12.45	17.23	340	\$5,858.20
M to N Intersection Widening (Jawrun)	1.52	3.20	12.45	17.17	30	\$515.10
M to N Energy Dissipator (Rip Rap)	1.62	1.00	12.45	15.07	5	\$75.35
M to N Landing Rock (Jawrun)	1.65	3.20	12.45	17.30	140	\$2,422.00
O to P 0 515 (Jawrun)	1.44	3.20	12.45	17.09	280	\$4,785.20
O to P Landing Rock (Jawrun)	1.45	3.20	12.45	17.10	330	\$5,643.00
O to P Landing Rock (Jawrun)	1.54	3.20	12.45	17.19	100	\$1,719.00
Q to R 0 4625 (Jawrun)	3.69	3.20	12.45	19.34	2560	\$49,510.40
Q to R Intersection Widening (Jawrun)	3.20	3.20	12.45	18.85	30	\$565.50
Q to R Base Rock (Jawrun)	3.27	1.70	12.45	17.42	100	\$1,742.00
Q to R Energy Dissipator (Rip Rap)	3.39	1.00	12.45	16.84	5	\$84.20
Q to R Energy Dissipator (Rip Rap)	3.40	1.00	12.45	16.85	5	\$84.25
Q to R Edge Repair (Jawrun)	3.57	1.00	12.45	17.02	10	\$170.20
Q to R Edge Repair (Jawrun)	3.70	1.00	12.45	17.15	10	\$171.50
Q to R Spot Rock (Jawrun)	3.69	3.20	12.45	19.34	50	\$967.00
Q to R Turnaround (Jawrun)	3.73	3.20	12.45	19.38	30	\$581.40
Q to R Landing Rock (Jawrun)	3.77	3.20	12.45	19.42	170	\$3,301.40
Q to R Energy Dissipator (Rip Rap)	3.89	1.00	12.45	17.34	10	\$173.40
Q to R Energy Dissipator (Rip Rap)	3.93	1.00	12.45	17.38	5	\$86.90
Q to R Landing Rock (Jawrun)	4.10	3.20	12.45	19.75	140	\$2,765.00
Q to R Landing Rock (Jawrun)	4.18	3.20	12.45	19.83	170	\$3,371.10
Q to R Base Rock (Jawrun)	3.39	1.70	12.45	17.54	100	\$1,754.00
Q to R Base Rock (Jawrun)	3.89	1.70	12.45	18.04	100	\$1,804.00
Q to R Base Rock (Jawrun)	3.93	1.70	12.45	18.08	100	\$1,808.00
Q to R Widening (Jawrun)	3.65	1.70	12.45	17.80	50	\$890.00
S to T 0 260 (Jawrun)	3.46	3.20	12.45	19.11	140	\$2,675.40
S to T Intersection Widening (Jawrun)	3.43	3.20	12.45	19.08	30	\$572.40
S to T Landing Rock (Jawrun)	3.49	3.20	12.45	19.14	220	\$4,210.80
Total C.Y.					6735	Sub Total \$125,263.35

**TOTAL ROCKING COSTS** \$125,263.35

## ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Firebreak 8 Stockpile	Location:	Sec. 12 , T2N, R8W, W.M.
Sale:	<b>Standard Grade South</b>	Road:	2880 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	2880 c.y.
Drill Pct.:	0%	In Place Total:	2057 c.y.

Load Dump Truck: \_\_\_\_\_ \$1.20 /cu.yd. x \_\_\_\_\_ 2880 cu.yds. = \$3,456.00

Subtotal \$3,456.00

Base Cost= \_\_\_\_\_ \$1.20 Per Cu.Yd. TOTAL PRODUCTION COSTS \$3,456.00

Road Segment	Haul Cost \$/cu.yd.	Proc Cost \$/cu.yd.	Base Cost. \$/cu.yd.	Cost \$/cu.yd.	Number Cu. Yds	ROCK COST
A to B Spot Rock/Leveling Rock (Crushed)	3.20	3.20	1.20	7.60	200	\$1,520.00
A to B Culvert backfill/bedding from 279+	3.20	1.25	1.20	5.65	260	\$1,469.00
A to B Backfill, bedding, road surface (Crushed)	4.93	1.25	1.20	7.38	80	\$590.40
A to B Backfill (Crushed)	3.53	1.25	1.20	5.98	30	\$179.40
A to B Crushed Rock Berm (Crushed)	2.59	1.25	1.20	5.04	10	\$50.40
A to B Crushed Rock Berm (Crushed)	2.45	1.25	1.20	4.90	10	\$49.00
A to B Crushed Rock Berm (Crushed)	2.37	1.25	1.20	4.82	5	\$24.10
A to B Widening (Crushed)	2.23	3.20	1.20	6.63	30	\$198.90
C to D Spot Rock (Crushed)	4.83	3.20	1.20	9.23	50	\$461.50
I to J 0 5625 (Crushed)	3.52	3.20	1.20	7.92	1270	\$10,058.40
I to J 5625 9250 (Crushed)	5.69	3.20	1.20	10.09	620	\$6,255.80
I to J Approach Widening (Crushed)	2.92	3.20	1.20	7.32	30	\$219.60
I to J Approach Widening (Crushed)	4.88	3.20	1.20	9.28	50	\$464.00
I to J Culvert bedding/backfill (Crushed)	2.97	1.25	1.20	5.42	20	\$108.40
I to J Culvert bedding/backfill (Crushed)	3.23	1.25	1.20	5.68	40	\$227.20
I to J Culvert bedding/backfill (Crushed)	3.91	1.25	1.20	6.36	20	\$127.20
I to J Leveling Rock (Crushed)	3.52	3.20	1.20	7.92	100	\$792.00
I to J Crushed Rock Berm (Crushed)	4.58	1.25	1.20	7.03	5	\$35.15
K to L Spot Rock (Crushed)	2.86	3.20	1.20	7.26	30	\$217.80
K to L Crushed Rock Berm (Crushed)	2.85	1.25	1.20	5.30	5	\$26.50
K to L Culvert Bedding//Surfacing (Crushed)	2.85	1.25	1.20	5.30	15	\$79.50
Total C.Y.					2880	Sub Total \$23,154.25

TOTAL ROCKING COSTS \$23,154.25

## ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Pit:	Jordan Stockpile	Location:	Sec. 29, T1N, R7W, W.M.
Sale:	<b>Standard Grade South</b>	Road:	6160 c.y.
Swell:	1.40	Stockpile:	c.y.
Shrinkage	1.16	Total Truck Loads:	6160 c.y.
Drill Pct.:	0%	In Place Total:	4400 c.y.

Load Dump Truck: \$1.20 /cu.yd. x 6160 cu.yds. = \$7,392.00

Subtotal \$7,392.00

Move in Loader	1	@	\$694.29	=	\$694.29
Move in Trucks	4	@	\$241.57	=	\$966.28
				Subtotal	\$1,660.57

Base Cost= \$1.47 Per Cu.Yd. TOTAL PRODUCTION COSTS \$9,052.57

Road Segment	Haul Cost \$/cu.yd.	Proc Cost \$/cu.yd.	Base/load Cost. \$/cu.yd.	Cost \$/cu.yd.	Number Cu. Yds	ROCK COST
A to B 0 12840 (Crushed)	11.80	3.20	1.47	16.47	5060	\$83,338.20
A to B 25355 27905 (Crushed)	16.08	3.20	1.47	20.75	580	\$12,035.00
A to B Culvert backfill/bedding to 279+05	13.40	1.25	1.47	16.12	180	\$2,901.60
A to B Culvert bedding/backfill (Crushed)	10.48	1.25	1.47	13.20	60	\$792.00
A to B Backfill, bedding, road surface (Cr)	11.91	1.25	1.47	14.63	60	\$877.80
A to B Backfill, bedding, road surface (Cr)	12.87	1.25	1.47	15.59	70	\$1,091.30
A to B Turnout (Crushed)	13.10	3.20	1.47	17.77	40	\$710.80
A to B Backfill, bedding, road surface (Cr)	13.63	1.25	1.47	16.35	60	\$981.00
A to B Backfill, bedding, road surface (Cr)	14.18	1.25	1.47	16.90	50	\$845.00
				Total C.Y.	6160	Sub Total
						\$103,572.70

TOTAL ROCKING COSTS \$103,572.70

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

Sale: **Standard Grade South**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
42.0	Pavement	30
8.0	Main Lines	7
0.0	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	Excavators (Large)	\$809.29	1	\$44.80	0.00	9.80	9.8	\$439.04	\$1,248.33
1	Tractor (D8)	\$893.29	2	\$15.10	0.00	9.80	9.8	\$147.98	\$1,041.27
2	Dump Truck (Off Hiway)	\$1,565.10	1	\$4.75	0.00	9.80	9.8	\$93.10	\$1,658.20
<b>TOTAL MOVE-IN COSTS:</b>								<b>\$3,947.80</b>	



## OREGON DEPARTMENT OF FORESTRY CRUISE REPORT STANDARD GRADE SOUTH

### Type of Sale

Regeneration harvest, Recovery

### Legal Description

Section(s) 12 of T2N R8W, Section(s) 7, 8, 17, 18 of T2N R7W W.M.

### Sale Acreage

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

	<u>ACRES</u>	
	<u>Gross</u>	<u>Net</u>
<b>Unit 1 (Modified Clearcut)</b>	137	108
<b>Unit 2 (Modified Clearcut)</b>	127	102
<b>Unit 3 (Modified Clearcut)</b>	149	111
<b>Total</b>	414	321

#### 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

The timber sale was cruised using variable plot sampling. 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	33.61	350’ x 350’
2	40.00	350’ x 350’
3	40.00	350’ x 350’

#### 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.

Unit	Cruise Statistics (Board Foot Volumes)			
	Acres	Number of Plots	SE (%)	CV (%)
1	108	32	12.1	68.5
2	102	39	6.5	40.7
3	111	39	6.8	42.2
Project Total	321	110	5.2	54.9

### **Hidden Defect and Breakage**

A 1% reduction for conifers and a 2% reduction for hardwood volumes were applied for hidden defect and breakage.

### **Timber Description**

All units were planted between 1959 and 1960.

Unit 1 is clearcut. The Unit is a Douglas-fir dominated stand with a small red alder component. Approximately half of the north end was thinned in 2004 with West Standard Timber Sale.

Unit 2 is clearcut. The Unit is a Douglas-fir dominated stand with minor components of noble fir, western hemlock and red alder. The unit was thinned in 2004 as part of the West Standard Timber Sale.

Unit 3 is clearcut. The Unit is a Douglas-fir dominated stand with minor components of noble fir, western hemlock and red alder component. Approximately 80% of the unit was thinned in 2004 with West Standard Timber Sale.

Sale Unit	Age	Species	DBH	Merchantable Bole Height (feet)
1	63	Douglas-fir	16.7	70
		Red Alder	14.2	25
2	65	Douglas-fir	17.5	63
		Red alder	12.8	43
		Western Hemlock	18.9	56
		Noble fir	24.8	91

3	63	Douglas-fir	18.7	68
		Red Alder	16.2	47
		Western hemlock	19.1	61
		Noble fir	16.5	53

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

### **Cruiser /Dates**

ODF Staff Cruised; November 2024.

### **Revenue Distribution**

BOF – 100%

Tax Code: 5600 (100%)

Deed Numbers: 35 (Tillamook County) and 591 (Longview Fibre Co.)

### **Attachments**

Volume Summary

Stand Table (3)

Log Stock Table (3)

Species, Sort, Grade Table (3)

Logging Plan Map

### **Stand and Log Stock Tables Species Key**

DF – Douglas-fir

RA – Red alder

WH – Western hemlock

NF – Noble fir

NL – Noble fir leave

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

T02N R08W S18 T0100

T02N R08W S18 T0100

**Twp** Rge **Sec** **Tract** **Type** **Acres** **Plots** **Sample Trees** **Page** **1**  
**02N** **08W** **18** **UNIT 1** **0100** **108.00** **32** **111** **Date** **4/1/2025**  
**Time** **12:58:03PM**

Spp	T	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches										
										MBF	MBF	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23
DF		CO	2		40	1,230		1,230	43.5					220	440	521	48			
DF		CO	3		30	2		2	.1			2								
DF		CO	3		33	3		3	.1			3								
DF		CO	3		34	11		11	.4			9	2							
DF		CO	3		40	1,192	.4	1,187	42.0			195	296	471	142	52	31			
DF		CO	4		12	10		10	.4		10									
DF		CO	4		13	9		9	.3		3			6						
DF		CO	4		15	7		7	.2		7									
DF		CO	4		16	5		5	.2		5									
DF		CO	4		17	4		4	.1		3	2								
DF		CO	4		18	10		10	.3		5	5								
DF		CO	4		19	10		10	.4		7	3								
DF		CO	4		20	3		3	.1		3									
DF		CO	4		21	3		3	.1		2	2								
DF		CO	4		22	13		13	.4		5	2	6							
DF		CO	4		23	14	3.0	14	.5		13	1								
DF		CO	4		24	4		4	.2		4									
DF		CO	4		25	4		4	.1		2	2								
DF		CO	4		26	20		20	.7		20									
DF		CO	4		27	12		12	.4		12									
DF		CO	4		28	10	4.9	10	.3		8	2								
DF		CO	4		29	7		7	.2		4	3								
DF		CO	4		30	2		2	.1		2									
DF		CO	4		31	4		4	.2		4									
DF		CO	4		33	21		21	.7		21									
DF		CO	4		34	14		14	.5		14									
DF		CO	4		35	3		3	.1		3									
DF		CO	4		36	13		13	.5		13									
DF		CO	4		37	11		11	.4		11									
DF		CO	4		40	181		181	6.4		54	69	15	22	21					
DF		Totals				2,834		2,828	98.5		233	300	320	493	389	492	552	48		
RA		H	4		20	13		13	30.1		13									
RA		H	4		23	12		12	27.9		12									
RA		H	4		28	7		7	16.9		7									
RA		H	4		30	11		11	25.2		11									
RA		Totals				43		43	1.5		43									
Total All Species					2,876		2,870	100.0		233	342	320	493	389	492	552	48			

TC		TSTNDSUM											Stand Table Summary			
Project														STDGRDS		
T02N R08W S18 T0100											T02N R08W S18 T0100					
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1							
02N	08W	18	UNIT 1	0100	108.00	32	111	Date:	04/01/2021							
								Time:	12:58:04PM							
S Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	T o t a l s			
		DBH	Trees	16'				Ht Tot	Net Cu.Ft.		Net Bd.Ft.	Tons	Cunits	MBF		
DF		8	1	83	48	4.837	1.69	4.84	4.6	20.0	.64	22	97	69	24	10
DF		9	2	82	51	7.643	3.38	7.64	7.0	30.0	1.53	54	229	165	58	25
DF		10	4	84	89	12.382	6.75	18.57	9.7	40.0	5.12	180	743	553	194	80
DF		11	2	80	63	5.117	3.38	5.12	15.3	40.0	2.24	78	205	241	85	22
DF		12	3	84	87	6.449	5.07	12.90	11.7	43.3	4.30	151	559	464	163	60
DF		13	1	85	73	1.832	1.69	1.83	21.1	70.0	1.10	39	128	119	42	14
DF		14	8	85	85	12.635	13.51	20.53	19.4	70.0	11.34	398	1,437	1,224	430	155
DF		15	9	84	88	12.382	15.20	22.01	20.9	78.1	13.12	460	1,720	1,417	497	186
DF		16	6	85	101	7.255	10.13	13.30	27.0	101.8	10.24	359	1,354	1,105	388	146
DF		17	8	85	102	8.569	13.51	19.28	25.2	96.1	13.86	486	1,853	1,497	525	200
DF		18	5	85	111	4.777	8.44	10.51	30.3	120.0	9.09	319	1,261	981	344	136
DF		19	7	84	112	6.002	11.82	13.72	33.7	128.8	13.17	462	1,766	1,422	499	191
DF		20	4	84	121	3.096	6.75	8.51	32.8	124.5	7.97	280	1,060	860	302	115
DF		21	7	83	115	4.914	11.82	10.53	39.9	170.7	11.97	420	1,797	1,293	454	194
DF		22	13	87	119	8.314	21.95	20.47	43.7	186.6	25.50	895	3,818	2,754	966	412
DF		23	4	83	115	2.341	6.75	6.44	42.9	167.3	7.88	276	1,077	851	299	116
DF		24	3	87	128	1.612	5.07	4.84	47.3	212.2	6.52	229	1,026	704	247	111
DF		25	6	84	130	2.972	10.13	7.92	57.2	247.5	12.92	453	1,961	1,396	490	212
DF		26	8	83	118	3.663	13.51	9.62	57.9	236.2	15.87	557	2,271	1,714	601	245
DF		27	1	89	140	.425	1.69	1.27	65.5	316.7	2.38	83	403	257	90	44
DF		28	2	84	111	.790	3.38	1.97	68.7	276.0	3.87	136	545	418	146	59
DF		29	1	82	117	.368	1.69	.37	131.1	600.0	1.38	48	221	149	52	24
DF		31	1	85	141	.322	1.69	.97	86.2	410.0	2.37	83	396	256	90	43
DF		34	1	83	105	.268	1.69	.54	117.8	470.0	1.80	63	252	194	68	27
DF		Totals	107	84	94	118.964	180.65	223.70	29.2	117.0	186.16	6,532	26,181	20,106	7,055	2,828
RA		11	1	71	37	5.968	3.94	5.97	8.6	20.0	1.41	51	119	152	55	13
RA		14	1	69	33	3.684	3.94	3.68	16.4	30.0	1.66	60	111	179	65	12
RA		17	1	74	39	2.499	3.94	2.50	29.5	40.0	2.02	74	100	219	79	11
RA		18	1	81	34	2.229	3.94	2.23	27.5	30.0	1.68	61	67	182	66	7
RA		Totals	4	73	36	14.380	15.75	14.38	17.1	27.6	6.77	246	397	731	266	43
Totals		111	83	88		133.344	196.41	238.08	28.5	111.6	192.93	6778	26,578	20,837	7,321	2,870



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

**T02N R07W S07 T0100**

**T02N R07W S07 T0100**

**Twp Rge Sec Tract Type Acres Plots Sample Trees Page**  
**02N 07W 07 UNIT 2 0100 102.00 39 105 Date 1/10/2025**  
**Time 3:38:14PM**

Spp	T	S	So	Gr	Log	Gross	% Def	Net	% Spc	Net Volume by Scaling Diameter in Inches										
										MBF	MBF	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23
WH		CO	4		18	1		1	1.1		1									
WH		CO	4		21	3		3	1.9		1	1								
WH		CO	4		24	1		1	.9		1									
WH		CO	4		40	19		19	14.3		2	9	8							
WH		Totals				131		131	5.2		10	13	50	9	34	15				
NL		CO	2		40	188		188	90.2				18	29	33	23	84			
NL		CO	3		20	1		1	.6			1								
NL		CO	3		40	15	12.8	13	6.5			8	5							
NL		CO	4		12	1		1	.4			1								
NL		CO	4		29	2		2	.8		2									
NL		CO	4		40	3		3	1.5		3									
NL		Totals				210		208	8.2		5	11	23	29	33	23	84			
Total All Species						2,546		2,521	100.0		184	256	269	361	309	394	339	325	84	

TC		TSTNDSUM		Stand Table Summary												
Project										STDGRDS						
T02N R07W S07 T0100								T02N R07W S07 T0100								
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1							
02N	07W	07	UNIT 2	0100	102.00	39	105	Date:	01/10/2021							
								Time:	3:38:16PM							
S Spec	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits	MBF
DF		8	1	83	48	5.837	2.04	5.84	4.6	20.0	.77	27	117	79	28	12
DF		9	1	81	62	4.612	2.04	4.61	8.7	30.0	1.14	40	138	116	41	14
DF		10	1	81	74	3.736	2.04	3.74	13.6	40.0	1.45	51	149	148	52	15
DF		11	1	78	49	3.087	2.04	3.09	12.3	30.0	1.09	38	93	111	39	9
DF		13	3	83	85	6.631	6.11	11.05	16.0	54.0	5.05	177	597	515	181	61
DF		14	7	82	65	13.341	14.26	17.15	19.6	56.7	9.58	336	972	977	343	99
DF		15	3	82	80	4.981	6.11	9.96	17.6	61.7	5.00	175	614	510	179	63
DF		16	3	82	85	4.378	6.11	8.76	21.8	71.7	5.45	191	627	556	195	64
DF		17	2	85	93	2.585	4.07	5.17	26.1	97.5	3.85	135	504	393	138	51
DF		18	9	83	85	10.377	18.34	19.60	29.7	97.1	16.58	582	1,902	1,691	593	194
DF		19	3	83	81	3.104	6.11	4.14	42.0	135.0	4.95	174	559	505	177	57
DF		20	9	81	96	8.405	18.34	16.81	37.7	115.6	18.08	634	1,942	1,844	647	198
DF		21	5	83	103	4.235	10.19	8.47	44.6	152.0	10.78	378	1,288	1,099	386	131
DF		22	3	85	104	2.315	6.11	4.63	47.7	170.0	6.30	221	787	643	226	80
DF		23	3	84	109	2.118	6.11	4.24	53.9	206.7	6.51	228	876	664	233	89
DF		24	4	85	95	2.594	8.15	5.84	48.3	177.8	8.04	282	1,038	820	288	106
DF		25	4	85	103	2.391	8.15	4.78	63.6	243.7	8.66	304	1,165	883	310	119
DF		26	3	84	105	1.658	6.11	3.87	60.5	227.1	6.67	234	879	680	239	90
DF		27	2	84	116	1.025	4.07	2.56	55.9	234.0	4.09	143	600	417	146	61
DF		28	1	82	108	.476	2.04	.95	82.5	315.0	2.24	79	300	229	80	31
DF		29	2	88	123	.888	4.07	2.67	67.8	318.3	5.15	181	848	525	184	87
DF		31	2	85	125	.777	4.07	2.33	78.4	358.3	5.21	183	836	532	187	85
DF		35	2	80	134	.610	4.07	1.52	93.9	464.0	4.08	143	707	416	146	72
DF		Totals	74	83	82	90.162	150.77	151.77	32.5	115.6	140.72	4,937	17,539	14,353	5,036	1,789
NF		20	1	91	100	2.194	4.79	4.39	43.0	175.0	4.53	189	768	462	193	78
NF		29	2	90	115	2.087	9.57	5.22	80.2	396.0	10.04	418	2,066	1,024	427	211
NF		Totals	3	91	107	4.281	14.36	9.61	63.2	295.0	14.57	607	2,834	1,486	619	289
NL		20	1	88	96	.739	1.61	1.48	39.4	140.0	1.40	58	207	143	59	21
NL		23	2	92	93	1.117	3.22	2.23	52.0	220.0	2.79	116	492	285	119	50
NL		30	1	86	101	.328	1.61	.66	97.1	400.0	1.53	64	263	156	65	27
NL		33	1	91	112	.271	1.61	.81	87.0	443.3	1.70	71	361	173	72	37
NL		34	2	92	115	.511	3.22	1.28	110.0	560.0	3.38	141	716	344	143	73
NL		Totals	7	90	100	2.967	11.28	6.46	69.6	315.4	10.80	450	2,038	1,101	459	208
WH		13	1	85	72	1.205	1.11	1.21	23.8	70.0	.92	29	84	94	29	9
WH		16	1	80	17	.796	1.11	.80	12.3	20.0	.31	10	16	32	10	2
WH		17	2	85	75	1.410	2.22	2.82	23.6	85.0	2.13	67	240	218	68	24
WH		19	1	84	71	.564	1.11	1.13	29.9	100.0	1.08	34	113	110	34	12
WH		20	1	83	67	.509	1.11	1.02	31.4	100.0	1.02	32	102	104	33	10
WH		21	1	85	66	.462	1.11	.92	33.6	100.0	.99	31	92	101	32	9
WH		22	1	85	94	.421	1.11	.84	49.1	165.0	1.32	41	139	135	42	14
WH		23	2	88	70	.770	2.22	1.54	42.0	145.0	2.07	65	223	211	66	23
WH		24	1	83	74	.354	1.11	.71	48.7	160.0	1.10	34	113	113	35	12
WH		25	1	92	86	.326	1.11	.65	61.5	255.0	1.28	40	166	131	41	17
WH		Totals	12	85	67	6.817	13.33	11.63	32.9	110.8	12.24	382	1,289	1,248	390	131
RA		10	1	80	60	3.291	1.79	3.29	10.8	40.0	.97	35	132	99	36	13
RA		11	2	82	71	5.439	3.59	5.44	16.5	60.0	2.47	90	326	252	91	33
RA		14	1	80	75	1.679	1.79	3.36	15.8	45.0	1.46	53	151	149	54	15
RA		15	3	75	66	4.388	5.38	5.85	27.0	55.0	4.34	158	322	443	161	33
RA		16	1	74	59	1.285	1.79	1.29	36.9	70.0	1.30	47	90	133	48	9

TC TSTNDSUM		Stand Table Summary														
Project											STDGRDS					
T02N R07W S07 T0100								T02N R07W S07 T0100								
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	2							
02N	07W	07	UNIT 2	0100	102.00	39	105	Date:	01/10/2021							
								Time:	3:38:16PM							
Spc	S T	DBH	Sample Trees	FF 16'	Av Ht Tot	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
									Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
RA	Totals	8	79	67	16.083	14.36	19.22	19.9	53.1	10.54	383	1,021	1,076	391	104	
OC	26	1	86	84	.278	1.03										
OC	Totals	1	86	84	.278	1.03										
Totals		105	83	80	120.588	205.13	198.70	34.0	124.4	188.87	6760	24,720	19,264	6,895	2,521	

TC		TLOGSTVB		Log Stock Table - MBF													
Project:										STDGRDS							
T02N R07W S08 T0100										T02N R07W S08 T0100							
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page	1								
02N	07W	08	UNIT 3	0100	111.00	39	135	Date	4/7/2025								
								Time	9:21:36AM								
Spp	T	So	Gr	Log	Gross	%	Net	%	Net Volume by Scaling Diameter in Inches								
									MBF	Def	MBF	Spc	2-3	4-5	6-7	8-9	10-11
DF	CO	2	40		1,800	1.9	1,765	57.4				525	366	727	147		
DF	CO	3	20		2		2	.1									
DF	CO	3	29		3		3	.1			3						
DF	CO	3	31		3		3	.1			3						
DF	CO	3	33		17		17	.5				17					
DF	CO	3	35		3		3	.1			3						
DF	CO	3	36		8		8	.3			4	3					
DF	CO	3	37		5		5	.2			5						
DF	CO	3	38		4		4	.1				4					
DF	CO	3	40		996	.1	995	32.4			279	237	479				
DF	CO	4	12		4		4	.1		4							
DF	CO	4	13		3		3	.1		3							
DF	CO	4	14		2		2	.1		2							
DF	CO	4	15		2		2	.1		1	1						
DF	CO	4	16		1		1	.0				1					
DF	CO	4	17		2		2	.1		2							
DF	CO	4	18		20		20	.6		19		1					
DF	CO	4	19		5		5	.2		5							
DF	CO	4	20		7		7	.2		6	2						
DF	CO	4	21		2		2	.1				2					
DF	CO	4	22		3		3	.1		3							
DF	CO	4	23		12		12	.4		10	2						
DF	CO	4	26		10		10	.3		10							
DF	CO	4	27		6		6	.2		4	2						
DF	CO	4	28		21		21	.7		21							
DF	CO	4	29		18		18	.6		18							
DF	CO	4	30		14		14	.5		14							
DF	CO	4	31		7		7	.2		7							
DF	CO	4	32		7		7	.2		7							
DF	CO	4	34		18		18	.6		18							
DF	CO	4	35		4		4	.1		4							
DF	CO	4	36		10		10	.3		10							
DF	CO	4	38		11		11	.4		11							
DF	CO	4	40		83		83	2.7		59				24			
DF	Totals				3,111	1.1	3,076	93.6		236	303	251	496	525	366	752	147
RA	H	4	16		2		2	4.1		2							
RA	H	4	39		10		10	17.6		10							
RA	H	4	40		45		45	78.3		20	24						
RA	Totals				57		57	1.7		33	24						
WH	CO	2	40		47	2.7	46	56.0					30	16			
WH	CO	3	28		2		2	2.4		2							
WH	CO	3	40		27		27	33.3		12		15					
WH	CO	4	12		2		2	2.1		2							
WH	CO	4	21		3		3	4.1		2	1						
WH	CO	4	26		2		2	2.1		2							
WH	Totals				83	1.6	82	2.5		4	17	15	30	16			
NF	CO	2	40		30		30	42.9						6		24	
NF	CO	3	40		40		40	57.1			40						

TC TLOGSTVB		<b>Log Stock Table - MBF</b>																	
Project:										<b>STDGRDS</b>									
<b>T02N R07W S08 T0100</b>										<b>T02N R07W S08 T0100</b>									
<b>Twp</b>	<b>Rge</b>	<b>Sec</b>	<b>Tract</b>	<b>Type</b>	<b>Acres</b>	<b>Plots</b>	<b>Sample Trees</b>	<b>Page</b>	<b>2</b>										
<b>02N</b>	<b>07W</b>	<b>08</b>	<b>UNIT 3</b>	<b>0100</b>	<b>111.00</b>	39	135	<b>Date</b>	<b>4/7/2025</b>										
								<b>Time</b>	<b>9:21:36AM</b>										
<b>S</b>	<b>So Gr</b>	<b>Log</b>	<b>Gross</b>	<b>%</b>	<b>Net</b>	<b>%</b>	<b>Net Volume by Scaling Diameter in Inches</b>												
<b>Spp</b>	<b>T</b>	<b>rt de</b>	<b>Len</b>	<b>MBF</b>	<b>Def</b>	<b>MBF</b>	<b>Spc</b>	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
NF	Totals		70		70	2.1					40				6		24		
Total All Species			3,322	1.1	3,285	100.0		240	353	315	511	525	396	774	147	24			

TC		TSTNDSUM		Stand Table Summary												
Project										STDGRDS						
T02N R07W S08 T0100										T02N R07W S08 T0100						
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1							
02N	07W	08	UNIT 3	0100	111.00	39	135	Date:	04/07/2021							
								Time:	9:21:38AM							
S Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits	MBF
DF		8	1	83	31	5.852	2.04	5.85	3.6	20.0	.61	21	117	67	24	13
DF		10	1	82	76	3.745	2.04	3.75	13.6	40.0	1.46	51	150	162	57	17
DF		11	3	82	72	9.285	6.13	9.29	14.7	50.0	3.89	137	464	432	152	52
DF		12	6	83	78	15.604	12.26	23.41	12.9	45.6	8.60	302	1,066	955	335	118
DF		13	1	82	87	2.216	2.04	4.43	13.8	45.0	1.74	61	199	194	68	22
DF		14	1	81	98	1.911	2.04	3.82	17.6	60.0	1.91	67	229	213	75	25
DF		15	4	82	98	6.658	8.17	13.32	21.2	80.0	8.05	282	1,065	893	313	118
DF		16	6	82	89	8.777	12.26	16.09	24.3	80.9	11.14	391	1,302	1,236	434	145
DF		17	8	82	88	10.367	16.34	16.85	26.9	89.2	12.92	453	1,503	1,434	503	167
DF		18	10	84	91	11.559	20.43	21.96	30.3	106.3	18.98	666	2,335	2,107	739	259
DF		19	6	82	95	6.224	12.26	12.45	34.0	107.5	12.08	424	1,338	1,341	470	149
DF		20	5	82	104	4.681	10.21	11.24	33.9	115.0	10.85	381	1,292	1,205	423	143
DF		21	6	82	101	5.095	12.26	10.19	43.6	142.5	12.67	445	1,452	1,406	493	161
DF		22	6	84	80	4.643	12.26	7.74	44.1	143.0	9.73	341	1,106	1,079	379	123
DF		23	10	81	98	7.079	20.43	14.87	49.4	161.4	20.92	734	2,400	2,322	815	266
DF		24	6	83	89	3.901	12.26	6.50	55.0	186.0	10.20	358	1,209	1,132	397	134
DF		25	7	84	106	4.194	14.30	7.79	66.3	258.5	14.71	516	2,013	1,633	573	223
DF		26	3	81	95	1.662	6.13	2.22	67.9	240.0	4.29	150	532	476	167	59
DF		27	4	83	110	2.055	8.17	4.62	65.7	261.1	8.66	304	1,207	962	337	134
DF		28	10	84	98	4.777	20.43	9.55	75.3	277.0	20.49	719	2,646	2,275	798	294
DF		29	2	80	72	.891	4.09	.89	85.0	290.0	2.16	76	258	240	84	29
DF		30	6	83	112	2.497	12.26	5.83	83.3	340.7	13.84	486	1,985	1,536	539	220
DF		31	1	89	92	.390	2.04	.78	93.7	390.0	2.08	73	304	231	81	34
DF		32	4	80	115	1.463	8.17	3.66	90.3	340.0	9.41	330	1,243	1,044	366	138
DF		35	1	83	108	.306	2.04	.92	87.3	316.7	2.28	80	290	253	89	32
DF		Totals	118	83	88	125.831	241.03	217.99	36.0	127.1	223.67	7,848	27,709	24,827	8,711	3,076
WH		13	1	83	76	1.558	1.44	3.12	13.1	40.0	1.31	41	125	145	45	14
WH		17	1	82	78	.911	1.44	1.82	24.8	85.0	1.45	45	155	160	50	17
WH		26	2	83	78	.779	2.87	1.56	59.4	190.0	2.96	92	296	328	103	33
WH		27	1	83	83	.361	1.44	.72	68.4	225.0	1.58	49	163	175	55	18
WH		Totals	5	83	78	3.609	7.18	7.22	31.6	102.2	7.29	228	738	809	253	82
NF		15	4	91	64	4.012	4.92	4.01	28.4	90.0	2.73	114	361	303	126	40
NF		40	1	91	110	.141	1.23	.28	184.5	960.0	1.25	52	271	139	58	30
NF		Totals	5	91	66	4.153	6.15	4.29	38.6	147.2	3.98	166	632	442	184	70
RA		15	2	75	58	3.009	3.69	3.01	31.5	60.0	2.60	95	181	289	105	20
RA		16	1	77	58	1.322	1.85	1.32	36.9	70.0	1.34	49	93	149	54	10
RA		18	2	75	70	2.089	3.69	3.13	34.6	76.7	2.99	109	240	331	121	27
RA		Totals	5	75	62	6.420	9.23	7.47	33.8	68.8	6.93	252	513	769	280	57
OC		13	1	86	58	1.113	1.03									
OC		15	1	86	78	.836	1.03									
OC		Totals	2	86	67	1.948	2.05									
Totals		135	83	85		141.962	265.64	236.97	35.8	124.9	241.87	8494	29,592	26,847	9,428	3,285



"STEWARDSHIP IN FORESTRY"

## Standard Grade South

### Volume Summary

Unit 1-Modified Clearcut				
108 acres				
SPECIES	Cruised Net	Cruised Net	Hidden	Net Sale
	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	26.18	2828	1%	2800
Hemlock		0	1%	0
Spruce		0	1%	0
Noble Fir		0	1%	0
Alder	0.40	43	2%	42
<b>TOTAL</b>	<b>26.58</b>	<b>2871.0</b>		<b>2842</b>

Unit 2-Modified Clearcut				
102 acres				
SPECIES	Cruised Net	Cruised Net	Hidden	Net Sale
	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	17.54	1789	1%	1771
Hemlock	1.29	131	1%	130
Spruce		0	1%	0
Noble Fir	2.83	289	1%	286
Alder	1.02	104	2%	102
<b>TOTAL</b>	<b>22.68</b>	<b>2313</b>		<b>2289</b>

Unit 3- Modified Clearcut				
111 acres				
SPECIES	Cruised Net	Cruised Net	Hidden	Net Sale
	MBF/ Acre	MBF	D&B	MBF
Douglas-fir	27.71	3076	1%	3045
Hemlock	0.74	82	1%	81
Spruce		0	1%	0
Noble Fir	0.63	70	1%	69
Alder	0.51	57	2%	56
<b>TOTAL</b>	<b>29.59</b>	<b>3285</b>		<b>3251</b>



"STEWARDSHIP IN FORESTRY"

## ***Standard Grade South***

### **Volume Summary**

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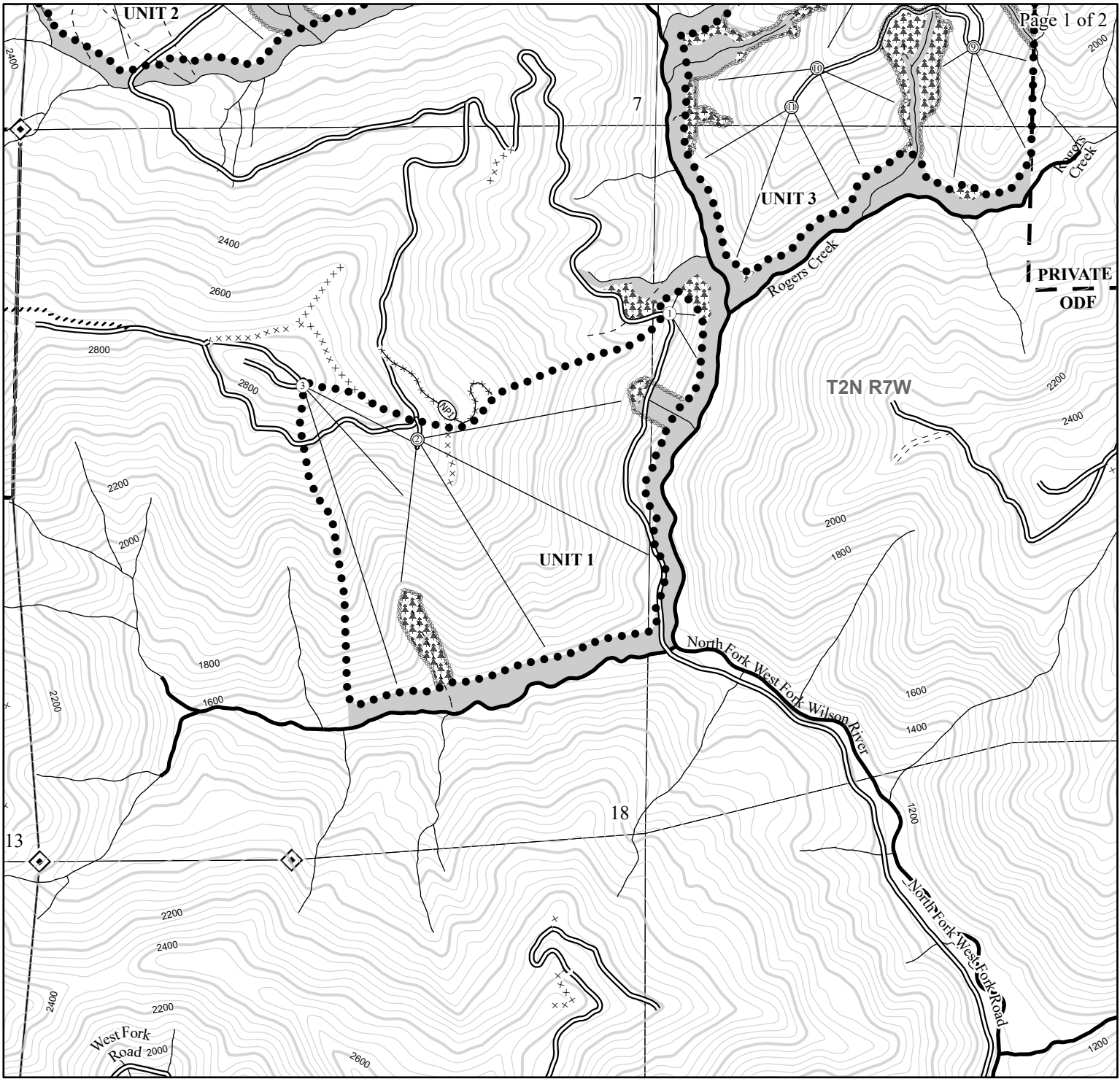


"STEWARDSHIP IN FORESTRY"

**Standard Grade South**

**Volume Summary**

<b>TOTAL SALE VOLUME</b>		<b>321</b>	<b>acres</b>
<b>SPECIES</b>	<b>Cruised Net (MBF)</b>	<b>Net Sale (MBF)</b>	
Douglas-fir	7693	7617	
Hemlock	213	210	
Spruce	0	0	
Noble Fir	359	355	
Red Alder	204	200	
<b>TOTAL</b>	<b>8469</b>	<b>8382</b>	



- ⊙ Landing To Be Constructed
- Landing Existing
- Cable Logging
- Timber Sale Boundary
- ▨ Riparian Boundary
- ▨ Riparian Buffer
- ▨ Green Tree Retention
- Type-F Stream
- Type-N Perennial Stream
- Type-N Seasonal Stream
- == Surfaced Road
- === Unsurfaced Road
- xxx Blocked Road
- Non-Project Construction
- //// Recreation Trail
- 200' Contour
- 40' Contour
- ▬ Property Line
- Sections
- ◇ Corners



NET ACRES

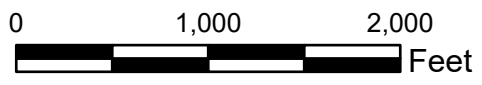
## LOGGING PLAN

FOR TIMBER SALE CONTRACT TL-341-2026-W01148-01  
 STANDARD GRADE SOUTH  
 SECTION 12 of T2N R8W, SECTIONS 7, 8, 17, 18 of T2N R7W W.M.  
 TILLAMOOK COUNTY, OREGON

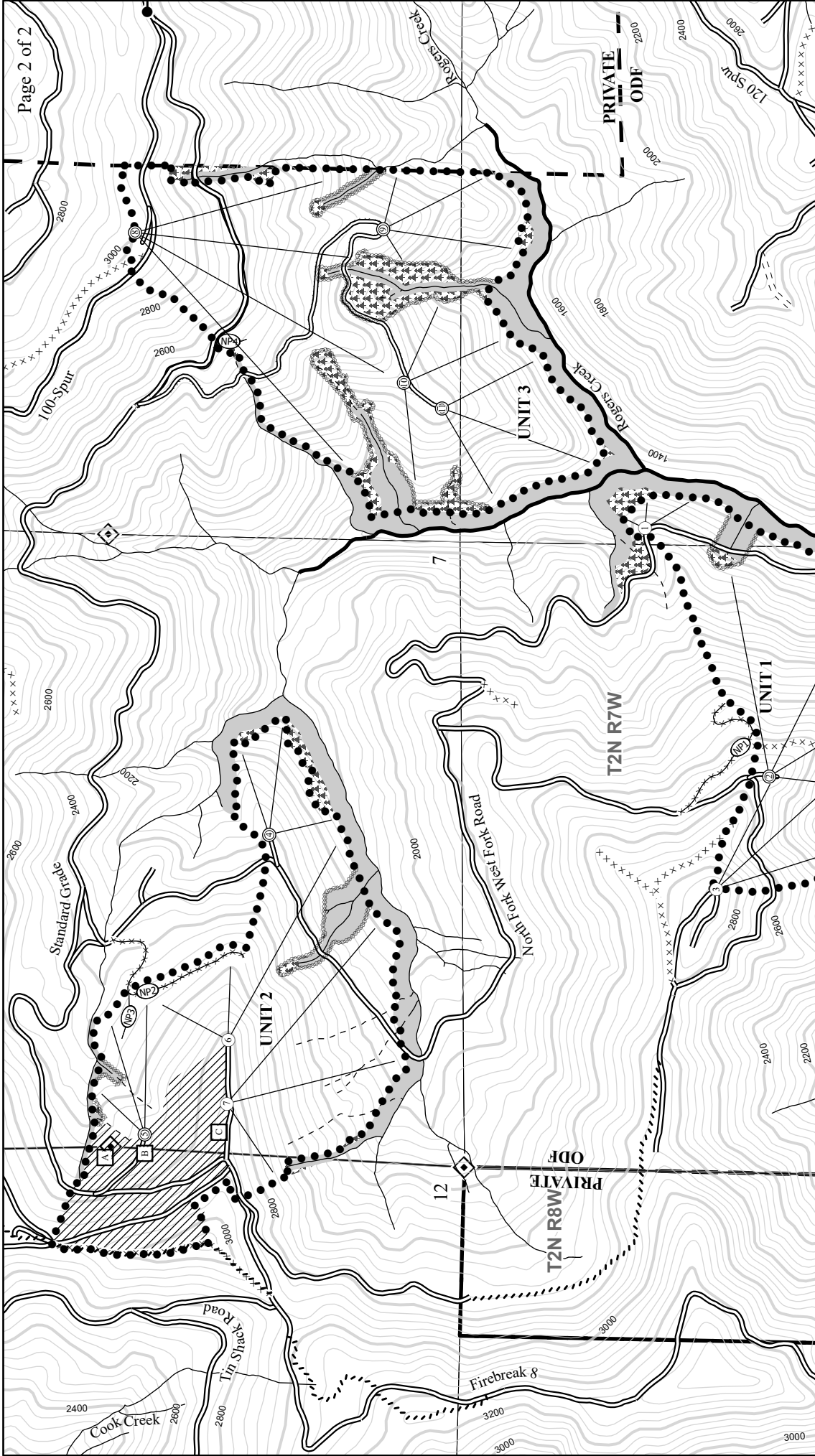
Tillamook District GIS  
 June 2025

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

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



	GROUND	CABLE	TOTAL
UNIT 1	0	108	108
UNIT 2	24	78	102
UNIT 3	0	111	111
<b>TOTAL</b>	<b>26</b>	<b>295</b>	<b>321</b>



# LOGGING PLAN

- Ground
- Landing To Be Constructed
- Landing Existing
- Cable Logging
- Ground Based
- Timber Sale Boundary
- Riparian Boundary
- Riparian Buffer
- Green Tree Retention
- Type-F Stream
- Type-N Perennial Stream
- Type-N Seasonal Stream
- Surfaced Road
- Unsurfaced Road
- Blocked Road
- Recreation Trail
- Non-Project Construction
- 200' Contour
- 40' Contour
- Property Line
- Sections
- Corners
- Gates

NET ACRES		
UNIT 1	GROUND	CABLE TOTAL
UNIT 1	0	108
UNIT 2	24	78
UNIT 3	0	111
<b>TOTAL</b>	<b>26</b>	<b>295</b>

1:12,000  
 1 inch = 1,000 feet  
 0 1,000 2,000 Feet

FOR TIMBER SALE CONTRACT TL-341-2026-W01148-01  
 STANDARD GRADE SOUTH  
 SECTION 12 of T2N R8W, SECTIONS 7, 8, 17, 18 of T2N R7W W.M.  
 TILLAMOOK COUNTY, OREGON

Tillamook District GIS  
 June 2025  
 This product is for informational use and may not be suitable for legal, engineering, or surveying purposes.