PART IV: OTHER INFORMATION

State Timber Sale Contract
No. 341-10-23
Big 3 Junction

NOTICE OF TRANSFER OF STATE TIMBER

Instructions **629:-Form-301-010**

Complete Section 1. Mark the box which applies to you/your company in Section 2. Complete Section 3 and obtain signatures.

SECTION 1

On _____, state timber sale purchaser (Transferor)
_____, sold, exchanged or otherwise transferred to
_____, (Transferee) state timber originating from State
Timber Sale Contract No. _____.

Transferee hereby certifies that they:

(a) Will not export the unprocessed state timber which is the subject of this transaction;

(b) Will not sell, transfer, exchange or otherwise convey the unprocessed timber which is the subject of this transaction to any other person without first obtaining a like certification from that person.

(c) Are not prohibited by OAR's 629-31-005 through 045 from purchasing state timber or logs directly from the State Forester, or this is a sale of Western Red Cedar for domestic processing.

SECTION 2

☐ Have not exported unprocessed timber originating from private lands in Oregon in the last 24 months.

☐ This is a sale of hardwood logs for domestic processing.

☐ This is a sale of Western Red Cedar for domestic processing.

☐ This is a sale of pulp logs or cull logs processed at domestic pulp mills, domestic chip plants or other domestic operations for the purpose of conversion of the logs into chips.

SECTION 3

The parties understand that falsely entering into this certification, or failure to comply with the terms of this certification is a violation of the Forest Conservation and Shortage Relief Act of 1990 and OAR Chapter 629, Division 31, and is subject to any and all penalties contained therein.

Transferor:	Transferee:
_____ Signed	_____ Signed
_____ Title	_____ Title
_____ Dated	_____ Dated

[Note: For the purpose of this form, the definition of unprocessed timber is the same as in OAR 629-31-005]

Mail To: State Forester
2600 State Street
Salem, OR 97310

Written Plan
For
Big Three Junction
Timber Sale; # 341-10-023

Timber Harvest

LEGAL DESCRIPTION: Portions of sections 28, 29, 31, 32, and 33, T04N, R07W, WM, Clatsop County, Oregon.

PROTECTED RESOURCE: The North Fork Cronin Creek, a large Type F stream.

DESCRIPTION OF THE AREA: The North Fork Cronin Creek flows East to West into Cronin Creek. The North Fork is adjacent to the southern boundary of area 1 and the west/northwest boundary of area 2 within the timber sale. Vegetation within the RMA is mostly alder and salmonberry with a few scattered conifer.

Many of the tributary streams within the sale area were found to be dry with the exception of the stream found in area 2. Steep and very steep slopes are located throughout the sale areas.

PROTECTION MEASURES: The North Fork Cronin Creek has been entirely posted outside of the timber sale areas. No timber will be cut within at least 150 feet of the North Fork Cronin Creek Type F aquatic zone. No Timber will be cut within 50 feet of the Perennial Type N aquatic zone.

Trees shall be directionally felled so that they do not fall or slide into the protected aquatic zone.

Cable corridors through the RMA will be spaced at a minimum of 100 foot intervals.

Reviewed by: Erik Marcy Date: 3-9-10
Erik Marcy
Unit Forester

Prepared by Tara Carlson
December 9, 2009

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Big 3 Junction
Sale 341-10-023

District: Forest Grove **Date:** April 20, 2010

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	$1,021,575.60	$390,461.75	$1,412,037.35
		Project Work:	$(103,888.00)
		Advertised Value:	$1,308,149.35

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Big 3 Junction
Sale 341-10-023

District: **Forest Grove** **Date:** **April 20, 2010**

timber description

Location: Portions of Sections 28, 29, 30, 31, 32, and 33, T4N, R7W, W.M., Clatsop County, Oregon.

Stand Stocking: 20%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	17	0	98
Western Hemlock / Fir	20	0	98
Sitka Spruce	41	0	98
Alder (Red)	13	0	95
Maple	17	0	95

Volume by Grade	2S	3S	4S	Camprur	Total
Douglas - Fir	1,112	1,539	545	0	3,196
Western Hemlock / Fir	618	447	105	0	1,170
Sitka Spruce	34	8	1	0	43
Alder (Red)	0	0	0	1,289	1,289
Maple	0	0	0	68	68
Total	1,764	1,994	651	1,357	5,766

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Big 3 Junction
Sale 341-10-023

District: Forest Grove **Date: April 20, 2010**

comments: Pond Values Used: 1st Quarter Calendar Year 2010.

Western Red Cedar and Other Cedars Stumpage Price = Pond Value minus Logging Cost
$631/MBF = $820/MBF - $189/MBF

SCALING COST ALLOWANCE = $5.00/MBF

FUEL COST ALLOWANCE = $3.00/Gallon

HAULING COST ALLOWANCE
Hauling costs equivalent to $700 daily truck cost.

Other Costs (with Profit & Risk to be added):
Brand and Paint: $1.00/MBF x 5,766 MBF = $5,766
Intermediate Supports: 10 @ $100/support = $1,000
Snag Creation: 208 Snags in Areas 1 & 2 @ $15/snag = $3,120
TOTAL Other Costs (with Profit & Risk to be added) =$9,886

Other Costs (No Profit & Risk added):
Machine Time for Slash Piling: 35 hours @ $150/hour = $5,250

Longview Timber Road Use Fees(4-7 Ridge Haul Route)
$300 Fee plus $0.20/mbf/mile:
$300 + (Area 1 approximately = .20 x 3292 mbf x 2.89 miles) + (Area 2 approximately = .20 x 2609 mbf x 10.6 miles) = 7,433.86
TOTAL Other Costs (No Profit & Risk added) = $12,683.86

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Big 3 Junction
Sale 341-10-023

District: Forest Grove **Date: April 20, 2010**

logging conditions

combination#: 1

Douglas - Fir	85.00%
Western Hemlock / Fir	85.00%
Sitka Spruce	85.00%
Alder (Red)	85.00%
Maple	85.00%

yarding distance: Medium (800 ft) **downhill yarding:** No
logging system: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber
tree size: Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF
loads / day: 10.0 **bd. ft / load:** 4,200
cost / mbf: $79.62

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

combination#: 2

Douglas - Fir	15.00%
Western Hemlock / Fir	15.00%
Sitka Spruce	15.00%
Alder (Red)	15.00%
Maple	15.00%

yarding distance: Short (400 ft) **downhill yarding:** No
logging system: Shovel **Process:** Manual Delimbing
tree size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF
loads / day: 12.0 **bd. ft / load:** 4,200
cost / mbf: $49.69

machines:
Shovel Logger

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Big 3 Junction
Sale 341-10-023

District: Forest Grove **Date:** April 20, 2010

logging costs

Operating Seasons:	2.00	**Profit Risk:**	10.00%
Project Costs:	$103,888.00	**Other Costs (P/R):**	$9,886.00
Slash Disposal:	$0.00	**Other Costs:**	$12,683.86

Miles of Road

Road Maintenance: $0.00

Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	0.0	12.0	0.0

Hauling Costs

Species	$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	$0.00	2.0	4.2
Western Hemlock / Fir	$0.00	2.0	3.8
Sitka Spruce	$0.00	2.0	3.8
Alder (Red)	$0.00	2.0	3.0
Maple	$0.00	2.0	3.0

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Big 3 Junction
Sale 341-10-023

District: Forest Grove **Date:** April 20, 2010

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
$75.13	$10.04	$1.52	$77.28	$1.71	$16.57	$0.00	$5.00	$2.20	$189.45
Western Hemlock / Fir									
$75.13	$10.04	$1.52	$85.40	$1.71	$17.38	$0.00	$5.00	$2.20	$198.38
Sitka Spruce									
$75.13	$10.04	$1.52	$85.40	$1.71	$17.38	$0.00	$5.00	$2.20	$198.38
Alder (Red)									
$75.13	$10.33	$1.52	$111.36	$1.71	$20.00	$0.00	$5.00	$2.20	$227.25
Maple									
$75.13	$10.33	$1.52	$111.36	$1.71	$20.00	$0.00	$5.00	$2.20	$227.25

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	$0.00	$444.37	$254.92	$0.00
Western Hemlock / Fir	$0.00	$369.83	$171.45	$0.00
Sitka Spruce	$0.00	$343.84	$145.46	$0.00
Alder (Red)	$0.00	$520.00	$292.75	$0.00
Maple	$0.00	$420.00	$192.75	$0.00

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Big 3 Junction
Sale 341-10-023

District: **Forest Grove** **Date:** **April 20, 2010**

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
Maple	0	$0.00	$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	3,196	$254.92	$814,724.32
Western Hemlock / Fir	1,170	$171.45	$200,596.50
Sitka Spruce	43	$145.46	$6,254.78
Alder (Red)	1,289	$292.75	$377,354.75
Maple	68	$192.75	$13,107.00

Gross Timber Sale Value

Recovery: $1,412,037.35

Prepared by: Tara Carlson **Phone:** 503-325-5451

TIMBER SALE SUMMARY
Big 3 Junction
Contract No. 341-10-023

1. **Type of Sale:** Areas 1 and 2 are Modified Clearcuts (MC). The sale is recovery, sealed bid auction.

2. **Revenue Distribution:** 100% BOF, Clatsop County.

3. **Sale Acreage:** Area 1 is 112 net acres of (MC). Area 2 is 103 net acres of (MC). Acreage was determined using ERSI ArcMap GIS software.

SPECIES	2 SAW	3 SAW	4 SAW	Camprun	SPECIES TOTAL
Douglas-fir	1,112	1,539	545		3,196
Western Hemlock	618	447	105		1,170
Red Alder				1,289	1,289
Sitka Spruce	34	8	1		43
Big Leaf Maple				68	68
TOTAL:	**1,764**	**1,994**	**651**	**1,357**	**5,766**

4. **Cruise Data**: Areas 1 and 2 were contract cruised. Cruised data from the applicable stands were inputted into the Super Ace 2004 program. No additional plots were taken. The plots were cruised using a 33.6 BAF. Take trees and saw grades were assigned based on the height, diameter and damage/defect measurements provided by the cruise and observations made in the field. Volumes and statistics were generated from plot data by using the Super Ace 2004 program.
   Cruise statistics:

   Area 1: CV 49.8% and SE 11.1%.

   Area 2: CV 54.9% and SE 11.7%.

5. **Timber Description:** Area 1 is a naturally regenerated, unmanaged mixed stand of Douglas-fir, Western Hemlock, and Red Alder with a minor component of Sitka spruce and other hardwoods. Area 2 is also a naturally regenerated, unmanaged stand with Douglas-fir and Red Alder as the main component. A minor component of other conifer and hardwoods is found throughout the unit. The stands ages range from approximately 55-75 years old. The average DF take-tree DBH for all areas is approximately 17 inches. Estimated DF volume for Area 1 averages 15.6 MBF per acre and Area 2 averages 14.3 MBF. Total take tree volume will average about 27.6 MBF/acre.

6. **Topography and Logging Method:** The topography ranges from 800ft to 2000ft with average slope of approximately 45% becoming as steep as 75% in cable yarding areas. The sale areas are roughly 85% cable yarding and 15% ground based yarding.

7. **Access:** The sale area is accessed two ways, one via Highway 26 to the 101 road and 108 road, which are both currently rocked roads. The other access route is via Highway 26 to Lower Nehalem Road through Spruce Run Campground and onto the 4-7 Ridge Road, which is currently a rocked road. There is one gate located on the 101 Road, one on the 108 Road, and one on the 4-7 Ridge Road. These gates will require a key or combination, which can be obtained from the Forest Grove District Office.

8. **Projects:**

Project No. 1	Constructing 2.33 miles of new road:	$53,084.41
Project No. 2	Surfacing of roads with 3,910 cyd^3 of rock:	$43,330.08
Project No. 3	Grass seed and fertilize:	$1,125.06
Project No. 4	Roadside Brushing:	$120.00
Move in cost:		
Area 1:		$4,877.64
Area 2:		$1,350.45
Total All Project Cost:		**$103,887.64**
Total Credits:		**$103,888.00**

9. **Other Costs:**

Other Costs with (P/R):

✧ Brand and paint ($1.00/MBF):	$ 5,766
✧ Intermediate Supports/ Tail Tree Rigging (10 @ $100.00 each):	$ 1,000
✧ Snag Creation (208 trees @ $10/Snag):	$ 3,120
Total (P/R):	**$ 9,886**

Other Costs (No P/R):

✧ Skid Trail Closure/Slash Piling (35 hrs. @ $150.00/hr):	$ 5,250
✧ Longview Timber Road Use Fees for 4-7 Ridge Haul Route:	$ 7,433.86
Total (No P/R):	**$ 12,683.86**

Pre-Operations Report

Operation Name:	**Big 3 Junction**			
Management Basin:	**Lower Nehalem**		**Sale Quarter:**	**2**
County (%):	**Clatsop**	**100%**	**BOF %**	**100**
			CSL %	**0**

I. VOLUME AND VALUE SUMMARY

Table 1. Types, Acres, and Value

Area	Harvest Type	Anticipated Product	Gross Acres	Net Acres	MBF/ Acre[1]	MBF/Area[1]	$/MBF[2]	$/Area
1	MC	DF,RA,WH-M	113	109	29	3,061	$196.42	$601,255
2	MC	DF,RA,WH-M	108	99	25	2,446	$196.42	$480,452
3	R/W	DF,RA,WH-M	7	7	25	181	196.42	$35,552
Total			124	107		5,688		

1. Estimated harvest volume per acre or area.
2. Estimated 'stumpage value' (excluding Project Costs)

Gross Value	$1,117,259
Project Costs	$103,888
Net Value	$1,013,371

II. PHYSICAL DESCRIPTION OF OPERATION AREA

Table 2. Physical Characteristics of Operation Area[1]

Location[2]*: T4N, R7W, Sections 28, 29, 30, 31, 32, and 33	
Rainfall:	Elevation: 480-2,040
Site Index:	Aspect: Area 1-SE, Area 2-N
Vegetation Zone:	Other:
Soils: Rye and Killam	

1. Complete the required sections, indicated with an asterisk (*). The other sections should be completed if they influence management decisions regarding this operation, including decisions regarding roads and reforestation. If the characteristic is unique to an Area, then identify the Area.
2. Short description of operation location from a commonly known land mark (i.e. Two miles east of Bald Mtn.) or legal description.

III. CURRENT STAND CONDITION:

Table 3. Stand Inventory Information

Area	Stand ID	Measured /Imputed[1]	Species[2]	Age[3]	TPA	DBH	BA	SDI	Net Acres
1	36327	M	RA,DF	67	190	13	162	45	24
1	36329	I	DF,RA	67	123	14	130	35	46
1	36330	I	DF,WH,SS	67	69	16	92	24	27
1	38536	I	WH,DF	60	212	13	184	51	12
2	36327	M	RA,DF	67	190	13	162	45	30
2	36358	I	RA,WH	55	190	14	203	54	21
2	36359	M	RA,WH	55	190	14	203	54	26
2	36361	I	RA,WH	40	190	14	203	54	22

1. Identify the source of stand inventory information. Use the following codes: M = Measure SLI data, I = Imputed SLI data, P = Pre-Cruise Plots, O = other (if other, describe below).
2. List the predominant species (i.e. those that compose >10% of the BA). Use the standard SLI species codes.
3. Stand age is based on the birth year determined by the district.

Table 4. Additional Stand Information

Area	Stand ID	Snags/ Acre[1]	Down Wood / Acre[2]	% Ground Cover	Predominant Understory Vegetation[3]	Forest Health Issues[4]
1	36327	n/a	n/a	100	Sword Fern, Vine Maple, Salal	
1	36329	n/a	n/a	100	Sword Fern, Vine Maple, Salal	
1	36330	n/a	n/a	100	Sword Fern, Vine Maple, Salal	
1	38536	n/a	n/a	100	Sword Fern, Vine Maple, Salal	
2	36327	n/a	n/a	100	Sword Fern, Vine Maple, Salal	
2	36358	n/a	n/a	100	Sword Fern, Vine Maple, Salal	
2	36359	n/a	n/a	100	Sword Fern, Vine Maple, Salal	
2	36361	n/a	n/a	100	Sword Fern, Vine Maple, Salal	

1. Identify the number of hard snags per acre (decay classes 1 and 2).
2. Identify the cubic feet per acre of hard down wood (decay classes 1 and 2)
3. Identify the three most predominant species or those that will have the greatest impact on management decisions. Include the percent cover of each species in parenthesis (). For example Sword Fern (40).
4. If "yes", describe forest health issues below, including "in unit" invasive species.

IV. DESIRED FUTURE CONDITION/VISION:

Table 5. Stand Structure Information

Area	Stand ID	Current	Post Harvest[1]	Desired Future	Net Acres
1	36327	UDS	REG	GEN	24
1	36329	CSC	REG	GEN	46
1	36330	CSC	REG	GEN	27
1	38536	CSC	REG	GEN	12
2	36327	UDS	REG	GEN	30
2	36358	CSC	REG	GEN	21
2	36359	UDS	REG	GEN	26
2	36361	CSC	REG	GEN	22

1. The stand is expected to develop into this condition in the five to ten years after this operation is completed.

***(Describe the Vision for the stand** – Given the current and desired future condition for these stands, describe the intent of applying the management prescription identified in Section V.)*

The current stands are unproductive. The regeneration harvests in these areas will remove the slow-growing alder and under-stocked conifer and replace them with new more productive stands. The sale areas will be planted back with a mixture of western hemlock, noble fir, SNC resistant Douglas-fir, and cedar. Throughout the life of the stands, they will be evaluated for pre-commercial and commercial thinning, as well as other intensive management practices, in order to maximize the production of timber.

A small portion (about 4 acres) of Area 1 is designated in the DFC as OFS. This is a mapping error and will be removed from the landscape design and categorized as general. These acres will be reallocated to a portion of the same riparian area that is currently designated a General.

V. PROPOSED MANAGEMENT PRESCRIPTION:

Table 6. Prescription[1]

Area	Harvest Type	Harvest Species	Residual Species	Residual TPA	Residual BA	Residual SDI

1	MC	DF,WH,RA	WRC,DF ,WH,RA	5	--	--
2	MC	DF,WH,RA	WRC,DF ,WH,RA	5	--	--

1. *If there are any special consideration with this prescription (i.e. reserve species, diameter limits, etc.) describe below*

Table 7. Snag and Down Wood

Area	Snags Creation[1]								Anticipated Down Wood[5] (ft3)
	Method[2]	Snags /Acre	DBH	Species	Arrangement				
					Scattered in Unit	Clumps in Unit	In Unit RMA[3]	Adjacent RMA[4]	
1	Girdling	2	18	DF,WH	X			X	750
2	Girdling	2	18	DF,WH	X			X	750

1. Snag creation is optional; complete this section, if snags are to be actively created with this operation. If leaving additional green trees to become snags, enter information into Table 8 (Green Trees).
2. Methods include: None, Topping, Girdling, Other (if other, describe below).
3. Snags are left in or adjacent to an RMA "within" the harvest area (both sides of the stream are in the harvest Area).
4. Snags are left in or adjacent to an RMA that forms the boundary of the harvest Area (i.e. adjacent to the harvest Area).
5. Estimate the amount of hard down wood per acre that can be expected to be in the Area after harvest has been completed. If a regeneration harvest varies from the FMP standard of 600 to 900 cubic feet per acre, describe the alternative strategy in the vision pathway (i.e. leaving extra green trees, etc.).

Table 8. Green Trees

Area	Purpose[1]	Species	DBH Range	TPA[2]	Green Tree Arrangement[3]				
					Scattered in Unit	Clumps in Unit	In Unit RMA[4]	Adjacent RMA[5]	Green Tree Area
1	FMP	DF,WRC, RA,WH	15-32"	5	X		X		X
2	FMP	DF,WRC, RA,WH	15-32"	5	X		X		X

1. Green trees can be left for several purposes within a unit including FMP Standards (NW and SW FMP – 5 trees/acres); supplementing snags, and supplementing down wood. Within an Area, list each purpose for green tree retention and the total if there is more than one purpose in that unit.
2. If the green trees left for the purpose of meeting the FMP Standard is either more or less than the standard, describe the rationale below.
3. Green tree arrangement is described by their proximity to the harvest area of the sale.
4. Green trees are left in or adjacent to an RMA "within" the harvest area (both sides of the stream are in the harvest Area).
5. Green trees are left in or adjacent to an RMA that forms the boundary of the harvest Area (i.e. adjacent to the harvest Area).

Table 9. Pathway

Area	Reforestation			Precommercial Thinning[2]		Partial Cut A[3]	Partial Cut B[3]	Regeneration Harvest[3]
	Type[1]	Species	TPA	Age	TPA	Age	Age	Age
1	Initial	DF, WH,WRC	436	15	220	40		60
2	Initial	DF, WH,WRC	436	15	220	40		60

1. Reforestation Types include: Initial, Underplanting, Patch (i.e. planting of patch cuts), Other (explain below).
2. Complete only for Regeneration Harvests.
3. Partial Cut and Regeneration Harvest
    a. If this operation is a Partial Cut Harvest, then identify the age that additional harvest entries are anticipated for this stand
    b. If this operation is a Regeneration Harvest; then identify the age of the anticipated harvest entries in the new plantation, including first two Partial Cuts and the next Regeneration Harvest.

Table 10. Site Preparation[1]

Area	Site Prep				Other issues (Big Game, Mtn. Beavers, SNC, etc)			
	Slash Treatment	Whole Tree Yarding	Chemical	Other[2]	Vegetation	Animal	Insect & Disease	Other[2]
1	Mechanical	x	x			Big game		
2	Mechanical	x	x			Big game		

1. Given the time between the Pre-Operations Report development and site preparation, it may necessary to enter TBD (To Be Determined), but anticipated actions should be identified, based on current knowledge of the site.
2. If "Other", describe below.

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Table 11. Harvest System and Access Summary

Area	Harvest System		Slope (%)	Unit Access[2]	Seasonal Access[3]
	% Cable[1]	% Ground[1]			
1	80	20	5-80%	Simple	All Weather
2	80	20	10-80%	Simple	All Weather

1. Estimate the harvest system to the nearest 20% (if less than 10% enter <10% or 0% if appropriate).
2. Unit access terms are "Established", "Simple", "Verified", and "Unverified".
3. All Weather, Dry Weather, or To Be Determined (TBD).

Are Easements required along haul route? ☒ YES ☐ NO
If "yes", describe below easements that need to be obtained.

ODF currently has easements on the 101 road with Stimson Lumber Co., and the 108 road with Longview Timber Corp. A road use permit is necessary for the 4-7 Ridge Road from Longview Timberlands, LLC in order to have access from Foss County Road.

Are property line surveys required for this operation? ☐ YES ☒ NO
If "yes", describe the lines to be surveyed, type of survey (i.e. section subdivision, refresh previously established line, etc.), and length of survey.

Are Invasive Species present along the haul route? ☐ YES ☒ NO
If "yes", describe below the management actions necessary to meet management goals for these species.

Table 12. Transportation Management Summary (Miles or Number of Crossings)

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct			2.3	
Improve			0.15	
Maintain	10	2		
Block (Dormant)				
Vacate				
Stream Crossings[1]				
Type F				
Type N			1N	

1. Identify the type and number of stream crossing (N) to be installed and the number of existing culverts to be replaced (R) (i.e. 7 N /5 R). If bridge construction or repair is required, describe below.

VII. AQUATIC RESOURCES AND WATER QUALITY:

Table 13. Estimate of Known Stream Classifications within or adjacent to the Operation

Area[1]	Fish Bearing (Type F)	Operating in Inner Zone of Type F[3]	Non-Fish Bearing (Type N)				Unknown - Fish Presence Surveys Required[5]
			Large / Medium	Small Perennial	H.E.R. / P.D.F.T[4]	Other	
1	3,030						None
2	6,310			X			None
Total Length[2]	9,340			1,134			

1. Identify the stream classes (Fish Bearing, 4 types of Non-Fish Bearing, and Unknown) within or adjacent to each Area with an "X". An Area is "adjacent" to a stream if a portion of it is within the Inner or Outer Zone of the stream.
2. Enter the total length of each stream class within or adjacent to the Operation (i.e. total for all Areas).
3. If harvesting (other than cable corridors) is anticipated in the Inner Zone of Type F streams, describe the pathway to a 'mature forest condition' below.
4. High Energy Reach (H.E.R.) and Potential Debris Flow Tract (P.D.F.T.)
5. Identify whether fish presence surveys are necessary for the Area.

Table 14. Additional Stream Considerations

Area	Stream Name[1]	Species Present	SAH Basin[2]	Domestic Water Sources Present[3]
1	North Fork Cronin Creek	None	None	None
2	North Fork Cronin Creek	None	None	None

1. Enter the name of stream(s) within or adjacent to the Area. For the unnamed tributaries, list the name of the stream(s) that the tributaries flow into.
2. If the Area is in a SAH basin, enter the basin name; otherwise enter "None". Outside the north coast, enter NA.
3. If "yes", describe below the location and site protection strategies for these water sources

Potential Stream Habitat Improvement within or adjacent to this operation? ☐ **YES** ☒ **NO**

If "yes", describe below the potential stream habitat improvement projects

The vast majority of green tree retention for the two modified clear-cuts will be concentrated around the North Fork Cronin Creek and in the buffers of the in-unit Type-N tributaries. There will be no operating in the inner zone in any portion of the sale areas. Due to difficult logging, actively managing the riparian zones towards a complex structure is not a viable option. There are however, pockets of large remnant conifers present in the riparian areas that did not burn in the 1945 fire. It is expected that these areas will acquire a more complex structure naturally over time.

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

Table 15. Northern Spotted Owls - Surveys and Presence

Area	NSO Surveys Required[1]	Years Surveys Completed[2]	Additional Surveys Planned[2]	NSO Response[3]
1 & 2	Yes	2007, 2008, 2009		none

1. Surveys are required if the Area contains NSO habitat, as determined by Area Wildlife Biologist. Enter "Yes" or one of the following codes when surveys are not required: "N.H" – no habitat within the unit; "N.R." – surveys of individual operations are not required (Klamath-Lake District only); "T.B." – surveys are not required because the Area is within the Tillamook Burn (see NSO Policy); "HCP" – covered by a Habitat Conservation Plan; "S.W." – a survey waiver has been issue for another reason (explain below or attach the waiver).
2. Enter the years surveys completed or planned (i.e. 2008, 2009), not the number of years surveys completed or planned.
3. Response is based on surveys being conducted specifically for this operation (this table is not intended to include historic responses). If "yes", see the preliminary Biological Assessment for more information. If "yes" and a Biological Assessment is not required, explain below.

Is the Operation within an NSO Provincial Circle or Home Range? ☐ **YES** ☒ **NO**
If "yes", attached the preliminary Biological Assessment.

Table 16. Marbled Murrelets - Surveys and Presence

Area	MM Surveys Are Required[1]	Years Surveys Completed[2]	Additional Surveys Planned[2]	MM Observations[3, 4]
1 & 2	Yes	2007 and 2008		none

1. Survey are required if the Area contains or is adjacent (within 330 feet) of potential marbled murrelet habitat, as determined by Area Wildlife Biologist. Enter "Yes", or one of the following codes when surveys are not required: "N.H." – no potential habitat within or adjacent to the Area; "O.Z." – outside the Marbled Murrelet Survey Zone; "T.C." – tree climbing was used (or planned) instead of the normal survey protocol; "HCP" – covered by a Habitat Conservation Plan; "S.W." – a survey waiver has been issue for another reason (explain below or attach the waiver).
2. Enter the years surveys completed or planned (i.e. 2008, 2009), not the number of years surveys completed or planned.
3. Marbled murrelet observations are based on surveys being conducted specifically for this operation (this table is not intended to include historic presence detections).
4. Enter the type of observation: None, Presence, Occupied, or Indeterminate (further surveys are required).

Is the Operation within a Marble Murrelet Management Area? ☐ **YES** ☒ **NO**
If "yes", attached the preliminary Biological Assessment.

Other Wildlife Considerations:
(Describe species with resource site protection rules defined Forest Practices Act/Rules and other species of concern that are known to be present in the vicinity of the operation and the associated management implications. Describe any special considerations for deer and elk habitat [such as seasonal road closures].) None.

T&E Plants:

Does the Oregon Natural Heritage Program database or field reconnaissance indicate the presence of known threatened or endangered plants near the operation? ☐ **YES** ☒ **NO**

The sale areas were also checked against local records in the Land Management Classification System (LMCS). No listed plants were indentified within or adjacent to the sale areas.
(If "yes", list the known plants and describe the management implications.)

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

(Table 17 is completed by the Geotechnical Specialist)

Summary of Slope Stability Assessment

This assessment is based on analysis of USGS 1:24,000 topographic maps.

There are high landslide hazard locations scatted throughout the sale. The northern portion of Area 1 drains into an unnamed tributary of the Nehalem River. The remainder of the sale drains into the North Fork of Cronin Creek. The risk of landslides delivering directly from the sale to the unnamed tributary of the Nehalem River is low and to the North Fork of Cronin Creek is high. The northern portion of Area 1 and the western portion of Area 3 appear to be located on large, deep-seated landslide landforms.

X. RECREATION RESOURCES:

Table 18. Recreation Sites In the Vicinity of the Operation[1]

Type of Recreation Site or Facility	In or Immediately Adjacent[1] to the	In the Vicinity of the Operation (1/4 mile)	On the Anticipated Haul Route

	Operation		
Motorized Trails			
Non-Motorized Trails			
Campgrounds			
Other Recreation Sites or Facilities			

1. If "existing" or "planned" is listed in any of the boxes, describe recreation site and the management implications; otherwise don't write anything.
2. "Immediately adjacent" is defined as within 100 feet of the operations boundary.

The sale areas are designated as Non-Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). The sale has been reviewed by the District Recreation Coordinator. No trails were identified within or adjacent to the sale areas.

XI. CULTURAL RESOURCES:

Does the ODF Cultural Resources Inventory or field reconnaissance indicate the presence of cultural resources in and adjacent to this operation? ☐ **YES** ☒ **NO**

(Adjacent is defined as within 200 feet of the operation, including construction of new roads outside the operation Area boundaries. If "yes", describe the type of resource and the protection measures).

The *Tillamook State Cultural Assessment* does not list cultural sites within or adjacent to the sale boundaries.

XII. SCENIC RESOURCES:

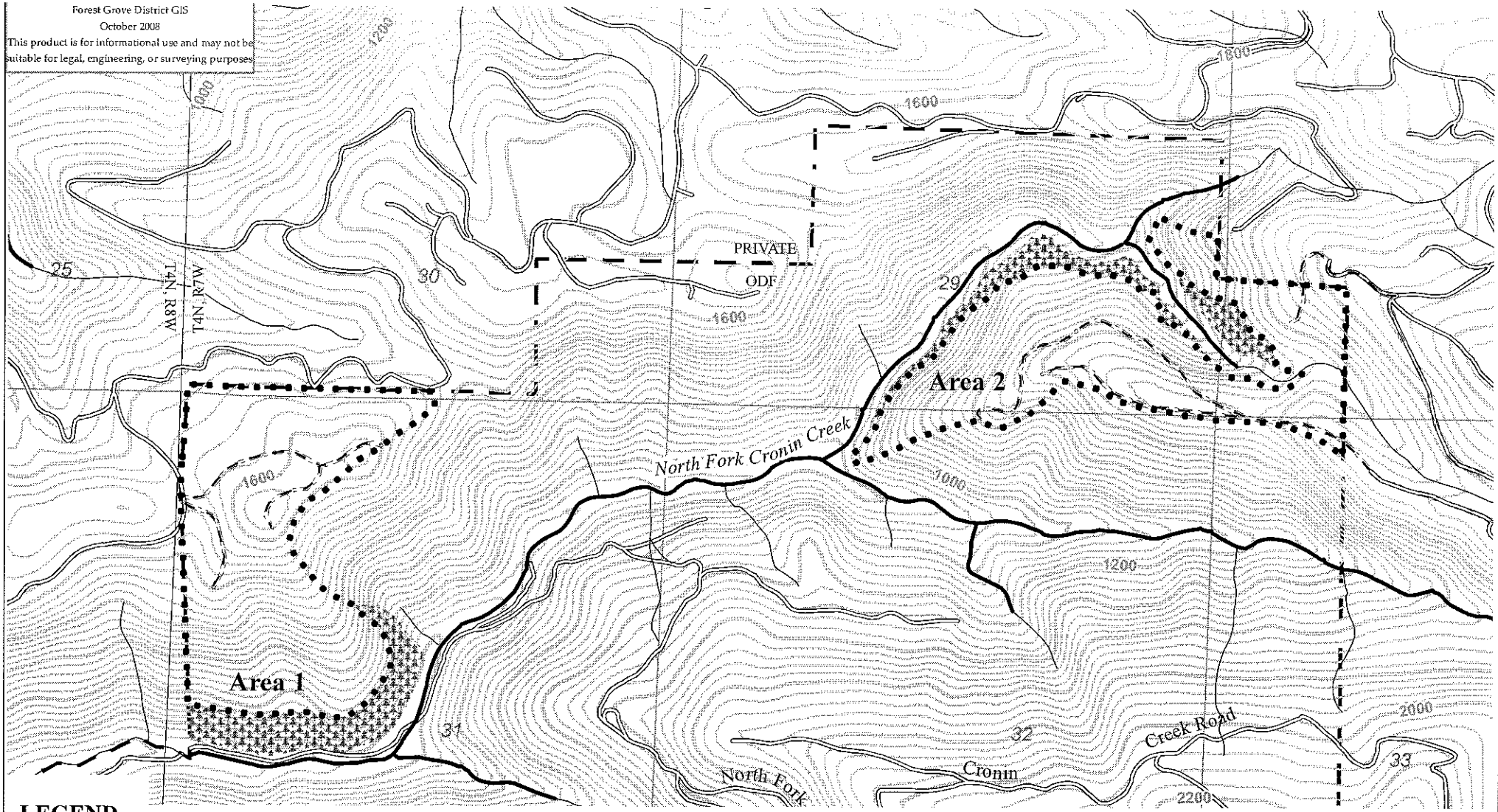
The district has reviewed the scenic potential of vantage points in and around this operation. This review shows that this operation contains areas with an ODF Visual Classification of __3__ *(if class 1 or 2, describe the view shed and management strategies used to achieve the visual objectives below).*

XIII. OTHER RESOURCE CONSIDERATIONS:

Are there other resources present in or around this operation that need special consideration?
☐ **YES** ☒ **NO**

(Other resources include, but are not limited to: power lines, buried cables, permanent plots, research areas, etc. If "yes", describe any resources or other special considerations not covered in another section.)

There is a property line between the State and private property on Areas 1 and 2. This will need to be clearly identified during sale preparation. A permit will also need to be obtained if guyline trees and/or tailholds are needed on the adjacent landowner, Longview Timber Co.



LEGEND

- Existing Roads
- Road Construction
- Type N Stream
- Type F Stream
- Sale Boundary
- Green Tree Retention
- ODF Ownership
- Index contour, 200 ft
- Intermediate contour 40 ft

FY 2009

Big 3 Junction

Portions of Sections 28, 29, 30, 31, 32, and 33
T04N, R07W, W.M., Clatsop County, OR

1:15,840

1 inch = .25 miles

0 0.125 0.25 0.5 Miles

Approximate Net Acres	
Area 1	109
Area 2	99
Area 3 (R/W)	7
Total	215

N
W E
S

PROJECT COST SUMMARY SHEET

Timber Sale: Big 3 Junction

Sale Number: 341-10-023

PROJECT NO. 1: ROAD CONSTRUCTION AND IMPROVEMENT

CONSTRUCTION

Road Segment	Length	Cost
A to B	49+50	$26,430.40
C to D	22+75	$9,568.67
F to G	9+50	$3,046.29
H to I	21+75	$6,963.73
J to K	9+00	$3,400.15
L to M	10+50	$3,675.18
	123+00 stations	
	2.33 miles	

SUBTOTAL CONSTRUCTION **$53,084.41**

TOTAL PROJECT NO. 1 COST = **$53,084.41**

PROJECT NO. 2: SURFACING

Road Segment	Amount	Type	Cost
A to B	2,321 cy	6" - 0	$27,689.53
C to D	1,090 cy	6" - 0	$9,328.20
F to G	499 cy	6" - 0	$6,312.35
Total	3,910 cy	6" - 0	

TOTAL PROJECT NO. 2 COST = **$43,330.08**

PROJECT NO. 3: GRASS SEEDING, FERTILIZING

Grass seed and fertilize areas of disturbed soil. $1,125.06

TOTAL PROJECT NO. 3 COST = **$1,125.06**

PROJECT NO. 4: ROADSIDE BRUSHING

Brush Segment E-F 0.15 miles @ $800.00 per mile $120.00

TOTAL PROJECT NO. 4 COST = **$120.00**

MOVE IN Area 1 **$4,877.64**

MOVE IN Area 2 **$1,350.45**

TOTAL ALL PROJECTS **$103,887.64**

TOTAL CREDITS **$103,888.00**

SUMMARY OF CONSTRUCTION COST

Timber Sale: **Big 3 Junction** Timber Sale No. : 341-10-023

Road Segment: **A to B** Construction : 49+50 stations

0.94 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	4.50	acres @	$1,401.00	per acre =	$6,304.50	
Balanced Road Construction	41.70	sta @	$90.00	per sta =	$3,753.00	
Endhaul						
Excavate & Load	500	cy @	$1.80	per cy =	$900.00	
Drill & Shoot	1,500	cy @	$4.50	per cy =	$6,750.00	
Haul	500	cy @	$1.76	per cy =	$880.00	
Place Fill	1,500	cy @	$2.12	per cy =	$3,180.00	
Compact Waste Area	500	cy @	$0.25	per cy =	$125.00	
Construct Turnouts	6	ea @	$60.00	per ea =	$360.00	
Construct Turnaround	1	ea @	$75.00	per ea =	$75.00	
Landing	1	ea @	$285.00	per ea =	$285.00	
Grade, Ditch, and Roll	37.00	sta @	$28.70	per sta =	$1,061.90	
Grade and Roll (Outslope)	12.50	sta @	$27.20	per sta =	$340.00	
				TOTAL	EXCAVATION COSTS=	**$24,014.40**

CULVERTS - MATERIALS & INSTALLATION

Culverts

132	LF of 18"	$2,376.00	0	LF of 24"	$0.00
0	LF of 30"	$0.00	0	LF of 36"	$0.00
0	LF of 42"	$0.00	0	LF of 48"	$0.00
0	LF of 54"	$0.00	0	LF of 60"	$0.00
		$2,376.00			

Culvert Markers

4 markers $40.00

TOTAL CULVERT COSTS = **$2,416.00**

PROJECT NO. 1 TOTAL COST = $26,430.40

PROJECT NO. 2:

SURFACING

	8	" deep =	42 cy/sta				
A to B	2,079	cy of	6" - 0	@	$11.93	per cy =	$24,802.47
Curve Widening	24	cy of	6" - 0	@	$11.93	per cy =	$286.32
Turnaround (1)	14	cy of	6" - 0	@	$11.93	per cy =	$167.02
Turnouts (6)	84	cy of	6" - 0	@	$11.93	per cy =	$1,002.12
Landing (2)	120	cy of	6" - 0	@	$11.93	per cy =	$1,431.60
Total =							
	2,321	cy of	6" - 0				

PROJECT NO. 2 TOTAL COST = $27,689.53

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	2.25	acres @	$200.00	per acre =	$450.00

PROJECT NO. 3 TOTAL COST = $450.00

TOTAL COST = $54,569.93

SUMMARY OF CONSTRUCTION COST

Timber Sale: **Big 3 Junction** Timber Sale No. : 341-10-023

Road Segment: **C to D** Construction : 22+75 stations

0.43 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	2.08	acres @	$1,078.00	per acre =	$2,242.24	
Balanced Road Construction	12.15	sta @	$90.00	per sta =	$1,093.50	
Drift	4.00	sta @	$150.00	per sta =	$600.00	
Rock Excavation						
Drill & Shoot	1,000	cy @	$4.50	per cy =	$4,500.00	
Construct Turnouts	2	ea @	$60.00	per ea =	$120.00	
Construct Turnaround	1	ea @	$75.00	per ea =	$75.00	
Landing	1	ea @	$285.00	per ea =	$285.00	
Grade, Ditch, and Roll	22.75	sta @	$28.70	per sta =	$652.93	
				TOTAL EXCAVATION COSTS=		$9,568.67

PROJECT NO. 1 TOTAL COST = $9,568.67

PROJECT NO. 2:

SURFACING

	8	" deep =	42 cy/sta					
C to D (jaw run)	456	cy of	6" - 0	@	$12.48	per cy =	$5,690.88	
C to D (pit run)	500	cy of	6" - 0	@	$3.93	per cy =	$1,965.00	
Curve Widening	12	cy of	6" - 0	@	$12.48	per cy =	$149.76	
Turnaround (1)	14	cy of	6" - 0	@	$12.48	per cy =	$174.72	
Turnouts (2)	28	cy of	6" - 0	@	$12.48	per cy =	$349.44	
Junction	20	cy of	6" - 0	@	$12.48	per cy =	$249.60	
Landing (1)	60	cy of	6" - 0	@	$12.48	per cy =	$748.80	
Total =								
	1,090	cy of	6" - 0					

PROJECT NO. 2 TOTAL COST = $9,328.20

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	1.04	acres @	$200.00	per acre =	$208.00	

PROJECT NO. 3 TOTAL COST = $208.00

TOTAL COST = $19,104.87

SUMMARY OF CONSTRUCTION COST

Timber Sale: **Big 3 Junction** Timber Sale No. : 341-10-023

Road Segment: **E to F** Improvement : 8+00 stations

0.15 miles

PROJECT NO. 4

Roadside Brushing

Mechanical Roadside Brushing	0.15	miles @	$800.00	per mile =	$120.00
				TOTAL COST=	**$120.00**

TOTAL COST = $120.00

SUMMARY OF CONSTRUCTION COST

Timber Sale: **Big 3 Junction** Timber Sale No. : 341-10-023

Road Segment: **F to G** Construction : 9+50 stations

0.18 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.88	acres @	$1,078.00	per acre =	$948.64	
Balanced Road Construction	9.50	sta @	$90.00	per sta =	$855.00	
Construct Turnouts	1	ea @	$60.00	per ea =	$60.00	
Construct Turnaround	1	ea @	$75.00	per ea =	$75.00	
Landing	1	ea @	$285.00	per ea =	$285.00	
Grade, Ditch, and Roll	9.50	sta @	$28.70	per sta =	$272.65	
				TOTAL EXCAVATION COSTS=		**$2,496.29**

CULVERTS - MATERIALS & INSTALLATION

Culverts

30	LF of 18"	$540.00	0	LF of 24"	$0.00
0	LF of 30"	$0.00	0	LF of 36"	$0.00
0	LF of 42"	$0.00	0	LF of 48"	$0.00
0	LF of 54"	$0.00	0	LF of 60"	$0.00
		$540.00			

Half Rounds

0	LF of 21"	$0.00
0	LF of 30"	$0.00
		$0.00

Culvert Markers

1 markers $10.00

TOTAL CULVERT COSTS = **$550.00**

PROJECT NO. 1 TOTAL COST = $3,046.29

PROJECT NO. 2:

SURFACING

	8	" deep =	42 cy/sta				
F to G	399	cy of	6" - 0	@	$12.65	per cy =	$5,047.35
Curve Widening	12	cy of	6" - 0	@	$12.65	per cy =	$151.80
Turnaround (1)	14	cy of	6" - 0	@	$12.65	per cy =	$177.10
Turnouts (1)	14	cy of	6" - 0	@	$12.65	per cy =	$177.10
Landing (1)	60	cy of	6" - 0	@	$12.65	per cy =	$759.00
Total =	499	cy of	6" - 0				

PROJECT NO. 2 TOTAL COST = $6,312.35

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.44	acres @	$200.00	per acre =	$88.00

PROJECT NO. 3 TOTAL COST = $88.00

TOTAL COST = $9,446.64

SUMMARY OF CONSTRUCTION COST

Timber Sale: **Big 3 Junction** Timber Sale No. : 341-10-023

Road Segment: **H to I** Construction : 21+75 stations

0.41 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	2.00	acres @	$1,401.00	per acre =	$2,802.00	
Balanced Road Construction	21.75	sta @	$90.00	per sta =	$1,957.50	
Construct Turnouts	2	ea @	$60.00	per ea =	$120.00	
Construct Turnaround	1	ea @	$75.00	per ea =	$75.00	
Landing	1	ea @	$285.00	per ea =	$285.00	
Grade, Ditch, and Roll	21.75	sta @	$28.70	per sta =	$624.23	
				TOTAL EXCAVATION COSTS=		**$5,863.73**

CULVERTS - MATERIALS & INSTALLATION

Culverts

60	LF of 18"	$1,080.00	0	LF of 24"	$0.00
0	LF of 30"	$0.00	0	LF of 36"	$0.00
0	LF of 42"	$0.00	0	LF of 48"	$0.00
0	LF of 54"	$0.00	0	LF of 60"	$0.00
		$1,080.00			

Culvert Markers

2 markers $20.00

TOTAL CULVERT COSTS = **$1,100.00**

PROJECT NO. 1 TOTAL COST = $6,963.73

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	1.00	acres @	$200.00	per acre =	$200.00

PROJECT NO. 3 TOTAL COST = $200.00

TOTAL COST = $7,163.73

SUMMARY OF CONSTRUCTION COST

Timber Sale: **Big 3 Junction** Timber Sale No. : 341-10-023

Road Segment: **J to K** Construction : 9+00 stations

0.17 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.83	acres @	$1,401.00	per acre =	$1,157.85	
Balanced Road Construction	4.60	sta @	$90.00	per sta =	$414.00	
Drift	4.40	sta @	$150.00	per sta =	$660.00	
Construct Turnaround	1	ea @	$75.00	per ea =	$75.00	
Landing	1	ea @	$285.00	per ea =	$285.00	
Grade, Ditch, and Roll	9.00	sta @	$28.70	per sta =	$258.30	
				TOTAL EXCAVATION COSTS=		**$2,850.15**

CULVERTS - MATERIALS & INSTALLATION

Culverts

30	LF of 18"	$540.00	0	LF of 24"	$0.00
0	LF of 30"	$0.00	0	LF of 36"	$0.00
0	LF of 42"	$0.00	0	LF of 48"	$0.00
0	LF of 54"	$0.00	0	LF of 60"	$0.00
		$540.00			

Culvert Markers

1 markers $10.00

TOTAL CULVERT COSTS = **$550.00**

PROJECT NO. 1 TOTAL COST = $3,400.15

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.41	acres @	$200.00	per acre =	$82.64	

PROJECT NO. 3 TOTAL COST = $82.64

TOTAL COST = $3,482.80

SUMMARY OF CONSTRUCTION COST

Timber Sale: **Big 3 Junction** Timber Sale No. : 341-10-023

Road Segment: **L to M** Construction : 10+50 stations

0.20 miles

PROJECT NO. 1

EXCAVATION

Clearing and Grubbing (Scatter)	0.96	acres @	$1,401.00	per acre =	$1,350.83	
Balanced Road Construction	10.50	sta @	$90.00	per sta =	$945.00	
Construct Turnouts	1	ea @	$60.00	per ea =	$60.00	
Construct Turnaround	1	ea @	$75.00	per ea =	$75.00	
Landing	1	ea @	$285.00	per ea =	$285.00	
Grade, Ditch, and Roll	10.50	sta @	$28.70	per sta =	$301.35	
				TOTAL EXCAVATION COSTS=		**$3,017.18**

CULVERTS - MATERIALS & INSTALLATION

Culverts

36	LF of 18"	$648.00	0	LF of 24"	$0.00
0	LF of 30"	$0.00	0	LF of 36"	$0.00
0	LF of 42"	$0.00	0	LF of 48"	$0.00
0	LF of 54"	$0.00	0	LF of 60"	$0.00
		$648.00			

Culvert Markers

1 markers $10.00

PROJECT NO. 1 TOTAL COST = $3,675.18

PROJECT NO. 3:

Grass seed and fertilize areas of disturbed soil.	0.48	acres @	$200.00	per acre =	$96.42	

PROJECT NO. 3 TOTAL COST = $96.42

TOTAL COST = $3,771.60

Move-In Calculations

Timber Sale: **Big 3 Junction**
Sale Number: **341-10-023**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
8.0	Main Lines	**7**
2.0	Steep Grades	**2**

No.	EQUIPMENT DESCRIPTION	Base Cost	Woods Cost	Pilot Cars	Within Area Move ($/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
1	Drill & Compressor	$276.00	$295.72		$46.00	0.0	0.0	0.0	0.0	$571.72
0	Brush Cutter	$0.00	$0.00		$4.00	0.0	0.0	0.0	0.0	$0.00
1	Graders	$300.00	$321.43		$3.65	0.0	1.0	1.0	3.7	$625.08
0	Loader (Small)	$0.00	$0.00	1	$3.55	0.0	0.0	0.0	0.0	$0.00
0	Loader (Med. & Large)	$0.00	$0.00	1	$9.00	0.0	0.0	0.0	0.0	$0.00
2	Rollers (smooth/grid) & Compactors	$576.92	$540.50		$5.00	0.0	1.0	1.0	10.0	$1,127.42
0	Excavators (Small)	$0.00	$0.00		$22.00	0.0	0.0	0.0	0.0	$0.00
0	Excavators (Med.)	$0.00	$0.00		$35.50	0.0	0.0	0.0	0.0	$0.00
1	Excavators (Large)	$466.14	$467.23	1	$44.80	0.0	1.0	1.0	44.8	$978.17
0	Tired Backhoes/Skidders	$0.00	$0.00		$3.00	0.0	0.0	0.0	0.0	$0.00
0	Tractors (D6)	$0.00	$0.00	2	$7.10	0.0	0.0	0.0	0.0	$0.00
0	Tractors (D7)	$0.00	$0.00	2	$11.30	0.0	0.0	0.0	0.0	$0.00
1	Tractor (D8)	$473.80	$427.80	2	$15.10	0.0	1.0	1.0	15.1	$916.70
3	Dump Truck (10 cy +)	$350.00	$300.00		$2.85	0.0	1.0	1.0	8.6	$658.55
0	Dump Truck (Off Hiway)	$0.00	$0.00	1	$4.75	0.0	0.0	0.0	0.0	$0.00
0	Water Truck (1500 Gal)	$0.00	$0.00		$2.85	0.0	0.0	0.0	0.0	$0.00
0	Water Truck (2500 Gal)	$0.00	$0.00		$2.85	0.0	0.0	0.0	0.0	$0.00
								TOTAL MOVE-IN COSTS:		$4,877.64

Move-In Calculations

Timber Sale: **Big 3 Junction**
Sale Number: **341-10-023**

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
6.5	Main Lines	**7**
0.0	Steep Grades	**2**

No.	EQUIPMENT DESCRIPTION	Base Cost	Woods Cost	Pilot Cars	Within Area Move ($/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
0	Drill & Compressor	$0.00	$0.00		$46.00	0.0	0.0	0.0	0.0	$0.00
0	Brush Cutter	$0.00	$0.00		$4.00	0.0	0.0	0.0	0.0	$0.00
1	Graders	$0.00	$167.15		$3.65	0.0	0.0	0.0	0.0	$167.15
0	Loader (Small)	$0.00	$0.00	1	$3.55	0.0	0.0	0.0	0.0	$0.00
0	Loader (Med. & Large)	$0.00	$0.00	1	$9.00	0.0	0.0	0.0	0.0	$0.00
2	Rollers (smooth/grid) & Compactors	$40.25	$379.50		$5.00	0.0	0.0	0.0	0.0	$419.75
0	Excavators (Small)	$0.00	$0.00		$22.00	0.0	0.0	0.0	0.0	$0.00
0	Excavators (Med.)	$0.00	$0.00		$35.50	0.0	0.0	0.0	0.0	$0.00
1	Excavators (Large)	$82.80	$275.02	1	$44.80	0.0	0.0	0.0	0.0	$357.82
0	Tired Backhoes/Skidders	$0.00	$0.00		$3.00	0.0	0.0	0.0	0.0	$0.00
0	Tractors (D6)	$0.00	$0.00	2	$7.10	0.0	0.0	0.0	0.0	$0.00
0	Tractors (D7)	$0.00	$0.00	2	$11.30	0.0	0.0	0.0	0.0	$0.00
1	Tractor (D8)	$82.80	$257.93	2	$15.10	0.0	0.0	0.0	0.0	$340.73
1	Dump Truck (10 cy +)	$0.00	$65.00		$2.85	0.0	0.0	0.0	0.0	$65.00
0	Dump Truck (Off Hiway)	$0.00	$0.00	1	$4.75	0.0	0.0	0.0	0.0	$0.00
0	Water Truck (1500 Gal)	$0.00	$0.00		$2.85	0.0	0.0	0.0	0.0	$0.00
0	Water Truck (2500 Gal)	$0.00	$0.00		$2.85	0.0	0.0	0.0	0.0	$0.00
								TOTAL MOVE-IN COSTS:		$1,350.45

ROCK DEVELOPMENT COST SUMMARY

Timber Sale: Big 3 Junction

Sale Number: 341-10-023

Pit Name: Big Rock

Swell:	1.30	Pit Run (trk measure)	3,410 cy
Shrinkage:	1.16	Total Truck Yardage:	3,410 cy
Drill Pct.:	100%	Total In Place Yardage:	2,623 cy

Pit Development					=	$7,324.19
Drill & Shoot (Downholes):	$3.00	/cy	x	2,623 cy	=	$7,869.23
Jaw Run	$1.90	/cy	x	3,410 cy	=	$6,479.00
Load Jaw:	$0.70	/cy	x	3,410 cy	=	$2,387.00
Load Dump Truck:	$0.70	/cy	x	3,410 cy	=	$2,387.00
					Subtotal	$26,446.42
Move in Loaders						$815.09
Set Up Jaw						$880.00
Clean Up Pit						$300.00
					Subtotal	$1,995.09

PIT DEVELOPMENT COST $8.34/cy

TOTAL PRODUCTION COST $28,441.51

Gregory k. Miller - 02/01/2010

TC PSTATS

PROJECT STATISTICS

PROJECT IG3 JC2

DATE 2/23/2010

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07	28	1	0100 112	215.00	44	253	S	W
04N	07W	28	1	0300 } 107					
04N	07W	29	1	0400 }					

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	44	253	5.8		
CRUISE	43	253	5.9	36,992	.7
DBH COUNT					
REFOREST					
COUNT					
BLANKS	1				
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
DF	126	72.7	16.6	67	27	108.8	15,218	14,978	3,805	3,804
R ALDER	74	76.8	12.9	44		69.7	6,240	6,150	1,826	1,825
WH	38	14.6	20.2	86	6	32.4	6,033	5,649	1,357	1,348
BL MAPLE	12	7.5	16.8	33		11.6	512	473	223	220
RC	2	.3	30.2	83		1.6	202	144	64	63
S SPRUCE	1	.1	41.0	114		1.0	201	201	44	44
TOTAL	*253*	*172.1*	*15.5*	*57*		*225.2*	*28,407*	*27,596*	*7,320*	*7,304*

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
DF	91.7	8.2	311	339	366			
R ALDER	60.8	7.1	100	108	115			
WH	85.7	13.9	567	659	750			
BL MAPLE	70.1	21.1	65	83	100			
RC	3.2	3.0	427	440	453			
S SPRUCE								
TOTAL	*118.8*	*7.5*	*290*	*314*	*337*	*563*	*141*	*63*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	SAMPLE TREES - CF LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
DF	79.4	7.1	77	82	88			
R ALDER	63.3	7.3	30	33	35			
WH	80.3	13.0	132	151	171			
BL MAPLE	69.7	21.0	34	43	52			
RC	30.5	28.6	138	193	248			
S SPRUCE								
TOTAL	*102.6*	*6.4*	*73*	*79*	*84*	*421*	*105*	*47*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	TREES/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	122.4	18.4	59	73	86			
R ALDER	167.3	25.2	57	77	96			
WH	248.2	37.4	9	15	20			
BL MAPLE	267.2	40.2	4	7	11			
RC	463.6	69.8	0	0	1			
S SPRUCE	663.3	99.9	0	0	0			
TOTAL	*69.3*	*10.4*	*154*	*172*	*190*	*192*	*48*	*21*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	BASAL AREA/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	109.2	16.5	91	109	127			
R ALDER	157.6	23.7	53	70	86			
WH	238.7	36.0	21	32	44			

PROJECT STATISTICS

PROJECT IG3 JC2

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07	28	1	0100	215.00	44	253	S	W
04N	07W	28	1	0300					
04N	07W	29	1	0400					

CL 68.1	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.00	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
BL MAPLE	259.8	39.1	7	12	16			
RC	474.8	71.5	0	2	3			
S SPRUCE	663.3	99.9	0	1	2			
TOTAL	*46.4*	*7.0*	*209*	*225*	*241*	*86*	*21*	*10*

CL 68.1	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	110.7	16.7	12,480	14,978	17,477			
R ALDER	155.6	23.4	4,709	6,150	7,592			
WH	249.8	37.6	3,523	5,649	7,774			
BL MAPLE	259.4	39.1	288	473	658			
RC	463.6	69.8	44	144	245			
S SPRUCE	663.3	99.9	0	201	402			
TOTAL	*54.2*	*8.2*	*25,341*	*27,596*	*29,851*	*118*	*29*	*13*

CL 68.1	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	110.5	16.6	3,170	3,804	4,437			
R ALDER	157.9	23.8	1,391	1,825	2,259			
WH	252.8	38.1	835	1,348	1,861			
BL MAPLE	265.4	40.0	132	220	308			
RC	476.7	71.8	18	63	109			
S SPRUCE	663.3	99.9	0	44	89			
TOTAL	*51.0*	*7.7*	*6,743*	*7,304*	*7,865*	*104*	*26*	*12*

A2

TC PSTATS Area 2

PROJECT STATISTICS

PROJECT IG3 JC2

PAGE 1
DATE 2/25/2010

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07	28	1	0300	103.00	23	131	S	W
04N	07W	29	1	0400					

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	23	131	5.7		
CRUISE	22	131	6.0	19,502	.7
DBH COUNT					
REFOREST COUNT					
BLANKS	1				
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
DF	68	76.7	16.0	64	27	107.0	14,497	14,304	3,599	3,599
R ALDER	46	101.2	12.6	40		87.6	7,461	7,307	2,205	2,203
WH	15	10.3	18.8	82	4	20.0	3,751	3,617	815	809
BL MAPLE	1	.8	18.0	50		1.3	113	113	24	24
RC	1	.3	27.0	82		1.3	161	151	51	51
TOTAL	*131*	*189.3*	*14.5*	*52*		*217.3*	*25,983*	*25,492*	*6,694*	*6,686*

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
DF	91.4	11.1	266	299	332			
R ALDER	62.6	9.2	94	103	113			
WH	52.8	14.1	377	439	501			
BL MAPLE								
RC								
TOTAL	*98.8*	*8.6*	*225*	*246*	*268*	*390*	*97*	*43*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	SAMPLE TREES - CF LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
DF	76.5	9.3	65	72	79			
R ALDER	64.0	9.4	28	31	34			
WH	49.0	13.1	84	97	110			
BL MAPLE								
RC								
TOTAL	*82.8*	*7.2*	*56*	*61*	*65*	*274*	*68*	*30*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	TREES/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	139.0	29.6	54	77	99			
R ALDER	157.7	33.6	67	101	135			
WH	206.3	44.0	6	10	15			
BL MAPLE	479.6	102.2		1	2			
RC	479.6	102.2		0	1			
TOTAL	*77.7*	*16.6*	*158*	*189*	*221*	*252*	*63*	*28*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	BASAL AREA/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	118.5	25.2	80	107	134			
R ALDER	154.3	32.9	59	88	116			
WH	204.7	43.6	11	20	29			
BL MAPLE	479.6	102.2		1	3			
RC	479.6	102.2		1	3			
TOTAL	*55.7*	*11.9*	*192*	*217*	*243*	*129*	*32*	*14*

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07	28	1	0300	103.00	23	131	S	W
04N	07W	29	1	0400					

CL 68.1	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	116.6	24.8	10,750	14,304	17,859			
R ALDER	147.7	31.5	5,007	7,307	9,607			
WH	229.1	48.8	1,851	3,617	5,382			
BL MAPLE	479.6	102.2		113	229			
RC	479.6	102.2		151	305			
TOTAL	*54.9*	*11.7*	*22,510*	*25,492*	*28,475*	*126*	*31*	*14*

CL 68.1	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
DF	116.6	24.8	2,705	3,599	4,493			
R ALDER	153.4	32.7	1,483	2,203	2,922			
WH	222.2	47.3	426	809	1,191			
BL MAPLE	479.6	102.2		24	49			
RC	479.6	102.2		51	103			
TOTAL	*53.4*	*11.4*	*5,926*	*6,686*	*7,445*	*119*	*30*	*13*

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T04N R07W S28 Ty0100	112.00
T04N R07W S28 Ty0300	48.00
T04N R07W S29 Ty0400	55.00

Project: BIG3_JC2

Acres 215.00

Page 1
Date 2/23/2010
Time 8:21:24AM

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	Bd Ft	CF/ Lf	Logs Per /Acre
DF		DO2S	34	2.3	5,294	5,174	1,112			48	52	3	1	32	64	35	350	2.21	14.8
DF		DO3S	48	1.6	7,277	7,157	1,539		71	28	2	1	1	16	83	37	127	0.93	56.3
DF		DO4S	17		2,535	2,535	545		100			11	29	11	48	28	39	0.40	65.8
DF		PU UT	1		112	112	24			100		100				11	70	1.12	1.6
DF	**Totals**		54	1.6	15,218	14,978	3,220		51	31	19	4	6	21	70	32	108	0.86	138.4
WH		DO2S	50	9.3	3,173	2,876	618			41	59		11	5	84	36	403	2.62	7.1
WH		DO3S	37	3.3	2,152	2,080	447		74	18	8	0	2	13	84	37	138	0.93	15.1
WH		DO4S	9		490	490	105		94	6		8	32	11	49	27	40	0.41	12.4
WH		PU UT	4	7.5	218	202	43		4		96	4			96	28	243	1.58	.8
WH	**Totals**		20	6.4	6,033	5,649	1,214		36	28	36	1	9	8	82	33	160	1.16	35.4
RA		DOR	97	1.3	6,071	5,993	1,289		91	9		9	14	21	57	29	59	0.61	100.7
RA		PU UT	3	7.0	169	157	34		100			49	16		35	21	32	0.44	4.9
RA	**Totals**		22	1.4	6,240	6,150	1,322		91	9		10	14	20	56	29	58	0.61	105.7
BM		DOUT	21	6.4	111	104	22		100			35	23	8	34	22	30	0.79	3.5
BM		DOR	67	9.1	347	315	68		75	25			5	67	28	34	78	1.09	4.0
BM		PU UT	12		54	54	12			100			100			24	150	1.34	.4
BM	**Totals**		2	7.6	512	473	102		72	28		8	20	46	26	28	60	0.99	7.9
RC		DO3S	82	32.8	177	119	26		11	50	39				100	39	244	2.91	.5
RC		DO4S	18		25	25	5		100						100	40	150	1.26	.2
RC	**Totals**		1	28.8	202	144	31		26	41	32				100	39	220	2.48	.7
SS		DO2S	78		158	158	34				100				100	40	1460	7.42	.1
SS		DO3S	19		39	39	8			100					100	40	360	2.46	.1
SS		DO4S	3		4	4	1		100			100				18	40	0.83	.1
SS	**Totals**		1		201	201	43		2	19	78	2			98	33	620	4.18	.3
Totals				2.9	28,407	27,596	5,933		56	25	18	5	8	18	69	31	96	0.83	288.4

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T04N R07W S28 Ty0100 112.00

Project: BIG3_JC2
Acres 112.00

Page 1
Date 3/2/2010
Time 10:00:37AM

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	Bd Ft	CF/ Lf	Logs Per /Acre
DF		DO2S	35	2.4	5,743	5,608	628			40	60	2		42	56	35	391	2.52	14.3
DF		DO3S	47	2.0	7,475	7,327	821		61	35	3			21	79	37	132	0.96	55.6
DF		DO4S	18		2,663	2,663	298		100			6	34	10	50	29	41	0.41	64.6
DF	**Totals**		53	1.8	15,881	15,598	1,747		46	31	23	2	6	27	66	33	116	0.90	134.5
WH		DO2S	53	10.8	4,519	4,033	452			31	69		12	7	81	35	439	3.06	9.2
WH		DO3S	37	4.4	2,909	2,781	311		63	26	11	1	2	19	78	36	140	0.96	19.8
WH		DO4S	10		704	704	79		92	8			39	4	57	28	43	0.42	16.5
WH	**Totals**		25	7.6	8,132	7,517	842		32	27	41	0	11	11	78	33	165	1.24	45.5
RA		DOR	100	.6	5,118	5,087	570		94	6		9	15	16	60	29	60	0.60	84.2
RA	**Totals**		17	.6	5,118	5,087	570		94	6		9	15	16	60	29	60	0.60	84.2
BM		DOUT	24	6.4	213	200	22		100			35	23	8	34	22	30	0.79	6.7
BM		DOR	76	9.1	665	604	68		75	25			5	67	28	34	78	1.09	7.7
BM	**Totals**		3	8.5	879	804	90		81	19		9	10	52	30	28	56	0.98	14.4
RC		DO3S	65	53.3	192	90	10				100				100	40	280	4.60	.3
RC		DO4S	35		48	48	5		100						100	40	150	1.26	.3
RC	**Totals**		0	42.7	241	138	15		35		65				100	40	215	2.93	.6
SS		DO2S	78		303	303	34				100				100	40	1460	7.42	.2
SS		DO3S	19		75	75	8			100					100	40	360	2.46	.2
SS		DO4S	3		8	8	1		100			100				18	40	0.83	.2
SS	**Totals**		1		386	386	43		2	19	78	2			98	33	620	4.18	.6
Totals				3.6	30,637	29,531	3,307		51	25	24	3	9	21	67	32	106	0.89	279.8

3212

TC PSPCSTGR

Species, Sort Grade - Board Foot Volumes (Project)

T04N R07W S28 Ty0300	48.00
T04N R07W S29 Ty0400	55.00

Project: BIG3_JC2
Acres 103.00

Page 1
Date 3/2/2010
Time 9:59:46AM

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	Bd Ft	CF/ Lf	Logs Per /Acre
RA		DOR	95	1.8	7,109	6,979	719		89	11		9	13	25	54	28	59	0.62	118.8
RA		PU UT	5	7.0	352	328	34		100			49	16		35	21	32	0.44	10.3
RA	**Totals**		29	2.1	7,461	7,307	753		89	11		10	13	24	53	28	57	0.61	129.1
DF		DO2S	32	2.2	4,806	4,702	484			59	41	3	3	19	75	35	309	1.89	15.2
DF		DO3S	49	1.3	7,061	6,972	718		81	19		1	2	10	87	37	122	0.89	57.0
DF		DO4S	17		2,396	2,396	247		100			18	23	12	47	26	36	0.39	67.1
DF		PU UT	2		234	234	24			100		100				11	70	1.12	3.3
DF	**Totals**		56	1.3	14,497	14,304	1,473		56	30	14	6	6	13	75	31	100	0.82	142.7
WH		DO2S	44	5.3	1,709	1,618	167			68	32		8		92	37	330	1.79	4.9
WH		DO3S	37	.7	1,329	1,319	136		100				1		99	39	133	0.86	9.9
WH		DO4S	7		258	258	27		100			32	11	31	25	24	33	0.39	7.9
WH		PU UT	12	7.5	455	421	43		4		96	4			96	28	243	1.58	1.7
WH	**Totals**		14	3.6	3,751	3,617	373		44	31	25	3	5	2	90	33	148	1.00	24.5
BM		PU UT	100		113	113	12			100			100			24	150	1.34	.8
BM	**Totals**		0		113	113	12			100			100			24	150	1.34	.8
RC		DO3S	100	6.2	161	151	16		18	82					100	38	225	1.99	.7
RC	**Totals**		1	6.2	161	151	16		18	82					100	38	225	1.99	.7
Totals				1.9	25,983	25,492	2,626		64	25	11	7	8	14	71	30	86	0.75	297.7

2607

TC PLOGSTBF

Log Stock Table - Percent Board Feet

Project: BIG3_JC2 **Acres** 215.00

T04N R07W S28 Ty0100	112.00
T04N R07W S28 Ty0300	48.00
T04N R07W S29 Ty0400	55.00

CuFt: S **BdFt: W**

Page 1
Date 2/25/2010
Time 4:35:18PM

Spp	S T	Sort	Grd	Log Len	Gross MBF	Def %	Net MBF	% Spc	Percent Net Volume by Scaling Diameter in Inches 2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
DF		DO	2S	16	29	1.9	29	.9							21.8	29.7	48.4			
DF		DO	2S	28	13		13	.4						100.0						
DF		DO	2S	32	373	4.1	358	11.1						5.2	27.2	49.0	11.8	6.8		
DF		DO	2S	36	192	2.3	188	5.8						24.0	45.1	21.0	9.9			
DF		DO	2S	40	530	1.0	525	16.3						10.6	14.0	48.8	21.1	5.5		
DF		DO	3S	17	10		10	.3						100.0						
DF		DO	3S	27	10		10	.3				100.0								
DF		DO	3S	29	2		2	.1				100.0								
DF		DO	3S	32	237		237	7.3			2.6	28.7	27.5	36.0	5.2					
DF		DO	3S	33	2		2	.1			100.0									
DF		DO	3S	35	5		5	.2			100.0									
DF		DO	3S	36	346		343	10.7			21.0	29.8	29.9	15.0	4.3					
DF		DO	3S	38	3		3	.1				100.0								
DF		DO	3S	39	3		3	.1			100.0									
DF		DO	3S	40	946	2.4	923	28.7			2.8	19.9	47.0	21.4	3.1	2.7	3.1			
DF		DO	4S	12	3		3	.1			100.0									
DF		DO	4S	13	6		6	.2			100.0									
DF		DO	4S	14	2		2	.1			100.0									
DF		DO	4S	15	11		11	.3			100.0									
DF		DO	4S	16	8		8	.3			100.0									
DF		DO	4S	17	4		4	.1			100.0									
DF		DO	4S	18	6		6	.2			100.0									
DF		DO	4S	19	10		10	.3			100.0									
DF		DO	4S	20	11		11	.4			100.0									
DF		DO	4S	21	7		7	.2			100.0									
DF		DO	4S	22	20		20	.6			100.0									
DF		DO	4S	23	23		23	.7			100.0									
DF		DO	4S	24	12		12	.4			100.0									
DF		DO	4S	25	13		13	.4			100.0									
DF		DO	4S	26	19		19	.6			100.0									
DF		DO	4S	27	26		26	.8			100.0									
DF		DO	4S	28	2		2	.1			100.0									
DF		DO	4S	29	26		26	.8			100.0									
DF		DO	4S	30	11		11	.4			100.0									
DF		DO	4S	32	10		10	.3			100.0									
DF		DO	4S	33	4		4	.1			100.0									
DF		DO	4S	34	26		26	.8			100.0									

TC PLOGSTBF

Log Stock Table - Percent Board Feet

Project: BIG3_JC2 **Acres** 215.00

T04N R07W S28 Ty0100	112.00
T04N R07W S28 Ty0300	48.00
T04N R07W S29 Ty0400	55.00

CuFt: S **BdFt: W**

Date 2/25/2010
Time 4:35:18PM

Spp	S T	Sort	Grd	Log Len	Gross MBF	Def %	Net MBF	% Spc	Percent Net Volume by Scaling Diameter in Inches 2-3 4-5	6-7 8-9	10-11 12-13	14-15 16-19	20-23 24-29	30-39 40+
DF		DO	4S	35	21		21	.7		100.0				
DF		DO	4S	36	3		3	.1		100.0				
DF		DO	4S	37	74		74	2.3		100.0				
DF		DO	4S	38	43		43	1.3		100.0				
DF		DO	4S	39	12		12	.4		100.0				
DF		DO	4S	40	132		132	4.1		100.0				
DF		PU	UT	12	5		5	.2				100.0		
DF		PU	UT	16	19		19	.6			54.6	45.4		
DF		Totals			3,272	1.6	3,220	54.3		20.5 11.5	18.7 15.1	10.3 15.7	6.6 1.7	
WH		DO	2S	21	20		20	1.6					100.0	
WH		DO	2S	24	16	17.4	13	1.1					100.0	
WH		DO	2S	25	23	4.2	22	1.8						100.0
WH		DO	2S	26	13		13	1.0					100.0	
WH		DO	2S	32	43	28.2	31	2.6				23.1 30.6	46.3	
WH		DO	2S	36	94	5.1	89	7.3				12.4 59.3	28.3	
WH		DO	2S	40	474	9.1	431	35.5			6.6	13.6 29.6	31.9 18.4	
WH		DO	3S	20	2		2	.2			100.0			
WH		DO	3S	24	5		5	.4				100.0		
WH		DO	3S	26	2		2	.2			100.0			
WH		DO	3S	29	2		2	.1		100.0				
WH		DO	3S	32	70	20.1	56	4.6		5.8	58.7 11.6	23.8		
WH		DO	3S	34	3		3	.2		100.0				
WH		DO	3S	36	46		46	3.8		41.8 31.8	26.3			
WH		DO	3S	38	4		4	.3		100.0				
WH		DO	3S	40	329		327	26.9		2.8 13.9	55.9	16.7 10.8		
WH		DO	4S	14	1		1	.1		100.0				
WH		DO	4S	15	2		2	.2		100.0				
WH		DO	4S	17	3		3	.3		100.0				
WH		DO	4S	19	1		1	.1		100.0				
WH		DO	4S	20	1		1	.1		100.0				
WH		DO	4S	22	8		8	.6		18.3		81.7		
WH		DO	4S	23	2		2	.2		100.0				
WH		DO	4S	25	3		3	.3		100.0				
WH		DO	4S	27	9		9	.7		37.5 62.5				
WH		DO	4S	28	7		7	.6		100.0				
WH		DO	4S	29	2		2	.2		100.0				

TC PLOGSTBF

Log Stock Table - Percent Board Feet

Project: BIG3_JC2 **Acres** 215.00

T04N R07W S28 Ty0100	112.00
T04N R07W S28 Ty0300	48.00
T04N R07W S29 Ty0400	55.00

CuFt: S **BdFt: W**

Date 2/25/2010
Time 4:35:18PM

Spp	S T	So rt	Grd	Log Len	Gross MBF	Def %	Net MBF	% Spc	Percent Net Volume by Scaling Diameter in Inches 2-3 4-5	6-7 8-9	10-11 12-13	14-15 16-19	20-23 24-29	30-39 40+
WH		DO	4S	30	3		3	.2		100.0				
WH		DO	4S	31	2		2	.1		100.0				
WH		DO	4S	32	3		3	.3		100.0				
WH		DO	4S	33	7		7	.5		100.0				
WH		DO	4S	38	7		7	.6		100.0				
WH		DO	4S	39	16		16	1.3		100.0				
WH		DO	4S	40	28		28	2.3		82.9 17.1				
WH		PU	UT	16	2		2	.1		100.0				
WH		PU	UT	40	45	7.8	42	3.4				100.0		
WH		Totals			1,297	6.4	1,214	20.5		9.8 6.8	19.1 2.9	12.9 21.9	18.3 8.3	
RA		DO	R	12	7		7	.5		100.0				
RA		DO	R	14	14		14	1.1		100.0				
RA		DO	R	15	19		19	1.4		100.0				
RA		DO	R	16	3		3	.2		100.0				
RA		DO	R	17	10		10	.8		100.0				
RA		DO	R	18	7		7	.5		100.0				
RA		DO	R	19	24		24	1.8		100.0				
RA		DO	R	20	27		27	2.1		54.5		45.5		
RA		DO	R	21	15	8.9	13	1.0		100.0				
RA		DO	R	22	4		4	.3		100.0				
RA		DO	R	23	17		17	1.3		100.0				
RA		DO	R	24	18		18	1.3		44.7	55.3			
RA		DO	R	25	27		27	2.1		100.0				
RA		DO	R	26	18		18	1.4		100.0				
RA		DO	R	27	7		7	.5		100.0				
RA		DO	R	28	27		27	2.0		100.0				
RA		DO	R	29	34		34	2.5		100.0				
RA		DO	R	30	16	5.6	15	1.1		29.4	70.6			
RA		DO	R	31	31		31	2.3		84.2 15.8				
RA		DO	R	32	230	3.8	221	16.7		7.4 61.7	25.7 5.3			
RA		DO	R	35	17		17	1.3		100.0				
RA		DO	R	36	322		320	24.2		19.0 45.0	30.4 5.6			
RA		DO	R	38	28		28	2.1		68.9	31.1			
RA		DO	R	40	384	1.0	380	28.7		39.9 20.4	20.3 13.2	6.2		
RA		PU	UT	12	5		5	.4		100.0				
RA		PU	UT	19	6		6	.5		100.0				

TC PLOGSTBF

Log Stock Table - Percent Board Feet

Project: BIG3_JC2 **Acres** 215.00

T04N R07W S28 Ty0100	112.00
T04N R07W S28 Ty0300	48.00
T04N R07W S29 Ty0400	55.00

CuFt: S **BdFt: W**

Date 2/25/2010
Time 4:35:18PM

Spp	S T	So rt	Grd	Log Len	Gross MBF	Def %	Net MBF	% Spc	Percent Net Volume by Scaling Diameter in Inches 2-3 4-5	6-7 8-9	10-11 12-13	14-15 16-19	20-23 24-29	30-39 40+
RA		PU	UT	20	8	33.3	5	.4		100.0				
RA		PU	UT	22	2		2	.2		100.0				
RA		PU	UT	23	3		3	.2		100.0				
RA		PU	UT	36	12		12	.9		100.0				
RA		Totals			1,342	1.4	1,322	22.3		42.8 28.8	19.7 6.0	2.7		
BM		DO	UT	16	8		8	7.7		100.0				
BM		DO	UT	22	5		5	5.1		100.0				
BM		DO	UT	32	2		2	1.7		100.0				
BM		DO	UT	36	9	16.7	8	7.5		100.0				
BM		DO	R	22	2	100.0								
BM		DO	R	30	4		4	3.5		100.0				
BM		DO	R	32	29	8.6	27	26.3			36.5	63.5		
BM		DO	R	35	20	6.1	18	18.1		54.1 45.9				
BM		DO	R	40	20	3.5	19	18.7		49.9	50.1			
BM		PU	UT	24	12		12	11.5			100.0			
BM		Totals			110	7.6	102	1.7		44.6 8.3	18.9 11.5	16.7		
RC		DO	3S	36	3		3	8.9		100.0				
RC		DO	3S	40	35	35.4	23	73.7				100.0		
RC		DO	4S	40	5		5	17.4			100.0			
RC		Totals			44	28.8	31	.5		8.9	17.4	73.7		
SS		DO	2S	40	34		34	78.5					100.0	
SS		DO	3S	40	8		8	19.4				100.0		
SS		DO	4S	18	1		1	2.2		100.0				
SS		Totals			43		43	.7		2.2		19.4	78.5	
Total		All Species			6,108	2.9	5,933	100.0		23.4 14.2	18.9 10.3	9.2 13.4	7.4 3.2	

TC PSTNDSUM

Stand Table Summary

Page 1
Date: 2/25/2010

T04N R07W S28 Ty0100	112.00
T04N R07W S28 Ty0300	48.00
T04N R07W S29 Ty0400	55.00

Project BIG3_JC2
Acres 215.00

Time: 4:35:17PM
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.	Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals Tons	Totals Cunits	Totals MBF
DF		9	4	82	68	7.568	3.34	6.12	10.6	48.1	2.08	65	294	447	140	63
DF		11	4	84	83	4.945	3.26	7.42	12.1	50.0	2.87	90	371	617	193	80
DF		12	8	83	84	9.962	7.82	15.93	14.7	52.5	7.49	234	837	1,611	503	180
DF		13	6	79	62	5.694	5.25	7.85	15.8	45.0	3.97	124	353	854	267	76
DF		14	7	83	92	6.391	6.83	13.38	16.7	63.2	7.15	223	845	1,537	480	182
DF		15	5	83	86	3.468	4.26	6.94	19.8	72.3	4.39	137	501	944	295	108
DF		16	14	85	100	8.409	11.74	17.73	24.1	99.0	13.70	428	1,756	2,946	921	378
DF		17	8	84	107	4.639	7.31	9.28	30.0	109.8	8.93	279	1,018	1,921	599	219
DF		18	5	84	76	2.299	4.06	5.08	22.9	92.9	3.72	116	471	800	250	101
DF		19	9	83	93	3.680	7.25	8.51	27.9	102.4	7.61	238	872	1,635	511	187
DF		20	7	84	94	2.933	6.40	6.36	35.3	127.6	7.17	224	812	1,543	482	174
DF		21	9	83	105	3.419	8.22	8.75	35.8	142.4	10.03	313	1,246	2,156	674	268
DF		22	8	85	97	2.072	5.47	4.01	48.7	180.2	6.25	195	723	1,344	420	155
DF		23	7	83	105	1.918	5.53	4.97	42.8	178.2	6.81	213	885	1,464	458	190
DF		24	3	85	112	.835	2.62	2.51	42.9	168.3	3.46	107	422	744	231	91
DF		25	4	84	93	.854	2.91	1.71	55.2	227.3	3.02	94	388	649	203	83
DF		26	3	84	112	.829	3.06	2.20	58.5	240.9	4.11	128	529	884	276	114
DF		27	4	85	119	.821	3.26	2.21	65.9	293.0	4.66	146	648	1,003	313	139
DF		28	3	79	124	.696	2.98	2.09	61.2	257.8	4.09	128	538	879	275	116
DF		29	1	81	138	.216	.99	.65	76.1	363.3	1.58	49	236	340	106	51
DF		30	2	85	132	.332	1.63	1.00	80.8	380.8	2.58	81	380	554	173	82
DF		31	1	80	123	.189	.99	.38	96.7	380.0	1.17	37	144	252	79	31
DF		32	2	81	124	.292	1.63	.70	94.4	442.1	2.11	66	309	454	142	66
DF		36	1	78	127	.140	.99	.42	99.2	463.3	1.35	42	195	290	90	42
DF		37	1	79	128	.133	.99	.40	114.2	510.0	1.46	46	203	313	98	44
DF		Totals	126	83	90	72.737	108.82	136.58	27.8	109.7	121.77	3,804	14,978	26,181	8,178	3,220
RA		8	2	79	39	6.142	2.14	6.14	3.7	15.0	.62	23	92	134	49	20
RA		9	7	81	43	14.486	6.40	12.06	7.7	28.7	2.54	92	346	546	199	74
RA		10	4	82	90	6.923	3.78	6.92	11.5	41.7	2.22	79	288	477	171	62
RA		11	5	81	74	6.690	4.42	6.69	16.1	57.1	2.96	108	382	636	231	82
RA		12	6	80	87	7.334	5.76	11.94	13.2	47.4	4.34	158	566	933	339	122
RA		13	8	83	86	7.637	7.04	12.34	16.9	59.1	5.72	208	730	1,230	447	157
RA		14	5	81	74	4.535	4.85	7.06	18.9	59.0	3.67	134	417	789	287	90
RA		15	11	81	79	8.802	10.80	16.73	18.8	62.0	8.64	314	1,038	1,858	676	223
RA		16	9	81	74	6.486	9.06	11.49	21.9	74.7	6.91	251	858	1,486	541	185
RA		17	5	81	86	2.751	4.34	5.50	25.1	84.6	3.80	138	465	817	297	100
RA		18	4	82	84	1.913	3.34	3.83	28.7	94.6	3.02	110	362	649	236	78
RA		20	2	81	81	.983	2.14	1.97	36.3	107.5	1.96	71	211	422	153	45
RA		21	3	81	75	1.124	2.70	1.98	38.9	112.4	2.13	77	223	457	166	48
RA		22	1	81	98	.376	.99	.75	50.5	175.0	1.04	38	132	225	82	28
RA		24	1	90	26	.316	.99									
RA		25	1	80	51	.291	.99	.29	80.4	140.0	.64	23	41	138	50	9
RA		Totals	74	81	70	76.786	69.74	105.70	17.3	58.2	50.22	1,825	6,150	10,797	3,923	1,322
WH		11	1	86	80	1.504	.99	3.01	8.3	30.0	.80	25	90	173	54	19
WH		12	2	84	106	2.527	1.98	3.79	18.1	73.3	2.20	69	278	473	148	60
WH		14	2	90	81	1.214	1.28	1.83	21.8	90.2	1.27	40	165	274	86	35
WH		15	1	90	106	.521	.64	1.04	23.2	105.0	.77	24	109	166	52	24
WH		16	1	81	154	.711	.99	2.13	23.0	100.0	1.57	49	213	337	105	46
WH		17	2	91	70	.811	1.28	1.62	21.5	82.5	1.12	35	134	240	75	29
WH		18	1	92	119	.362	.64	1.09	26.6	120.0	.93	29	130	199	62	28
WH		19	3	85	135	1.333	2.62	4.00	30.9	101.8	4.01	124	407	862	266	88
WH		22	4	91	98	1.103	2.91	3.31	25.7	115.7	2.72	85	383	586	183	82

Stand Table Summary

Date: 2/25/2010

T04N R07W S28 Ty0100	112.00
T04N R07W S28 Ty0300	48.00
T04N R07W S29 Ty0400	55.00

Project BIG3_JC2

Acres 215.00

Time: 4:35:17PM

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
WH		23	4	85	122	1.131	3.26	3.05	47.8	197.8	4.69	146	603	1,008	313	130
WH		24	4	81	132	1.151	3.62	3.45	47.5	164.4	5.39	164	568	1,158	352	122
WH		25	1	89	115	.188	.64	.56	48.3	223.3	.87	27	126	187	59	27
WH		26	1	70	134	.269	.99	.81	28.5	136.7	.74	23	110	158	49	24
WH		27	2	85	124	.410	1.63	1.23	55.3	264.2	2.18	68	325	469	146	70
WH		31	2	82	150	.379	1.98	1.14	90.2	410.0	3.28	103	466	705	220	100
WH		32	1	76	140	.178	.99	.53	87.7	363.3	1.50	47	194	321	100	42
WH		33	1	84	146	.167	.99	.50	93.9	493.3	1.52	47	247	326	101	53
WH		34	1	76	151	.157	.99	.47	105.9	440.0	1.60	50	208	344	108	45
WH		35	1	80	143	.149	.99	.59	74.5	387.5	1.42	44	230	304	95	49
WH		39	2	72	163	.239	1.98	.96	104.2	456.3	3.22	100	437	691	214	94
WH		43	1	77	148	.098	.99	.30	170.3	763.3	1.63	50	225	351	108	48
WH		Totals	38	85	112	14.601	32.41	35.41	38.1	159.5	43.41	1,348	5,649	9,334	2,898	1,214
BM		10	1	76	21	1.819	.99	1.82	5.9	20.0	.29	11	36	62	23	8
BM		14	1	77	52	.928	.99	.93	24.9	50.0	.61	23	46	132	50	10
BM		15	1	79	27	.809	.99	.81	15.7	30.0	.34	13	24	72	27	5
BM		16	1	80	48	.711	.99	.71	28.7	50.0	.54	20	36	116	44	8
BM		17	1	80	54	.629	.99	.63	36.9	70.0	.62	23	44	132	50	9
BM		18	2	82	56	.923	1.63	.92	34.5	101.4	.86	32	94	185	69	20
BM		21	2	79	56	.825	1.98	.83	34.6	75.0	.77	29	62	165	61	13
BM		22	1	81	67	.376	.99	.75	37.3	105.0	.77	28	79	165	60	17
BM		24	1	80	57	.316	.99	.32	77.1	140.0	.66	24	44	142	52	10
BM		34	1	76	35	.157	.99	.16	110.0	50.0	.46	17	8	99	37	2
BM		Totals	12	79	43	7.494	11.55	7.87	28.0	60.1	5.91	220	473	1,270	474	102
SS		41	1	81	132	.108	.99	.32	136.7	620.0	1.15	44	201	248	95	43
SS		Totals	1	81	132	.108	.99	.32	136.7	620.0	1.15	44	201	248	95	43
RC		27	1	77	101	.161	.64	.32	75.5	225.0	.78	24	72	167	52	16
RC		33	1	71	107	.167	.99	.33	117.1	215.0	1.28	39	72	275	84	15
RC		Totals	2	74	104	.328	1.63	.66	96.7	219.9	2.06	63	144	442	136	31
Totals			253	82	81	172.054	225.16	286.54	25.5	96.3	224.52	7,304	27,596	48,272	15,704	5,933

A 1

TC PSTATS Area 1

PROJECT STATISTICS

PROJECT IG3 JC2

DATE 2/25/2010

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07	28	1	0100	112.00	21	122	S	W

	PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES
TOTAL	21	122	5.8		
CRUISE	21	122	5.8	17,490	.7
DBH COUNT					
REFOREST					
COUNT					
BLANKS					
100 %					

STAND SUMMARY

	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DF	58	69.1	17.1	70	27	110.5	15,881	15,598	3,995	3,992
R ALDER	28	54.3	13.4	50		53.3	5,118	5,087	1,478	1,477
WH	23	18.5	20.8	89	7	43.8	8,132	7,517	1,855	1,844
BL MAPLE	11	13.7	16.8	32		21.0	879	804	405	400
RC	1	.3	33.0	84		1.9	241	138	77	75
S SPRUCE	1	.2	41.0	114		1.9	386	386	85	85
TOTAL	*122*	*156.2*	*16.5*	*62*		*232.4*	*30,637*	*29,531*	*7,895*	*7,873*

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
DF	89.8	11.8	340	385	431			
R ALDER	58.5	11.3	102	115	128			
WH	83.4	17.8	660	802	945			
BL MAPLE	73.9	23.3	59	76	94			
RC								
S SPRUCE								
TOTAL	*120.1*	*10.9*	*344*	*386*	*428*	*576*	*144*	*64*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	SAMPLE TREES - CF LOW	AVG	HIGH	# OF TREES REQ. 5	10	INF. POP. 15
DF	78.7	10.3	85	95	105			
R ALDER	62.6	12.0	31	35	39			
WH	75.9	16.2	157	187	217			
BL MAPLE	71.1	22.5	34	44	53			
RC								
S SPRUCE								
TOTAL	*103.1*	*9.3*	*88*	*98*	*107*	*424*	*106*	*47*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	TREES/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	107.2	24.0	53	69	86			
R ALDER	179.7	40.2	33	54	76			
WH	239.4	53.5	9	19	28			
BL MAPLE	181.9	40.6	8	14	19			
RC	458.3	102.4		0	1			
S SPRUCE	458.3	102.4		0	0			
TOTAL	*60.3*	*13.5*	*135*	*156*	*177*	*153*	*38*	*17*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	BASAL AREA/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	102.3	22.9	85	110	136			
R ALDER	161.4	36.1	34	53	73			
WH	217.8	48.7	22	44	65			
BL MAPLE	177.2	39.6	13	21	29			

PROJECT STATISTICS

PROJECT IG3 JC2

TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
04N	07	28	1	0100	112.00	21	122	S	W

CL 68.1 SD: 1.00	COEFF VAR.	S.E.%	BASAL AREA/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
RC	458.3	102.4		2	4			
S SPRUCE	458.3	102.4		2	4			
TOTAL	*35.9*	*8.0*	*214*	*232*	*251*	*54*	*14*	*6*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	NET BF/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	106.0	23.7	11,901	15,598	19,295			
R ALDER	169.5	37.9	3,160	5,087	7,014			
WH	228.5	51.1	3,679	7,517	11,356			
BL MAPLE	185.1	41.4	471	804	1,137			
RC	458.3	102.4		138	279			
S SPRUCE	458.3	102.4		386	782			
TOTAL	*49.8*	*11.1*	*26,244*	*29,531*	*32,817*	*104*	*26*	*12*

CL 68.1 SD: 1.0	COEFF VAR.%	S.E.%	NET CUFT FT/ACRE LOW	AVG	HIGH	# OF PLOTS REQ. 5	10	INF. POP. 15
DF	105.5	23.6	3,051	3,992	4,932			
R ALDER	166.6	37.2	927	1,477	2,027			
WH	228.2	51.0	903	1,844	2,784			
BL MAPLE	181.3	40.5	238	400	563			
RC	458.3	102.4		75	152			
S SPRUCE	458.3	102.4		85	172			
TOTAL	*44.6*	*10.0*	*7,087*	*7,873*	*8,659*	*84*	*21*	*9*

CRUISE REPORT
Big 3 Junction
341-10-023

1. Acreage Calculation:
Area 1 has 112 net acres of (MC). Area 2 is 103 net acres of (MC). All acres were determined using ArcGIS.

2. Cruise Method:
The area was cruised by contract cruisers. Cruised data from the applicable stands were transfered into the Super Ace 2004 program. The plots were cruised using a 33.6 BAF. Take trees and saw grades were assigned based on the height, diameter and damage/defect measurements provided by the cruise and observations made in the field. Leave trees were selected based upon the resulting cruise data. Volumes and statistics were generated from plot data by using the Super Ace 2004 program.

3. Sampling Intensity:

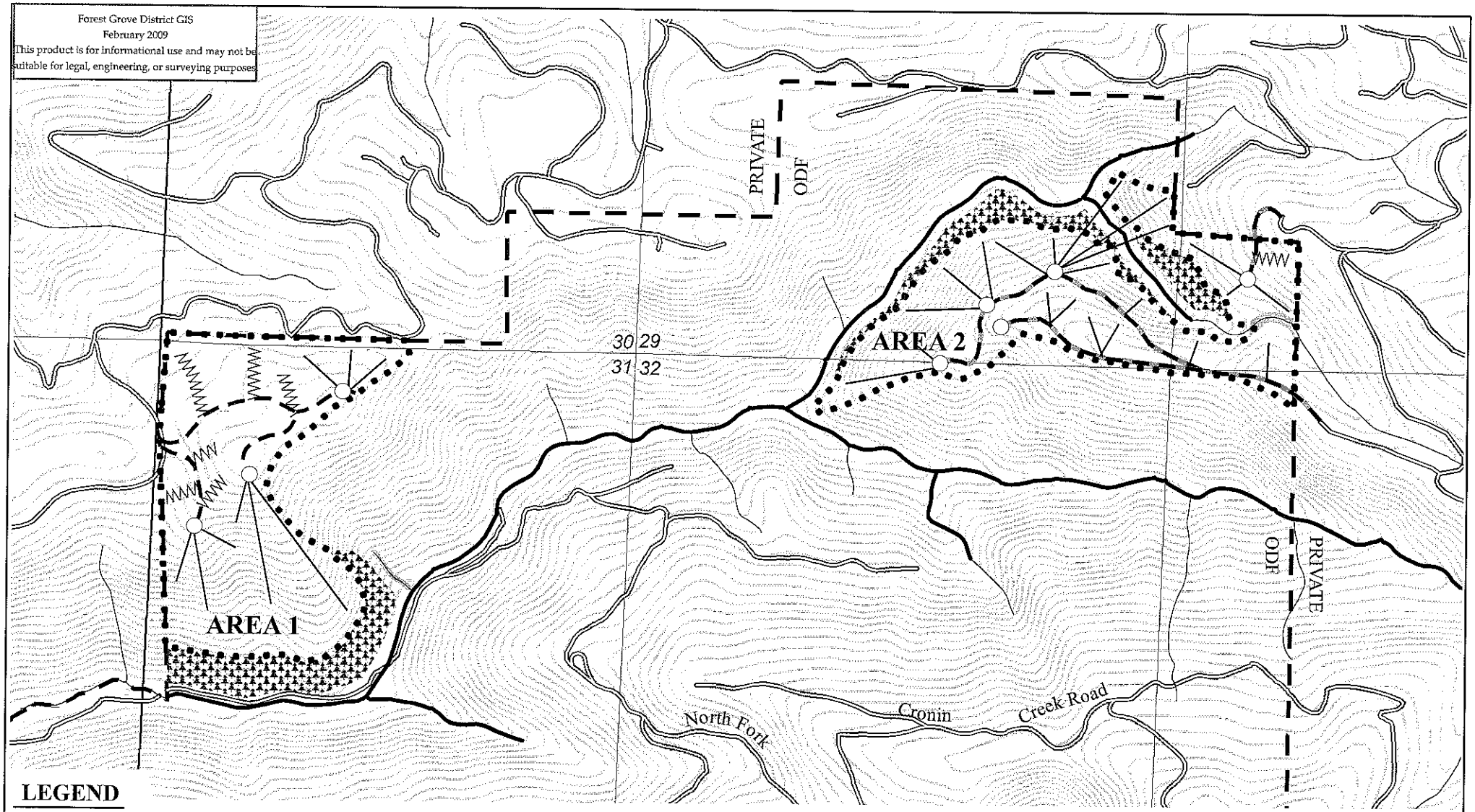
	Area 1 & 2 Actual Take
CV	54%
SE	8%
# of Plots	44

4. Form Factors:
Form factors were estimated using a form point of 16 feet.
5. Height Standards:
Merchantable heights were estimated to the nearest foot.
6. Diameter Standards:
Diameters were measured outside bark at breast height to the nearest inch.
7. Grading System:
All trees were cruised for saw log grades favoring 40 foot log segments followed by 32 and 24 foot lengths.
8. Merchantable Top:
Conifer merchantable tops were measured to 7 inches, hardwood to 8 inches or 25% of DOB.
9. Computation Procedures:
Volumes for Areas 1 and 2 were computed using the Super Ace 2004 program.
10. Cruisers:
The sale areas 1 and 2 were cruised in 2008. Office calculations were prepared by Tara Carlson in October 2009.

11. Signatures:

Prepared by: Tara Carlson Date 01/29/10

Unit Forester: Erik Marcy 3-9-10
Erik Marcy Date



LEGEND

- Existing Roads
- Posted Right of Way
- Unsurfaced Road Construction
- Surfaced Road Construction
- Type N Stream
- Type F Stream
- Sale Boundary
- Green Tree Retention
- Waste Area
- Rock Source
- ODF Ownership
- Ground Yarding
- Cable Yarding
- Cable Landing

LOGGING PLAN

OF TIMBER SALE CONTRACT NO. 341-10-023

BIG 3 JUNCTION

PORTIONS OF SECTIONS 28, 29, 31, 32, and 33
T04N, R07W, W.M., CLATSOP COUNTY, OR

1:15,840
1 INCH = .25 MILES

0 0.125 0.25 0.5 Miles

Approximate Net Acres	
Area 1	112
Area 2	103
Total	215

N