"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Cost Summary
Doty's Derby
Sale 341-07-55

District: Forest Grove **Date:** 1/16/07

	Conifer	Hardwood	Total
Gross Timber Sale Value	$1,047,912.36	$0.00	$1,047,912.36
		Project Work	($20,577.90)
		Advertised Value	$1,027,334.46

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Timber Description
Doty's Derby
Sale 341-07-55

District: Forest Grove

Location: Section 22, T3N, R6W, W.M., Tillamook County, Oregon.

Date: 1/16/07 **Stand Stocking:** 20%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	18	0	98

Volume by Grade	Douglas - Fir	Total
2S	1,504	1,504
3S	1,209	1,209
4S	376	376
Total	3,089	3,089

Comments: Pond Values Used: 4th Quarter Calendar Year 2006.

Western Hemlock Stumpage Price = Pond Value minus Logging Costs
$140/MBF = $320/MBF - $180/MBF
Western Red Cedar Stumpage Price = Pond Value minus Logging Costs
$780/MBF = $960/MBF - $180/MBF
Red Alder Stumpage Price = Pond Value minus Logging Costs
$470/MBF = $650/MBF - $180/MBF

Hauling costs adjusted to make equivalent to $700 daily truck cost.
Hauling Cost Calculation Douglas-fir:
$700 - % Profit & Risk ($700 / 1.15) = $608 Daily Truck Cost.
$608 Daily Truck Cost / (3 trips per day x 4.5 mbf per load) = $45.04/MBF Hauling Cost.

Other Costs (with Profit & Risk to be added):
154 snags will be created by tree topping at $55.00 per tree = $8,470
Brand and Paint at $1.00 per MBF = $3,089
5 Intermediate supports at $110.00 a piece = $500.00
TOTAL Other Costs (with Profit & Risk to be added): $12,059

Other Costs (No Profit & Risk to be added):
10 Hours for stacking fire wood at $110/hour for shovel use = $1,100
6,100 feet of hand fire trail to be constructed at $1.25 ft = $7,625
TOTAL Other Costs (No P&R): $8,725

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Logging Conditions
Doty's Derby
Sale 341-07-55

Combination#: 1 Douglas - Fir 70.00%

Yarding Distance: Medium (800 ft) **Downhill Yarding:** No

Logging System: Cable: Medium Tower >40 - <70 **Process:** Stroke Delimber

Tree Size: Mature Private Forest / Regen Cut (250 Bft/tree), 6-11 logs/MBF

Loads/Day: 7 **Bd. Ft./Load:** 4,500

Cost/MBF: $104.21

Machines:

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

Combination#: 2 Douglas - Fir 30.00%

Yarding Distance: Short (400 ft) **Downhill Yarding:** Yes

Logging System: Shovel **Process:** Manual Delimbing

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

Loads/Day: 9 **Bd. Ft./Load:** 4,500

Cost/MBF: $58.14

Machines:

Shovel Logger

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Logging Costs
Doty's Derby
Sale 341-07-55

Date: 1/16/07

Operating Seasons: 2.0 **Profit & Risk:** 15%

Project Costs: $20,578 **Other Costs (P/R):** $12,059

Slash Disposal: $0 **Other Costs:** $8,725

Road Maintenance: $0.00

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	0.0	8.0	0.0

Hauling Costs

Species	$/MBF	Trips/Day	MBF/Load
Douglas - Fir	$45.04	3.0	4.5

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Logging Costs Breakdown
Doty's Derby
Sale 341-07-55

Costs	Douglas - Fir
Logging	90.39
Road Maintenance	3.43
Fire Protection	1.75
Hauling	45.96
Other (P/R appl.)	3.90
Profit & Risk	21.81
Slash Disposal	0.00
Scaling	2.00
Other	2.82
Total	172.06

Amortization	0.00
Pond Value	511.30
Stumpage	339.24
Amortized	-0.00

"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Summary
Doty's Derby
Sale 341-07-55

Amortized

	Douglas - Fir
MBF	0.00
Value	0.00
Total	0.00

Unamortized

	Douglas - Fir
MBF	3,089.00
Value	339.24
Total	1,047,912.36

Gross Timber Sale Value

Recovery $1,047,912.36

Prepared by: Andrew Walker Date: 1/16/07

District: Forest Grove Phone: (503) 359-7465

PROJECT COST SUMMARY SHEET

Timber Sale: **Doty's Derby 341-07-55**

CONSTRUCTION **Project No. 1**

Road Segment	Length	Cost
B to C	3 + 00	$1,149.52
D to E	4 + 50	$1,714.08
	7 + 50 stations	
	0.14 miles	

SUBTOTAL CONSTRUCTION **$2,863.60**

IMPROVEMENTS **Project No. 1**

Road Segment	Length	Cost
A to B	10 + 25	$1,889.48
	10 + 25 stations	
	0.19 miles	

SUBTOTAL IMPROVEMENTS **$1,889.48**

SURFACING **Project No. 2**

Road Segment	Amount	Type	Cost
A to B	760 cy	6" - 0	$7,372.00
B to C	224 cy	6" - 0	$2,215.36
D to E	308 cy	6" - 0	$3,261.72
Total	1,292 cy	4" - 0	

SUBTOTAL SURFACING **$12,849.08**

SPECIAL PROJECTS

Project No. 3	Grass seed and fertilize areas of disturbed soil.	$194.40

SUBTOTAL SPECIAL PROJECTS **$194.40**

MOVE IN **$2,781.34**

TOTAL ALL PROJECTS **$20,577.90**

TOTAL CREDITS **$20,577.90**

Greg Miller - 09/29/2006

SUMMARY OF CONSTRUCTION COST

Timber Sale: **Doty's Derby 341-07-55** Road: **A to B**

Construction - 0+00 stations
0.00 miles

Improvement - 10+25 stations
0.19 miles

CLEARING AND GRUBBING -

Scattering	0.50 acres @	$980.00	per acre =	$490.00		
			TOTAL CLEARING AND GRUBBING			**$490.00**

EXCAVATION -

Road	10.25	sta @	$50.00	per sta =	$512.50	
Heliport	4.00	sta @	$139.00	per sta =	$556.00	
Grade, ditch and roll	0.19	mi @	$1,742.00	per mi =	$330.98	
				TOTAL	EXCAVATION	**$1,399.48**

CULVERTS - MATERIALS & INSTALLATION

Culverts

0	LF of 18"	$0.00	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
		$0.00		$0.00

Half Rounds

0	LF of 21"	$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	0 LF of 66"	$0.00
		$0.00		$0.00

Culvert Stakes

0 stakes $0.00

TOTAL CULVERTS **$0.00**

SURFACING-

8 " deep = 44 cy/sta

Subgrade	451	cy of	6" - 0	@	$9.70	per cy =	$4,374.70	
Turnouts (2)	44	cy of	6" - 0	@	$9.70	per cy =	$426.80	
Heliport	265	cy of	6" - 0	@	$9.70	per cy =	$2,570.50	
Total =	760	cy of	6" - 0			TOTAL	SURFACING	**$7,372.00**

SPECIAL PROJECTS

Grass seed and fertilize areas of disturbed soil.	0.50 acres x $180 / acre	$90.00	
		$0.00	
		$0.00	
		$0.00	
	TOTAL SPECIAL PROJECTS		**$90.00**

TOTAL COST = $9,351.48

Greg Miller - 09/29/2006

SUMMARY OF CONSTRUCTION COST

Timber Sale: **Doty's Derby 341-07-55** Road: **B to C**

Construction - 3+00 stations
0.06 miles

Improvement - 0+00 stations
0.00 miles

CLEARING AND GRUBBING -

Scattering	0.50 acres @	$980.00	per acre =	$490.00		
			TOTAL CLEARING AND GRUBBING			**$490.00**

EXCAVATION -

Road	3.00	sta @	$90.00	per sta =	$270.00	
Landing	1.00	lndg @	$285.00	per lndg =	$285.00	
Grade, ditch and roll	0.06	mi @	$1,742.00	per mi =	$104.52	
				TOTAL EXCAVATION		**$659.52**

CULVERTS - MATERIALS & INSTALLATION

Culverts

0 LF of 18"	$0.00	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	
	$0.00		$0.00	

Half Rounds

0 LF of 21"	$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	0 LF of 66"	$0.00	
	$0.00		$0.00	

Culvert Stakes

0 stakes	$0.00	TOTAL CULVERTS	**$0.00**

SURFACING-

10 " deep = 56 cy/sta

Subgrade	168	cy of	6" - 0	@	$9.89	per cy =	$1,661.52	
Landing	56	cy of	6" - 0	@	$9.89	per cy =	$553.84	
Total =	224	cy of	6" - 0			TOTAL SURFACING		**$2,215.36**

SPECIAL PROJECTS

Grass seed and fertilize areas of disturbed soil.	0.25 acres x $180 / acre	$45.00	
		$0.00	
		$0.00	
		$0.00	
	TOTAL SPECIAL PROJECTS		**$45.00**

TOTAL COST = $3,409.88

Greg Miller - 09/29/2006

SUMMARY OF CONSTRUCTION COST

Timber Sale: **Doty's Derby 341-07-55** Road: **D to E**

Construction - 4+50 stations
0.09 miles

Improvement - 0+00 stations
0.00 miles

CLEARING AND GRUBBING -

Scattering	0.66 acres @	$980.00	per acre =	$646.80		
			TOTAL CLEARING AND GRUBBING			**$646.80**

EXCAVATION -

Road	4.50	sta @	$139.00	per sta =	$625.50	
Landing	1	lndg @	$285.00	per lndg =	$285.00	
Grade, ditch and roll	0.09	mi @	$1,742.00	per mi =	$156.78	
				TOTAL EXCAVATION		**$1,067.28**

CULVERTS - MATERIALS & INSTALLATION

Culverts

0 LF of 18"	$0.00		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
	$0.00			$0.00

Half Rounds

0 LF of 21"	$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	0 LF of 66"	$0.00
	$0.00		$0.00

Culvert Stakes

0 stakes $0.00

TOTAL CULVERTS **$0.00**

SURFACING-

10 " deep = 56 cy/sta

Subgrade	252	cy of	6" - 0	@	$10.59	per cy =	$2,668.68
Landing	56	cy of	6" - 0	@	$10.59	per cy =	$593.04
Total =	308	cy of	6" - 0			TOTAL SURFACING	**$3,261.72**

SPECIAL PROJECTS

Grass seed and fertilize areas of disturbed soil.	0.33 acres x $180 / acre	$59.40
		$0.00
		$0.00
		$0.00
	TOTAL SPECIAL PROJECTS	**$59.40**

TOTAL COST = $5,035.20

Greg Miller - 09/29/2006

MOBILIZATION COST SUMMARY

Timber Sale: **Doty's Derby 341-07-55**

MILEAGE FACTORS

Distance	Factor	Distance	Factor
0-25	0.58	55	1.07
30	0.66	60	1.15
35	0.74	65	1.23
40	0.82	70	1.31
45	0.91	75	1.40
50	1.00	80	1.48

MILEAGE FACTOR = 1.00

No.	EQUIPMENT DESCRIPTION	Base Cost	Move in Cost	Within Area Move ($/mile)	Begin Mileage	End Mileage	Total Miles	Within Area Cost	Total Cost
0	Drill & Compressor	$235	$0.00						$0.00
1	Graders	$570	$570.00	$7.33	0	0	2	$14.66	$584.66
0	Loader (1.5 - 2.5 cy)	$545	$0.00	$8.42	0	0	0	$0.00	$0.00
0	Loader (3 cy +)	$570	$0.00	$9.56	0	0	0	$0.00	$0.00
1	Rollers & Compactors	$235	$235.00	$14.25	0	0	2	$28.50	$263.50
1	Excavators	$750	$750.00	$36.60	0	0	2	$73.20	$823.20
0	Large Backhoes	$275	$0.00	$5.53	0	0	0	$0.00	$0.00
0	Small backhoes	$235	$0.00	$4.84	0	0	0	$0.00	$0.00
1	Tractors (D5 - D7)	$570	$570.00	$18.47	0	0	2	$36.94	$606.94
0	Tractors (D8)	$750	$0.00	$25.53	0	0	0	$0.00	$0.00
4	Dump Truck (12 cy)	$120	$480.00	$2.88	0	0	2	$23.04	$503.04
0	Belly Dump	$140	$0.00	$3.68	0	0	0	$0.00	$0.00
0	Water Truck (3000 gal)	$140	$0.00	$2.88	0	0	0	$0.00	$0.00

TOTAL MOBILIZATION COSTS = $2,781.34

Greg Miller - 09/29/2006

ROCK PIT DEVELOPMENT AND CRUSHING COST SUMMARY

Timber Sale: **Doty's Derby 341-07-55**

Pit Name: **Camp 5**

Swell:	1.30	1-1/2"-0 (trk measure)	cy
Shrinkage:	1.16	4"-0 (trk measure)	cy
Drill Pct.:	100%	Pit Run (trk measure)	1,292 cy
		Total Truck Yardage	1,292 cy
		Total In Place Yardage	994 cy

Move in excavator				$750.00
Scalp & Clear Overburden				$0.00
			Subtotal	$750.00
Move in Drill and Compressor				$0.00
Drill & Shoot	$0.00 /cy x	0 cy	=	$0.00
			Subtotal	$0.00
Dig and Load Rock	$2.82 /cy x	1,292 cy	=	$3,643.44
Push Rock	$0.00 /cy x	0 cy	=	$0.00
Oversize Reduction	$4.00 /cy x	0 cy	=	$0.00
Move in Crusher				$0.00
Set Up Crusher				$0.00
Move in Screening plant				$0.00
Move in Loaders				$0.00
Load Crusher	$0.70 /cy x	0 cy	=	$0.00
Crushing (1-1/2" - 0)	$2.50 /cy x	0 cy	=	$0.00
Crushing (4" - 0)	$2.00 /cy x	0 cy	=	$0.00
Crushing (Jaw Run)	$1.75 /cy x	0 cy	=	$0.00
Load Dump Truck	$0.00 /cy x	0 cy	=	$0.00
			Subtotal	$3,643.44
Gradation Tests	$0.00 /2000 cy x	6,917 cy	=	$0.00
Change Gradation				$0.00
Clean Up Pit				$260.00
			Subtotal	$260.00

BASE COST $3.60/cy

TOTAL PRODUCTION COST $4,653.44

Greg Miller - 09/29/2006

TIMBER SALE SUMMARY
Doty's Derby
341-07-55

1. **Type of Sale**: Modified Clearcut, Recovery, sealed bid auction.

2. **Revenue Distribution:** 100% BOF, 95% Rehab Obligation, Tillamook County, Tax Code 56-1

3. **Sale Acreage:** Area 1 is 35 net acres, Area 2 is 43 net acres; Area 3 is 1 net acre of R/W. All acres were determined using ArcView GIS.

4. **Volume: In MBF**

SPECIES	2 SAW	3 SAW	4 SAW	SPECIES TOTAL
Douglas-fir				
Areas 1, 2, & 3 (R/W) MC	1,535	1,234	384	**3,153**
Less 2% D & B.	1,504	1,209	376	**3,089**
Total				**3,089**

5. **Cruise Data**: All areas were SLI cruised converted to Superace using 40 BAF with full plots in Areas 1, 2. The sale was cruised in September, 2005. A conifer top cruise diameter of 7 inches or 25% of DBH outside bark was used. Cruise statistics: Combined sale areas: DF take trees: CV = 39.4%, SE = 10.5%.

6. **Timber Description:** Area 1 is a well stocked, unmanaged stand of Douglas-fir, age 65-67 years. Area 2 is a well stocked, unmanaged stand of Douglas-fir, age 60-68 years. The average take DBH for all areas is: DF = 18". Estimated volume per acre for clearcut Areas averages 39.9 MBF Douglas-fir.

7. **Topography and Logging Method:** The topography ranges from 10% to 60%. The clearcut areas are 70% cable yarding and 30% ground yarding.

8. **Access:** Enter ODF Salmonberry Road between Hwy 26, MP 28 and MP 29. From the Salmonberry Road take Section 10 Road to Wheeler Road to Fire Road #2. Right off Fire Road #2 on spur road to timber sale area. Access is entirely through ODF owned land and on ODF roads. Miles of road from Highway 26 to timber sale area is approximately 7-8 miles.

9. **Projects:**

Project No. 1 is constructing 0.14 miles of road costing $ 2,863.60 for sale access and 0.19 miles of road improvements, costing $ 1,889.48.
Project No. 2 is road surfacing costing $ 12,849.08
Project No. 3 is grass seeding and fertilizing road banks costing $ 194.40.

Move in cost is $ 2,781.34
Total cost for all projects is **$ 20,577.90**

10. **Other Costs:**

Firewood sorting & skid trail blocking, 10 hours of shovel time at $ 1,100.00.
Brand and paint costs of $ 3,089.00.
Snag creation: $ 8,470.00.
Intermediate supports $ 500.00.
Fire trail construction: $ 7,625.00.
Total other costs are $ **20,784.00**.

CRUISE REPORT
Doty's Derby
341-07-55

1. Acreage Calculation: Area 1 has 35 net acres, and area 2 is 43 net acres. Area 3 is 1 net acre of R/W. All acres were determined using ArcView computer program.

2. Cruise Method: The area was variable plot cruised for the Stand Level Inventory (SLI) by IRM contract cruisers. One Portion of the stand makes up the sale. The plots were cruised using a 40 BAF. Take trees and saw grades were assigned based on the height, diameter and damage measurements provided by the SLI cruise. Data from plots within the sale were done using the Superace 98 program.

3. Sampling Intensity:

Area 1	Estimated	Actual
CV	45%	39.4%
SE	13%	10.5%
No. of Plots	9	15
Take Trees/Plot	4-6	5.5

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 graded favoring 40 foot segments.

8. Merchantable Top: Total tree heights were obtained from SLI data. Conifer merchantable tops were calculated in SuperAce 98 to 7 inches, hardwood to 8 inches or 25% of DBH outside bark.

9. Computation Procedures: Volumes for Area 1 were computed using the Super Ace 2004 program.

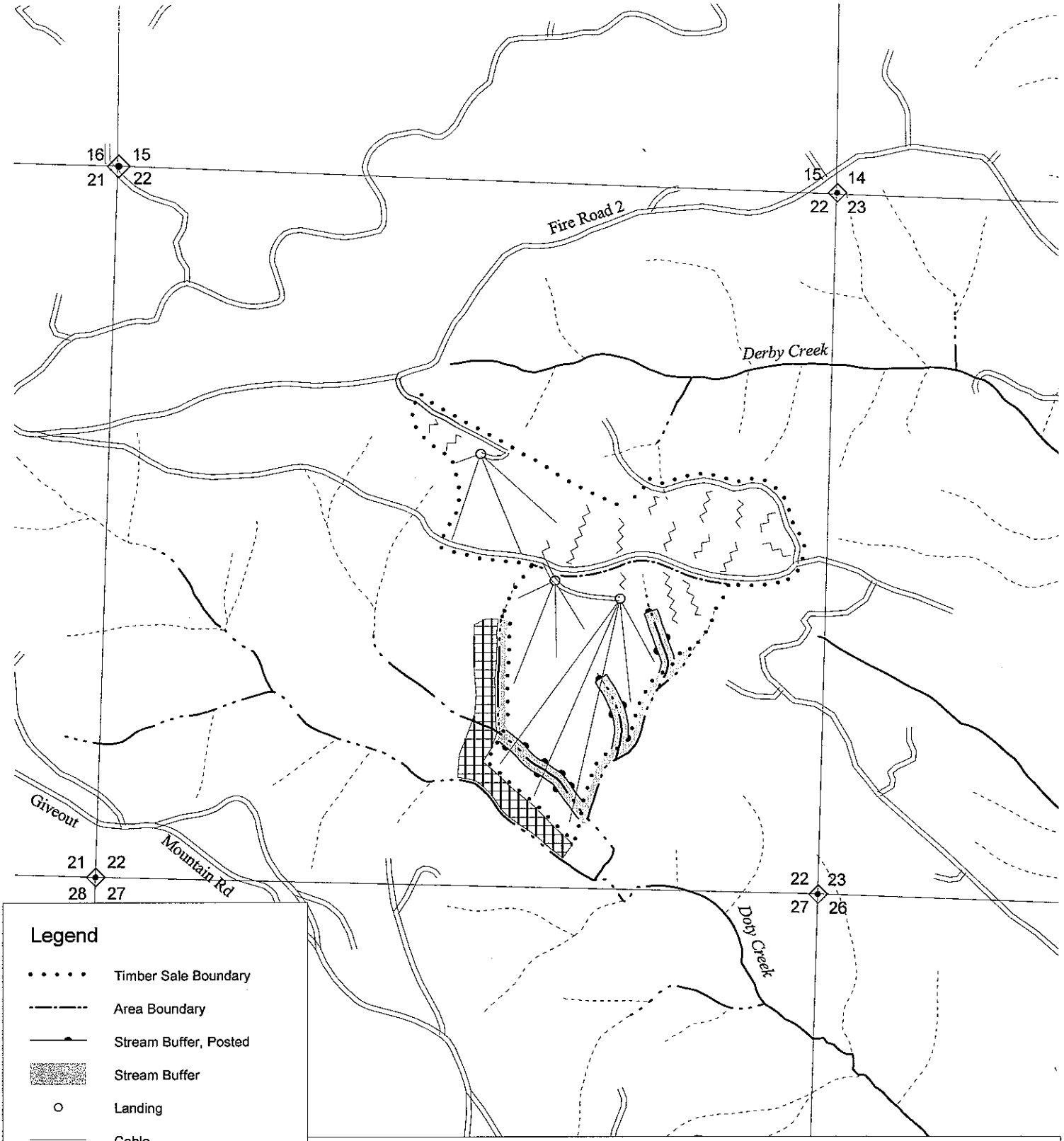
10. Deductions: Two percent of the conifer volume was subtracted from the computed volumes to account for hidden defect and breakage.

11. Cruisers: The sale was cruised by IRM contract cruisers in September 2005. Office calculations were prepared by Drew walker in October 2006.

12. Signatures:

Prepared by: Drew walker 11/22/06
Drew Walker Date

Unit Forester: Erik Marcy 11-17-06
Erik Marcy Date



Legend

- Timber Sale Boundary
- Area Boundary
- Stream Buffer, Posted
- Stream Buffer
- Landing
- Cable
- Tractor
- Green Tree Retention Area
- Surfaced Existing Road
- Type F Stream
- Type N Stream, perennial
- Type N Stream, seasonal

Approximate Net Acres

Area 1 cc	35 acres
Area 2 cc	43 acres
Area 3 r/w	1 acre
Total	79 acres

N

Logging Plan

of Timber Sale Contract No. 341-07-55
Doty's Derby
Portions of Section 22,
T3N, R6W, WM, Tillamook County, Oregon

1 inch = 1000 feet

1000 0 1000 Feet