



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Cline Plunkett Thin
Sale 341-15-39

District: West Oregon

Date: September 30, 2014

cost summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$234,669.76	\$0.00	\$234,669.76
		Project Work:	\$(52,749.00)
		Advertised Value:	\$181,920.76



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Cline Plunkett Thin
Sale 341-15-39

District: West Oregon

Date: September 30, 2014

timber description

Location: Portions of Sections 15, 16, 21, 22, and 23, T11S, R8W, W.M., Lincoln County, Oregon.

Stand Stocking: 20%

SpecieName	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	11	0	95

Volume by Grade	3S	4S	Total
Douglas - Fir	1,383	593	1,976
Total	1,383	593	1,976



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Sale 341-15-39

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District: West Oregon

Date: September 30, 2014

comments: Pond Values Used: 3rd Quarter Calendar Year 2014.

Western Hemlock and Other Conifers Stumpage Price =
Douglas-fir Bid Price

Western redcedar and Other Cedars Stumpage Price =
Douglas-fir Bid Price

Red Alder and Other Hardwoods Stumpage Price =
Douglas-fir Bid Price

SCALING COST ALLOWANCE = \$5.00/MBF

FUEL COST ALLOWANCE = \$4.00/Gallon

LOG HAUL:
Costed to Eugene.

HAULING COSTS
Hauling costs equivalent to \$780 daily truck cost.

Other Costs (with Profit & Risk to be added):
Brand and Paint: 1,976 MBF @ \$1/MBF = \$1,976
Intermediate Supports: \$1,200
TOTAL Other Costs (with Profit & Risk to be added) = \$3,176

Other Costs (No Profit & Risk added):
Invasive Species Equipment Cleaning: \$2,000
Firewood Sorting: \$1,000
Non-project roads/additional logging costs: \$750
Forest Investment Associates Road Use Fee: \$752.80
TOTAL Other Costs (No Profit & Risk added) = \$4,502.80

SLASH DISPOSAL
None.



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal Cline Plunkett Thin Sale 341-15-39

District: West Oregon

Date: September 30, 2014

logging conditions

combination#: 1 Douglas - Fir 45.64%
yarding distance: Short (400 ft) downhill yarding: No
logging system: Track Skidder Process: Stroke Delimber
tree size: Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF
loads / day: 3.0 bd. ft / load: 3,000
cost / mbf: \$159.80
machines: Stroke Delimber (B)

combination#: 2 Douglas - Fir 26.92%
yarding distance: Short (400 ft) downhill yarding: No
logging system: Cable: Small Tower <=40 Process: Stroke Delimber
tree size: Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF
loads / day: 3.0 bd. ft / load: 3,000
cost / mbf: \$314.92
machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Small)

combination#: 3 Douglas - Fir 18.47%
yarding distance: Medium (800 ft) downhill yarding: No
logging system: Cable: Small Tower <=40 Process: Stroke Delimber
tree size: Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF
loads / day: 2.5 bd. ft / load: 3,000
cost / mbf: \$377.90
machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Small)

combination#: 4 Douglas - Fir 8.97%
yarding distance: Long (1,500 ft) downhill yarding: No
logging system: Cable: Small Tower <=40 Process: Stroke Delimber
tree size: Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF
loads / day: 2.0 bd. ft / load: 3,000
cost / mbf: \$472.37
machines: Log Loader (A)
Stroke Delimber (A)
Tower Yarder (Small)



"STEWARDSHIP IN FORESTRY"

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District: West Oregon

Date: September 30, 2014

logging costs

Operating Seasons:	2.00	Profit Risk:	15.00%
Project Costs:	\$52,749.00	Other Costs (P/R):	\$3,176.00
Slash Disposal:	\$0.00	Other Costs:	\$4,502.80

Miles of Road

Road Maintenance: \$2.62

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

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	2.0	3.0



"STEWARDSHIP IN FORESTRY"

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District: West Oregon

Date: September 30, 2014

logging costs breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Scaling	Other	Total
Douglas - Fir									
\$269.87	\$2.75	\$4.44	\$118.69	\$1.61	\$59.60	\$0.00	\$5.00	\$2.28	\$464.24

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$583.00	\$118.76	\$0.00



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District: West Oregon

Date: September 30, 2014

summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	1,976	\$118.76	\$234,669.76

Gross Timber Sale Value

Recovery: \$234,669.76

Prepared by: Joe Goldsby

Phone: 541-929-9168

SUMMARY OF ALL PROJECT COSTS

Sale Name: Cline Plunkett Thin

Date: September 2014

Project #1 - New Construction

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>	
A1 to A2	12.9 sta	\$2,197	
A5 to A6	2.4 sta	\$710	
C2 to C3	3.2 sta	\$793	
C6 to C7	2.8 sta	\$733	
C10 to C11	1.6 sta	\$583	
C12 to C13	2.5 sta	\$700	
C16 to C17	12.5 sta	\$2,515	
C20 to C21	1.8 sta	\$608	
C22 to C23	3.6 sta	\$842	
D4 to D5	17.8 sta	\$2,891	
D7 to D8	4.7 sta	\$762	
TOTALS	65.8 sta		\$13,334

Project #2 - Improvements

<u>Road Segment</u>	<u>Length</u>	<u>Cost</u>	
A to A1	26.8 sta	\$1,156	
A3 to A4	71.6 sta	\$3,454	
A7 to A8	6.2 sta	\$61	
A9 to A10	5.6 sta	\$55	
B to B1	54.5 sta	\$749	
B1 to B6	57.6 sta	\$1,261	
B2 to B3	20.1 sta	\$6,956	
B4 to B5	1.1 sta	\$1,208	
B6 to B7	10.2 sta	\$9,473	
C to C1	55.7 sta	\$687	
C4 to C5	5.8 sta	\$399	
C8 to C9	32.2 sta	\$2,203	
C14 to C15	18.6 sta	\$1,329	
C18 to C19	1.5 sta	\$108	
D to D1	39.5 sta	\$3,374	
D2 to D3	22.8 sta	\$1,295	
TOTALS	429.8 sta		\$33,768

Project #3 - Vacate Road

D1 to D6	26.1 sta	\$755
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Project #4 - Post Harvest Activities

Turnaround rock		
Tank traps (8)		\$1,953

Move in

	<u>Cost</u>	<u>On-site move</u>	
Crawler tractor, D-7 or equiv.	\$1,640	\$100	
Grader, Cat 14-G or equiv.	\$340	\$40	
Backhoe	\$340	\$100	
Vibratory roller	\$340	\$39	
TOTAL			\$2,939

GRAND TOTAL \$52,749

Compiled by J. Doyal

Date 09/02/2014

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 26.8 sta
ROAD A to A1

IMPROVEMENT

Re-open road Sta. 7+80 to 26+80 (with dozer)	19 sta.	@	\$45.27 /sta	=	\$860
Shape surface Sta. 0+00 to 7+80 (with road grader)	7.8 sta.	@	\$9.90 /sta	=	\$77
Shape surface Sta. 7+80 to 26+80 (with road grader)	19 sta.	@	\$11.55 /sta.	=	\$219

TOTAL IMPROVEMENT \$1,156

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$1,156

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 1 LENGTH const 12.9 sta
ROAD A1 to A2

CLEARING AND GRUBBING

0.71 acres	@	\$1,010.24 /acre	=	\$717 road
0.10 acres	@	\$1,010.24 /acre	=	\$101 landing

TOTAL CLEARING AND GRUBBING = \$818

EXCAVATION

With D7 dozer or equivalent

Construct road	12.9 sta.	@	\$74.28 /sta.	=	\$958
Construct landing	2 hr.	@	\$135.80 /hr.	=	\$272
Shape subgrade (with road grader)	12.9 sta.	@	\$11.55 /sta.	=	\$149

TOTAL EXCAVATION = \$1,379

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$2,197

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 71.6 sta
ROAD A3 to A4

IMPROVEMENT

Shape surface 71.6 sta. @ \$9.90 /sta = \$709
(with road grader)

TOTAL IMPROVEMENT \$709

SURFACING

Spot Rock 144 cy of Size 1 1/2-0" Cost \$19.06 /yd. = \$2,745
(100 cy/mi)

TOTAL ROCK COST \$2,745

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$3,454

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 1 LENGTH const 2.4 sta
ROAD A5 to A6

CLEARING AND GRUBBING

0.13 acres	@	\$1,010.24 /acre	=	\$131 road
0.10 acres	@	\$1,010.24 /acre	=	\$101 landing

TOTAL CLEARING AND GRUBBING = \$232

EXCAVATION

With D7 dozer or equivalent

Construct road	2.4 sta.	@	\$74.28 /sta.	=	\$178
Construct landing	2 hr.	@	\$135.80 /hr.	=	\$272
Shape subgrade (with road grader)	2.4 sta.	@	\$11.55 /sta	=	\$28

TOTAL EXCAVATION = \$478

Compiled by:
Date:

J. Doyal
Sep 2, 2014

GRAND TOTAL =====> \$710

SUMMARY OF CONSTRUCTION COST

SALE ROAD	Cline Plunkett Thin A7 to A8	Project # 2	LENGTH improve	6.2 sta
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IMPROVEMENT

Shape surface (with road grader)	6.2 sta.	@	\$9.90 /sta	=	\$61
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TOTAL IMPROVEMENT	\$61
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Compiled by:
Date:

J. Doyal
Sep 2, 2014

GRAND TOTAL =====>	\$61
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SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 5.6 sta
ROAD A9 to A10

IMPROVEMENT

Shape surface 5.6 sta. @ \$9.90 /sta = \$55
(with road grader)

TOTAL IMPROVEMENT \$55

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$55

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 54.5 sta
ROAD B to B1

IMPROVEMENT

Shape surface 54.5 sta. @ \$13.75 /sta = \$749
(with road grader)

TOTAL IMPROVEMENT \$749

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$749

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 57.6 sta
ROAD B1 to B6

IMPROVEMENT

Shape surface 57.6 sta. @ \$13.75 /sta = \$792
(with road grader)

TOTAL IMPROVEMENT \$792

SURFACING

Spot Rock 27 cy of Size 3-0" Cost \$17.37 /yd. = \$469
(100 cy/mi)

TOTAL ROCK COST \$469

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$1,261

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 20.1 sta
ROAD B2 to B3

IMPROVEMENT

Shape surface 20.1 sta. @ \$9.90 /sta = \$199
(with road grader)

TOTAL IMPROVEMENT \$199

SURFACING

		Size	Cost		
3" lift (0+00 to 19+60)	324 cy of	3-0"	\$18.87	/yd.	= \$6,114
Landing (Point B3)	36 cy of	Jaw Run	\$17.86	/yd.	= \$643

TOTAL ROCK COST \$6,757

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$6,956

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 1.1 sta
ROAD B4 to B5

IMPROVEMENT

Re-open landing (with road dozer)	0.25 hrs.	@	\$ 135.80 /hr.	=	\$34
Shape surface (with road grader)	1.1 sta.	@	\$11.55 /sta	=	\$13
Compact subgrade (with vibratory roller)	1.1 sta.	@	\$8.31 /sta.	=	\$9

TOTAL IMPROVEMENT \$56

SURFACING

		Size	Cost		
8" lift (0+00 to 0+60)	27 cy of	3-0"	\$18.87 /yd.	=	\$509
Landing (Point B5)	36 cy of	Jaw Run	\$17.86 /yd.	=	\$643

TOTAL ROCK COST \$1,152

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$1,208

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 10.2 sta
ROAD B6 to B7

IMPROVEMENT

Re-open road (with dozer)	3 hrs.	@	\$135.80 /hr	=	\$407
Re-open landing (with dozer)	0.5 hr.	@	\$ 135.80 /hr	=	\$68
Shape surface (with road grader)	10.2 sta.	@	\$11.55 /sta	=	\$118
Compact subgrade (with vibratory roller)	10.2 sta.	@	\$8.31 /sta	=	\$85

TOTAL IMPROVEMENT \$678

SURFACING

		Size	Cost		
8" lift (0+00 to 9+70)	432 cy of	3-0"	\$18.87 /yd.	=	\$8,152
Landing (Point B7)	36 cy of	Jaw Run	\$17.86 /yd.	=	\$643

TOTAL ROCK COST \$8,795

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$9,473

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 55.7 sta
ROAD C to C1

IMPROVEMENT

Re-open landing (with dozer)	1 hrs.	@	\$ 135.80 /hr.	=	\$136
Shape surface (with road grader)	55.7 sta.	@	\$9.90 /sta	=	\$551

TOTAL IMPROVEMENT \$687

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$687

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 1 LENGTH const 3.2 sta
ROAD C2 to C3

CLEARING AND GRUBBING

0.18 acres	@	\$1,010.24 /acre	=	\$182 road
0.10 acres	@	\$1,010.24 /acre	=	\$101 landing

TOTAL CLEARING AND GRUBBING = \$283

EXCAVATION

With D7 dozer or equivalent

Construct road	3.2 sta.	@	\$74.28 /sta.	=	\$238
Construct landing	2 hr.	@	\$135.80 /hr.	=	\$272

TOTAL EXCAVATION = \$510

Compiled by:
Date:

J. Doyal
Sep 2, 2014

GRAND TOTAL =====> \$793

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 5.8 sta
ROAD C4 to C5

IMPROVEMENT

Re-open road 5.8 sta. @ \$45.27 /sta = \$263
(with dozer)

TOTAL IMPROVEMENT \$263

EXCAVATION

With D7 dozer or equivalent

Construct landing 1 hr. @ \$135.80 /hr. = \$136

TOTAL EXCAVATION = \$136

Compiled by:

J. Doyal

Date:

Sep 2, 2014

GRAND TOTAL =====>

\$399

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 1 LENGTH const 2.8 sta
ROAD C6 to C7

CLEARING AND GRUBBING

0.15 acres	@	\$1,010.24 /acre	=	\$152 road
0.10 acres	@	\$1,010.24 /acre	=	\$101 landing

TOTAL CLEARING AND GRUBBING = \$253

EXCAVATION

With D7 dozer or equivalent

Construct road	2.8 sta.	@	\$74.28 /sta.	=	\$208
Construct landing	2 hr.	@	\$135.80 /hr.	=	\$272

TOTAL EXCAVATION = \$480

Compiled by:

J. Doyal

Date:

Sep 2, 2014

GRAND TOTAL =====>

\$733

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 32.2 sta
ROAD C8 to C9

CLEARING AND GRUBBING

0.10 acres @ \$1,010.24 /acre = \$101 landing

TOTAL CLEARING AND GRUBBING = \$101

IMPROVEMENT

Re-open road 32.2 sta. @ \$45.27 /sta = \$1,458
Shape surface 32.2 sta. @ \$11.55 /sta = \$372
(with road grader)

TOTAL IMPROVEMENT \$1,830

EXCAVATION

With D7 dozer or equivalent

Construct landing 2 hr. @ \$135.80 /hr. = \$272

TOTAL EXCAVATION = \$272

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$2,203

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 1 LENGTH const 1.6 sta
ROAD C10 to C11

CLEARING AND GRUBBING

0.09 acres @ \$1,010.24 /acre = \$91 road
0.10 acres @ \$1,010.24 /acre = \$101 landing

TOTAL CLEARING AND GRUBBING = \$192

EXCAVATION

With D7 dozer or equivalent

Construct road 1.6 sta. @ \$74.28 /sta. = \$119
Construct landing 2 hr. @ \$135.80 /hr. = \$272

TOTAL EXCAVATION = \$391

Compiled by:

J. Doyal

Date:

Sep 2, 2014

GRAND TOTAL =====>

\$583

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 1 LENGTH const 2.5 sta
ROAD C12 to C13

CLEARING AND GRUBBING

0.14 acres	@	\$1,010.24 /acre	=	\$141 road
0.10 acres	@	\$1,010.24 /acre	=	\$101 landing

TOTAL CLEARING AND GRUBBING = \$242

EXCAVATION

With D7 dozer or equivalent

Construct road	2.5 sta.	@	\$74.28 /sta.	=	\$186
Construct landing	2 hr.	@	\$135.80 /hr.	=	\$272

TOTAL EXCAVATION = \$458

Compiled by:
Date:

J. Doyal
Sep 2, 2014

GRAND TOTAL =====> \$700

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 18.6 sta
ROAD C14 to C15

IMPROVEMENT

Re-open road (with dozer)	18.6 sta.	@	\$45.27 /sta	=	\$842
Shape surface (with road grader)	18.6 sta.	@	\$11.55 /sta	=	\$215

TOTAL IMPROVEMENT \$1,057

EXCAVATION

With D7 dozer or equivalent

Construct landing	2 hr.	@	\$135.80 /hr.	=	\$272
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TOTAL EXCAVATION = \$272

Compiled by:
Date:

J. Doyal
Sep 2, 2014

GRAND TOTAL =====> \$1,329

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 1 LENGTH const 12.5 sta
ROAD C16 to C17

CLEARING AND GRUBBING

0.69 acres	@	\$1,010.24 /acre	=	\$697 road
0.20 acres	@	\$1,010.24 /acre	=	\$202 landings

TOTAL CLEARING AND GRUBBING = \$899

EXCAVATION

With D7 dozer or equivalent

Construct road	12.5 sta.	@	\$74.28 /sta.	=	\$929
Construct landings	4 hr.	@	\$135.80 /hr.	=	\$543
Shape subgrade (with road grader)	12.5 sta.	@	\$11.55 /sta	=	\$144

TOTAL EXCAVATION = \$1,616

Compiled by:
Date:

J. Doyal
Sep 2, 2014

GRAND TOTAL =====> \$2,515

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 1.5 sta
ROAD C18 to C19

IMPROVEMENT

Shape surface (with road grader)	1.5 sta.	@	\$11.55 /sta	=	\$17
Re-open landing (with road grader)	1 hr.	@	\$90.75 /hr.	=	\$91

TOTAL IMPROVEMENT \$108

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$108

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin
ROAD C20 to C21

Project # 1

LENGTH const

1.8 sta

CLEARING AND GRUBBING

0.10 acres	@	\$1,010.24 /acre	=	\$101 road
0.10 acres	@	\$1,010.24 /acre	=	\$101 landing

TOTAL CLEARING AND GRUBBING = \$202

EXCAVATION

With D7 dozer or equivalent

Construct road	1.8 sta.	@	\$74.28 /sta.	=	\$134
Construct landing	2 hr.	@	\$135.80 /hr.	=	\$272

TOTAL EXCAVATION = \$406

Compiled by:

J. Doyal

Date:

Sep 2, 2014

GRAND TOTAL =====>

\$608

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin
ROAD C22 to C23

Project # 1

LENGTH const

3.6 sta

CLEARING AND GRUBBING

0.20 acres	@	\$1,010.24 /acre	=	\$202 road
0.10 acres	@	\$1,010.24 /acre	=	\$101 landing

TOTAL CLEARING AND GRUBBING = \$303

EXCAVATION

With D7 dozer or equivalent

Construct road	3.6 sta.	@	\$74.28 /sta.	=	\$267
Construct landing	2 hr.	@	\$135.80 /hr.	=	\$272

TOTAL EXCAVATION = \$539

Compiled by:
Date:

J. Doyal
Sep 2, 2014

GRAND TOTAL =====> \$842

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 39.5 sta
ROAD D to D1

IMPROVEMENT

Shape surface 39.5 sta. @ \$13.75 /sta = \$543
(with road grader)

TOTAL IMPROVEMENT \$543

SURFACING

		Size	Cost		
Spot Rock (100 cy/mi)	81 cy of	1 1/2-0"	\$19.06 /yd	=	\$1,544
Surface Rock	18 cy of	1 1/2-0"	\$19.06 /yd	=	\$343

(culvert installation)

TOTAL ROCK COST \$1,887

SPECIAL PROJECTS

Install x-drain (21+00)	30 ft.	@	\$20.00 /ft.	=	\$600
(18" x 30')					
Backhoe	2 hr.	@	\$77.00 /hr	=	\$154
Vibratory hand compactor	1 day	@	\$90.00 /day	=	\$90
Culvert disposal				=	\$100

TOTAL SPECIAL PROJECTS COST = \$944

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$3,374

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 3 LENGTH vacate 26.1 sta
ROAD D1 to D6

SPECIAL PROJECTS

Vacate road 8 hr. @ \$77.00 /hr. = \$616

(with backhoe)

Culvert disposal = \$100

Tank trap 0.5 hr. @ \$77.00 /hr. = \$39

(Point D1)

TOTAL SPECIAL PROJECTS COST = \$755

Compiled by:

J. Doyal

Date:

Sep 2, 2014

GRAND TOTAL =====>

\$755

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 2 LENGTH improve 22.8 sta
ROAD D2 to D3

IMPROVEMENT

Re-open road (with dozer)	22.8 sta.	@	\$45.27 /sta	=	\$1,032
Shape subgrade (with road grader)	22.8 sta.	@	\$11.55 /sta	=	\$263

TOTAL IMPROVEMENT \$1,295

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$1,295

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin Project # 1 LENGTH const 17.8 sta
ROAD D4 to D5

CLEARING AND GRUBBING

0.98 acres	@	\$1,010.24 /acre	=	\$990 road
0.10 acres	@	\$1,010.24 /acre	=	\$101 landing

TOTAL CLEARING AND GRUBBING = \$1,091

EXCAVATION

With D7 dozer or equivalent

Construct road	17.8 sta.	@	\$74.28 /sta.	=	\$1,322
Construct landing	2 hr.	@	\$135.80 /hr.	=	\$272
Shape subgrade (with road grader)	17.8 sta.	@	\$11.55 /sta	=	\$206

TOTAL EXCAVATION = \$1,800

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$2,891

SUMMARY OF CONSTRUCTION COST

SALE	Cline Plunkett Thin	Project # 1	LENGTH	const	4.7 sta
ROAD	D7 to D8				

CLEARING AND GRUBBING

0.26 acres	@	\$808.19 /acre	=	\$210 road
0.10 acres	@	\$808.19 /acre	=	\$81 landing

TOTAL CLEARING AND GRUBBING = \$291

EXCAVATION

With D7 dozer or equivalent

Construct road	4.7 sta.	@	\$74.28 /sta.	=	\$349
Construct landing	0.5 hr.	@	\$135.80 /hr.	=	\$68
Shape subgrade (with road grader)	4.7 sta.	@	\$11.55 /sta	=	\$54

TOTAL EXCAVATION = \$471

Compiled by: J. Doyal
Date: Sep 2, 2014

GRAND TOTAL =====> \$762

SUMMARY OF CONSTRUCTION COST

SALE Cline Plunkett Thin - Project #4 Post Harvest
ROAD

SURFACING

Turnaround rock

		Size	Cost	
Pt. A8	18 cy of	3-0"	\$17.37 /yd =	\$313
Pt. A10	18 cy of	3-0"	\$17.37 /yd =	\$313
Pt. B3	27 cy of	3-0"	\$17.37 /yd =	\$469
Pt. B7	27 cy of	3-0"	\$17.37 /yd =	\$469

TOTAL ROCK COST = \$1,564

MISCELLANEOUS PROJECTS

Tank traps

Pt. A1 (Sta. 7+80)	0.5 hr.	@	\$77.00 /hr. =	\$39
Pt. A5	0.5 hr.	@	\$77.00 /hr. =	\$39
Pt. C2	0.5 hr.	@	\$77.00 /hr. =	\$39
Pt. C4	0.5 hr.	@	\$77.00 /hr. =	\$39
Pt. C6	0.5 hr.	@	\$77.00 /hr. =	\$39
Pt. C8	0.5 hr.	@	\$77.00 /hr. =	\$39
Pt. C20	0.5 hr.	@	\$77.00 /hr. =	\$39
Pt. D7	1.5 hr.	@	\$77.00 /hr. =	\$116

TOTAL MISCELLANEOUS PROJECTS = \$389

Compiled by:
Date:

J. Doyal
Sep 2, 2014

GRAND TOTAL =====>

\$1,953

SUMMARY OF MAINTENANCE COST

SALE
ROAD

Cline Plunkett Thin

- Final Maintenance Cost Estimate
(Costed in appraisal, not in project costs)

Grading Move-in \$ 380.28

Road Segment	Length	Cost/Sta	Cost	Mileage
A3 to A4	71.6	\$9.90	\$708.84	1.36
B to B1	54.5	\$13.75	\$749.38	1.03
B1 to B6	57.6	\$13.75	\$792.00	1.09
B2 to B3	20.1	\$9.90	\$198.99	0.38
B4 to B5	1.1	\$9.90	\$10.89	0.02
B6 to B7	10.2	\$9.90	\$100.98	0.19
C to C1	55.7	\$9.90	\$551.43	1.05
D to D1	39.5	\$13.75	\$543.13	0.75
Totals	310.3		\$3,655.64	5.88

Maintenance Rock:

	Volume	Cost/CY	Cost
1½-0"	27	\$19.06	\$514.62
3-0"	36	\$17.37	\$625.32

Grand Total \$ 5,175.86

TS Volume 1,976 MBF

Cost / MBF = \$2.62

NOTES:

Rock Haul Cost Computation

SALE NAME: Cline Plunkett Thin DATE: Sep 2, 2014
ROAD NAME: Hwy 20 Cutoff CLASS: Medium
ROCK SOURCE: Rickard 18 CY truck
Route: Garrett Ln, Hwy 20, Harlan Burnt Woods Rd,
Burnt Woods Ridge Rd, Burnt Woods Forest Rd,
Hwy 20 Cutoff

TIME Computation:

Road speed time factors:

1.	55 MPH	24.6	MRT	26.8 minutes
2.	50 MPH		MRT	0.0 minutes
3.	45 MPH		MRT	0.0 minutes
4.	40 MPH		MRT	0.0 minutes
5.	35 MPH		MRT	0.0 minutes
6.	30 MPH	4.0	MRT	8.0 minutes
7.	25 MPH	2.4	MRT	5.8 minutes
8.	20 MPH	2.2	MRT	6.6 minutes
9.	15 MPH		MRT	0.0 minutes
10.	10 MPH		MRT	0.0 minutes
11.	05 MPH		MRT	0.0 minutes

Dump or spread time per RT 0.50 minutes

Total hauling cycle time for this setting
(100% efficiency)

47.70 minutes

Operator efficiency correction 0.85 56.12 minutes

Job efficiency correction 0.90 62.36 minutes

Truck capacity (CY) 18.00 3.46 min/CY

Loading time, delay time per CY 0.25 min/CY

TIME (minutes) per cubic yard 3.71 min/CY

COST per CY computation

Cost of truck and operator per hour \$90.22 /hr.

Cost of truck and operator per minute \$1.50 /min

Cost per CY \$5.57 /CY

Spread and compact Water truck, Grader & Roller \$1.50 /CY

Size	Cost/Yd (Pit)	Cost Delivered w/o processing	Cost Delivered with processing
1½ - 0"	\$ 10.80	\$16.37	\$17.87
3 - 0"	\$ 9.11	\$14.68	\$16.18
Jaw Run	\$ 8.10	\$13.67	\$15.17

Note: Pit costs November 2012

Rock Haul Cost Computation

SALE NAME: Cline Plunkett Thin DATE: Sep 2, 2014
ROAD NAME: Hwy 20 Cutoff CLASS: Medium
ROCK SOURCE: Rickard 9 CY truck
Route: Garrett Ln, Hwy 20, Harlan Burnt Woods Rd,
Burnt Woods Ridge Road, Burnt Woods Forest Rd,
Hwy 20 Cutoff

TIME Computation:

Road speed time factors:

1.	55 MPH	24.6	MRT	26.8 minutes
2.	50 MPH		MRT	0.0 minutes
3.	45 MPH		MRT	0.0 minutes
4.	40 MPH		MRT	0.0 minutes
5.	35 MPH		MRT	0.0 minutes
6.	30 MPH	4.0	MRT	8.0 minutes
7.	25 MPH	2.4	MRT	5.8 minutes
8.	20 MPH	2.2	MRT	6.6 minutes
9.	15 MPH		MRT	0.0 minutes
10.	10 MPH		MRT	0.0 minutes
11.	05 MPH		MRT	0.0 minutes

Dump or spread time per RT 0.50 minutes

Total hauling cycle time for this setting
(100% efficiency) 47.70 minutes

Operator efficiency correction 0.85 56.12 minutes

Job efficiency correction 0.90 62.36 minutes

Truck capacity (CY) 9.00 6.93 min/CY

Loading time, delay time per CY 0.25 min/CY

TIME (minutes) per cubic yard 7.18 min/CY

COST per CY computation

Cost of truck and operator per hour \$68.88 /hr.

Cost of truck and operator per minute \$1.15 /min

Cost per CY \$8.26 /CY

Spread and compact Water truck, Grader & Roller \$1.50 /CY

Size	Cost/Yd (Pit)	Cost Delivered w/o processing	Cost Delivered with processing
1½ - 0"	\$ 10.80	\$19.06	\$20.56
3 - 0"	\$ 9.11	\$17.37	\$18.87
Jaw Run	\$ 8.10	\$16.36	\$17.86

TIMBER CRUISE REPORT

1. **Sale Area Location:** Portions of Sections 15, 16, 21, 22, and 23, T11S, R8W, W.M., Lincoln County, Oregon.
2. **Fund Distribution:**
 - a. **Fund** BOF 100%
 - b. **Tax Code**
3. **Sale Acreage by Area:**

Area	Treatment	Gross Acres	Acreage Adjustment	Net Sale Acres	Acreage Comp. Method	Closure
1	Partial Cut	86	Cruise	70	Ortho photo, GIS, GPS	n/a
2	Partial Cut	90	Cruise	80	Ortho photo, GIS, GPS	n/a
3	Partial Cut	217	Cruise	194	Ortho photo, GIS, GPS	n/a
4	Partial Cut	3	Cruise	3	Ortho photo, GIS, GPS	n/a

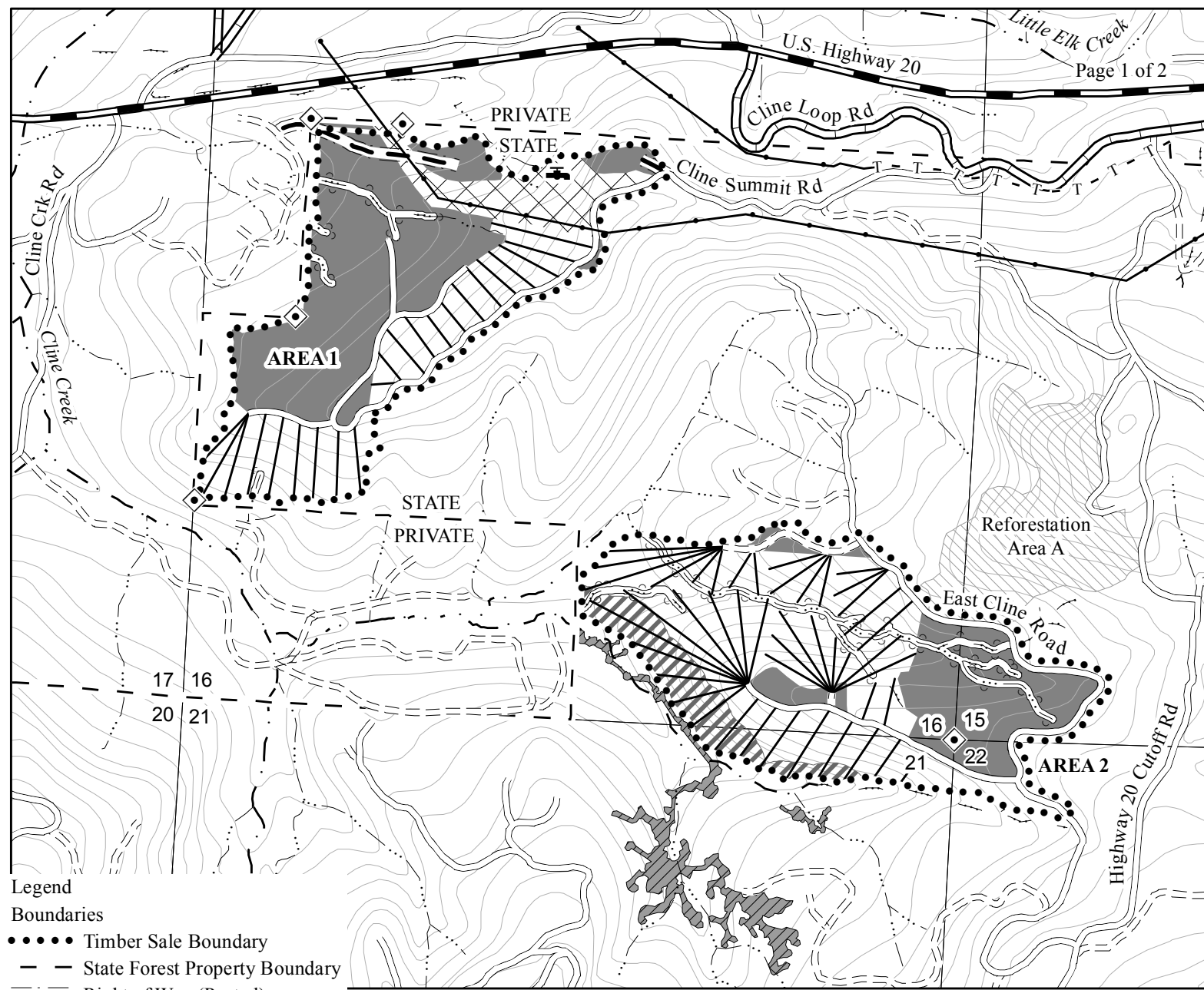
4. **Cruisers and Cruise Dates:** Sale Areas 1 and 2 were cruised by Trask Hodgeson in the winter of 2013. Area 3 was cruised by Evelyn Hukari in the fall of 2012. The volume for Area 4 was estimated based upon cruise data from the other sale areas.
5. **Cruise Method and Computation:** The sale consists of four partial cut areas that were cruised using variable plot sampling. All areas were cruised using a 20 BAF. Plots were randomly located throughout the areas with 29 plots in Area 1, 25 plots in Area 2, and 11 plots in Area 3. Trees contributing to excess basal area on each plot (above the residual basal area target of 140 ft²/acre) were measured for DBH and height. Data from measured trees was entered into a variable plot density management worksheet to determine removal volumes. Standard grade, defect, and breakage percentages were applied to the resulting volumes.

Stereo photos, digital ortho photos, LiDar data, and GPS data from a Garmin GPSmap 62s were used to map the boundaries for the sale, and ArcMap 10.1 was used to determine gross acreage.
6. **Timber Description:** Timber in Area 1 is 29 year-old planted Douglas-fir. Area 2 contains 26 year-old planted Douglas-fir. Area 3 is largely 26 year-old planted Douglas-fir with approximately 6 acres of 64 year-old Douglas-fir. Area 4 is 37 year-old planted Douglas-fir. Reserved tree species detected in the unit include red alder and bigleaf maple. Reserved trees were found in small amounts throughout Areas 1, 2, and 3.

7. Total Volume (MBF) by Species and Grade:

Species	Gross Cruise Volume	D & B	D & B (MBF)	Net Sale Volume
Area 1				
Douglas-fir	432	5%	22	410
Area 2				
Douglas-fir	473	5%	24	449
Area 3				
Douglas-fir	1156	5%	58	1098
Area 4				
Douglas-fir	20	5%	1	19
Total				
Douglas-fir	2081	5%	104	1976

Species	DBH	Net Vol.	2-Saw	3-Saw	4-Saw	% D & B
Area 1	Grade Percentages		--	70%	30%	
Douglas-fir	11.2	410	--	287	123	5%
Area 2	Grade Percentages		--	70%	30%	
Douglas-fir	11.1	449	--	314	135	5%
Area 3	Grade Percentages		--	70%	30%	
Douglas-fir	11.3	1098	--	769	329	5%
Area 4	Grade Percentages		--	70%	30%	
Douglas-fir	11.5	19	--	13	6	5%
Total	Grade Percentages		--	70%	30%	
Douglas-fir	11.3	1976	--	1383	593	5%



- Legend**
- Boundaries**
- Timber Sale Boundary
 - - - State Forest Property Boundary
 - - - Right of Way (Posted)
- Roads**
- == Highway
 - == County Road
 - == Surfaced Road
 - == Unsurfaced Road
 - - - New Construction
- Streams**
- - - Type F Stream
 - Type D Stream
 - - - Type N Stream
 - ~~~~~ Unposted Stream Buffer
- Yarding Method**
- Tractor Yarding Area
 - Cable Corridors
 - ▨ Potential Suitable Habitat
 - ▨ Seasonally Restricted Buffer
 - ▨ Low Stocked Area
 - ▨ Reforestation Area
- Other Features**
- Overhead Transmission Line
 - - - Buried Transmission Line
 - ◆ Land Survey Monument

LOGGING PLAN

OF TIMBER SALE CONTRACT NO. 341-15-39
CLINE PLUNKETT THIN
PORTIONS OF SECTIONS 15, 16, 21, 22 & 23,
T11S, R8W, W.M.,
LINCOLN COUNTY, OREGON

This product is for informational use and may not have been prepared for or be suitable for legal, engineering or survey purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of this information.

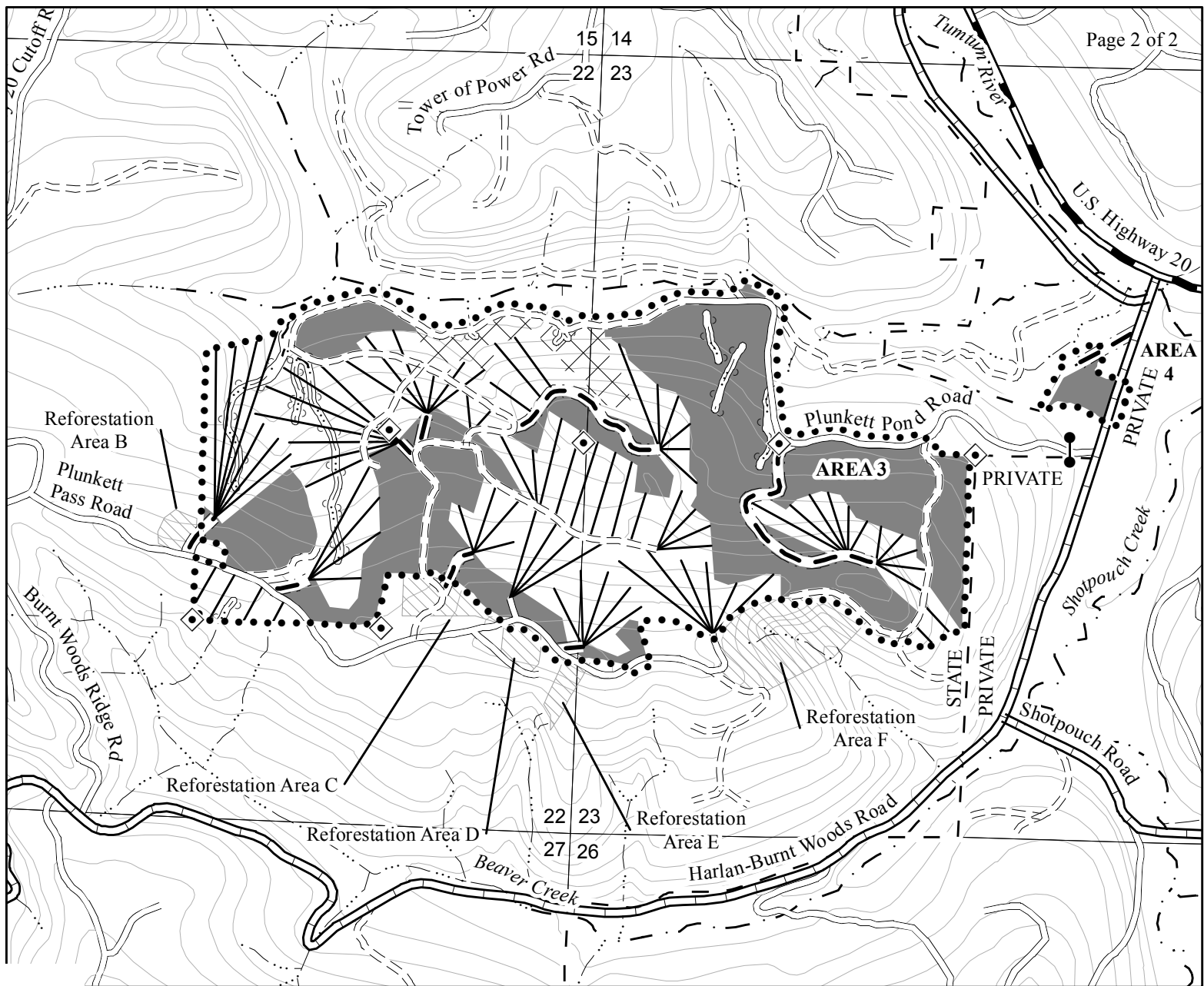
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AREA	NET ACRES	
	TRACTOR	CABLE
1 (PC)	43	27
2 (PC)	20	60
3 (PC)	91	103
4 (PC)	3	0
TOTAL	157	190



Created By: Blake McKinley
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Date: 08/28/2014



Legend

Boundaries

- Timber Sale Boundary
- - - State Forest Property Boundary
- - - Right of Way (Posted)

Roads

- ▬ Highway
- ▬ County Road
- ▬ Surfaced Road
- ▬ Unsurfaced Road
- ▬ New Construction

Streams

- · · Type F Stream
- ▬ Type D Stream
- · · Type N Stream
- ▬ Unposted Stream Buffer

Yarding Method

- ▬ Tractor Yarding Area
- ▬ Cable Corridors
- ▬ Low Stocked Area
- ▬ Reforestation Area
- ◆ Land Survey Monument

LOGGING PLAN

OF TIMBER SALE CONTRACT NO. 341-15-39
CLINE PLUNKETT THIN
PORTIONS OF SECTIONS 15, 16, 21, 22 & 23,
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Scale

1:12,000



AREA	NET ACRES	
	TRACTOR	CABLE
1 (PC)	43	27
2 (PC)	20	60
3 (PC)	91	103
4 (PC)	3	0
TOTAL	157	190



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Date: 05/13/2014