Pre-Operations Report

Operation Name: Rolling Rocks (Alternate)
County: Tillamook
Management Basin: Upper Salmonberry

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres
1	Modified Clearcut	123	105
Total	**Regeneration Harvest**	**123**	**105**
2	Moderate Partial Cut	95	91
Total	**Partial Cut Harvest**	**95**	**91**

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

The sale is located on a gentle ridgetop and moderate to steep slopes above Bathtub Creek, Belding Creek, and an unnamed tributary of the Salmonberry River.

Area 1 slopes have aspects that range from north to east and vary from 0% to 60%. Area 2 slopes have a varied aspect and range from 15% to 70%. Elevation ranges from 1680 to 2440 feet. The major soil types of the sale are Jewell, Rye, Killam and Osweg.

II. CURRENT STAND CONDITION:

The entire sale area burned in the 1945 Tillamook Burn. About a third of Area 2 was seeded in 1965 and an even smaller portion back in 1960. The northern third of Area 1 was fertilized in 1993. There are no other records of stand management for the sale area.

Only a small portion of Area 1 (20 acres) has been inventoried using the Stand Level Inventory (SLI) procedure and this stand has been classified as CSC (see table 3). The current stand structures of the unmeasured stands are estimated to be CSC, according to SLI expanded data. Stand classification plots will be taken prior sale preparation to confirm that the unmeasured stand in the clearcut unit is not complex structure (LYR or OFS).

It has been determined that expanded SLI data in the sale area significantly underestimates volume and basal area. This determination is based on field and aerial photo recon and also comparing similar measured stands to expanded data.

Area 1:
The stands within the sale area consist of Douglas-fir with <15 % hemlock, noble fir and other conifers. The current condition is estimated as CSC, with an understory of vine maple, dwarf Oregon grape, sword fern, and huckleberry. The stands are multi-cohort aging from 40-60 years old.

Area 2:
The stands within the sale area consist of Douglas-fir with <15 % hemlock, noble fir and other conifers. The current condition is estimated as CSC, with an understory of vine maple, dwarf Oregon grape, sword fern, and huckleberry. The stands are multi-cohort aging from 40-60 years old.

Snags and DWD:
The sale area has approximately 2-3 snags per acre and 3500+ cubic feet of DWD. These numbers are based on estimates from visual observation, expanded SLI data, and assumption. Most of these components are in decay classes 3-4 (remnant old growth from 1945 fire). There is little evidence of *Phellinus* or other disease.

Table 2. Stand Inventory Information

Area	Prescription	Stand ID [1]	Species	Age	DBH	BA	TPA	SDI	Net Acres [2]
1	MC[3]	7449*	DF	44	17	215	136	53	16
		7461	DF, WH	44	18	325	192	79	20
		7469*	DF, WH	44	16	203	146	51	59
		7482*	DF	39	14	178	168	48	10
		Target [5]	*REG*						*105*
2	PC-M[3]	7477*	DF, WH	44	16	203	146	51	14
		7482*	DF	39	14	178	168	48	38
		7508*	DF	39	14	178	168	48	39
		Target [5]			*18*	*140*	*80*	*33*	*91*

[1] The source of stand inventory information is from SLI inventory grown forward to 2007. Stand ID's shown with a (*) are unmeasured stands, and the source of inventory information for these stands is expanded SLI data.
[2] The acres are based on GIS and exclude existing and planned roads, stream buffers, green tree retention areas, and non-thinnable areas.
[3] MC is Modified Clearcut, PC-M is Moderate Partial Cut.
[4] The Target row for partial cut areas identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

III. DESIRED FUTURE CONDITION / VISION:

According to the Forest Grove District's landscape design, the desired future condition (DFC) for Area 1 is 95% General, 3% LYR, and 1% OFS. The sale area includes 3 acres of LYR and 1 acre of OFS because the DFC map was developed at a landscape-level scale with a 'broad-brush' approach. In contrast,

the sale boundary was delineated at a site-specific scale, based on field and photo reconnaissance, and the location of the sale boundary reflects topographic and operational considerations. The difference in these scales sometimes results in slivers of DFC complex being included in clearcut prescriptions. Area 2 is 57% GEN and 43% LYR.

Area 1:

This area will be managed heavily for production of Douglas-fir. Stands will be converted to regeneration every 60-65 years. This appears to be a very productive site with little disease, access, harvesting, riparian or other issues. Maintaining some species diversity, legacy trees (scattered and clumped), snags and down woody components will continue to enhance wildlife habitat potential.

Area 2:

The area in DFC-General shares the same vision as Area 1.

The goal for the DFC-Layered area is to keep the stand's overstory healthy and growing rapidly and to initiate the process of developing a healthy understory layer of trees and vegetation. The stand will become a much more complex stand than its current state, in terms of species composition, decadent material, tree size and density variation, etc. Douglas-fir will dominate the overstory with >25% other conifer. Intermediate layers of shade tolerant conifers will be present. Alder will be concentrated along springs and riparian areas.

Table 3. Stand Structure Information

Area	Prescription	Stand ID	Current	Post Harvest [1]	Desired Future	Acres
1	MC	7449	CSC[2]	REG	GEN	13
					LYR	3
		7461	CSC	REG	GEN	20
		7469	CSC[2]	REG	GEN	58
					OFS	1
		7482	CSC[2]	REG	GEN	10
2	PC-M	7477	CSC[2]	UDS	GEN	14
		7482	CSC[2]	UDS	GEN	38
		7508	CSC[2]	UDS	LYR	39

[1] The stand is expected to develop into this condition in the five to ten years after this operation is completed.
[2] Current stand condition is based on expanded data; see discussion above.

IV. PROPOSED MANAGEMENT PRESCRIPTION AND PATHWAY:

Area 1:

This is a modified clearcut. SAH management strategies will be implemented for this entry. Leave trees will consist of clumps and individual trees scattered in strategic locations throughout the unit. There will be topping of 2 trees per acre for snag creation. Another regeneration harvest will occur approximately 60 years post harvest. In the interim there will be a pre-commercial thinning at age 15 and 1 moderate partial cut harvest entry at age 40.

Area 2:

This is a moderate partial cut harvested to an RD of 33 and a basal area target of 140. After harvest, average DBH will be about 18 inches. SAH management strategies will be implemented for this entry. The prescription will also allow the development of an abundant understory to achieve an UDS condition for the next several years. By preserving all trees other than Douglas-fir the total species composition will shift to a higher percentage of western hemlock and noble fir. Understory and intermediate layers of conifer will develop over the next several years. There will be tree topping of 1 tree per acre for snag creation to add additional structure complexity. More snags and DWD will develop naturally.

In 15-20 years the area in DFC-Layered will be a good target for another partial-cut entry to keep the stand on its pathway to LYR structure. Additional snag creation will be assessed at time of harvest planning.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%		X
Planned Quarter:		1st	

	Conifer	Hardwood	Total
Net Volume (MBF)	5,500		5,500
Stumpage Value ($/MBF)	$300		
Estimated Gross Value	$1,650,000		$1,650,000
		Project Costs:	$164,000
		Estimated Net Value:	$1,486,000

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale area access is via Storey Burn to the Standard Grade Road to the Belding and Red Rock Hill Roads. All of these roads are currently all-weather, crushed rock surface roads. This is a total distance of approximately 16 miles from the summit of Highway 6.

Access crosses several miles of private ownership. ODF has easements for all roads. There are 2 gates along the route which require keys. There will be no road use fees.

Approximately 1.7 miles of road will be constructed to provide sale access costing approximately $119,000. New construction is limited to ridge tops and gentle to moderate side slopes. Proposed roads will not cross any perennial streams.

Approximately 0.9 miles of road will be improved with the timber sale for better access and to improve sustainability. Estimated cost for improvement is $45,000. Improvement will likely consist of brushing, adding a lift of rock, and culvert installation/replacement.

Estimated cost of project work is $164,000.

The operation will be 50% cable yarding and 50% ground based yarding (percentages are based on area).

Table 5. Transportation Management Summary (Miles).

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construction	0	0	1.7	0
Improvement	0	0	0.9	0
Maintenance	0	15.0	1.6	0
Closure/Vacation	0	0	0	0

VII. AQUATIC RESOURCES AND WATER QUALITY:

The entire sale area is within the South Fork Salmonberry River basin. This basin has been designated as a Salmon Anchor Habitat (SAH) Basin. SAH Basin Strategies will be applied to streams within the SAH boundary during the timber sale layout and contract development.

The sale area is mostly limited to ridgetops and upper slopes and headwaters. Area 1 is located on slopes above Bathtub Creek and Belding Creek (both Medium-Type F), Area 2 above the Salmonberry River (Large-Type F) and Red Rock Creek (Small-Type F). A few small perennial and seasonal Type N streams begin within the sale areas.

According to Forest Grove's GIS streams layer, streams have not been verified for fish presence. All streams assumed Type F will be treated as Type F until they are verified as such. All streams will be managed in accordance to SAH strategies.

This operation involves an activity that is listed in the National Marine Fisheries Service (NMFS) adopted rules under Section 4(d) of the Endangered Species Act. The haul route crosses or is in close proximity to a stream with listed fish.

In order to protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods include (but are not limited to) maintaining culverts and other road drainage structures, and using sediment control devices in road ditches when necessary.

High quality crushed rock road surfaces will be maintained and log hauling will be restricted between November 1st and March 31st of each year. Restrictions may include limiting the number of loads hauled per day, not hauling during periods of heavy moisture, or having an alternate haul route. Culvert installment and replacement in live streams will be conducted between July 1 and September 15. Operations outside of this period will be reviewed with ODFW.

VIII. T&E SPECIES CONSIDERATIONS:

The sale areas have been reviewed with the ODF Northwest Oregon Area Biologist.

Surveys for northern spotted owls were conducted in 2007 due to the presence of potentially suitable spotted owl habitat within and adjacent to the timber sale area. Rolling Rocks was surveyed for spotted owls three times in 2007 with no responses, and the second year of survey will be completed in 2008. All surveys were/will be conducted in accordance with USFWS protocol.

Surveys for marbled murrelets are not required, due to the absence of potentially suitable habitat within the sale area. The District T&E Coordinator made the determination that the sale area is non-suitable habitat for marbled murrelets. The ODF wildlife biologist for the NW Oregon Area reviewed and approved this determination.

The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known listed plant locations, as well as against local records in the Land Management Classification System (LMCS). No listed plant records were identified within or adjacent to the sale areas.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

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

There are a few isolated high landslide hazard locations in Area I. High landslide hazard locations are scattered across the southern half of Area II. Area I drains into unnamed tributaries of the Salmonberry River. Area II drains into Bathtub Creek, Belding Creek, and an unnamed tributary of the Salmonberry River. The risk of landslides delivering directly to unnamed tributaries of the Salmonberry River from Area I and Area II is low. The risk of landslides delivering directly to Bathtub Creek from Area II is low. The risk of landslides delivering directly to Belding Creek from Area II is Moderate. Portions of Area II that drain to Bathtub Creek appear to be located on a large, deep-seated landslide landform (*per Northwest Oregon Area Geotechnical Specialist*).

The geotechnical specialist will be consulted if evidence of recent landslide activity is identified during sale layout.

X. RECREATION RESOURCES:

The sale area is designated as Non-Motorized in the Tillamook State Forest Comprehensive Recreation Plan (1993). There are no trails or designated recreational activities within the vicinity of the sale area. Due to the location and difficult access, not many people use this area.

XI. CULTURAL RESOURCES:

During initial recon of the sale, a cultural resource site was discovered within Area 1. District personnel and the Public Use Coordinator (ODF Salem Staff) visited the site and researched its potential historic use. It was determined that this area was a site for milling railroad ties in the early 1900's. The site is within the harvest unit but will be posted as a green tree retention area and protected from harvest and harvesting activities. Total area of the site is roughly 2 acres. The site will be added to the Tillamook State Forest Cultural Resource Inventory GIS database.

No other cultural resource records were identified within or adjacent***** to the operation areas. If any other significant cultural resources are located during sale preparation, the Public Use Coordinator will be consulted regarding potential protection measures.

*******Adjacent refers to approximately one tree length from an operation area. For the purpose of this screen, a 200 foot buffer around the sale boundary and proposed road construction right-of-way was assessed for cultural resource locations.*

XII. SCENIC RESOURCES:

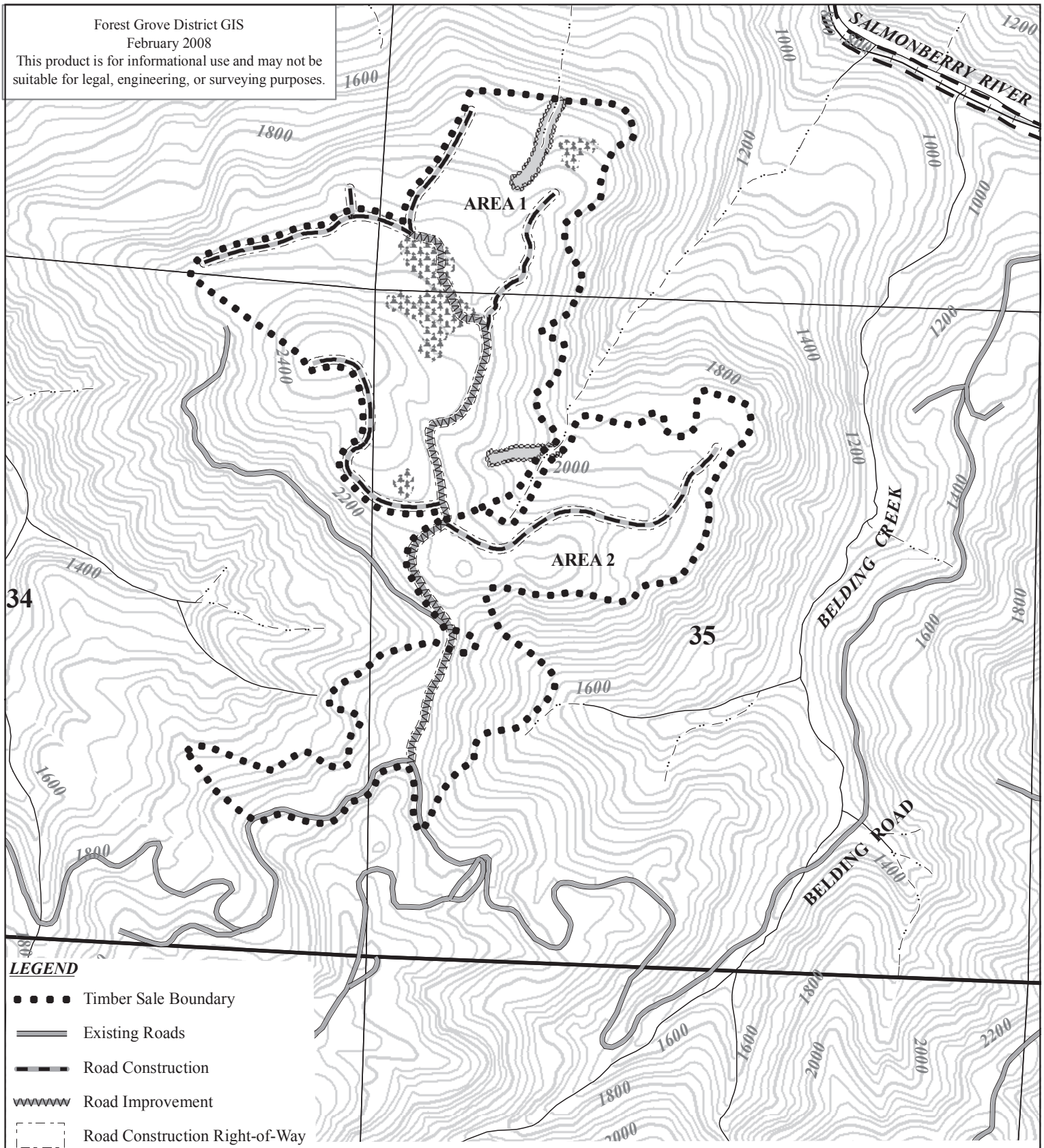
The sale area is in an area of low visual sensitivity.

XIII. OTHER RESOURCE CONSIDERATIONS:

All known survey corners and witness trees shall be protected from damage during any operations.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

The sale area contains Focused and Special Stewardship, Aquatic and Riparian Habitat Subclass. 88 acres of the sale area is also classified as Focused Stewardship, Wildlife Subclass, because the sale area is within the Lousignont Creek/Upper Nehalem River SAH. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.



FY 2009
ROLLING ROCKS
PORTIONS OF SECTIONS 26 & 27, T03N, R07W, W.M.
TILLAMOOK COUNTY, OREGON

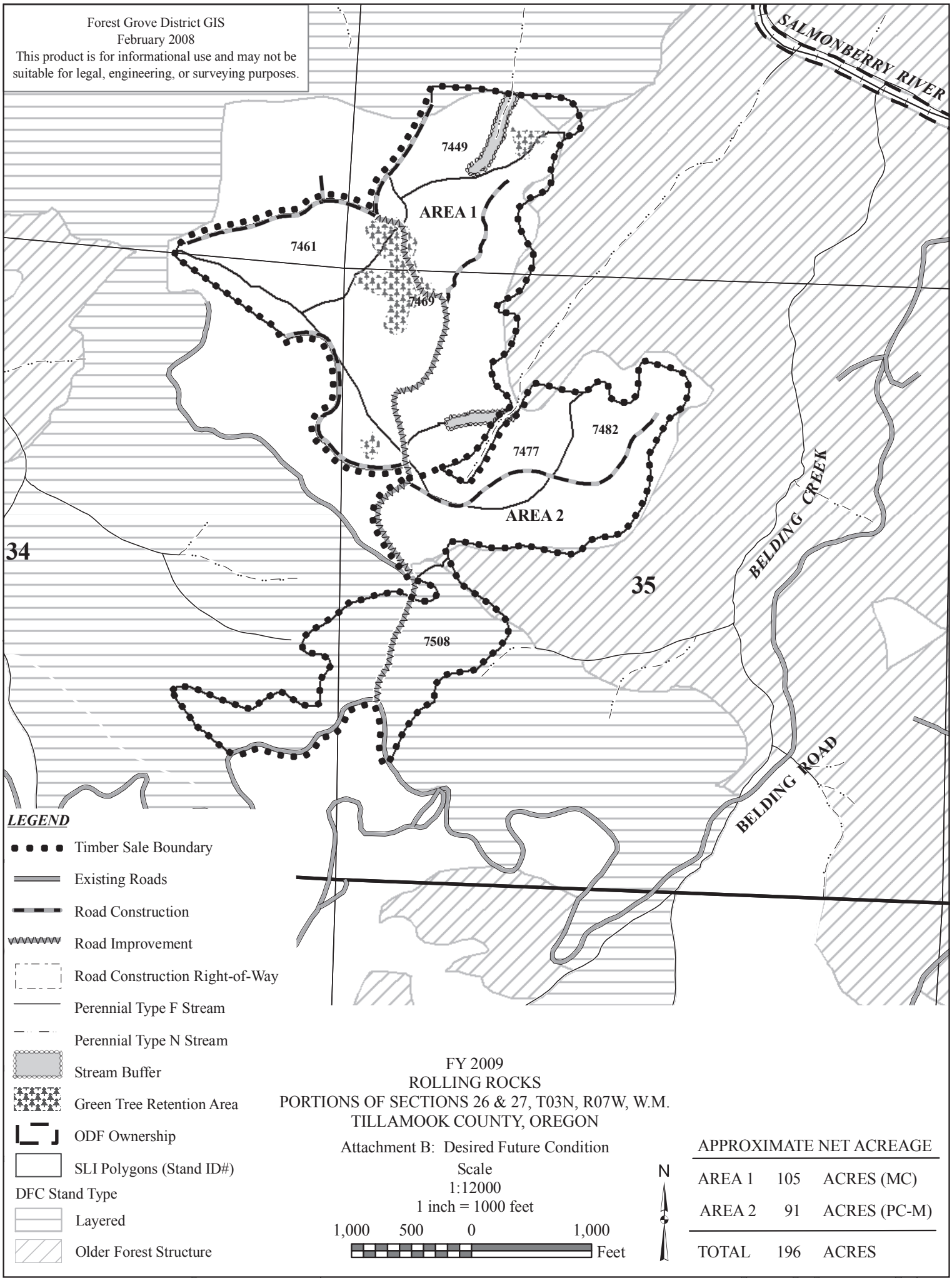
Attachment A: Topography

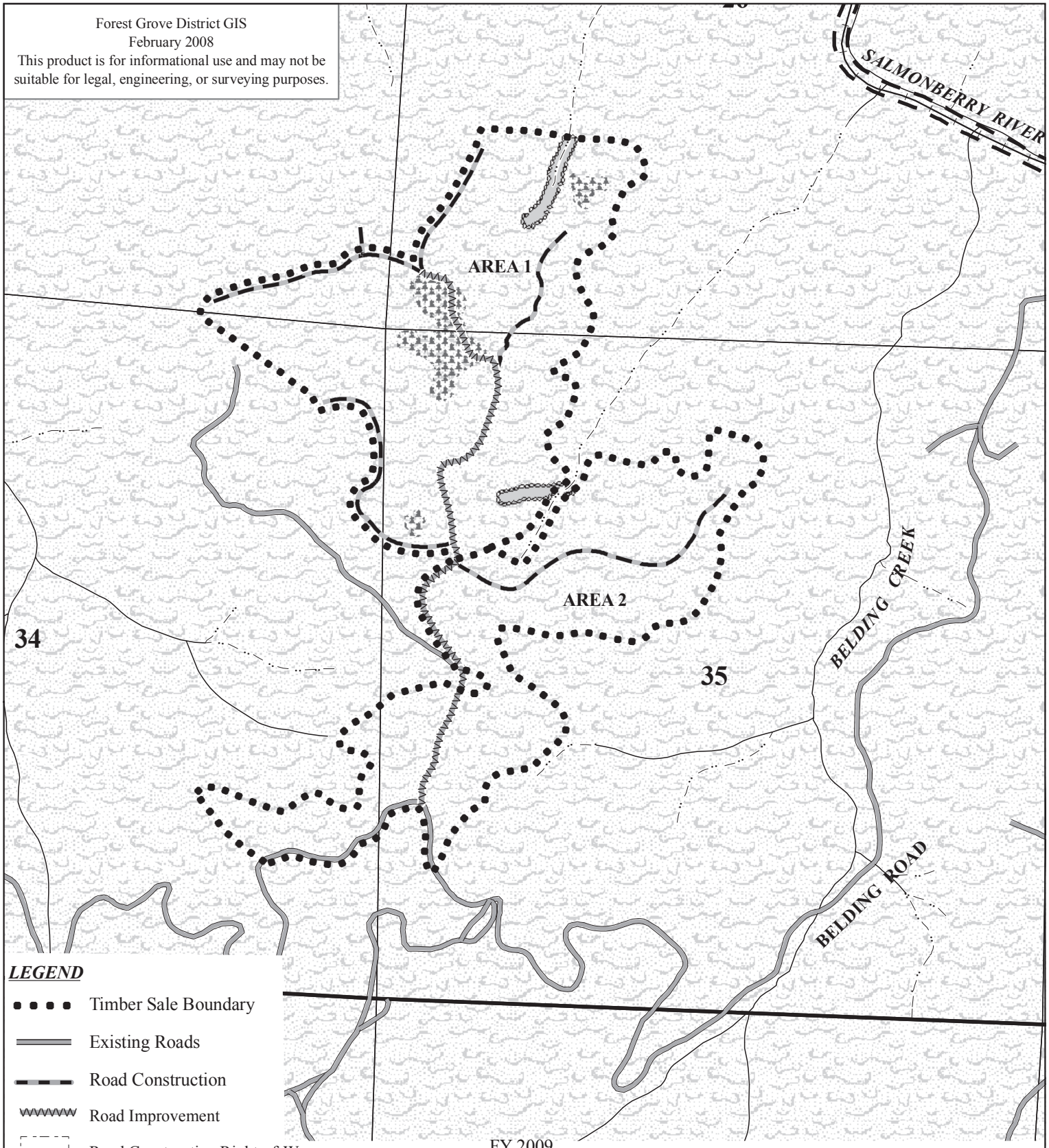
Scale
1:12000
1 inch = 1000 feet

1,000 500 0 1,000
Feet

N

APPROXIMATE NET ACREAGE		
AREA 1	105	ACRES (MC)
AREA 2	91	ACRES (PC-M)
TOTAL	196	ACRES


Forest Grove District GIS
February 2008
This product is for informational use and may not be suitable for legal, engineering, or surveying purposes.
SALMONBERRY RIVER
7449
AREA 1
7461
7469
7482
7477
AREA 2
34
35
7508
BELDING CREEK
BELDING ROAD
LEGEND
Timber Sale Boundary
Existing Roads
Road Construction
Road Improvement
Road Construction Right-of-Way
Perennial Type F Stream
Perennial Type N Stream
Stream Buffer
Green Tree Retention Area
ODF Ownership
SLI Polygons (Stand ID#)
DFC Stand Type
Layered
Older Forest Structure
FY 2009
ROLLING ROCKS
PORTIONS OF SECTIONS 26 & 27, T03N, R07W, W.M.
TILLAMOOK COUNTY, OREGON
Attachment B: Desired Future Condition
Scale
1:12000
1 inch = 1000 feet
1,000 500 0 1,000
Feet
N
APPROXIMATE NET ACREAGE
AREA 1 105 ACRES (MC)
AREA 2 91 ACRES (PC-M)
TOTAL 196 ACRES



FY 2009
ROLLING ROCKS
PORTIONS OF SECTIONS 26 & 27, T03N, R07W, W.M.
TILLAMOOK COUNTY, OREGON

Attachment C: Key Resources (SAH)

Scale
1:12000
1 inch = 1000 feet

1,000 500 0 1,000 Feet

N

APPROXIMATE NET ACREAGE		
AREA 1	105	ACRES (MC)
AREA 2	91	ACRES (PC-M)
TOTAL	196	ACRES