

# PART III: EXHIBITS

State Timber Sale Contract  
No. 341-08-31  
Roger Thin

EXHIBIT B

Page 1 of 3  
629-Form 341-203  
Revised 06/97

## OREGON DEPARTMENT OF FORESTRY

### TIMBER SALE OPERATIONS PLAN

(See Page 2 for instructions)



Date Received by STATE: \_\_\_\_\_

(5) State Brand Information (complete):

(1) Contract No.: 341-08-31

(2) Sale Name: Roger Thin

(3) Contract Expiration Date: October 31, 2009

Project Completion Dates: \_\_\_\_\_

(4) Purchaser: \_\_\_\_\_

(6) Purchaser Representatives:

Projects: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell/Other

Phone: \_\_\_\_\_

Home: \_\_\_\_\_

Projects: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell/Other

Phone: \_\_\_\_\_

Home: \_\_\_\_\_

Projects: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell/Other

Phone: \_\_\_\_\_

Home: \_\_\_\_\_

Projects: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell/Other

Phone: \_\_\_\_\_

Home: \_\_\_\_\_

Logging: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell/Other

Phone: \_\_\_\_\_

Home: \_\_\_\_\_

Logging: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell/Other

Phone: \_\_\_\_\_

Home: \_\_\_\_\_

Logging: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell/Other

Phone: \_\_\_\_\_

Home: \_\_\_\_\_

Logging: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell/Other

Phone: \_\_\_\_\_

Home: \_\_\_\_\_

(7) State Representatives:

Projects: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell/Other

Phone: \_\_\_\_\_

Home: \_\_\_\_\_

Logging: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell/Other

Phone: \_\_\_\_\_

Home: \_\_\_\_\_

(8) Name of Subcontractors & Starting Dates:

Projects: No(s) \_\_\_\_\_ - \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

No(s) \_\_\_\_\_ - \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

No(s) \_\_\_\_\_ - \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

No(s) \_\_\_\_\_ - \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Logging: Felling \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Yarding: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

(9) Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(10) Operations Map: Attach a copy of timber sale Exhibit A or other suitable map which plainly shows the items listed on the instruction sheet.

EXHIBIT B  
INSTRUCTION SHEET FOR OPERATIONS PLAN

**SUBMIT ONE COPY OF PLAN TO STATE**

Operations shall be limited to the work shown in the plan until a revised plan or supplemental plan is submitted covering additional work. Compliance with this plan is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act. If STATE has prepared a required Forest Practices Act (FPA) "Written Plan" for operations, PURCHASER shall comply with all provisions of the Written Plan.

**Item No. (from Page 1)**

- (5) All sales require you to use a brand furnished by STATE. If the State brand has not been assigned when the plan is submitted, it will be furnished and assigned later. Complete drawing. If more than one brand is assigned to the sale, complete both drawings.
- (6) The contract requires you to have a designated representative available on the sale area or work location who is authorized to receive in your behalf any notice or instruction given by STATE and to take action in regard to performance under the contract. If logging and project work is widely separated, a representative is required for each.
- (7) The STATE representative will be designated when your plan is approved and is the person who will inspect and issue instructions regarding performance.
- (8) Show names of subcontractors to be used for any or all phases of the operations. If subcontractors are not known, or are changed later, give notification to the STATE representative prior to commencement of work by subcontractor.  
  
Show projected dates for commencement of both projects and logging. If projected dates need to be changed at a later date, notification must be given to the STATE representative by supplemental plan or otherwise, prior to commencement of such operations.
- (10) The STATE representative will furnish extra copies of Exhibit A of the contract for your use in preparing the operations map. The map shall use the following legend and show:
  1. Landing locations, approximate setting boundaries, and probable sequence of logging the settings. Number the settings in sequence.
  2. Locations of spur roads planned for construction, other than those required by the timber sale contract. Provide spur road specifications.
  3. Location of proposed tractor yarding roads. Show if and how marked on the ground.
  4. Location of temporary stream crossings.
  5. List the sequence of performing project work.
  6. Location of rock sources - attach pit development plans.







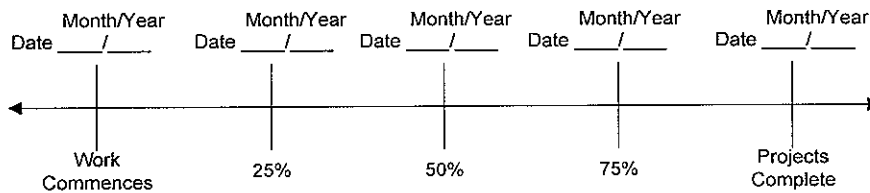
	Cable landing, with numbers for sequence.
	Tractor landing with alphabetical sequence.
	Approximate setting boundary.
	Spur truck roads.
	Tractor yarding roads.
	Temporary stream crossings.

EXHIBIT B  
OPERATIONS PLAN

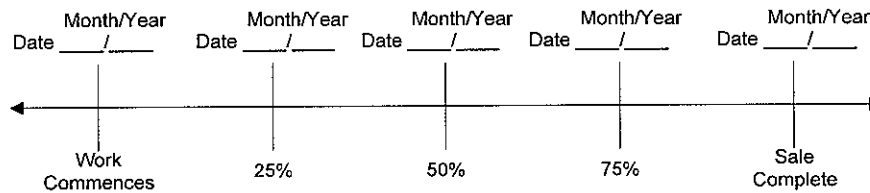
**Completion Timeline**

Indicate on the appropriate timeline below, the dates by which you plan to complete the work as required under this contract. The purpose of this section is to develop a plan that will ensure you complete the work as required, and meet the interim completion date(s) and contract expiration date. This plan is incorporated and made a part of the contract. When, in the opinion of STATE, operations are not commencing in a manner that meets the intent of this plan, you may be placed in violation of contract and your operations suspended until an amended plan is submitted and approved by STATE.

**Projects**



**Harvest & Other Requirements**



The Federal Endangered Species Act (ESA) prohibits a person from taking any federally listed threatened or endangered species. Taking under the federal ESA may include alteration of habitat. STATE's approval of this plan does not certify that PURCHASER's operation under the plan is lawful under the federal ESA. As provided in the timber sale contract, PURCHASERS must comply with all applicable state, federal, and local laws.

PURCHASER's compliance with this plan is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act.

APPROVED: Date: \_\_\_\_\_

SUBMITTED BY:  
PURCHASER

STATE OF OREGON - DEPARTMENT OF FORESTRY

\_\_\_\_\_  
Title \_\_\_\_\_

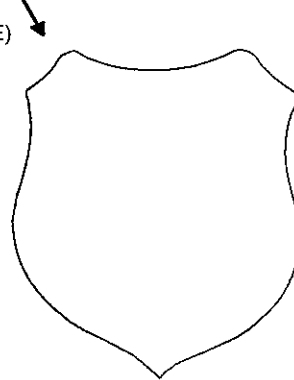
\_\_\_\_\_  
Title \_\_\_\_\_

Original: Salem  
cc: District File  
Purchaser

EXHIBIT C – SAWMILL GRADE

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

- (1) ORIGINAL REGISTRATION  Date \_\_\_\_\_  
 REVISION NUMBER \_\_\_\_\_  Date \_\_\_\_\_  
 CANCELLATION  Date \_\_\_\_\_
- (2) TO: \_\_\_\_\_  
 (Third Party Scaling Organization)
- (3) FROM: Tillamook (06) Phone 503-842-2545  
 (State Forestry District)  
 Address 5005 Third Street, Tillamook, OR 97141
- (4) PURCHASER: \_\_\_\_\_  
 Address \_\_\_\_\_

- (12) SALE NAME Roger Thin  
 COUNTY Tillamook
- (13) STATE CONTRACT NUMBER 341-08-31
- (14) SCALE: westside  eastside  cubic foot
- (15) STATE BRAND REGISTRATION NUMBER \_\_\_\_\_
- (16) BUREAU BRAND CODE NUMBER \_\_\_\_\_
- (17) STATE BRAND INFORMATION:  
 (COMPLETE) 

(5) MINIMUM SCALING SPECIFICATIONS			CLASS		
SPECIES	SCALING DIAMETER INCHES	*NET SCALE VOLUME	PER MBF	** SUM	SUB
Conifers	--	10	X		
Hardwoods	--	10	X		

\* Apply minimum volume test to whole logs over 40' Westside; 20' Eastside.  
 \*\* Sum (if indicated); see instructions and explain in Item (20).

- (6) WESTSIDE SCALE: YES  NO   
 Actual taper all logs over 40' scaling length
- (7) EASTSIDE SCALE: YES  NO   
 \*Actual taper butt logs over 40' scaling length
- (8) PENCIL BUCK YES  NO   
 back to Minimum Scaling Diameter \_\_\_\_\_
- (9) ADD-BACK VOLUME -- YES  NO   
 Deductions due to delay

- (18) PAINT REQUIRED: YES   
 COLOR Orange

(19) SPECIAL SCALES
PEELABLE CULL (all species)
UTILITY/PULP (all species)
<b>NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE</b>
OTHER: _____
OTHER: _____

(10) APPROVED SCALING LOCATIONS	Species	Yard	Truck

(20) REMARKS: \_\_\_\_\_  
 \_\_\_\_\_

Operator's Name (Optional inclusion by District): \_\_\_\_\_

(11) NOTICE OF CANCELLATION OF BRAND:  
 Effective Date: \_\_\_\_\_  
 \_\_\_\_\_  
 State Forester's Representative

(21) SIGNATURES:  
 \_\_\_\_\_ Date  
 Purchaser or Authorized Representative  
 \_\_\_\_\_ Date  
 State Forester Representative

**Notify the District within one hour when branding or painting is inadequate for quick identification, the receipts are missing, not correctly or completely filled out, and/or when logs presented for scaling are impossible to scale accurately.**

**EXHIBIT C – SAWMILL GRADE**

**INSTRUCTIONS FOR FORM 343-307 (rev. 5/01)**

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires Item (21). Complete date.
- (2) Designate Third Party Scaling Organization (TPSO). Send 4 copies to TPSO, 1 to purchaser, 1 to Salem, and keep such copies as to district needs.
- (3) State District office, address and phone.
- (4) Enter Purchaser's business name and address as it appears on the Contract.
- (5) Minimum Scaling Specifications. Review Section 2040 or 2045, "Log Removal," of the Contract. Species, or combined species can be separate entries. Information serves as a basis for scaling (see also Items (13) thru (17)), and is required to show existence on the sale. **PerM** (per MBF). **SUM** (lump sum material). **SUB** (submerchantable material. SUB, as used by the State, references that material containing at least 10 bf (net) but less than the lower merchantable net volume limit or grade requirements for other merchantable (PerM) entries. PerM, SUM, and Sub must be indicated by checking the appropriate column. Species with the same specifications and value are combined into one entry. PerM and Sub require scaling therefore complete specifications. SUM need not be scaled, hence no specifications. Loads containing only SUM are to be ticketed if so instructed in Item (19). Mixed loads of SUM, PERM and/or subspecies will always be scaled.
- (6) Westside -- actual taper segment scale. Check Yes or No. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Westside).
- (7) Eastside -- actual taper/taper table segment scale. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Northwest Log Rules Eastside). Items with \* follow U.S. Forest Service Eastside rules.
- (8) Pencil Buck. Check NO if a westside sale, optional for eastside sales.
- (9) Add-Back Volume. Add-Back is normally checked YES. Scaler records deductions (sap rot, weather checks, etc.) caused by an abnormal delay in removal. Enter separately on scale ticket. TPSO provides State with summaries that include this as a net volume by species. Salvage sales and certain other circumstances may require that "NO" be checked.
- (10) Show scaling locations only applicable to TPSO. Not necessary to list markets. If all species are scaled at same location, enter "ALL."
- (11) When logging is complete, recall branding hammers, date and sign where indicated, check CANCELLATION box at top of form, and send to TPSO.
- (12) Enter sale name and county.
- (13) Enter sale Contract number.
- (14) Check Westside or Eastside log scale. Cubic foot refers to Northwest Log Rules Cubic Foot Scale.
- (15) Oregon Forest Products Brand Registry Number (optional).
- (16) DO NOT USE -- TPSO will fill in when applicable.
- (17) Show one brand only. Complete drawing. If more than one brand is assigned to the sale, (1) make separate form for each brand, and (2) on each form, explain and show other brand(s) under REMARKS, Item 19.
- (18) Check YES and designate orange.
- (19) Special Scales. These are the Special Scales that will be applied. If "Other" is indicated, please describe. Give comments in Item (19).
- (20) Use this space to designate weight conversion factors, or any other explanations to clarify scaling requirements. If additional scaling locations are approved, prepare another form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (21) Require purchaser to sign and date completed form.

EXHIBIT C – PULP SORT

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

(1) ORIGINAL REGISTRATION  Date \_\_\_\_\_  
 REVISION NUMBER \_\_\_\_\_  Date \_\_\_\_\_  
 CANCELLATION  Date \_\_\_\_\_

(2) TO: \_\_\_\_\_  
 (Third Party Scaling Organization)

(3) FROM: Tillamook (06) Phone 503-842-2545  
 (State Forestry District)  
 Address 5005 Third Street, Tillamook, OR 97141

(4) PURCHASER: \_\_\_\_\_  
 Address \_\_\_\_\_

(12) SALE NAME Roger Thin  
 COUNTY Tillamook

(13) STATE CONTRACT NUMBER 341-08-31

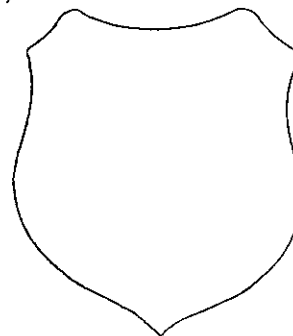
(14) SCALE: \*By weight  eastside  cubic foot

(15) STATE BRAND REGISTRATION NUMBER \_\_\_\_\_

(16) BUREAU BRAND CODE NUMBER \_\_\_\_\_

(17) STATE BRAND INFORMATION:

(COMPLETE)



MINIMUM SCALING SPECIFICATIONS			CLASS		
SPECIES	SCALING DIAMETER INCHES	*NET SCALE VOLUME	PER MBF	** SUM	SUB
Pulp	*By weight			<input type="checkbox"/>	
				<input type="checkbox"/>	

\* Apply minimum volume test to whole logs over 40' Westside; 20' Eastside.  
 \*\* Sum (if indicated): see instructions and explain in Item (20).

(6) WESTSIDE SCALE: YES  NO   
 Actual taper all logs over 40' scaling length

(7) EASTSIDE SCALE:    
 \*Actual taper butt logs over 40' scaling length

(8) PENCIL BUCK    
 back to Minimum Scaling Diameter \_\_\_\_\_

(9) ADD-BACK VOLUME --    
 Deductions due to delay

(18) PAINT REQUIRED: YES   
 COLOR Blue

(19) SPECIAL SCALES
PEELABLE CULL (all species)
UTILITY/PULP (all species)
<b>NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE</b>
OTHER: <b>Convert weight to MBF, using a factor of 10 tons per MBF.</b>

(10) APPROVED SCALING LOCATIONS	Species	Yard	Truck
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

(20) REMARKS: \*Pulp logs shall be weighed in lieu of Scaling. Tons shall be short tons or 2,000 lbs.  
 (1) Weigher will attach a machine-printed weight ticket to the Scaler Receipt part of the STATE Log Load Receipt and mail them weekly to the approved Third-Party Scaling Organization (TPSO). (2) The TPSO shall notify the Tillamook District Office, (503) 842-2545, immediately if the above requirements are not met.

Operator's Name (Optional inclusion by District): \_\_\_\_\_

(21) SIGNATURES:  
 \_\_\_\_\_  
 Purchaser or Authorized Representative Date

\_\_\_\_\_ Date  
 State Forester Representative

(11) NOTICE OF CANCELLATION OF BRAND:  
 Effective Date: \_\_\_\_\_

\_\_\_\_\_  
 State Forester's Representative

**EXHIBIT C – PULP SORT**

**INSTRUCTIONS FOR FORM 343-307 (rev. 5/01)**

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires Item (21). Complete date.
- (2) Designate Third Party Scaling Organization (TPSO). Send 4 copies to TPSO, 1 to delivery location, 1 to purchaser, 1 to Salem, and keep such copies as to district needs.
- (3) State District office, address and phone.
- (4) Enter Purchaser's business name and address as it appears on the Contract.
- (5) Minimum Scaling Specifications. Review Section 2040 or 2045, "Log Removal," of the Contract. Species, or combined species can be separate entries. Information serves as a basis for scaling (see also Items (13) thru (17)), and is required to show existence on the sale. **PerM** (per MBF). **SUM** (lump sum material). **SUB** (submerchantable material). SUB, as used by the State, references that material containing at least 10 bf (net) but less than the lower merchantable net volume limit or grade requirements for other merchantable (PerM) entries. PerM, SUM, and Sub must be indicated by checking the appropriate column. Species with the same specifications and value are combined into one entry. PerM and Sub require scaling therefore complete specifications. SUM need not be scaled, hence no specifications. Loads containing only SUM are to be ticketed if so instructed in Item (19). Mixed loads of SUM, PERM and/or subspecies will always be scaled.
- (6) Westside -- actual taper segment scale. Check Yes or No. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Westside).
- (7) Eastside -- actual taper/taper table segment scale. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Northwest Log Rules Eastside). Items with \* follow U.S. Forest Service Eastside rules.
- (8) Pencil Buck. Check NO if a westside sale, optional for eastside sales.
- (9) Add-Back Volume. Add-Back is normally checked YES. Scaler records deductions (sap rot, weather checks, etc.) caused by an abnormal delay in removal. Enter separately on scale ticket. TPSO provides State with summaries that include this as a net volume by species. Salvage sales and certain other circumstances may require that "NO" be checked.
- (10) Show scaling locations only applicable to TPSO. Not necessary to list markets. If all species are scaled at same location, enter "ALL."
- (11) When logging is complete, recall branding hammers, date and sign where indicated, check CANCELLATION box at top of form, and send to TPSO.
- (12) Enter sale name and county.
- (13) Enter sale Contract number.
- (14) Check Westside or Eastside log scale. Cubic foot refers to Northwest Log Rules Cubic Foot Scale.
- (15) Oregon Forest Products Brand Registry Number (optional).
- (16) DO NOT USE -- TPSO will fill in when applicable.
- (17) Show one brand only. Complete drawing. If more than one brand is assigned to the sale, (1) make separate form for each brand, and (2) on each form, explain and show other brand(s) under REMARKS, Item 19.
- (18) Check YES and designate blue.
- (19) Special Scales. These are the Special Scales that will be applied. If "Other" is indicated, please describe. Give comments in Item (19).
- (20) Use this space to designate weight conversion factors, or any other explanations to clarify scaling requirements. If additional scaling locations are approved, prepare another form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (21) Require purchaser to sign and date completed form.

EXHIBIT D  
FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
14 feet	12 feet	A to B	0+00 to 117+00	Outslope
14 feet	12 feet	C to D	0+00 to 18+25	Outslope
14 feet	12 feet	E to F	0+00 to 22+55	Outslope

CLEARING. This work shall consist of clearing, removing, and disposing of all trees, Snags, Down Timber, brush, surface objects, and protruding obstructions within the clearing limits.

Where clearing limits have not been marked, the "Road Brushing Specifications" in Exhibit D shall apply. Clearing debris shall not be placed or permitted to remain in or under any road embankment sections. Clearing debris shall not be left lodged against standing trees.

All danger trees, leaners, and Snags outside the clearing limits which could fall and hit the road shall be felled.

GRUBBING. This work shall consist of the removal or digging out of stumps and protruding objects.

All stumps shall be completely removed within the limits of required grubbing. Stumps overhanging cutslopes shall be removed. Grubbing debris shall not be placed or permitted to remain in or under any road embankment sections. Grubbing debris shall not be left lodged against standing trees. Grubbing classifications are as follows:

New construction - From the top of the cutslope to the toe of the fill.

Improvements and reconstructions - 4 feet back from the shoulder of the subgrade or the ditch, whichever is widest, or as marked in the field.

Trees outside the clearing limits shall not be felled unless approved in writing by STATE.

CLEARING AND GRUBBING DISPOSAL. Scatter through openings in the timber outside of the cleared right-of-way, except areas where end-haul is required.



EXHIBIT D  
FOREST ROAD SPECIFICATIONS

EXCAVATION. Excavation and grading shall not be done when weather and/or ground conditions are such that damage will result to existing subgrade or cause excessive erosion.

Excavation shall conform to STATE-engineered lines, grades, dimensions, and plans when provided.

All suitable excavated material shall be used where possible for the formation of fills, shoulders, and drainage structure backfills. Embankment materials shall be free of woody debris, brush, muck, sod, frozen material, and other deleterious materials. All fills and drainage structure backfills shall be machine compacted according to the specifications in Exhibit E.

Unless road design plans show otherwise, all roads shall be on a balanced cross section, except when the slope is over 50 percent, the road shall be on full bench for the width specified.

Bank excavation and sidecast pullback on a project road segment shall be completed prior to subgrade approval.

ROAD WIDTH LIMITATIONS. PURCHASER shall obtain advance written approval from STATE to construct the road to a greater width than specified. Extra subgrade width shall be required for:

Fill Widening. Add to each fill shoulder 1 foot for fills 3 feet to 6 feet high; 2 feet for fills over 6 feet high.

Curve Widening. Widen the inside shoulder of all curves as follows: 400 divided by the radius of the curve equals the amount of extra width.

DRAINAGE

Outslope. Road subgrade shall be outsloped at 4 to 6 percent.

TURNOUTS. Increase roadbed width an additional 8 feet for both subgrade and surfacing. Length shall be at least 25 feet, or as staked on the ground, plus 25-foot approaches at each end.

Location: Intervisible but not greater than 750 feet.

GRADING

Rock  
Common -  
Common - turnpike (level) section

Back Slopes  
Vertical to 1/4:1  
3/4:1  
2:1

Fill Slopes  
Not steeper  
than 1½:1

Top of cutslope shall be rounded.

TURNAROUNDS. Increase subgrade width an additional 30 feet for a length of 16 feet with 20-foot radius returns at locations marked in the field.

EXHIBIT D

ADDITIONAL ROAD IMPROVEMENT INSTRUCTIONS

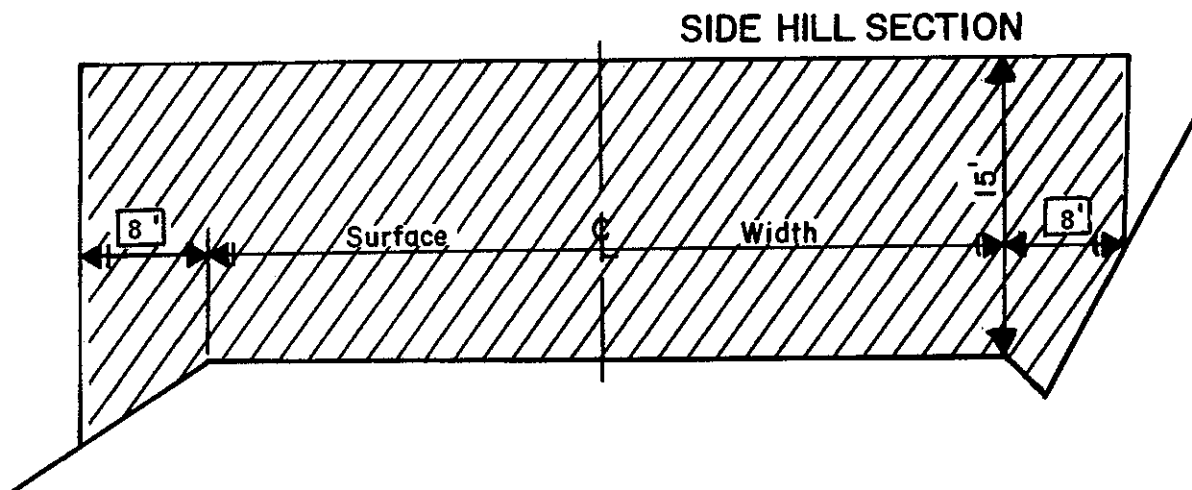
Between Points A and B:

- Between Stations 81+00 and 83+80, construct a 50-foot radius curve as marked in the field.
- At Station 111+70, remove log culvert before installing culvert No. 6.

EXHIBIT D  
ROAD BRUSHING SPECIFICATIONS



Clearing Limits



REQUIREMENTS

Unless otherwise approved in writing by STATE, brush and trees less than 6 inches DBH shall be cut to a height of 6 inches or less above the ground surface or obstructions such as rocks or existing stumps. Brushing on project road segments shall be completed prior to subgrade approval.

Debris resulting from the brushing operation shall be removed from the roadway, cutslope, ditches, and water courses within 72 hours and may be scattered downslope from the road or placed in other stable locations, unless otherwise approved by STATE.

Trees outside the clearing limits shall not be felled unless approved in writing by STATE.

EXHIBIT D  
END-HAULING REQUIREMENTS

POINT TO POINT	STA. TO STA.	WASTE AREA LOCATION
A to B	106+30 to 114+20	See below

End-Haul Areas General Requirements

Material shall not be intentionally side cast.

Clearing and grubbing debris shall be end-hauled.

When blasting is required, it shall be accomplished using timing devices, delayed charges, low intensity shots, or other suitable means to contain all material within the road prism.

Containment

Full containment: The amount of material lost over the outside edge of the road shall not exceed 6 inches in depth measured perpendicular to the natural ground slope. Pioneer excavation shall be removed by digging, loading, and hauling rather than by pushing or scraping methods.

Tree bases and stumps may have up to 12 inches of material directly above them. Any amount of material exceeding the containment requirements shall be removed by whatever means necessary and end-hauled to a designated waste area.

Waste Area Location

As shown on Exhibit A and marked in the field.

Waste Treatment

Deposit at waste area, spread evenly, compact, and provide adequate drainage. Pile woody debris separate from other waste material.

EXHIBIT E

CULVERT SPECIFICATIONS

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the Contract. Culverts 36 inches in diameter and smaller shall be constructed of corrugated polyethylene. Culverts shall conform to the material and fabricating requirements of the "Standard Specifications for Highway Construction" prepared by the Highway Division of the Oregon State Department of Transportation. Polyethylene culverts shall also be double walled and meet the requirements of AASHTO M-294-901, Type S. Corrugation types and shapes other than those meeting the above minimum Highway requirements, shall be approved in writing by STATE.

Culverts shall be located according to the alignment and grade as shown on the Plan and Profile, and/or as staked in the field, or as stipulated in special instructions.

The STATE Representative shall determine final culvert locations and stake the locations in the field prior to installation.

Culvert grade shall slope away from ditch grade at least 5 percent unless otherwise specified.

The foundation and trench walls for all culverts shall be free from logs, stumps, limbs, stones, and other objects which would dent or damage the pipe. The culvert trench shall be excavated 3 pipe diameters wide to permit compaction and working on each side of the pipe. Tamping shall be done in 6-inch lifts, 1 pipe diameter each side of the pipe to 95 percent density or over. Bedrock shall be excavated as required to provide a uniform foundation for the full length of the culvert. Minimum bedding depth shall be 6 inches.

A bedding of granulated material or crushed rock as specified shall be placed to provide a wide band of support and to transmit the load from above evenly over the entire length of the pipe.

Backfill shall consist of granulated material, crushed rock, or job-excavated soil free of stumps, limbs, rocks, or other objects which would damage the pipe.

Transporting of the pipe shall be done carefully. Dragging or allowing free fall from trucks or into trenches shall not be permitted.

Joining shall be done with bands of like material and corrugations. Manufacturers' instructions shall be followed for prefabricated pipe assembly.

Polyethylene joints shall be made with split couplings, corrugated to engage the pipe corrugations, and shall engage a minimum of 4 corrugations, 2 on each side of the pipe joint.

When joints are employed, the longest length of pipe shall be placed at the outlet end.

A manufacturer's certification that the product was manufactured, tested, and supplied in accordance with this specification shall be furnished to the Project Engineer upon request.

EXHIBIT E

CULVERT SPECIFICATIONS

Minimum height of cover over top of culvert to subgrade when road is to be rocked shall be as follows: 12" for culverts 18" to 36" in diameter.

Lengths of individual culvert sections shall be not less than 10 feet, unless otherwise provided for in special instructions. The shortest culvert section length shall be placed at the inlet end.

The ends of each culvert shall be free of logs and debris which would restrict the free flow of water. The intake end of relief culverts shall be provided with a sediment catching basin 3 feet in diameter at the bottom. The outlet end of any culvert which would allow water to erode embankment soil shall be provided with an approved slope protection device. Construct lead-off ditches away from culvert outlets where the slope gradients restrict the free flow of water.

EXHIBIT E  
CULVERT LIST

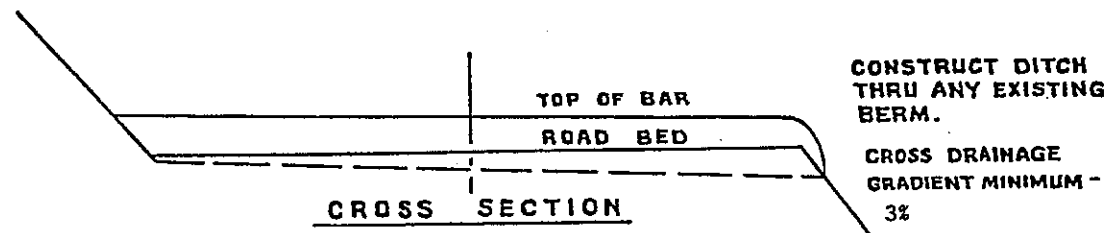
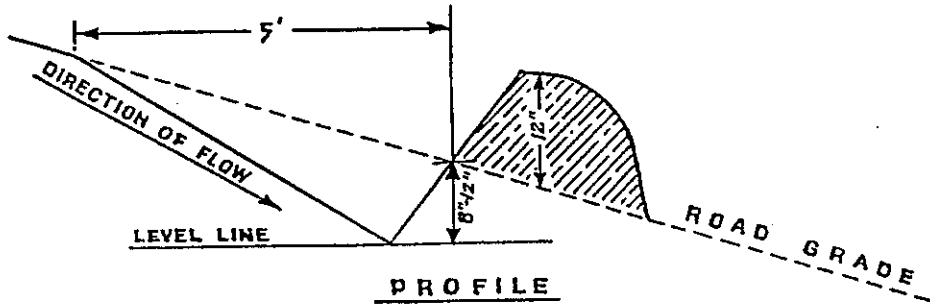
CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	ROAD SEGMENT POINT TO POINT	STATION
1	24	38	A to B	89+70
2	24	40	A to B	90+70
3	24	28	A to B	97+50
4	24	32	A to B	99+00
5	24	40	A to B	104+55
6	24	40	A to B	111+70

The intake end of culverts smaller than 48 inches in diameter shall be marked by installing a 5 foot long, painted steel fence post two feet into the ground, within 6 inches of the inlet on the downgrade side.

Tamping is required on all culverts.

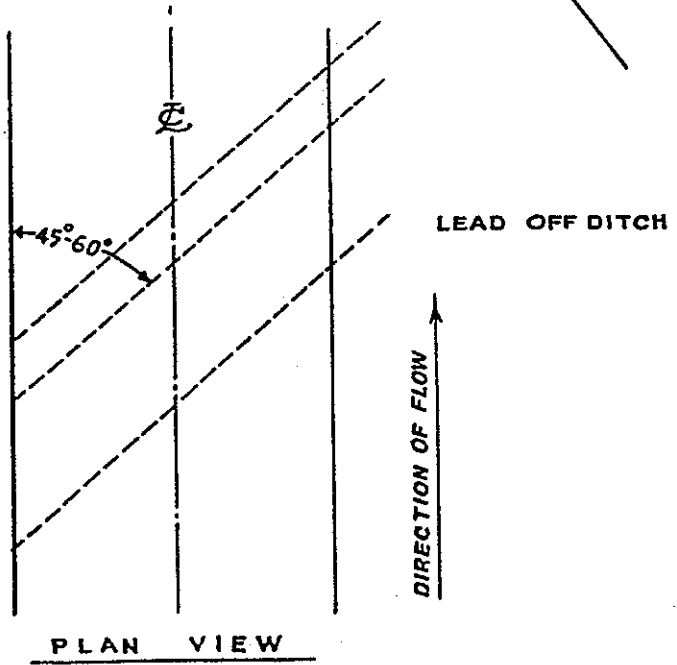
All culverts scheduled for replacement shall become property of PURCHASER and be removed from State land in the same project period in which replacement occurred.

EXHIBIT F  
 WATERBAR SPECIFICATIONS



**SPACING OF WATERBARS**

ROAD GRADE	DISTANCE
≤ 5%	600'
6-10%	300'
11-15%	150'
16-20% or greater	100'



**WATERBAR SPECIFICATIONS  
 FOR CROSS DITCHING #298**



EXHIBIT G

SEEDING AND FERTILIZING

This work shall consist of preparing seedbeds and furnishing and placing required seed and fertilizer.

Seeding Seasons. Seeding shall be performed only from March 1 through June 15 and August 15 through October 15. Seeding materials shall not be applied during windy weather or when the ground is excessively wet or frozen. Areas of disturbed soil shall be seeded by the end of the project period in which work was started. PURCHASER shall notify STATE 24 hours prior to seeding.

Soil Preparation. Areas to be seeded that have been damaged by erosion or other causes shall be restored prior to seeding. All areas to be seeded shall be finished and then cultivated to provide a reasonably firm, but friable seedbed. A minimum of 1/2 inch of surface soil shall be in a loose condition.

Application Methods for Seed and Fertilizer

Dry Method. Mechanical seeders, seed drills, landscape seeders, cultipacker seeders, fertilizer spreaders or other approved mechanical seeding equipment shall be used to apply the seed and fertilizer in the amounts and mixtures specified. Hand-operated seeding devices may be used when seed and fertilizer are applied in dry form.

Application Rates for Seed and Fertilizer

Seed listed below shall be applied at the following rates per acre:

<u>Species</u>	<u>Lb./Acre</u>	<u>Mixture</u>	<u>Pure Live Seed</u>	<u>Poison and/or Repellent</u>
Fine Fescue	12	40%	98%	0
Annual Ryegrass	6	20%	98%	0
Perennial Ryegrass	9	30%	98%	0
White Dutch Clover	3	10%	98%	0

Fertilizer: Chemical analysis shall be 16-20-0 and shall be applied at the rate of 300 pounds per acre.

Seeding will be considered acceptable when all other specified requirements in Exhibit G have been completed and a healthy, uniform, close stand of grass has been established, unless otherwise approved in writing by STATE.

## PART IV: OTHER INFORMATION



"STEWARDSHIP IN FORESTRY"

### WRITTEN PLAN

**SALE NAME:** Roger Thin

**PROTECTED WATERS:** An unnamed medium Type F tributary to the North Fork Wilson River.

**Definitions:** Stream buffer: 100 feet horizontal distance from the stream bank of the Type F Stream.

**LOCATION:** Portions of Section 15, T2N, R7W, W.M., Tillamook County, Oregon.

**Activity:** Cable lines across Type F stream.

**Protection measures:**

- Trees within the stream buffer or outside the timber sale boundary are reserved from cutting, except as approved by ODF to facilitate logging operations. Trees felled within these zones will be left for down wood.
- Trees that enter Type F streams will be left for down wood.
- When cable yarding lines are strung across RMA's they will be at least 150 feet apart and the cable lines will be pulled out prior to rigging the next yarding road.

**Date:** April, 2007

**Prepared by:** David Wells, Forester