PART III: EXHIBITS

State Timber Sale Contract No. 341-14-28 Foley In Between

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	d Information (complete):	~~~ ~~
(1)	Contract No.: <u>341-14-28</u>	<u></u>	(
(2)	Sale Name: Foley In Between			~
(3)	Contract Expiration Date: October 31, 2015		ion Dates:	
	•			
(4)	Purchaser:			
(6)	Purchaser Representatives:			
	Projects	Phone:	Cell/Other Phone:	Home:
	Projects:	riiolie.	Cell/Other	nome.
	Projects:	Phone:		Home:
	<u> </u>		Cell/Other	
	Projects:	Phone:		Home:
	D ' (DI	Cell/Other	11
	Projects:	Phone:	Phone: Cell/Other	Home:
	Logging:	Phone:		Home:
	2055mg	Thone.	Cell/Other	110me
	Logging:	Phone:	Phone:	Home:
			Cell/Other	
	Logging:	Phone:		Home:
	Road Maintenance:	Phone:	Cell/Other Phone:	Home:
	Road Maintenance.	r none.		Home.
(7)	State Representatives:			
		7.1	Cell/Other	
	Projects:	Phone:	Phone: Cell/Other	Home:
	Logging:	Phone:		Home:
	Logging.	Thone.	Cell/Other	110mc.
	Road Maintenance:	Phone:	Phone:	Home:
(8)	Name of Subcontractors & Starting Dates:			
		D .	DI	
	Projects: No(s)	Date:	Phone:	
	No(s) No(s)	Date:	Phone:	
	No(s)	Date:	Phone:	
	Logging: Felling	Date:	Phone:	
	Yarding:	Date:	Pnone:	
(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.

Explanation of 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 quarry development plans.

1	Cable Landing, with numbers for sequence.
А	Tractor Landing with alphabetical sequence.
	Approximate setting boundary.
	Spur truck roads.
~~	Tractor yarding roads.
X	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: STATE OF OREGON - DEPARTMENT OF FORESTRY	SUBMITTED BY: PURCHASER
Title	Title

Original: Salem cc: District File Purchaser

Operations Plan.doc/Jaz B (TS)

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EXHIBIT C - SAWMILL GRADE (WESTSIDE SCALE)

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

REVISION CANCELLA (2) TO: (3) FROM: T (S) Address £ (4) PURCHAS Mailing Add	REGISTRATION NUMBER ATION (Third Party Scal illamook (06) Photate Forestry District) 5005 3 rd St. Tillamo EER: dress: mber:	Da Da one (503)	ate ation) 842-2 7141	2545		(9) (10) (11) (12)		_
(5) MINIM SPECIES Conifers Hardwoods	UM SCALING SPE	NET VOLU				(13)	PAINT REQUIRED: YES ☒ COLOR: Orange	
(6) WESTSIDI	ual taper rule. Logs over 40'.	10' Westside	YES	NC _		PEI NO ME	D-BACK VOLUME - Deductions due to delay (Check applicable) (Check applicable)	_
LOCATIO	ED SCALING DNS proved Locations web-site)	Species	Yard	Truck	Weight	(15)	REMARKS	
						1 '	ator's Name (Optional inclusion by District): SIGNATURES: Purchaser or Authorized Representative Date	
] - -	State Forester Representative Date	
						-	State Forester Representative PRINT NAME	

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 343-307a (rev. 11/11)

Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires logging and hauling to be complete, recall branding hammers, date and sign where indicated, write diagonally across page "CANCEL", and send to TPSO.

Designate Third Party Scaling Organization (TPSO).

Columbia River Log Scaling & Grading Bureau

P.O. Box 7002, Eugene, OR 97401

Phone: (541) 342-6007 Fax: (541) 342-2631

Email: services@crls.com

Southern Oregon Log Scaling & Grading Bureau

P.O. Box 580, Roseburg, OR 97470

Phone: (541) 673-5571 Fax: (541) 672-6381

Email: info@southernoregonlogscaling.com

Northwest Log Scalers, Inc . 5526 NE 122nd Ave, Portland, OR 97230

Phone: (503) 254-0600 Fax: (503) 408-0919

Email: info@nwlogscalers.com

Pacific Rim Log Scaling Bureau, Inc.

8288 28th Court North East, Lacey, WA 98516 Phone: (360) 528-8710 Fax: (360) 528-8718

Email: office@prlsb.com

Yamhill Log Scaling & Grading Bureau P.O. Box 709, Forest Grove, OR 97116

Phone: (503) 359-4474 Fax: (503) 359-4476

Email: yamhill@attglobal.net

Pacific Log Scaling & Grading Bureau, Inc. P.O. Box 23939, Portland, OR 97281

Phone: (503) 684-5599 Fax: (503) 639-4880

Email: PacLogScale@aol.com

- (3) State District office, address and phone.
- (4) Enter Purchaser's business name, address, and phone number as it appears on the Contract.
- Minimum Scaling Specifications. (5)
- Westside Region 6 actual taper segment scale. Check Yes or No. Special Service Rules on file with TPSO. See: Segment (6)Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Westside).
- Weight Scale Sample Check box if sale is to be a Weight Scale Sample. All specifics for handling, scaling and processing will be attached or explained in the Remarks section Item (15).
- Show scaling locations only applicable to TPSO. Location name should appear as it does on the ODF Approved Scaling Location web site: http://www.odf.state.or.us/DIVISIONS/management/asset_management/ScalingLocation.asp Locations with scaling and processing directions specific to their location should be on a separate form. Species should be identified if not capable of receiving "all" species. Check appropriate box for either: yard, truck scale, or weight. Refer to the web site listed above for the locations approval status.
- (9) Enter sale name and county.
- (10) Enter sale Contract number.
- (11) Enter Oregon's State Brand Registry Number (REQUIRED).
- (12) Show brand assigned to timber sale. One brand only. If more than one brand is assigned to the sale: (1) make a separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section Item (15).
- (13) Check yes for Paint Required and designate "Orange" for color. Non required removal volumes may sometimes require blue paint.
- (14) Special Requests. These are requests that will be applied to ODF timber sales. All boxes applicable to the timber sales designated in the Exhibit C form must be "marked". If "Other" is indicated, it must contain a description and any necessary comments.
- (15) Use this space to designate any weight conversion factors, per load volumes, weight scale sample instructions or any other explanations to clarify scaling, processing and/or mailing requirements. If additional scaling locations are approved, revise original or current form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (16) Require purchaser to sign and date completed form in addition to State Forester Representative, sign and print name on the form.

Salem Distribution Instructions: Original will be mailed to Salem after it is electronically scanned and placed in the Salem transfer drive \\WPODFFILL01\Transfer\ScalingInstructions or e-mailed directly to scaling@odf.state.or.us. Scaling instructions for each brand should be scanned separately, for each approved TPSO.

State Timber Sale Contract No. 341-14-28 Foley In Between

Mail to ODF weekly.

• Convert to mbf using 10 tons per mbf.

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EXHIBIT C - PULP SORT

PROCESSING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

(1)	ORIGINAL REGISTRATION Date	(9) S	ALE NAME: Foley In Between
	REVISION NUMBER Date CANCELLATION Date	C	COUNTY: Tillamook
(2)	_	(10)	STATE CONTRACT NUMBER: 341-14-28
(3)	(Approved Pulp Processing Facility) FROM: Tillamook (06) Phone (503) 842-2545	(11)	STATE BRAND REGISTRATION NUMBER
	(State Forestry District) Address 5005 3 rd St. Tillamook, OR 97141	(12)	STATE BRAND INFORMATION: (COMPLETE BELOW)
(4)	PURCHASER:		
(5)	Scaling Bureau (TPSO) Processing Weight receipts:		
	Mailing Address: Phone Number:		
(6)	STATE Definition of Approved Pulp Sort:		
	Top portion of the tree (tops).	(13)	REMARKS:
	 All logs with a diameter (Big End) greater than8_ inches marked 		
	with blue paint.		
	·	Oper	ator's Name (Optional inclusion by District):
(7)	PULP FACILITY PROCESSING INSTRUCTIONS:		(-)
	 Pulp loads shall be weighed in lieu of scaling. One Ton = 2000 lbs (Short Ton). 		
	 Pulp loads shall have a yellow Log Load Receipt attached. 	(14)	SIGNATURES:
	 Gross weight and truck tare weight for each load shall be machine printed on the weight receipt. 		
	Weigher shall sign the weight receipt.		Purchaser or Authorized Representative Date
	 Weigher shall record the Log Load Receipt number on the weight receipt. 		
	 Weigher shall attach the Weight receipt to the Log Load Receipt and mail them weekly to the 		State Forester Representative Date
	TPSO processing the Weight receipt.		State Forester Representative PRINT NAME
(8)	TPSO PROCESSING INSTRUCTIONS		

Notify the District within one hour when branding is inadequate for quick identification, the logs are marked with orange paint, the receipts are missing, not correctly or completely filled out, and/or logs do not meet the specifications of the STATE definition of Approved Pulp Sort.

Distribution: ORIGINAL: Salem / COPIES: TPSO, Approved Pulp Processing Location, Purchaser, District, Mgmt. Unit

EXHIBIT C - PULP SORT

INSTRUCTIONS FOR FORM 343-307b (rev. 11/11)

- (1) Must Complete. Check appropriate box. REVISION NUMBER requires comments in the Remarks Section (13). CANCELLATION requires logging and hauling to be complete, recall branding hammers, date and sign where indicated, write diagonally across page "CANCEL", and send to TPSO.
- (2) **Must Complete**. Approved Pulp Processing Facility. Write in as written in the Approved Log Delivery Location http://www.odf.state.or.us/DIVISIONS/management/asset_management/ScalingLocation.asp
- (3) Must Complete. State Forestry District and District Phone Number.
- (4) Must Complete. Purchaser's business name as it appears on the Contract.
- (5) **Must Complete.** Third Party Scaling Organization that will be processing the weight tickets, mailing address, and phone number.

Columbia River Log Scaling & Grading Bureau P.O. Box 7002, Eugene, OR 97401

Phone: (541) 342-6007 Fax: (541) 342-2631

Email: services@crls.com

Southern Oregon Log Scaling & Grading Bureau P.O. Box 580, Roseburg, OR 97470

Phone: (541) 673-5571 Fax: (541) 672-6381 Email: info@southernoregonlogscaling.com

Northwest Log Scalers, Inc . 5526 NE 122nd Ave, Portland, OR 97230 Phone: (503) 254-0600 Fax: (503) 408-0919

Email: info@nwlogscalers.com

Pacific Rim Log Scaling Bureau, Inc.

8288 28th Court North East, Lacey, WA 98516

Phone: (360) 528-8710 Fax: (360) 528-8718

Email: office@prlsb.com

Yamhill Log Scaling & Grading Bureau P.O. Box 709, Forest Grove, OR 97116

Phone: (503) 359-4474 Fax: (503) 359-4476

Email: yamhill@attglobal.net

Pacific Log Scaling & Grading Bureau, Inc. P.O. Box 23939, Portland, OR 97281

Phone: (503) 684-5599 Fax: (503) 639-4880

Email: PacLogScale@aol.com

- (6) **Must Complete.** Big end log not to exceed_____ inches. Big end of log is not to exceed 2 inches greater than the minimum removal specifications in the contract. Example: Minimum removal specifications 6 inches and 20 board feet, then the Big end of log not to exceed 8 inches. When conifer and hardwood removal specifications are different, use the smaller removal diameter to determine this specification.
- (9) **Must Complete**. Enter sale name and county. If more than one county write in all the counties that the sale is located in.
- (10) Must Complete. Enter sale Contract number.
- (11) Must Complete. Enter Oregon's State Brand Registry Number (REQUIRED).
- (12) **Must Complete**. Show brand assigned to timber sale. One brand only. If more than one brand is assigned to the sale: (1) make a separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section Item (13).
- (13) Use this section to list any special instructions or the reason for any revisions in section item (1).
- (14) **Must Complete.** Purchaser required to sign and date completed form in addition to State Forester Representative, sign <u>and</u> print name on the form.

Salem Distribution Instructions: Original will be mailed to Salem after it is electronically scanned and placed in the Salem transfer drive \\WPODFFILL01\Transfer\ScalingInstructions or e-mailed directly to scaling@odf.state.or.us. Scaling instructions for each brand should be scanned separately, for each approved TPSO.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH (feet)	SURFACED WIDTH (feet)	POINT TO POINT	STATION TO STATION	DRAINAGE
16 feet	12 feet	A to B	0+00 to184+15	Ditch
16 feet	12 feet	C to D	0+00 to 175+85	Ditch
16 feet	12 feet	E to F	0+00 to 241+65	Ditch

DRAINAGE

<u>Ditch</u>. Reestablish ditch as specified in Exhibit D. Subgrade shall be crowned at 4 to 6 percent. Construct ditchouts away from subgrade at locations marked in the field or as directed by STATE.

<u>TURNOUTS</u>. 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: As existing in the field.

 SLOPES
 Back Slopes
 Fill Slopes

 Rock
 Vertical to 1/4 :1
 Not Steeper

 Common
 3/4 :1
 Than 1 ½: 1

Top of cutslopes shall be rounded.

<u>LANDINGS</u>. Landings shall be constructed as posted in the field, no less than 50 feet wide and no more than 70 feet wide unless otherwise approved by STATE. Surface is to be crowned for drainage with general grade no more than 4 percent and no less than 2 percent. All cuts shall be ditched.

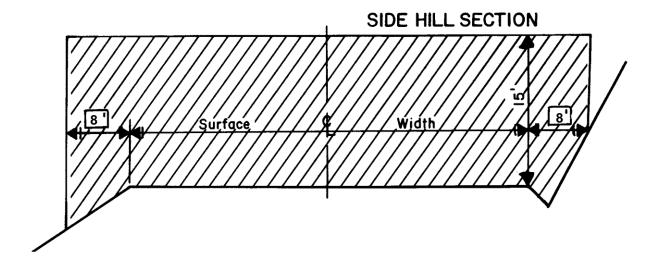
<u>TURNAROUNDS</u>. Increase subgrade width an additional 30 feet for a length of 16 feet with 20' radius returns at locations marked in the field.

<u>SEASONAL WINTERIZATION</u>. All unsurfaced roads or unfinished subgrades shall be waterbarred in accordance with the specifications in Exhibit I, and blocked from vehicular traffic prior to October 31, annually and as directed by STATE.

EXHIBIT D

ROAD BRUSHING SPECIFICATIONS





REQUIREMENTS

Unless otherwise approved in writing by STATE, brush and trees less than 8 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. Trees 8 inches or larger in diameter at stump height shall not be felled but shall be limbed for road visibility. Brushing on project road segments shall be completed prior to subgrade approval. Trees shall not be felled unless a portion of the bole is within the clearing limits.

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.

<u>CULVERT AND ROAD MARKER DAMAGES.</u> Culvert and road markers damaged, or any portion of a marker damaged from PURCHASER activities shall be repaired or replaced by PURCHASER.

EXHIBIT D FULL BENCH AND END-HAUL REQUIREMENTS

POINT TO POINT	STA. TO STA.
A to B	0+00 to184+15*
C to D	0+00 to 175+85*
E to F	0+00 to 241+65*

^{*}Slopes over 55 percent

Ditch Material End-Haul General Requirements

Ditch cleaning material from road segments with a side slope greater than 55 percent shall be end-hauled to designated waste area. Ditch line material will not be swept across the road prism.

Waste Area Location

As shown on Exhibit A and as marked in the field or otherwise approved by STATE. Setback from slope break shall be a minimum of 20 feet horizontal measurement.

Waste Area Treatment

Deposit at waste area, spread evenly, compact, and provide adequate drainage. Pile woody debris separate from other waste material. Mulch and seed all waste areas in accordance with Exhibits M and N.

ROAD SURFACING

ROAD SEGMENT:	A to	В			STATIONS:		0+00	to 84+95		
Application	Rock Siz		Loca	tion	Compacted Depth		ne (CY) per	Number of Units	Curve Widenin g (CY)	Approx. Total (CY)
Road Rock	Crushed	1"-0"	0+00 t	o 84+95	3 "	station	14.950	84.95	60	1,330
Turnouts	Crushed	1"-0"	A to	В	3 "	то	10	12		120
Application	Rock Size and Location		Approx. Total (CY)							
Culvert Backfill	Crushed	1"-0"	22+	-65		10				

ROAD SEGMENT:	C t	o D			STATIONS:		0+00	to	9+20		
Application	Application Rock Size and Type		Location		Compacted Depth	Volume (CY) per			mber of Units	Curve Widenin g (CY)	Approx. Total (CY)
Road Rock	Crushed	1"-0"	0+00 to	9+20	3 "	station	15.217		9.20	10	150
Turnouts	Crushed	1"-0"	C to [)	3 "	то	10		2		20
Application Rock Size and Type		Location	on	Approx. Total (CY)							
Culvert Backfill	Crushed	2"-0"	40+0	0		10					
Culvert Backfill	Crushed	2"-0"	54+6	5	10						
Culvert Backfill	Crushed	2"-0"	144+5	55	10						
Culvert Backfill	Crushed	2"-0"	150+0)5	10						
Junction Rock	Crushed	2"-0"	0+00		30						
Energy Dissipator Riprap 24"-12"		40+0	0	5							
Energy Dissipator	Riprap	24"-12"	54+6	5		5					
Energy Dissipator	Riprap	24"-12"	144+5	55		5					
Energy Dissipator	Riprap	24"-12"	150+0)5		5	•				

ROAD SEGMENT:	Εt	o F		STATIONS:	0+00	to 0+00		
Application	plication Rock Size and Type		Location	Compacted Depth	•		Curve Widenin g (CY)	Approx. Total (CY)
Application	Application Rock Size and Type		Location	Approx. Total (CY)				•
Culvert Backfill	Crushed	2"-0"	5+50		10			
Culvert Backfill	Crushed	2"-0"	9+05		10			
Culvert Backfill	Crushed	2"-0"	109+40		10			
Culvert Backfill	Crushed	2"-0"	110+40		10			
Energy Dissipator	Riprap	24"-12"	5+50		5			
Energy Dissipator	Riprap	24"-12"	9+05		5			
Energy Dissipator	Riprap	24"-12"	109+40		5			
Energy Dissipator	Riprap	24"-12"	110+40		5			

TOTAL ROCK	24"-12" RIPRAP	1"-0" CRUSHED	2"-0" CRUSHED
1780 CY	40 CY	1630 CY	110 CY

CRUSHED ROCK SPECIFICATIONS

Roads shall be uniformly graded and approved by STATE prior to rocking.

Additional rock for curve widening is required and has been included in the volume estimates.

Turnouts, turnarounds, landings and junctions shall be rocked concurrently with the road.

End-dumping of riprap shall not be allowed, unless otherwise approved in writing by STATE.

Any additional turnarounds or turnouts created during any operation associated with this timber sale shall be rocked at PURCHASER's expense and as instructed by STATE.

For typical cross section, turnout and turnaround see Forestry Department Drawing Nos. 351-C, 351-D and TOTA-1 at the Forestry Department district office.

<u>Materials</u>. The material shall be fragments of rock crushed to the required size. The material shall be free from vegetation and lumps of clay. STATE may require screening and/or rejecting of materials utilized for production of crushed rock for the purpose of removing excess fine material. Excess fines are present, when greater than 5 percent of a total rock sample weight, passes a #200 sieve. Rock crushing shall be limited to periods when weather conditions are acceptable to STATE.

<u>Quality and Grading Requirements</u>. The base material shall be rock. River gravel shall not be used. Crushed rock shall meet the grading requirements that follow;

Hardness - Test Method AASHTO T 96: 30% Maximum

Durability - Test Method ODOT TM 208

Passing No. 20 Sieve: 30% Maximum

CRUSHED ROCK SPECIFICATIONS

For Crushed Rock Use 1"-0" and 2"-0' stockpiles on Exhibit A.

For 24"-12" Riprap 50% or more of the rock shall be at 24 inches in one dimension. 100% of the rock

shall be at least 12 inches in one dimension.

Control of riprap and pit-run gradation shall be by visual inspection by STATE. Pit-run shall be reasonably free of organic material and shall not contain an excessive amount of oversized (cobbles or boulders) or undersized (clay, silt or sand) particles.

The referenced sieve shall have square openings as set forth in AASHTO M 92, Woven Cloth Series. The determinations of size and gradings shall be as set forth in AASHTO T 27.

ROCK ACCOUNTABILITY

PURCHASER shall obtain subgrade approval from STATE prior to rocking. Rocking shall be limited to periods when weather conditions are acceptable to STATE and when sediment will not enter streams. Additional surfacing needed because of construction season or construction practice is not included in the preceding ROAD SURFACING table, and shall be furnished at PURCHASER expense.

Rock accountability shall be determined by the following methods, as directed by STATE. STATE shall be given 24 hours' notice prior to rocking.

<u>Depth Measurement</u>. Rock shall be spread and compacted according to the depths specified in Exhibit E. Truck measure volumes are given, but shall not limit the amount of rock spread. Depth shall be determined in the most compacted area of the surface cross section. The depth of compacted aggregates shall not vary more than 1 inch from the depth specified in the "Road Surfacing" table in Exhibit E. The average depth for each road segment shall be the specified depth or greater. If additional rock is required because of insufficient depth, the locations and volumes to be added shall be determined by STATE. The conversion from compacted yardage to truck yardage is 1.3 multiplied by the compacted yardage equals truck yardage.

Turnouts shall have a surfaced area of at least 44 square yards each at the depths shown in Exhibit E.

Turnarounds shall have a surfaced area of at least 73 square yards each at the depths shown in Exhibit E.

<u>Curve Surfacing</u>. Extra surface width shall be required for the inside of all curves as follows: 400 divided by the radius of the curve equals the amount of extra width to be surfaced at the depths shown in Exhibit E.

<u>Load Records</u>. Notify STATE before spreading the rock and maintain a record of all rock delivered for spreading. Make the record available for STATE inspection. A report listing the amount of rock delivered the prior month must be submitted no later than the 15th of each month.

COMPACTION AND PROCESSING REQUIREMENTS

<u>Moisture Content</u>: Compaction must take place when moisture content of the materials being compacted is favorable for effective compaction as determined by STATE.

<u>Compaction Pass</u>: A pass is defined as traveling a road section forward and then backward over that same section.

<u>Crushed Rock</u>. The rock shall be uniformly mixed and spread in layers on the approved roadbed. Each layer of crushed rock shall be moistened or dried to uniform moisture content suitable for maximum compaction and compacted in layers not to exceed 6 inches in depth. When more than 1 layer is required, each shall be shaped and compacted before the succeeding layer is placed. Any irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and adding or removing material until the surface is smooth and uniform. Each layer shall be compacted with a minimum of 3 passes over the entire width and length of the road until the surface is smooth and hard and visible deformation ceases. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

Rock shall be compacted and processed during the same project period it is spread, unless otherwise approved in writing by STATE.

Rock shall be crowned at 4 to 6 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS				
A to B 0+00 to 84+95	Vibratory Roller				
C to D 0+00 to 9+20	Vibratory Roller				

<u>Existing Crushed Rock</u>. The existing rock shall be unearthed to a minimum depth of 4 inches or to 1 inch below the bottom of potholes, whichever is greater. The existing rock shall then be uniformly mixed and moistened or dried to a uniform moisture content suitable for maximum compaction and compacted. Any irregularities or depressions that develop during compaction shall be corrected by loosening the material at these places and adding or removing material until the surface is smooth and uniform. The existing rock shall be compacted with a minimum of 3 passes over the entire width and length of the road. Compaction shall be accomplished by using the approved equipment listed below or others approved by STATE:

Existing crushed rock shall be compacted and processed after completion of all project work and log hauling, unless otherwise approved in writing by STATE.

Rock shall be crowned at 4 to 6 percent unless otherwise specified.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
A to B C to D E to F	Vibratory Roller

COMPACTION EQUIPMENT OPTIONS

<u>Vibratory Rollers</u>. The drum shall have a smooth surface, a diameter not less than 48 inches, a width not less than 58 inches, and a turning radius of 15 feet or less. Vibration frequency shall be regulated in steps to 1400, 1500, and 1600 VPM, corresponding to engine speeds of 1575, 1690, and 1800 RPM. The centrifugal force developed shall be 7 tons at 1600 VPM. It shall be activated by a power unit of not less than 25 horsepower. The vibratory roller shall be self-propelled and operated at speeds ranging from 0.9 miles to 1.8 miles per hour, as directed by STATE.

EXHIBIT F

ROCK QUARRY DEVELOPMENT AND USE

- 1. PURCHASER shall prepare a written development plan for the quarry area. The plan shall be submitted to STATE for approval prior to conducting any operation in quarry area. The plan shall include, but not be limited to:
 - (a) Location of quarry floor, benches, and roads to benches.
 - (b) Disposal site for woody debris, overburden and reject material.
 - (c) Time lines for rock quarry use.
 - (d) Erosion control measures.
 - (e) Oversize material location
- PURCHASER shall schedule and coordinate quarry and stockpile usage with other existing or planned activity requiring quarry or stockpile usage. PURCHASER shall notify STATE 5 days prior to the start of quarry development activities.
- 3. PURCHASER shall conduct the Operations relative to the disposal of waste material in such manner that silt, rock, debris, dirt, or clay shall not be washed, conveyed, or otherwise deposited in any stream. All waste shall be deposited at an approved "waste disposal site."
- 4. The quarry floor shall be developed to provide drainage away from the quarry.
- 5. Quarry face shall be developed in a uniform manner. All quarry backslopes shall be left in a stable condition.
- 6. Oversized material that is produced shall be piled in the vicinity of the quarry as directed by STATE.
- 7. The quarry site shall be left in a condition free from overburden and debris. Access roads to the quarry, benches, and the quarry floor shall be cleared of unused rock and dirt at the termination of use. Access roads shall be waterbarred to provide drainage as specified in Exhibit I and blocked as directed by STATE. Unused rock material that is produced shall be piled in the vicinity of the quarry as directed by STATE. Dirt, overburden, and reject material shall be hauled to designated waste area.
- 8. Proper winterization and storm-water control measures such as waterbarring, drainage, utilization of filter bales, mulching and/or blocking access shall be constructed and maintained to protect the watershed and Project Work, as directed by STATE.
- 9. Apply seed and mulch to the waste area, as specified in Exhibits M and N.

Page 1 of 2

EXHIBIT G

CULVERT SPECIFICATIONS

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the Contract. Culverts shall be constructed of corrugated polyethylene. Polyethylene culverts shall be double-walled and meet the requirements of AASHTO M-294-11, Type S, or ASTM F2648.

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.

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 culvert corrugations, and shall engage a minimum of 4 corrugations, 2 on each side of the culvert joint.

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 specified in special instructions.

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

Cross drain culverts on road grades in excess of 3 percent shall be skewed at least 30 degrees from perpendicular to the road centerline, except that cross drain culverts at the low point of dips in roads shall not be skewed.

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 culvert. The culvert trench shall be excavated 3 culvert diameters wide to permit compaction and working on each side of the culvert. Tamping shall be done in 6-inch lifts, 1 culvert diameter each side of the culvert 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 culvert.

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

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

Minimum height of cover over top of culvert to subgrade when road is to be rocked shall be 12" for culverts 18" to 24" in diameter.

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 energy dissipater. Construct lead-off ditches away from culvert outlets where the slope gradients restrict the free flow of water.

Tamping is required on all culverts.

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

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

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

EXHIBIT G

CULVERT LIST

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	ROAD SEGMENT POINT TO POINT	STATION
1	18	40	A to B	22+65
2	18	40	C to D	40+00
3	18	40	C to D	54+65
4	18	40	C to D	144+55
5	24	40	C to D	150+05
6	18	40	E to F	5+50
7	18	40	E to F	9+05
8	24	40	E to F	109+40
9	24	40	E to F	110+40

CPP = Polyethylene

TOTAL LENGTHS BY DIAMETER		
18 INCH	24 INCH	
240 Feet	120 Feet	

EXHIBIT H

TYPICAL EMBEDDED ENERGY DISSIPATOR

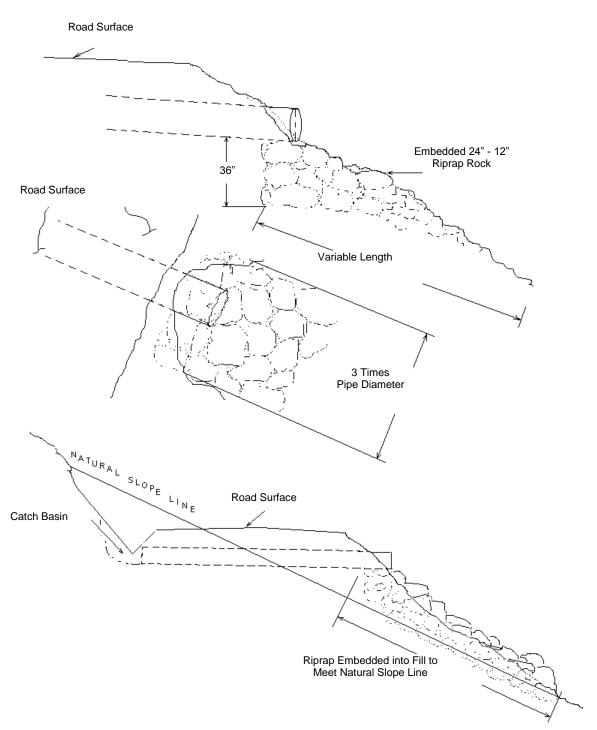
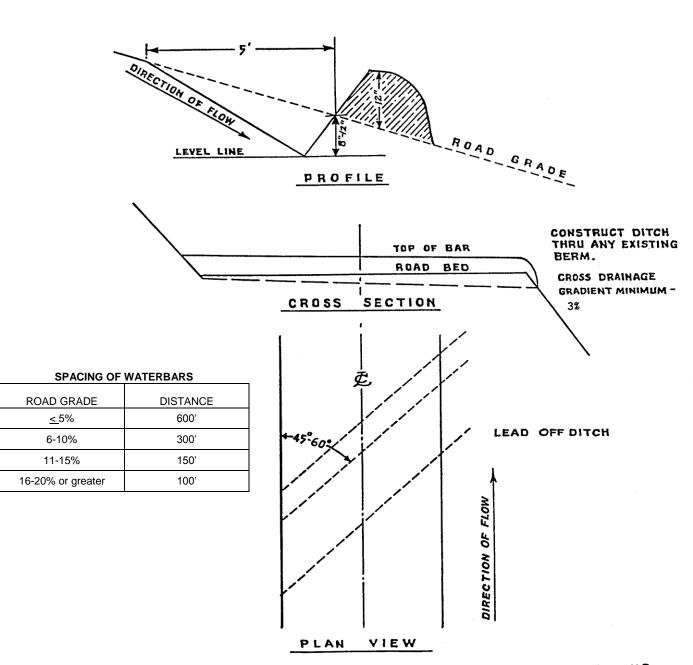
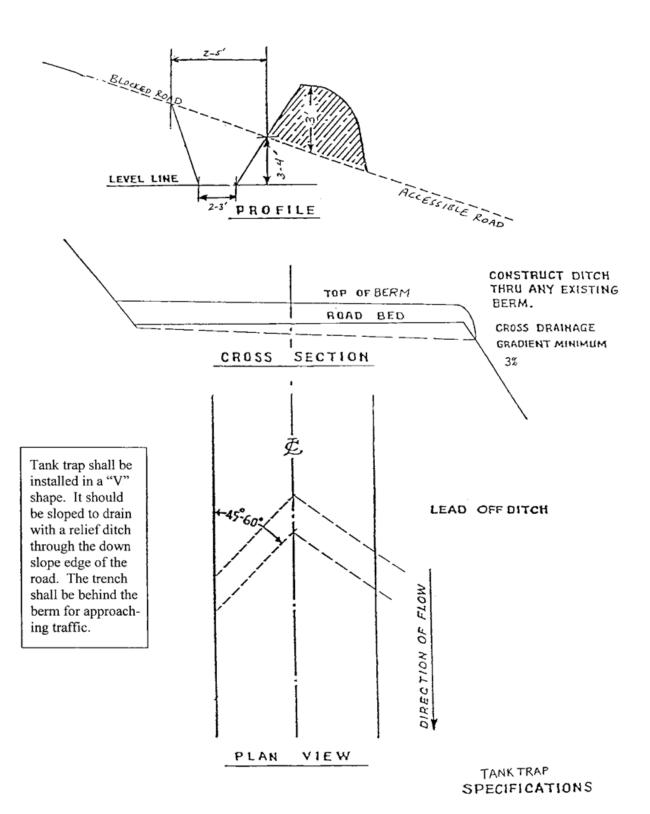


EXHIBIT I
WATERBAR SPECIFICATIONS



WATERBAR SPECIFICATIONS FOR CROSS DITCHING #298

EXHIBIT J
TANK TRAP SPECIFICATIONS



State Timber Sale Contract No. 341-14-28 Foley In Between

EXHIBIT K

SPECIFICATIONS FOR SKID ROAD CLOSURE

All skid/forwarder roads shall be closed by PURCHASER prior to the timber sale completion.

Skid roads shall be closed by constructing a barrier which makes the road impassable to vehicular traffic. Where skid roads meet permanent forest roads, PURCHASER shall block access to vehicular traffic by placing several root wads across the road.

All berms or holes caused by logging Operations shall be flattened out to as close to the natural slope as possible.

Scatter locally available woody material (logs, stumps, brush, Slash, etc.) on the closed running surface.

Waterbar the subgrade and running surface at a spacing of no more than 100 feet and as specified in Exhibit I, "Waterbar Specifications."

Apply forage seed to the roadbed as specified in Exhibit L, "Seeding and Fertilizing."

EXHIBIT L

SEEDING AND FERTILIZING

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

<u>Seeding Seasons</u>. 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.

<u>Soil Preparation</u>. 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

<u>Dry Method</u>. 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:

SPECIES	Lb./Acre	MIXTURE	PURE LIVE SEED	Repellent
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

<u>Fertilizer</u>: Chemical analysis shall be 16-20-0 and shall be applied at the rate of 100 pounds per acre. Fertilizer shall not be applied within 100 feet of streams.

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

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EXHIBIT M

MULCHING

This work shall consist of furnishing and placing required mulch. Mulch shall consist of straw that is free of noxious weeds.

Mulching Period. Straw mulch shall be applied within 24 hours of spreading grass seed and fertilizer.

Application Rates for Mulch

Place straw mulch to a reasonably uniform thickness of 3/4 to $1\frac{1}{4}$ inches. This rate requires between 1 and $1\frac{1}{2}$ tons of dry mulch per acre.

PART IV: OTHER INFORMATION

State Timber Sale Contract No. 341-14-28 Foley In Between

Dated

NOTICE OF TRANSFER OF STATE TIMBER

Instruction	ons	629:-Form-301-010	
Complete obtain sig		ou/your company in Section 2. Complete Section 3 and	
SECTION	N 1		
On	, state	e timber sale purchaser (Transferor)	
	, sold, exc	hanged or otherwise transferred to	
		(Transferee) state timber originating from State	
Timber S	ale Contract No		
Transfere	ee hereby certifies that they:		
(a)	Will not export the unprocessed state timb	er which is the subject of this transaction;	
(b)	Will not sell, transfer, exchange or otherwise convey the unprocessed timber which is the subject of this transaction to any other person without first obtaining a like certification from that person; and		
(c)	Are not prohibited by OAR's 629-31-005 the State Forester, or this is a sale of Wes	nrough 045 from purchasing state timber or logs directly from tern Red Cedar for domestic processing.	
SECTION	N 2		
	Have not exported unprocessed timber originating from private lands in Oregon in the last 24 months.		
	This is a sale of hardwood logs for domestic processing.		
	This is a sale of Western Red Cedar for domestic processing.		
	This is a sale of pulp logs or cull logs processed at domestic pulp mills, domestic chip plants or other domestic operations for the purpose of conversion of the logs into chips.		
SECTION	N 3		
certification		certification, or failure to comply with the terms of this and Shortage Relief Act of 1990 and OAR Chapter 629, ntained therein.	
Transfero	or: 7	ransferee:	
Signed		Signed	
Title		Title	

Dated