

# PART III: EXHIBITS

State Timber Sale Contract  
No. 341-13-59  
Green Spill

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.: 341-13-59

(2) Sale Name: Green Spill

(3) Contract Expiration Date: December 31, 2015

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.

**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 pit development plans.



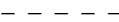
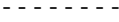


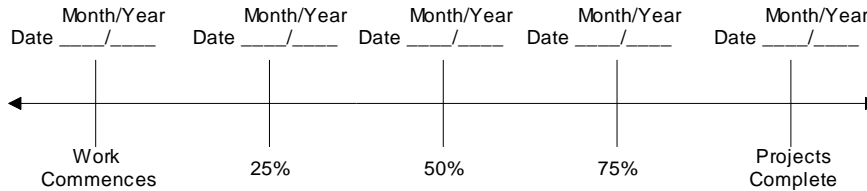
	Cable Landing, with numbers for sequence.
	Tractor Landing with alphabetical sequence.
	Approximate setting boundary.
	Spur truck roads.
	Tractor yarding roads.
	Temporary stream crossings.

EXHIBIT B  
OPERATIONS PLAN

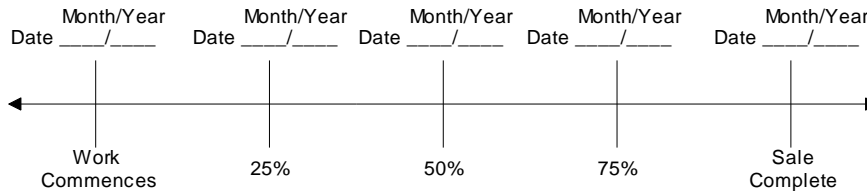
**Completion Timeline**

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 AND PULP GRADE

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

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

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

(3) FROM: West Oregon District (01) Phone: (541) 929-3266  
(State Forestry District)  
Address 24533 Alsea Hwy, Philomath, OR 97370-9112

(4) PURCHASER: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_

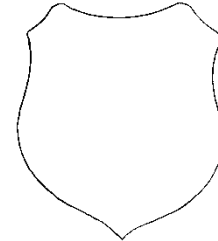
(13) SALE NAME: Green Spill

COUNTY: Benton, Lincoln, and Polk

(14) STATE CONTRACT NUMBER: 341-13-59

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

(16) STATE BRAND INFORMATION (COMPLETE):



(5) MINIMUM SCALING SPECIFICATIONS			CLASS		
SPECIES	SCALING DIAMETER INCHES	*NET SCALE VOLUME	PER MBF	** SUM	SUB
Conifers	by weight	8 ton/MBF			
Hardwoods	by weight	8 ton/MBF			
Pulp	by weight	8 ton/MBF			

\* Apply minimum volume test to whole logs over 40' Westside; 20' Eastside.  
\*\* Sum (if indicated): see instructions and explain in Item (19).

(6) WESTSIDE SCALE: YES NO  
Use Region 6 actual taper rule. Logs over 40'. ☐ ☒

(7) EASTSIDE SCALE: YES NO  
Use Region 6 actual taper rule. Logs over 40'. ☐ ☒

(8) Weight Scale Sample YES NO  
(6) – (8), pink log load receipts ☐ ☒

(9) Weight Sale YES NO  
☒ ☐

(10) Per Load YES NO  
(9) and (10), yellow log load receipts ☐ ☒

(11) APPROVED SCALING LOCATIONS (as shown on the ODF Approved Locations web-site)	Species	Yard	Truck	Weight

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

(17) PAINT REQUIRED: YES ☒  
COLOR: Orange

(18) SPECIAL REQUESTS (Check applicable)
PEELABLE CULL (all species) ..... <input type="checkbox"/>
<b>NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE</b> ..... <input type="checkbox"/>
PENCIL BUCK..... <input type="checkbox"/>
ADD-BACK VOLUME - Deductions due to delay ..... <input type="checkbox"/>
OTHER: _____

(19) REMARKS Loads shall be weight scaled in lieu of scaling. Tons shall be short tons or 2,000 lbs. Loads shall have a pink Weight Load and Weight Scale Receipt attached. Weigher shall attach a machine-printed weight ticket, with the ODF weight load number on it, to the ODF Weight Scale Receipt and mail them weekly to the approved Third-Party Scaling Organization for processing. TPSO shall convert loads in tons to loads in MBF using a conversion factor of 8 tons per MBF and designate as camp run.

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

(20) 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 AND PULP GRADE**  
**INSTRUCTIONS FOR FORM 343-307 (rev. 01/09)**

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires Item (12). Complete date.
- (2) Designate Third Party Scaling Organization (TPSO).
- (3) State District office, address and phone.
- (4) Enter Purchaser's business name, address, and phone number 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 (16) thru (18)), and is required to show existence on the sale. **SUM** (lump sum material). **SUB** (sub-merchantable 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 (Per MBF) entries. Per MBF, SUM, and SUB must be indicated by checking the appropriate column. Species with the same specifications and value are combined into one entry. Per MBF 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, Per MBF and/or subspecies will always be scaled.
- (6) Westside -- Region 6 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 -- Region 6 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) 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 (19).
- (9) Weight Sale -- Check box if sale is to be sold as a weight sale. Processing procedures from approved locations to TPSO's will be explained in the Remarks section of Item (19).
- (10) Per Load -- Check box if volumes on sale are per load. Specific instructions for handling and processing will be fully explained in the Remarks section of Item (19).
- (11) 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](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.
- (12) When logging and hauling is complete, recall branding hammers, date and sign where indicated, check CANCELLATION box in Item (1), and send to TPSO.
- (13) Enter sale name and county
- (14) Enter sale Contract number.
- (15) Enter Oregon's State Brand Registry Number **(REQUIRED)**.
- (16) Show brand assigned to timber sale. One brand only. 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) in the Remarks section Item (19).
- (17) Check yes for Paint Required and designate "Orange" for color. Non required removal volumes may sometimes require blue paint.
- (18) 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.
- (19) 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.
- (20) 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 e-mailed directly to the State Forests Program/Asset Management Unit to both Timber Revenue Specialists. Scaling instructions for each brand should be scanned separately, for each approved TPSO.

**Distribution (See specific instructions on pg. 2): ORIGINAL: Salem / COPIES: TPSO, Approved Scaling Location, Purchaser, District, Mgmt. Unit**

EXHIBIT D  
FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
16 feet	12 feet	A to A1	0+00 to 78+90	Ditch
14 feet	--	A to A1	78+90 to 89+20	No Ditch
14 feet	--	A2 to A3	0+00 to 6+20	No Ditch
16 feet	12 feet	B to D	0+00 to 239+40	Ditch
14 feet	12 feet	B1 to B2	0+00 to 105+40	Ditch
14 feet	12 feet	B3 to B4	0+00 to 11+70	No Ditch
16 feet	12 feet	C to C1	0+00 to 92+80	Ditch
14 feet	12 feet	C2 to C3	0+00 to 8+60	No Ditch
16 feet	12 feet	D to D1	0+00 to 85+30	Ditch
14 feet	12 feet	D to D1	85+30 to 116+20	No Ditch
14 feet	12 feet	D2 to D3	0+00 to 3+60	No Ditch
14 feet	12 feet	D4 to D5	0+00 to 2+00	No Ditch
16 feet	12 feet	E to E1	0+00 to 311+30	Ditch
14 feet	12 feet	E1 to E2	0+00 to 7+60	No Ditch
14 feet	12 feet	E3 to E4	0+00 to 4+10	No Ditch
16 feet	12 feet	F to F1	0+00 to 145+60	Ditch
14 feet	--	F2 to F3	0+00 to 11+40	No Ditch
14 feet	12 feet	F4 to F5	0+00 to 32+20	Ditch
14 feet	--	F6 to F7	0+00 to 9+60	No Ditch

## EXHIBIT D

### FOREST ROAD SPECIFICATIONS

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 clearing limits shall extend 5 feet back of the top of the cutslope and 5 feet out from the toe of the fill slope, or as directed by STATE. 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 CLASSIFICATION.

New construction – 5 feet back from the top of the cutslope and 5 feet out from the toe of the fill.

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

CLEARING AND GRUBBING DISPOSAL. Scatter in stable locations through openings in the timber outside of the cleared right-of-way, except areas where end-haul is required. In areas where end-haul is required, clearing and grubbing debris shall be fully contained and hauled to a designated waste area. Clearing and grubbing debris shall be left in a stable location, and not left lodged against standing trees.

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-specified lines, grades, dimensions, and plans when provided. Plans are available between points E3 to E4 at the Philomath ODF office.

Unless road 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.

Suitable excavated material shall be used 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.

Sidecast includes any road generated excess excavation material which is not essential as part of the road prism, is not compacted, and is below the roadway. Sidecast shall not be placed where it will enter a stream course. Leaving sidecast below the road is only permissible if specifically allowed in "Full Bench and End Haul Requirements" in this Exhibit.

All fills shall be machine compacted according to the "Compaction and Processing Requirements" in this Exhibit.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

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 specified in the plans or as follows: 400 divided by the radius of the curve equals the amount of extra width.

DRAINAGE

Subgrade. Subgrade shall be crowned or outsloped at 4 to 6 percent as shown on the "Forest Road Specifications" table in this Exhibit (crown roads with ditch and outslope roads with no ditch).

Ditch. Construct "V" shaped ditch 3 feet wide and to a depth of 1 foot below subgrade.

Ditchouts. Construct ditchouts to drain away from subgrade at locations marked in the field or as directed by STATE.

TURNOUTS. Increase roadbed width an additional 8 feet for both subgrade and surfacing. Length shall be at least 50 feet, or as staked on the ground, plus 25-foot approaches at each end.

Location: as marked in the field.

SLOPES

Solid Rock

Fractured Rock

Soil - side slopes 50% and over

Soil - side slopes less than 50%

Back Slopes

Vertical to  $\frac{1}{4}$  :1

$\frac{1}{2}$  :1

$\frac{3}{4}$  :1

1 :1

Fill Slopes

1½:1

1½:1

Top of cutslope shall be rounded.

LANDINGS. 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 3 percent. Surface as shown in the "Road Surfacing" table in this Exhibit.

TURNAROUNDS. Increase subgrade width an additional 20 feet for a length of 20 feet at locations marked in the field.

SEASONAL WINTERIZATION. All unsurfaced roads or unfinished subgrades shall be waterbarred in accordance with the specifications in Exhibit D, and blocked from vehicular traffic prior to October 1, annually and as directed by STATE.



EXHIBIT D

FOREST ROAD SPECIFICATIONS

GENERAL ROAD CONSTRUCTION INSTRUCTIONS:

- (1) Timber Removal. Remove all trees within posted right-of-way boundary, as specified in Section 2210, "Designated Timber."
- (2) Excavated Materials. Excavated materials shall be utilized for road construction and hauled in where necessary. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A. Surplus excavated materials and waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted in accordance with this Exhibit.
- (3) Subgrade Preparation and Application of Surfacing Rock.
  - (a) Complete fill construction, and other specified work prior to the application of surfacing rock.
  - (b) Subgrade shall be outsloped at 4 to 6 percent.
  - (c) Upon completion of above required work, apply, process, and compact surfacing rock in accordance with specifications in the "Compaction and Processing Requirements" in this Exhibit. Final road surface shall be outsloped at 4 to 6 percent.

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS

**Project No. 1**

<u>Segment</u>	<u>Station</u>	<u>Work Description:</u>
A2 to A3	0+00 to 6+20	Construct road using a D-7 or equivalent with a dozer. Right-of -Way is posted.
	0+60; 2+40	Add jaw-run rock to patch wet areas.
	4+80	Install temporary culvert (install and remove within same in-stream work period).
	0+00 to 6+20	Shape outslope surface with a road grader.
E3 to E4	0+00 to 4+10	Construct road using a D-7 or equivalent dozer. Right-of -Way is posted.
	3+60 to 4+10	Construct a landing.
	3+60 to 4+10	Shape outslope subgrade with a road grader.
	0+00 to 4+10	Compact subgrade with a vibratory roller.
	0+00 to 3+60	Apply and process a 8 inch lift of rock.
F2 to F3	4+10	Apply jaw-run rock to the Landing.
	<b>This road segment is within 300 feet of a Marbled Murrelet Management Area, work shall not be allowed from April 1 through August 5, or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.</b>	
	8+20 to 11+40	Construct road using a D-7 or equivalent dozer. Right-of -Way is posted.
	10+90 to 11+40	Construct a Landing.
	8+20 to 11+40	Shape outslope surface with a road grader.

EXHIBIT D  
FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- (1) Timber Removal. Remove all trees within posted Right-of-Way Boundary or individually marked with an orange "C", as specified in Section 2210, Designated Timber.
- (2) Excavated Materials. Excavated materials shall be utilized for road and fill construction and hauled in where necessary. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A. Waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted in accordance with Exhibit D.
- (3) Culvert Replacement, Culvert Installation, Fill Reconstruction, and Fill Removal. Existing culvert geometry shall be modified to provide for optimum drainage and culvert performance. Modifications may include, skewing the culvert and/or installing the culvert at gradients equal to or exceeding the drainage (or ditch) gradient. Where culvert removal is specified, fills shall be excavated to natural stream course levels. All woody debris encountered during fill excavation shall be removed. All waste materials shall be placed in stable locations on the existing subgrade and shall be uniformly sloped and compacted for drainage. Removed culvert(s) shall be returned in, good condition, to the ODF office in Philomath.
- (4) Drainage Ditches. Restore or construct ditchlines, including ditchouts, as directed by STATE. Clean out all culvert inlets and outlets for a 10-foot radius. Re-establish or construct culvert sediment basins. Waste materials from drainage ditches and sediment basins shall not be pulled across existing surfacing rock, but shall be placed in nearby waste areas and uniformly sloped and compacted for drainage, as directed by STATE. Damaged culvert inlets and/or outlets shall be repaired by opening them with a hydraulic jack, or cutting off the culvert end to allow for free passage of water at peak flow levels. Install a culvert marker at each newly installed culvert and at each existing culvert that is missing a marker that could be reached by a grader blade.
- (5) Subgrade Preparation and Application of Surfacing Rock.
  - (a) Complete drainage ditches, ditchouts, and other specified work prior to the application of new surfacing rock.
  - (b) Cut out all potholes and/or washboard sections from the existing surfacing.
  - (c) Apply required patching and leveling rock, as directed by STATE.
  - (d) Process (grade and mix) the existing surface and added base rock. Provide for a crown or outslope of 4 to 6 percent, and compact in accordance to the "Compaction and Processing Requirements" in this Exhibit.
  - (e) Upon completion of above required work, apply, process, and compact surfacing rock in accordance to this Exhibit.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

**Project No. 2**

<u>Segment</u>	<u>Station</u>	<u>Work Description:</u>
A to A1	78+90 to 89+20 0+00 to 78+90 78+90 to 89+20	Re-open existing dirt spur with a dozer. Right-of -Way is posted. Shape crowned surface and re-establish ditches with a road grader. Shape outslope surface with a road grader.
B to D	0+00 to 239+40	Apply spot rock in conjunction with STATE grading road.
B1 to B2	0+00 to 105+40 105+40	Shape crowned surface and re-establish ditches with a road grader. Add jaw-run rock to Landing.
B3 to B4	0+00 to 11+70	Shape outsloped surface with a road grader.
C to C1		<b>Portions of this segment pass through or is within 300 feet of a Marbled Murrelet Management Area, use of a vibratory roller shall not be allowed from April 1 through August 5, or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.</b>
	0+00 to 49+30 0+00 to 92+80 49+30 to 92+80	Apply spot rock prior to grading. Shape crowned surface and re-establish ditch with road grader. Apply and process a 3 inch lift of rock.
C2 to C3	0+00 to 8+60 0+00 to 8+10 8+60	Shape outsloped surface with a road grader. Apply and process a 4 inch lift of rock. Apply jaw-run rock to Landing.
D to D1		<b>Portions of this segment pass through or is within 300 feet of a Marbled Murrelet Management Area, use of a vibratory roller shall not be allowed from April 1 through August 5, or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.</b>
	0+00 to 85+30 0+00 to 85+30 85+30 to 116+20 85+30 to 115+70 116+20	Apply spot rock as directed by STATE. Shape crowned surface and re-establish ditches with a road grader. Shape outsloped surface with a road grader. Apply and process a 4 inch lift of rock. Apply jaw-run rock to Landing.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS (CONTINUED)

<u>Segment</u>	<u>Station</u>	<u>Work Description:</u>
D2 to D3		<b>This road segment is within 300 feet of a Marbled Murrelet Management Area, work shall not be allowed from April 1 through August 5, or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.</b>
	0+00 to 3+60	Re-open rock road with a dozer.
	0+00 to 3+60	Shape outsloped surface with a road grader.
	0+00 to 3+10	Apply and process a 6 inch lift of rock.
	3+60	Apply jaw-run rock to Landing.
D4 to D5		<b>This road segment is within 300 feet of a Marbled Murrelet Management Area, work shall not be allowed from April 1 through August 5, or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.</b>
	0+00 to 2+00	Re-open rock road with a dozer.
	0+00 to 2+00	Shape outsloped surface with a road grader.
	0+00 to 1+50	Apply and process a 6 inch lift of rock.
	1+50 to 2+00	Apply jaw-run rock to Landing.
E to E1	105+60 to 311+30	Apply spot rock in conjunction with STATE grading road.
E1 to E2	0+00 to 7+10	Apply spot rock as directed by STATE.
	0+00 to 7+10	Shape outsloped surface with a road grader.
	7+10 to 7+60	Apply jaw-run rock to Landing.
F to F1	11+15 to 12+15	Restore ditch and clean debris off road. Place material in stable location(s) along edge of road and away from trees and culverts.
	0+00 to 145+60	Apply spot rock as directed by STATE.
	0+00 to 145+60	Shape surface for proper drainage and re-establish ditches with a road grader.
F2 to F3		<b>This road segment is within 300 feet of a Marbled Murrelet Management Area, work shall not be allowed from April 1 through August 5, or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.</b>
	0+00 to 8+20	Re-open road with a dozer. Right-of -Way is posted.
	0+00 to 8+20	shape outsloped surface with a road grader.
F4 to F5	0+00 to 32+20	Apply spot rock as directed by STATE.
	0+00 to 32+20	Shape crowned surface and re-establish ditches with a road grader.
F6 to F7	0+00 to 9+60	Re-open road with a dozer. Right-of -Way is posted.
	9+10 to 9+60	Re-open Landing with a dozer.
	0+00 to 9+60	Shape outsloped surface with a road grader.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC POST HARVEST INSTRUCTIONS

**Project No. 3**

<u>Segment</u>	<u>Station</u>	<u>Work Description:</u>
A to A1	78+50 78+90	Apply turnaround rock to Landing. Construct tank trap.
A2 to A3	4+90	Remove temporary culvert (install and remove within same in-stream work period). Return undamaged culvert to ODF office in Philomath.
B1 to B2	Within Area V	Apply Landing patch and turnaround rock as directed by STATE.
B3 to B4	Within Area V	Apply turnaround rock.
C to C1	Within Area II	Apply Landing patch rock as directed by STATE.
C2 to C3	Within Area II	Apply turnaround rock.
D to D1	Within Area III	Apply Landing patch and turnaround rock as directed by STATE.
D2 to D3	Within Area III	Apply turnaround rock.
E1 to E2	7+10 to 7+60	Apply turnaround rock.
E3 to E4	3+60 to 4+10	Apply turnaround rock.
F to F1	Within Area IV	Apply Landing patch rock as directed by STATE.
F2 to F3	0+50	Construct tank trap.
F6 to F7	0+50	Construct tank trap.

EXHIBIT D

FULL BENCH AND END-HAUL REQUIREMENTS

POINT TO POINT	STA. TO STA.	CONTAINMENT - SIDECAST	WASTE AREA LOCATION	WASTE AREA TREATMENT
E3 to E4	0+00 to 1+50	1	1, 2	1

Full Bench and End-Haul Areas General Requirements

Sidecast includes any road generated excess excavation material which is not essential as part of the road prism, is not compacted, and is below the roadway. Material shall not be sidecast unless specified above.

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

Containment/Sidecast

- (1) Full: No excavated material remains below the road.
- (2) Normal/Incidental: The amount of excavated material lost over the outside edge of the road shall not exceed 1 foot in depth.

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

- (1) Setback from slope break shall be a minimum of 20 feet horizontal measurement.
- (2) Drift past steep area and scatter in openings or incorporate back into subgrade.

Waste Area Treatment

- (1) Deposit organic material in stable location(s) along road outside road prism. Mineral soil and rock shall be incorporated back into the road subgrade.

EXHIBIT D  
ROAD SURFACING

ROAD SEGMENT: A to A1				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	A to A1		0+00 to 89+20		
				Volume (CY) Per		Number Of		
Turnaround	3-0" crushed	78+50	n/a	Turnaround	27	Turnaround	1	27
Total Rock for Road Segment:			A to A1					27

ROAD SEGMENT: A2 to A3				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	A2 to A3		0+00 to 6+20		
				Volume (CY) Per		Number Of		
Patch Rock	Jaw-Run	0+60 and 2+40	n/a	Location	27	Locations	2	54
Total Rock for Road Segment:			A2 to A3					54

ROAD SEGMENT: B to D				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	B to D		0+00 to 239+40		
				Volume (CY) Per		Number Of		
Spot Rock	1½-0" crushed	0+00 to 239+40	n/a	Mile	25	Miles	4.5	108
Total Rock for Road Segment:			B to D					108

ROAD SEGMENT: B1 to B2				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	B1 to B2		0+00 to 105+40		
				Volume (CY) Per		Number of		
Landing	Jaw-Run	B2	n/a	Landing	36	Landings	1	36
Total Rock for Road Segment:			B1 to B2					36
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	A6 to A7		0+00 to 2+90		
				Volume (CY) Per		Number Of		
Landing Patch	3-0" crushed	Landings	n/a	Landing	9	Landings	10	90
Turnaround	3-0" crushed	B2	n/a	Landing	27	Landings	1	27

ROAD SEGMENT: B3 to B4				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	B3 to B4		0+00 to 11+70		
				Volume (CY) Per		Number Of		
Turnaround	3-0" crushed	B4	n/a	Turnaround	27	Turnaround	1	27
Total Rock for Road Segment:			B3 to B4					27

EXHIBIT D

ROAD SURFACING

ROAD SEGMENT: C to C1				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	C to C1		0+00 to 92+80		
				Volume (CY) Per		Number Of		
Spot Rock	1½-0" crushed	0+00 to 49+30	n/a	Mile	25	Miles	0.9	27
Surface Rock	1½-0" crushed	49+30 to 92+30	3"	Station	16.5	Stations	43.0	720
Total Rock for Road Segment:			C to C1					747
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	C to C1		0+00 to 92+80		
				Volume (CY) Per		Number Of		
Landing Patch	1½-0" crushed	Landings	n/a	Landing	9	Landings	5	45
Total Rock for Road Segment:			C to C1					45

ROAD SEGMENT: C2 to C3				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	C2 to C3		0+00 to 8+60		
				Volume (CY) Per		Number Of		
Base Rock	3-0" crushed	0+00 to 8+10	4"	Station	22	Stations	8.1	180
Curve Widening	3-0" crushed	0+00 to 8+10	4"					18
Landing	Jaw-Run	C3	n/a	Landing	36	Landings	1	36
Total Rock for Road Segment:			C2 to C3					234
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	C2 to C3		0+00 to 10+10		
				Volume (CY) Per		Number Of		
Turnaround	3-0" crushed	C3	n/a	Landing	27	Landings	1	27

ROAD SEGMENT: D to D1				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	D to D1		0+00 to 116+20		
				Volume (CY) Per		Number Of		
Spot Rock	1½-0" crushed	0+00 to 85+30	n/a	Mile	25	Miles	1.6	45
Base Rock	3-0" crushed	85+30 to 115+70	4"	Station	22	Stations	30.4	669
Curve Widening	3-0" crushed	85+30 to 115+70	4"					24
Landing	Jaw-Run	D1	n/a	Landing	36	Landings	1	36
Total Rock for Road Segment:			D to D1					774
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	D to D1		0+00 to 116+20		
				Volume (CY) Per		Number Of		
Landing Patch	3-0" crushed	Landings	n/a	Landing	9	Landings	2	18
Turnaround	3-0" crushed	D1	n/a	Landing	27	Landings	1	27



EXHIBIT D

ROAD SURFACING

ROAD SEGMENT: D2 to D3				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	D2 to D3		0+00 to 3+60		
				Volume (CY) Per		Number Of		
Base Rock	3-0" crushed	0+00 to 3+10	6"	Station	33	Stations	3.1	99
Landing	Jaw-Run	D3	n/a	Landing	36	Landings	1	36
Total Rock for Road Segment:			D to D1					135
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	D2 to D3		0+00 to 3+60		
				Volume (CY) Per		Number Of		
Turnaround	3-0" crushed	D3	n/a	Landing	27	Landings	1	

ROAD SEGMENT: D4 to D5				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	D4 to D5		0+00 to 2+00		
				Volume (CY) Per		Number Of		
Base Rock	3-0” crushed	0+00 to 1+50	6”	Station	33	Stations	1.5	54
Landing	Jaw-Run	D5	n/a	Landing	36	Landings	1	36
Total Rock for Road Segment:			D4 to D5					90

ROAD SEGMENT: E to E1				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	E to E1		0+00 to 311+30		
				Volume (CY) Per		Number Of		
Spot Rock	1½-0" crushed	105+60 to 311+30	n/a	Mile	25	Miles	3.9	99
Total Rock for Road Segment:			E to E1					99

ROAD SEGMENT: E1 to E2				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	E1 to E2		0+00 to 7+60		
				Volume (CY) Per		Number Of		
Spot Rock	3-0" crushed	0+00 to 7+10	n/a	Mile	25	Miles	0.1	9
Landing	Jaw-Run	E2	n/a	Landing	36	Landings	1	36
Total Rock for Road Segment:			E1 to E2					45
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	E1 to E2		0+00 to 116+20		
				Volume (CY) Per		Number Of		
Turnaround	3-0" crushed	E2	n/a	Landing	27	Landings	1	

EXHIBIT D

ROAD SURFACING

ROAD SEGMENT: E3 to E4				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	E3 to E4		0+00 to 4+10		
				Volume (CY) Per		Number Of		
Base Rock	3-0" crushed	0+00 to 3+60	8"	Station	44	Stations	3.6	162
Landing	Jaw-Run	E4	n/a	Landing	36	Landings	1	36
Total Rock for Road Segment:			E3 to E4					198
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	E3 to E4		0+00 to 4+10		
				Volume (CY) Per		Number Of		
Turnaround	3-0" crushed	E4	n/a	Landing	27	Landings	1	27

ROAD SEGMENT: F toF1				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	F to F1		0+00 to 145+60		
				Volume (CY) Per		Number Of		
Spot Rock	1½-0" crushed	0+00 to 145+60	n/a	Mile	25	Miles	2.8	72
Total Rock for Road Segment:			F to F1					72
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	C to C1		0+00 to 145+60		
				Volume (CY) Per		Number Of		
Landing Patch	1½-0" crushed	Landings	n/a	Landing	9	Landings	10	90
Total Rock for Road Segment:			F to F1					90

ROAD SEGMENT: F4 to F5				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	F4 to F5		0+00 to 32+20		
				Volume (CY) Per		Number Of		
Spot Rock	3-0" crushed	0+00 to 32+20	n/a	Mile	25	Miles	0.6	18
Total Rock for Road Segment:			F4 to F5					18

Size	¾ - 0"	1½ - 0"	3 - 0"	4 - 0"	Jaw-run	Pit-run
Tons/CY	1.34	1.34	1.34	1.34	1.34	1.34

(Conversion factors from Wild Rose Quarry)

	Maintenance Rock Volume(s) in CY						
Rock Size	¾ - 0"	1½ - 0"	3 - 0"	4 - 0"	Jaw-run	Pit-run	Other
Rock Totals CY	--	171	--	--	--	--	--

ROCK TOTALS	Pit-Run	Jaw-Run	3"-0"	1½"-0"	1"-0"
Cubic Yards	--	306	1557	1377	--
Tons	--	410	2086	1845	--

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

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

Fifty feet has been subtracted from the total length of roads to be rocked for landing rock.

Rock volumes are rounded to the nearest 9 CY load.

EXHIBIT D

CRUSHED ROCK SPECIFICATIONS

Source. Crushed rock shall be obtained from a STATE approved commercial rock source.

Materials. The material shall be fragments of rock crushed to the required size. The material shall be well graded, consistent, and 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.

Quality and Grading Requirements. 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 percent Maximum

Durability – Test Method ODOT MT 208  
Passing No. 20 Sieve: 30% Maximum

DURABLE CRUSHED ROCK SPECIFICATIONS

Grading Requirements

<u>For 1½"-0"</u>	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	¾" sieve	60-90%
	Passing	¼" sieve	30-50%
	Passing	No. 10 sieve	15-30%
	Passing	No. 40 sieve	7-15%
<u>For 3"-0"</u>	Passing	4" sieve	100%
	Passing	3" sieve	90-100%
	Passing	1½" sieve	60-90%
	Passing	¾" sieve	40-60%
	Passing	¼" sieve	20-40%
	Passing	No. 10 sieve	5-20%

JAW-RUN ROCK SPECIFICATIONS

<u>For Jaw-Run</u>	Passing	6" sieve	100%
	Passing	3" sieve	45-65%

Control of gradation shall be by visual inspection by STATE.

EXHIBIT D

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.

Depth Measurement. Rock shall be spread and compacted according to the depths specified in Exhibit D. 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 D. 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.

Load Records. 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.

EXHIBIT D

COMPACTION AND PROCESSING REQUIREMENTS

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

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

Subgrade. Subgrade surfaces of the road segments listed below shall be graded and compacted prior to rocking. Compaction shall be accomplished by traveling all surfaces from shoulder to shoulder until the surface is smooth and hard and visible deformation ceases. At least 3 passes shall be made over the entire width and length of the road. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

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

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
E3 to E4 from 0+00 to 4+10	1

Fills. Embankments and fills shall be placed in (approximately) horizontal layers not more than 8 inches in depth. Each layer shall be separately, and thoroughly, compacted. Compaction equipment shall be operated over the entire width of each layer until visible deformation of the layers ceases. At least 3 passes shall be made over the entire width and length of each layer.

Placing individual rocks or boulders with more depth than the allowed layer thickness shall be permitted, provided the embankment will accommodate them. Such rocks and boulders shall be at least 6 inches below the subgrade. They shall be carefully distributed and the voids filled with finer material, forming a dense and compacted mass. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
A2 to A3 station 4+90 (temp. culvert)	3

EXHIBIT D

COMPACTION AND PROCESSING REQUIREMENTS

Crushed Rock. 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 or outsloped to match the subgrade at 4 to 6 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
C to C1 (49+30 to 92+80), C2 to C3, D to D1 (85+30 to 115+70), D2 to D3, D4 to D5, & E3 to E4	1 and 2
Spot, landing patch, turnaround, and maintenance	2

COMPACTION EQUIPMENT OPTIONS

- (1) Vibratory Rollers. 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.
- (2) Loaded Dump Trucks. Dump trucks shall be routed over the entire cross section of the road surface. Loaded trucks shall cover all of the subgrade with a minimum of three passes.
- (3) Crawler Tractors. D7 or equivalent, crawler tractor shall be routed over the entire cross section of the surface and trucks shall cover all of the surface with a minimum of three passes.

EXHIBIT D

CULVERT SPECIFICATIONS

Temporary culvert materials shall be furnished by STATE and installed by PURCHASER, unless otherwise specified in the Contract. PURCHASER shall be responsible for transportation of the culvert to and from the job site.

Culvert shall be constructed of corrugated double-walled polyethylene.

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 as specified in special instructions.

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.

Backfill shall consist of 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 18".

The ends of each culvert shall be free of logs and debris which would restrict the free flow of water.

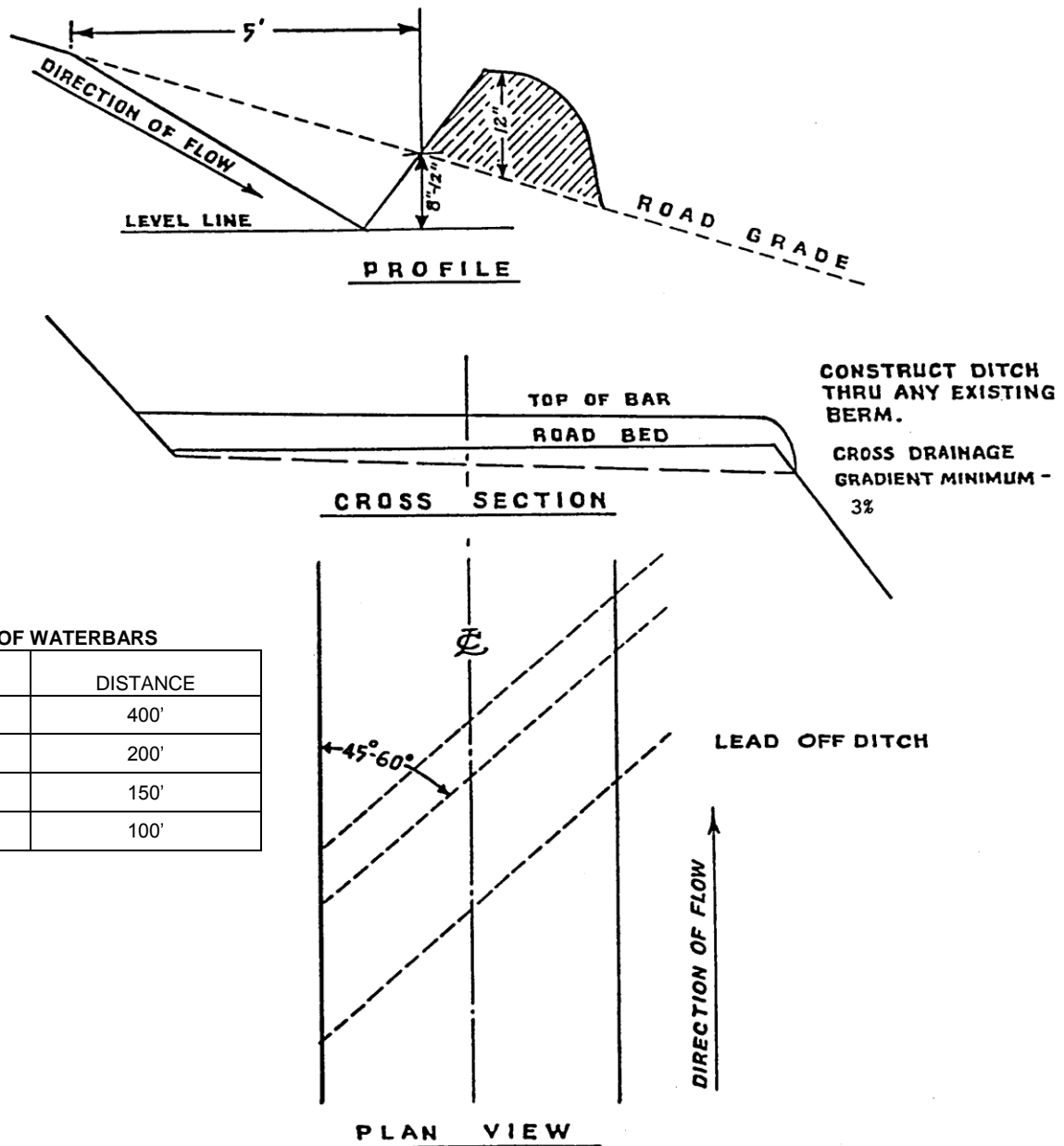
CULVERT LIST

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	MATERIAL TYPE	GAUGE	ROAD SEGMENT POINT TO POINT	STATION
1 <sup>1</sup>	18	40	CPP <sup>2</sup>		A2 to A3	4+90
(Pick up temporary pipe from ODF office in Philomath)						

1. Instream working period is July 1 through September 15. Temporary culvert must be installed and removed the same season. Temporary culvert shall not remain installed outside of instream working period unless otherwise approved in writing by STATE.
2. Polyethylene.

EXHIBIT D

WATERBAR SPECIFICATIONS



SPACING OF WATERBARS

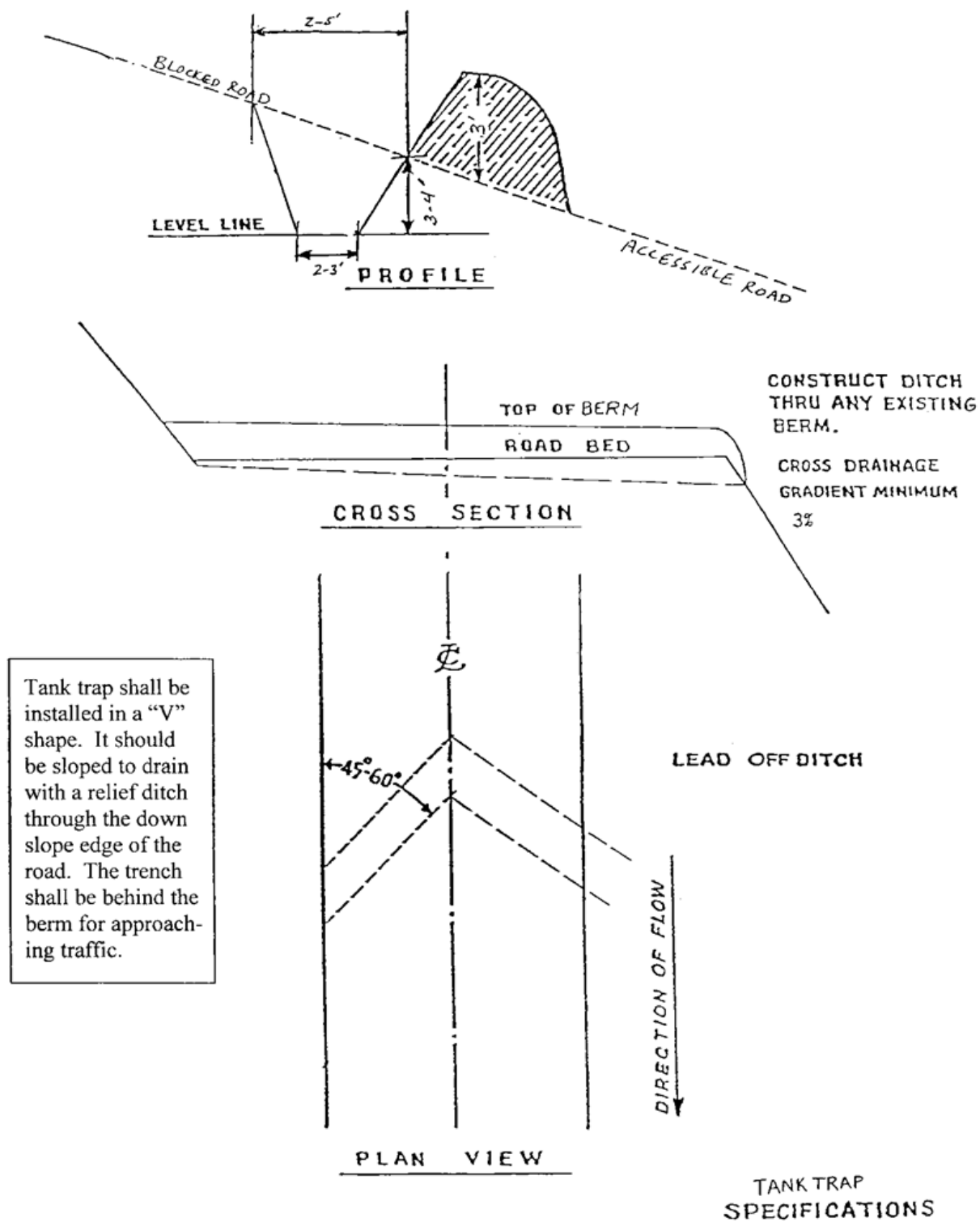
ROAD GRADE	DISTANCE
≤ 5%	400'
6-10%	200'
11-15%	150'
16-20% or greater	100'

WATERBAR SPECIFICATIONS  
FOR CROSS DITCHING #298



EXHIBIT D

TANK TRAP SPECIFICATIONS



## PART IV: OTHER INFORMATION

State Timber Sale Contract  
No. 341-13-59  
Green Spill

### NOTICE OF TRANSFER OF STATE TIMBER

#### Instructions

629:-Form-301-010

Complete Section 1. Mark the box which applies to you/your company in Section 2. Complete Section 3 and obtain signatures.

#### SECTION 1

On \_\_\_\_\_, state timber sale purchaser (Transferor)  
\_\_\_\_\_, sold, exchanged or otherwise transferred to  
\_\_\_\_\_, (Transferee) state timber originating from State  
Timber Sale Contract No. \_\_\_\_\_.

Transferee hereby certifies that they:

- (a) Will not export the unprocessed state timber 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.
- (c) Are not prohibited by OAR's 629-31-005 through 045 from purchasing state timber or logs directly from the State Forester, or this is a sale of Western Red Cedar for domestic processing.

#### SECTION 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 3

The parties understand that falsely entering into this certification, or failure to comply with the terms of this certification is a violation of the Forest Conservation and Shortage Relief Act of 1990 and OAR Chapter 629, Division 31, and is subject to any and all penalties contained therein.

Transferor:

Transferee:

Signed \_\_\_\_\_

Signed \_\_\_\_\_

Title \_\_\_\_\_

Title \_\_\_\_\_

Dated \_\_\_\_\_

Dated \_\_\_\_\_

[Note: For the purpose of this form, the definition of unprocessed timber is the same as in OAR 629-31-005]

Mail To: State Forester  
2600 State Street  
Salem, OR 97310

**FPA Written Plan for Timber Harvest**

**Green Spill Timber Sale**

**Portions of Section 34, T9S, R8W; Sections 1, 2, 12, 13, and 24, T10S, R8W; and Sections 6, 18, and 19, T10S, R7W, W.M., Benton, Lincoln, and Polk Counties, Oregon.**

**Protected Resources:** Steere Creek, Yaquina River, and Little Rock Creek.

**Situation:** Stream buffers are posted out of the sale areas with a minimum of 70 to 100 ft horizontal distance from the Type F streams. The operation may need to tail hold across some of these streams in order to harvest portions of Areas II, III, and IV.

**Resource Protection Measures:**

1. Where the logging system requires skylines to pass over the streams, pull cables out of the streamside vegetation prior to rigging the next yarding road.
2. Space skyline corridors passing over the stream a minimum of 100 feet apart.
3. Full suspension of logs is required when yarding over streams and buffers.
4. Use tail trees where needed to provide adequate lift.
5. Do not lower skyline cables or logs into streamside vegetation during the yarding cycle.
6. Fell trees adjacent to the stream buffers so that they do not fall into the stream buffers.
7. Tail hold stumps / equipment will be located at least 100' away from streams.
8. Ground lead equipment must stay out of the posted buffers (70 to 100 feet from stream).

**I, the undersigned, submit this written plan in compliance with the requirements of the Forest Practices Act, regarding operations conducted within 100 feet of type F streams.**

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PURCHASER REPRESENTATIVE

DATE

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STATE REPRESENTATIVE

DATE

**FPA Written Plan for Timber Harvest**

**Green Spill Timber Sale**

**Portions of Section 34, T9S, R8W; Sections 1, 12, and 13, T10S, R8W; and  
Sections 6, T10S, R7W, W.M., Benton, Lincoln, and Polk Counties, Oregon.**

**Protected Resource:** Marbled Murrelet Management Areas (MMMA) adjacent to Areas I, II, III, and IV.

**Situation:** The east boundaries of Area I and II, north boundary of Area III, and south boundary and northeast corner of Area IV are within 300 feet of marbled murrelet management areas. These areas have seasonal operating restrictions that will limit operations during the nesting season. The portions of these areas within 300' of the MMMA must follow the resource protection measures listed below.

**Resource Protection Measures:**

- Felling Operations within 300 feet of Marbled Murrelet Management Areas shall not be allowed from April 1 through August 5 or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.
- Cable Yarding Operations including use of tailhold/guyline anchors within 300 feet of Marbled Murrelet Management Areas shall not be allowed from April 1 through August 5 or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.
- Ground-based Operations within 300 feet of Marbled Murrelet Management Areas shall not be allowed from October 1 through August 5, or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.
- Log loading within 300 feet of Marbled Murrelet Management Areas shall not be allowed from April 1 through August 5 or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.
- Work on Project No. 1, road segment F2 to F3 in Area IV, shall not be allowed from November 1 through August 5 and from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.
- Work on Project No. 2 (lifts of rock), road segments C to C1, D to D1, D2 to D3, and D4 to D5 within 300 feet of Marbled Murrelet Management Areas shall not be allowed from April 1 through August 5 or from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.

**I, the undersigned, submit this written plan in compliance with the requirements of the Forest Practices Act, regarding operations conducted within 300 feet of a marbled murrelet management area.**

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PURCHASER REPRESENTATIVE

\_\_\_\_\_  
DATE

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STATE REPRESENTATIVE

\_\_\_\_\_  
DATE

Attachment: Exhibit "A"