



**Oregon Department of Forestry**  
 2600 State St Salem OR 97310

PART III: EXHIBITS

**EXHIBIT B**

**TIMBER SALE OPERATIONS PLAN**

(See page 2 for instructions)

Date Received by State: \_\_\_\_\_

(5) State Brand Information ( Complete)

(1) Contract Number: WO-341-2021-W00362-01

(2) Sale Name: Little Thin on the Prairie

(3) Contract Expiration Date: 12/31/2023

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

(6) State Representatives:

<u>Name</u>	<u>Circle One</u>	<u>Phone No.</u>	<u>Cell No.</u>	<u>Alt Phone</u>
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			

(7) Purchaser Representatives:

<u>Name</u>	<u>Circle One</u>	<u>Phone No.</u>	<u>Cell No.</u>	<u>Alt Phone</u>
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			
	Logging Projects All			

(8) Name of Subcontractors and Start Dates:

<u>Project No.</u>	<u>Subcontractor Name.</u>	<u>Start Date</u>	<u>Completion Date</u>	<u>Cell No.</u>	<u>Alt Phone</u>

	<u>Subcontractor Name.</u>	<u>Start Date</u>	<u>Cell No.</u>	<u>Alt Phone</u>
FELLING				
YARDING				

(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.



## Oregon Department of Forestry

2600 State St Salem OR 97310

PART III: EXHIBITS

### EXHIBIT B







## INSTRUCTION SHEET FOR OPERATIONS PLAN

### SUBMIT ONE COPY OF PLAN 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.
- (9) 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 required by the timber sale contract. Provide spur road specifications
  3. Locations of proposed tractor yarding roads. Show if and how marked on the ground.
  4. Locations of temporary stream crossings.
  5. List the sequence of performing project work.
  6. Location of rock sources - attach pit development plans.

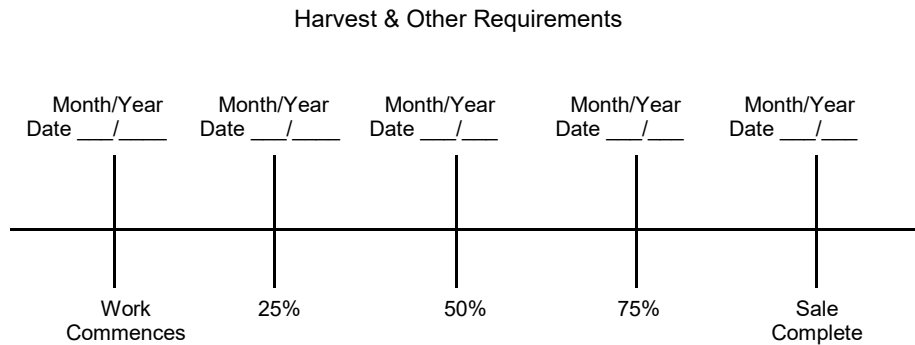
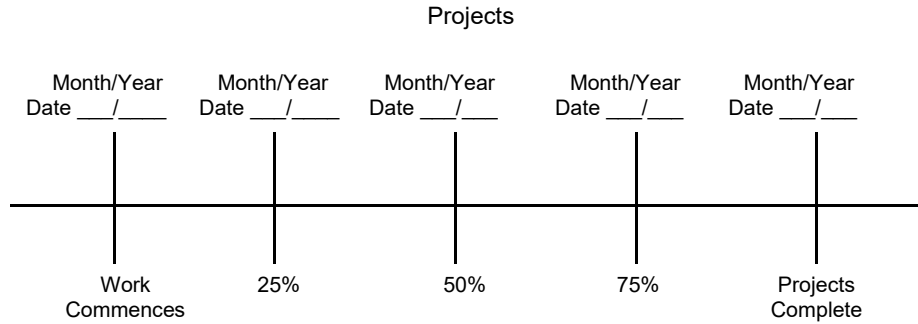
	1	Cable Landing, with numbers for sequence.
	A	Tractor Landing with alphabetical sequence.
		Approximate setting boundary.
		Spur truck roads.
		Tractor yarding roads.
		Temporary stream crossings.



**Oregon Department of Forestry**  
 2600 State St Salem OR 97310  
 PART III: EXHIBITS  
**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.



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, PURCHASER's 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 \_\_\_\_\_



Oregon Department of Forestry  
**EXHIBIT C - SAWMILL GRADE (WESTSIDE SCALE)**  
**SCALING INSTRUCTIONS - LOCATION APPROVAL - BRAND INFORMATION**  
 West Oregon - NWOA

(1) ORIGINAL REGISTRATION  Date \_\_\_\_\_  
 REVISION NUMBER 000  Date \_\_\_\_\_  
 CANCELLATION  Date \_\_\_\_\_

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

(3) FROM: West Oregon Phone (541) 929-3266  
 (State Forestry District)  
 Address: 24533 ALSEA HWY  
PHILOMATH, OR 97370

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

(5) MINIMUM SCALING SPECIFICATIONS	
SPECIES	MINIMUM NET VOLUME
Conifers	10
Hardwoods	10

\*Apply minimum volume test to whole logs over 40' Westside

(6) WESTSIDE SCALE:  
 Use Region 6 actual taper rule. Logs over 40'.

(7) Weight Scale Sample  YES  NO

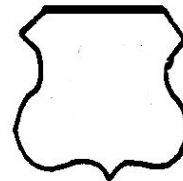
(8) APPROVED SCALING LOCATIONS (as shown on the ODF Approved Locations web-site )	Species	Yard	Truck	Weight

(9) **SALE NAME:** Little Thin on the Prairie  
**COUNTY:** Lincoln

(10) **STATE CONTRACT NUMBER:**  
WO-341-2021-W00362-01

(11) **STATE BRAND REGISTRATION NUMBER:**  
 \_\_\_\_\_

(12) **STATE BRAND INFORMATION:**



(13) **PAINT REQUIRED:** YES   
**COLOR:** Orange

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

(15) **REMARKS**  
 \_\_\_\_\_  
 \_\_\_\_\_

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

(16) **SIGNATURES:**

\_\_\_\_\_  
 Purchaser or Authorized Representative Date

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

\_\_\_\_\_  
 State Forester Representative PRINT NAME



Oregon Department of Forestry  
**EXHIBIT C - SAWMILL GRADE**  
**INSTRUCTIONS FOR FORM 343-307a (rev. 11/11)**  
**West Oregon - NWOA**

(1) 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.

(2) 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](mailto:services@crls.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](mailto:office@prlsb.com)

Mountain Western Log Scaling & Grading Bureau  
P.O.Box 580, Roseburg, OR 97470  
Phone: (541) 673-5571 Fax: (541) 672-6381  
Email: [info@southernoregonlogscaling.com](mailto:info@southernoregonlogscaling.com)

Yamhill Log Scaling & Grading Bureau  
P.O.Box 709, Forest Grove, OR 97116  
Phone: (503) 359-4474 Fax: (503) 359-4476  
Email: [yamhilllog@frontier.com](mailto:yamhilllog@frontier.com)

Northwest Log Scalars Inc.  
6137 NE 63rd St, Vancouver, WA, 98661  
Phone: (360) 553-7212 ext. 4 Fax:(360) 553-7213  
Email: [info@nwlogscalars.com](mailto:info@nwlogscalars.com)

Pacific Log Scaling & Grading Bureau, Inc.  
P.O.Box 23939, Portland, OR 97281  
Phone: (503) 684-5599 Fax: (503) 639-4880  
Email: [PacLogScale@sol.com](mailto:PacLogScale@sol.com)

(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.

(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) 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).

(8) 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.

(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 <\\WPODFILL01\Transfer\ScalingInstructions> or e-mailed directly to [scaling@odf.state.or.us](mailto:scaling@odf.state.or.us). Scaling Instructions for each brand should be scanned separately, for each approved TPSO.

**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.**

**General Distribution: TPSO, Approved Scaling Locations(s), Purchaser, Specific distribution instructions are outlined on the last page of this report: Instructions for Form**



Oregon Department of Forestry  
**EXHIBIT C - PULP SORT**  
**PROCESSING INSTRUCTIONS - LOCATION APPROVAL**  
**BRAND INFORMATION**

West Oregon, NWOA

(1) ORIGINAL REGISTRATION  Date \_\_\_\_\_  
REVISION NUMBER 000  Date \_\_\_\_\_  
CANCELLATION  Date \_\_\_\_\_

(2) TO: \_\_\_\_\_  
**(Approved Pulp Processing Facility)**

(3) FROM: West Oregon Phone (541) 929-3266  
(State Forestry District)  
Address: 24533 ALSEA HWY  
PHILOMATH, OR 97370

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

(5) Scaling Bureau (TPSO) Processing Weight receipts:  
\_\_\_\_\_

Mailing Address: \_\_\_\_\_

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

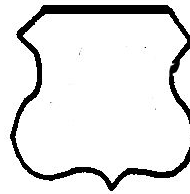
(9) **SALE NAME:** Little Thin on the Prairie

COUNTY: Lincoln

(10) **STATE CONTRACT NUMBER:**  
WO-341-2021-W00362-01

(11) STATE BRAND REGISTRATION NUMBER: \_\_\_\_\_

(12) STATE BRAND INFORMATION:



(13) **REMARKS:** Mule train loads require a load ticket for each set of bunks.

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

(14) SIGNATURES:  
\_\_\_\_\_

Purchaser or Authorized Representative Date

State Forester Representative Date

State Forester Representative PRINT NAME

(6) **STATE Definition of Approved Pulp Sort:**  
• Top portion of the tree (tops).  
• All logs with a diameter (Big End) greater than 8 inches marked with blue paint.

(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.
- Gross weight and truck tare weight for each load shall be machine printed on the weight receipt.
- Weigher shall sign the weight receipt.
- 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 TPSO processing the Weight receipt.

(8) TPSO PROCESSING INSTRUCTIONS

- Submit data files daily (or each day of activity).
- Mail or deliver scale tickets weekly to ODF Headquarters in Salem.

**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**



Oregon Department of Forestry  
**EXHIBIT C - PULP SORT**  
**Instructions for Form 343-307b**

West Oregon, NWOA

- (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](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](mailto:services@crls.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](mailto:office@prlsb.com)

Mountain Western Log Scaling & Grading Bureau  
P.O.Box 580, Roseburg, OR 97470  
Phone: (541) 673-5571 Fax: (541) 672-6381  
Email: [info@southernoregonlogscaling.com](mailto:info@southernoregonlogscaling.com)

Yamhill Log Scaling & Grading Bureau  
P.O.Box 709, Forest Grove, OR 97116  
Phone: (503) 359-4474 Fax: (503) 359-4476  
Email: [yamhilllog@frontier.com](mailto:yamhilllog@frontier.com)

Northwest Log Scalers Inc.  
6137 NE 63rd St, Vancouver, WA, 98661  
Phone: (360) 553-7212 ext. 4 Fax:(360) 553-7213  
Email: [info@nwlogscalers.com](mailto:info@nwlogscalers.com)

Pacific Log Scaling & Grading Bureau, Inc.  
P.O.Box 23939, Portland, OR 97281  
Phone: (503) 684-5599 Fax: (503) 639-4880  
Email: [PacLogScale@sol.com](mailto:PacLogScale@sol.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.
- (7) **Must Complete.** Enter sale name and county. If more than one county write in all the counties that the sale is located in.
- (8) **Must Complete.** Enter sale Contract number.
- (9) **Must Complete.** Enter Oregon's State Brand Registry Number (**REQUIRED**).
- (10) **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).
- (11) Use this section to list any special instructions or the reason for any revisions in section item(1).
- (12) **Must Complete.** Purchaser required 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 \\WPODFILL01\Transfer\ScalingInstructions or e-mailed directly to [scaling@odf.state.or.us](mailto:scaling@odf.state.or.us). 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 Pulp Processing Location, Purchaser, District, Mgmt. Unit**

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
14 feet	N/A	A to B	0+00 to 14+80	Outsloped
14 feet	N/A	C to D	0+00 to 6+10	Outsloped
14 feet	12 feet	1 to 2	0+00 to 144+60	Crowned
14 feet	12 feet	3 to A	0+00 to 27+50	Crowned
14 feet	N/A	4 to 5	0+00 to 37+70	Outsloped
14 feet	N/A	6 to 7	0+00 to 4+90	Outsloped
14 feet	12 feet	2 to 8	0+00 to 34+50	Crowned
14 feet	N/A	9 to 10	0+00 to 6+40	Outsloped
14 feet	N/A	11 to 12	0+00 to 4+70	Outsloped
14 feet	12 feet	13 to 14	0+00 to 117+40	Crowned

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.

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

CLEARING CLASSIFICATION.

New Construction - 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.

Improvement - 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.

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 cut slopes shall be removed.

GRUBBING CLASSIFICATION.

New construction - from the top of the cut slope to 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. Clearing and grubbing debris shall not be placed or permitted to remain in or under any road embankment sections. Clearing and grubbing debris shall be left in a stable location, and not left lodged against standing trees.

Clearing, grubbing, and associated disposal shall be completed prior to subgrade approval.



EXHIBIT D

FOREST ROAD SPECIFICATIONS

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

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

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.

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 at 4 to 6 percent or outsloped at 3 to 4 percent as shown on the "Forest Road Specifications" table in this Exhibit.

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: Intervisible but not greater than 750 feet apart and as marked in the field.

SLOPES

	<u>Cut Slopes</u>	<u>Fill Slopes</u>
Solid Rock	Vertical to 1/4 :1	
Fractured Rock	1/2 :1	
Soil - side slopes 50% and over	3/4 :1	1 1/2 :1
Soil - side slopes less than 50%	1 :1	1 1/2 :1

Top of cut slope 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 these Exhibits, 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. Removal 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) Drainage Ditches. Construct ditchlines, including ditchouts, as directed by STATE. Cut slopes of ditchlines and ditchouts shall not exceed a 1:1 slope. Construct culvert sediment basins. Waste materials from drainage ditches and sediment basins shall be placed in nearby waste areas and uniformly sloped and compacted for drainage, as directed by STATE.
- (4) Equipment. All excavation and riprap placement shall be performed using a minimum 1½ cubic-yard, track-mounted excavator.
- (5) Subgrade Preparation and Application of Surfacing Rock.
  - (a) Complete culvert installations, drainage ditches, ditchouts, fill construction, and other specified work prior to the application of surfacing rock.
  - (b) Subgrade shall be crowned at 4 to 6 percent or outsloped at 3 to 4 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 crowned at 4 to 6 percent or outsloped at 3 to 4 percent.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS (Project No. 1)

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
A to B	0+00 to 14+80	Construct a 14' wide outsloped subgrade road with dozer. Shape subgrade with grader and compact subgrade with vibratory roller. Apply 10 CY of 3"-0" rock for junction rock at Pt. A.
	4+00 to 7+00	Push excavated material ahead for fill material.
	9+50	Construct turnaround.
	11+75 to 12+50	Endhaul excavated material to waste area as shown on Exhibit A (150 CY).
	14+80	Construct Landing and compact with vibratory roller.
C to D	0+00 to 6+10	Construct a 14' wide outsloped subgrade road with dozer. Shape subgrade with grader and compact subgrade with vibratory roller.
	6+10	Construct Landing and compact with vibratory roller.

EXHIBIT D  
FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- (1) Timber Removal. Remove all trees within posted Right-of-Way Boundary as specified in Section 2210, Designated Timber.
- (2) Bank Slough Removal. Excavate all bank slough. Bank slough material shall not be pulled across existing surfacing rock. Excavated material shall be hauled to the designated waste areas as marked in the field and/or designated on Exhibit A.
- (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 fill reconstruction or culvert replacement is specified, fills shall be excavated to natural stream course levels. All woody debris encountered during fill excavation shall be removed. Fill reconstruction backfill shall consist of select materials and may be obtained from borrow pits, as directed by STATE. Unsuitable backfill material shall be hauled to the designated waste areas as marked in the field and/or designated on Exhibit A. STATE may require the use of crushed rock for culvert bedding and backfill according to the "Specific Road Improvement Instructions." Backfill materials shall be thoroughly compacted in accordance with this Exhibit.
- (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. Install a culvert marker at each newly installed culvert.
- (5) Fill Armor and Energy Dissipator Construction. Where rock is specified for fill armor, rock shall be machine placed and tamped at a 1½:1 slope, beginning at the toe of the fill. Where rock is used for an energy dissipator, rock shall be placed below the culvert outlet and embedded for a minimum of 3 feet, in accordance with this Exhibit.
- (6) Sod Removal. Scrape off sod and grass from road surfacing where needed. Do not leave berms along road edges and ditch lines. Sod material shall be scattered in stable locations through openings in the timber outside of the cleared right-of-way. End-haul sod debris as required to the designated waste areas as marked in the field and/or designated on Exhibit A.
- (7) Equipment. All excavation and riprap placement shall be performed using a minimum 1½ cubic yard, track-mounted excavator.
- (8) Waste areas. shall be uniformly sloped and compacted for drainage.
- (9) Subgrade Preparation and Application of Surfacing Rock.
  - (a) Complete culvert installations, drainage ditches, fill reconstruction, 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 at 4 to 6 percent or outslope of 3 to 4 percent, and compact in accordance to the "Compaction and Processing Requirements" in this Exhibit.

EXHIBIT D  
FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS (Project No. 2)

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
1 to 2	0+00 to 50+00  88+20  120+30  To 144+60	Clean culvert inlets and outlets (approximately 2). Apply 70 CY of 3"-0" rock for spot rock as directed by STATE. Process and compact surfaced and crowned road with grader and vibratory roller (25 Sta.).  Excavate bank slough and place in stable location.  Remove sod with grader and scatter in stable location.
3 to A	0+00 to 27+50	Remove sod and scatter in stable locations. Clean culvert inlets and outlets (approximately 1). Apply 60 CY of 1 1/2"-0" rock for spot rock and 10 CY of 1 1/2"-0" rock for turnout rock as directed by STATE. Shape surface rock with a grader. Compact surface with vibratory roller.
4 to 5	0+00 to 31+20  31+20 to 37+70  35+70	Spot grade surface up to 5 stations as directed by STATE.  Reopen unsurfaced outsloped road and Landing with an excavator. Excavate bank slough with excavator. End haul bank slough to waste area. Round cut slope. Remove sod with grader, end haul sod debris to waste area. Compact waste material. Shape subgrade with grader and compact with vibratory roller.  Utilize 30 CY of jaw-run rock for armor rock on downhill side of road.
6 to 7	0+00 to 4+90	Remove sod with grader. Reopen Landing with grader. Shape unsurfaced outsloped subgrade with a grader and compact with vibratory roller.
2 to 8	0+00  To  34+50  0+00 To 10+80 (Pt. 9) 10+80 (Pt. 9) To 16+90 (Pt. 11)	Reopen crowned surfaced road with grader. End haul sod debris to waste area (approximately 140 CY). Excavate bank slough and end haul to waste area (approximately 200 CY). Compact waste material. Realign road (Sta. 16+20 to 17+20). Clean culvert inlets and outlets (approximately 4). Repair culvert ends (approximately 2). Reopen Landing with grader (Sta. 34+50). Construct turnaround (Sta. 34+50). Shape subgrade with grader and compact with vibratory roller.  Apply 240 CY of 3"-0" rock for surface rock (4" lift). Shape surface with grader and compact with vibratory roller.  Apply 190 CY of 3"-0" rock for surface rock (6" lift). Shape surface with grader and compact with vibratory roller.
9 to 10	0+00 to 6+40	Reopen unsurfaced outsloped road and Landing with an excavator. Remove sod and shape subgrade with grader. Compact subgrade with vibratory roller. Apply 10 CY of 3"-0" rock to rock junction (Pt. 9).

11 to 12	0+00 To 4+70	Remove sod, realign road (0+00 to 0+80) and shape subgrade with a grader, compact with vibratory roller. Excavate and end haul approximately 60 CY of bank slough (Sta. 0+00 to 0+50) to waste area. Compact waste material. Reopen Landing with excavator (Point 12). Apply 8" lift of jaw-run rock (190 CY) for surface rock (Pt. 11 to 12) and 30 CY of jaw-run rock for Landing rock (Pt. 12). Shape surface with grader and compact surface with vibratory roller.
13 to 14	0+00 To 117+40 116+40	Re-establish ditch with grader (approximately 35 Sta.). Apply 120 CY of 1½"-0" rock to spot rock as directed by STATE. Clean culvert inlets and outlets (approximately 9). Repair culvert ends (approximately 4). Shape surfaced crowned road with grader.  Install 18"x30' culvert. Utilize 10 CY of 1 ½"-0" rock for culvert bedding/backfill. Utilize 1 bale of hay to cover exposed soils.

EXHIBIT D  
ROAD SURFACING

ROAD SEGMENT	A to B			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	A to B		0+00 to 14+80			
				Volume (CY) per		Number of			
Junction Rock	3"-0"	0+00	n/a	10	Load	1	Loads	10	14
Total Rock for Road Segment		A to B						10	14

ROAD SEGMENT	1 to 2			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	1 to 2		0+00 to 144+60			
				Volume (CY) per		Number of			
Spot rock	3"-0"	0+00 to 50+00	n/a	10	Load	7	Loads	70	95
Total Rock for Road Segment		1 to 2						70	95

ROAD SEGMENT	3 to A			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	3 to A		0+00 to 27+50			
				Volume (CY) per		Number of			
Turnout rock	1 1/2"-0"	As marked in field	n/a	10	Turnout	1	Turnouts	10	14
Spot rock	1 1/2"-0"	0+00 to 27+50	n/a	10	Load	6	Loads	60	81
Total Rock for Road Segment		3 to A						70	95

ROAD SEGMENT	4 to 5			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	4 to 5		0+00 37+70			
				Volume (CY) per		Number of			
Armor Rock	Jaw-Run	35+70	n/a	10	Load	3	Loads	30	41
Total Rock for Road Segment		4 to 5						30	41

ROAD SEGMENT	2 to 8			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	2 to 8		0+00 to 34+50			
				Volume (CY) per		Number of			
Surface rock	3"-0"	0+00 to 10+80	4	22	Station	10.9	Stations	240	324
Surface rock	3"-0"	10+80 to 16+90	6	33	Station	6	Stations	190	257
Total Rock for Road Segment		2 to 8						430	581

EXHIBIT D

ROAD SURFACING

ROAD SEGMENT	9 to 10			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	9 to 10		0+00 to 6+40			
				Volume (CY) per		Number of			
Junction Rock	3"-0"	0+00	n/a	10	Junction	1	Junctions	10	14
Total Rock for Road Segment		9 to 10						10	14

ROAD SEGMENT	11 to 12			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	11 to 12		0+00 to 4+70			
				Volume (CY) per		Number of			
Surface rock	Jaw-Run	0+00 to 4+70	6	44	Station	4.7	Stations	190	257
Landing Rock	Jaw-Run	4+70	n/a	30	Landing	1	Landings	30	41
Total Rock for Road Segment		11 to 12						220	298

ROAD SEGMENT	13 to 14			POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Application	Rock Size and Type	Location	Depth of Rock (inches)	13 to 14		0+00 117+40			
				Volume (CY) per		Number of			
Spot Rock	1 1/2"-0"	n/a	n/a	10	Load	12	Load	120	162
Culvert bedding rock	1 1/2"-0"	116+40	n/a	10	Culvert	1	Culverts	10	14
Total Rock for Road Segment		13 to 14						130	176

**ROCK CONVERSION FACTORS**

Size	1 1/2"-0"	3"-0"	Jaw-Run	Pit-Run
Tons/CY	1.35	1.35	1.35	1.35

(Conversion factors from Hardrock Quarry)

Maintenance Rock Volumes in CY				
Rock Size	1 1/2"-0"	3"-0"	Jaw-Run	Pit-Run
Rock Totals	100			

Total Rock Volumes For Projects				
Rock Size	1 1/2"-0"	3"-0"	Jaw-Run	Pit-Run
Rock Totals CY	200	520	250	
Rock Totals TONS	270	702	338	

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



## 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 15<sup>th</sup> 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 at 4 to 6 percent or outsloped or insloped at 3 to 4 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	SUBGRADE COMPACTION OPTIONS
All road segments.	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	FILLS COMPACTION OPTIONS
All road segments.	1 and 2

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, compacted, and approved by STATE 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 or outsloped at 3 to 4 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

EXHIBIT D

COMPACTION AND PROCESSING REQUIREMENTS

ROAD SEGMENT	CRUSHED COMPACTION OPTIONS
All road segments requiring crushed rock.	1

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) Vibratory Hand-Operated or Backhoe-Mounted Tamper. Vibratory hand-held or hydraulic tampers shall be used for compaction of backfill materials around culverts (and/or bridge approach embankment materials around abutments). The tamper shoe dimensions shall be a minimum of 10" X 13" and capable of a centrifugal force of 2,250 pounds.

EXHIBIT D

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%
<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  
CULVERT SPECIFICATIONS

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the Contract.

Culverts 36 inches in diameter and smaller shall be constructed of corrugated polyethylene. Polyethylene culverts shall be double-walled and meet the requirements of AASHTO M-294-11, Type S, or ASTM F2648.

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.

Culverts in live streams shall be installed with the inlet and outlet on grade with the stream bottom, unless otherwise specified in writing.

Cross Drain Culverts

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. Cross drains shall be skewed to fit the required culvert length to the road prism.

Cross drain culverts shall be installed at a slope steeper than the incoming ditch grade, but not less than 3 percent or greater than 10 percent.

Disconnect Culverts

The culvert inlet shall be located as close to the channel that it is disconnecting, while the culvert outlet shall be located as far from the channel as possible; discharge culvert outflow on the forest floor, allowing for filtration before the water enters the disconnected channel.

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. Bedrock shall be excavated as required to provide a uniform foundation for the full length of the culvert.

A bedding of 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 for all culverts.

Backfill shall consist of crushed rock on improvement segments.

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 rockered shall be as follows: 12" for culverts 18" to 36".

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

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

EXHIBIT D

CULVERT SPECIFICATIONS

The outlet end of any culvert which would allow water to erode embankment soil shall be provided with an energy dissipator, half round, or other approved slope protection device.

Compaction by tamping utilizing a Vibratory Hand-Operated or Backhoe-Mounted Tamper is required for all culverts.

All culverts scheduled for replacement shall become property of the PURCHASER and be removed from STATE land and hauled to an approved refuse site in the same project period in which replacement occurred. 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.

The intake ends of culverts in fills less than 3 feet to the top of the culvert shall be marked by driving white fiberglass posts within 6 inches of the downgrade side. Posts shall be a minimum of 6 feet long and 2½ inches wide, with the spade driven 2 feet into the ground. Install a culvert marker at each existing culvert that is missing a marker that could be reached by a grader blade.

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

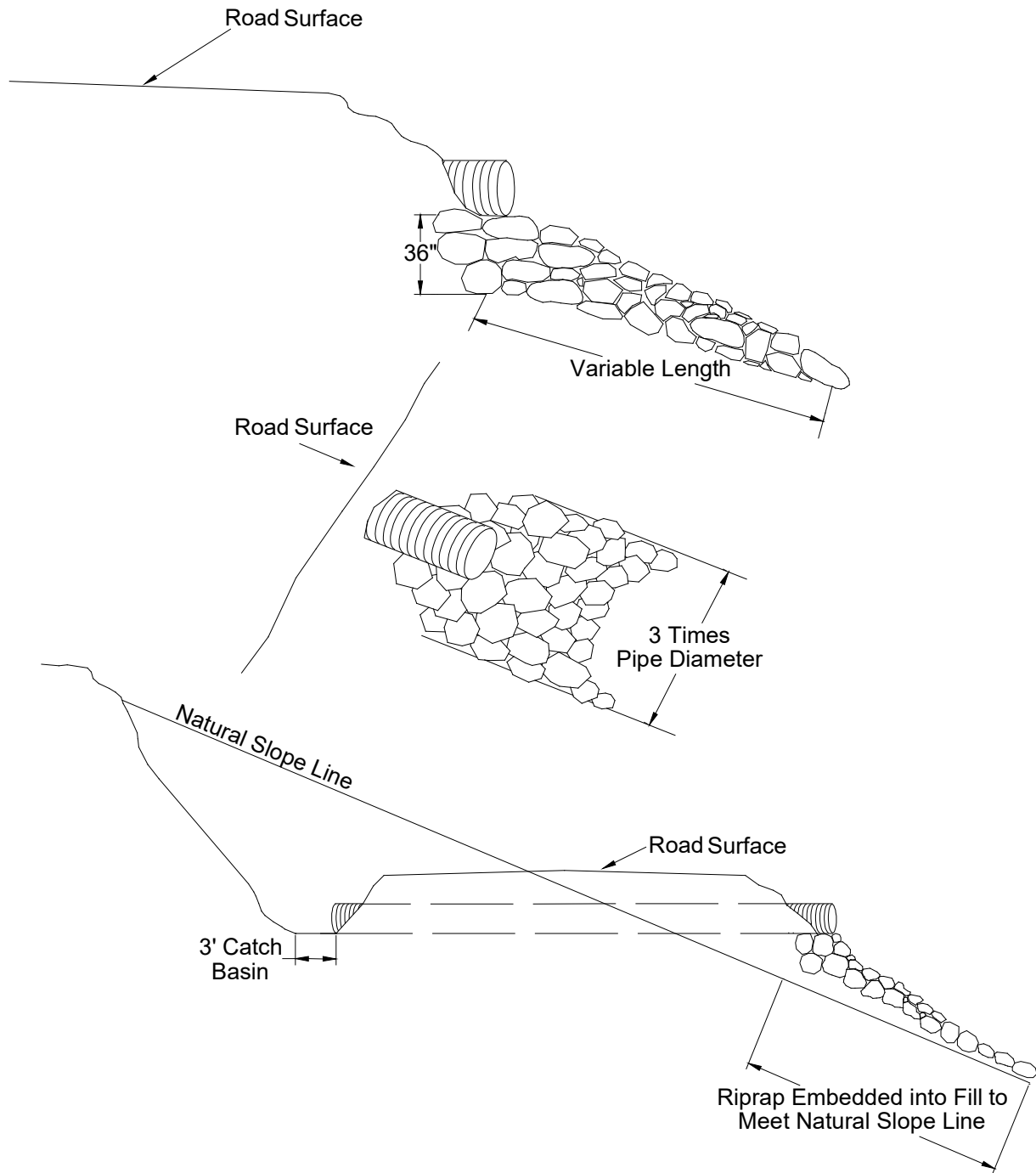
CULVERT LIST

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	MATERIAL TYPE	ROAD SEGMENT POINT TO POINT	STATION
1	18	30	CPP	13 to 14	116+40

CPP = Polyethylene

EXHIBIT D

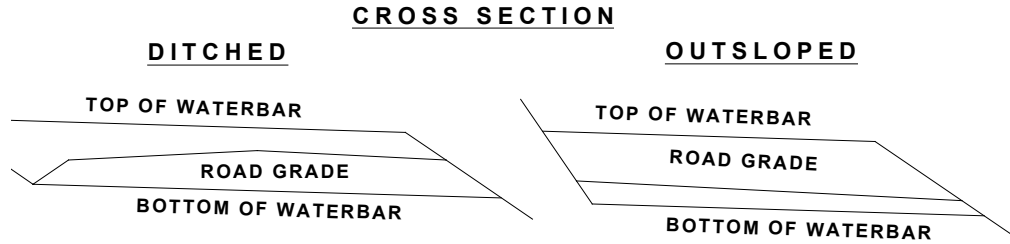
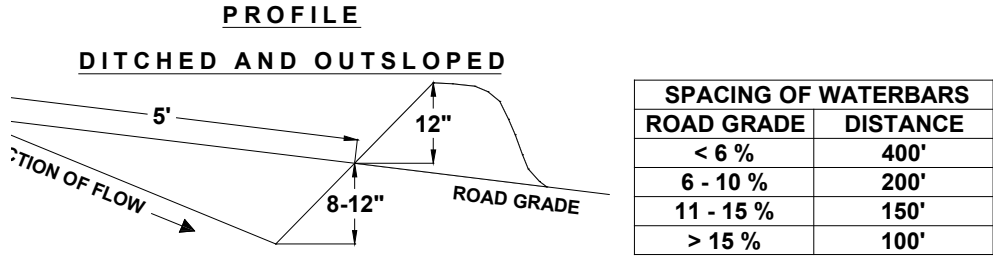
TYPICAL EMBEDDED ENERGY DISSIPATOR



Dissipator shall be installed prior to the installation of the culvert, unless approved by STATE.

EXHIBIT D

WATERBAR SPECIFICATIONS



CONSTRUCT DITCHOUT THRU ANY EXISTING BERM.  
CROSS DRAINAGE GRADIENT MINIMUM 3%.

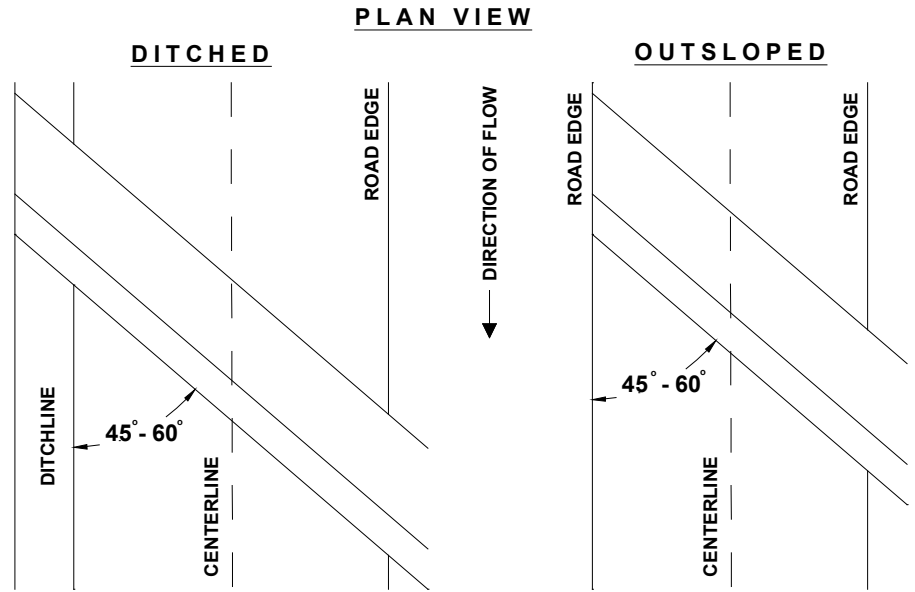
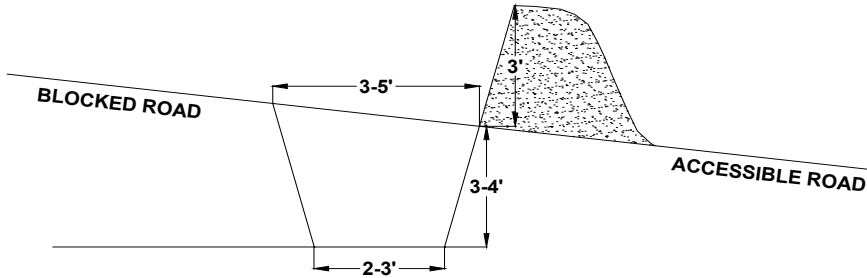




EXHIBIT D

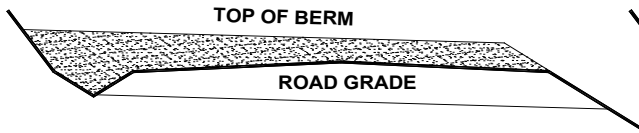
TANK TRAP SPECIFICATIONS

**PROFILE**  
**DITCHED AND OUTSLOPED**

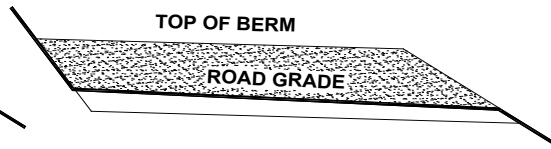


**CROSS SECTION**

**DITCHED**



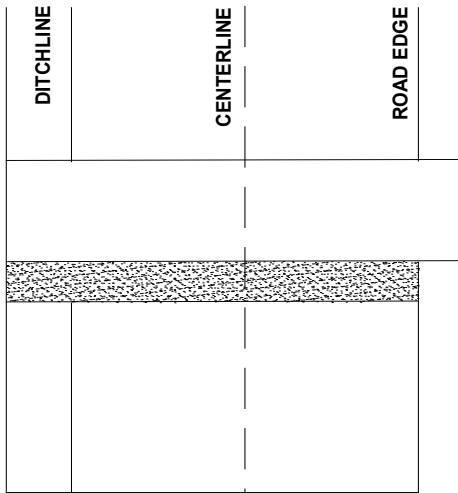
**OUTSLOPED**



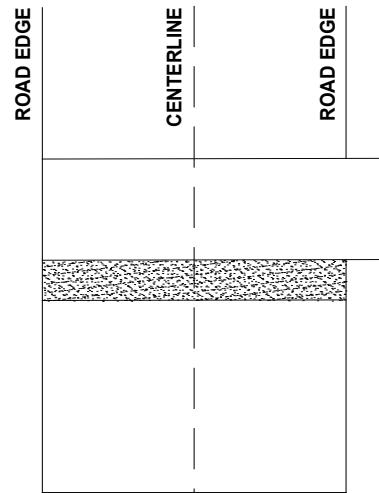
CONSTRUCT DITCHOUT THRU ANY EXISTING BERM.  
CROSS DRAINAGE GRADIENT MINIMUM 3%

**PLAN VIEW**

**DITCHED**



**OUTSLOPED**



DIRECTION OF FLOW  
↓

It should be sloped to drain with a relief ditch through the down slope edge of the road. The trench shall be behind the berm for approaching traffic.



**FPA WRITTEN PLAN for Yarding Corridors through Type F RMA's**

**Little Thin on the Prairie Timber Sale**

**Location:** Portions of Sections 16 & 17, T10S, R09W, W.M, Lincoln County, Oregon

**Landowner:** Oregon Department of Forestry  
24533 Alsea Hwy  
Philomath OR, 97370  
(541) 929-3226

**Protected Resources:** Long Prairie Creek, a large Type F stream. Thayer Creek, a medium Type F stream.

**Situation:** The Timber Sale Area extends down to the Type F RMA's. To achieve one-end suspension, cable corridors may need to tailhold on the other side of the Type F streams, however no logs will be yarded through the RMA's.

**Resource Protection Practices:**

Along all of the above mentioned streams, as well as any other streams, the following practices are required under the timber sale contract, to protect the streams and streamside areas:

- No trees will be felled within stream buffers (RMA's), except as necessary in cable corridors.
- Trees that fall or slide into Type F RMA's shall not be removed without prior approval from STATE.
- Trees adjacent to the stream buffers (RMA's) will be felled away from or parallel to the streams to prevent trees from entering the aquatic areas.
- When cable logging is conducted nearby the RMA's, logging lines may cross, but will not be lowered into the RMA's during yarding, except during rigging. During rigging the lines must be pulled out of the RMA's when changing corridors.
- Logs shall be fully suspended when yarding across all stream buffers (RMA's).
- Cable corridors must be at least 100 feet apart where they cross the RMA's.

**I, the undersigned, submit this written plan in compliance with the requirements in the Forest Practices Act regarding the use of cable corridors across Type F RMA's. I agree to the protection measures listed on this plan:**

\_\_\_\_\_  
Purchaser/Operator Contract Representative

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

\_\_\_\_\_  
State Representative

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

**FPA WRITTEN PLAN**  
**for Timber Harvest and Road Improvement within 300 feet of a Sensitive Wildlife Site**

**Little Thin on the Prairie**

**Location:** Portions of Section 16 and 17, T10S, R09W, W.M, Lincoln County Oregon

**Landowner:** Oregon Department of Forestry  
24533 Alsea Hwy  
Philomath OR, 97370  
(541) 929-3226

**Protected Resource:** The West Prairie Marbled Murrelet Management Area (MMMA).

**Situation:** Portions of Units 1, 2 and 3 lie within the non-habitat buffer for the West Prairie MMMA. Thinning operations will occur within the non-habitat buffer but will not occur within the occupied habitat. The use of Guylines and Tailholds within occupied habitat may be allowed with STATE approval. Road improvement, including grading, excavation and rocking, will occur mainly within the non-habitat buffer.

**Resource Protection Measures:**

- 1) The following shall not be allowed within the MMMA buffer from April 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.
  - a) Ground-based yarding operations.
  - b) Cable yarding operations.
  - c) Use of mechanized equipment, including chainsaws.
  - d) Non-project road and Landing construction.
  - e) Road improvement on roads not commonly used. (Pts. 2 to 8, 9 to 10 and 13 to 14)
  
- 2) Use of Guylines or Tailholds in the MMMA will have the following restrictions:
  - a) Consultation with STATE and approval of each Guyline, Tailhold and cable line placement is required before Guylining or Tailholding is allowed in this area. A lead time of two weeks is required to schedule a field consultation between STATE, PURCHASER, the Operator, and the person responsible for Guyline and Tailhold selection and cable rigging. Consultation will include identification of nesting platforms and cover trees.
  
  - b) The following trees within the Designated Occupied Habitat of the MMMA will not be selected for Guyline or Tailhold anchors:
    - i) Trees with potential nest platforms or immediately surrounding trees that provide cover to the potential nest platforms, as determined by STATE.
    - ii) If feasible, the largest trees in the areas where the number of large trees is limited.
    - iii) If feasible, minor conifer species not commonly found in the stand.
  
  - c) Cables located within the MMMA will be located so that raising, lowering or use of the line will not damage trees considered to have suitable nesting platforms or associated cover trees.

- d) Lines that may damage, in the opinion of the ODF Area Biologist or authorized representative, potential or existing nesting platforms or associated cover trees must be removed and relocated.
  - e) Any plans to Guyline or Tailhold in the MMMA must be addressed in the Operations Plan and at the Pre-Operations meeting.
- 3) Human food trash will be policed and removed from all project areas, Landings, and roadways on a daily basis. Food items and food waste will be stored inside appropriate containers or vehicles.

**I, the undersigned, submit this written plan in compliance with the requirements in the Forest Practices Act regarding operations conducted within 300 feet of an endangered species nesting site. I agree to the protection measures listed on this plan:**

\_\_\_\_\_  
Purchaser/Operator Contract Representative

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

\_\_\_\_\_  
State Representative

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