

PART III: EXHIBITS

State Timber Sale Contract
No. 341-15-39
Cline Plunkett Thin

EXHIBIT B

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

OREGON DEPARTMENT OF FORESTRY

TIMBER SALE OPERATIONS PLAN

(See Page 2 for instructions)

Date Received by STATE: _____

(5) State Brand Information (complete):



(1) Contract No.: 341-15-39

(2) Sale Name: Cline Plunkett Thin

(3) Contract Expiration Date: December 31, 2016

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.







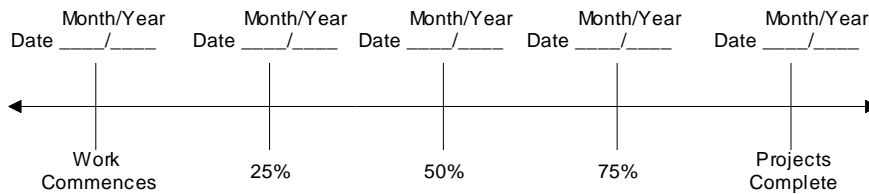
-  Cable Landing, with numbers for sequence.
-  Tractor Landing with alphabetical sequence.
-  Approximate setting boundary.
-  Spur truck roads.
-  Tractor yarding roads.
-  Temporary stream crossings.

EXHIBIT B
OPERATIONS PLAN

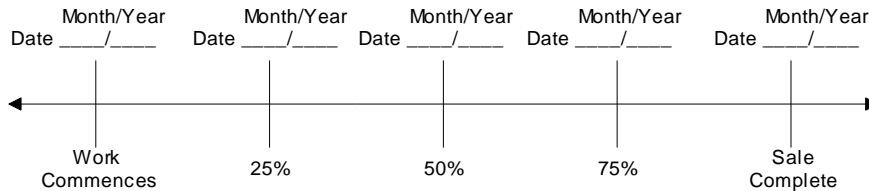
Completion Timeline

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 _____

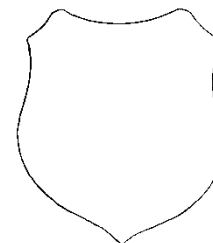
Original: Salem
 cc: District File
 Purchaser

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 Phone (541) 929-3266
 (State Forestry District)
 Address 24533 Alsea Highway, Philomath, OR 97370-9112
- (4) PURCHASER: _____
 Mailing Address: _____
 Phone Number: _____

- (9) SALE NAME: Cline Plunkett Thin
 COUNTY: Lincoln
- (10) STATE CONTRACT NUMBER: 341-15-39
- (11) STATE BRAND REGISTRATION NUMBER: _____
- (12) STATE BRAND INFORMATION (COMPLETE):



- (13) PAINT REQUIRED: YES
 COLOR: Orange

(5) MINIMUM SCALING SPECIFICATIONS	
SPECIES	MINIMUM NET VOLUME
Conifers	By weight – 8 tons/mbf
Hardwoods	By weight – 8 tons/mbf
Pulp	By weight – 8 tons/mbf

Apply minimum volume test to whole logs over 40' Westside

- (6) WESTSIDE SCALE: YES NO
 Use Region 6 actual taper rule. Logs over 40'.
- (7) Weight Scale Sample

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

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

- (15) REMARKS Loads shall be weight scaled in lieu of scaling. Tons shall be short tons or 2,000 lbs. Loads shall have a pink Scaler Receipt and Load Receipt attached. Weigher shall attach a machine-printed weight ticket, with the ODF weight load number on it, to the ODF 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. "Mule Train" loads require a load ticket for each set of bunks.

Operator's Name (Optional inclusion by District): _____

- (16) 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.

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

EXHIBIT C – SAWMILL AND PULP GRADE
INSTRUCTIONS FOR FORM 343-307a (rev. 11/11)

- (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

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

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

Yamhill Log Scaling & Grading Bureau
P.O. Box 709, Forest Grove, OR 97116
Phone: (503) 359-4474 Fax: (503) 359-4476
Email: yamhill@attglobal.net

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

- (3) State District office, address and phone.
- (4) Enter Purchaser's business name, address, and phone number as it appears on the Contract.
- (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
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. Scaling instructions for each brand should be scanned separately, for each approved TPSO.

EXHIBIT D
 FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
14 feet	12 feet	A to A1	0+00 to 7+80	No Ditch
14 feet	--	A to A1	7+80 to 26+80	No Ditch
14 feet	--	A1 to A2	0+00 to 12+90	No Ditch
14 feet	12 feet	A3 to A4	0+00 to 71+60	No Ditch
14 feet	--	A5 to A6	0+00 to 2+40	No Ditch
14 feet	12 feet	A7 to A8	0+00 to 6+20	No Ditch
14 feet	12 feet	A9 to A10	0+00 to 5+60	No Ditch
14 feet	12 feet	B to B1	0+00 to 54+50	Ditch
14 feet	12 feet	B1 to B6	0+00 to 57+60	Ditch
14 feet	12 feet	B2 to B3	0+00 to 20+10	No Ditch
14 feet	12 feet	B4 to B5	0+00 to 1+10	No Ditch
14 feet	12 feet	B6 to B7	0+00 to 10+20	No Ditch
14 feet	12 feet	C to C1	0+00 to 55+70	No Ditch
14 feet	--	C2 to C3	0+00 to 3+20	No Ditch
14 feet	--	C4 to C5	0+00 to 5+80	No Ditch
14 feet	--	C6 to C7	0+00 to 2+80	No Ditch
14 feet	--	C8 to C9	0+00 to 32+20	No Ditch
14 feet	--	C10 to C11	0+00 to 1+60	No Ditch
14 feet	--	C12 to C13	0+00 to 2+50	No Ditch
14 feet	--	C14 to C15	0+00 to 18+60	No Ditch
14 feet	--	C16 to C17	0+00 to 12+50	No Ditch
14 feet	12 feet	C18 to C19	0+00 to 1+50	No Ditch
14 feet	--	C20 to C21	0+00 to 1+80	No Ditch
14 feet	--	C22 to C23	0+00 to 3+60	No Ditch
14 feet	12 feet	D to D1	0+00 to 39+50	Ditch
14 feet	--	D1 to D6	0+00 to 26+10	No Ditch
14 feet	--	D2 to D3	0+00 to 22+80	No Ditch
14 feet	--	D4 to D5	0+00 to 17+80	No Ditch
14 feet	--	D7 to D8	0+00 to 4+70	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.

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.

EXHIBIT D
FOREST ROAD SPECIFICATIONS

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 25 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>Back Slopes</u>	<u>Fill Slopes</u>
Solid Rock	Vertical to ¼:1	
Fractured Rock	½:1	
Soil - side slopes 50% and over	¾:1	1½:1
Soil - side slopes less than 50%	1:1	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 outsloped or 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.

GENERAL ROAD CONSTRUCTION INSTRUCTIONS:

Project No. 1

- (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.

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS

Project No. 1

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
A1 to A2	0+00 to 12+40	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	12+40 to 12+90	Construct Landing at Point A2.
	0+00 to 12+90	Shape surface with road grader.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

A5 to A6	0+00 to 1+90	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	1+90 to 2+40	Construct Landing at Point A6.
	0+00 to 2+40	Shape surface with road grader.
C2 to C3	0+00 to 2+70	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	2+70 to 3+20	Construct Landing at Point C3.
C6 to C7	0+00 to 2+30	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	2+30 to 2+80	Construct Landing at Point C7.
C10 to C11	0+00 to 1+10	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	1+10 to 1+60	Construct Landing at Point C11.
C12 to C13	0+00 to 2+00	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	2+00 to 2+50	Construct Landing at Point C13.
C16 to C17	0+00 to 12+00	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	3+60	Construct Landing at Station 3+60.
	12+00 to 12+50	Construct Landing at Point C17.
	0+00 to 12+50	Shape subgrade with road grader.
C20 to C21	0+00 to 1+30	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	1+30 to 1+80	Construct Landing at Point C21.
C22 to C23	0+00 to 3+10	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	3+10 to 3+60	Construct Landing at Point C23.
D4 to D5	0+00 to 17+30	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	17+30 to 17+80	Construct Landing at Point D5.
	0+00 to 17+80	Shape surface with road grader.
D7 to D8	0+00 to 4+20	Construct new outsloped dirt road using a D-7 or equivalent dozer. Right-of-way is posted.
	4+20 to 4+70	Construct Landing at Point D8.

EXHIBIT D
FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

Project No. 2

- (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 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) Bank Slough Removal. Dig out all bank slough. Bank slough material 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.
- (4) 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. All waste materials shall be hauled to nearby waste areas and shall be uniformly sloped and compacted for drainage. Fill reconstruction backfill shall consist of select materials and may be obtained from borrow pits, as directed by STATE. Backfill materials shall be hauled in where necessary and thoroughly compacted in accordance with this Exhibit. Crushed rock shall be used for backfilling excavation trenches less than 3 feet deep. STATE may require the use of crushed rock for culvert bedding. Removed culverts shall be hauled to an approved refuse site off of STATE land.
- (5) 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.
- (6) 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 of 4 to 6 percent of an outslope of 3 to 4 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	7+80 to 26+80 0+00 to 7+80 7+80 to 26+80	Re-open existing dirt road with dozer from station 7+80 to Point A1. Shape outsloped surface with road grader. Shape outsloped subgrade with road grader.
A3 to A4	0+00 to 9+00 0+00 to 71+60 0+00 to 71+60	Follow recommendations of Consumers Power Inc. to protect buried transmission cable. Apply spot rock prior to grading. Shape outsloped surface with road grader.
A7 to A8	0+00 to 6+20	Shape outsloped surface with road grader.
A9 to A10	0+00 to 5+60	Shape outsloped surface with road grader.
B to B1	0+00 to 54+50	Shape ditched surface with road grader. Re-establish ditches where needed.
B1 to B6	0+00 to 57+60 0+00 to 57+60	Apply spot rock prior to grading. Shape ditched surface with road grader. Re-establish ditches where needed.
B2 to B3	0+00 to 20+10 0+00 to 19+60 19+60 to 20+10	Shape outsloped surface with road grader prior to adding lift of rock. Apply and process a 3 inch lift of rock. Apply Jaw-run to Landing at Point B3.
B4 to B5	0+00 to 0+60 0+60 to 1+10 0+00 to 1+10 0+00 to 0+60 0+60 to 1+10	Shape outsloped surface with road grader prior to adding lift of rock. Re-open Landing with dozer. Compact surface with vibratory roller. Apply and process an 8 inch lift of rock. Apply Jaw-run rock to Landing at Point B5.
B6 to B7	0+00 to 10+20 0+00 to 10+20 0+00 to 10+20 0+00 to 9+70 9+70 to 10+20	Re-open existing road and Landing with dozer. Shape outsloped subgrade with road grader. Compact subgrade with vibratory roller. Apply and process an 8 inch lift of rock. Apply Jaw-run rock to Landing at Point B7.
C to C1	0+00 to 55+20 55+20 to 55+70	Shape outsloped surface with road grader. Re-open Landing with dozer at Point C1.
C4 to C5	0+00 to 5+30 5+30 to 5+80	Re-open existing dirt road with dozer. Construct Landing at Point C5.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

C8 to C9	0+00 to 31+70	Re-open existing dirt road with dozer.
	31+70 to 32+20	Construct Landing at Point C9.
	0+00 to 32+20	Shape outsloped subgrade with road grader.
C14 to C15	0+00 to 18+10	Re-open existing dirt road with dozer.
	18+10 to 18+60	Construct Landing/turnaround at Pt. C15.
	0+00 to 18+60	Shape outsloped subgrade with road grader.
C18 to C19	0+00 to 1+00	Shape outsloped surface with road grader.
	1+00 to 1+50	Re-open Landing with road grader at Point C19.
D to D1	21+00	Replace culvert, compact fill, and apply patch rock.
	0+00 to 39+50	Apply spot rock prior to grading.
	0+00 to 39+50	Shape ditched surface with road grader. Re-establish ditches where needed.
D2 to D3	0+00 to 22+80	Re-open dirt road with dozer.
	0+00 to 22+80	Shape outsloped subgrade with road grader.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

Project No. 3 - Vacate Road

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
D1 to D6	0+00 to 26+10	Remove and dispose of culverts and/or re-establish stream channel at stations 45+00, 47+30, and 57+20.
	0+00	Construct a tank trap at Point D1. NOTE: If old culverts are found, remove from STATE lands.

SPECIFIC POST HARVEST INSTRUCTIONS

Project No. 4

Clear debris off Landings on surfaced roads, place in a stable location, and establish drainage. Burnable material shall be a minimum of 50 feet from reserve timber.

A to A1	Construct tank trap at Station 7+80.
A5 to A6	Construct tank trap at Point A5.
A7 to A8	Apply turnaround rock to Landing at Point A8.
A9 to A10	Apply turnaround rock to Landing at Point A10.
B2 to B3	Apply turnaround rock to Landing at Point B3.
B6 to B7	Apply turnaround rock to Landing at Point B7.
C2 to C3	Construct tank trap at Point C2.
C4 to C5	Construct tank trap at Point C4.
C6 to C7	Construct tank trap at Point C6.
C8 to C9	Construct tank trap at Point C8.
C20 to C21	Construct tank trap at Point C20.
D7 to D8	Construct tank trap at Point D7.

EXHIBIT D
 ROAD SURFACING

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	A3 to A4		0+00 to 71+60		
				Volume (CY) per		Number of		
Spot Rock	1½-0"	A3 to A4	n/a	100	mile	1.4	miles	144
Total Rock for Road Segment:				A3 to A4				144

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	A7 to A8		0+00 to 6+20		
				Volume (CY) per		Number of		
Turnaround	3-0"	A8	n/a	18	Landing	1	Landing	18

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	A9 to A10		0+00 to 5+60		
				Volume (CY) per		Number of		
Turnaround	3-0"	A10	n/a	18	Landing	1	Landing	18

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	B1 to B6		57+60		
				Volume (CY) per		Number of		
Spot Rock	3-0"	B1 to B6	n/a	25	mile	1.1	miles	27
Total Rock for Road Segment:				B1 to B6				27

EXHIBIT D
 ROAD SURFACING

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	B2 to B3		0+00 to 20+10		
				Volume (CY) per		Number of		
Base Rock	3-0"	0+00 to 19+60	3"	16.5	station	19.6	stations	324
Landing	jaw-run	B3	n/a	36	Landing	1	Landing	36
Total Rock for Road Segment:				B2 to B3				360
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	B2 to B3		0+00 to 20+10		
				Volume (CY) per		Number of		
Turnaround	3-0"	B3	n/a	27	Landing	1	Landing	27

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	B4 to B5		0+00 to 1+10		
				Volume (CY) per		Number of		
Base Rock	3-0"	0+00 to 0+60	8"	44	station	0.6	stations	27
Landing	jaw-run	B5	n/a	36	Landing	1	Landing	36
Total Rock for Road Segment:				B4 to B5				63

ROAD SEGMENT				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	B6 to B7		0+00 to 10+20		
				Volume (CY) per		Number of		
Base Rock	3-0"	0+00 to 9+70	8"	44	station	9.7	stations	432
Landing	jaw-run	B7	n/a	36	Landing	1	Landing	36
Total Rock for Road Segment:				B6 to B7				468
Post Harvest Application	Rock Size and Type	Location	Depth of Rock (inches)	B6 to B7		0+00 to 10+20		
				Volume (CY) per		Number of		
Turnaround	3-0"	B7	n/a	27	Landing	1	Landing	27

EXHIBIT D
 ROAD SURFACING

ROAD SEGMENT				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 39+50		
				Volume (CY) per	Number of			
Culvert Patch Rock	1½-0"	21+00	n/a	18 culvert	1	culvert	18	
Spot Rock	1½-0"	D to D1	n/a	100 mile	0.8	mile	81	
Total Rock for Road Segment:				D to D1			99	

ROCK CONVERSION FACTORS

Size	¾-0"	1½-0"	3-0"	4-0"	jaw-run	pit-run
Tons/CY	1.35	1.35	1.35	1.35	1.35	1.35

(Conversion factors from Rickard Rock Quarry)

Maintenance Rock Volumes in CY							
Rock Size	¾ - 0"	1½-0"	3-0"	4-0"	jaw-run	pit-run	other
Rock Totals		27	36				

TOTAL ROCK VOLUMES							
Rock Size	¾ - 0"	1½-0"	3-0"	4-0"	jaw-run	pit-run	other
Rock Totals CY	0	270	936	0	108	0	0
Rock Totals TONS	0	365	1264	0	146	0	0

Roads shall be uniformly graded, shaped, and approved by STATE prior to rocking.
 Cubic yard volumes have been rounded to the nearest 9 CY truck load.

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.

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 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 outsloped at 3 to 4 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
B6 to B7	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
Culvert backfill – D to D1 (Station 21+00)	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 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 crowned at 4 to 6 percent or outsloped at 3 to 4 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
B2 to B3, B4 to B5, & B6 to B7	1 and 3
Spot, Landing patch, turnaround, & maintenance	3

EXHIBIT D

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.
- (3) 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.

EXHIBIT D
CULVERT SPECIFICATIONS

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

Culverts shall be constructed of corrugated aluminized (Type 2) steel.

Aluminized (Type 2) steel culverts shall meet the requirements of AASHTO M-36-03¹.

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.

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.

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, or job-excavated soil free of stumps, limbs, rocks, or other objects which would damage the culvert.

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

EXHIBIT D

CULVERT SPECIFICATIONS

Minimum height of cover over top of culvert to subgrade when road is to be rocked shall be as follows: 12" for culverts 18" to 36" and 18" for culverts 42" to 96" [add 6" for roads which will not be rocked]. Minimum vertical cover for other designs shall be as specified by STATE.

Lengths of individual culvert sections shall be not less than 10 feet, unless otherwise provided for in special instructions.

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

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

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 in the same project period in which replacement occurred.

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

Following are the minimum standard gauges for steel culvert and coupling bands. Some culverts may require different gauges and may be found in the culvert listing.

<u>Dia.</u>	<u>Steel Culvert</u>	<u>Thickness</u>		<u>Band Gauges</u>	<u>Band Widths (")</u>	
	<u>Gauge</u>	<u>Uncoated</u>	<u>Coated</u>		<u>Annular</u>	<u>Helical</u>
12-15	16	(0.0598")	(0.064")	16	7	12
18-24	16	(0.0598")	(0.064")	16	12	12
30-36	16	(0.0598")	(0.064")	16	12	12
42	14	(0.0747")	(0.079")	16	12	12
48	14	(0.0747")	(0.079")	16	24	24
54	14	(0.0747")	(0.079")	16	24	24
60	12	(0.1046")	(0.109")	16	24	24
66-72	12	(0.1046")	(0.109")	16	24	24
78	12	(0.1046")	(0.109")	16	24	24
84	12	(0.1046")	(0.109")	16	24	24
90-120	12	(0.1046")	(0.109")	16	26	26

Culverts larger than 60" in diameter shall have 3" x 1" corrugations.

EXHIBIT D
CULVERT LIST

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	MATERIAL TYPE	GAUGE	ROAD SEGMENT POINT TO POINT	STATION
1	18	30	ACSP	16	D to D1	21+00

ACSP = Aluminized, CPP = Polyethylene, GCSP = Galvanized

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 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 crushed rock. River gravel shall not be used. Crushed rock shall meet the grading requirements that follow:

Rock strength: for rock not produced from STATE quarries, the material from which base material is produced or manufactured shall meet the following test requirement for Aggregate Hardness - Test Method AASHTO T 96.

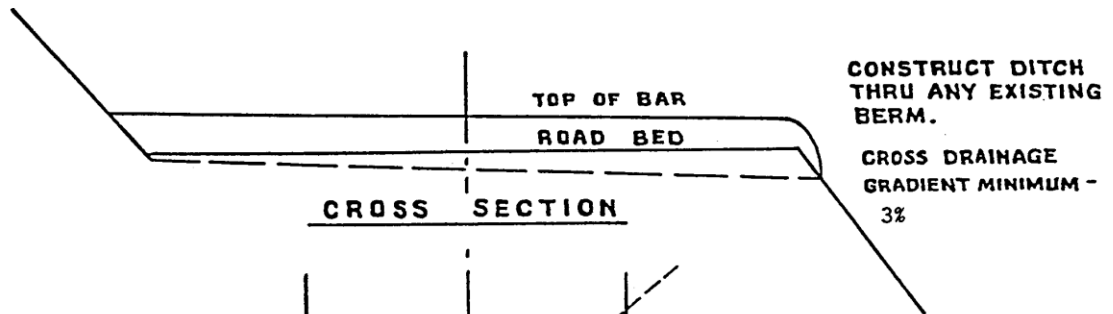
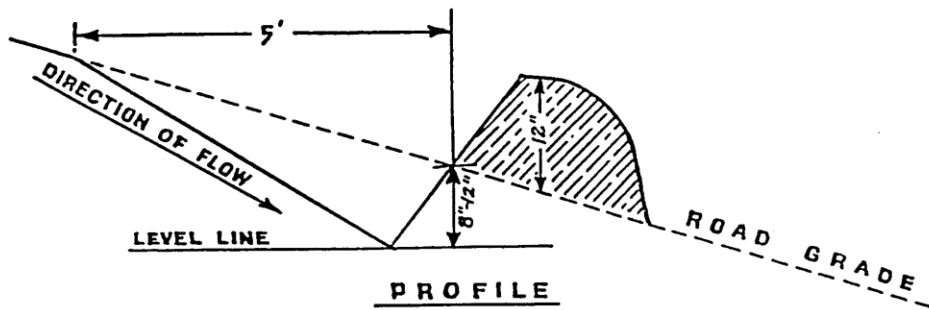
DURABLE CRUSHED ROCK SPECIFICATIONS

Grading Requirements

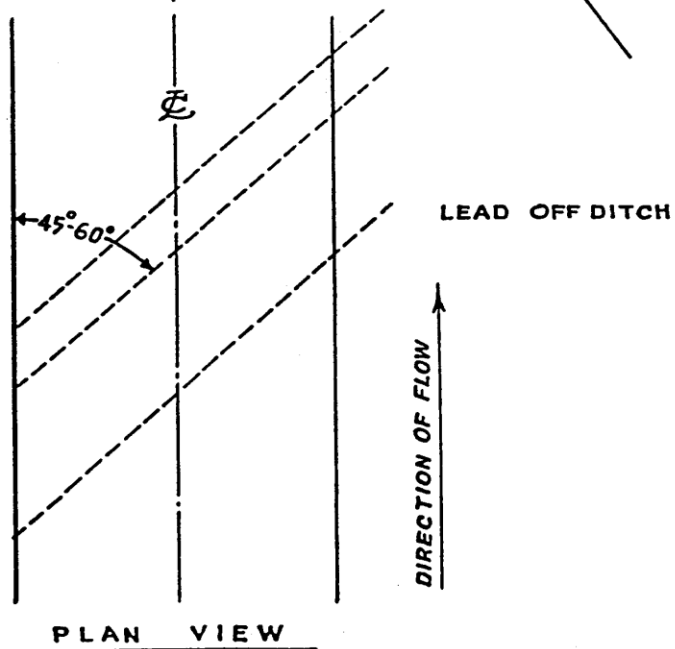
<u>For 1½"-0"</u>	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	¾" sieve	60-90%
	Passing	¼" sieve	30-50%
	Passing	No. 10 sieve	15-30%
	Passing	No. 40 sieve	7-15%
<u>For 3"-0"</u>	Passing	4" sieve	100%
	Passing	3" sieve	90-100%
	Passing	1½" sieve	60-90%
	Passing	¾" sieve	40-60%
	Passing	¼"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



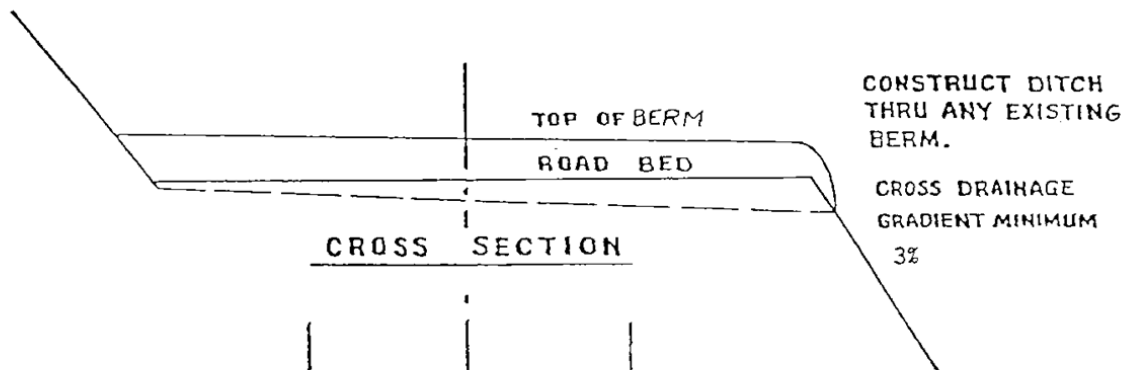
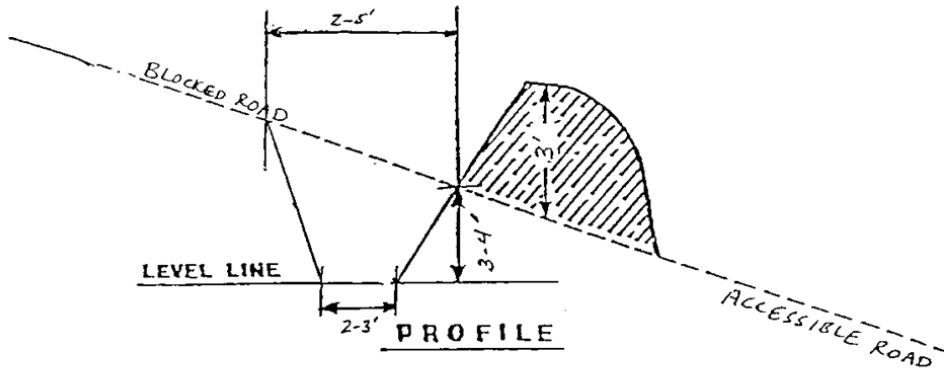
SPACING OF WATERBARS	
ROAD GRADE	DISTANCE
≤5%	400'
6-10%	200'
11-15%	150'
16-20% or greater	100'



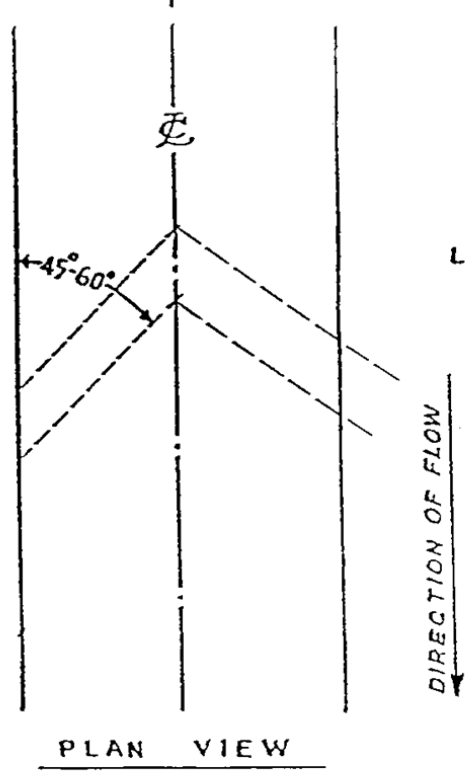
**WATERBAR SPECIFICATIONS
 FOR CROSS DITCHING #298**

EXHIBIT D

TANK TRAP SPECIFICATIONS



Tank trap shall be installed in a "V" shape. 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.



TANK TRAP SPECIFICATIONS

PART IV: OTHER INFORMATION

State Timber Sale Contract
No. 341-15-39
Cline Plunkett Thin

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. 341-15-39.

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; and
- (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