



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: WL-341-2022-W00844-01

(2) Sale Name: NC 6

(3) Contract Expiration Date: 05/31/2024

(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>

Subcontractor Name.

Start Date

Cell No.

Alt 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.



Oregon Department of Forestry

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PART III: EXHIBITS

EXHIBIT B

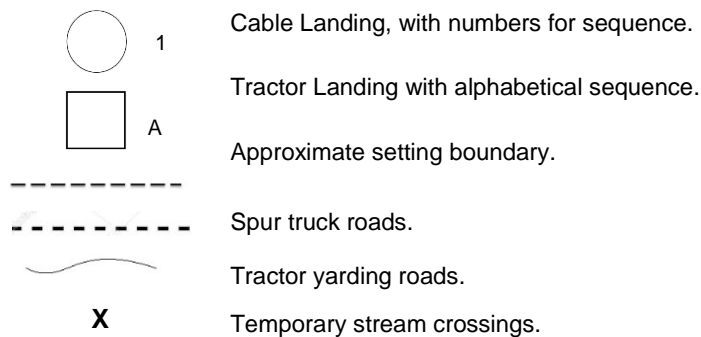
INSTRUCTION SHEET FOR OPERATIONS PLAN

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.




Oregon Department of Forestry

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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.

Projects

Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____
Work Commences	25%	50%	75%	Projects Complete

Harvest & Other Requirements

Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____	Month/Year Date ____/____
Work Commences	25%	50%	75%	Sale Complete

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
Western Lane - SOA

(1) ORIGINAL REGISTRATION ☐ Date _____
REVISION NUMBER 000 ☐ Date _____
CANCELLATION ☐ Date _____

(2) TO: _____
(Third Party Scaling Organization)

(3) FROM: Western Lane Phone (541) 935-2283
(State Forestry District)
Address: 87950 TERRITORIAL HWY
VENETA, OR 97487-0157

(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: NC 6
COUNTY: Lane

(10) STATE CONTRACT NUMBER:
WL-341-2022-W00844-01

(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"/>
NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE	<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) _____

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.
General Distribution: TPSO, Approved Scaling Locations and Purchaser.



Oregon Department of Forestry
EXHIBIT C - SAWMILL GRADE
INSTRUCTIONS FOR EXHIBIT C
Western Lane - SOA

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires logging and hauling to be complete, recall branding hammers.

(2)

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

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

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

Pacific Rim Log Scaling Bureau, Inc.
8288 28th Court North East, Lacey, WA 98516
Phone: (360) 528-8710 Fax: (360) 528-8718
Email: office@prlsb.com

Yamhill Log Scaling & Grading Bureau
P.O.Box 709, Forest Grove, OR 97116
Phone: (503) 359-4474 Fax: (503) 359-4476
Email: yamhilllog@frontier.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: https://apps.odf.oregon.gov/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 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. Signatures not required on revisions.



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

Western Lane, SOA

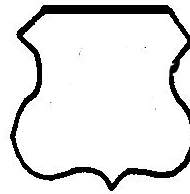
(1) ORIGINAL REGISTRATION ☐ Date _____
REVISION NUMBER 000 ☐ Date _____
CANCELLATION _____

(9) SALE NAME: NC 6
COUNTY: Lane
STATE CONTRACT NUMBER:
WL-341-2022-W00844-01

(2) _____
(3) FROM: Western Lane Phone (541) 935-2283
(State Forestry District)
Address: 87950 TERRITORIAL HWY
VENETA, OR 97487-0157

(11) STATE BRAND REGISTRATION NUMBER: _____
(12) STATE BRAND INFORMATION: _____

(4) PURCHASER: _____
(5) Scaling Bureau (TPSO) Processing Weight receipts: _____



Mailing Address: _____
Phone Number: _____

(13) REMARKS: _____

(6) **STATE Definition of Approved Pulp Sort:**
• Top portion of the tree (tops).
• All logs with a diameter (Big End) greater than 9 inches marked with blue paint.

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

(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.

Purchaser or Authorized Representative _____ Date _____
State Forester Representative _____ Date _____
State Forester Representative PRINT NAME _____

(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.

General Distribution: TPSO, Approved Scaling Locations and Purchaser.



**Oregon Department of Forestry
EXHIBIT C - PULP SORT
INSTRUCTIONS FOR EXHIBIT C**

Western Lane, SOA

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires logging and hauling to be complete, recall branding hammers.
- (2) Approved Pulp Processing Facility. Write in as written in the Approved Log Delivery Location https://apps.odf.oregon.gov/Divisions/management/asset_management/scalinglocation.asp
- (3) State District office, address and phone.
- (4) Enter Purchaser's business name, address, and phone number as it appears on the Contract.
- (5) 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

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@mwlsqb.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

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

Big end of log is not to exceed 2 inches greater than the minimum removal specifications in the contract. Example: Minimum removal specifications 6 inches and 20 board feet, then the Big end of log not to exceed 8 inches. When conifer and hardwood removal specifications are different, use the smaller removal diameter to determine this specification.

- (9) 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 (13).
- (13) Use this section to list any special instructions or the reason for any revisions in section item (1).
- (14) Require purchaser to sign and date completed form in addition to State Forester Representative, sign and print name on the form. Signatures not required on revisions.



EXHIBIT D
FOREST ROAD SPECIFICATIONS

Road	Subgrade Width	Surfaced Width	STATION TO STATION	Drainage
Nelson CR RD	16'	12'	A to B	Crowned
Spur 1	16'	12'	C to D	Maintain Existing
Spur 1a	16'	12'	0+00 to 7+48	Crowned
Spur 2	16'	12'	B to E	Maintain Existing
Spur 2a	16'	12'	0+00 to 2+49	Outsloped
Spur 2b	16'	12'	0+00 to 8+80	Outsloped
Spur 2c	16'	12'	0+00 to 3+55	Outsloped
Spur 2d	16'	12'	0+00 to 14+60	Outsloped
Spur 2e	16'	12'	0+00 to 13+14	Crowned

Surface width shall be increased to accommodate off-tracking on horizontal curves.

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 10 feet back of the top of the cut slope and 10 feet out from the toe of the fill slope, or as directed by STATE. The “Road Brushing Specifications” in Exhibit G shall apply. Clearing debris shall not be placed or permitted to remain in or under any road embankment sections. Clearing debris shall not be left lodged against standing trees.

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

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

All stumps shall be completely removed within the limits of required grubbing. Stumps overhanging cut slopes 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 - 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. 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.



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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, insloped, or outsloped at 4 to 6 percent as shown on the “Forest Road Specifications” table in this Exhibit or as specified by STATE.

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

Solid Rock

Fractured Rock

Soil - side slopes 50% and over

Soil - side slopes less than 50%

Back Slopes

Vertical to ¼ :1

¼:1

¾:1

1:1

Fill Slopes

1½ :1

Top of cut slope shall be rounded were specified by STATE.

LANDINGS. Landings shall be constructed as posted in the field, no less than 50 feet wide and no more than 100 feet wide, unless otherwise approved by STATE. Roadside landings shall be no less than 15 feet wide (from the subgrade edge) and no more than 50 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 H, and blocked from vehicular traffic prior to October 31, annually and as directed by STATE.

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Version April 2019



EXHIBIT D
FOREST ROAD SPECIFICATIONS

GENERAL ROAD CONSTRUCTION/RECONSTRUCT INSTRUCTIONS:

- (1) Roadside Brushing. Conduct roadside brushing as specified in Exhibit G.
- (2) Timber Removal. Remove all trees within posted right-of-way, as specified in Section 2210, “Designated Timber.”
- (3) Bank Slough Removal. Dig out all bank sloughs. 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) Drainage Ditches. Restore or construct ditch lines, including ditchouts, as directed by STATE. Clean out any plugged culvert inlets and outlets. 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.
- (5) 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.
- (6) 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, insloped, or outsloped at 4 to 6 percent.
 - (c) Upon completion of above required work, apply, process, and compact surfacing rock in accordance with specifications in the “Compaction and Processing Requirements” in this Exhibit. Final road surface shall be crowned or outsloped at 4 to 6 percent.

The subgrade shall be approved by STATE prior to the application of rock.



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EXHIBIT D FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

Nelson Creek as shown on Exhibit A:

A to B Conduct roadside brushing according to exhibit G.

Clean out ditches, dig out catch basins, re-establish ditches, re-establish settling ponds and unplug culvert inlets/outlets. Remove overhanging woody debris and logs within the road prism.

Settling ponds and catch basins that are full of sediment and debris must be dug out to restore proper settling and drainage. All disturbed areas and exposed soil along the road, in the ditches, and catch basins must be seeded and mulched. Try to minimize disturbance along ditch line to keep vegetation for filtering.

Grade and shape running surface to re-establish crowned drainage and remove potholes. Rip surface to the lowest pothole depth prior to grading and shaping. The operator shall maintain or re-establish drainage for the entire road based on current grade and shape. Prepare the running surface for a lift of rock. The regraded surface shall be compacted before application of new rock according to exhibit F.

Rocking Instructions:

A to B Apply a compacted 4" lift of 'washed' 1 ½" open cap rock for the segments marked in the field and as directed by STATE. If marked segments are not identifiable in the field, these segments include any area along the haul route that comes within 100ft of Nelson Creek and where culverts and cross drains are located. 1580 cubic yards provided.

For the remaining portions of the haul route, apply a compacted depth of 2" of 1 ½"-0" cap rock. 1080 cubic yards provided.

Apply turnout rock as directed by STATE. 80 cubic yards provided.

Spur 1 as shown on Exhibit A:

C to D Conduct roadside brushing according to exhibit G.

Clean out ditches, re-establish ditches, and unplug culvert inlets/outlets. Remove overhanging woody debris and logs within the road prism. Grade and shape running surface to re-establish existing drainage and remove waterbars. The operator shall maintain or re-establish drainage for the entire road based on current grade and shape. Grade out old turnouts and wide spots where feasible. Purchaser is required to maintain during the entirety of sale.

RL1 Construct roadside landing in accordance with this exhibit. Remove trees in posted ROW and clear brush.

TA1 Construct empty truck turnaround in accordance with this exhibit on the north side of the road. If fill is needed for construction, generate clean fill from roadside, RL1, or Spur 1a as directed by STATE.

D Reconstruct landing.

NC6

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EXHIBIT D
FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

Spur 1 as shown on Exhibit A: continued

Rocking Instructions:

- C to D Apply a compacted depth of 2” of 1 ½”-0” cap rock.
 Apply curve widening rock as directed by STATE. 60 cubic yards.
- RL1 Apply roadside landing rock. 40 cubic yards.
- TA1 Apply turn around rock. 40 cubic yards.
- D Apply landing rock. 40 cubic yards.

Spur 2 as shown on Exhibit A:

- B to E Conduct roadside brushing according to exhibit G.
- Clean out ditches, re-establish ditches, and unplug culvert inlets/outlets. Remove overhanging woody debris and logs within the road prism. Grade and shape running surface to re-establish existing drainage and remove waterbars. The operator shall maintain or re-establish drainage for the entire road based on current grade and shape. Grade out old turnouts and wide spots where feasible. Purchaser is required to maintain during the entirety of sale.

Rocking Instructions:

- B to E Apply a compacted depth of 2” of 1 ½”-0” cap rock.
 Apply spot rock as directed by STATE. 100 cubic yards provided.

Spur 2b as shown on Exhibit A:

- 0+00 to 8+80 Conduct roadside brushing according to exhibit G.
- Grade and shape running surface to re-establish outsloped drainage. The operator shall maintain or re-establish drainage for the entire road based on current grade and shape. Purchaser is required to maintain during the entirety of sale.
- 0+00 Clean out and unplug culvert.
- 1+15 to 4+50 Clean up ditch and cutbank to clear debris that has sloughed into the road prism.
- 7+28 Construct empty truck turnaround.
- 8+80 Reconstruct old landing.

Rocking Instructions:

- 0+00 to 8+80 Apply a compacted depth of 2” of 1 ½”-0” cap rock.



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EXHIBIT D FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

Spur 2b as shown on Exhibit A: continued

- 7+28 Apply truck turn around rock. 20 cubic yards.
8+80 Apply landing Rock. 40 cubic yards.

Spur 2c as shown on Exhibit A:

- 0+00 to 3+55 Conduct roadside brushing according to exhibit G.

0+00 to 3+55 Grade and shape running surface to re-establish outsloped drainage. The operator shall maintain or re-establish drainage for the entire road based on current grade and shape. Purchaser is required to maintain during the entirety of sale.

3+55 Reconstruct old landing.

Rocking Instructions:

- 0+00 to 3+55 Apply a compacted depth of 2" of 1 ½"-0" cap rock.
3+55 Apply landing rock. 40 cubic yards.

Spur 2d as shown on Exhibit A:

- 0+00 to 14+60 Conduct roadside brushing according to exhibit G.

 Grade and shape running surface to re-establish outsloped drainage. The operator shall maintain or re-establish drainage for the entire road based on current grade and shape. Purchaser is required to maintain during the entirety of sale.

8+70 Construct truck turnout.
12+00 Construct roadside landing.
14+60 Reconstruct old landing.

Rocking Instructions:

- 0+00 to 14+60 Apply a compacted depth of 2" of 1 ½"-0" cap rock.
 Apply spot rock as directed by STATE. 40 cubic yards provided.

12+00 Apply roadside landing rock. 40 cubic yards.
14+60 Apply landing rock. 40 cubic yards.

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EXHIBIT D FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD CONSTRUCTION/RECONSTRUCTION INSTRUCTIONS:

Spur 1a as shown on Exhibit A:

- 0+00 to 7+48 Conduct Roadside brushing according to Exhibit G.
- Clear and grub. Approximately 20 feet wide of clearing and grubbing is anticipated. Remove all stumps within the road prism. Scatter stumps in openings and gaps in stable locations. On slopes greater than 50%, stumps shall be hauled to an approved waste area.
- Clearing debris shall be piled on stable locations on slopes less than 50%. Clearing debris shall be piled in a manor to facilitate burning. The piles shall be conical in nature.
- Grade and shape running surface to establish crowned drainage. Utilize ditchouts to facilitate drainage. Purchaser is required to maintain during the entirety of sale.
- 0+99 Clear and grub posted ROW to construct ramp-up roadside landing. Pullback any old side casted material on the outer edge of the ROW before construction. Place waste material on slopes less than 50% and as directed by STATE.
- 6+08 to 7+48 Begin re-alignment for balanced road construction. Place any clean fill generated along old road grade where the turn around is to be constructed.
- 6+51 Construct empty truck turnaround.
- 7+48 Construct landing.

Rocking Instructions:

- 0+00 to 7+48 Apply a compacted depth of 6" of 3"- 0" base rock and 2" of 1 ½"-0" cap rock.
- 0+99 Apply roadside landing rock. 40 cubic yards.
- 6+51 Apply turn around rock. 20 cubic yards.
- 7+48 Apply landing rock. 40 cubic yards.

Spur 2a as shown on Exhibit A:

- 0+00 to 2+49 Conduct Roadside brushing according to Exhibit G.
- Clear and grub. Approximately 20 feet wide of clearing and grubbing is anticipated. Clearing debris shall be piled on stable locations on slopes less than 50%. Clearing debris shall be piled in a manor to facilitate burning. The piles shall be conical in nature.
- Grade and shape running surface to re-establish outsloped drainage. Purchaser is required to maintain during the entirety of sale.
- 2+49 Reconstruct landing.

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EXHIBIT D FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD CONSTRUCTION/RECONSTRUCT INSTRUCTIONS:

Spur 2a as shown on Exhibit A: continued

Rocking Instructions:

0+00 to 2+49 Apply a compacted depth of 2" of 1 ½"-0" cap rock.

2+49 Apply landing Rock. 40 cubic yards.

Spur 2e as shown on Exhibit A:

0+00 to 13+14 Conduct Roadside brushing according to Exhibit G.

Clear and grub. Approximately 20 feet wide of clearing and grubbing is anticipated. Remove all stumps within the road prism. Scatter stumps in openings and gaps in stable locations. On slopes greater than 50%, stumps shall be hauled to an approved waste area.

Clearing debris shall be piled on stable locations on slopes less than 50%. Clearing debris shall be piled in a manner to facilitate burning. The piles shall be conical in nature.

Grade and shape to establish crowned drainage. Utilize ditchouts where necessary to facilitate drainage. Purchaser is required to maintain during the entirety of sale.

0+00 to 1+88 Construct balanced subgrade that ties into old road grade. There is old sidecast and wasted material that will need to be pulled back out of the road prism.

2+86 Construct ditch out left.

3+70 Construct ditch out right.

4+60 Construct ditch out left.

6+65 Construct ditch out right.

6+80 Construct truck turnout.

7+45 Construct roadside landing.

13+14 Construct landing. Construct empty truck turnaround near start of the landing.

Rocking Instructions:

0+00 to 13+14 None

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EXHIBIT D END-HAUL REQUIREMENTS

Road	STA. to STA.	Approx. Waste (yds ³)	Containment Sidecast	Waste Area Location	Waste Area Treatment
2E to H	H	1716	3	1,3	1
Total		1716			

Landing fills shall not be allowed on slopes over 55%

End-Haul Areas General Requirements

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

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

Containment/Sidecast

- (1) Full: No excavated material remains below the road.
- (2) Normal/Incidental: The amount of excavated material lost over the outside edge of the road shall not exceed 1 foot in depth.
- (3) Sidecast: Material shall be spread evenly below the road so that it does not build up behind trees, snags or other debris, and shall not exceed 3 feet in depth.

Any amount of material exceeding the containment requirements shall be removed by whatever means necessary and end-hauled to a designated waste area.

Waste Area Location

- (1) As shown on Exhibit A, Vicinity, and as marked in the field.
- (2) Setback from slope break shall be a minimum of 20 feet horizontal measurement.
- (3) As directed by STATE.

Waste Area Treatment

- (1) Deposit at waste area, spread evenly, compact with Dozer, and provide adequate drainage. Fill depths greater than one foot must be compacted in 6” lifts.
- (2) Pile woody debris separate from other waste material.



EXHIBIT E
ROAD SURFACING

ROAD	ROCK TYPE	ROCK SIZE	COMPACTED DEPTH	YDS ³ /STA	TOTAL STATIONS	STA. TO STA. POINT TO POINT		APPROX TOATAL YDS ³
Nelson CR RD 2"	CAP	1 1/2"-0"	2"	11	98.00	A	B	1080
Nelson CR RD 4"	CAP	1 1/2" open	4"	22	72.00	A	B	1580
Spur 1	CAP	1 1/2"-0"	2"	11	58.40	C	D	640
Spur 1a	BASE	3"-0"	6"	33	7.48	0+00	7+48	250
Spur 1a	CAP	1 1/2"-0"	2"	11	7.48	0+00	7+48	80
Spur 2	CAP	1 1/2"-0"	2"	11	50.96	B	E	560
Spur 2a	CAP	1 1/2"-0"	2"	11	2.49	0+00	2+49	30
Spur 2b	CAP	1 1/2"-0"	2"	11	8.80	0+00	8+80	100
Spur 2c	CAP	1 1/2"-0"	2"	11	3.55	0+00	3+55	40
Spur 2d	CAP	1 1/2"-0"	2"	11	14.60	0+00	14+60	160
LANDINGS								
ROAD		ROCK SIZE	COMPACTED DEPTH	YDS ³ /STA	STATIONS	STATION		APPROX TOATAL YDS ³
Spur 1		Pit Run	6"	40	2.00	RL1, D		80
Spur 1a		Pit Run	6"	40	2.00	0+99, 7+48		80
Spur 2a		Pit Run	6"	40	1.00	2+49		40
Spur 2b		Pit Run	6"	40	1.00	8+80		40
Spur 2c		Pit Run	6"	40	1.00	3+55		40
Spur 2d		Pit Run	6"	40	2.00	12+00, 14+60		80
TRUCK TURN AROUND								
ROAD		ROCK SIZE	COMPACTED DEPTH	Yds ³ /Point	NO. OF TURN AROUNDS	STATION		APPROX TOATAL YDS ³
Nelson CR RD 2"		Pit Run	6"	20	4	As directed by STATE		80
Spur 1		Pit Run	6"	20	2	TA1		40
Spur 1a		Pit Run	6"	20	1	6+51		20
Spur 2b		Pit Run	6"	20	1	7+28		20
CURVE WIDENING/SPOT ROCK								
Road		ROCK SIZE	COMPACTED DEPTH	Yds ³ /Point	# POINTS	STATION		APPROX TOATAL YDS ³
Spur 1		1 1/2"-0"		10	6	As directed by STATE		60
Spur 2		1 1/2"-0"		10	10	As directed by STATE		100
Spur 2d		1 1/2"-0"		10	4	As directed by STATE		40

Road shall be compacted, graded, shaped, and approved by STATE prior to rocking.

Approximate yards assumes construction during ideal weather conditions.

Only clean, uncontaminated crushed rock counts towards rock depth measurement.

Rock Totals	Pit Run	1 1/2"-0" Open	1 1/2"-0"	3"-0"
LOOSE TRUCK Cu. Yds	520	1580	2890	250



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EXHIBIT E 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 weekly. However, depth measurement shall be used to determine contract compliance. Purchaser shall provide all load receipts to account for all rock from a commercial source.



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EXHIBIT E
DURABLE CRUSHED ROCK SPECIFICATIONS

Grading Requirements

<u>For 1½" Open (Drain Rock)</u>	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	1" sieve	35-70%
	Passing	½" sieve	0-5%
<u>For 1½"-0"</u>	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	¾" sieve	60-90%
	Passing	¼" sieve	30-50%
	Passing	No. 10 sieve	15-30%
	Passing	No. 40 sieve	7-15%
<u>For 3"-0"</u>	Passing	4" sieve	100%
	Passing	3" sieve	90-100%
	Passing	1½" sieve	60-90%
	Passing	¾" sieve	40-60%
	Passing	¼" sieve	20-40%
	Passing	No. 10 sieve	5-20%

JAW-RUN, PIT-RUN, and RIPRAP ROCK SPECIFICATIONS

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

Control of gradation shall be by visual inspection by STATE.



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EXHIBIT F
COMPACTION AND PROCESSING REQUIREMENTS

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

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

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

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

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
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 layer’s 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
All road segments	1, 4, & 8

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

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

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



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EXHIBIT F COMPACTION AND PROCESSING REQUIREMENTS

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
All road segments requiring crushed rock.	1 & 8

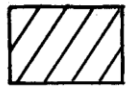
Pit-Run Rock. The rock shall be uniformly mixed and spread in layers on the approved roadbed. Each layer of pit-run rock shall be moistened or dried to uniform moisture content suitable for maximum compaction and compacted in layers not to exceed 8 inches in depth. When more than 1 layer is required, 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.

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.
- (4) 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.
- (8) As Approved by STATE.



EXHIBIT G
ROAD BRUSHING SPECIFICATIONS



Clearing Limits

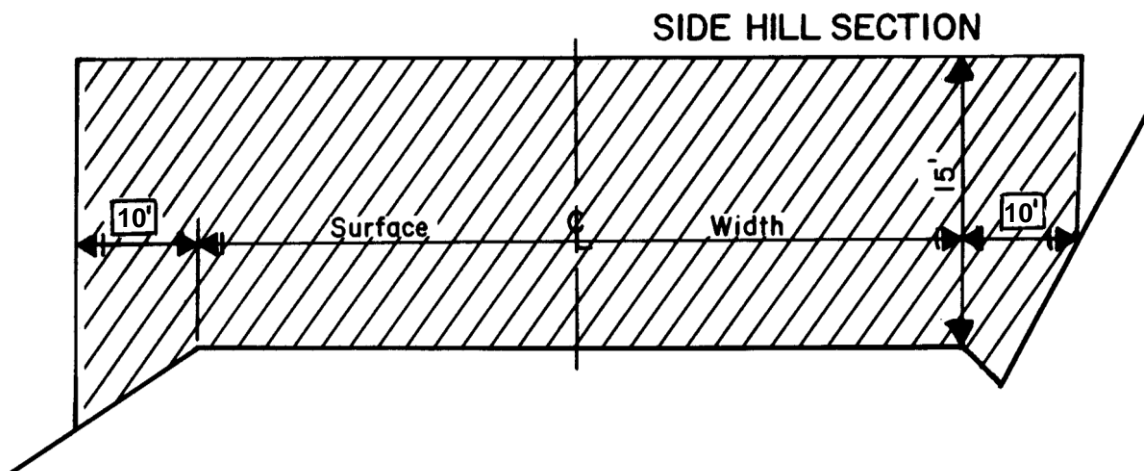




EXHIBIT G
ROAD BRUSHING SPECIFICATIONS

REQUIREMENTS

The minimum height of clearing shall be 15 feet from the road surface, and the minimum width of clearing on the cut slope sides of the road shall be 10 feet horizontal distance from the shoulder of the road and 10 feet horizontal on the down slope side from the road shoulder. In situations where site distance is an issue brushing height on the cut slope may vary from the drawing, as directed by STATE.

For cuts lopes less than 6 feet in height, brushing shall extend 5 feet beyond the top of cut slope.

Brush and trees shall be cut to a maximum height of 6 inches above the ground surface or obstructions such as rocks or existing stumps.

Debris resulting from the brushing operation shall be removed from the roadway, cut slope, ditches, water courses, culvert inlets and outlets and sediment catching basins. Debris shall be mulched or scattered downslope from the road or placed in other stable locations. Large debris, 6 inches or larger in diameter, shall be mulched or cut into lengths 6 feet or less to facilitate rapid decay, unless otherwise approved by STATE.

Trees larger than 6 inches in diameter at stump height, located within clearing limits but outside of the ditch line or shoulder, shall not be cut down, but shall be limbed for road visibility. Planted or established conifers, located within brushing limits but outside of the ditch line or shoulder, shall not be cut down, but shall be limbed for road visibility unless otherwise directed by STATE.

Existing debris on the roadway, cut slope, ditch line, or catch basin shall be removed and treated. Debris shall be mulched or scattered downslope from the road or placed in other stable locations. Large non-merchantable debris, 6 inches or larger in diameter, shall be mulched or cut into lengths 6 feet or less to facilitate rapid decay, unless otherwise approved by STATE.

Merchantable blown down trees encountered shall be bucked in lengths as directed by STATE, and placed in locations acceptable to STATE, or pushed out of the road prism.

When spur roads to be brushed end with a Landing, the Landing is to be brushed as directed by STATE.

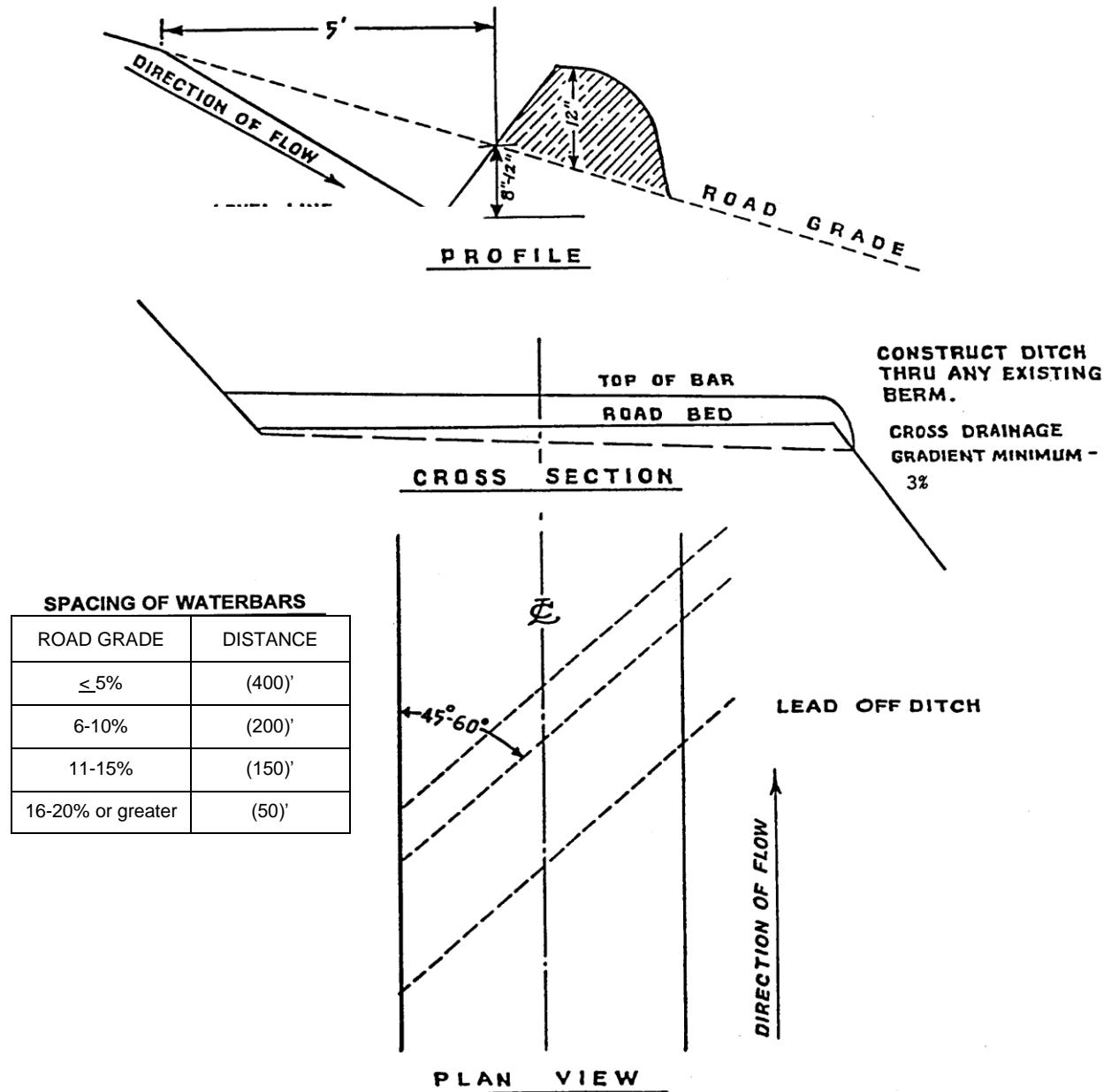
CULVERT AND ROAD MARKER DAMAGES. Culvert and road markers damaged, or any portion of a marker damaged from PURCHASER activities shall be assessed a damage fee of \$25 per marker.



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EXHIBIT H
WATERBAR SPECIFICATIONS



WATERBAR SPECIFICATIONS
FOR CROSS DITCHING #298



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EXHIBIT I
TANK TRAP SPECIFICATIONS

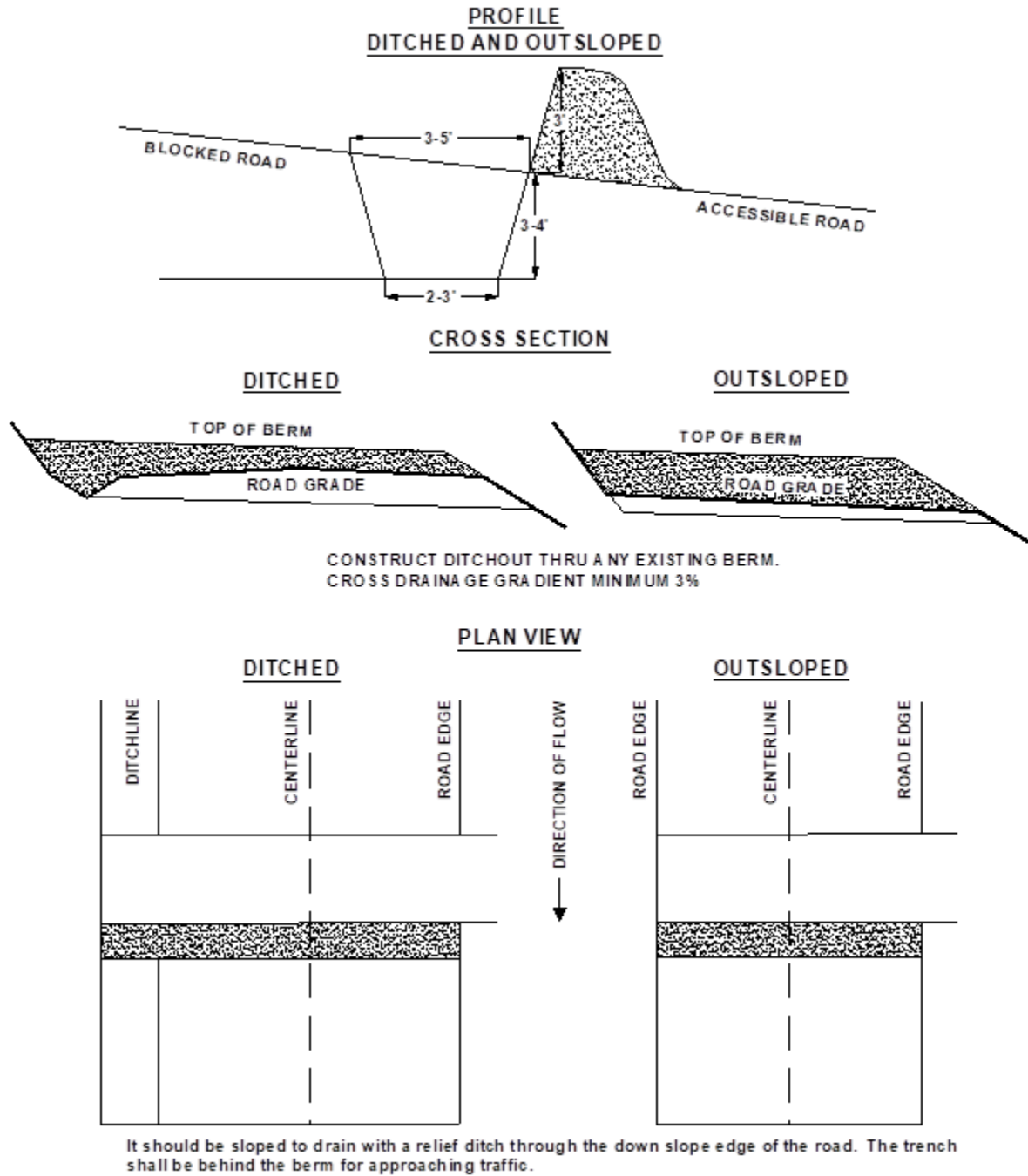




EXHIBIT J
ROAD VACATING SPECIFICATIONS

PURCHASER shall vacate at the following points: F, G, H, and 2E to H. Specific objectives for this project include:

- (a) Fill removal and stream channel development.
 - (b) Culvert removal.
 - (c) Restoration of natural contours by outsloping of the road prism.
 - (d) Minimize disturbance of existing vegetation.
-
- (1) Tree Removal. Cut or remove all trees necessary to access the project area and to facilitate vacating operations, as directed by STATE. Timber shall NOT be removed as designated timber, unless located within posted timber sale boundaries or right-of-way boundaries.
 - (2) Fill Removal and Stream Channel Development. Remove fills to the natural stream course level(s). Stream channel(s) shall be excavated/developed to specified widths. Developed stream banks shall be sloped at natural contours or no steeper than 1 ½:1, as directed by STATE.
 - (A) Trees required for stream enhancement work shall be conifers obtained from the sale area, or at other locations acceptable to STATE. Trees can have defects such as double tops, crooked trunks, heart rot etc. as long as they meet the required size dimensions.
 - (B) Trees shall be uprooted as needed, cut to length, and delivered to the project site, as directed by STATE. Trees shall be transported by log truck, or other means so that roads are not damaged (i.e. trees cannot be dragged on road surface).
 - (C) All areas of bare or disturbed soils shall be seeded with an approved grass seed mix. Fertilizer shall not be used. All access trails shall be thoroughly blocked to prevent access using large woody debris or boulders, water barred, ripped or tilled, and mulched upon completion, as directed by STATE
 - (3) Culvert Removal. Remove drainage structures and culverts. Removed culverts shall be hauled to an approved refuse site off STATE land.
 - (4) Outslope Road. Outslope road to restore natural contours or establish a minimum of 10 percent slope for drainage at designated locations. If the road grade exceeds 10 percent, outslope of the road shall be 2 percent greater than the road grade.
 - (5) Use of Excavated Materials.
 - (A) Fill Excavation. Excavated materials shall be placed on the interior (cut) side of the road and utilized to restore the cut slope to natural contours, or to a minimum 10 percent outsloped surface for drainage. Any excess material will be hauled to a designated waste area, as directed by STATE.
 - (B) Woody Debris Shall be placed on the surface of pullback/fill material.
 - (C) Block Roads. Use excavated material from fill removals to block roads from vehicle access, as directed by STATE.
 - (6) Erosion Control. Erosion control shall be completed in a progressive manner. Grass seed and straw mulch shall be applied for every 500 feet of road vacated, prior to continuing work.



EXHIBIT J
ROAD VACATING SPECIFICATIONS

All excavated material and bare soil shall utilize grass seed and straw mulch approved by STATE and in accordance with the specifications in Exhibit K. Applied mulch shall be a minimum of 2 inches deep and provide a uniform cover.

- (7) Construct Waterbars as directed by STATE. Construct waterbars according to the specifications in Exhibit H.
- (8) Equipment. A minimum 1½ cubic-yard, track mounted excavator shall be used for all excavation, culvert removal, streambed preparation, road blocking, and waterbarring, unless otherwise approved in writing by STATE.
- (9) Dry Conditions. All work shall be performed during dry conditions acceptable to STATE.
- (10) Support, including transport, other equipment, replacements, supplies, maintenance, and repairs, shall be furnished as required to complete the project and shall be furnished without cost to STATE, other than as agreed under the contract terms.

SPECIFIC INSTRUCTIONS/SPECIFICATIONS:

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
	F	Small fill removal and stream enhancement. Remove fill to natural stream course level. Waste material may be placed in stable locations adjacent to work location as directed by STATE. All waste material must be spread evenly, tampered with the excavator, and seeded and mulched.
	G	Small fill removal and stream enhancement. Remove fill to natural stream course level. Waste material may be placed in stable locations adjacent to work location as directed by STATE. All waste material must be spread evenly, tampered with the excavator, and seeded and mulched.
	H	Large fill removal and stream enhancement. Remove fill to natural stream course level. A ramp down will need to be constructed to reach full extent of fill removal. All waste material at this location must be end hauled to designated location marked in the field or as directed by STATE. Refer to Exhibit D for waste area treatment.
2E to H		This segment to be vacated after work at station H is complete. Vacate according to specifications in this exhibit.



EXHIBIT K
SEEDING AND MULCHING

This work shall consist of preparing seedbeds and furnishing and placing required seed, fertilizer, and straw mulch. Straw mulch shall consist of straw that is free of noxious weeds. Apply seed, and straw mulch in locations directed by STATE.

Seeding Seasons. Seeding shall be performed only from March 1 through June 15 and August 15 through October 31 unless otherwise approved by STATE. Seeding materials shall not be applied during windy weather or when the ground is excessively wet or frozen. Areas of disturbed soil shall be seeded by the end of the project period in which work was started.

APPLICATION METHODS FOR SEED AND FERTILIZER

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

APPLICATION RATES FOR SEED AND FERTILIZER

The seed mixture listed below shall be applied at 100 lbs. per acre. The seed mixture shall be comprised of the following:

SPECIES	MIXTURE	PURE LIVE SEED	GERMINATION
Annual Rye	33%	95%	>90%
Orchard Grass	33%	95%	>90%
Perennial Rye	34%	95%	>90%

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

APPLICATION RATES FOR MULCH

Place straw mulch to a reasonably uniform thickness of 0.75 to 1.5 inches. This rate requires 1 tons of dry mulch per acre.

Application Locations:

Road Segment	Location
F	Shown in Exhibit A
G	Shown in Exhibit A
WA	Shown in Exhibit A
2E to H	Shown in Exhibit A
Other	Disturbed areas where bare soil is exposed

PART IV: OTHER INFORMATION

OREGON DEPARTMENT OF FORESTRY Western Lane District

Written Plan NC6 Timber Sale 341-2022-W00844-01

Portions of Section 6, T17S, R07W, W.M. Lane County

Protected Waters: Small Type F, Tributary to Nelson Creek.

Activity: Road Vacating/Crossing Removal

Project Measures:

- Removal of fill and old culvert from stream crossing.
- Activities will only take place during In-Stream-Work period
 - July 1st to September 15th
- All waste material will be transported from stream crossing to nearby waste area.
- All bare soil from pulling of culvert near stream will be seeded to prevent erosion and runoff.

Prepared By: Morgan Kawakami
Natural Resources Specialist

Date: October 28, 2021

PART IV: OTHER INFORMATION

OREGON DEPARTMENT OF FORESTRY Western Lane District

Written Plan

NC6 Timber Sale 341-2022-W00844-01

Portions of Section 6, T17S, R7W, W.M., Lane County

Protected Waters: Small Type F (Nelson Creek Tributary)

Activity: Cable yarding within 100 feet of a small Type F stream for approximately 1,500 feet (Nelson Creek Tributary).

Protection Measures:

Cable Yarding:

- No cutting will take place within approximately 100 feet of the stream (either side) except for any cable corridors that may be needed or for safety purposes.
- Any tree requiring to be felled for either corridors or safety reasons that is within the stream RMA (beyond the Timber Sale Boundary signs) will be felled away from the stream if safe to do so and left where they fall.
- Corridors through the RMA, if necessary, will be at least 100 feet apart (within the RMA).
- All lines will be re-spoiled and then restrung for each new corridor.

Prepared By: Morgan Kawakami
Roads Specialist

Date: October 28, 2021