



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: FG-341-2020-W00231-01

(2) Sale Name: Hindsight

(3) Contract Expiration Date: 10/31/2022

(4) Purchaser Name: _____

(6) State Representatives:

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

(7) Purchaser Representatives:

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

(8) Name of Subcontractors and Start Dates:

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

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

(9) Comments:

(10) Operations Map: Attach a copy of timber sale Exhibit A or other suitable map which plainly shows the items listed on the instruction sheet.



Oregon Department of Forestry
2600 State St Salem OR 97310

PART III: EXHIBITS

EXHIBIT B

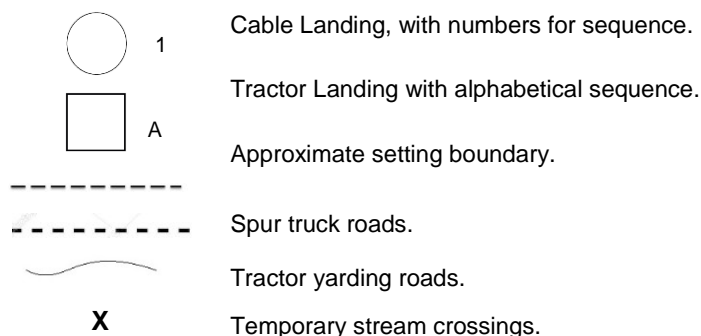
INSTRUCTION SHEET FOR OPERATIONS PLAN

SUBMIT ONE COPY OF PLAN STATE

Operations shall be limited to the work shown in the plan until a revised plan or supplemental plan is submitted covering additional work. Compliance with this plan is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act. If STATE has prepared a required Forest Practices Act (FPA) "Written Plan" for operations, PURCHASER shall comply with all provisions of the Written Plan.

Explanation of Item No.(from Page 1)

- (5) All sales require you to use a brand furnished by STATE. If the State brand has not been assigned when the plan is submitted, it will be furnished and assigned later. Complete drawing. If more than one brand is assigned to the sale, complete both drawings.
- (6) The contract requires you to have a designated representative available on the sale area or work location who is authorized to receive in your behalf any notice or instruction given by STATE and to take action in regard to performance under the contract. If logging and project work is widely separated, a representative is required for each.
- (7) The STATE representative will be designated when your plan is approved and is the person who will inspect and issue instructions regarding performance.
- (8) Show names of subcontractors to be used for any or all phases of the operations. If subcontractors are not Known, or are changed later, give notification to the STATE representative prior to commencement of work by subcontractor.
- (9) Show projected dates for commencement of both projects and logging. If projected dates need to be changed at a later date, notification must be given to the STATE representative by supplemental plan or otherwise, prior to commencement of such operations.
- (10) The STATE representative will furnish extra copies of Exhibit A of the contract for your use in preparing the operations map. The map shall use the following legend and show:
 1. Landing locations, approximate setting boundaries, and probable sequence of logging the settings. Number the settings in sequence.
 2. Locations of spur roads planned for construction, other than required by the timber sale contract. Provide spur road specifications
 3. Locations of proposed tractor yarding roads. Show if and how marked on the ground.
 4. Locations of temporary stream crossings.
 5. List the sequence of performing project work.
 6. Location of rock sources - attach pit development plans.





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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
Forest Grove - NWOA

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

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

(3) FROM: Forest Grove Phone (503) 357-2191
(State Forestry District)
Address: 801 GALES CRK RD
FOREST GROVE, OR 97116-1199

(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

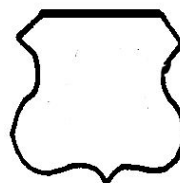
(8) APPROVED SCALING LOCATIONS (as shown on the ODF Approved Locations web-site)				
	Species	Yard	Truck	Weight

(9) SALE NAME: Hindsight
COUNTY: Washington

(10) STATE CONTRACT NUMBER:
FG-341-2020-W00231-01

(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) SIGNATURES:

Purchaser or Authorized Representative Date

State Forester Representative Date

State Forester Representative PRINT NAME



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

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires logging and hauling to be complete, recall branding hammers, date and sign where indicated, write diagonally across page "CANCEL", and send to TPSO.
- (2) Designate Third Party Scaling Organization (TPSO).

Columbia River Log Scaling & Grading Bureau
 P.O.Box 7002, Eugene, OR 97401
 Phone: (541) 342-6007 Fax: (541) 342-2631
 Email: services@crls.com

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@southernoregonlogscaling.com

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

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

- (3) State District office, address and phone.
- (4) Enter Purchaser's business name, address, and phone number as it appears on the Contract.
- (5) Minimum Scaling Specifications.
- (6) Westside - Region 6 actual taper segment scale. Check Yes or No. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs - All Species - State Forestry Department Scaling Practices (Westside).
- (7) Weight Scale Sample - Check box if sale is to be a Weight Scale Sample. All specifics for handling, scaling and processing will be attached or explained in the Remarks section item (15).
- (8) Show scaling locations only applicable to TPSO. Location name should appear as it does on the ODF Approved Scaling Location web site: http://www.odf.state.or.us/DIVISIONS/management/asset_management/ScalingLocation.asp 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.

Notify the District within one hour when branding or painting is inadequate for quick identification, the receipts are missing, not correctly or completely filled out, and/or when logs presented for scaling are impossible to scale accurately.

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

EXHIBIT D

FOREST GATE DESIGN, CONSTRUCTION, AND INSTALLATION

DESCRIPTION OF WORK. PURCHASER shall construct, and install gates with posts at Points A, C, and D, as directed by STATE. PURCHASER shall furnish all materials unless otherwise specified.

GATE AND POST REQUIREMENTS AND SPECIFICATIONS:

Gates shall be commercially manufactured, heavy duty, 6-rail with vertical braces, notched and welded.

2 of the gates shall be 50" x 16' and 1 gate shall be 50" x 18'.

Post shall be constructed from 4" Sch. 40 steel pipe.

Holes shall be drilled and painted prior to setting in the ground.

All posts shall be painted with a rust resistant primer coat and a topcoat of a rust resistant high visibility yellow.

Prior to painting, posts shall be cleaned and free of rust scale.

GENERAL GATE AND POST INSTALL INSTRUCTIONS:

All gate post locations shall be marked on the ground and will require STATE approval prior to installing the posts.

Distance between hinge and lock post shall be minimized while allowing full swing of gate in both directions with 6" – 8" of ground clearance throughout the swing.

If the bottom of the posts are installed at a depth shallower than 5', the bottom of the post shall be cut. The post shall then be set, with a minimum of 2' below ground, set in concrete. Concrete shall be a minimum of 2' in diameter and 2' deep (.45cy per post).

Blocking post shall be set to a height of 4' above the ground, firm and plum.

The gate shall be locked to the hinge post ("master" lock supplied by STATE) utilizing the installed chain, as show in this exhibit.

The gate shall be able to be locked ("DF" lock supplied by STATE) to the lock post utilizing the installed chain, as show in this exhibit.

The gate shall be able to be locked ("DF" lock supplied by STATE) to the blocking post utilizing the installed chain, as approved by STATE.

All bare metal, welds, scrapes, cuts or grind marks shall be cleaned and painted with rust resistant high visibility yellow paint.

SPECIFIC GATE INSTALLATION INSTRUCTIONS:

<u>Point</u>	<u>Work Description</u>
A	Install a 16' gate with the hinge post on the west side of the road.
C	Install a 18' gate with the hinge post on the south side of the road.
D	Block Morgan Creek Road to vehicle access, at the junction with X-Over road, as directed by STATE.
E	Block Morgan Creek Road to vehicle access, at junction, as directed by STATE.
F	Install a 16' gate with the hinge post on the east side of the road. Place boulders within tree line on east side of the road to block vehicle access around gate.

FOREST ROAD GATE DESIGN, CONSTRUCTION, AND INSTALLATION



EXHIBIT E

BRIDGE PROJECT REQUIREMENTS

DESCRIPTION OF WORK. Complete the following project in accordance with the manufacturer provided specifications, engineer's instructions, the attached exhibits and directions from STATE. PURCHASER shall furnish all materials unless otherwise specified.

EXISTING STRUCTURE. The existing structure shall remain in place during the duration of this project. The existing curbing material shall be removed. Existing structure is restricted to a maximum loading of 10 tons. No equipment, trucks or bridge components shall be placed on, skidded over, hauled or traveled across the existing structure.

BRIDGE. PURCHASER shall provide and install one portable low profile all steel bridge superstructure. The bridge design shall meet the following specifications unless otherwise approved in writing by STATE:

1. Bridge shall be prefabricated, modular in design, and in two pieces with a split down the middle.
2. Meet or exceed the U-80 Specification.
3. Length of span shall be 40'.
4. Bridge deck width of 14' between rub rails.
5. Bridge shall have 13" tall rub rails with 33-degree angles at ends.
6. Bridge components shall be constructed of weathering steel and/or painted with rust resistant paint.
7. The bridge deck shall be all steel and have an anti-skid surface.
8. Bridge shall have sturdy pull pipes or winch tubes on both ends to allow for winching and skidding.

BRIDGE DELIVERY, STORAGE AND HANDLING. PURCHASER is responsible for handling and protection of the bridge materials at all times. All bridge materials shall be unloaded and handled with large excavators, or equivalent, using nylon slings. If damage occurs, PURCHASER shall repair or replace components as directed by STATE. Materials may be stored at the project site, as approved by STATE. If stored at the project site, materials shall be placed on a level surface in a safe and stable manner.

BRIDGE SILL AND ABUTMENTS. Bridge shall sit on 2 - 4" x 12" x 16', #1 or better Douglas-fir, treated for ground contact, sills. Sills shall sit on smooth level abutments constructed with 1½" – 0 crushed rock. Final height of abutments and sill shall allow for at least 6" of clearance between the lowest point of the new bridge and the deck of the existing structure. Compact abutments according to the specifications in Exhibit E.

BRIDGE APPROACHES. Bridge approaches shall have a crowned surface that matches the width of the existing road and taper to the bridge width. Final grade of approaches shall not exceed 1%, tapering out to the existing road surface. Fill slope of approaches shall not exceed 1:1. Approaches shall be constructed with 1½" – 0 crushed rock. Boulders may be used to retain 1½" – 0 material and be used as fill armor. Compact approaches and surfacing according to the specifications in Exhibit E.

EROSION CONTROL METHODS. Erosion control measures, filter bags, sediment fences, sediment traps or catch basins, leave strips or berms shall be installed prior to construction and maintained during and after construction as appropriate. Upon completion of project, all areas of disturbed soil and waste areas shall be grass seeded and mulched according to the specifications in Exhibit F.

CONSTRUCTION SITE. South Lousignont Road shall be blocked and signed closed during the project. During periods of inactivity gate shall be locked closed and road blocked with boulders or equipment.

EXHIBIT E

ROCK SPECIFICATIONS

Application	Rock Size and Type	Location	Volume Per		Number of		Total Volume
Bridge Sills & Approaches	1 ½"-0 Crushed	Point B	Approach	60 cy	Approaches	2	120 cy
Fill Armor	36" Boulder	Point B	Approach	4 each	Approaches	2	8 boulders
Road Blocking	36" Boulder	Points D & E	Blockage	16 each	Blockages	2	32 Boulders
Gate Reinforcement	36" Boulder	Point F	Gate	8 each	Gates	1	8 boulders

ROCK TOTALS	Boulders	1½" - 0"
	40	120 cy

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

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.

EXHIBIT E

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, outsloped, or insloped at 4 to 6 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	SUBGRADE COMPACTION OPTIONS
All	Vibratory Roller

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	FILL COMPACTION OPTIONS
All	Vibratory Roller, Vibratory Hand-Operated, or Backhoe-Mounted Tamper

EXHIBIT E

COMPACTION AND PROCESSING REQUIREMENTS

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

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

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

ROAD SEGMENT	CRUSHED ROCK COMPACTION OPTIONS
All	Vibratory Roller

COMPACTION EQUIPMENT OPTIONS

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.

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

EXHIBIT F

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 fertilizer to all waste areas, and bare soils resulting from Project Nos. 1 & 2. Apply straw mulch to all bare soils within 100' of streams resulting from Project Nos. 1 & 2 and to all waste areas.

Seeding Seasons. Seeding shall be performed only from March 1 through June 15 and August 15 through October 31. Seeding materials shall not be applied during windy weather or when the ground is excessively wet or frozen. Areas of disturbed soil shall be seeded by the end of the project period in which work was started. PURCHASER shall notify STATE within 24 hours of seeding and fertilizer application.

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%

Fertilizer: Chemical analysis shall be 16-20-0 and shall be applied at the rate of 200 pounds per acre. Fertilizer shall not be applied within 100 feet of streams.

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

APPLICATION RATES FOR MULCH

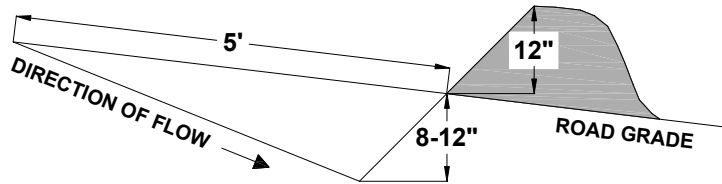
Place straw mulch to a reasonably uniform thickness of 1½ to 2½ inches. This rate requires between 2 and 3 tons of dry mulch per acre.

EXHIBIT G

WATERBAR SPECIFICATIONS

PROFILE

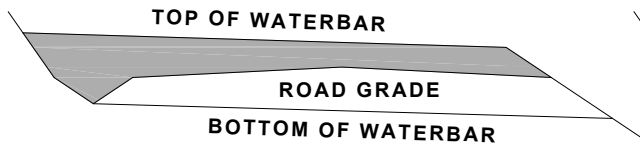
DITCHED AND OUTSLOPED



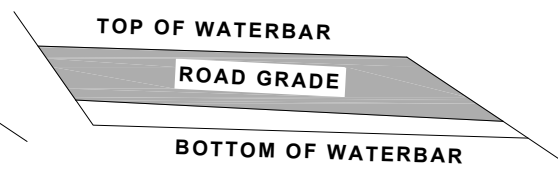
SPACING OF WATERBARS	
ROAD GRADE	DISTANCE
< 6 %	400'
6 - 10 %	200'
11 - 15 %	150'
> 15 %	100'

CROSS SECTION

DITCHED



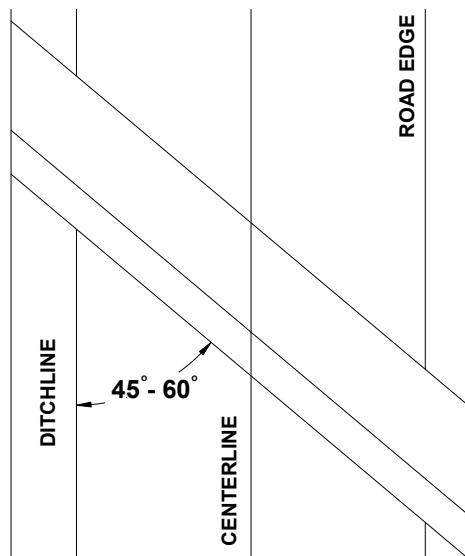
OUTSLOPED



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

PLAN VIEW

DITCHED



OUTSLOPED

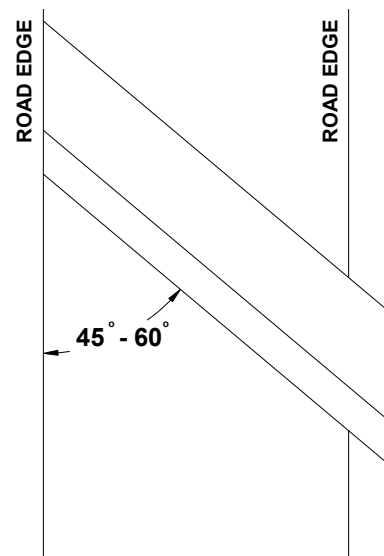
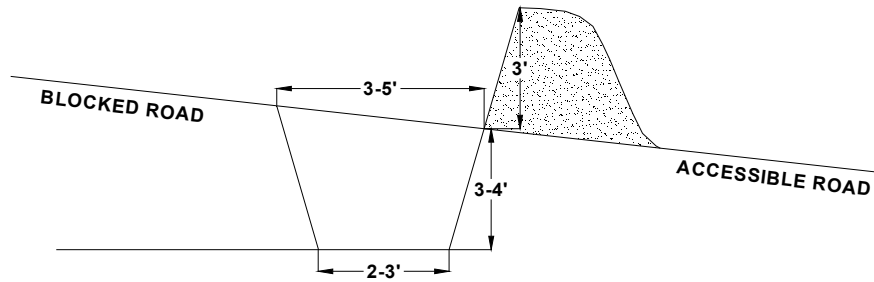


EXHIBIT G

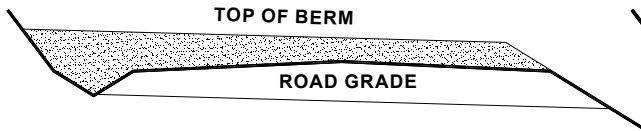
TANK TRAP SPECIFICATIONS

PROFILE
DITCHED AND OUTSLOPED

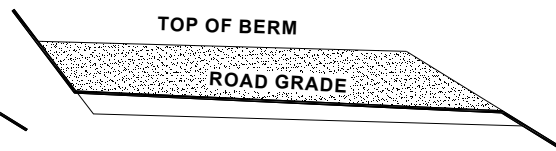


CROSS SECTION

DITCHED



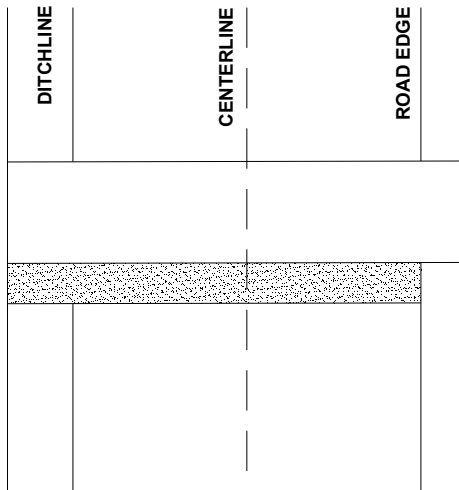
OUTSLOPED



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

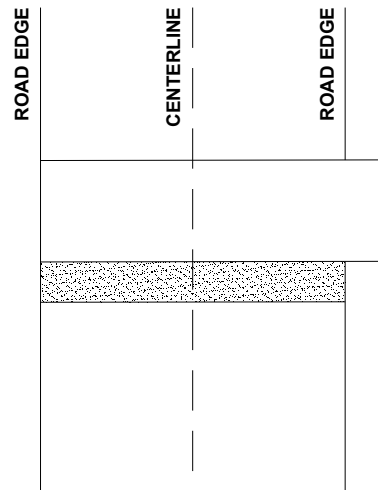
PLAN VIEW

DITCHED



DIRECTION OF FLOW
↓

OUTSLOPED



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.

EXHIBIT H

SPECIFICATIONS FOR BRUSH AND SLASH SHOVEL PILING

Description of Work to be Done

Areas designated for work under the contract shall be treated according to the specifications given below:

Clearing - Brush, logging Slash, and other debris shall be cleared from planting sites and piled in windrows or piles, so that 80 percent or more of the soil organic layer is exposed. All woody vegetation other than trees is defined as brush in this exhibit.

Piles - shall be located at least 75 feet apart and shall be no more than 75 feet long. Piles shall be located inside the sale area designated for piling and shall be more than 75 feet from any edge or standing conifer tree. Logs and chunks which are suitable for firewood shall be piled separately from Slash, near roads and Landings and alongside the road in locations designated by STATE.

Conifer Trees - shall be saved, unless otherwise directed by STATE.

Protective Measures - shall comply with Oregon Forest Practice Rules issued per ORS 527.610 to 527.992. Examples of protective measures are: (1) waterbarring tractor trails where necessary to prevent runoff toward streams; (2) not windrowing in streams or streamways; and (3) leaving Stream Buffers along designated streams.

Work specifications may be modified or waived only upon written notice from STATE.

EXHIBIT H

SPECIFICATIONS FOR BRUSH AND SLASH SHOVEL PILING

Equipment Type, Equipment Operation, and Conduct of Work

The specifications given below are requirements for equipment type, equipment operation, and conduct of work under the contract.

Shovel - shall be a track-mounted machine with a ground-pressure rating of not more than 6.8 PSI and a net horsepower of 85 or more. The machine shall be capable of a minimum horizontal reach of 26 feet and a minimum vertical reach of 16 feet.

- Log Loader – shovel: Grapple shall be a hydraulically controlled, with a 360-degree continuous rotation, and tooth length on rake arm shall be greater than 14 inches long, unless otherwise approved in writing by STATE.

Equipment	Rate	Acres	Appraised Value
Log Loader	\$200 / acre	41	\$8,200

Operator - must be experienced in operating similar equipment on land clearing operations, be able to operate the equipment proficiently, and pile the debris on the area as directed by STATE.

Support - including transport, other equipment, replacements, supplies, maintenance, and repairs shall be furnished as required to complete work; and shall be furnished without cost to STATE, other than as agreed under the contract terms.

Work Scheduling - work shall be accomplished only during dry weather conditions, and started within 14 calendar days after completion of yarding activities on the Timber Sale Area. Operations shall provide for continual operation until contract work is completed, unless interrupted by poor weather, fire closures, or other uncontrollable circumstances. Equipment breakdowns shall be repaired without undue delay, and provision shall be made for replacement of equipment to prevent prolonged delays. Piling operation shall not be allowed when operations might damage sites or affect stream flows. Any exception to these instructions must be authorized in writing by STATE.

STATE Representative - shall provide directions for the conduct of work according to specifications.

WRITTEN PLAN
Hindsight
Timber Sale #FG-341-2020-W00231

LEGAL DESCRIPTION: Portions of Sections 16 and 31, T3N, R5W, W.M, Washington County, Oregon.

PROTECTED RESOURCE: Type-F stream North Fork Lousignont Creek flows along the northeast side of the Timber Sale Area and Type-F stream Morgan Creek flows along the north side of the Timber Sale Area. The Timber Sale Area is within a designated aquatic anchor.

DESCRIPTION OF THE AREA: Slopes adjacent to this Creek range from 5% in the flood plane to approximately 80% up slope to Morgan Creek Road. Streamside vegetation along these Type-F streams include Douglas-fir, western hemlock, grand fir, western red cedar, red alder, and big leaf maple.

PROTECTION MEASURES: The Type-F stream is buffered at an average distance of 115 feet upslope from the floodplain edges with "Timber Sale Boundary" signs and "Timber Sale Boundary" flagging. Cables may hang over this stream on the opposite slope of ridge to facilitate logging. When cables pass through or over the stream buffers, all necessary precautions shall be taken to protect all stream buffer components. Trees felled within the buffer for cable corridors shall not be yarded. Equipment shall not be allowed on slopes greater than 35% or operated within 50 feet of streams. Operations shall be suspended during periods of high soil moisture. Trees and snags adjacent to buffers shall be felled away from or parallel to buffer.

Prepared by: Adrian Torres 09/16/2019

Reviewed by: Erik Marcy 9-19-19
Erik Marcy; Unit Forester Date

WRITTEN PLAN FOR INSTREAM ACTIVITIES –

HINDSIGHT TIMBER SALE SALE NO. FG-341-2020-W00231-01

TEMPORARY PORTABLE BRIDGE INSTALLATION

PROJECT DESCRIPTION:

This project consists of installing a temporary portable bridge on North Fork Lousignont Creek at the following location:

SE ¹/₄ NW ¹/₄, Section 16, T3N, R5W, W.M.

The Oregon Forest Practices Act requires a written plan for operations within 100 feet of a Type F stream. This Written Plan addresses the installation of a temporary portable bridge at an existing crossing and the protection measures that will be applied to minimize impact to the stream and the associated riparian area.

A 40-foot temporary portable bridge will be installed over the existing structure. The new bridge will utilize the existing abutments, wingwalls, and road fill. No in-water work is expected with this operation.

PROTECTED RESOURCES:

The bridge to be installed under this Written Plan will be installed at an existing road crossing on South Lousignont Road. This will maintain fish passage to the North Fork Lousignont Creek, a large type F stream. This project site is within the Forest Practices Coast Range Region.

DESCRIPTION OF THE AREA:

The stream's drainage area is 2.84 square miles, with a mean elevation of 1,150 feet. The existing flow capacity under the bridge is 596 cubic feet per second, which will accommodate the predicted 50-year peak flow of 398 cubic feet per second. Average active channel width at normal high water is measured to be 24.3 feet.

Upstream of the crossing, beginning about 1,200 feet upstream, the side slopes become steeper with a constricted channel. From 1,200 feet upstream of the crossing to downstream of the crossing, the side slopes are gentle with a broad flood plain. Vegetation upstream and downstream of the crossing consists of an overstory of dominantly red alder mixed with scattered conifers. Understory consists of salmonberry.

PROTECTION MEASURES:

The operation is designed to be completed with no in-water work, however if conditions change any in-water work associated with this plan will be accomplished from July 1 to August 31, annually. In-water work will be limited to the minimum necessary to adequately prepare the site for installation of the bridge.

Cutting of trees within the riparian area adjacent to the site will be limited to those necessary to facilitate installation of the bridge. All of the work will be accomplished by machinery operating from the existing road. Upon completion of the installation of the bridge all areas of disturbed soil will be seeded and mulched within project site.