

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 B	rand Information (Co	implete)
(1) Contract Number:	WO-341-20)21-W00697-01			
(2) Sale Name:	Just in Bea	aver			
(3) Contract Expiration I	Date: 12/31	/2023			
(4) Purchaser Name:					
(6) State Representative	es:				
<u>Name</u>		Circle One	Phone No.	Cell No.	Alt Phone
		Logging Projects All			
		Logging Projects All			
		Logging Projects All			
		Logging Projects All			
(7) Purchaser Represen	tatives:	Circle One	Phone No.	Cell No.	Alt Phone
		Logging Projects All			
		Logging Projects All			
		Logging Projects All		1	1
		Logging Projects All		1	1
		Logging Projects All		1	1
		Logging Projects All		-	
					4
		Logging Projects All			
8) Name of Subcontractor Project No. Subcont	ors and Start I <u>ractor Name</u>		Completion Date	Cell No.	Alt Phone
Sub	contractor N	ame. S	tart 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

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
 - 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.

Cable Landing, with numbers for sequence.

Tractor Landing with alphabetical sequence.

Approximate setting boundary.

Spur truck roads.

Tractor yarding roads.

Temporary stream crossings.



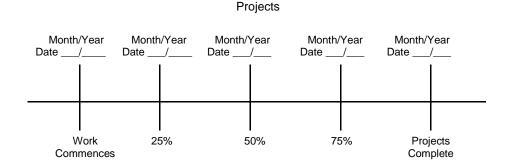
Oregon Department of Forestry

2600 State St Salem OR 97310 PART III: EXHIBITS

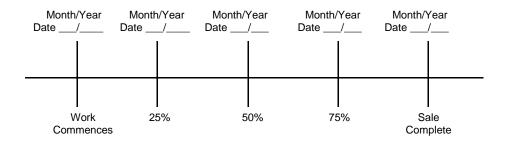
EXHIBIT B OPERATIONS PLAN

Completion Timeline

Indicate on the appropriate timeline below, the dates by which you plan to complete the work as required under this contract. The purpose of this section is to develop a plan that will ensure you complete the work as required, and meet the interim completion date(s) and contract expiration date. This plan is incorporated and made a part of the contract. When, in the opinion of STATE, operations are not commencing in a manner that meets the intent of this plan, you may be placed in violation of contract and your operations suspended until an amended plan is submitted and approved by STATE.



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, PURCHASER's must comply with all applicable state, federal, and local laws.

PURCHASER's compliance with this plan is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act.

APPROVED; Date:	SUBMITTED BY:
	PURCHASER
STATE OF OREGON - DEPARTMENT OF FORESTRY	_
Title	Title



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

(1) ORIGINAL REGIS				(9) SALE NAME: Just in Beaver
REVISION NUMB	ER <u>000</u> ⊔ Da' □ Da'			COUNTY: Polk
CANCELLATION	□ Da	<u> </u>		— (10) STATE CONTRACT NUMBER:
(2) TO:				WO-341-2021-W00697-01
(T	hird Party Scaling Orga	nization)		(11) STATE BRAND REGISTRATION NUMBER:
(3) FROM: West Ore) 929-326	66	<u> </u>
(State Fores	try District) ALSEA HWY			(12) STATE BRAND INFORMATION:
	MATH,OR 97370			_
	WATTI,OK 97370			-
(4) PURCHASER:				_ /,
Mailing Address:				_ ()
Phone Number:				— (13) PAINT REQUIRED: YES ☑
(5) MINIMUM	SCALING SPECIFIC	ATIONS		(13) PAINT REQUIRED: YES ☑ COLOR: Orange
· · ·			\	- <u> </u>
SPECIES Conifers	MINIMUM NE		VIE	(14) SPECIAL REQUESTS (Check applicable)
Hardwoods	1			PEELABLE CULL (all species)
Tiaiuwoous	1	<u> </u>		NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE ✓
*Apply minimum vol	ume test to whole logs of	over 40' W	estside	
(6) WESTSIDE SCAL	_			ADD-BACK VOLUME - Deductions due to delay ✓
* *	 taper rule. Logs over 40	'.		OTHER: "Mule Train" loads require a load ticket for each set
-	YES	NO		of bunks.
(7) Weight Scale Sam		Ø		(15) REMARKS
<u> </u>				¬
(8) APPROVED SCA LOCATIONS	LING S	9	농 동	
(as shown on the ODF Appro Locations web-site)	ved sign	Yard	Truck	
Locations web site)				Operator's Name (Optional inclusion by District):
				(16)
				4 ` ´
				Purchaser or Authorized Representative Date
				_
				State Forester Representative Date
				Out Franks Branch & BRINT MANE
				State Forester Representative PRINT NAME



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

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

(2)

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@southernoregonlogscaling.com

Northwest Log Scalers Inc.

6137 NE 63rd St, Vancouver, WA, 98661

Phone: (360) 553-7212 ext. 4 Fax:(360) 553-7213

Email: info@nwlogscalers.com

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 specifies 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.

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.



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

West Oregon, NWOA

(1)	ORIGINAL REGISTRATION Date	(9) SALE NAME: Just in Beaver
	REVISION NUMBER 000 Date	COUNTY: Polk
	CANCELLATION	STATE CONTRACT NUMBER:
(2)		WO-341-2021-W00697-01
	(Approved Pulp Processing Facility)	(11) STATE BRAND REGISTRATION NUMBER:
(3)	FROM: West Oregon Phone (541) 929-3266 (State Forestry District)	(12) STATE BRAND INFORMATION:
	Address: 24533 ALSEA HWY	
	PHILOMATH,OR 97370	
(4)	PURCHASER:	
(5)	Scaling Bureau (TPSO) Processing Weight receipts:	
	Mailing Address:	(13) REMARKS : "Mule Train" loads require a load ticket for each set of bunks.
	Phone Number:	<u>Duriks.</u>
(6)	STATE Definition of Approved Pulp Sort:	Operator's Name (Optional inclusion by District):
	• Top portion of the tree (tops).	
	All logs with a diameter (Big End) greater	(14) SIGNATURES:
	than 8 inches marked with blue paint.	
(7)	PULP FACILITY PROCESSING INSTRUCTIONS:	Purchaser or Authorized Representative Date
	 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.	State Forester Representative Date
	Gross weight and truck tare weight for each load shall be machine printed on the weight receipt.	·
	Weigher shall sign the weight receipt.	State Forester Representative PRINT NAME
	Weigher shall record the Log Load Receipt number on the weight receipt.	
	 Weigher shall attach the Weight receipt to the Log Load Receipt and mail them weekly to the TPSO processing the Weight receipt. 	
(8)	TPSO PROCESSING INSTRUCTIONS	
	Submit data files daily (or each day of activity).	
	• Mail or deliver scale tickets weekly to ODF Headquarters i	n

Notify the District within one hour when branding is inadequate for quick identification, the logs are marked with orange paint, the receipts are missing, not correctly or completely filled out, and/or logs do not meet the specifications of the STATE definition of Approved Pulp Sort.

Distribution: ORIGINAL: Salem/ COPIES: TPSO, Approved Pulp Processing Location, Purchaser, District, Mgmt. Unit



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

West Oregon, NWOA

- (1) Must Complete. Check appropriate box. REVISION NUMBER requires comments in the Remarks Section(13). CANCELLATION requires logging and hauling to be complete, recall branding hammers, date and sign where indicated, write diagonally across page "CANCEL", and send to TPSO.
- (2) **Must Complete.** Approved Pulp Processing Facility. Write in as written in the Approved Log Delivery Location http://www.odf.state.or.us/DIVSIONS/management/asset_management/ScalingLocation.asp
- (3) Must Complete. State Forestry District and District Phone Number.
- (4) Must Complete. Purchaser's business name as it appears on the Contract.
- (5) Must Complete. Third Party Scaling Organization that will be processing the weight tickets, mailing address, and phone number.

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

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

Northwest Log Scalers Inc. 6137 NE 63rd St, Vancouver, WA, 98661 Phone: (360) 553-7212 ext. 4 Fax:(360) 553-7213

Email: info@nwlogscalers.com

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

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

- (7) Must Complete. Enter sale name and county. If more than one county write in all the counties that the sale is located in.
- (8) Must Complete. Enter sale Contract number.
- (9) Must Complete. Enter Oregon's State Brand Registry Number (REQUIRED).
- (10) **Must Complete.** Show brand assigned to timber sale. One brand only, if more than one brand is assigned to the sale: (1) make a separate form for each brand and (2) on each form, explain and show other brand(s) in the Remarks section Item(13).
- (11) Use this section to list any special instructions or the reason for any revisions in section item(1).
- (12) Must Complete. Purchaser required to sign and date completed form in addition to State Forester Representative, sign and print name on the form.

Salem Distribution Instructions: Original will be mailed to Salem after it is electronically scanned and placed in the Salem transfer drive \\WPODFFILL01\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.

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

FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
16 feet	14 feet	1 to 2	0+00 to 105+82	Crowned
14 feet	4 feet 12 feet 2 to		0+00 to 26+71	Crowned/ Outsloped
14 feet	12 feet	4 to 5	0+00 to 4+92	Outsloped
14 feet	12 feet	6 to 7	0+00 to 10+33	Outsloped

<u>CLEARING</u>. This work shall consist of clearing, removing, and disposing of all trees, Snags, Down Timber, brush, surface objects, and protruding obstructions within the clearing limits.

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

CLEARING CLASSIFICATION.

Improvement- Where clearing limits have not been marked, the clearing limits shall extend 5 feet back of the top of the cutslope and 5 feet out from the toe of the fill slope, or as directed by STATE. 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.

<u>GRUBBING</u>. 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.

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

<u>CLEARING AND GRUBBING DISPOSAL</u>. 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.

<u>EXCAVATION</u>. 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.

FOREST ROAD SPECIFICATIONS

EXCAVATION (continued)

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.

<u>ROAD WIDTH LIMITATIONS</u>. 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.

<u>Curve Widening</u>. 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

<u>Subgrade</u>. 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.

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

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

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

SLOPES	Back Slopes	Fill Slopes
Solid Rock	Vertical to 1/4:1	2
Fractured Rock	1/2:1	
Soil - side slopes 50% and over	3/4:1	1½:1
Soil - side slopes less than 50%	1:1	1½:1

Top of cutslope shall be rounded.

<u>LANDINGS</u>. Landings shall be constructed as posted in the field, no less than 50 feet wide and no more than 70 feet wide unless otherwise approved by STATE. Surface is to be crowned for drainage with general grade no more than 3 percent. Surface as shown in the "Road Surfacing" table in this Exhibit.

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

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

FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- (1) <u>Timber Removal</u>. Remove all trees within posted Right-of-Way as specified in Section 2210, Designated Timber.
- (2) <u>Bank Slough Removal</u>. 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.
- 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. Excess 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.
- (4) <u>Drainage Ditches</u>. 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.
- (5) <u>Energy Dissipator Construction.</u> Where rock is used for an energy dissipator, rock shall be placed below the culvert outlet and embedded for a minimum of 3 feet, in accordance with this Exhibit.
- (6) <u>Sod Removal</u> Scrape off sod and grass from road surfacing where needed. Sod material shall be scattered in stable locations through openings in the timber outside of the cleared right-of-way.
- (7) Equipment. All excavation and dissipator rock placement shall be performed using a minimum 1½ cubic yard, track-mounted excavator.
- (8) <u>Waste Areas</u> shall be uniformly sloped and compacted for drainage.
- (9) Subgrade Preparation and Application of Surfacing Rock.
 - (a) Complete culvert installations, drainage ditches, fill reconstruction, ditchouts, and other specified work prior to the application of new surfacing rock.
 - (b) Cut out all potholes and/or washboard sections from the existing surfacing.
 - (c) Apply required patching and leveling rock, as directed by STATE.
 - (d) Process (grade and mix) the existing surface and added base rock. Provide for a crown at 4 to 6 percent or outslope of 3 to 4 percent, and compact in accordance to the "Compaction and Processing Requirements" in this Exhibit.

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT (Project No. 1)

Segment 1 to 2	Station 0+00 to 105+82	Work Description Apply 40 CY of 1½"-0" spot rock from Point 1 to Point 2 and process surface with grader (5 stations).
	64+42 to 75+10	Remove bank slough and haul waste material to waste area (~100 CY). Compact waste material.
	89+95	Construct Landing and shape and compact subgrade with grader and vibratory roller. Apply 20 CY of jaw-run rock and process and compact Landing with grader and vibratory roller. Clean out approximately 2 culverts.
2 to 3	0+00 to 15+80	Remove sod from road with a grader.
	15+80 to 26+71	Re-open crowned road and Landings with grader from Sta. 15+80 to Sta. 21+87 and outsloped road from Sta. 21+87 to Sta. 26+71. Daylight road from Sta. 15+80 to Sta. 21+87 and place trees in a stable location.
	0+00 to 21+87	Re-establish ditch line in accordance with this Exhibit and end haul waste material to waste area as shown on Exhibit A. Compact waste material.
	10+43	Excavate existing culvert and remove from STATE lands. Replace with an 18"x30' CPP culvert. Utilize salvaged bedding material and 10 CY of 1½"-0" rock as culvert bedding and backfill and 5 CY of pit-run rock as a dissipator. Scatter excess excavation material in locations approved by state.
	Pt. 4	Apply 10 CY of jaw-run rock for Landing.
	15+80	Install an 18" x 35' CPP culvert. Utilize 20 CY of 1½"-0" rock as culvert bedding and backfill and 5 CY of pit-run rock as a dissipator. Use excavated material as needed for backfill, scatter excess material in locations approved by state. Dewater stream during in-stream activities and apply straw mulch to exposed soils at completion.
	17+87 & 19+72	Install 18" x 30' CPP culverts. Utilize 20 CY of 1½"-0" rock each as culvert bedding and backfill and 5 CY of pit-run rock each as a dissipator. Use excavated material as needed for backfill, scatter excess material in locations approved by state.
	19+22	Install a 24" x 30' CPP culvert. Utilize 20 CY of 1½"-0" rock as culvert bedding and backfill. Use excavated material as needed for backfill, scatter excess material in locations approved by state. Dewater stream during in-stream activities and apply straw mulch to exposed soils at completion.
	15+80 to 26+71	Reshape and compact subgrade with grader and vibratory roller.
	Pt. 3	Construct 50'x50' Landing. Shape and compact subgrade with grader and vibratory roller. Apply 40 CY of jaw-run rock.

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT (Project No. 1)

Segment 2 to 3 (continued)	Station 0+00 to 15+80	Work Description Apply a 2 inch lift of 1½"-0" rock (170 CY).
	15+80 to 26+71	Apply a 6 inch lift of 3"-0" rock (360 CY).
	21+87	Apply 20 CY of jaw-run rock to be used as a turnout.
	0+00 to 26+71	Process and compact all rocked road segments, Turnouts and Landings with a grader and vibratory roller in accordance with this Exhibit.
		Clean out approximately 2 culverts.
4 to 5	0+00 to 0+50	Re-open outsloped road with dozer. Shape and compact subgrade with grader and vibratory roller. Apply 10 CY of jaw-run rock and process and compact surface with grader and vibratory roller.
	3+70	Restore streambed to natural channel
	0+50	Create tank trap to block road
6 to 7	0+00 to 10+30	Re-open outsloped road with dozer. Shape and compact subgrade with grader and vibratory roller. Apply an 8 inch lift of jaw-run rock (450 CY). Process and compact surface with grader and vibratory roller.
	6+97 & 10+30	Apply 60 CY of jaw-run rock total to Landings. Process and compact Landings with grader and vibratory roller.

ROAD SURFACING

					oint to Point	Sta	. to Sta.		
				1	to 2	0+00	to 105+82		
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Spot Rock	1 1/2"-0	0+00 to 105+82	n/a	10	load	4	loads	40	54
Landing Rock	Jaw-Run	89+85	n/a	20	Ldg	1	Ldg	20	27
- ,		·	•			•		00	0.4

Total rock for road segment

1 to 2

60 81

					oint to Point 2 to 3		to Sta.		
Application	Rock Size and Type	Location	Depth of Rock (inches)	V	olume CY) per	Number of		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Surface Rock	1½"-0"	0+00 to 15+80	2	11	station	15.8	stations	170	230
Surface Rock	3"-0"	15+80 to 26+71	6	33	station	10.9	stations	360	486
Landing Rock	Jaw-Run	Pt. 4	n/a	10	Ldg	1	Ldg	10	14
Landing Rock	Jaw-Run	Pt. 3	n/a	40	Ldg	1	Ldg	40	54
Dissipator Rock	Pit-Run	n/a	n/a	5	dissip ator	4	dissipators	20	27
Culvert bedding Rock	1½"-0"	n/a	n/a	10	load	9	loads	90	121
Total rock for roa	d segment	2 to 3		,	31		·	690	932

				F	oint to Point I to 5		. to Sta.		
Application	Rock Size and Type	Location	Depth of Rock (inches)	200	Volume (CY) per Number of		mber of	TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Base Rock	Jaw-Run	0+00 to 0+50	n/a	10	load	1	load	10	14

Total rock for road segment

4 to 5

10

14

EXHIBIT D

ROAD SURFACING

				Point t	o Point	Sta. t	o Sta.		
				6 t	o 7	0+00 to	10+30		
Application	Rock Size and Type	Location	Depth of Rock (inches)	Volume (CY) per		Number of		TOTAL VOLUME (CY)	TOTAL VOLUME (TONS)
Surface Rock	Jaw-Run	0+00 to 10+30	8	44	station	10.3	stations	450	608
Landing Rock	Jaw-Run	Pt. 6, 6+97, Pt. 7	n/a	10 load		6	loads	60	81
Total rock for roa	d segment	6 to 7						510	689

Total rock for road segment

Total Project Work Rock Volumes Rock Size 1 1/2-0" 3"-0 Jaw-Run Pit-Run **Rock Totals CY** 590 20 300 360 **Rock Totals TONS** 405 486 797 27

	lumes			
Rock Size	1 1/2"-0	3"-0	Jaw-Run	Pit-Run
Rock Totals CY	100	30	1=	-
Rock Totals TONS	135	41	-	-

	CY to TONS conversion factors			
Size	1 1/2"-0	3"-0	Jaw-Run	Pit-Run
Tons/CY	1.35	1.35	1.35	1.35

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

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.

<u>Depth Measurement</u>. 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.

<u>Load Records</u>. Notify STATE before spreading the rock and maintain a record of all rock delivered for spreading. Make the record available for STATE inspection. A report listing the amount of rock delivered the prior month must be submitted no later than the 15th of each month.

COMPACTION AND PROCESSING REQUIREMENTS

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

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

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

Subgrade shall be crowned at 4 to 6 percent or outsloped or insloped at 3 to 4 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	SUBGRADE COMPACTION OPTIONS
All road segments.	1

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

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

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

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

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

Rock shall be crowned at 4 to 6 percent or outsloped at 3 to 4 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

COMPACTION AND PROCESSING REQUIREMENTS

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

COMPACTION EQUIPMENT OPTIONS

- (1) Vibratory Rollers. The drum shall have a smooth surface, a diameter not less than 48 inches, a width not less than 58 inches, and a turning radius of 15 feet or less. (Vibration frequency shall be regulated in steps to 1400, 1500, and 1600 VPM, corresponding to engine speeds of 1575, 1690, and 1800 RPM. The centrifugal force developed shall be 7 tons at 1600 VPM. It shall be activated by a power unit of not less than 25 horsepower.) The vibratory roller shall be self-propelled and operated at speeds ranging from 0.9 miles to 1.8 miles per hour, as directed by STATE.
- (2) <u>Vibratory Hand-Operated or Backhoe-Mounted Tamper</u>. 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.

DURABLE CRUSHED ROCK SPECIFICATIONS

Grading Requirements

For 1½"-0"	Passing Passing Passing Passing Passing Passing	2" sieve 1½" sieve 3/4" sieve 1/4" sieve No. 10 sieve No. 40 sieve	100% 90-100% 60-90% 30-50% 15-30% 7-15%
For 3"-0"	Passing Passing Passing Passing Passing Passing Passing	4" sieve 3" sieve 1½" sieve 3/4" sieve 1/4" sieve No. 10 sieve	100% 90-100% 60-90% 40-60% 20-40% 5-20%
For Jaw-run	Passing	6" sieve	100%
	Passing	3" sieve	45-65%
For Pit-run	Passing	10" sieve	100%
	Passing	6" sieve	60-85%

Control of gradation shall be by visual inspection by STATE.

CULVERT SPECIFICATIONS

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

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

Polyethylene joints shall be made with split couplings, corrugated to engage the culvert corrugations, and shall engage a minimum of 4 corrugations, 2 on each side of the culvert joint.

Culverts shall be located according to the alignment and grade as shown on the Plan and Profile, and/or as staked in the field, or as specified in special instructions.

The STATE Representative shall determine final culvert locations and stake the locations in the field prior to installation.

Cross Drain Culverts

Cross drain culverts on road grades in excess of 3 percent shall be skewed at least 30 degrees from perpendicular to the road centerline, except that cross drain culverts at the low point of dips in roads shall not be skewed. Cross drains shall be skewed to fit the required culvert length to the road prism.

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

In-stream Culverts

De-watering of the work site shall be accomplished according to PURCHASER's STATE approved plan and prior to the removal of any additional fill material for the development of the culvert bed and stream channel. De-watering of the work site may be accomplished by use of cofferdams, pumps, temporary diversion ditches and/or drainage structures. Work shall be done only during the in-stream work period, unless otherwise approved by STATE.

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 excavated material free from woody debris and capped with 1½"-0 crushed rock on improvement segments.

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

Minimum height of cover over top of culvert to subgrade when road is to be rocked shall be as follows: 12" for culverts 18" to 36" and 18" for culverts 42" to 96". Minimum vertical cover for other designs shall be as specified by STATE. The finished subgrade shall match the subgrade of the road before construction.

CULVERT SPECIFICATIONS

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

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

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 and hauled to an approved refuse site in the same project period in which replacement occurred. Damaged culvert inlets and/or outlets shall be repaired by opening them with a hydraulic jack, or cutting off the culvert end to allow for free passage of water at peak flow levels.

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

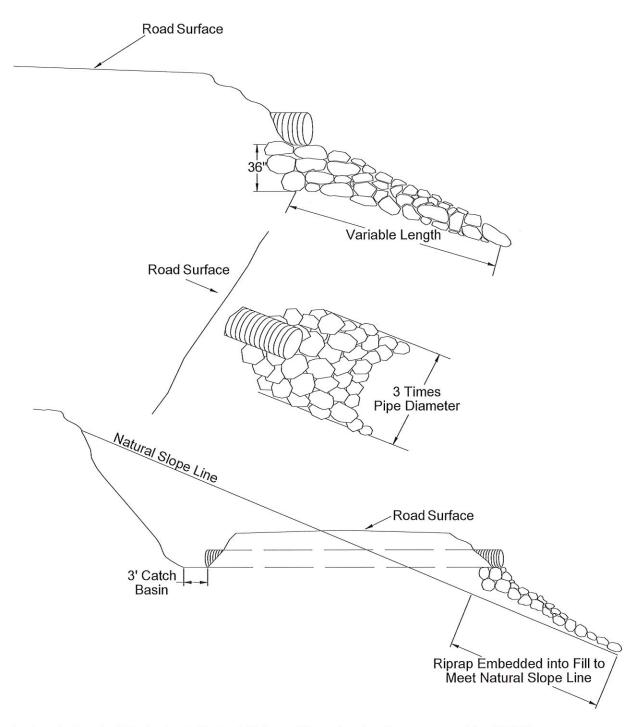
CULVERT LIST

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	MATERIAL TYPE	ROAD SEGMENT POINT TO POINT	STATION
1	18	30	CPP	2 to 3	10+43
2	18	35	CPP	2 to 3	15+80
3	18	30	CPP	2 to 3	17+87
4	24	30	CPP	2 to 3	19+22
5	18	30	CPP	2 to 3	19+72

CPP = Polyethylene

EXHIBIT D

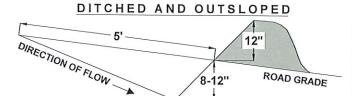
TYPICAL EMBEDDED ENERGY DISSIPATOR



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

WATERBAR SPECIFICATIONS

PROFILE

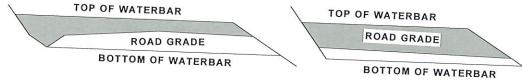


SPACING OF WATERBARS			
ROAD GRADE DISTANCE			
< 6 %	400'		
6 - 10 %	200'		
11 - 15 %	150'		
> 15 %	100'		

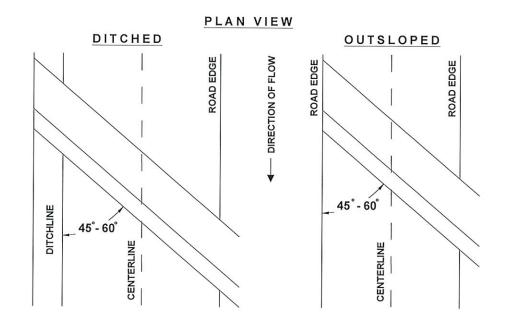
CROSS SECTION

DITCHED

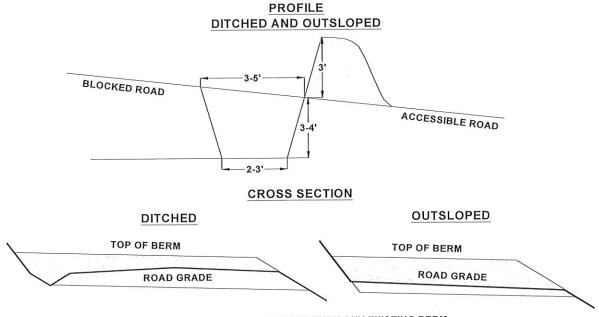
OUTSLOPED



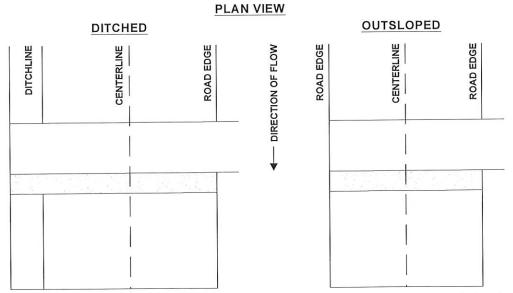
CONSTRUCT DITCHOUT THRU ANY EXISTING BERM. CROSS DRAINAGE GRADIENT MINIMUM 3%.



TANK TRAP SPECIFICATIONS



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

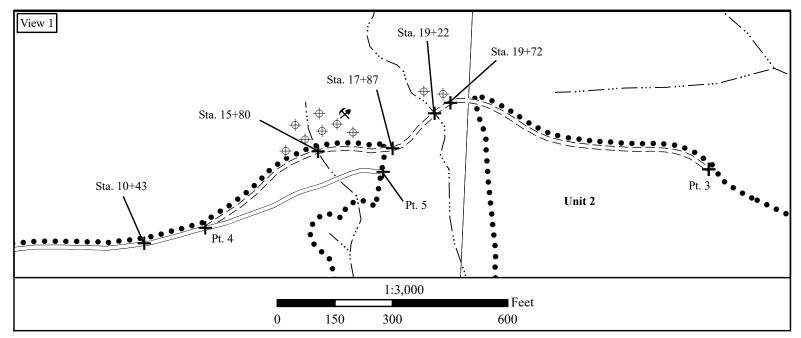


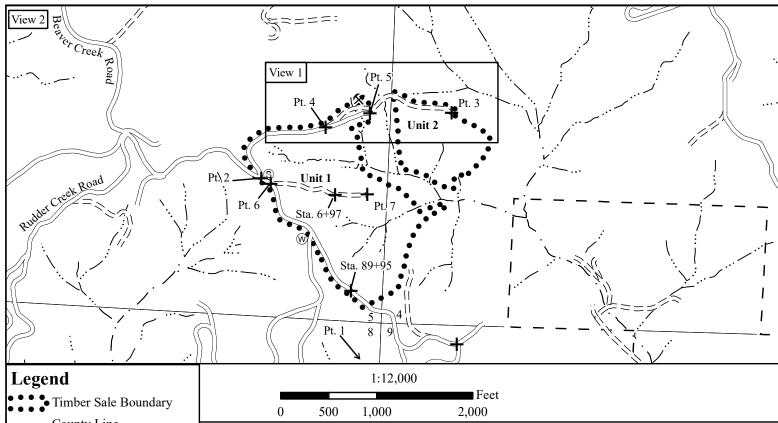
It should be sloped to drain with a relief ditch through the down slope edge of the road. The trench shall be behind the berm for approaching traffic.

EXHIBIT E

ROCK QUARRY TEST DRILLING REQUIREMENTS

- PURCHASER shall notify STATE a minimum of 2 weeks prior to beginning any operations. A STATE Representative shall be present during test drilling to monitor results, issue instructions, determine test hole locations and depths. The representative also shall certify hours of operation or acceptance of work when required under contract.
- 2) Work scheduling 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. Testing operations shall not be allowed from October 1 to May 31, or during any other period when operations might damage sites or affect stream flows. Any exception to these instructions must be authorized in writing by STATE.
- 3) The hydraulic rock drill shall be a crawler-type in the 40,000 pound class or greater, with a minimum penetration rate of 120 feet per hour while drilling a 4"-6" bore hole, in overburden, fractured rock and solid rock.
- 4) The operator must be experienced in operating hydraulic rock drills on rock test drilling operations, be able to operate the drill proficiently, and operate in the area as directed by STATE.
- 5) 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.
- 6) Test holes shall be drilled to determine mass attitudes of rock strata, rates of drill advancement, depths of overburden and other pertinent information.
- 7) Each test hole shall be staked and assigned an individual number. Test holes shall be drilled for a maximum distance of 60 feet in vertical, horizontal and/or other directions, as directed by STATE.
- 8) STATE may elect to change the test drilling locations at the quarry sites. However, no more than a total of 16 hours of hydraulic rock drill time will be utilized. Should STATE determine that not all hours are needed, PURCHASER shall pay to STATE \$265 per hour for each hour not used or exchange unused drill time for excavator time with approval from STATE.
- 9) Access road construction is required. Access roads shall be constructed by the PURCHASER using small excavator. All routes and locations of access roads are flagged with white flagging. No more than a total of 10 hours of small excavator time will be utilized. Should STATE determine that not all hours are needed, PURCHASER will be directed to complete related quarry projects.
- 10) Upon completion of test drilling at each site, waterbar all excavator and test equipment access roads and reestablish drainage ditches, as directed by STATE.





County Line

- Ownership

Roads

= Surfaced Road

= = Unsurfaced Road

Streams

Type F Stream

Type N Stream

Project Point

- Stockpile \odot
- (W) Waste Area
- **Exploratory Drill Location** Φ

Ø. Rock Pit

PROJECT POINTS

OF TIMBER SALE CONTRACT NO. WO-341-2021-W00697-01 JUST IN BEAVER PORTIONS OF SECTIONS 4 & 5, T10S, R08W, W.M., POLK COUNTY, OREGON.

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FPA WRITTEN PLAN for Tailholding within 300 feet of a Sensitive Wildlife Site

Just In Beaver Timber Sale

Location: Portions of Section 4, T10S, R08W, W.M, Polk County, Oregon

Landowner: Oregon Department of Forestry

24533 Alsea Hwy Philomath OR, 97370 (541) 929-3226

Protected Resources: The Cedar Beaver Marbled Murrelet Management Area (MMMA).

Situation: Unit 2 borders the Non-habitat Buffer of the Cedar Beaver MMMA on the eastern border of the unit. The use of Tailholds within occupied habitat may be allowed with STATE approval.

Resource Protection Practices:

- 1) The following shall not be allowed within seasonally restricted buffers from April 1 through August 5 and from August 6 through September 15 between two hours before sunset and two hours after sunrise, unless otherwise approved in writing by STATE.
 - a) Felling operations.

State Representative

- b) Use of mechanized equipment.
- 2) Use of Tailholds in the MMMA shown on Exhibit A will have the following restrictions:
 - a) Consultation with STATE and approval of each Tailhold and cable line placement is required before Tailholding is allowed in these areas. A lead time of two weeks is required to schedule a field consultation between STATE, PURCHASER, the Operator, and the person responsible for Tailhold selection and cable rigging. Consultation will include identification of nesting platforms and cover trees.
 - b) The following trees within the MMMA will not be selected for Tailhold anchors:
 - i) Trees with potential nest platforms or immediately surrounding trees that provide cover to the potential nest platforms, as determined by STATE.
 - ii) If feasible, the largest trees in the areas where the number of large trees is limited.
 - iii) If feasible, minor conifer species not commonly found in the stand.
 - c) Cables located within the MMMA will be located so that raising, lowering or use of the line will not damage trees considered to have suitable nesting platforms or associated cover trees.
 - d) Lines that may damage, in the opinion of the ODF Area Biologist or authorized representative, potential or existing nesting platforms or associated cover trees must be removed and relocated.
 - e) Any plans to Guyline or Tailhold in the MMMA must be addressed in the Operations Plan and at the Pre-Operations meeting.

I, the undersigned, submit this written plan in corregarding operations conducted within 300 feet of	•	e Forest Practices Act
	Date:	
Purchaser/Operator Contract Representative		

Date: