

# **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	emplete)
(1) Contract Number:	WL-341-20	24-W01061-0	1			
(2) Sale Name:	Chicken B	one				
(3) Contract Expiration [	Date: 05/31	/2026				
(4) Purchaser Name:						
(6) State Representative	es:					
Name		Circle C	)ne	Phone No.	Cell No.	Alt Phone
		Logging Pro	jects All			
		Logging Pro	jects All			
		Logging Pro	jects All			
		Logging Pro	jects All			
(7) Purchaser Represen	tatives:	Circle C	)ne	Phone No.	Cell No.	Alt Phone
		Logging Pro	jects All			
		Logging Pro	jects All			
		Logging Pro	jects All			
		Logging Pro	jects All			1
		Logging Pro	jects All	1		1
		Logging Pro	jects All			1
		Logging Pro	jects All	1		1
8) Name of Subcontracto	ors and Start	Dates:		J	J L	_ I I
Project No. Subcont	ractor Name	<u>. Start I</u>	<u>Date</u>	Completion Date	Cell No.	Alt Phone
Sub	contractor N	ame.	<u>S</u>	Start Date	Cell No.	Alt Phone
ELLING						
/ARDING						
9) Comments:						

<sup>(10)</sup> 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 including without limitation PURCHASER'S independent obligation to avoid take of a T&E species and PURCHASER'S obligation to comply with terms and conditions of any incidental take Permit(s) that include required minimization and mitigation measures in any applicable Habitat Conservation Plan. 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.

Cable Landing, with numbers for sequence.

Tractor Landing with alphabetical sequence.

Approximate setting boundary.

Spur truck roads.

Tractor yarding roads.

X Temporary stream crossings.



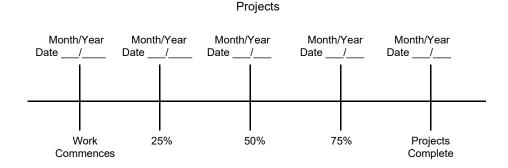
# Oregon Department of Forestry

2600 State St Salem OR 97310 PART III: EXHIBITS

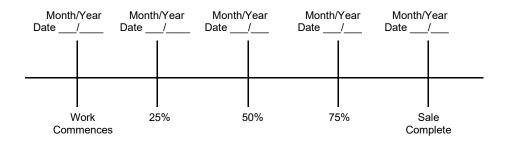
# EXHIBIT B OPERATIONS PLAN

#### **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 or that the plan is consistent with the terms and conditions of any applicable incidental take Permit(s) including any required minimization and mitigation measures proposed in the applicable Habitat Conservation Plan. As provided in the timber sale contract, PURCHASER's must comply with all applicable state, federal, and local laws, including without limitation any Permit(s) issued thereunder.

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 REGIS	TRATION   Dat	e		(9) SALE NAME: Chicken Bone
REVISION NUMBI	ER 000 □ Dat	e		COUNTY: Lane
CANCELLATION	□ Dat	e		(10) STATE CONTRACT NUMBER:
(2) TO:				WL-341-2024-W01061-01
	hird Party Scaling Orgar	nization)		(11) STATE BRAND REGISTRATION NUMBER:
(3) FROM: Western	Lane Phone (541	) 935-228	3	<u> </u>
(State Forest	,			(12) STATE BRAND INFORMATION:
	TERRITORIAL HWY			_
VENET	A,OR 97487-0157			_
(4) PURCHASER:				_ ) (
Mailing Address:				
Phone Number:				<del>-</del>
	SCALING SPECIFICA	ATIONS		_ (13) PAINT REQUIRED: YES ☑
(5) MINIMUM S	CALING SPECIFICA	ATIONS		COLOR: Orange
SPECIES	MINIMUM NE		ИΕ	(14) SPECIAL REQUESTS (Check applicable)
Conifers	10			PEELABLE CULL (all species)
Hardwoods	Hardwoods 10			NO DEDUCTIONS ALLOWED FOR
***************************************			-4-1-1-	MECHANICAL DAMAGE ☑
	ume test to whole logs o	over 40' vve	stside	ADD-BACK VOLUME - Deductions due to delay ☑
(6) WESTSIDE SCALI	⊏: taper rule. Logs over 40			OTHER:
Ose Negion o actual				
	YES	NO		(15) <b>REMARKS</b> :
(7) Weight Scale Sam	iple 🗆	<u> </u>	ř	"Mule Trains"
(8) APPROVED SCA	LING <u>မွ</u>	9	ᇷᆝᆴ	Loads are required to have load tickets for each set of bunks.
(as shown on the ODF Appro	ved &	Yard	Truck Weight	If truck and pup are to be weighed, weigh and process
Locations web-site )	σ σ			separately for gross and tare weights.  Operator's Name (Optional inclusion by District):
				(16) SIGNATURES:
				-
				Purchaser or Authorized Representative Date
				State Forester Representative Date
				- Butter of social representative
				State Forester Representative PRINT NAME
				State Futester Representative PRINT INAIVE



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

Pacific Rim Log Scaling Bureau, Inc.

Yamhill Log Scaling & Grading Bureau

P.O.Box 709, Forest Grove, OR 97116

Email: yamhilllog@frontier.com

Email: office@prlsb.com

8288 28th Court North East, Lacey, WA 98516

Phone: (360) 528-8710 Fax: (360) 528-8718

Phone: (503) 359-4474 Fax: (503) 359-4476

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

Mountain Western Log Scaling & Grading Bureau 2560 NW Medical Park Drive, OR 97471 Phone: (541) 673-5571 Fax: (541) 672-6381

Email: info@mwlsgb.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

(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: 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 <u>and</u> print name on the form. Signatures not required on revisions.



Salem.

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

Western Lane, SOA

(1)	ORIGINAL REGISTRATION Date	(9) SALE NAME: Chicken Bone	
	REVISION NUMBER 000 □ Date	COUNTY: Lane	
	CANCELLATION Date	(10) STATE CONTRACT NUMBER:	
(2)	TO:	WL-341-2024-W01061-01	
	(Approved Pulp Processing Facility)	(11) STATE BRAND REGISTRATION NUMBER:	
(3)	FROM: Western Lane Phone (541) 935-2283 (State Forestry District)	(12) STATE BRAND INFORMATION:	
	Address: 87950 TERRITORIAL HWY		
	VENETA,OR 97487-0157	(	
(4)	PURCHASER:		
(5)	Scaling Bureau (TPSO) Processing Weight receipts:		
	Mailing Address:	(13) REMARKS:	
	<u> </u>	"Mula Traina"	
	Phone Number:	<ul><li>"Mule Trains"</li><li>1. Loads are required to have load tickets for each set of bunk.</li><li>2. Truck and pup are to be weighed and processed separately gross and tare weights.</li></ul>	
(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 <u>8</u> inches marked with blue paint.		
(7)	PULP FACILITY PROCESSING INSTRUCTIONS:	Purchaser or Authorized Representative Date	
	Pulp loads shall be weighed in lieu of scaling.	Purchaser or Authorized Representative Date	
	• 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	
	<ul> <li>Weigher shall record the Log Load Receipt number on the weight receipt.</li> </ul>		
	<ul> <li>Weigher shall attach the Weight receipt to the Log Load Receipt and mail them weekly to the TPSO processing the Weight receipt.</li> </ul>		
(8)	TPSO PROCESSING INSTRUCTIONS		
	Submit data files daily (or each day of activity).		
	Mail or deliver scale tickets weekly to ODF Headquarters in		

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.



# 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

Mountain Western Log Scaling & Grading Bureau 2560 NW Medical Park Drive, Roseburg, OR 97471 Phone: (541) 673-5571 Fax: (541) 672-6381

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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

- (6) 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 <u>and</u> print name on the form. Signatures not required on revisions.

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#### **EXHIBIT D**

#### FOREST ROAD SPECIFICATIONS

Road	Subgrade Width	Surfaced Width	STATION TO STATION	Drainage
Chicken Creek Rd [A to B]	16 feet	12 feet	0+00 to 138+00	Maintain Existing
South Chicken Rd [C to D]	16 feet	12 feet	0+00 to 102+10	Maintain Existing
East Chicken Spur 2 [E to F]	16 feet	12 feet	0+00 to 27+65	Maintain Existing
East Chicken Spur 2a [G to H]	16 feet	12 feet	0+00 to 6+30	Maintain Existing
Chicken Ridge Spur [I to J]	16 feet	12 feet	0+00 to 2+85	Maintain Existing

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

<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.

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 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.

<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.

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

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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 or as specified by STATE in this Exhibit "Full Bench and End Haul Requirements", 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.

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

Ditch. Construct "V" shaped ditch 3 feet wide and to a depth of 1 foot below subgrade.

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

<u>TURNOUTS</u>. 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 at locations marked in the field.

<u>SLOPES</u>	<u>Cut Slopes</u>	Fill Slopes
Solid Rock	Vertical to ¼:1	
Fractured Rock	<sup>1</sup> / <sub>2</sub> :1	
Soil - side slopes 50% and over	<sup>3</sup> ⁄ <sub>4</sub> :1	1½:1
Soil - side slopes less than 50%	1:1	1½:1

Top of cut slope shall be rounded on full bench portions.

<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 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.

<u>SEASONAL WINTERIZATION</u>. All unsurfaced roads or unfinished subgrades shall be waterbarred in accordance with the specifications in Exhibit I, and blocked from vehicular traffic prior to October 31, annually and as directed by STATE.

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# **EXHIBIT D**

#### FOREST ROAD SPECIFICATIONS

#### GENERAL ROAD CONSTRUCTION INSTRUCTIONS:

- Timber Removal. Remove all trees within posted right-of-way boundary as specified in Section 2210, "Designated Timber."
- Excavated Materials. Excavated materials shall be utilized for road construction and hauled in where necessary. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A. Surplus excavated materials and waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted in accordance with this Exhibit.
- 3 <u>Subgrade Preparation and Application of Surfacing Rock.</u>
  - (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, outsloped, or insloped at 3 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, outsloped, or insloped at 3 to 6 percent.)

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

# SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS

# Chicken Creek Road [A to B]

# Subgrade Instructions:

54+15	Construct 50' roadside landing.
59+15	Construct 50' roadside landing.
71+75	Construct 40' roadside landing.
135+60	Construct 80' landing at intersection.

# **Rocking Instructions:**

54+15	Rock landing with 40cy of pit-run.
59+15	Rock landing with 40cy of pit-run.
71+75	Rock landing with 30cy of pit-run.
135+60	Rock landing with 50cy of pit-run.
138+00	Rock landing with 20cy of pit-run

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# **EXHIBIT D**

#### FOREST ROAD SPECIFICATIONS

# SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS

# South Chicken Road [C to D]

# **Subgrade Instructions:**

64+60 Construct 40' roadside landing.

73+95 Clear and grub 80' existing landing site.

# **Rocking Instructions:**

Rock landing with 30cy of pit-run.

73+95 Rock landing with 60cy of pit-run.

# East Chicken Spur 2 [E to F]

# **Subgrade Instructions:**

8+95 Clear and grub 40-foot landing site at switchback.

20+75 Construct truck turnaround.

25+20 Clear and grub additional 50-feet for a landing at switchback.

# **Rocking Instructions:**

8+95 Rock landing with 20cy of pit-run.

20+75 Rock truck turnaround with 20cy of pit-run.

25+20 Rock switchback landing with 60cy of pit-run and 60cy of 3"-0".

# East Chicken Spur 2a [G to H]

# **Rocking Instructions:**

6+30 Add 30cy of pit run to existing landing.

Page 5 of 8

#### **EXHIBIT D**

# FOREST ROAD SPECIFICATIONS

# GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- (1) <u>Timber Removal</u>. Remove all trees within posted Right-of-Way Boundary as specified in Section 2210, Designated Timber.
- (2) <u>Excavated Materials</u>. Excavated materials shall be utilized for road and fill construction and hauled in where necessary. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A. Surplus excavated materials and waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted in accordance with Exhibit F.
- (3) <u>Bank Slough Removal</u>. Excavate all bank slough. Bank slough material shall not be pulled across existing surfacing rock. Excavated material shall be hauled to the designated waste areas as marked in the field and/or designated on Exhibit A.
- (4) <u>Culvert Replacement, Culvert Installation, Fill Reconstruction, and Fill Removal</u>. Existing culvert geometry shall be modified to provide for optimum drainage and culvert performance. Modifications may include, skewing the culvert and/or installing the culvert at gradients equal to or exceeding the drainage (or ditch) gradient. Where fill reconstruction or culvert replacement is specified, fills shall be excavated to natural stream course levels. All woody debris encountered during fill excavation shall be removed. Fill reconstruction backfill shall consist of select materials and may be obtained from borrow pits, as directed by STATE. Unsuitable backfill material shall be hauled to the designated waste areas as marked in the field and/or designated on Exhibit A. Backfill materials shall be hauled in where necessary and thoroughly compacted in accordance with this Exhibit.
- (5) <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 end-hauled to an approved waste area, as directed by STATE. Damaged culvert inlets and/or outlets shall be repaired by opening them with a hydraulic jack, or cutting off the culvert end to allow for free passage of water at peak flow levels. Install a culvert marker at each newly installed culvert and at each existing culvert that is missing a marker that could be reached by a grader blade.
- (6) <u>Sod Removal</u>. Remove/separate sod from crushed rock surfacing as directed by STATE. Sod material shall be scattered in stable locations through openings in the timber outside of the cleared right-of-way. In areas where sod cannot be scattered in a stable location, material shall be end hauled to designated waste areas as shown on Exhibit A, or other stable locations as directed by STATE.)
- (7) <u>Equipment</u>. All excavation 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. Designated Waste materials shall be seeded and mulched in accordance with specifications in Exhibit K.
- (9) <u>Subgrade Preparation Before Application of Surfacing Rock</u>. Complete culvert installations, drainage ditches, fill reconstruction, ditchouts, and other specified work prior to the application of new surfacing rock.

Page 6 of 8

# **EXHIBIT D**

#### FOREST ROAD SPECIFICATIONS

#### SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

# Chicken Creek Road [A to B]

- Remove bank slough and clean out culvert inlets and outlets.
  - o Endhaul bank slough and stump at station 86+60 to waste area.
- Remove any berms on the outside edge of the road.
- Endhaul waste to an approved waste area, or as shown on Exhibit A.
- Establish proper drainage.

# South Chicken Road [C to D]

- Remove bank slough and clean out culvert inlets and outlets.
  - o Endhaul bank slough and stumps at station 81+35 to waste area.
- Remove any berms on the outside edge of the road.
- Endhaul waste to an approved waste area, or as shown on Exhibit A.
- Establish proper drainage.

# East Chicken Spur 2 [E to F]

- Remove bank slough and clean out culvert inlets and outlets.
- Remove any berms on the outside edge of the road.
- Endhaul waste to an approved waste area, or as shown on Exhibit A.
- Establish proper drainage.

# East Chicken Spur 2a [G to H]

- Remove bank slough and clean out culvert inlets and outlets.
- Remove any berms on the outside edge of the road.
- Establish proper drainage.

# Chicken Ridge Spur [I to J]

- Remove bank slough and clean out culvert inlets and outlets.
- Remove any berms on the outside edge of the road.
- Establish proper drainage.

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#### **EXHIBIT D**

#### FOREST ROAD SPECIFICATIONS

# **GENERAL ROAD MAINTENANCE INSTRUCTIONS:**

- 1 Roadside Brushing. Conduct roadside brushing as specified in Exhibit H.
- 2 <u>Grade and Shape Road</u>. Grade and shape existing surface rock to restore proper road shape and drainage.
- 3 <u>Application of Surfacing Rock</u>.
  - (a) Cut out all potholes and/or washboard sections from the existing surfacing.
  - (b) Apply required patching and leveling rock, as directed by STATE.
  - (c) Process (grade and mix) the existing surface and added cap rock. Provide for a crown, outslope, or inslope of 4 to 6 percent, and compact in accordance to the "Compaction and Processing Requirements" in this Exhibit.
  - (d) Upon completion of above required work, apply, process, and compact surfacing rock in accordance to this Exhibit.

# SPECIFIC ROAD MAINTENANCE INSTRUCTIONS

# Chicken Creek Road [A to B]

- Conduct roadside brushing between points A and B.
- Grade and shape.

# Rocking

- Apply 130cy of 1  $\frac{1}{2}$ "-0" cap rock between stations 14+85 to 26+80.
- Apply 120cy of 1 ½"-open cap rock between stations 124+25 to 135+60.
- Apply 220cy of spot rock as needed between Points A and B.

# South Chicken Road [C to D]

- Conduct roadside brushing between Point C and station 102+10.
- Grade and shape.

# East Chicken Spur 2 [E to F]

- Conduct roadside brushing between points E and F.
- Grade and shape.

# Rocking

- Apply 100cy of 3"-0" spot rock between station 20+75 to Point G.

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# **EXHIBIT D**

# FOREST ROAD SPECIFICATIONS

# SPECIFIC ROAD MAINTENANCE INSTRUCTIONS

# East Chicken Spur 2a [G to H]

- Conduct roadside brushing between points G and H.
- Grade and shape.

# Rocking

Apply 50cy of 3"-0" spot rock between Points G to H as directed by STATE.

# Chicken Ridge Spur [I to J]

- Conduct roadside brushing between points I and J.
- Grade and shape.

# Rocking

- Apply 30cy of 1 ½"-0" cap rock between Points I to J.

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# **EXHIBIT E**

# ROAD SURFACING

ROAD	ROCK TYPE	ROCK SIZE	COMPACTED DEPTH	YDS <sup>3</sup> /STA	TOTAL STATIONS	STA. T POINT T	O STA. O POINT	APPROX. TOATAL YDS <sup>3</sup>
Chicken Creek Rd [A to B]	CAP	1 1/2"-0"	2"	11	11.95	14+85	26+80	130
Chicken Creek Rd [A to B]	CAP	1 1/2" open	2"	11	11.35	124+25	135+60	120
Chicken Ridge Spur [I to J]	CAP	1 1/2"-0"	2"	10	2.85	0+00	2+85	30
LANDINGS		•						
ROAD		ROCK SIZE	COMPACTED DEPTH	YDS <sup>3</sup> /STA	STATIONS	STA	TION	APPROX. TOATAL YDS <sup>3</sup>
Chicken Creek Rd [A to B]	LNDG.	Pit Run	6"	36	5.00	54+15, 59	+15, 71+75	180
South Chicken Rd [C to D]	LNDG.	Pit Run	6"	45	2.00	64+60	, 73+95	90
East Chicken Spur 2 [E to F]	LNDG.	Pit Run	6"	40	2.00	8+95,	25+20	80
East Chicken Spur 2a [G to H]	LNDG.	Pit Run	6"	30	1.00	6+	-30	30
TRUCK TURN AROUND								
ROAD		ROCK SIZE	COMPACTED DEPTH	Yds <sup>3</sup> /Point	NO. OF TURN AROUNDS	STA	TION	APPROX. TOATAL YDS <sup>3</sup>
East Chicken Spur 2 [E to F]	TTA	Pit Run	6"	20	1	20+75		20
SPOT AND CURVE WIDENING ROCK								•
ROAD		ROCK SIZE	COMPACTED DEPTH	Yds <sup>3</sup> /Point	# POINTS	STA	TION	APPROX. TOATAL YDS <sup>3</sup>
Chicken Creek Rd [A to B]	SPOT	1 1/2"-0"		10	22	As N	eeded	220
East Chicken Spur 2 [E to F]	SPOT	3"-0"	6"	100	1	25	+20	100
East Chicken Spur 2a [G to H]	SPOT	3"-0"	6"	50	1	6+	-30	50
BACKFILL/ DRAIN ROCK								
ROAD		ROCK SIZE	COMPACTED DEPTH	Yds <sup>3</sup> /Point	# POINTS	STA	TION	APPROX. TOATAL YDS <sup>3</sup>
Chicken Creek Rd [A to B]	BF / DRAIN	Pit Run		30	1	57	+15	30
ENERGY DISIPATOR/ RIP RAP ROCK								
ROAD		ROCK SIZE	COMPACTED DEPTH	Yds <sup>3</sup> /Point	# POINTS		TION	APPROX. TOATAL YDS <sup>3</sup>
Chicken Creek Rd [A to B]	E.D.	Pit Run		10	1	57	+15	10

Rock Totals	Pit Run	3"-0"	1 1/2"-0"	1 1/2" open
LOOSE TRUCK Cu. Yds	440	150	380	120

Lndg = Landing

E.D = Energy Disipator Rock

LOOSE TRUCK Cu. Yds. are rounded to the nearest 10 Cu. Yds. in the table shown.

Depth Measurement shall be used to determine contract compliance.

The STATE shall reserve the right to approve the rock source.

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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.

<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 weekly. However depth measurement shall be used to determine contract compliance.

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# **EXHIBIT E**

# DURABLE CRUSHED ROCK SPECIFICATIONS

# **Grading Requirements**

For 1½"-0"	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	3/4" sieve	60-90%
	Passing	1/4" sieve	30-50%
	Passing	No. 10 sieve	15-30%
	Passing	No. 40 sieve	7-15%
For 3"-0"	Passing	4" sieve	100%
	Passing	3" sieve	90-100%
	Passing	$1\frac{1}{2}$ " sieve	60-90%
	Passing	3/4" sieve	40-60%
	Passing	1/4" sieve	20-40%
	Passing	No. 10 sieve	5-20%

# JAW-RUN, PIT-RUN, AND RIPRAP ROCK SPECIFICATIONS

For 6"-0" Pit-Run	Passing	10" sieve	100%
	Passing	6" sieve	60-85%
	Passing	3" sieve	30-50%
	Passing	1/4" sieve	0-20%

 $\underline{\text{For } 24\text{"-}6\text{" Riprap}}$  A minimum of 50 percent of the material shall measure a minimum of 24 inches, measured in one dimension. Material shall be clean, well graded, and free of 2"-0" fines.

Control of gradation shall be by visual inspection by STATE.

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# **EXHIBIT F**

#### 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.

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

ROAD SEGMENT	SUBGRADE COMPACTION OPTIONS
Chicken Creek Rd. [A to B], South Chicken Rd. [C to D], East Chicken Spur 2 [E to F], East Chicken Spur 2a [G to H], Chicken Ridge Spur [I to J]	(1) Vibratory Roller Or (9) as approved by STATE

<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
Chicken Creek Road [A to B]: Station 57+15	(1) Vibratory Roller And (4) Vibratory Hand-Operatored or Bankhoe-Mounted Tamper for pipe installations in fills, Or (9) as approved by STATE

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#### **EXHIBIT F**

# COMPACTION AND PROCESSING REQUIREMENTS

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

ROAD SEGMENT	CRUSHED COMPACTION OPTIONS	
All road segments requiring crushed rock.	(1) & (9)	

<u>Pit-Run Rock</u>. The rock shall be uniformly mixed and spread in layers on the approved roadbed. Each layer of pitrun 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 shall be accomplished by using one or more of the approved equipment options listed below:

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

ROAD SEGMENT	PIT-RUN COMPACTION OPTIONS	
Segments requiring pit-run rock	(6) D7 CAT or equivalent	

Page 3 of 3

# **EXHIBIT F**

# COMPACTION EQUIPMENT OPTIONS

- (1) <u>Vibratory Rollers</u>. 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) <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.
- (8) <u>Dozer</u>. A dozer/track-type tractor weighing a minimum of 45,000 pounds as directed by STATE shall be operated over the pit-run so that the entire surface comes in contact with the tracks.
- (10) As Approved by STATE.

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#### **EXHIBIT G**

#### **CULVERT SPECIFICATIONS**

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

Culverts 30 inches in diameter and smaller shall be constructed of corrugated polyethylene.

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

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

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

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

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 stream crossing culverts.

Backfill shall consist of crushed rock, rock crusher reject, or job-excavated soil free of stumps, limbs, rocks, or other objects which would damage the culvert on new construction 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". Minimum vertical cover for other designs shall be as specified by STATE.

Lengths of individual culvert sections shall be not less than 10 feet, unless otherwise provided for in special instructions. The 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 intake end of cross drain and disconnect culverts shall be provided with a sediment catching basin 3 feet in diameter at the bottom. The outlet end of any culvert which would allow water to erode embankment soil shall be provided with an energy dissipator, half round, or other approved slope protection device. Construct lead-off ditches away from culvert outlets where the slope gradients restrict the free flow of water.

Culverts 24 inches in diameter or larger shall have 1:1 beveled inlets.

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#### **EXHIBIT G**

#### **CULVERT SPECIFICATIONS**

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

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

The intake ends of culverts in fills less than 3 feet to the top of the culvert shall be marked by driving steel posts within 6 inches of the downgrade side. Posts shall be painted with a rust-resistant paint and be a minimum of 5 feet long, with the spade driven 2 feet into the ground). Install a culvert marker at each existing culvert that is missing a marker that could be reached by a grader blade.

Energy Dissipators shall be installed within 72 hours of culvert installation, unless otherwise approved in writing by STATE.

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

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

	Steel Culvert	<u>Thickness</u>		<u>rel Culvert</u> <u>Thickness</u>			Band Widths (")	
<u>Dia.</u>	<u>Gauge</u>	<u>Uncoated</u>	<u>Coated</u>	Band Gauges	<u>Annular</u>	<u>Helical</u>		
18-24	16	(0.0598")	(0.064")	16	12	12		

# **CULVERT LIST**

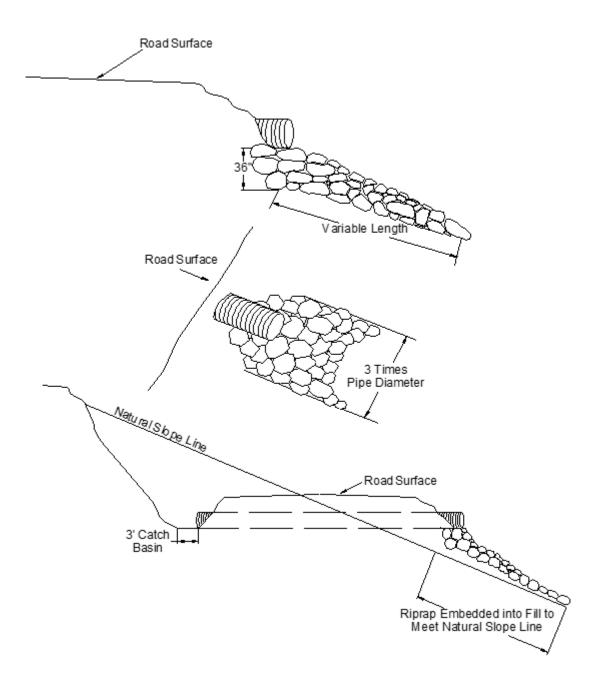
CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	MATERIA L TYPE	GAUGE	ROAD SEGMENT POINT TO POINT	STATION
1	24"	50	CPP	16	Chicken Creek Rd. [A to B]	57+15

ACSP = Aluminized, CPP = Polyethylene, GCSP = Galvanized

Approximate culvert lengths are provided. Actual installed culvert length may be altered i.e. shortened or lengthened, to fit the road prism or stream crossing in accordance to the specifications above.

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# $\label{eq:exhibit} \mbox{EXHIBIT G}$ TYPICAL EMBEDDED ENERGY DISSIPATOR



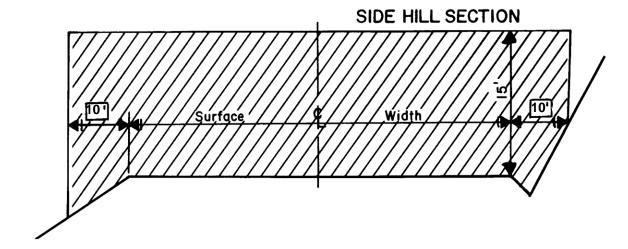


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# EXHIBIT H

# ROAD BRUSHING SPECIFICATIONS





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#### **EXHIBIT H**

#### 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 side(s) 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. The minimum width of brushing on the cut slope side of the road shall be dictated by the height of the cut slope as indicated in the drawing above. In situations where site distance is an issue brushing heights on the cut slope may vary from the drawing, as directed by STATE.

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. No mechanical brushing of planted/established conifers is allowed. Limbing of conifer shall be done by hand and the limbs must be cut at the stem colla (i.e. approximately 1/4" to 1/2" from bole of tree.

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.

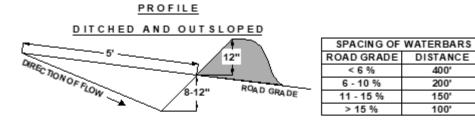
Merchantable blown down trees encountered shall be bucked in lengths as directed by STATE, and placed in locations acceptable to STATE, or pushed out of the road prism.

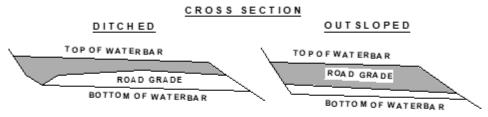
When spur roads to be brushed end with a Landing, the Landing is to be brushed as directed by STATE.

<u>CULVERT AND ROAD MARKER DAMAGES</u>. Culvert and road markers damaged, or any portion of a marker damaged from PURCHASER activities shall be replaced.

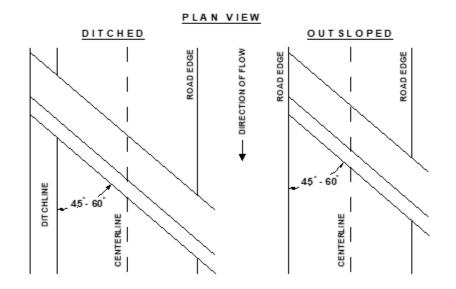
**EXHIBIT I** 

# WATERBAR SPECIFICATIONS





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



#### EXHIBIT J

#### 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, fertilizer, and straw mulch to all waste areas, and bare soils resulting from Project No. 3.

<u>Seeding Seasons</u>. Seeding shall be performed only from <u>March 1</u> through <u>June 15</u> and <u>August 15</u> through <u>October 31</u>. 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

<u>Dry Method</u>. 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	MIXTUR E	PURE LIVE SEED	GERMINATION
Annual Rye	33%	95%	>90%
Orchard Grass	33%	95%	>90%
Perennial Rye	34%	95%	>90%

<u>Fertilizer</u>: 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  $1\frac{1}{2}$  to  $2\frac{1}{2}$  inches. This rate requires between 2 and 3 tons of dry mulch per acre.

# **Application Locations**:

Road Segment	Location	
Chicken Creek Rd. [A to B]	57+15	