STATE OF MONTANA - TIMBER SALE CONTRACT FOR STUMPAGE SOLD BY THE TON

VERSION 18 - JANUARY 2018

DEPARTMENT OF NATURAL RESOURCES & CONSERVATION 2705 Spurgin Road Missoula, MT 59804	NAME, ADDRESS AND PHONE NUMBER OF PURCHASER:	
	Tax I.D. Number	
LAND OFFICE	SALE NAME	SALE NUMBER
Northwestern	Dog Rock	
UNIT OFFICE	AWARD DATE	TERMINATION DATE
Stillwater		December 1, 2029

THIS CONTRACT IS MADE AND ENTERED INTO by and between the State of Montana, acting through its Department of Natural Resources & Conservation, Trust Land Management Division (hereinafter called the State) and (, a sole proprietorship; or , a partnership; or , lnc. a corporation) (hereinafter called Purchaser) having an office and principal place of business at the address shown above. Purchaser's bid on the timber described in this contract has been accepted by the State after having been estimated, appraised and advertised for sale as required by law. Therefore, in consideration of the mutual promises contained in this agreement, the State agrees to sell and the Purchaser agrees to purchase the designated timber located on the areas described in this Contract at the specified rates of payment and in strict conformity with the requirements, standards, specifications and conditions set forth in this Contract.

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	-ATTACHMENTS- The following attachments are hereby made a part of this contract:					
ATTA	CHMENT A: Timber Sale Maps				3 Pages	
ATTA	ATTACHMENT B: Road Construction, Improvements and Maintenance Specifications 36 Pages					
	ATTACHMENT C: Forest Fire Regulations 2 Pages					
	ATTACHMENT D: Working in Bear Habitat Brochure 1 Page					
	ATTACHMENT E: Montana Streamside Protection Act (124 Permit and Application) 18 Pages					
ATTA	CHMENT F: BPA – Guidelines For	Logging Acti	vities		2 Pages	

TABLE 1 - LEGAL DESCRIPTION OF The timber designated for sale under this Con				rea
Subdivisions	5	Section	Twn	Rge
S 1/2		2	33N	24W
E 1/2		11	33N	24W
ALL		12	33N	24W
NW 1/4		13	33N	24W
SW 1/4		17	33N	23W
ALL		18	33N	23W
ALL		19	33N	23W
SW 1/4		21	33N	23W
NW 1/4		28	33N	23W
W ½		29	33N	23W
N ½		30	33N	23W
NE 1/4		32	33N	23W
Total approximate acres in gross sale area:	3,360	·		
Number of harvest units (Including Right-of-Way):	21			
Total acres in harvest units (Including Right-of-Way):	481			

TABLE 1 (continued) - ESTIMATED SALE VOLUME The state does not guarantee the product weight, by species or in total, to equal the estimated advertised weight in quantity or product designation.		
Product Estimated Quantity (Tons)		
Sawlogs	22,990	
Other Material	Not Estimated	
Total Estimated Volume 22,990		

TABLE 1 (continued) - PAYMENT RATES					
Payment	Amount		Requirements		
Performance Bond Amount:	20% of bid v	alue	See Section II.A.1-3.		
	Product	Amount			
Ctumpaga Data par tan	Sawlogs	Bid Rate	See Section II.B.1-3.		
Stumpage Rate per ton:	Other Material	\$1.00	See Section II.B. 1-3.		
Forest Improvement (FI) Fee Per ton:	Sawlogs	\$4.05	See Section II.B.4		
Quarterly F.I. payment		\$15,518	(FI/ton x total tons / 6) See Section II.B.4		

I. GENERAL TERMS

- A. DEFINITION OF CONTRACT LANGUAGE: The following definitions apply to terms used in this Contract:
 - 1. Administrator The Forest Management Bureau Chief, Trust Land Management Division, Department of Natural Resources & Conservation
 - 2. Board The Montana Board of Land Commissioners.
 - 3. Department The Department of Natural Resources and Conservation.
 - 4. Draw A swale or drainageway that may not have perceptible or definite beds or banks.
 - 5. Environmental Law Includes, but is not limited to, the following laws and any regulations promulgated under these laws: the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") (42 U.S.C. § 9601 *et seq.*), as amended; the Resource Conservation and Recovery Act ("RCRA") (42 U.S.C. §§ 6901 6987), as amended; the Clean Air Act (42 U.S.C. § 7401, *et seq.*), as amended; the Safe Drinking Water Act (42 U.S.C. § 300f *et seq.*), as amended; the Clean Water Act (33 U.S.C. § 1401 *et seq.*), as amended; the Clean Air Act of Montana (Mont. Code Ann. § 75-2-101 *et seq.*), as amended; the Montana Water Quality Act (Mont. Code Ann. § 75-5-101 *et seq.*), as amended; the Montana Solid Waste Management Act (Mont. Code Ann. § 75-10-201 *et seq.*), as amended; the Montana Hazardous Waste Act (Mont. Code Ann. § 75-10-401 *et seq.*), as amended; the Montana Comprehensive Environmental Cleanup and Responsibility Act (Mont. Code Ann. § 75-10-701 *et seq.*) as amended; and the Montana Underground Storage Tank Act (Mont. Code Ann. § 75-11-501 *et seq.*) as amended.
 - 6. Forest Officer The State field representative assigned the job of contract administration for this timber sale Contract. Except as otherwise expressly stated in the Contract, the Forest Officer is not authorized to modify the Contract on behalf of the State.
 - 7. Hazardous or deleterious substance Means a substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose an imminent and substantial threat to public health, safety, or welfare or the environment, and is:
 - a. A substance that is defined as a hazardous substance by section 101(14) of CERCLA, 42 U.S.C. § 9601(14), as amended.
 - b. A substance identified by the administrator of the United States Environmental Protection Agency as a hazardous substance pursuant to section 102 of CERCLA, 42 U.S.C. § 9602, as amended.
 - c. A substance that is defined as a hazardous waste pursuant to section 1004(5) of RCRA, 42 U.S.C. § 6903(5), as amended, including a substance listed or identified in 40 CFR 261.
 - d. Any petroleum product.
 - 8. Operating period The annual time period during which field activities (logging, hauling, construction, etc.) may be conducted.
 - 9. Paid or payment Except as otherwise expressly stated in the Contract, full remuneration by either cash, money order or certified check.
 - 10. Purchaser The signatory party to this Contract other than the Administrator. Purchaser is also defined to include employees and agents of the Purchaser authorized to conduct activities as required for execution of the timber sale Contract. As an independent contractor, neither the

Purchaser, its employees or agents are considered employees of the State of Montana pursuant to work performed under this Contract.

- 11. Sawlog A green or dead log as further defined under Section VII.C.
- 12. State The State of Montana and its agents and employees.
- 13. Stream A stream is a natural watercourse of perceptible extent that has a sandy or rocky bottom or definite banks and confines and conducts continuously or intermittently flowing water.
- 14. Stumpage The rate paid in dollars per ton as specified in Table 1 for Sawlogs and/or Other Material.
- 15. Supervisor A person designated by the Purchaser in charge of operations on site at the sale area at all times when construction or harvesting operations are in progress. The Supervisor has authorization to receive notices from the Forest Officer and take appropriate action with regard to breach and/or violations of the terms of the contract.

B. REMOVAL OF TIMBER AND TITLE TRANSFER:

- Provided the Purchaser has paid for timber as required in Section II.B.1, ADVANCE STUMPAGE PAYMENT, the Purchaser has the right to cut and remove timber from the sale area provided all Contract requirements related to the commencement of operations have been met.
- 2. Title to all timber included in this contract shall be retained by the State until:
 - a. The timber has been paid for.
 - b. The timber has been measured, as described in Section III.A. MEASUREMENT AND LOG ACCOUNTABILITY.
 - c. The timber has been properly marked and ticketed as described in Section III.C & E. MEASUREMENT AND LOG ACCOUNTABILITY, and removed from the gross sale area,
- 3. Title to timber remaining on the gross sale area at termination of the contract shall remain with the State of Montana.
- 4. As documented in this contract, or otherwise agreed to, all roads and other improvements become the property of the State as they are constructed.
- C. TERM OF CONTRACT: This Contract is effective upon approval and execution by the Administrator and shall terminate on the Termination Date shown on page 1 unless terminated sooner for successful completion or for gross or persistent breach and/or failure to promptly and properly remedy contract violations of the Contract terms pursuant to Section IV. B, TERMINATION.
- D. PRE-OPERATIONS MEETING: No activity may occur on the sale area until a pre-operations meeting is conducted between the Purchaser and the State. The Purchaser shall notify the Forest Officer at least seven (7) days prior to the start of operations to schedule the pre-operations meeting. The Forest Officer will specify to the Purchaser what information the Purchaser must provide to the State at the pre-operations meeting.
- **E. ANNUAL OPERATING PLAN:** Purchaser may be required to submit a written annual operating plan, as specified by, and at the request of the Forest Officer.

F. CONTRACT TERM EXTENSION:

1. In the event that Purchaser's operations are delayed and Purchaser is not able to complete the requirements of this Contract prior to the termination date, the State may grant an extension of

the term of this Contract. An extension will be considered by the State under only the following circumstances:

- a. The State determines an extension is in its best interests;
- b. Purchaser applies for the extension in writing at least 30 days prior to the termination date.
- c. The State notifies the Purchaser that an extension is required.
- d. Purchaser has provided the State with written notice from the surety that the performance bond on this contract has been extended for a period commensurate with the requested contract extension.
- e. Purchaser has made a good faith effort to complete the sale.
- f. The extension request is not based on poor log and/or market conditions.
- 2. If the contract term extension is granted, Purchaser shall conduct continuous operations through the operating periods and/or resume operations at the start of the next operating period until the requirements of this Contract are completed. No extension shall be granted for a period longer than eighteen (18) months after the termination date as provided herein unless a longer extension is determined to be in the State's best interest.
- 3. If the extension is requested and granted because of delays resulting from matters within Purchaser's control, the following will apply:
 - a. Purchaser shall pay an extension fee of \$ 500.00.
 - b. Stumpage rates for any volume cut, skidded or hauled during the extension period will be escalated a minimum of 10% to reflect the interest lost to the trust beneficiaries.
 - c. No de-escalation will occur from the time the extension is granted by the Administrator, as documented in a signed modification, through the remainder of the Contract.
- 4. An extension may be granted to the Purchaser without penalty if the State prohibits logging activity for more than 2 weeks during the operating period described in this Contract.
- 5. All conditions of this contract shall remain in force during any period of extension, unless those conditions are amended by the terms of the extension.
- 6. In the event the Contract terminates pursuant to Section I.C, TERM OF CONTRACT due to expiration of the time within which its performance shall have been completed, and the Department has not granted an extension, the Purchaser shall immediately cease all operations within the Gross Sale Area as shown in Table 1. Operations beyond the contract termination date for which the Department has not granted an extension will be treated as trespass.
- **G. LIABILITY FOR LOSS:** The Purchaser is responsible for loss, degradation, or damage to timber while the timber is in his, her or its custody, including but not limited to, timber which has been felled, skidded or decked and/or timber which has been lost, damaged or stolen after removal from the sale area but before scaling or weight is recorded.
- H. SUPERVISION: When construction or harvesting operations are in progress, the Purchaser shall have exclusive control over the way the Contract is executed if, as determined by the Department, the Purchaser has and is complying with all terms and conditions provided herein. Purchaser is required to have a supervisor(s) in charge of operations on the sale area at all times. Such supervisor(s) shall have authorization to receive notices from the Forest Officer and take appropriate action with regard to breach and/or violations of the terms and conditions of the Contract.

I. COMPLAINTS:

- 1. Complaints by the Purchaser concerning any action or decision of a Forest Officer, including suspension orders, must be made in writing to the Administrator postmarked within 30 days of the disputed action or decision. In the interim, Purchaser must comply with the directions of the Forest Officer.
- 2. Upon receipt of a complaint, the Administrator, or a designated representative, shall promptly hold an informal conference with the Purchaser and the Forest Officer to review the disputed action. The Purchaser shall be given adequate notice of the conference and shall be given the opportunity to present evidence and an argument to rebut the reasons given by the Forest Officer for the disputed action. After review, the Administrator shall notify the Purchaser in writing of his decision. The decision of the Administrator is final on behalf of the State, except regarding termination of the contract.
- J. ASSIGNMENT: This contract shall not be assigned in whole or in part unless approved in writing by the Administrator.

K. MODIFICATIONS:

- 1. This contract, together with the attachments listed herein, contains the entire agreement of the parties and no statements, promises or inducements made by either party, or agents of either party, that are not contained in such written Contract shall be valid or binding. This Contract, except as described in Section I.K.2 below, cannot be enlarged, modified or altered except upon written agreement signed by all parties to this contract. Only the Administrator, his successor, his designated representative, or the Board of Land Commissioners, is authorized to enter into such modification on behalf of the State.
- 2. To protect cultural or natural resources the State may modify provisions of the Contract without prior agreement by the Purchaser. If such modifications occur the State will provide equitable compensation to the Purchaser for those modifications.
- L. EQUAL EMPLOYMENT OPPORTUNITY: Pursuant to Section 49-3-207, MCA, any hiring by the Purchaser under this agreement must be based on merit and qualifications and there must be no discrimination based on race, color, religion, creed, political ideas, sex, age, marital status, physical or mental disability, or national origin by any person performing this Contract.

M. LIABILITY INSURANCE:

- 1. Prior to the execution of this Contract, the Purchaser or their agents shall obtain, carry and keep in good standing for the remainder of the contract period, with any extensions:
 - a. Comprehensive general liability insurance coverage to the limit of \$1,000,000.00 per occurrence and \$2,000,000.00 per aggregate. Each such policy shall include endorsements, which shall name the State as an additional insured and shall provide that the State shall be given 30 days' written notice, at the address stated above, prior to cancellation or any material change in such policy.
 - b. Automobile Liability Insurance: The Purchaser shall purchase and maintain coverage with split limits of \$500,000 per person (personal injury), \$1,000,000 per accident occurrence (personal injury), and \$100,000 per accident occurrence (property damage), OR combined single limits of \$1,000,000 per occurrence to cover such claims as may be caused by any act, omission, or negligence of the contractor or its officers, agents, representatives, assigns, or subcontractors.
- 2. In lieu of such coverage, the Purchaser may provide proof of self-insurance in at least an amount equal to that provided above.

- 3. Prior to the commencement of any work to be performed under this contract, Purchaser shall deliver to the State a certificate of insurance from the insurer(s) of the Purchaser or their agents certifying that coverage in at least the amounts stated above is in force. Such certificate shall be submitted to the State for approval of the insurer(s), the amount, and the form. The State reserves the right to require a certified copy of any such policy or to examine the policy itself.
- 4. A self-insured Purchaser shall provide an equivalent certificate of insurance subject to the approval of the State.
- 5. It is further understood and agreed that this Contract shall terminate immediately in the event that the mandatory liability insurance coverage required under this part is for any reason not obtained or is discontinued.

N. WORKERS' COMPENSATION INSURANCE:

- 1. Prior to the commencement of any work under this Contract, Purchaser shall provide written verification to the Administrator that all individuals who are to be engaged in work under this Contract, including but not limited to employees, agents or independent contractors of the Purchaser or of its subcontractors, are either insured for workers' compensation coverage or are exempted from such coverage as certified independent contractors pursuant to § 39-71-401 MCA.
- 2. It is expressly understood and agreed that no such individual may engage in work in furtherance of this Contract at any time during its period unless either insured for workers' compensation coverage or exempted from such coverage as indicated above.
- 3. It is understood and agreed that this Contract shall terminate immediately if workers' compensation coverage or exemptions required under this part is discontinued for any individuals engaged in work under this Contract.
- O. SAFETY: The Purchaser, employees, subcontractors and their employees shall conduct their activities in a safe and workmanlike manner, shall cooperate in making it possible for the Forest Officer to safely, efficiently, and economically perform his, her or its administrative duties, and shall comply with federal and State safety standards for logging operations as established by the United States Department of Labor, Occupational Safety and Health Administration (OSHA; 29 Code of Federal Regulations 1910 and any other such applicable regulations promulgated by OSHA) and as required by Title 50, Chapter 71 of the Montana Code Annotated, and any regulations promulgated to implement the statutes found in that Title and Chapter of the Montana Code Annotated. The Purchaser, and not the State, is responsible for instituting and maintaining all precautions, procedures and programs for the safety of all persons on the project site, and the State hereby disclaims any and all responsibility for injuries or accidents occurring at the site.
- **P. SAWMILLS PROHIBITED:** No sawmills shall be allowed to operate on the gross sale area.
- Q. LOG CHIPPERS OR GRINDERS: No log chippers or grinders shall be allowed to operate on the gross sale area unless written approval to do so is granted by the Forest Officer. In order for approval to be granted, the Purchaser shall identify a method acceptable to the State for the measurement of all wood to be ground or chipped. If the Purchaser intends to operate a log chipper outside of the gross sale area, provisions must be made for obtaining certified weights of either the material removed from the sale or of the resultant products.

R. SALE DELAYED OR PRECLUDED BY JUDICIAL ACTION OR GOVERNMENT REGULATORY ACTION:

1. In the event judicial action, change in applicable law, or implementation of government regulatory action renders proceeding with this contract unlawful, the State will suspend or terminate the Contract in whole or in part. Upon notice of such suspension or termination, Purchaser shall

immediately cease all or any portion of such operations under the Contract as directed by the State. If a court of competent jurisdiction has entered a final judgment rendering further proceeding with this Contract unlawful, or government regulatory action takes effect, the State may terminate the Contract or, at the State's option, suspend the Contract in whole or in part, pending appeal of the court's final judgment. If the Contract is suspended, the State shall not be liable to the Purchaser for damages or losses resulting from the delay. In the event the Contract is terminated due to judicial action, a change in law, or government regulations, the State shall be liable to Purchaser only as follows:

- a. The State shall refund any portion of advance stumpage payments or down payments not needed to compensate the State for timber removed.
- b. The State shall release any portion of the performance bond not needed to compensate the State for timber removed or other losses suffered by the State due to breach of contract by the Purchaser.
- c. The State shall reimburse the Purchaser for the portion of reasonable costs of constructing or improving roads or of installing other facilities on State lands pursuant to this Contract that the Purchaser has not been able to use for removing timber. The Purchaser shall provide documentation requested by the State of the Purchaser's actual costs of constructing or improving such roads or installing other improvements.
- **S. VENUE AND CHOICE OF LAW:** In the event of litigation concerning this agreement, venue shall be in the First Judicial District, Lewis and Clark County, Montana, and this agreement shall be governed by the laws of the State of Montana both as to interpretation and performance.
- **T. AUTHORIZATION TO ENTER:** The Purchaser is authorized to enter the sale area only for purposes related to the performance of this Contract.
- U. USE BY OTHERS: The State reserves the right to issue timber permits or other permits on the sale area for forest products not included in this Contract or for other uses not in conflict with this Contract. The State also reserves the right to permit other persons to cross the sale area to gain access to other lands for fire suppression or for other purposes. Where the Purchaser improves or reconstructs an existing road, the use thereafter by the Purchaser shall accommodate safe use by others.
- V. OTHER OPERATIONS BY THE STATE: The State reserves the right to at any time conduct within the gross sale area forest management operations including, but not limited to, slash piling, burning, handwork, broadcast burning, mop-up, patrolling, thinning and tree planting during the term of this Contract.

W. INDEMNITY AND LIABILITY:

- 1. The Purchaser agrees to indemnify the State, its officials, agents, and employees, while acting within the scope of their duties and hold the State harmless from and against all claims, demands, and causes of action of any kind or character, including the cost of defense, arising in favor of the Purchaser's employees or third parties on account of bodily or personal injuries, death or damage to property arising out of services performed, goods or rights to intellectual property provided or omissions of services or in any way resulting from the acts or omission of the Purchaser and/or its agents, employees, subcontractors or its representatives while engaged in work under this Contract, all to the extent of the Purchaser's negligence.
- 2. The Purchaser shall be responsible for, indemnify, defend and hold the State harmless from and against any loss, cost (including, without limitation, reasonable legal, accounting, consulting, engineering and similar expenses), damage, claim, fine or liability, including the necessity for tests, inspections or other work, and any damage, claim, fine or liability arising as a result of such tests, inspections or other work, the State must perform:

- a. Based upon an actual or alleged violation by the Purchaser of, or failure by the Purchaser to comply with, any Environmental Law during the term of this Contract:
- b. Arising from the discharge, release, threatened release, handling, storage, treatment, deposit or disposal of any Hazardous or Deleterious Substances caused or exacerbated by the activities of the Purchaser on or in the gross sale area during the term of this Contract; or
- c. Otherwise arising out of or in connection with any environmental condition or action caused or created by the Purchaser.
- X. OTHER LAWS AND REGULATIONS: This Contract is subject to all applicable federal, state, county, and municipal laws, ordinances, and regulations in effect at the date of this Contract or which may, from time to time, be adopted, and which do not impair the obligations of this Contract and which do not deprive the Purchaser of an existing property right recognized by law. A violation by the Purchaser of any federal, state, county, and/or municipal laws, ordinances and/or regulations while conducting operations under the terms of this Contract, shall, in the discretion of the State, constitute sufficient reason for the suspension or termination of this Contract. If any part of the lands or premises under this Contract are used or allowed or permitted to be used for any purpose contrary to the laws of this state or the United States, such unlawful use shall, in the discretion of the State, constitute sufficient reason for the suspension or termination of this Contract.
- Y. FORCE MAJEURE: Neither party shall be responsible for failure to fulfill its obligations due to causes beyond its reasonable control, including without limitation, acts or omissions of government or military authority, acts of God, materials shortages, transportation delays, fires, floods, labor disturbances, riots, wars, terrorist acts, or any other causes, directly or indirectly beyond the reasonable control of the nonperforming party, so long as such party is using its best efforts to remedy such failure or delays. Force majeure will not relieve the Purchaser from liability for damage or otherwise excuse performance of this Contract should the Purchaser cause a fire for which they would be liable under § 50-63-103, MCA.

II. CHARGES AND PAYMENTS

A. PERFORMANCE BOND:

- 1. As a guarantee of the faithful performance of this Contract, Purchaser shall furnish a bond, with sufficient sureties, to the State in an amount equal to the potential loss to the State in the event of Purchaser's breach or default under the terms of this Contract as determined by the Administrator (§ 77-5-202 (a), MCA). The performance bond may be in cash, bond, irrevocable letter of credit, or certificate of deposit with sufficient sureties. A letter of credit must be automatically renewable without amendment for the term of the contract. The performance bond the Purchaser must submit for this contract is shown in Table 1.
- 2. Upon full performance of the terms of the Contract, the State shall release the performance bond.
- 3. Upon substantial performance of the terms of the Contract, the Administrator may release a portion of the performance bond not needed to compensate the State for any remaining timber to be removed or any other losses that may be suffered by the State due to breach of Contract by the Purchaser. The bond shall not be reduced to less than five percent (5%) of the estimated value of the timber sold.
- **B. PAYMENTS:** The Purchaser agrees to make payments to the Treasurer of the State of Montana as follows:
 - 1. ADVANCE STUMPAGE PAYMENTS: The Purchaser is required to pay for all timber in advance of cutting at the rates shown in Table 1. Advance stumpage payments will be held by the State to cover the Purchaser's estimated timber cutting for at least six (6) weeks of operations. Advance

- stumpage payments may be reduced just before completion of the sale or when cutting requirements are to be suspended for at least 3 months. Advance stumpage payments may be in cash, bond, irrevocable letter of credit, or certificate of deposit with sufficient sureties.
- 2. INITIAL ADVANCE STUMPAGE PAYMENT: The initial advance payment will be made by the Purchaser prior to the start of timber cutting operations.
- 3. PAYMENT SCHEDULE: Payments in full for individual invoices will be made by the Purchaser as called for by the Administrator; in no event will payments be made by the Purchaser more than 14 days from the date of billing.
- 4. FOREST IMPROVEMENT PAYMENTS: The Purchaser is required to pay a fee for Forest Improvement on all sawlogs cut, both live and dead. The Forest Improvement fee for this sale is shown in Table 1. The Purchaser agrees to make these payments in 6 installments. The first 5 payments will be calculated using this formula: [Forest Improvement fee per ton times total estimated tons divided by 6]. The final payment will be made in conjunction with the final sale billing. The amount of the final billing will be adjusted to reflect payment due based on the actual sale weight. The Purchaser will be billed quarterly for the 5 payments on or about the first day of January, April, July and October. Payments will start on the first quarterly billing date after contract signature or as otherwise determined by the Administrator. If the sale is completed before all the Forest Improvement payments have been made, the Purchaser will be billed for the balance owed.

C. ROAD USE AND MAINTENANCE PAYMENTS:

- 1. PAYMENTS: The Purchaser is required to make payments for road use and maintenance at the rates listed in Table 1 or as amended by revisions to road use permits. Payments will be made as called for by the Administrator or as otherwise directed in this contract.
- 2. ALTERNATE HAUL ROUTES: The Purchaser is authorized by the State to use the haul route described in this contract and attachments. If the Purchaser chooses to use an alternate haul route, that haul route must be approved by the State. Road use charges, maintenance requirements and payments may be adjusted to reflect the haul route used by the Purchaser. The Purchaser is responsible for obtaining any right-of-way required for an alternate haul route and for meeting all requirements of any agreements associated with that right-of-way. Proof of any such agreement must be provided to the State prior to use. Stumpage fees and Forest Improvement fees are not subject to a downward adjustment under this clause.

III. MEASUREMENT AND LOG ACCOUNTABILITY

A. PRODUCT MEASUREMENT:

- 1. The State will determine the value of products removed from the sale based on the total gross weight of material hauled. Weight tickets will be used to obtain the total value.
- 2. When mixed products with different payment rates per ton are hauled on one load, the entire load will be charged at the rate of the product with the highest value contained in the load.
- 3. Upon request by the State, the most recent load delivered to a receiving mill must be made available for inspection by the State or their representatives. The weight ticket identifying the load must remain affixed to the load.
- **B. WEIGHT TICKETS:** The Purchaser is required to furnish weight tickets to the State as agreed to by the Forest Officer and the Purchaser.

- All weight tickets shall be mailed or delivered with corresponding load tickets, as outlined below, directly to the DNRC Unit or Land Office administering this contract. In this case, send truck tickets to Stillwater Unit DNRC, 7425 Hwy 93 North, PO Box 164, Olney MT 59927. This requirement may be waived or changed by the Forest Officer.
- 2. Weight tickets shall show gross, tare and net weights and the corresponding load ticket number of each product load. Weight tickets must be from State of Montana certified scales, and all weight tickets must have mechanically stamped weights for the gross and tare weights unless otherwise permitted in writing by the Forest Officer. Weight tickets will be mailed or delivered to the State on a bi-weekly basis or as otherwise agreed to by the Forest Officer. A weight ticket will be considered as missing if not furnished within 4 weeks of the load delivery date. Failure to comply with this provision is a contract violation.
- 3. Truck ticket information may be provided to DNRC electronically if all required ticket information is provided. Contact Forest Product Sales Supervisor (406) 542-4276 at the Forest Management Bureau to implement electronic transfer. The information must be provided to the State on a biweekly basis prior to the tenth (10th) and twenty-fourth (24th) of each month. The paper copy of the weight tickets must also continue to be provided to the State. The requirement to supply the paper copy of the weight tickets may be waived by the Administrator.
- C. LOAD TICKETS: The Purchaser will be issued load ticket books with consecutively numbered tickets for uniquely identifying truckloads of logs. A load ticket shall be attached to the driver's side bunk log of each product load prior to hauling, with the Scaler's copy given to the State from the delivery point. The Purchaser shall complete each ticket with the sale information required by the State. The Purchaser shall provide to the Forest Officer a complete list of destinations to which loads will be delivered. The State, at its discretion, may require a separate ticket book for each destination. Failure to comply with this provision is a contract violation.
- D. SORTING OF PRODUCTS: The State may require separate ticket books for any loads sorted by the Purchaser by size or species or by specific products intended for different delivery points. Load tickets designated for a specific product must only be used for that specific product. When a load ticket is used with an incorrect product it is a contract violation.
- **E. LOAD MARKING:** The Purchaser is required to mark all loads of logs before removal from the loading area to assist in identification while in transit or at the point of delivery. Marking shall be accomplished by painting "ST" in blue paint and the last three digits of the truck load ticket number on log ends of at least three logs on each load, both front and back. The driver's side bunk log shall be one of the marked logs. Failure to comply with this provision is a contract violation.
- **F. PROMPT DELIVERY**: The Purchaser will deliver loads from the timber sale area to a receiving log yard directly without diversion. "Over-nighting" loads during transit are expressly forbidden unless approved by Forest Officer prior to hauling. Failure to comply with this provision is a contract violation.

G. SCALE RULE:

- 1. Any sawlogs scaled by the State shall be scaled using the Scribner Decimal "C" log rule. Log scaling will follow the procedures listed in the National Forest Log Scaling Handbook (FSH 2409.11) excluding Region 1 supplements.
- 2. In cases where conversion is required, a conversion factor of **6.57** tons per thousand board feet will be used for sawlogs.

IV. CONTRACT VIOLATIONS AND PENALTIES

A. SUSPENSION:

- 1. FAILURE TO PAY ADVANCE STUMPAGE: If Purchaser fails to submit advance stumpage payments as directed by the Administrator pursuant to the terms of this Contract within 30 days of the request for such payments, all operations covered by this Contract shall immediately cease upon written or oral order from the State until all required advance stumpage payments, or guarantee of payment satisfactory to the State, have been made. The cutting and removal of timber may resume only upon receipt of written notice to the Purchaser from the State that acknowledges adequate payment or guarantee.
- 2. LOSS OF BOND: If the surety bond or other bond securing performance of this Contract is canceled or otherwise becomes ineffective, operations covered by this Contract shall immediately cease upon written or oral order from the State to the Purchaser. Cutting and removal of timber may resume only upon receipt of written notice from the State that acknowledges adequate bond.

3. OTHER CONTRACT VIOLATIONS:

- a. Should the Forest Officer observe a condition that violates the terms of this Contract, the Forest Officer may verbally notify the Purchaser or its employees or subcontractors of such condition and immediately suspend all or part of the operations in the sale area to prevent harm to the interests of the State or the public. Should the Purchaser or its employees or subcontractors fail to comply with any verbal suspension order, the Administrator may terminate the Contract pursuant to Section IV. B. Termination. The Forest Officer may rescind his/her verbal suspension order upon satisfactory cure of the Purchaser's violation and operations may resume.
- b. Suspension orders may be given in writing or verbally to the Purchaser, or to his, her or its employees or subcontractors. Once given, the Purchaser, and his, her or its employees or subcontractors shall immediately comply with such order of suspension and failure to do so shall constitute grounds for termination of this Contract. Suspension orders are reviewable under the provisions described in Section I.I. COMPLAINTS.
- c. The Administrator may issue a written notice of suspension depending upon the severity of the violation and Purchaser's ability to cure. Such notice shall contain information regarding: 1. The breach observed and harm anticipated; 2. The contract provisions violated; 3. If possible, the measures required to cure the violation and allow operations to resume; and 4. The deadline within which the Purchaser must cure the violation. Should the Purchaser fail to cure the violation as required, or to obtain a written variance from the Administrator, the Administrator may charge the Purchaser a \$250 per day penalty for every day that the violation persists. Operations may resume only upon written notice from the Administrator. If satisfactory measures or remedies cannot be found to cure the violation, the Administrator may immediately terminate the Contract pursuant to Section IV.B. TERMINATION.

B. TERMINATION:

- 1. Gross or persistent contract violations and/or failure to promptly and properly remedy contract violations by the Purchaser pursuant to the terms of this Contract shall be grounds for termination of the Contract by the State.
- 2. If this Contract is terminated by the State, the Administrator shall immediately notify the Purchaser of the termination and the reasons for it by certified mail. Such notice shall describe in what respects the Contract has been breached, the means, if any, by which the breach can be remedied and the consequences of such termination. The Contract shall be terminated 18 days from the date the notice is mailed to the Purchaser at the address stated in this Contract.

- 3. Upon receipt of the notice of termination the Purchaser shall immediately cease all operations pursuant to and permitted by the contract until the termination is resolved as provided pursuant to this Section of the Contract, Section IV.B. TERMINATION.
- 4. The Purchaser has 18 days after mailing of the notice of termination within which to file with the State a notice of appeal for a hearing before the Board of Land Commissioners or its appointee. If a timely notice of appeal is filed, the Contract remains in effect until the decision of the Board, but any suspension order shall remain in effect in the interim. The Board or its appointee shall conduct an informal open hearing to determine whether the Contract should be reinstated.
- 5. If the Contract is reinstated the Purchaser will not be penalized for any delays that resulted from the appeal.
- 6. If the Contract is terminated for breach and not reinstated, it is understood that the State may refuse to accept bids or proposals submitted under 77-5-212 MCA from the Purchaser on future State timber sales and permits for a minimum period of 2 years.

C. LIABILITY FOR DAMAGES:

- 1. The Purchaser shall be liable for any damages sustained by the State arising from Purchaser's breach of the terms of this Contract and the State may cause all or part of the performance bond to be forfeited to recover such damages.
- 2. In the event that a portion of the timber sale under this Contract is resold as a result of the Purchaser's forfeiture and the stumpage rate pursuant to the resold contract is lower than the stumpage rate provided herein, the difference between the original rate and the new rate shall be considered damages and the Purchaser shall be liable to the State for those damages. The State may cause all or part of the Purchaser's performance bond to be forfeited to recover such damages.
- D. STATE'S OPTION TO COMPLETE CONTRACT REQUIREMENTS: If the Purchaser fails to complete the requirements described in this Contract in a timely manner or if the Contract is terminated pursuant to Section IV.B. TERMINATION, the State reserves the right to complete the work itself or through a contractor. The Purchaser will be billed for any additional costs incurred by the State due to the Purchaser's failure to perform the requirements of this Contract. These additional costs may include State employee time and expenses that were extraordinary to the normal administration of the contract, such as time and expenses incurred to hire a replacement contractor. Purchaser's failure to make payment within 14 days from the date of billing may cause all or part of the performance bond to be forfeited to recover such costs.
- **E. WAIVER OF PENALTIES:** The penalties specified in this section shall be regarded as liquidated damages and may be waived or reduced at the discretion of the Administrator in exceptional cases.
- **F. FOREST PRACTICES LAWS:** The Purchaser shall conduct logging operations in compliance with all laws relating to forest practices in the State of Montana. The Purchaser shall be responsible for all reclamation and penalties that result from violations of applicable forest practices laws.

G. LOGGING REQUIREMENT VIOLATIONS:

- 1. HIGH STUMPS: The Purchaser may be charged \$25.00 for each tree stump cut higher than 12 inches on the side adjacent to the highest ground except in unusual cases when this height is not considered practical.
- 2. LONG BUTTS: The Purchaser may be required to pay \$25.00 per long butt for cutting long butts that contain useable material in excess of the minimum net scale in percentage of gross shown in Table 2.

3. LARGE TOPS: The Purchaser may be required to pay for cutting tops larger than the Top Diameter Inside Bark (DIB) shown in Table 2. This charge will be at the current contract rate for the net volume by species, or \$25.00 per large top, whichever is greater.

4. UNDESIGNATED TREES:

- a. Undesignated or reserve trees that are cut or damaged as a result of Purchaser's operations shall be considered cut in trespass and the Purchaser may be charged three times the highest Contract stumpage rate (minimum \$10.00/ton) for the Contract product class(es) the tree contains.
- b. If the Forest Officer determines that a suitable replacement for a reserve tree as described above is not available, Purchaser agrees to pay the State \$500.00 per tree, in addition to the rates charged in Section IV.G.4.a. UNDESIGNATED TREES.
- 5. FAILURE TO REMOVE: The State may charge the Purchaser for trees that are designated for cutting under the terms of this contract and/or logs that meet the Manufacturing and Recovery Standards shown in Table 2 that are not removed from the sale area or presented for measurement. This charge may be up to triple the Contract stumpage rate plus the Forest Improvement rate for the class of material contained in those trees fixed in accordance with the terms of this Contract. If the State removes such material from the sale area, the Purchaser will be required to reimburse the State for all applicable cutting, yarding, processing, loading and hauling costs.
- 6. LOSS IN WEIGHT DUE TO PURCHASER DELAY: Up to a 15% increase in net weight of logs will be added by the State for loss in weight due to delay by the Purchaser in delivering cut logs to the manufacturing point. A delay is defined as in excess of 30 days after felling.

H. MEASUREMENT AND LOG ACCOUNTABILITY VIOLATIONS:

- 1. MISSING LOAD TICKETS: The Purchaser will be charged up to \$500.00 for each unused load ticket that the Purchaser has lost or misplaced while in his, her or its possession. An unused ticket is defined as a ticket that is not turned into the State with an associated truckload weight.
- 2. FAILURE TO ATTACH OR COMPLETE LOAD TICKET: The Purchaser may be charged \$500.00 per load for failure to attach a load ticket to each product load prior to hauling, or for failure to complete the load ticket with all required information.

3. MISSING WEIGHT TICKETS:

- a. The Purchaser will be charged up to triple the Contract stumpage rate plus the Forest Improvement rate [(stumpage + FI) x 3 = penalty] for each truck weight ticket not furnished to the State.
- b. The Forest Officer will notify the Purchaser of each missing weight ticket.
- c. The load weight will be determined by averaging weights from other loads hauled by the Purchaser to the same mill within the same billing period, or 30 tons for single loads and 38 tons for loads with a pup trailer attached.
- d. For Other Material, as defined by this Contract, the minimum stumpage for purposes of penalty shall be \$10.00 per ton or the Contract stumpage rate multiplied by 3, whichever is higher. The Forest Improvement fee is not included in Other Material penalties.
- 4. IMPROPERLY LABELED PRODUCT: The Purchaser may be charged \$500.00 per load for loads with an incorrect load ticket for the product (Sawlog or Other Material) in the load. In addition, the stumpage paid for an improperly ticketed load shall be at the highest Contract stumpage rate for products hauled pursuant to this Contract.

 IMPROPERLY MARKED LOADS: The Purchaser may be charged \$40.00 per load for each load not marked in accordance with Section III.E. LOAD MARKING.

I. RESOURE PROTECTION VIOLATIONS:

- The Purchaser may be charged five hundred dollars (\$500.00) per piece of equipment determined to have entered sale area without Forest Officer inspection in accordance with VI.J. NOXIOUS WEED MANAGMENT. This charge does not relieve the Purchaser from requirement VI.J. NOXIOUS WEED MANAGEMENT.
- J. FAILURE TO MEET COMPLETION DATES: The Purchaser may be charged \$100.00 for each complete calendar day the Purchaser fails to meet the deadlines shown in Table 3 and Table B1.
- **K. LATE PAYMENTS:** The Purchaser may be charged \$100.00 per day beginning the 15th day after the billing date for failure to pay for forest products, pursuant to Section II.B PAYMENTS.

V. FIRE PROTECTION

- **A. FIRE REGULATIONS:** The Purchaser is required to conduct all operations in accordance with the Montana Forest Fire Regulations, Attachment C.
- **B. FIRE PREVENTION:** During the time that this Contract remains in force, the Purchaser shall, to the greatest extent practicable, prevent forest fires on the area described in this Contract and in its vicinity, and shall require all employees, contractors and employees of contractors to do likewise.
- **C. OPEN BURNING REQUIREMENTS:** The Purchaser is required to conduct any burning of slash or other debris in accordance with the Montana Department of Environmental Quality open burning restrictions. The Forest Officer must be notified prior to the start of any burning operations.
- D. FIRE SUPPRESSION: Unless prevented by circumstances over which he, she or it has no control, the Purchaser shall place qualified employees, contractors and employees of contractors and all equipment at the disposal of any authorized State, County, or Federal Forest Officer for the purpose of fighting forest fires. Payment for such services shall be made at rates to be determined by the Forest Officer, which shall be within a range of payment rates shown in the NWCG Standards for Interagency Incident Business Management Handbook. Any employees or equipment furnished by the Purchaser, contractors or employees of contractors, shall be relieved from fire fighting as soon as it is practicable for the Forest Officer to obtain other adequate labor or equipment.
- **E. FIRE COSTS:** The costs borne by the State for suppressing fires that are intentionally lit by the Purchaser or that are caused by negligence or fault in the Purchaser's operations shall be paid by the Purchaser to the State. The Purchaser shall also be liable for property and resource damage resulting from these fires.
- **F. FIRE REPORTING:** Any wildfires, which the Purchaser detects or suppresses, must be reported as soon as possible to the responsible fire protection agency and the Department.
- **G. SUSPENSION OF OPERATIONS:** When fire danger reaches extreme levels that cause operations to be curtailed through Stage II, Hoot Owl requirements or other measures, the State may suspend operations until fire conditions in and/or around the sale area improve. The State will grant a contract extension to compensate for the time suspended.
- H. CONTACT INFORMATION: The Purchaser will provide the Forest Officer with phone numbers of the Purchaser and their employees and contractors when logging operations are in progress (including nights and weekends), in order to establish contact if a wildfire occurs within the sale area or on other lands accessed by road systems associated with the sale.

VI. RESOURCE PROTECTION

A. DAMAGE PREVENTION: The Purchaser shall use reasonable skill and care in all operations to prevent damage to soils, trails, meadows, stream banks, stream channels, wetlands, lakeshores or other natural features of the sale area.

B. STREAM PROTECTION:

- Construction and logging equipment will not be operated in Streamside Management Zones. An
 exception may be provided for through this Contract or the Forest Officer may grant written
 permission. Additional protection measures may be required in Section VII.G, SPECIAL
 OPERATING REQUIREMENTS and in Contract Attachments.
- 2. The Purchaser shall notify the Forest Officer immediately if debris from logging or construction enters a stream or stream channel.
- 3. The Purchaser shall remove any debris resulting from logging or construction operations, which may affect the natural flow of any streams traversing the sale area. This work will be completed in a manner that causes the least disturbance to the streams, as directed by the Forest Officer.
- 4. Logs shall not be hauled, skidded or yarded across streams unless the logs are fully suspended, or otherwise yarded as specified in this Contract. The Forest Officer must approve all logging and construction plans, including changes, before implementation.
- 5. All operations shall be conducted in a manner to comply with Montana Water Quality Standards, the Streamside Management Zone Law, and all applicable permits.
- C. CULTURAL RESOURCES: If a cultural resource is discovered, the Purchaser shall immediately suspend all operations in the vicinity of the cultural resource and notify the Forest Officer. Operations may only resume if authorized by the Forest Officer. Cultural resources identified and protected elsewhere in this contract are exempted from this clause. Cultural resources, once discovered or identified, are not to be disturbed by the Purchaser, or his, her or its employees and/or subcontractors.

D. DISCOVERY OF THREATENED AND ENDANGERED SPECIES:

- If a specific habitat feature for a federally listed threatened or endangered species is encountered, the Purchaser shall suspend all operations in the vicinity of the observation or discovery and immediately notify the Forest Officer. Operations may resume only if authorized by the Forest Officer. Habitat features identified and protected elsewhere in this contract are exempted from this clause.
- 2. If a federally listed threatened or endangered species is encountered, the Purchaser shall immediately notify the Forest Officer. The Purchaser may be required to suspend operations in the vicinity of the observation or discovery. If suspended, operations may resume only if authorized by the Forest Officer.
- **E. SANITATION:** The Purchaser's operations, as described by this contract, shall comply with all applicable State laws, rules and regulations concerning sanitation in operations. Refuse resulting from the Purchaser's activities, including the use, servicing, repair, or abandonment of equipment, shall be removed, buried or otherwise disposed of in a manner that complies with all State laws and meets the approval of the Forest Officer. The Purchaser shall not service tractors, trucks and similar pieces of equipment on lands that directly drain into or are within 100 feet of lakes, streams or recreational facilities. No logging camp will be located on the gross sale area without prior approval by the Forest Officer.

- **F. HAZARDOUS SUBSTANCES:** In addition to the indemnification provided in Section I.W.2. INDEMNITY AND LIABILITY, with respect to Hazardous Substances, the following duties shall apply:
 - The Purchaser shall know and comply with regulations governing the storage, handling, application, disposal, and reporting of pesticides, herbicides, containers, biological waste, petroleum products, dust abatement compounds, and other hazardous substances. The Purchaser shall obtain the approval of the Forest Officer to store, handle, apply or dispose of these substances on State land.
 - 2. The Purchaser shall not transport, handle, store, load, apply, or dispose of any hazardous substance in such a manner as to pollute water supplies or waterways, or cause damage or injury to people, land, desirable plants, and animals.
- G. PROTECTION OF IMPROVEMENTS: The Purchaser shall to the greatest extent practicable protect from damage all gates, signs, telephone lines, power lines, fences, irrigation ditches, cattle guards, drainage structures, road improvements, and any other improvements or infrastructure within the gross sale area and/or along haul routes. Damages caused by the Purchaser, his, her or its employees or subcontractors, and expenses associated with the repair or replacement of damaged structures and improvements are the sole responsibility of the Purchaser.
- H. PROPERTY CORNER RESTORATION: The Purchaser is required to replace any General Land Office township, section, quarter or meander corners, monuments or witness trees on or adjacent to the timber sale area which may have been moved, disturbed or lost, as a result of the Purchaser's logging or construction operations. Any necessary replacements must be carried out by a licensed surveyor at the Purchaser's expense.
- I. PASSABLE ROADS: The Purchaser will leave all roads and trails free from obstruction by logs, brush or debris following the completion of logging operations. Temporary or permanent obstructions may be acceptable if approved by the Forest Officer.
- J. NOXIOUS WEED MANAGEMENT: All equipment used in road construction and off-road logging activity must be pressure-washed by the Purchaser and inspected by the Forest Officer prior to entering the sale area. This cleaning will remove all dirt, plant parts, and material that may carry noxious weed seeds into the sale area. Other equipment and vehicles entering and leaving the sale area shall be cleaned prior to start up and kept reasonably clean during the course of operations. All subsequent move-ins of logging and construction equipment shall be treated the same as the initial move-in.

K. WILDLIFE PROTECTION:

- The Purchaser is authorized to enter areas closed by gates, barricades or berms with motorized vehicles only for the purposes related to the performance of this contract. Motorized vehicle entry for purposes other than contract performance, such as hunting or transporting game animals will be considered trespass and prosecuted to the fullest extent of the law (Montana Code Annotated § 45-6-203).
- 2. The Purchaser is prohibited from carrying firearms while conducting contract operations [ARM 36.11.432(1)(c); 36.11.443(2)].
- 3. The Purchaser will store human or pet food, livestock food, garbage, and other attractants in a bear-resistant manner [ARM 36.11.432(1)(d)(i)].
- 4. The Purchaser will not bury or discard attractants in the sale area, or burn attractants (such as food leftovers) in an open campfire [ARM 36.11.432(1)(d)(ii)].
- 5. The Purchaser will provide each employee with a copy of Attachment D "Working in Bear Habitat" Brochure [ARM 36.11.432(1)(a)].

VII. LOGGING

- A. TREES DESIGNATED FOR CUTTING: All trees meeting the following requirements must be cut by the Purchaser.
 - 1. TREES IN UNITS: Trees that meet the Minimum Log Size of Trees Designated for Cutting in Table 2 are to be cut in each unit according to the Marking specifications shown in Section VII.F. UNIT DESIGNATIONS.
 - 2. RIGHT-OF-WAY TREES: All trees within road right-of-way boundaries must be cut.
 - 3. DAMAGED TREES: Reserved trees, which are root-cut, damaged by felling or skidding, uprooted or broken off by the Purchasers operations may be designated for cutting by the Forest Officer. The Forest Officer may mark additional reserve trees to replace those that have been cut or damaged.
 - 4. FIRE KILL, INSECT INFESTATIONS AND WIND THROWN: The Purchaser may be required to cut and remove at current contract rates, fire-killed, high hazard, disease infected, insect-infested or wind thrown (defined as blown down or wind-damaged to the extent that the tree is expected to fall or is dying) trees that occur in any part of the gross sale area while this Contract is in effect, if the Forest Officer determines that the stumpage value per ton of the additional timber is approximately equal to the value of the timber being harvested under this Contract.

B. TREES RESERVED FROM CUTTING:

- 1. LEAVE TREES: Trees, both live and dead, marked to leave or otherwise described to leave are reserved from cutting. Any trees not specifically required to be cut are reserved from cutting.
- BOUNDARY AND BEARING TREES: Trees marking the boundaries of ownership, logging units, equipment restriction zones, streamside management zones, road rights-of-way, and bearing trees, are reserved from cutting unless otherwise designated by this contract or by the Forest Officer.
- 3. VALID CLAIMS: Timber to which there exists a claim under valid contracts with the State of Montana is exempted from this sale.

C. LOG MANUFACTURING AND RECOVERY STANDARDS:

- SAWLOG STANDARDS: Trees cut by the Purchaser shall be manufactured to secure the
 maximum utilization of forest products according to III.G.1. All logs that meet or exceed the
 Manufacturing and Recovery Standards in Table 2 and this section shall be skidded to landings
 and hauled by the Purchaser.
 - a. Logs shall be bucked to utilize the entire length of the tree to the top diameter specified under Manufacturing and Recovery Standards in Table 2.
 - b. Logs meeting utilization specifications in Table 2 shall be manufactured in such a manner as to minimize waste during bucking operations.
 - c. <u>A tree or log larger</u> than 5.6" top DIB is considered to be a sawlog if it contains Scribner Decimal C Net Scale ≥ 33% of Gross.
- 2. OTHER MATERIAL: The Purchaser may elect to remove other material that does not meet Sawlog Manufacturing and Recovery Standards in Table 2, only if approved by the Forest Officer. Such products shall be billed at the rate for other material shown in Table 1.
 - a. All contract provisions apply to the removal of Other Material.

- b. Other Material that has been manufactured by the Purchaser shall be decked and hauled separately from sawlogs. All decked non-sawlog material must be hauled or disposed of by the Purchaser in accordance with the instructions of the Forest Officer. All hauled loads will have a truck ticket assigned and will meet the specifications in Section III, MEASUREMENT AND LOG ACCOUNTABILITY.
- c. Butt cut logs (the first log cut above the stump) that meet LOG MANUFACTURING AND RECOVERY STANDARDS in Table 2, but do not meet TREES DESIGNATED FOR CUTTING minimum top DIB and length, may be considered as Other Material, not sawlogs.
- 3. DOWN WOODY MATERIAL:. 7 to 24 tons per acre of downed woody material larger than 3 inches in diameter shall be left scattered throughout the sale units. Retain a minimum of one 20-foot-long log 15 inches in diameter per acre. The Forest Officer will determine the appropriate amount of material and may designate pieces to be left for this purpose that would otherwise be skidded and hauled under Sections VII.C.1 or VII.C.2, LOG MANUFACTURING AND RECOVERY STANDARDS.
- NUTRIENT RETENTION: Removal from the site of fine branches and leafy material shall be minimized.
- 5. SNAGS: The Purchaser will retain a minimum of **2** snags per acre and **2** recruitment trees per acre that are >21 inches dbh within each harvest unit unless superseded by Section VII.F, UNIT DESIGNATIONS. If snags and recruitment trees of this size class are not available, the next largest available size class shall be retained. If snags present human safety concerns, the Purchaser may substitute snag recruits for snags upon approval of the Forest Officer. Snags cut for safety purposes shall remain in the unit [ARM 36.11.411].

TABLE 2.						
	TREES DESIGNAT		CTURING	THER MATERIAL G AND RECOVERY DARDS		
PRODUCT	The Purchaser must fell all trees marked or designated for cutting that contain a log of this minimum size.		The Purchaser must skid and haul all log that meet this minimum specification.			
PRODUCT	Top DIB	Length	Top DIB	Length		
Sawlogs	5.6"	16.5'	5.6"- 8.5" 8.6"+	10.5' 8.5'	Sawlogs meeting standards in Section VII.C.1.b through c	
Other Material (Roundwood and pulp)	2.5"	17'	2.5"	17'		

D. TREE AND BOUNDARY MARKING:

- 1. TREES MARKED TO CUT: N/A
- 2. TREES MARKED TO LEAVE: Marked with a horizontal **ORANGE** paint mark at Diameter Breast Height (DBH) and a mark below stump height.
- HARVEST UNIT BOUNDARIES: Marked with three horizontal ORANGE paint stripes facing into the unit.
- 4. ROAD RIGHT-OF-WAY BOUNDARIES: N/A
- 5. PROPERTY BOUNDARIES: N/A
- 6. STREAMSIDE MANAGEMENT ZONES: The State has marked with fluorescent **ORANGE** flagging stenciled with "STREAMSIDE MANAGEMENT ZONE".
- 7. EQUIPMENT RESTRICTION ZONES: Marked with **BLACK & ORANGE** striped flagging.
- **E. HARVEST SCHEDULE:** The Purchaser must cut and remove trees from the sale or portions of the sale, such as units, by the dates shown on the HARVEST COMPLETION SCHEDULE, Table 3:

	TABLE 3. HARVEST COMPLETION SCHEDULE				
Priority	Unit or Portion of Sale	Completion Date			
1	Units 10 and 11	August 14, 2027			
2	Units 1-9 and 12-21	September 30, 2029			

F. UNIT DESIGNATIONS: The following requirements are to be performed by the Purchaser in the harvest units listed below and as shown on the sale map, Attachment A. Paragraph headings refer to paragraphs listed in Section VII.G, SPECIAL OPERATING REQUIREMENTS.

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
1	19.7	668

MARKING: None.

Commercial Thin (Cut by Description)

Operator select leave trees based upon the following description:

- Leave the healthiest and best formed trees available, spacing all species to **25 feet**.
- Species preference for leave trees are western larch, Douglas-fir, lodgepole pine and Engelmann spruce.
- Leave trees should display superior form, vigor and growth habit, with full, pointy crowns exhibiting a crown ratio over 35%.

If the Forest Officer determines that the desired harvest prescription is not met by the Purchaser, the Forest Officer may require the Purchaser to sample mark an additional portion of the unit and have that sample marked portion be approved by the Forest Officer. If the Purchaser continues to be unable to meet the harvest prescription requirements the Forest Officer may require marking of the entire unit by the Purchaser and approval of marking by the Forest Officer prior to continuing harvest.

OPERATING PERIOD:

- July 1 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 2. CONTROL OF SLASH AND DEBRIS
- 3. LYNX HABITAT PROTECTION
- 4. STREAMSIDE MANAGEMENT/RIPARIAN MANAGEMENT ZONES
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
2	1.8	77

MARKING: None.

Clearcut w/ reserves (Cut by Description)

Operator select leave trees based upon the following description:

• Leave all western larch over 18" DBH

OPERATING PERIOD:

- July 1 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 2. CONTROL OF SLASH AND DEBRIS
- 3. LYNX HABITAT PROTECTION
- 5. ROUNDWOOD/PULP REMOVAL REQUIRED
- 6. SCARIFICATION REQUIRED
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 10. VISUAL SCREENING FOR WILDLIFE ADJACENT TO OPEN ROADS
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
3	17.6	1012
4	6.5	231
5	33	1497

YARDING METHOD: Cut-to-Length

MARKING: None.

Commercial Thin (Cut by Description)

Operator select leave trees based upon the following description:

- Leave the healthiest and best formed trees available, spaced to 25 feet.
- Species preference for leave trees are western larch, Douglas-fir, lodgepole pine and Engelmann spruce.
- Leave trees should display superior form, vigor and growth habit, with full, pointy crowns exhibiting a crown ratio over 35%.

If the Forest Officer determines that the desired harvest prescription is not met by the Purchaser, the Forest Officer may require the Purchaser to sample mark an additional portion of the unit and have that sample marked portion be approved by the Forest Officer. If the Purchaser continues to be unable to meet the harvest prescription requirements the Forest Officer may require marking of the entire unit by the Purchaser and approval of marking by the Forest Officer prior to continuing harvest.

OPERATING PERIOD:

- July 1 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 2. CONTROL OF SLASH AND DEBRIS
- 3. LYNX HABITAT PROTECTION
- 4. STREAMSIDE MANAGEMENT/RIPARIAN MANAGEMENT ZONES
- 7. CUT-TO-LENGTH HARVESTING
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
6	2.5	50

MARKING: None.

Sanitation (Cut by Description)

Operator select leave trees based upon the following description:

- Cut all mistletoe-infected overstory western larch
- Protect existing regeneration and intermediate canopy layers within harvest unit.

OPERATING PERIOD:

- July 1 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 3. LYNX HABITAT PROTECTION
- 6. SCARIFICATION REQUIRED
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
7	20.8	710

MARKING: None.

Commercial Thin (Cut by Description)

Operator select leave trees based upon the following description:

- Leave the healthiest and best formed trees available, spaced to 25 feet.
- Species preference for leave trees are western larch, Douglas-fir, lodgepole pine and Engelmann spruce.
- Leave trees should display superior form, vigor and growth habit, with full, pointy crowns exhibiting a crown ratio over 35%.

If the Forest Officer determines that the desired harvest prescription is not met by the Purchaser, the Forest Officer may require the Purchaser to sample mark an additional portion of the unit and have that sample marked portion be approved by the Forest Officer. If the Purchaser continues to be unable to meet the harvest prescription requirements the Forest Officer may require marking of the entire unit by the Purchaser and approval of marking by the Forest Officer prior to continuing harvest.

OPERATING PERIOD:

- July 1 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 3. LYNX HABITAT PROTECTION
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
8	28.1	1104

MARKING: None.

Clearcut w/ reserves (Cut by Description)

Operator-select leave trees based on the following description

- Retain 4 to 6 western larch, western white pine or Douglas-fir per acre that exhibit good form and vigor.
- Slashing of advanced regeneration required

OPERATING PERIOD:

- July 1 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 3. LYNX HABITAT PROTECTION
- 5. ROUNDWOOD/PULP REMOVAL REQUIRED
- 6. SCARIFICATION REQUIRED
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
9	50.8	2463
10	19.9	782
12	34.0	1743
13	25.6	1678
14	12.6	434
15	8.4	649

YARDING METHOD: Cut-to-Length

MARKING: None.

Commercial Thin (Cut by Description)

Operator select leave trees based upon the following description:

- Cut all merchantable whitewood
- Leave the healthiest and best formed western larch and Douglas-fir available, spaced to **25 feet**. Leave deciduous overstory, leave western white pine.
- Leave trees should display superior form, vigor and growth habit, with full, pointy crowns exhibiting a crown ratio over 35%.

If the Forest Officer determines that the desired harvest prescription is not met by the Purchaser, the Forest Officer may require the Purchaser to sample mark an additional portion of the unit and have that sample marked portion be approved by the Forest Officer. If the Purchaser continues to be unable to meet the harvest prescription requirements the Forest Officer may require marking of the entire unit by the Purchaser and approval of marking by the Forest Officer prior to continuing harvest.

OPERATING PERIOD:

- July 1 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Unit 10 July 1, 2025 March 31, 2026; July 1, 2026 March 31, 2027; July 1, 2027 August 14, 2027
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 2. CONTROL OF SLASH AND DEBRIS
- 3. LYNX HABITAT PROTECTION
- 4. STREAMSIDE MANAGEMENT/RIPARIAN MANAGEMENT ZONES
- 7. CUT-TO-LENGTH HARVESTING
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
11	24.7	4068

MARKING: Leave trees are marked.

Clearcut

Operator select leave trees based upon the following description:

- Leave trees marked with horizontal ORANGE paint stripe at DBH.
 - Retain 4 to 6 western larch, western white pine or Douglas-fir per acre that exhibit good form and vigor.
 - Slashing of advanced regeneration required except within visual screen corridor.

OPERATING PERIOD:

- July 1, 2025 March 31, 2026; July 1, 2026 March 31, 2027; July 1, 2027 August 14, 2027, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 2. CONTROL OF SLASH AND DEBRIS
- 3. LYNX HABITAT PROTECTION
- 4. STREAMSIDE MANAGEMENT/RIPARIAN MANAGEMENT ZONES
- 5. ROUNDWOOD/PULP REMOVAL REQUIRED
- 6. SCARIFICATION REQUIRED
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 8. EQUIPMENT RESTRICTION ZONES
- 10. VISUAL SCREENING FOR WILDLIFE ADJACENT TO OPEN ROADS
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
16	7.1	98

MARKING: Leave trees are marked.

Shelterwood

- Leave trees marked with horizontal ORANGE paint stripe at DBH.
 - Retain 12-17 western larch or Douglas-fir per acre that exhibit good form and vigor.

OPERATING PERIOD:

- July 1 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

SPECIAL OPERATING REQUIREMENTS:

- 1. NUTRIENT RECYCLING REQUIREMENT
- 2. CONTROL OF SLASH AND DEBRIS
- 3. LYNX HABITAT PROTECTION
- 4. ROUNDWOOD/PULP REMOVAL REQUIRED
- 6. SCARIFICATION REQUIRED
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 10. VISUAL SCREENING FOR WILDLIFE ADJACENT TO OPEN ROADS
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
17	2.7	59

YARDING METHOD: Ground based

MARKING: Leave trees are marked.

Clearcut

- Leave trees marked with horizontal **ORANGE** paint stripe at DBH.
 - Retain 4 to 6 western larch, western white pine or Douglas-fir per acre that exhibit good form and vigor.
- Slashing of advanced regeneration required except within visual screen corridor.

OPERATING PERIOD:

- June 16 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 3. LYNX HABITAT PROTECTION
- 5. ROUNDWOOD/PULP REMOVAL REQUIRED
- 6. SCARIFICATION REQUIRED
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 10. VISUAL SCREENING FOR WILDLIFE ADJACENT TO OPEN ROADS
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
18	10.9	655

MARKING: None.

Commercial Thin (Cut by Description)

Operator select leave trees based upon the following description:

- Leave the healthiest and best formed trees available, spacing all species to 25 feet.
- Species preference for leave trees are western larch, Douglas-fir, lodgepole pine and Engelmann spruce.
- Leave trees should display superior form, vigor and growth habit, with full, pointy crowns exhibiting a crown ratio over 35%.

If the Forest Officer determines that the desired harvest prescription is not met by the Purchaser, the Forest Officer may require the Purchaser to sample mark an additional portion of the unit and have that sample marked portion be approved by the Forest Officer. If the Purchaser continues to be unable to meet the harvest prescription requirements the Forest Officer may require marking of the entire unit by the Purchaser and approval of marking by the Forest Officer prior to continuing harvest.

OPERATING PERIOD:

- June 16 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 2. CONTROL OF SLASH AND DEBRIS
- 3. LYNX HABITAT PROTECTION
- 4. STREAMSIDE MANAGEMENT/RIPARIAN MANAGEMENT ZONES
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
19	12.7	351

MARKING: Leave trees are marked.

Seedtree

- Leave trees marked with horizontal ORANGE paint stripe at DBH.
 - Retain 8-10 western white pine, western larch or Douglas-fir per acre that exhibit good form and vigor.

OPERATING PERIOD:

- June 16 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 2. CONTROL OF SLASH AND DEBRIS
- 3. LYNX HABITAT PROTECTION
- 5. ROUNDWOOD/PULP REMOVAL REQUIRED
- 6. SCARIFICATION REQUIRED
- 9. FELLING TIMBER ADJACENT TO POWERLINES
- 10. VISUAL SCREENING FOR WILDLIFE ADJACENT TO OPEN ROADS
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
20	117.4	3341

MARKING: None.

Commercial Thin (Cut by Description)

Operator select leave trees based upon the following description:

- Cut all merchantable whitewood
- Leave the healthiest and best formed western larch and Douglas-fir available, spaced to **25 feet**. Leave deciduous overstory and western white pine.
- Leave trees should display superior form, vigor and growth habit, with full, pointy crowns exhibiting a crown ratio over 35%.

If the Forest Officer determines that the desired harvest prescription is not met by the Purchaser, the Forest Officer may require the Purchaser to sample mark an additional portion of the unit and have that sample marked portion be approved by the Forest Officer. If the Purchaser continues to be unable to meet the harvest prescription requirements the Forest Officer may require marking of the entire unit by the Purchaser and approval of marking by the Forest Officer prior to continuing harvest.

OPERATING PERIOD:

- June 16 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 2. CONTROL OF SLASH AND DEBRIS
- 3. LYNX HABITAT PROTECTION
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 9. FELLING TIMBER ADJACENT TO POWERLINES
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

HARVEST UNIT NUMBER(S)	ACRES	ESTIMATED VOLUME (Tons)
21	23.8	1319

MARKING: None.

Commercial Thin (Cut by Description)

Operator select leave trees based upon the following description:

- Leave the healthiest and best formed trees available, spacing all species to **25 feet**.
- Species preference for leave trees are western larch, Douglas-fir, western red cedar, lodgepole pine and Engelmann spruce.
- Leave trees should display superior form, vigor and growth habit, with full, pointy crowns exhibiting a crown ratio over 35%.

If the Forest Officer determines that the desired harvest prescription is not met by the Purchaser, the Forest Officer may require the Purchaser to sample mark an additional portion of the unit and have that sample marked portion be approved by the Forest Officer. If the Purchaser continues to be unable to meet the harvest prescription requirements the Forest Officer may require marking of the entire unit by the Purchaser and approval of marking by the Forest Officer prior to continuing harvest.

OPERATING PERIOD:

- June 16 March 31, as soil conditions allow (Section VII. L. 1 & 2)
- Log hauling may only occur during weekdays, Monday Friday, unless prior approval for weekend or holiday log hauling is received from the Forest Officer.

- 1. NUTRIENT RECYCLING REQUIREMENT
- 3. LYNX HABITAT PROTECTION
- 7. CUT-TO-LENGTH HARVESTING (if elected)
- 11. WHOLE TREE SKIDDING (if elected)
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED

- **G. SPECIAL OPERATING REQUIREMENTS**: The following requirements are to be performed by the Purchaser in specific sale units as shown in Section VII.F, UNIT DESIGNATIONS.
 - 1. NUTRIENT RECYCLING REQUIREMENT: Purchaser is required to leave material in the unit for recycling of forest nutrients. At the same time, logging slash loading shall be kept to a minimum by skidding and piling some slash at the landings.
 - a. Purchaser is required to leave most logging slash *foliage* scattered on the forest floor. The Forest Officer may require lopping and scattering of limbs, severing tops before skidding, returning tops to the woods, or other methods to achieve this requirement.
 - b. Purchaser is required to leave **7 to 24 tons** of material per acre, 3 inches in diameter or larger to meet DOWN, WOODY MATERIAL requirements in paragraph VII. C-3. The Forest Officer may require the bucking of cull material in the woods, leaving dead, down sawlogs, or other methods.
 - c. Purchaser is required to reduce slash loading above the amounts required to meet 1a and 1b above. The Forest Officer may require whole-tree skidding of some material to meet this requirement.
 - d. The Forest Officer and Purchaser will agree to amounts of material and the bucking, lopping and skidding methods to meet these requirements prior to felling and skidding the unit.
 - 2. CONTROL OF SLASH AND DEBRIS (quoted from ARM 36.11.223) -
 - 1. Slash, including slash generated by right-of-way clearing, road construction and maintenance, must be reduced to meet the general standard for 90% of the total area within each cutting unit. No single area greater than two acres or 10% of the cutting unit area, whichever is less, may exceed the general standard.
 - 2. The cutting unit must meet the general standard within 100 feet of:
 - (a) the perimeter of a cutting unit;
 - (b) all roads with legal public access that pass through or are adjacent to the cutting unit; and (c) active railroad rights-of-way.
 - 3. At least 90% of the slash piles generated by forest practices activity must be burned in areas where the general standard applies. (Piles will be a minimum size of 6 feet tall and will be located in areas where residual tree scorch will be minimized during burning. DNRC will complete all burning.)
 - 3. LYNX HABITAT PROTECTION: Retain patches of advanced shade-tolerant regeneration (grand fir, subalpine fir or Engelmann spruce) on up to 10 percent of the stand. Care shall be exercised in felling and skidding operations to minimize damage to patches of sub-merchantable trees as directed by the Forest Officer. If damage to submerchantable trees is deemed excessive, operations may be suspended by the Forest Officer until suitable arrangements are made to reduce damage.
 - 4. STREAMSIDE MANAGEMENT/ RIPARIAN MANAGEMENT ZONES: SMZs and/or RMZs are located within or adjacent to this harvest unit. The Purchaser is responsible for meeting SMZ rules and regulations. RMZ management as directed by the Forest Officer and harvest unit descriptions.
 - 5. ROUNDWOOD/ PULP REMOVAL REQUIRED: Species listed below that meet the specifications for 'Other Material' as described in Table 2 shall be removed from the cutting unit, skidded to landing areas, and hauled off site. Roundwood removal is optional in areas inoperable to a feller-buncher.
 - Subalpine fir
 - Engelmann spruce
 - Grand fir
 - Douglas-fir exhibiting low vigor, swept boles, forked tops or crown ratios <30%.

- 6. SCARIFICATION REQUIRED: Purchaser is required to scarify non-regenerated areas within this unit. A dozer with brush rake or excavator with bucket shall be used when the soil is dry. Scarification (the removal of surface duff and not more than 1 inch of topsoil) will not expose more than 30% of the area mineral soil and shall be done as directed by the Forest Officer. Adequate scarification may also be achieved with whole-tree, ground-based harvesting in consultation with the Forest Officer.
- 7. CUT-TO-LENGTH HARVESTING: In units with required cut-to-length yarding and in units where cut-to-length is "elected", the following requirements apply:
 - a. Trees must be felled and processed at the stump (harvester or feller buncher / harvester combination is acceptable).
 - b. Logs must be forwarded, from where processed, clear of the ground (no grapple skidding of processed logs allowed).
 - c. Processing operations must de-limb tops past merchantable lengths, to eliminate wolfy tops being retained in the harvest units, as directed by the Forest Officer.
 - d. Slash will be processed in trails, to be trampled by forwarding operations.
 - e. In areas where slash exceeds the required **7** to **24** tons per acre, the Purchaser shall mechanically pile or process into piles to be burned later to achieve slash levels as described above and as directed by the Forest Officer.
- 8. EQUIPMENT RESTRICTION ZONE: Equipment is prohibited from operating in areas designated and flagged as equipment restriction zones (ERZ). All trees designated for harvest within such zones shall be hand felled and winchline skidded to skid trails outside of the ERZ. Designated crossing of ERZ's much be approved by the Forest Officer. Slash will not be piled in or pushed into the ERZ.
- 9. FELLING TIMBER ADJACENT TO POWERLINES: Purchaser shall provide DNRC with proof of a plan worked out with Bonneville Power Administration for all work performed within a tree length of powerlines. At a minimum, the plan shall address notifications, safety mitigations and communication prior to harvesting adjacent to powerline corridors.
- 10. VISUAL SCREENING FOR WILDLIFE ADJACENT TO OPEN ROADS: Retain all vegetation and sub merchantable timber adjacent to open roads for up to 100 feet or as directed by the Forest Officer. This requirement is waived where hazard piling is required.
- 11. WHOLE TREE SKIDDING: If whole tree skidding is elected by the purchaser, trees will not be limbed or cut into log lengths before being skidded to the landings. If trees are too large to skid whole without causing excessive damage, an allowance will be made to buck the trees into log lengths with the limbs still attached to the log and skidded to the landings.
- 12. SLASHING OF LOGGING-DAMAGED TREES REQUIRED: The purchaser shall fell all submerchantable trees with logging-related root or stem damage causing lean. The stem shall be completely severed from the stump below the lowest live limb. Maximum stump height shall be 12 inches on the uphill side.
- H. LOGGING OPERATIONS PLAN: The Forest Officer shall approve a plan for felling, yarding, and landing logs (both Sawlogs and Other Material) in each harvest unit prior to the start of operations in that unit.
- I. SKID TRAIL LAYOUT AND YARDING PLAN: The Purchaser must follow these requirements along with those shown under VII.G. SPECIAL OPERATING REQUIREMENTS when developing a yarding plan for each unit. The Forest Officer may approve exceptions to these requirements in writing.

- 1. The Purchaser shall lay out skid trails and have locations approved by the Forest Officer prior to felling trees.
- 2. All skid trails will be located within the harvest unit boundaries.
- 3. Any constructed skid trails shall be completed and approved by the Forest Officer prior to felling timber.
- 4. Skid trails will not be located in draws and may only cross draws at locations flagged and approved by the Forest Officer.

J. LANDINGS AND LOG DECKS:

- The Purchaser shall construct landings at locations approved by the Forest Officer prior to felling timber.
- 2. Landings shall be kept to the minimum size necessary to allow the safe handling of logs. The Forest Officer must approve landing size.
- 3. All deck locations shall be approved by the Forest Officer prior to clearing or use. Decks shall be located so as to minimize the number of trees cut for construction of the deck area.

K. FELLING:

- 1. In each harvest unit, a felling pattern shall be used which conforms to the logging operations plan and causes the least damage to reserve trees and other resources.
- 2. Felling shall be systematic and continuous to avoid lost logs and minimize the number of skidding trips.
- 3. Trees shall be directionally felled away from features requiring protection within or adjacent to harvest units. Features requiring protection include streams, meadows, wet areas, and areas specified under Section VII.F. UNIT DESIGNATIONS. Wedges, jacks, winches, or other special equipment may be required to direct trees when felling. Trees falling into protection areas shall be winch-line skidded out of protected features. All necessary mitigation for damage caused by improper and/or non-approved felling into a protected zone is the responsibility of the Purchaser. The Forest Officer must approve all mitigation work.
- 4. <u>Traffic Control Required For Felling along Roads</u>: If felling operations occur along public roads, traffic guards with "STOP" signs shall be posted 500 feet in both directions from the units on open roads, providing a safety zone to warn oncoming traffic that logging operations are in progress. All traffic shall be stopped when tree felling is in progress. Traffic stops should not exceed 15 minutes at any one time. All saws will be shut off when traffic is moving through the safety zone. Wedges and/or jacks shall be used to ensure trees do not fall onto the roadway. In the event a tree falls across the roadway, all debris shall be removed immediately from the roadway and right-of-way. The Forest Officer must approve any extended road closures for logging operations.
- L. YARDING AND MECHANICAL FELLING: The Purchaser must follow these requirements during logging operations, along with those shown under Section VII.G. SPECIAL OPERATING REQUIREMENTS. The Forest Officer will determine when restrictive conditions apply and may approve exceptions to these requirements in writing.
 - 1. <u>Soil Compaction Restrictions</u>: In order to prevent soil resource impacts, ground-based mechanical felling and yarding are restricted to periods when one or more of the following conditions occur:
 - a. Soil moisture content at 4-inch depth less than 20% oven-dry weight.

- b. Minimum frost depth of 4 inches.
- c. Minimum snow depth of 18 inches, loose, or 12 inches, packed.
- 2. <u>Suspended Operations for Soil Compaction and Displacement</u>: The Purchaser will be required to restrict or suspend logging operations when soils are subject to compaction or displacement by heavy equipment.

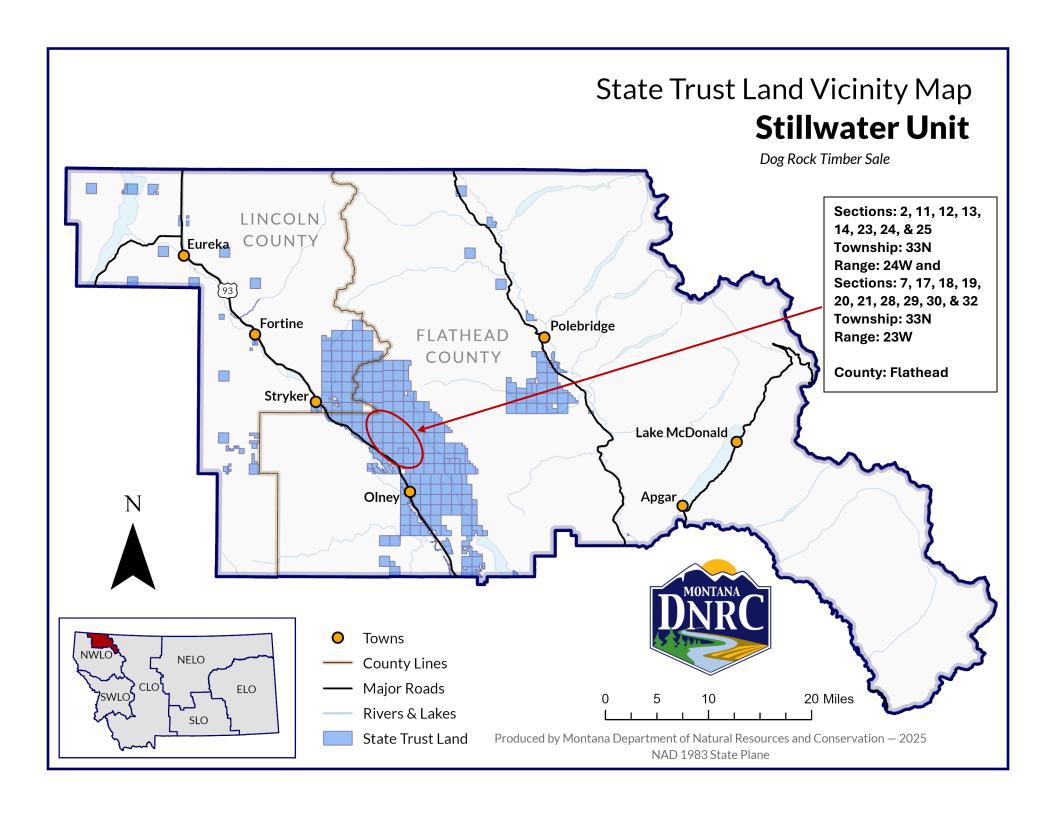
3. Equipment Restrictions:

- a. Equipment shall not be operated in areas designated as EQUIPMENT RESTRICTION ZONES, WETLAND MANAGEMENT ZONES or STREAMSIDE MANAGEMENT ZONES as shown in Section VII.D.6 and 7, unless authorized by this Contract or the Forest Officer.
- b. Equipment shall not be operated in soft soils, boggy areas or areas where skidding would cause excessive compaction and displacement.
- Any trees designated for harvest within such zones shall be winchline skidded to skid trails outside the zone.
- d. Slash will not be piled in or pushed into these zones.
- e. The Forest Officer must approve any designated crossings of restricted areas.
- 4. <u>Protection of Reserved Trees</u>: The Purchaser shall exercise reasonable care to prevent damage to trees reserved from cutting during logging operations.
- M. CLEAN-UP AND COMPLETION: The Purchaser must follow these requirements and those shown under Section VII.G. SPECIAL OPERATING REQUIREMENTS during logging operations. The Forest Officer will determine when restrictive conditions apply, specifications and dates to meet these requirements and may approve exceptions in writing. The Forest Officer must approve all designated work prior to the removal of the Purchaser's equipment.
 - 1. <u>Logging Debris Confined to Units</u>: All debris from logging shall be confined within the harvest unit boundaries. Any logging debris outside a harvest unit must be returned to within the unit boundary.
 - 2. <u>Skidding Debris on Roads</u>: The Purchaser shall remove logging slash remaining on any portion of a road cutbank or traveled way. Cut and fill slopes, ditches, or road surfaces damaged by skidding operations shall be restored to original conditions. Reseeding is required if vegetation is damaged by skidding.
 - 3. <u>Repair of Improvements</u>: Damage caused by the Purchaser's operations to culverts, waterlines, fences, roads, bridges, gates, cattleguards, signs, and all other improvements must be adequately repaired or replaced.

4. Erosion Control:

- a. The Purchaser shall construct slash and debris erosion barriers, dips, water bars or ditches in skid trails and landings as directed by the Forest Officer.
- b. The kinds and frequency of erosion control structures shall be adjusted to soil types, topography and climatic conditions as directed by the Forest Officer.
- c. The Purchaser is required to recontour any excavated skid trails and provide for effective erosion control in the trail location as directed by the Forest Officer.

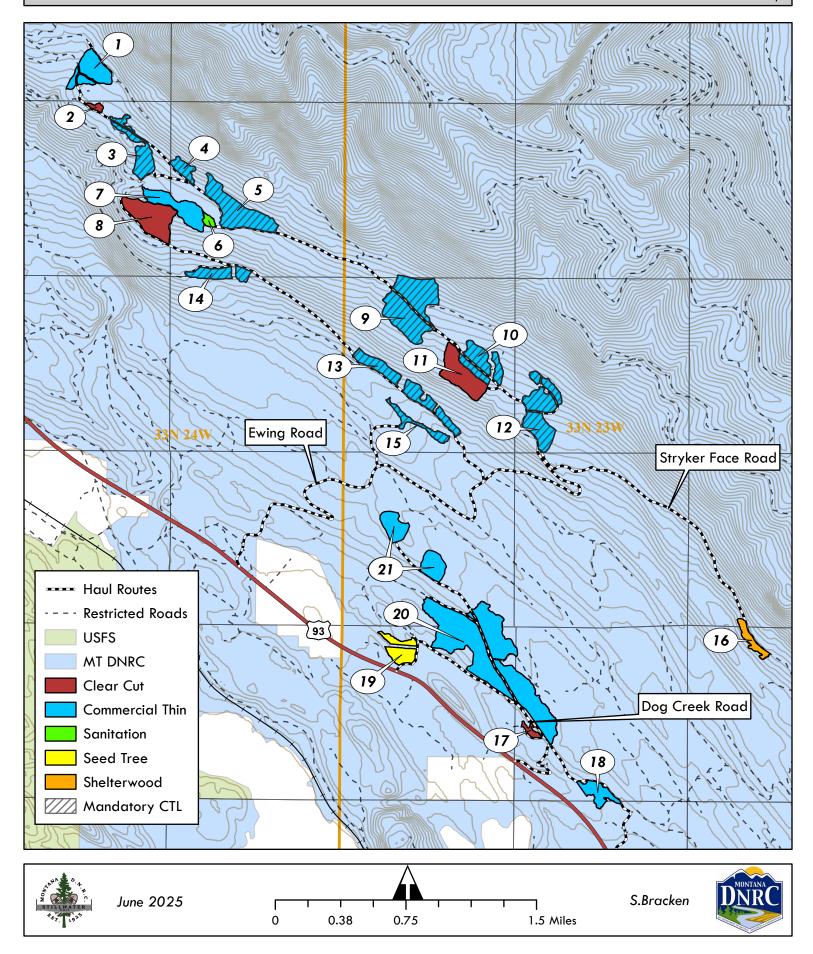
- d. Erosion control work shall commence as soon as skidding is completed on each skid trail or landing and must be kept current with unit operations.
- e. Erosion control work shall be completed and approved by the Forest Officer in unfinished units before operations cease for inactive periods including heavy winter snowfall, spring breakup and restricted dates.
- f. All erosion control work in each unit shall be completed prior to notification pursuant to Section VII.M.7. Acceptance of Completed Harvest Units.
- g. The Purchaser shall maintain erosion control structures in active sale areas throughout the contract period or extensions thereof.
- 5. <u>Landing and Decking Area Cleanup</u>: The Purchaser is required to pile logging residues on landings and log-decking areas. Proper equipment (e.g. brush blade, log loader) shall be used to ensure that no dirt is incorporated into the piles. Mechanical scarification of landing and decking areas may be required. Where logs have been decked on the downhill or fill side of a road, the Purchaser may be required to pile residue with a log loader or by hand. Residue piles shall be a minimum of 15 feet away from any live trees. Piles shall be located and constructed as directed by the Forest Officer.
- 6. <u>Systematic Harvest Unit Operations</u>: When harvest operations are begun on a designated harvest unit, the harvest operations on that unit shall be fully completed before cutting may begin on other harvest units.
- Acceptance of Completed Harvest Units: The Forest Officer will notify the Purchaser in writing
 when all contract requirements for each specified harvest unit or area have been met. After notice
 has been received, the Purchaser is not required to do additional work on the specified area
 except as provided in Section VII.A.4. FIRE KILL, INSECT INFESTATION, AND WIND
 THROWN.
- N. HAULING RESTRICTIONS: The Purchaser will be required to restrict or suspend hauling during periods when the compacted road surface would be damaged, as directed by the Forest Officer. Restrictions are required when hauling would cause rutting into the subgrade, or surfacing materials would be displaced, such as during heavy rainfall or spring breakup freezing and thawing cycles
- O. LOGGING OPERATIONS SAFETY SIGNS: Road signs warning of logging and road construction operations shall be posted 500 feet from the operations. When log hauling is in progress, warning signs shall be posted at major road junctions as directed by the Forest Officer. Warning signs must comply with specifications in the Manual on Uniform Traffic Control Devices.



Dog Rock Timber Sale T33N R24W Sections 2, 11-14 & 23-25

T33N R23W Sections 7, 17-21, 28-30 & 32

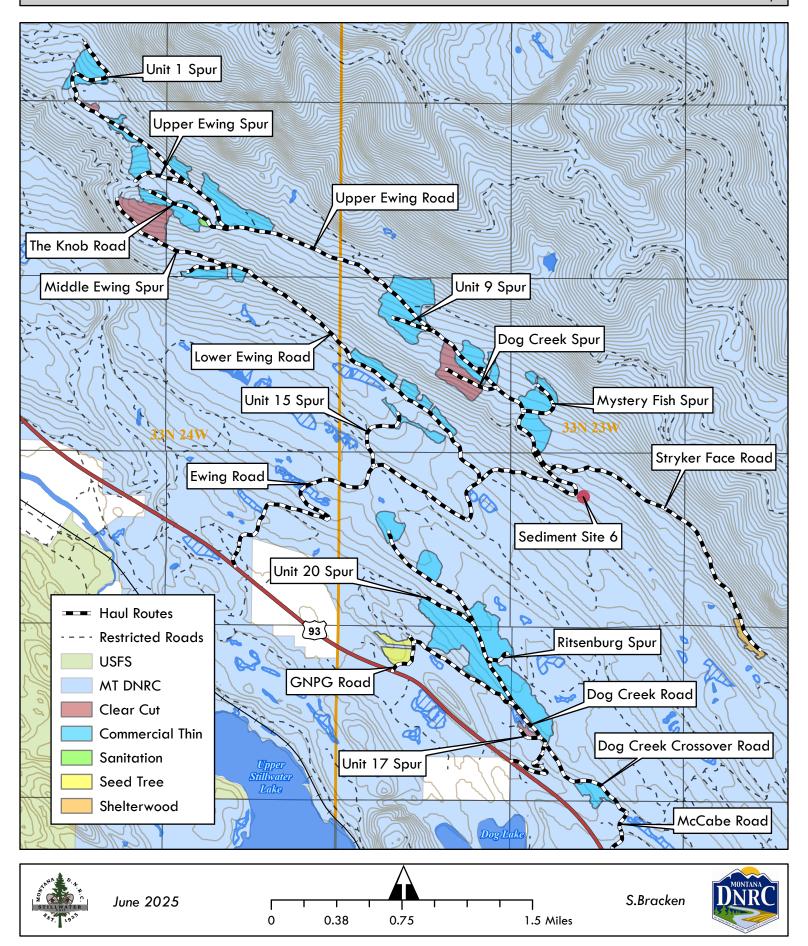
Attachment A: Overview Map



Dog Rock Timber Sale

T33N R24W Sections 2, 11-14 & 23-25 T33N R23W Sections 7, 17-21, 28-30 & 32

Attachment A: Roads Map



STATE OF MONTANA TIMBER SALE CONTRACT ATTACHMENT B

ROAD CONSTRUCTION, IMPROVEMENT	AND MAINTENANCE SPECIFICATIONS
SALE NAME	SALE NUMBER
Dog Rock	

I. CONSTRUCTION REQUIREMENTS

A. ROADS: The Purchaser is required to construct the roads shown in Table B-1 per the schedules stated, as shown on the Sale Map, Attachment A, and to the specifications and drawings in Attachment B and other applicable attachments.

	TABLE B	-1. ROAD CONST	RUCTION REQUIREMENTS	3		
Road Name or Number	Approximate Length (miles)	Type of Construction	Operation Period	Completion Date or Requirement		
McCabe Road	0.4	Maintenance	Any time soil is not too	Prior to hauling on		
Dog Creek Crossover Road	0.3	wet or dry to allow for shaping and compaction		these roads		
Unit 17 Spur	0.1		as determined by the Forest Officer			
Unit 20 Spur	0.3					
GNPG Road	0.2					
Stryker Face Road	1.8					
Ewing Road	3.5					
Lower Ewing Road	2.5	Maintenance	July 1 to March 31 and when conditions allow for	Prior to hauling on these roads		
Middle Ewing Spur	0.1	shaping and compaction			shaping and compaction	
Upper Ewing Road	3.6					
Mystery Fish Spur	0.4					
Unit 9 Spur	0.26					
The Knob Road	0.5					
Upper Ewing Spur	0.4					
Unit 1 Spur	0.4					
Unit 15 Spur	0.4					
Sediment Site 6	0.3	Road Reconstruction	July 1 to March 31 and when conditions allow for	Prior to hauling on these roads. All final		
Dog Creek Spur	0.3		shaping and compaction	road work requirements must be completed by August 14, 2027		
Ritsenburg Spur	0.2	Maintenance	June 16 to March 31 and	Prior to hauling on		
Dog Creek Road	2		when conditions allow for shaping and compaction	these roads		

B. ROAD CONSTRUCTION MATERIALS ESTIMATE:

TABLE B-2: MATERIALS FURNISHED AND INSTALLED BY THE PURCHASER:

The Purchaser is required to furnish the described material and install as required in Attachment B. Quantities are estimated, and the Attachment B requirements and specifications must be met regardless of the estimated amounts. All materials furnished by the Purchaser become the property of the State when installed. If, due to a minor design change, material is not installed, the material will be delivered to the nearest DNRC Unit Office and become property of the State upon delivery.

Corrugated Metal Pipe			Other Materials		
No.	Diameter	Length	Gauge	Amount	Description
3 1 2 1	18" 18" 24" 24"	22' 36' 26' 24'	16	4 3 1 1	18" CMP Band 24" CMP Band 36" CMP Band 42" CMP Band
1	36" 42"	50' 30'		4 4 1 100'	18' Conveyor belt rubber flapper 20' Conveyor belt rubber flapper 24' Conveyor belt rubber flapper 26' Conveyor belt rubber flapper 12' wide Geo-Textile fabric

TABLE B-2 (CONTINUED): SEED AND FERTILIZER REQUIREMENTS

The Purchaser is required to furnish and apply certified noxious weed-free, pure live seed mixture(s) and fertilizer in the amounts shown. Total pounds mixed seed are pure live seed, corrected for germination and purity. Germination and purity tests must have been conducted within the last 12 months prior to delivery. Purchaser shall furnish documentation of germination and purity tests to the Forest Officer prior to application.

	Certified Noxious Weed-Free Seed		Fertilizer
Pounds	Description	Pounds	Analysis (N-P-K)
194	Stillwater Blend 20% Annual Ryegrass 15% Slender Wheatgrass 25% Mountain Brome 15% Canada Bluegrass (Ruebens) 25% Hard Fescue (Durar)		N/A
20	Quick cover - Annual Rye		

TABLE B-2 (Continued): MATERIALS FURNISHED BY THE STATE:

The Purchaser is required to load and haul the described materials from the State source and install them as required in Attachment B.

Amo	unt	Description				
60-f	eet	Wood wattles				
		Fill Mate	erial			
Yards		Туре		Source Location	Delivery Location	
112 60 46.5		¾" Crushed Gravel Pit Run Talus		156 Pit 156 Pit Stryker Face Talus Site		

- **C. MINOR CHANGES:** The Forest Officer may require minor changes in location, design or specifications of road construction, improvement or maintenance requirements. Such changes must be within the scope of Attachment B requirements, and must not result in a significant (one thousand dollars [\$1,000.00] or greater) increase or decrease in cost as agreed to by the Forest Officer and the Purchaser.
- D. ADJUSTMENT FOR CHANGE IN REQUIREMENTS: If the State requests a change in road construction, improvement or maintenance specifications and the State in its discretion determines that the change would significantly increase the cost to the Purchaser, then the State must compensate the Purchaser. If the Purchaser requests a change in road construction, improvement or maintenance specifications and the State in its discretion determines that the change is acceptable and would significantly reduce the cost to the Purchaser, then the Purchaser must compensate the State. Compensation to the Purchaser will be in the form of stumpage credit. Compensation to the State will be in cash and will be billed as a supplement to the stumpage bill. All significant changes and compensation will be described in a contract modification.

II. RIGHT-OF-WAY CLEARING

A. CLEAR LIMIT DEFINITIONS are shown in Section IX. SPECIFICATIONS AND DRAWINGS.

B. CLEAR LIMIT MARKING:

- 1. Clear limits for existing roads are not marked.
- 2. Clear limits for all new construction are not marked.

C. CLEARING REQUIREMENTS:

- 1. Brush or trees on existing roads may be removed by sawing individual stems, cutting with a rotary brush cutter, uprooting with an excavator or other methods approved by the Forest Officer.
- 2. Inside the clear limits, but outside the road prism, trees and brush less than 20 feet tall and less than 3 inches in diameter that do not interfere with visibility or slope stability may be left as directed by the Forest Officer.
- All merchantable timber within the clear limits on all roads to be constructed under the terms of
 this Contract shall be cut to the specifications in the timber sale contract and skidded to decks, or
 decked with an excavator, prior to earth moving.

- 4. Clearing procedures shall protect residual stands, prevent incorporation of construction slash into the road prism, and protect roadside appearance outside clear limits.
- Grubbing will be limited to only those stumps and large roots within the road prism.

III. TREATMENT OF RIGHT-OF-WAY CLEARING MATERIALS

A. GENERAL TREATMENT REQUIREMENTS:

- Road construction slash more than 3 inches in diameter and 6 feet long and all concentrations of slash which would adversely affect the stability of the road shall be disposed of by the methods described in this section.
- 2. Slash and debris shall not be placed in drainages, roadside ditches or heads of culverts where the flow of water may be obstructed and shall be removed if placed therein.
- Lopping and scattering is defined as delimbing and sawing slash materials into lengths which will easily scatter to a maximum depth of 18 inches. Materials shall be scattered outside the road prism.
- 4. All slash to be disposed of by piling and burning shall be piled in burn bays at locations approved by the Forest Officer. Construction of piles will be of such size and at a sufficient distance from trees so that burning does not result in unnecessary damage to remaining trees. The Purchaser may be required to remove any trees damaged by burning operations at current contract rates. If burning is incomplete the residue must be disposed of as directed by the Forest Officer.

B. SIDESLOPES OF 35% OR LESS AND EXISTING ROADS:

- 1. Disposal will be by hand or machine piling for burning as directed by the Forest Officer.
- 2. Minor concentrations of slash or individual trees may be disposed of outside of the road prism by lopping and scattering as directed by the Forest Officer.
- 3. Tree stumps, large boulders and cull logs may be scattered outside the road right-of-way clear limits if approved in writing by the Forest Officer. Scattered stumps and boulders shall be placed away from trees and positioned so they will not roll.

C. SIDESLOPES OF 35% AND GREATER:

- 1. Treatment will be by excavator only, or by whole tree skidding to a decking area.
- 2. Where topography and timber types permit, piling for burning will be required as directed by the Forest Officer.
- 3. Where piling is not practical, treatment will be by windrowing at the toe of the fill. Slash will be windrowed on a trail constructed at the bottom of the right-of-way. Slash will be trampled and covered with organic surface material taken from the road prism as directed by the Forest Officer. Fill material may but up against but not cover or bury the windrow.
- 4. Minor concentrations of slash or individual trees may be disposed of by lopping and scattering as directed by the Forest Officer.
- 5. Tree stumps, large boulders and cull logs may be scattered outside the road right-of-way clear limits if approved in writing by the Forest Officer. Scattered stumps and boulders shall be placed away from trees and positioned so they will not roll.

IV. EXCAVATION AND EMBANKMENT OF FILL MATERIALS

A. EXCAVATION OF ROAD CROSS SECTION:

- 1. All grubbing and clearing shall be completed prior to the beginning of any excavation.
- 2. Surface organic layer and ash cap (surface reddish-brown soils with low gravel content) will be bladed to the side of the road and not incorporated into fills.
- 3. Wasted soils and organic layer will be shaped and spread to natural contours at locations approved by the Forest Officer.
- 4. When excavating on tangents and when balanced section construction is indicated, the following table will be used as a guideline to determine if sufficient excavation of road solid has occurred. Tolerances for road solid will be +1.0 feet and -0.5 feet.

TABLE B-3: EXCAVATION OF ROAD SOLID					
	ROAD WIDTH				
	12 FT.	14 FT.	16 FT.		
SIDESLOPE PERCENT	FEET	T OF ROAD SOL	.ID		
5	8.7	10.1	11.4		
10	8.8	10.2	11.5		
15	8.9	10.2	11.6		
20	8.3	9.5	10.8		
25	7.8	8.9	10.1		
30	7.6	8.9	10.1		
35	7.8	9.0	10.2		
40	8.1	9.2	10.6		
45	8.5	9.4	11.0		
50	8.8	9.8	11.6		
55	9.4	10.2	12.2		
60	10.1	11.7	13.3		
65 & over	12.0	14.0	16.0		

B. EMBANKMENT OF FILL MATERIALS:

- 1. Fill materials shall be unfrozen and free of snow and ice.
- 2. Fill materials shall be sorted to remove large rocks over 6 inches in diameter near the surface, which may interfere with surface blading.
- 3. Where possible all fill materials shall be applied in layers not to exceed 18 inches and each layer compacted with heavy equipment prior to application of the next layer.
- 4. If fill materials are too dry to allow compaction, the Forest Officer may require watering of layers followed by heavy equipment compaction.
- 5. Gravel used for surfacing shall be compacted into place using loaded dump trucks or a vibratory drum roller if specified in the Road Log.

C. PIT DEVELOPMENT AND RECLAMATION:

- 1. While the gravel pit or borrow area is open the surface of the pit shall be kept clean of noxious weeds. The Purchaser shall remove any weeds found growing at the pit by pulling, cultivating, covering with plastic, spraying, or other methods as directed by the Forest Officer.
- At completion of use, the pit area will be reshaped to as near natural contours as possible.
 Backslope ratios shall not exceed 3:1. Purchaser may be required to save topsoil, recontour the
 pit wall, and reclaim the disturbed portion of pit. All disturbed portions of the pit shall be grass
 seeded and fertilized.
- 3. At completion of use, talus slopes shall be backsloped and reshaped as directed by the Forest Officer. Grass seeding and fertilizing are required on any disturbed areas with exposed soil.

V. DRAINAGE STRUCTURES

- A. CORRUGATED METAL PIPE: The corrugated metal pipe required in Table B-2 will be installed as follows:
 - 1. All pipes shall be installed with a backhoe or excavator. The exact locations shall be determined and approved by the Forest Officer after the right-of-way is brushed and cleared.
 - 2. The excavation trench for culvert installation shall not be wider than necessary to permit satisfactory jointing and thorough tamping of the bedding material under and around the pipe.
 - The bedding surface shall be constructed to provide a firm foundation of uniform density through the entire length of the culvert and shall be slightly cambered along the centerline to correct for expected settlement.
 - 4. Where the bedding surface is not firm at the grade established, all unstable soil under the pipe and for a width of at least one diameter on each side of the pipe shall be removed and replaced with suitable selected material. Rock encountered in the bedding foundation will be removed to at least 12 inches below the bottom of the pipe and one diameter on each side. The final bedding area shall consist of fine, compacted granular material.
 - 5. Selected material shall be placed alongside the pipe for backfill in alternating layers not exceeding six inches in depth and thoroughly compacted by a hand held mechanical tamper (wacker packer). Special care must be taken to compact the fill thoroughly under the haunches of the pipe. Wacker packer compaction of backfill must be done for a horizontal distance on each side of the pipe equal to either one pipe diameter or to the outside limits of the trench, whichever is less. The depth of wacker packer compaction must extend at least to the top of the pipe.
 - 6. Selected native fill material will be free from rocks and hard earth clods larger than 3 inches in size. Frozen material, sod or a high percentage of organic matter is not permitted.
 - 7. The remainder of the fill above the top of the pipe may be compacted by tractor or rubber-tired roller. Fill is to extend above each pipe at least one-half the pipe diameter or a minimum of 12 inches, whichever is greater.
 - 8. The pipe shall be protected by adequate fill cover before heavy equipment is permitted to cross during roadway construction.
 - 9. Pipe that is damaged or improperly installed shall be repaired or replaced at Purchaser expense as directed by the Forest Officer.
 - 10. The Forest Officer must be contacted two days before any culvert installation and must be

present at any wet site culvert installation.

- 11. Riprap consisting of angular native rock of graded sizes 6 to 12 inches in diameter shall be installed to armor cuts and fills at both ends of all culverts installed in streams.
- 12. Energy dissipators consisting of native rock at least 24 inches in diameter with flat cross section shall be installed below culvert outlets in all perennial streams.

B. WET SITE CULVERT INSTALLATION REQUIREMENTS:

- The Forest Officer and the Purchaser shall agree upon a site specific sediment and erosion control plan that meets the requirements of all attachments and permits for each wet installation prior to any construction. Sediment and erosion control features may include any or all of the following at each site:
 - a. Filter Fabric Sediment Traps.
 - b. Sediment Control Fence.
 - c. Slash Filter Windrows.
 - d. Other measures as directed by Forest Officer.
- The Forest Officer and the Purchaser shall agree upon a site specific water diversion plan for each wet installation. Diversions may include: by-pass ditches, plastic lined by-pass ditches, plastic or metal pipe by-passes or other methods as directed by the Forest Officer. Pumping with discharge back into the channel is not permitted.
- 3. All wet site culvert installations require seeding of all disturbed areas with Quick Cover Mix the same day as installation is completed.
- 4. Any equipment operated within the high-water level of any stream or river channel shall be free of oil and fluid leaks and shall be clean of mud. Said equipment must be inspected by the Forest Officer and approved prior to any use.
- 5. Filter fabric sediment traps shall be installed prior to any construction activities on all wet culvert installations.

VI. ROAD MAINTENANCE

A. ROAD MAINTENANCE SCHEDULE AND REQUIREMENTS:

- 1. Road maintenance may be required on all native material or gravel roads designated for hauling purposes.
- 2. Road maintenance is defined to include all operations listed under Section VI. of Attachment B.
- 3. Initial maintenance of the roads shall be completed prior to use for logging and hauling.
- 4. The Forest Officer will determine the number, type, extent and frequency of intermediate maintenance operations. Road maintenance shall be repeated as needed to facilitate traffic and proper road drainage. The Purchaser will be advised of the time limitations to complete each maintenance project.
- 5. Final maintenance of the road system is required after all logging and hauling and prior to termination of the Timber Sale Contract.

B. SURFACE BLADING:

Description: Surface blading is keeping a native or aggregate roadbed in a condition to facilitate
traffic and provide proper drainage. It includes maintaining the crown or slope, shoulder, drainage dips, leadoff ditches, berms and turnouts, and provides a level of smoothness appropriate for
the amount and kind of traffic served and consistent with existing surfacing.

2. Specifications:

- a. The existing roadbeds, including turnouts, shall be bladed and shaped to reasonably conform to the designed cross section, and to eliminate ruts. Existing aggregate surfacing shall be bladed to conserve material and to prevent segregation of particle sizes. Rocks or other material remaining on the traveled way surface after final blading which are 4 inches or larger in size shall be removed from the road surface.
- Roadside cutslopes should not be undercut when cleaning ditches or removing road sloughs.
 Berms shall be removed from road shoulders when blading, except where berms are located as part of road design.
- c. Cutslopes that have been undercut may require backsloping, seeding and fertilizing.
- d. At intersections, the roadbeds at side roads shall be graded for a reasonable distance to assure proper blending of the two riding surfaces.
- e. Drainage dips and leadoff ditches shall be cleaned and graded to form their previous line and grade.
- f. Crowned roads should slope towards shoulders at least 2-5% (1/4-1/2 inch per foot road width) on native and gravel roads.
- g. At intersections where side roads enter the main road and the entering side road exceeds +3%, shallow ditching across the side road may be required to divert surface runoff and protect the main road's stability.
- h. The side-casting of road material into a stream, lake, wetland, or other body of water during road maintenance operations is prohibited in the SMZ.

C. DITCH CLEANING:

 Description: Ditch cleaning is removing and disposing of all foreign and slough material from roadside ditches to provide an unobstructed waterway conforming reasonably to previous line, grade and cross section.

2. Specifications:

- a. Slough material removed from the ditch may be blended into existing native road surface or shoulder only if it is the same material as the road surface. Slough material that is not suitable for blending should be disposed of as directed by the Forest Officer.
- b. Live vegetation and other organic material shall be removed and disposed of as directed by the Forest Officer.
- c. Unstable stumps, rocks, leaning trees or other debris shall be removed from the cutslope as directed by the Forest Officer.

D. CULVERT MAINTENANCE:

- 1. Description: Maintenance is work performed on inlets, outlets, catch basins, related channels, existing riprap, trash racks and any other facilities related to the drainage structure.
- 2. Specifications: Catch basins, outlets and energy dissipaters shall be kept functioning and cleaned of debris. Ends of culverts shall be kept straight and undamaged. Any washing along-side or underneath the culvert shall be repaired.

E. ROADSIDE VEGETATION MAINTENANCE:

1. Description: Maintenance of roadside vegetation includes removal of brush, tree growth, deadfall or other obstructions to passage, safety or visibility, as such obstructions are present or develop during the contract period.

2. Specifications:

- a. All trees that have fallen across the road shall be removed from the road prism unless otherwise agreed upon. Merchantable timber, if any, shall be cut in appropriate lengths and decked along the roadside in locations where traveled way width or sight distances will not be impaired.
- b. Brush and seedling trees that encroach upon the original road clear limits shall be removed when they reduce safe sight distances. Low shrubs and brush that do not restrict sight distance but provide cover and reduce erosion shall not be removed. Brush and seedling trees removed shall be disposed of as directed by the Forest Officer.
- **F. SNOWPLOWING:** If hauling occurs during the winter months, the Purchaser will be required to plow snow to the following guidelines on all State and private roads.
 - 1. Snow should be windrowed beyond the fill shoulder line.
 - 2. To protect the road surface, a 1 to 4-inch cushion of snow may be left on the road.
 - 3. At termination of use, the road will be prepared for spring runoff by opening drainage outlets through the plowed berms and by installing a snow-berm road closure.
 - 4. Tracked equipment will not be used to plow snow without prior written approval from the Forest Officer.
 - The side-casting of road material into a stream, lake, wetland, or other body of water during snow plowing operations is prohibited in the SMZ.
- **G. DUST ABATEMENT:** The Purchaser may be required to perform dust abatement on any of the roads designated as part of the haul route. Any dust abatement must conform to current standards of the owner of the road.
 - 1. If the Purchaser applies Magnesium Chloride or Calcium Chloride for dust abatement, the following specifications will be followed:
 - a. Dust abatement will be applied prior to summer hauling of logs.
 - b. Scarify road surface and grade to final grading specifications. A minimum of two inches of loose material is required on the road surface prior to applying the abatement.
 - c. The road surface will be moist to a minimum of depth of two inches or watered uniformly to

- moisten the road. If the road is watered, it will be done twelve to twenty-four hours prior to application of the abatement.
- d. The abatement will be applied at the rate of 0.25 gallons Magnesium Chloride per square yard or 0.20 gallons Calcium Chloride per square yard, followed immediately by another application at the same rate, for a total of 0.5 gallons Magnesium Chloride per square yard or 0.4 gallons Calcium Chloride per square yard.
- e. Chemical abatement will not be applied for 50 feet on either side of any stream crossing.
- f. Additional treatments using water may be required if deemed necessary by the Forest Officer.
- H. NOXIOUS WEED MANAGEMENT: The Purchaser may be required to perform noxious weed management on any of the roads designated as part of the haul route and on landings. Noxious weed management may include grass seeding, equipment washing and herbicide spraying.
 - 1. Grass seeding, if required, is shown in Section IX, GRASS SEEDING SPECIFICATIONS.
 - 2. All road construction equipment and equipment used in off-road logging activity must be pressure-washed by the Purchaser and inspected by the Forest Officer prior to entering the sale area. This cleaning will remove all dirt, plant parts, and material that may carry noxious weed seeds into the sale area. Other equipment and vehicles entering and leaving the sale area shall be cleaned prior to start up and kept reasonably clean during the course of operations. All subsequent move-ins of logging and construction equipment shall be treated the same as the initial move-in.
 - 3. If spraying is required in Attachment B, it shall be done by a commercial applicator licensed by the State of Montana or by personnel under the direct supervision of the licensed applicator. All herbicide applications shall follow EPA label requirements. Any weed control must comply with the current standards of the County Weed Board and as directed by the Forest Officer.

VII. ADDITIONAL REQUIREMENTS

- A. TEMPORARY SPUR ROAD SPECIFICATIONS: Temporary spur roads are defined as any roads constructed by the Purchaser to access a harvest unit or landing which is not an existing road and may not be shown as a required road to be constructed in Table B-1. All temporary roads will be constructed to the following specifications:
 - 1. Forest Officer shall approve the location prior to any construction.
 - Clearing and excavation shall be kept to the absolute minimum for safe truck hauling and to prevent erosion and water quality impacts. Some sidehill excavation, minor through cuts, ditching and turnpiking may be required.
 - 3. Temporary culverts may be required at ditch crossings, wet areas or other locations as directed by the Forest Officer.
 - 4. Temporary erosion control measures may be required to meet BMP standards on the road and/or the landing area while being used.
 - 5. At the completion of use the road shall be shaped back to natural contours, temporary culverts removed, erosion control measures installed, the disturbed areas grass seeded and the access closed to all vehicular traffic. The Forest Officer may require scarification or ripping of compacted landings and temporary spur roads.

- **B. GATES ON PRIVATE ROAD EASEMENTS:** When using private road easements to access the timber sale area, any gate encountered on private land will be left as prescribed by the easement grantor.
- C. GRID ROLLING ROAD PRISMS: N/A

D. TRAFFIC CONTROL AND WARNING SIGN SPECIFICATIONS:

- The Purchaser shall furnish, erect, and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs, and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of the public. Suitable warning signs shall be provided to properly control and direct traffic as requested by the Forest Officer.
- 2. All road barricades, warning signs, lights, temporary signals, flagger and pilot car operations and equipment, and other protective devices, shall conform with the specifications in the <u>Manual on Uniform Traffic Control Devices (MUTCD)</u>.

VIII. ROAD LOG AND SITE DESCRIPTIONS

Station	Work description	Materials or type of work	type or size	length or	Units
MM	McCabe Road	1) 10 11 11 11 11 11 11 1	<u> </u>		
	This is a 14- to 16-foot-wide native surface road that begins at the junction required; final blading may be required as directed by Forest Officer.	on with Highway 93	3N (MM 147.8	3). Initial bladir	ng is not
	Final Purchaser-do Road Maintenance				
	Final Blading	blading	final	0.4	miles
ММ	Dog Creek Crossove	r Road			
	This is a 14- to 16-foot-wide native surface road that begins at MM 0.4 o blading may be required as directed by Forest Officer.	n the McCabe Roa	nd. Initial blad	ing is not requ	ired; final
	Final Purchaser-do Road Maintenance				
	Final Blading	blading	final	0.3	miles
MM	Dog Creek Road	d			
	This is a 14- to 16-foot-wide native surface road that begins at the junction Creek Lodge. Minimal maintenance will be required as described below.	• •	3N (MM 148.7	7) just north of	Dog
0-2.0 mile	Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW.		initial	2	miles
	Final Purchaser-do Road Maintenance			amount B). Initial bladin 0.4 ing is not requi 0.3 7) just north of	
	Final Blading	blading	final	2	miles
	Grass Seed (Stillwater Blend)	grass seed	final	72	pounds

Work description	Materials or	type or	_	Units		
·	type of work	Size	amount Creek Road. Milading and gra 0.1 0.1 2	Ullits		
This is a 14- to 16-foot-wide native surface road that begins at approximation						
Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW.		initial	0.1	miles		
	blading	final	0.1	miles		
			***	pounds		
Tank trap road at junction with Dog Creek Road	earthwork	illiai	1	hours		
Ritsenburg Spur						
This is a 14- to 16-foot-wide native surface road that begins at approximal maintenance will be required as described below.	ately MM 1 on the	Dog Creek R	oad. Minimal			
Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW.		initial	0.2	miles		
Final Purchaser-do Road Maintenance			Creek Road. Milblading and grass 0.1 0.1 4 2 Road. Minimal 0.2 8			
Final Blading	blading	final	0.2	miles		
Grass Seed (Stillwater Blend)	grass seed	final	8	pounds		
GNPG Road						
This is a 14- to 16-foot-wide native surface road that begins at the junction with Highway 93N (MM 149.5). Initial blading is not required; final blading may be required as directed by Forest Officer.						
First Duncheses de Dand Meinten						
	hlading	final	0.2	miles		
Fillal Blauling	Diading	IIIIai	0.2	1111103		
	maintenance will be required as described below. Road must be closed directed by Forest Officer. Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW. Final Purchaser-do Road Maintenance Final Blading Grass Seed (Stillwater Blend) Tank trap road at junction with Dog Creek Road Ritsenburg Spu This is a 14- to 16-foot-wide native surface road that begins at approxim maintenance will be required as described below. Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW. Final Purchaser-do Road Maintenance Final Blading Grass Seed (Stillwater Blend) GNPG Road This is a 14- to 16-foot-wide native surface road that begins at the junction of the purchaser state state of the purchaser state of the purchaser state of the purch	Work description type of work Unit 17 Spur This is a 14- to 16-foot-wide native surface road that begins at approximately MM 0.5 mile maintenance will be required as described below. Road must be closed with a tank trap fol directed by Forest Officer. Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW. Final Purchaser-do Road Maintenance Final Blading blading Grass Seed (Stillwater Blend) grass seed Tank trap road at junction with Dog Creek Road earthwork Ritsenburg Spur This is a 14- to 16-foot-wide native surface road that begins at approximately MM 1 on the maintenance will be required as described below. Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW. Final Purchaser-do Road Maintenance Final Blading blading Grass Seed (Stillwater Blend) grass seed GNPG Road This is a 14- to 16-foot-wide native surface road that begins at the junction with Highway 93 required; final blading may be required as directed by Forest Officer. Final Purchaser-do Road Maintenance	Work description Unit 17 Spur This is a 14- to 16-foot-wide native surface road that begins at approximately MM 0.5 mile on the Dog C maintenance will be required as described below. Road must be closed with a tank trap following final bid directed by Forest Officer. Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW. Final Purchaser-do Road Maintenance Final Blading blading final Grass Seed (Stillwater Blend) grass seed final Tank trap road at junction with Dog Creek Road earthwork Ritsenburg Spur This is a 14- to 16-foot-wide native surface road that begins at approximately MM 1 on the Dog Creek R maintenance will be required as described below. Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW. Final Purchaser-do Road Maintenance Final Blading blading final Grass Seed (Stillwater Blend) grass seed final GNPG Road This is a 14- to 16-foot-wide native surface road that begins at the junction with Highway 93N (MM 149.5 required; final blading may be required as directed by Forest Officer. Final Purchaser-do Road Maintenance	Work description Unit 17 Spur This is a 14- to 16-foot-wide native surface road that begins at approximately MM 0.5 mile on the Dog Creek Road. Mi maintenance will be required as described below. Road must be closed with a tank trap following final blading and gra directed by Forest Officer. Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW. Final Purchaser-do Road Maintenance Final Blading blading final 0.1 Grass Seed (Stillwater Blend) grass seed final 4 Tank trap road at junction with Dog Creek Road earthwork 2 Ritsenburg Spur This is a 14- to 16-foot-wide native surface road that begins at approximately MM 1 on the Dog Creek Road. Minimal maintenance will be required as described below. Initial blading. Need to clean/remove lodgepole debris on road surface. Deck any merchantable trees; pile remaining slash along ROW. Final Purchaser-do Road Maintenance Final Blading blading final 0.2 Grass Seed (Stillwater Blend) grass seed final 8 GNPG Road This is a 14- to 16-foot-wide native surface road that begins at the junction with Highway 93N (MM 149.5). Initial bladir required; final blading may be required as directed by Forest Officer. Final Purchaser-do Road Maintenance		

Station	Work description	Materials or type of work	type or size	length or amount	Units
MM	Ewing Road				
	This is a 14 to 16 foot wide native surface road that begins at the junction will be required as described below. Specific work locations will be coord				ntenance
0.97	CMP, clean inlet and outlet. Add talus armoring to outlet, local barrow	earthwork	excavator	1	hours
1.17	Drain dip, make functional, smooth out rollover on CMP	blading	initial	0.5	hours
2.53	Clean flapper	blading	initial	0.5	hours
2.59	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
2.62	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
2.74	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
2.87	CMP, pry open inlet with excavator bucket. Grub brush and rocks from inlet, clean out debris, add armor to inlet, local barrow.	earthwork	excavator	1	hours
2.91	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
2.96	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
2.00	CMP, pry open inlet with excavator bucket. Grub brush and rocks from				
3.02	inlet, clean out debris, add armor to inlet, local barrow.	earthwork	excavator	1	hours
3.19	CMP, clean inlet and outlet	earthwork	excavator	0.5	hours
3.32	CMP, clean inlet and outlet	earthwork	excavator	0.5	hours
3.37	Remove wooden drain structure, add drain dip	blading	initial	1	hours
3.55	End of Road				
0-3.5				_	
mile	Initial blading	blading	initial	3.5	miles
0-3.5 mile	Ditch cleaning. Track excavator up road and clean debris from roadside and ditches.	earthwork	initial	3.5	miles
	Final Purchaser-do Road Maintenance				
	Final Blading	blading	final	3.5	miles
MM	Stryker Face Roa	ad	-		
	This is a 14 to 16 foot wide native surface road that begins at MM 3.5 on as described below.	the Ewing Road.	Minimal maint	enance will be	required
0.0	Segment Start				
-		earthwork	excavator	0.5	hours
0.22	Add armor to CMP inlet	earthwork	dumptruck	1.5	hours
¥. 		talus	Jampadon	0.5	yards
0.33	Pull ditch for approximately 100-feet to the south	earthwork	excavator	1	hours
	· · · · · · · · · · · · · · · · · · ·	Gartinvoin	ONOGVATOR	1	HOULD
0.41	Improve drain dip, make functional, add wattle to lead out	wattle	wood	20	feet
0.49	Clean flapper, dig leadout, make functional	earthwork	excavator	0.5	hours
0.70	Grown mapper, any readout, mane famountain	earthwork	excavator	1	hours
1.15	Clean ditch for 60-feet to the north of station, add talus to inlet	talus	excavator	1	yards
1.85	End of road	taido		1	yarao
0.0-1.8	Initial blading	Blading	initial	1.8	miles
0.0 1.0	THIS SHAIR	Diadilig	iiiliuui	1.0	1111100
	Final Purchaser-do Road Maintenance				

Station	Work description	Materials or type of work	type or size	length or amount	Units			
MM	Unit 15 Spur							
	The Unit 15 Spur is a 12-14-foot wide native surface road that begins at moderate brushing towards the end of the road segment. Drain dips nee				vill require			
0.0	Begin road segment	blading		0.42	miles			
0.1	Improve drain dip, dig lead out	3						
0.16	Improve drain dip, dig lead out							
0.21	Improve drain dip, dig lead out							
0.25	Improve drain dip, dig lead out							
0.21	Begin brushing of road prism for 620-feet to end of segment	brushing	excavator	2	hours			
0.35	Improve drain dip, dig lead out							
0.42	End of brushing. End of road.							
	Final Purchaser-do Road Maintenance							
	Final Blading	blading	final	0.42	miles			
	Grass Seed (Stillwater Blend)	grass seed	final	15	pounds			
MM	Mystery Fish Spur							
	Mystery Fish Spur is a 14 to 16-foot wide native surface road that begins This road will require multiple drainage improvements. Road must be clo				•			
	as instructed by Forest Officer.				grass seed			
0.0	as instructed by Forest Officer.			an blade and t	grass seeu			
0.0	as instructed by Forest Officer. Begin segment							
0.01	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism	earthwork	excavator	1	hours			
0.01 0.15	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout	earthwork earthwork	excavator excavator		hours hours			
0.01 0.15 0.23	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout	earthwork earthwork earthwork	excavator excavator excavator	1 1 1	hours hours hours			
0.01 0.15 0.23 0.27	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism	earthwork earthwork earthwork	excavator excavator excavator excavator	1 1 1 0.5	hours hours hours hours			
0.01 0.15 0.23	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout	earthwork earthwork earthwork earthwork	excavator excavator excavator excavator excavator	1 1 1 0.5 0.5	hours hours hours hours hours			
0.01 0.15 0.23 0.27 0.29	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism Add drain dip	earthwork earthwork earthwork	excavator excavator excavator excavator excavator excavator excavator	1 1 1 0.5	hours hours hours hours			
0.01 0.15 0.23 0.27	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism	earthwork earthwork earthwork earthwork	excavator excavator excavator excavator excavator	1 1 1 0.5 0.5	hours hours hours hours hours			
0.01 0.15 0.23 0.27 0.29	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism Add drain dip	earthwork earthwork earthwork earthwork earthwork earthwork	excavator excavator excavator excavator excavator excavator dump	1 1 1 0.5 0.5	hours hours hours hours hours hours			
0.01 0.15 0.23 0.27 0.29	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism Add drain dip	earthwork earthwork earthwork earthwork earthwork earthwork	excavator excavator excavator excavator excavator excavator dump	1 1 1 0.5 0.5 2	hours hours hours hours hours hours hours			
0.01 0.15 0.23 0.27 0.29	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism Add drain dip Construct armored drive-through drain dip and dig leadout	earthwork earthwork earthwork earthwork earthwork earthwork earthwork talus	excavator excavator excavator excavator excavator excavator dump truck	1 1 0.5 0.5 2 1.5	hours hours hours hours hours hours cu. yds.			
0.01 0.15 0.23 0.27 0.29 0.31	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism Add drain dip Construct armored drive-through drain dip and dig leadout Begin pulling ditch on cutslope	earthwork earthwork earthwork earthwork earthwork earthwork earthwork talus	excavator excavator excavator excavator excavator excavator dump truck	1 1 0.5 0.5 2 1.5	hours hours hours hours hours hours cu. yds.			
0.01 0.15 0.23 0.27 0.29 0.31	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism Add drain dip Construct armored drive-through drain dip and dig leadout Begin pulling ditch on cutslope Stop pulling ditch	earthwork earthwork earthwork earthwork earthwork earthwork earthwork talus earthwork	excavator excavator excavator excavator excavator excavator dump truck excavator	1 1 0.5 0.5 2 1.5 5	hours hours hours hours hours hours hours hours hours			
0.01 0.15 0.23 0.27 0.29 0.31 0.31 0.35 0.38	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism Add drain dip Construct armored drive-through drain dip and dig leadout Begin pulling ditch on cutslope Stop pulling ditch Remove earth berm, add drain dip and dig leadout End of Road	earthwork earthwork earthwork earthwork earthwork earthwork earthwork talus earthwork	excavator excavator excavator excavator excavator excavator dump truck excavator	1 1 0.5 0.5 2 1.5 5	hours hours hours hours hours hours hours hours hours			
0.01 0.15 0.23 0.27 0.29 0.31 0.31 0.35 0.38	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism Add drain dip Construct armored drive-through drain dip and dig leadout Begin pulling ditch on cutslope Stop pulling ditch Remove earth berm, add drain dip and dig leadout End of Road Final Purchaser-do Road Maintenance	earthwork earthwork earthwork earthwork earthwork earthwork earthwork talus earthwork earthwork	excavator excavator excavator excavator excavator excavator dump truck excavator	1 1 0.5 0.5 0.5 2 1.5 5 1	hours			
0.01 0.15 0.23 0.27 0.29 0.31 0.31 0.35 0.38	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism Add drain dip Construct armored drive-through drain dip and dig leadout Begin pulling ditch on cutslope Stop pulling ditch Remove earth berm, add drain dip and dig leadout End of Road Final Purchaser-do Road Maintenance Final Blading	earthwork earthwork earthwork earthwork earthwork earthwork earthwork talus earthwork earthwork	excavator excavator excavator excavator excavator excavator dump truck excavator excavator	1 1 0.5 0.5 0.5 2 1.5 5 1	hours hours hours hours hours hours hours hours miles			
0.01 0.15 0.23 0.27 0.29 0.31 0.31 0.35 0.38	as instructed by Forest Officer. Begin segment Smooth out berm, remove tank trap and improve prism Remove water bar, add drain dip and dig leadout Remove water bar, add drain dip and dig leadout Remove water bar, reshape road prism Add drain dip Construct armored drive-through drain dip and dig leadout Begin pulling ditch on cutslope Stop pulling ditch Remove earth berm, add drain dip and dig leadout End of Road Final Purchaser-do Road Maintenance	earthwork earthwork earthwork earthwork earthwork earthwork earthwork talus earthwork earthwork	excavator excavator excavator excavator excavator excavator dump truck excavator	1 1 0.5 0.5 0.5 2 1.5 5 1	hours			

Station	Work description	Materials or type of work	type or size	length or amount	Units
MM	Lower Ewing R	oad			
	The Lower Ewing Road is a 14-16-foot wide native surface road that be will require initial blading and the site-specific improvements listed below	•	the Ewing Roa	ad. The road s	egment
0.0	Designated assument				
0.0	Begin road segment	CMP	18"	36	feet
	CMP - Remove existing CMP and install new 18" x 36' ditch relief	CMP Band	18"	1	each
	CMP	earthwork	excavator	2	hours
0.05	-bed in crushed gravel	gravel	3/4"	10	cu. yds.
0.00	-armor inlet and outlet with talus	talus	0/1	5	cu. yds.
	-construct and armor ditch block	taido	dump		ou. yuo.
	-construct roll-over for surface drainage	earthwork	truck	3	hours
		rubber flapper		18	feet
0.23	Install 18-foot rubber flapper, bed in 3/4" crushed gravel	gravel	3/4"	2	yards
	-	earthwork	excavator	1	hours
0.3	Add energy dissipators to CMP outlet, local borrow	earthwork	excavator	0.5	hours
0.41	Redefine drain dip, make functional, dig leadout				
		rubber flapper		20	feet
0.42	Install 20-foot flapper, bed in 3/4" crushed gravel	gravel	3/4"	2	yards
		earthwork	excavator	1	hours
0.42	Clean CMP outlet and add talus armor to oulet	earthwork	excavator	0.5	hours
0.42	Clean Civir outlet and add talus armor to outet	talus		1	yard
0.44	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
0.56	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
0.59	Clean CMP inlet and outlet, add talus armor to inlet	earthwork		0.5	hours
0.00	Cicari Givii linet and outlet, and tales armor to mict	talus		0.5	yards
0.77	Clean CMP inlet and outlet, add talus armor to inlet	earthwork	excavator	0.5	hours
0.11	Cicari Givii linet and outlet, and tales armor to mict	talus		0.5	yards
		rubber flapper		20	feet
0.93	Install 20-foot flapper, bed in 3/4" crushed gravel	gravel	3/4"	2	yards
		earthwork	excavator	1	hours
1	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
1.13	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
		rubber flapper		20	feet
1.16	Install 20-foot flapper, bed in 3/4" crushed gravel	gravel	3/4"	2	yards
		earthwork	excavator	1	hours
1.17	Clean CMP inlet and outlet, add talus armor to outlet	earthwork		1	hours
	,	talus		0.5	yards
1.23	Grub brush and clean CMP inlet and outlet, add talus armor to inlet	earthwork	excavator	1	hours
	,	talus		0.5	yards
1.28	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
1.34	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
1.39	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
1.44	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
1 10	Install 24 feet flamon had in 2/4" amaked arrays	rubber flapper	0/4"	24	feet
1.49	Install 24-foot flapper, bed in 3/4" crushed gravel	gravel	3/4"	2	yards
1 5 4	Open tan water diverter, cleanant and make functional	earthwork	excavator	1	hours
1.54	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours

1.58	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
		rubber flapper	Oxfour ator	18	feet
1.63	Install 18-foot flapper, bed in 3/4" crushed gravel	gravel	3/4"	2	yards
		earthwork	excavator	1	hours
1.66	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
1.71	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
		CMP	24"	26	feet
	CMD Wet Install Democra and install new 24" v 261 CMD	CMP Band	24"	1	each
	CMP- Wet Install. Remove and install new 24" x 26' CMP -bed in crushed gravel	earthwork	excavator	4	hours
	-armor inlet and outlet with talus	gravel	3/4"	10	cu. yds.
1.8	-construct and armor ditch block	talus		5	cu. yds.
	-construct roll-over for surface drainage		dump		
	-sow quick cover grass seed within 1 day of installation	earthwork	truck	1.5	hours
			quick	-	
4.00	Occident the first and and a first and	grass seed	cover	5	pounds
1.82	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
1.87	Build drive through drain dip before CMP crossing, direct flow away from crossing.				
1.9	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
1.96	Clean CMP inlet	earthwork	excavator	0.5	hours
1.98	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
2.05	Open top water diverter, cleanout and make functional	earthwork	excavator	1	hours
2.07	Reshape drain dip, make functional				
2.19	Junction with Middle Ewing Spur				
2.52	End road segment				
	Initial blading	blading	initial	2.52	miles
	Final Purchaser-do Road Maintenance				
	Final Blading	blading	final	2.52	miles
MM	Middle Ewing Sp	ur			
	This is a 14 to 16 foot wide native surface road that begins at MM 2.19 or blading will be required.	n the Lower Ewing	g Road. Minor	brushing and	d spot
	June 19 19 19 19 19 19 19 19 19 19 19 19 19				
	Begin road segment.	blading		0.18	miles
0.0	Minor brushing of vegetation and small diameter blowdown.	earthwork	excavator	1	hours
0.3	Reshape road prism for approximately 60-feet	Garanvon	Oxfour ator		110010
	Treestage road promiter approximately or lock				
0.18	End road segment				
		,		A 15	
	Initial blading	blading	initial	0.18	miles
	Final Purchaser-do Road Maintenance				
	Final Blading	blading	final	0.18	miles
	Grass Seed (Stillwater Blend)	grass seed	final	7	pounds

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Station	Work description	Materials or type of work	type or size	length or amount	Units
MM	Upper Ewing Ro	ad			
	This is a 14 to 16 foot wide native surface road that begins MM 3.5 on the required as described below. Maintence Level 1 This road will require the following maintenance before hauling: -minor blading and spot blading -CMP cleaning inlet and outlet -minor ditch pulling and cleaning -final blading after hauling is complete Specific work locations will be coordinated and flagged by Forest Officer		ad. Level 1 Ma	intenance will	be
0.0	Begin road segment				
0.0	Dogin road segment	rubber flapper		26	feet
		gravel	3/4"	2	yards
0.14	Install 26-foot flapper, bed in 3/4" crushed gravel	earthwork	excavator	1	hours
			dump		
		earthwork	truck	4	hours
		rubber flapper		24	feet
0.18	Install 24-foot flapper, bed in 3/4" crushed gravel	gravel	3/4"	2	yards
		earthwork	excavator	1	hours
0.19	Junction with Mystery Fish Spur				
0.29	Add energy dissipation rocks to CMP outlet, local barrow	earthwork		0.5	hour
		earthwork	excavator	1	hours
0.4	Remove flapper, install drain dip and lead out	wattle	wood	20	feet
0.47	Clean inlet and outlet, add rock armor to CMP inlet, improve drain drip and make functional	earthwork	excavator	1	hours
		talus		1	yards
		earthwork	excavator	0.5	hours
0.48	Improve drain dip and dig lead out. Clean ditch for 30-feet and add talus.				
	taius.	talus		0.5	yards
		rubber flapper		20	feet
0.54	Install 20- foot flapper, bed in 3/4" crushed gravel	gravel	3/4"	2	yards
		earthwork	excavator	1	hours
0.61	Clean flapper, establish lead out	earthwork	excavator	0.5	hours
3.01	S.S	Cartilwork	CAGGVAIOI	0.5	110013
0.65	Replace flapper with drain dip and add wattle to outlet	wattle	wood	20	feet
0.70	A111 - B - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	earthwork		0.5	hours
0.73	Add drain dip, tank trap old skid trail access to the west	232		2.0	
0.75	Add talus to CMP outlet, local barrow	earthwork	excavator	0.5	hours
		earthwork	excavator	1	hours
0.85	Clean CMP inlet and outlet, add talus armor	talus	GAGGVAIOI	0.5	yards
0.9	Junction with Unit 9 Spur	เตเนอ		0.5	yarus
0.9	Outlotton with Onit 3 Opti				

	Site 2 stream work must be completed as described in	CMP	36	50	feet
	Attachment E by August 14, 2027.	CMP Band	36	1	each
	CMP- Wet install. Remove and install new 36" x 50' CMP	earthwork	excavator	4	hours
	-bed in crushed gravel	gravel	3/4"	10	cu. yds.
0.9	-armor inlet and outlet with talus	talus	3/4	5	cu. yds.
0.9	-construct and armor ditch block	laius	quick	J	cu. yus.
	-construct roll-over for surface drainage	grass seed	cover	5	pounds
	-sow quick cover grass seed within 1 day of installation	<u>g. a.c. ccc a</u>			poundo
	A Hydrologist or Forest Officer must be present during CMP installation. Please provide 3-days notice .	earthwork	dump truck	1.5	hours
0.95	Add drain dip	Gartiiwork	truck	1.0	Hours
1	CMP clean inlet and outlet	earthwork	excavator	0.5	hours
1.23	Add drain dip	Cartilwork	CACCAVATO	0.0	Hours
1.26	Cleanout existing flapper, make functional	earthwork	excavator	0.5	hours
1.37	CMP clean inlet and outlet, grub brush in ditch for 50-feet downhill	earthwork	excavator	1.5	hours
1.59	Reestablish drain dip and make functional				
1.62	Clean CMP inlet and outlet	earthwork		0.5	hours
1.65	Clean and pull ditch for 75-feet to the south	earthwork		1	hours
1.00	Clear and pair diterrior 75 leet to the South	CMP	24"	24	feet
		CMP Band	24"		
	CMP- Install new 24" x 24' CMP			1	each
1.72	-bed in crushed gravel -armor inlet and outlet with talus	earthwork	excavator	4	hours
1.72	-construct and armor ditch block	gravel	3/4"	10	cu. yds.
	-construct roll-over for surface drainage.	talus		5	cu. yds.
		o orthugarle	dump	1 5	houre
1.97	Class CMD inlet and sutlet add analysis discinators level however	earthwork	truck	1.5	hours
	Clean CMP inlet and outlet, add energy dissipators, local barrow	earthwork	excavator	1	hours
2.2	Clean CMP inlet and outlet	earthwork	excavator	0.5	hours
2.28	Junction with Knob Road				
2.37	Clean CMP inlet and outlet	earthwork	excavator	0.5	hours
		CMP	24"	26	feet
	CMP- Install new 24" x 26' CMP	CMP Band	24"	1	each
	-bed in crushed gravel	earthwork	excavator	4	hours
2.54	-armor inlet and outlet with talus	gravel	3/4"	10	cu. yds.
	-construct and armor ditch block -construct roll-over for surface drainage.	talus		5	cu. yds.
	-construct foil-over for surface drainage.		dump		
		earthwork	truck	1.5	hours
2.68	Junction with Upper Ewing Spur				
2.69	Clean CMP inlet	earthwork	excavator	0.5	hours
3.27	Add drain dip and dig lead out west of existing flapper				.
3.3	Pull back road fill and rearmor, add slash filter on inlet and outlet for	earthwork	excavator	2	hours
	30-feet	slash windrow		30	feet

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		CMP	42"	30	feet
	CMP- Wet install. Remove existing CMP and install new 42" x 30'	CMP Band	42"	1	each
	CMP		excavator	4	hours
	-bed in crushed gravel	earthwork gravel	3/4"	10	cu. yds.
3.31	-armor inlet and outlet with talus	talus		5	cu. yds.
	-construct and armor ditch block		quick	-	, , ,
	-construct roll-over for surface drainage	grass seed	cover	5	pounds
	-sow quick cover grass seed within 1 day of installation		dump		
		earthwork	truck	1.5	hours
3.32	Add drain dip and dig lead out to the west				
3.52	Decommission jeep trail, add earth berm	earthwork	excavator	1	hours
3.68	End of road				
	Light Light	11 8		0.00	.,
	Initial blading	blading	initial	3.68	miles
	Final Purchaser-do Road Maintenance				
	Final Purchaser-do Road Maintenance Final Blading	blading	final	3.68	miles
	Fillal blauling	biading	IIIIai	3.00	IIIIES
ММ	Unit 1 Spur				
101111	This is a 14 to 16 foot wide native surface road that begins at MM 3.66 o	on the Upper Ewing	Road Level	1 Maintenano	ce will be
	required as described below.	шо орро: =	,		20
0.0-0.21	Initial blading	blading	initial	0.21	miles
0.0	Begin road segment				
	Landalla Caracteria CA Caracteria	rubber flapper		48	feet
	Installation of two 24-foot flappers, bedded in 3/4" crushed gravel, at Forest Officers discretion	gravel	3/4"	4	yards
	1 diest Officers discretion	earthwork	excavator	2	hours
0.21	End haul route segment				
	Begin brushing old road prism to the north towards sediment				
	correction Site 1.				
0.21	Site 1 rehabilitation work must be completed as described in				
	Attachment E by August 14, 2027. A Hydrologist or Forest Officer must be present during CMP				
	installation. Please provide 3-days notice.	brushing	excavator	6	hours
0.41	End brushing	braoming	ολοαναιοι		nouro
	Rehabilitate native crossing as directed by Forest Officer or project				
0.41	Hydrologist	earthwork	excavator	6	hours
0.11	Cut notches in existing ford logs to allow water flow.	laborer	- CALGUARDI	2	hours
	The state of the s				
	Final Purchaser-do Road Maintenance				
	Final Blading	blading	final	0.21	miles
	i iliai biading				
	Grass seed (Stillwater Blend)	grass seed	final	7	pounds
	ă e		final excavator	7 1	pounds hours

Station	Work description	Materials or	type or	length or	Units
MM	Work description Upper Ewing Spi	type of work	size	amount	Units
ININ	This is a 14 to 16 foot wide native surface road that begins at MM 2.68 on the Upper Ewing Road. Minimal maintenance will be required as described below.				
0-0.33	Initial blading and clear debris from road surface.		initial	0.33	miles
	Final Purchaser-do Road Maintenance				
	Final Blading	blading	final	0.33	miles
	Grass seed (Stillwater Blend)	grass seed	final	14	pounds
MM	The Knob Road			•	
	This is a 14 to 16 foot wide native surface road that begins at MM 2.28 on the Upper Ewing Road. Minimal maintenance will be required as described below.				
0-0.5	Initial blading, heavy excavator brushing of brush and saplings from road prism.		initial	0.5	miles
	Final Purchaser-do Road Maintenance				
·	Final Blading	blading	final	0.5	miles
-	Grass seed (Stillwater Blend)	grass seed	final	18	pounds

2 1.11		Materials or	type or	length or		
Station	Work description	type of work	size	amount	Units	
MM						
	This is a 14-16-foot wide native surface road that begins at MM 0.40 on the Upper Ewing Road. The road segment will require Level 2 Maintenance and the site-specific improvements listed below.					
	Maintenance Level 2: -heavy brushing of 1-2" diameter vegetation, removal of stobs after brush-blading and spot blading -drainage improvements and maintenance -ditch pulling and cleaning	ning				
	-final blading and grass seeding required after hauling is complete Specific work locations will be coordinated and flagged by Forest Officer					
0.0	Begin road segment					
	Relic CMP, remove after harvest. De-water channel, lay back slopes	earthwork	excavator	4	hours	
0.05	and grass seed following removal. Removal of CMP must be completed as described in Attachment E (Site 5) by 8/14/2027.					
	A Hydrologist or Forest Officer must be present during CMP		quick			
	installation. Please provide 3-days notice.	grass seed	cover	5	pounds	
	Perennial wet spot. To improve road surface and drainage, the following is required:	earthwork	excavator	6	hours	
	-Narrow road surface to approximately 14 feet wide -Lay down geotextile fabric (12-feet x 100-feet) to increase road base	gravel	pit run	60	yards	
0.2		geotextile	12'	100	feet	
	stability -Place 12-inch loose pit run lift for 100-feet	earthwork	dump truck	4	hours	
		CMP	18	44	feet	
	CMP- Installation of two 18" x 22' ditch-relief CMPs at Forest Officer's	CMP Band	18"	2	each	
	discretion. If pipes are not installed, they will be transported to the	earthwork	excavator	4	hours	
N/A	Stillwater Unit Office storage sitebed in crushed gravel-armor inlet and outlet with talus-construct and armor ditch block-construct roll-	earthwork	dump truck	4	hours	
	over for surface drainage.	gravel	3/4"	20	yards	
		talus		10	yards	
0.32	End of road segment					
0.0-0.32	Level 2 Maintenance		initial	0.32	miles	
3.0 0.02	Final Purchaser-do Road Maintenance		initial	0.02	1111100	
	Final Blading	blading	final	0.32	miles	
	Grass seed (Stillwater Blend)	grass seed	final	10	pounds	
	Close road (kelly hump/tank trap) following final blading and grass seed	earthwork	excavator	1	hours	
	seed	earthwork	excavator	1		

Station	Work description	Materials or type of work	type or size	length or amount	Units	
MM						
	This segment involves tracking an excavator down an old skid trail to rehabilitate a failed CMP in a Class 1 stream crossing. Work will be directly supervised by either the Forest Officer or a project Hydrologist. The route down to the work site is generally clear of vegetation but may require some heavy brushing in and around the work site. Work must be completed as described in Attachment E (Site 6) by August 14, 2027. A Hydrologist or Forest Officer must be present during CMP installation. Please provide 3-days notice.					
	Brushing of old road prism to access work site	brushing	excavator	4	hours	
	Rehabilitation of native CMP as directed by Forest Officer or project Hydrologist	earthwork	excavator	6	hours	
	Grass seed (Stillwater Blend)	grass seed		8	pounds	
MM	Unit 9 Spur					
	This is a 14 to 16 foot wide native surface road that begins near MM 0.99 brushing, final blading and grass seeding will be required.	5 on the Upper Ew	ving Road. Init	ial blading, ex	cavator	
0-0.26	Remove two tank traps, initial blading and heavy excavator brushing of saplings and alder brush.	blading	initial	0.26	miles	
0.0	Relic CMP, remove after harvest. De-water channel, lay back slopes and grass seed following removal. Removal of CMP must be completed as described in Attachment E (Site 3) by August 14, 2027. A Hydrologist or Forest Officer must be present during CMP installation. Please provide 3-days notice.	earthwork grass seed	excavator quick cover	4 5	hours	
	Final Purchaser-do Road Maintenance					
	Final Blading	blading	final	0.26	miles	
	Grass Seed (Stillwater Blend) Tank trap road at junction with Upper Ewing Road after hauling is	grass seed	final	8	pounds	
	complete	earthwork		1	hours	
ММ	Unit 20 Spur					
	This is a 14 to 16 foot wide native surface road that begins at MM 1.5 on blading may be required as directed by Forest Officer.	the Dog Creek Ro	oad. Initial bla	ding is not req	uired, final	
	Final Purchaser-do Road Maintenance					
	Final Blading	blading	final	0.3	miles	
	Grass Seed (Stillwater Blend)	grass seed	final	8	pounds	

IX. SPECIFICATIONS AND DRAWINGS

A. REQUIREMENTS: Any construction requirements or structures shown in the Timber Sale Contract or Attachment B shall be constructed and installed by the Purchaser to specifications in this section. Structures shall be constructed at locations shown in the Road Log and as specified or staked by the Forest Officer.

B. SPECIFICATIONS:

 Road Construction Fabric: When road construction fabric is required the following specifications shall be met: minimum twenty mills thick with minimum trapezoid tear strength (ASTMD-1117-80) of 110 and mullen burst strength (ASTMD-3786-80) of minimum 375 psi; (e.g. Mirafi 500x or AMOCO 200208).

C. SPECIFICATION TABLES AND DRAWINGS:

GENERAL SPECIFICATIONS
GRASS SEEDING SPECIFICATIONS
GRAVEL AND END HAUL FILL MATERIAL SPECIFICATIONS
CLEAR LIMITS AND TYPICAL CROSS SECTIONS
CLEAR LIMIT DEFINITIONS FOR EXISTING ROADS
STANDARD DRAIN DIP FOR SINGLE LANE ROAD
SLASH FILTER WINDROW
CULVERT INSTALLATION REQUIREMENTS
STREAM CROSSING & WET SITE CULVERT INSTALLATION
RUBBER FLAPPER WATER DIVERTERS
OPEN TOP PIPE WATER DIVERTER
BRIDGE SITE REHABILITATION

	GENERAL SPE	CIFICATIONS		
ALIGNM	ENT	CUT SLOPE RATIO		
Minimum Curv	e Radius:			
Switchbacks: Curves:	50 Feet As marked on the ground	Common excavation: Angular Rock: Solid Rock: Maximum tolerance:	1:1 3/4:1 1/4:1 plus 15% minus 0%	
ROAD GRADE	MAXIMUM	FILL SLOPE RA	TIO	
Favorable: Adverse:	12% 8%	Common material: Angular rock:	1-1/2:1 1-1/3:1	
Grades as shown ir	the Road Log	Maximum tolerance:	plus 15% minus 0%	
DITCHI	ES	TURNOUTS		
Width:	3 feet	Length:	75 feet	
Depth:	1 foot	Width:	7 feet	
Located as shown in the Roa the Forest (Located by Purchaser and appro Officer. Spacing will be intervisi allows.		
USABLE ROAD	SURFACE	TURNAROUNE	s	
Tangents: Curves:	14 feet 16 feet (radius over 75 feet) 20 feet (radius under 75 feet)	Dimensions: large end around a long wheel b pickup. Location: at or near the end roads as approved	ase 2-wheel-drive e end of all dead	
Switchbacks: Slough widening: (in addition to usable road surface)	22 feet Tangents: 1foot Curves and all fills	Officer.	i i i i i i i i i i i i i i i i i	
Todu Suridce)	over 6 feet height: 2 feet.			

GRASS SEEDING SPECIFICATIONS

A. SEED REQUIREMENTS: The Purchaser shall furnish certified noxious weed-free, pure live seed mixture(s) and fertilizer in the amounts shown in Table B-2. Total pounds mixed seed is pure live seed, corrected for germination and purity. Germination and purity tests must have been conducted within the last 6 months prior to delivery. Purchaser shall furnish documentation of germination and purity tests to the Forest Officer prior to application.

B. APPLICATION REQUIREMENTS:

- 1. Fertilizer and seed may be applied with a hand spreader or power blower, which adjusts to distribute seed evenly at the specified rate while limiting application to the desired area. Seed and fertilizer shall be applied separately. Mixing of seed and fertilizer is prohibited.
- 2. Seed and fertilizer shall be applied as listed in the following tables. In the event weather conditions or time of year are not conducive for successful seed establishment, the Forest Officer may require a different application schedule from the ones stated.
- 3. Application estimates are approximate figures only to be used for estimating purposes.

SEEDING CONCURRENT WITH WET CULVERT INSTALLATION. Areas shown in this table shall be seeded within one day of culvert installation, or as otherwise directed by the Forest Officer.					
Areas To Be Seeded	Remarks	Pounds per acre	Acres		
Lower Ewing Road Upper Ewing Road	Quick Cover (annual rye)	20	0.25 0.75		
	Total Pounds Mixed Seed:	20			

SEEDING FOLLOWING FINAL BLADING

Areas shown in this table shall be seeded and fertilized within 15 calendar days after completion of final road blading and shaping.

Road Name	Length	Seed pounds	Fertilizer pounds	Acres
Noad Name	(miles)	per acre	per acre	Acres
Unit 9 Spur	0.26			0.4
Unit 20 Spur	0.3			0.4
Dog Creek Road	2.0			3.6
Unit 17 Spur	0.1			0.2
Ritsenburg Spur	0.2			0.4
Unit 15 Spur	0.42			0.75
Mystery Fish Spur	0.4	20	N/A	0.75
Middle Ewing Spur	0.18			0.35
Unit 1 Spur	0.21			0.35
Upper Ewing Spur	0.33			0.7
The Knob Road	0.5			0.9
Dog Creek Spur	0.32			0.5
Sediment Site 6	N/A			0.4

Total Pounds Mixed Seed: 194

Total Pounds Fertilizer: N/A

GRAVEL AND ROCK SPECIFICATIONS					
Material	Specifications				
3/4" minus crushed gravel	Crushed gravel. Well graded. Fine fraction (minus 200 sieve) not to exceed 15%				
Pit run gravel	Native gravel, well graded, with binder, compactable and not containing any rocks over 4" diameter.				
Drain rock	1"- 3" diameter, screened clean rock.				
General Large Rock Requirements Stone shall be hard, durable, angular in shape, resistant to weathering and weather action, and free from overburden, soil, and organic matter. Stone must be hard enough so pieces do not fracture or break during the loading, hauling, or placement activities. Neither breadth nor thickness of stone shall be less than one-third its length. Rounded stone or boulders from a streambed will not be accepted unless authorized by the State.					
Rock armor	Large rock with most sizes ranging from 6" to 12" diameter, used to armor fill slopes and catch basins.				
Talus rock	Large rock of variable sizes used as load-bearing fill or drainage rock in soft areas or French drains, as approved by Forest Officer.				

Large rock 18-24" diameter placed in streams at culvert outlets.

Energy dissipators

FOREST FIRE RULES & REGULATIONS

These rules apply to all activities on all classified forest lands within Montana during the legal Forest Fire Season, including any extension thereof (see 77-5-103(3), 76-11-101, 76-13-102(7), and 76-13-109 MCA). Reference also ARM 36.10.119 through 132.

Related State statute numbers are provided as a reference.

RULE I - DEBRIS BURNING

- The person conducting the burn shall obtain written authorization from the recognized fire protection agency before igniting any open fire during the legal forest fire season (required by 76-13-121 MCA). The recognized fire protection agency may deny, restrict, or rescind any authorization by notifying the person conducting the burn.
- All burning must comply with the Department of Environmental Quality or State/county/local open burning regulations.
- 3. Written authorization is not required for campfires.

RULE II - CAMPFIRES

- Campfires cannot be left unattended and must be completely extinguished (see 76-13-123 MCA).
- All campfires must be constructed in cleared or bare areas, and not allowed to spread beyond the established ring, pit, grate, or container.
- Anyone igniting a campfire is required to have fire tools listed in Rule VIII (4).

RULE III - RAILROADS AND POWERLINES

Railroad and powerline companies are required to prepare and annually update working agreements with recognized fire protection agencies. These agreements must stress safety and fire response procedures; and identify, remove, prevent, modify, abate, or correct forest fire hazards and risks associated with railroad and powerline company operations (see 69-14-721 MCA).

RULE IV - EQUIPMENT

- All internal combustion engines must be equipped with an approved and effective spark-arresting system, as established in the National Wildfire Coordinating Group's <u>Spark Arrester</u> <u>Guides</u>. Spark-arresting devices must be marked, properly installed, and maintained in accordance with the Guides. The following vehicles are exempt:
 - a. automobiles and light trucks of less than 23,000 GVW
 when all exhaust gases pass through a properly
 installed and maintained exhaust system, baffle-type
 muffler, and tailpipe. Vehicles with glass-pack
 mufflers do not qualify for the exemption.
 - b. heavy-duty trucks of 23,000 GVW or greater, with a muffler and vertical stack exhaust system extending

- above the cab.
- vehicles with other spark-arresting systems providing equal or increased effectiveness. Such vehicles must be inspected and have written authorization from the recognized fire protection agency.
- Equipment used for commercial, ranching, or industrial activities must meet the fire extinguisher and tool requirements listed in Rule VIII (5).

RULE V - FLAMING AND GLOWING SUBSTANCES

- All flaming and glowing substances, including but not limited to, lighted cigarettes, cigars, ashes, and matches, must be extinguished before being discarded (see 76-13-124 MCA).
- Smoking is allowed only at areas free of flammable or combustible material. Examples of these areas include a graveled road or an enclosed vehicle.

RULE VI - FIREWORKS

Use of fireworks is prohibited on all classified forest lands unless written authorization is obtained from the recognized fire protection agency. Authorization will only be considered between June 24 and July 5, inclusive, to coincide with the legal dates for the sale of fireworks in Montana (see 50-37-106 MCA).

RULE VII - WILDLAND/URBAN INTERFACE

- County governments without subdivision wild-fire protection standards are encouraged to establish standards for all new subdivisions by January 1, 2000.
- The <u>Fire Protection Guidelines for Wildland/Residential</u>
 <u>Interface Development</u> (DSL/DOJ, 1993) is available for use to assist counties in the development of standards.

RULE VIII - FIRE EXTINGUISHERS AND FIREFIGHTING TOOLS

- Chainsaw operators shall carry a fully charged and operable fire extinguisher, minimum-capacity 8-ounce liquid or 1pound dry chemical, with a 4BC or higher rating.
- Vehicles and equipment, mobile or stationary, with a combustion engine/motor used for commercial, ranching, or industrial activities must have one operable, dry-chemical fire

extinguisher with a minimum 2-1/2 -pound capacity and 4BC or higher rating.

- Chainsaw operators shall maintain one usable shovel at chainsaw-fueling sites.
- 4. All persons or parties igniting a campfire shall have one usable shovel and bucket. Persons igniting a barbecue need not have a shovel or bucket if the ashes are not removed from the container and the ashes or container are <u>not</u> placed on or near combustible material.
- 5. All commercial, ranching, or industrial activities must have:
 - a. one usable shovel or pulaski with each vehicle and equipment with an internal combustion engine/motor, mobile or stationary.
 - b. one backpack pump with each vehicle and with any equipment, used off road, mobile or stationary, with an internal combustion engine/motor, that cannot be used to build fireline and is being operated on combustible material.
- 6. Other types of firefighting tools that provide increased efficiency or effectiveness may be substituted by written authorization from the recognized fire-protection agency. For example, a Combil firefighting tool may be substituted for a shovel or pulaski.

RULE IX - FOREST ACTIVITY RESTRICTIONS

In areas designated by public proclamation by the administrator, division of forestry, as areas of high fire hazard, the administrator may request all persons, firms, or corporations present or engaged in any activity in the areas to voluntarily cease operations or to adjust working hours to less critical periods of the day. In the event such a request is refused, the administrator may issue a written order directing compliance.

RULE X - FOREST CLOSURE

- During periods of dangerous fire conditions, no person may enter or be upon those forest lands designated by public proclamation by the governor of the state of Montana as areas of dangerous fire hazard except under written permit issued by a recognized agency.
- 2. Permits to enter upon such areas during the closure may be issued by the recognized agency upon a showing of real need by the applicant. Permits may be issued to those persons having actual residence as a permanent or principal place of abode in the forest lands designated or to persons engaged in non-fire hazardous employment.
- However, no permit may be required of persons engaged in either firefighting, fire prevention, or law enforcement who are engaged in official business.

RULE XI - CORRECTION OF HAZARD AND UNUSUAL CIRCUMSTANCES OR EVENTS

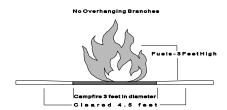
The recognized fire-protection agency may require identified wildland-fire hazards and/or risks be halted, prevented, abated, removed, disposed of, mitigated, or patrolled. This applies to public, private, nonprofit, commercial, and/or residential circumstances or events.

RULE XII - REQUEST FOR REVIEW

If any operator believes that in his case any requirment of a recognized agency is excessive, the operator may request the administrator, division of forestry, to review the requirements. If in the opinion of the administrator any or all are not necessary in the interest of public safety, he may make such changes as he considers advisable.

RULE XIII - DEFINITIONS

Backpack Pump: 5-gallon minimum; standard galvanized metal, fiberglass, or rubberized backpack water container with attached handpump; full of water at all times.



Bucket: Metal, plastic, canvas, or fiberglass container capable of holding at least one gallon of water. Motorcycle helmets qualify. **Campfirel** means a fire set for cooking, warming, or ceremonial purposes; not more than 3 feet in diameter or height; void of overhanging branches; with all combustible material cleared at least 1-1/2 times the diameter of the fire; or a barbecue in a noncombustible container.

Combi Tool: A tool combining a shovel and pick.

Fireworks: As defined in 50-37-101 MCA.

Forested Land: As defined in 76-13-102 MCA and 36.10.101

ARM.

Hazard: Condition that promotes the ignition and/or spread of a wildland fire.

Open Fire: The burning of a bonfire, rubbish fire, or other fire in an outdoor location where fuel being burned is not contained in a closed incinerator, or outdoor fireplace. Barbecue pits and burn barrels are considered open fires and therefore require a burning permit (Rule I).

Pulaski: An ax with a medium size sharp grub hoe opposite the ax blade.

Recognized Fire-Protection Authority: An agency organized for the purpose of providing fire protection and recognized by the board as giving adequate fire protection to forest lands in accordance with rules adopted by the board.

Risk: Action or device that could cause a wildland fire to ignite. **Shovel:** Vehicle, equipment, and chainsaw operator shovels will have a minimum overall length of 36 inches with a round pointed shovel head with a minimum width of 6 inches. Shovels required for campfires must be at least 24-inches in length with a pointed shovel head. Folding handles qualify.

RULE XIV - APPLICABILITY

The forest fire rules, Rule I through Rule XIII, (ARM 36.10.119 through 30.10.132) are in effect each year on classified forest land during the forest fire season May 1st to September 30th inclusive, or any legal extension thereof. Requirements pertaining to motor vehicles do not apply to those being operated solely on roads that are a part of federal or State maintained highway systems or on any paved public road.



WORKING IN BEAR HABITAT



12/03/12

Grizzly bear distribution is expanding in Montana and human/bear encounters are becoming more common. Working in bear habitat increases the likelihood of interactions with bears. It is important for contractors and their employees to be aware of steps that can be taken to minimize conflicts and how to react if an interaction occurs. This pamphlet provides information about bear behavior, preventive measures, and what to do in the event an encounter occurs. This pamphlet is intended to provide information about possible ways of avoiding encounters with bears. It should not, however, be relied on as the sole means of doing so. In addition to adhering to the guidelines outlined in this document, you should always rely on your experience, training, education and judgment about the best, safest manner to avoid encounters with bears.

ENCOUNTERS

- Stay calm and keep the animal in view, but avoid direct eye contact. Bears may interpret eye contact as a sign of aggression. Back away slowly. Never run from a bear unless you know you can reach safety. Determine whether the animal is a black bear or a grizzly bear.
- If the bear charges, stand your ground. Bears commonly "bluff charge," stopping within a few feet of a person, before fleeing in a different direction.
- Keep bear spray handy. Always have a canister of bear spray (at least eight ounces) on your belt. Make sure it is an EPA registered bear spray with 1 to 2% capsaicin and related capsaicinoids, has a spray duration of at least six seconds, and a range of 25 feet. Familiarize yourself with the directions for using the spray. Use it only if confronted by a charging bear. Spray toward the bear, aiming slightly downward.
- In the event that you have no bear spray, or it was ineffective and the charge is not a bluff, or the bear is exhibiting predatory behavior, you must change your approach. Signs of predatory behavior include: following, showing interest, coming into a tent, and unprovoked attacks. How you respond will depend on the species of bear attacking you. Black bear and young grizzly attacks: Always fight back. Jump up and down, wave your arms and yell. Try to look as large as possible. Never play dead it makes you easier prey. Remember that black bears and small grizzlies can climb trees, so stay on the ground. Mature grizzly attacks [particularly females with young]: If a surprise encounter occurs or if bear spray is ineffective, drop to the ground and play dead. Lie on your stomach, clasp your hands behind your neck, and use your elbows and toes to avoid being rolled over. If the bear rolls you over, keep rolling until you land back on your stomach. Remain still and don't struggle or scream. A defensive bear will stop attacking once it feels the threat is gone. Don't move until you are sure the bear has left the area. If the grizzly is exhibiting predatory behavior or comes into a tent at night, do all you can to escape or fight back.
- ▲ If an encounter occurs, contact the DNRC forest officer immediately and notify Montana FWP.

JOB SITE PREVENTION

- Watch for bear signs. Signs include: tracks; droppings; recently overturned rocks or logs; logs torn apart; clawed, bitten or rubbed trees; bear trails; hair on tree bark; fresh diggings; and crushed vegetation. If you observe any of these signs, be aware that a bear may be frequenting the area. If camping, or stopping to eat your lunch, select a different area.
- When working or walking alone, make noise and carry bear spray. Bears don't like surprises, but will move on if they hear people approaching. Make noise, especially when approaching blind corners, dense shrubs and streams, and when walking into the wind. Maintain regular communication with co-workers.
- If camping on site, leave coolers, food and beverages inside campers or secured vehicles. If cooking over an open fire, do not discard food or grease in fire pits.
- Don't leave trash, groceries or animal feed in your vehicle for extended periods. Bears can, and do, pry open car and truck doors and break windows to get at food and other items they associate with food.
- Bears are attracted to petroleum based products. Keep all fuel and oil canisters in bear resistant containers. Bears have been known to damage hoses, oil filters and foam seats on heavy equipment. Dispose of empty containers promptly.

FWP.MT.GOV

Timing Restrictions: No

No in-stream work between

Yes



Attachment E: Montana Streamside Protection Act (124 Permit and Application)

THE **OUTSIDE** IS IN US ALL.

Stream Protection Act (SPA 124) Permit

Date:
Applicant Name:
Address:
Permit #:
Waterbody:
Project Name:
Project Description:
Montana Fish, Wildlife & Parks has reviewed the proposed project. The project is approved provided it is carried out in accordance with the information supplied in the application, all general conditions listed on page 3 of this permit, and any special conditions listed below.
Expiration: This permit is valid for year(s) from the date of issuance.

if yes see below.

and

Special Conditions:

318 Authorization Review

I have reviewed the above project on behalf of the Montana Department of Environmental Quality (DEQ) pursuant to the Montana Water Quality Act Short-term Water Quality Standards for Turbidity 75-5-318 MCA:

This project <u>will not</u> increase turbidity if completed according to the conditions listed in the 310 or 124 permit. Therefore, application to DEQ for a 318 authorization <u>is not</u> required.

Impacts to the physical and biological environment from turbidity generated as a result of this project are uncertain. Therefore, the applicant must contact the Montana Department of Environmental Quality, 1520 East Sixth Avenue, Box 200901, Helena, MT 59620-0901, (406 444-3080) to determine project specific narrative conditions required to meet short-term water quality standards and protect aquatic biota.

Turbidity generated from this project is expected to be short-term and have only temporary and minor impacts on the physical and biological environment. Therefore, compliance with the conditions stated in the attached letter outlining **DEQ's Short Term Water Quality Standard for Turbidity Related to Construction Activity**, as well as other conditions listed in the 310 or 124 permit, are appropriate for this project.

Issuing Biologist:

Kenneth Breidinger

Signature:

Attachment E: Montana Streamside Protection Act (124 Permit and Application) pg 2 of 18

Stream Protection Act 124 Permit General Conditions

- 1. Complete work affecting a streambed or stream bank in an expeditious manner to avoid unnecessary impacts to the stream.
- 2. Limit the clearing of vegetation to that which is absolutely necessary for construction of the project. Take precautions to preserve existing riparian vegetation. Salvage and reuse native vegetation where possible.
- 3. Install and maintain erosion control measures where appropriate to protect aquatic resources. Do not clear and grub land adjacent to streams prior to installing proper erosion and sedimentation controls. Conduct all work in a manner that minimizes turbidity and other disturbances to aquatic resources.
- 4. Plan temporary construction facilities to:
 - a. Minimize disturbance to stream banks, stream bank vegetation, and the streambed by locating staging or storage facilities at least 50' horizontally from the highest anticipated water level during construction;
 - b. not restrict or impede fish passage in streams; and
 - c. not restrict any flow anticipated during use.
- 5. Provide sediment controls for drainage from topsoil stockpiles, staging areas, access roads, channel changes, and instream excavations.
- 6. Isolate work zones from flowing and standing waters to prevent turbid water and sediments from being discharged into streams or other drainages that flow directly into the stream. Divert flowing waters around the work zone.
- 7. Do not spill or dump material into streams. Store and handle petroleum products, chemicals, cement and other deleterious materials in a manner that will prevent their entering streams.
- 8. Do not permit wash water from cleaning concrete-related equipment or wet concrete to enter streams.
- 9. Do not operate mechanized equipment in any stream or flowing water unless special authorization is obtained. If special authorization is granted, the following conditions apply:
 - a. Powerwash all equipment allowed in a stream prior to entering the stream channel.
 - b. Clean and maintain all equipment so that petroleum-based products and hydraulic fluids do not leak or spill into the waterway.
- 10. Reclaim streambeds and stream banks as closely as possible to their pre-disturbed condition.
- 11. Restore disturbed stream banks to their natural or pre-disturbed configuration to match adjacent ground contours or as specified in the project plans. Stabilize, reseed, and re-vegetate disturbed areas. Install and maintain long-term biodegradable erosion-control measures to protect these areas until adequate vegetation has been established.
- 12. Restore temporary access routes and any temporarily disturbed areas to original conditions, including original contours and vegetation.
- 13. Dispose of any excess material generated from the project above the ordinary high water mark and in an area not classified as a wetland.

Culvert Installation

- 1. All work must be completed in an expeditious manner and must take place during low flow periods.
- 2. Work must be conducted to minimize impact on the stream and immediate vicinity, with use of machinery in stream only when necessary. To prevent leaks of petroleum products into the waterway, defective equipment must not be operated in areas capable of contributing surface flows to the waterway.
- 3. Any excess material generated from a project must be disposed of out of the flood plain and not in an area classified as a wetland.
- 4. All disturbed area (including any spoils or excess material) must be shaped, seeded to grass, and lightly mulched to control erosion and prevent the infestation of noxious weeds. Existing vegetation must be preserved wherever possible.
- 5. The fill slope of the crossing must be at a maximum grade of 1.5:1.
- 6. The culvert must be properly bedded in gravel and must be on grade with the pre-existing slope of the stream or buried one (1) inch below the existing gradient, unless otherwise specified.
- 7. Both the upper and lower ends of the culvert must be armored with oversize rock to control erosion and piping around the culvert, unless otherwise specified.
- 8. Culverts must have a fill depth over the top of the culvert of one-third (1/3) the diameter of the culvert, but no less than one (1) foot.
- 9. Culverts must be installed so that the low point in the road grade is not over the stream crossing. If this is not possible, construct water bars or cross drains in the road grade above the stream crossing.

Stream Diversion

- 1. Keep temporary stream diversions to the minimum length necessary to complete the work.
- 2. Design temporary stream diversions to pass all anticipated flows during the construction window.
- 3. Construct temporary dikes from sandbags, fabric-wrapped straw bales, earthen material wrapped in fabric, or other approved methods to divert the entire flow down the bypass channel.
- 4. If needed, construct a temporary dike on the downstream end of the construction zone to prevent backwatering of the construction site.
- 5. Provide detailed plans showing methods to divert stream flow around the construction site using one or more of the following methods, or other approved methods:
- a. A temporary, lined channel
- b. A temporary culvert

- c. A combination of a temporary, lined channel and culvert
- 7. Upon completion of the designed stream crossing, remove all material used in the temporary bypass a minimum of 50 feet from the site, and return the site to pre-project conditions, including land contours and vegetation, or according to project plans. Use erosion-control BMPs to protect the disturbed ground as necessary.

	CD/	Agency U	se Only
Application Number:			Date Received:
Stream or Waterbody:			the state of the s
Date Accepted:	lni	tials:	Date Forwarded to FWP:
This section is for all	Department of Tra	nsportation	and SPA 124 Permits (government projects)
Project Name: Dog Rock Timb	oer Sale		
Control Number:			Contract Letting Date:
MEPA/NEPA Compliance:	□Yes □No	If yes, #	C5 of this application does not apply.

Applicant Use

This is a standardized application to apply for one or all local, state, or federal permits listed below. Check the box(s) for each permit being applied for.

- Refer to the instructions to determine which permits apply to your project and submit an application to each applicable agency.
- Incomplete applications will result in a delay of application processing.
- The applicant is responsible for obtaining all necessary permits and landowner permission before beginning work.
- Other laws may apply.

	Permit	Agency	Required Application Sections:	Fee
	NSLPA 310 Permit	Local Conservation District	A-E and G	No fee
\boxtimes	SPA 124 Permit	Department of Fish, Wildlife & Parks (FWP)	A-E and G	No fee
	318 Authorization 401 Certification	Department of Environmental Quality (DEQ)	A-E and G	\$250 (318); \$400-\$20,000 (401)
	Navigable Rivers Land Use License, Lease, or Easement	Department of Natural Resources and Conservation (DNRC), Trust Lands Management Division	A-E and G	\$50, plus additional fee
	Section 404 Permit, Section 10 Permit	U.S. Army Corps of Engineers (USACE)	A-G and F1-10	Varied (\$0-\$100)
	Floodplain Permit	Local Floodplain Administrator	A-G	Varied (\$25-\$500+)

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A. APPLICANT INFORMATION				
APPLICANT (party responsible	e for project) Sam Brac	ken		
Has the landowner consented	d to the project? ⊠ Yes	□No		
Mailing Address: PO Box 1640	City, State: Olney, MT Zi	ip: 59937		
Physical Address: 7425 Highw	ay 93 North City, State	: Olney, MT Zip: 59937		
Daytime Phone: (406) 881-266	38 Email: sam.br	acken@mt.gov		
LANDOWNER NAME (if differe	ent from applicant) Mor	ntana DNRC		
Mailing Address: Same as abo	ove City, State:		Zip:	
Physical Address:		City, State:	Parker in Laborator	Zip:
Daytime Phone:		Email:		1000
CONTRACTOR/COMPANY NA	.ME (if applicable)			CELVCIAL I
Mailing Address:		City, State:		Zip:
Physical Address:		City, State:		Zip:
Daytime Phone:		Email:		
	B. PROJEC	T SITE INFORMATION		
Refer to section B1 of the instru	uations			
		ation: I Innamed tributar	vs of Dog Creek and Ro	ock Creek
NAME OF STREAM OR WATERBODY at project location: Unnamed tributarys of Dog Creek and Rock Creek Project Address/Location: Stillwater State Forest Nearest Town: Olney, MT				
County: Flathead Geoco		arest fown. Othey, Ph		
Township: T33N Range		Section: 2, 18 and 20	1/4 Section:	¼ Section:
Latitude:	. 25 and 24 W	Longitude:	74 Section.	4 Section.
Driving directions or other ins 20. From Olney MT, travel nor up this road system, see map	th on HWY93 approxim	nding the site: T33N R24		
Refer to section B2 of the instru	uctions			
2. Is the proposed activity wit	hin SAGE GROUSE are	as designated as genera	al, connected, or core h	abitat?
☐ Yes ☒ No Attach consul	tation letter if required	•		
Refer to section B3 of the instructions				
3. Is this a STATE NAVIGABLE	WATERWAY? The stat	e owns the beds of certa	ain navigable waterway	s.
\square Yes $\ \boxtimes$ No $\ $ If yes, send a copy of this application to the appropriate DNRC land office.				
Refer to section B4 of the instru	uctions			
4. WHAT IS THE CURRENT C existing bank condition, bank			-	Describe the
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Site 1: Brushed in relic stream crossing on class 1 perennial stream. Stable, well-vegetated slope. Vegetation consists of trees, brush and grass.

Sites 2 & 3: Existing road prisms. Banks, ditches and cut/fill slopes are well vegetated with brush, grass and trees.

Site 4: Existing road prism with relic stream crossing. Banks, ditches and cut/fill slopes are well vegetated.

Site 5: Existing road prism with old crossing, no crossing structure. Banks, ditches and cut/fill slopes are well vegetated.

Site 6: Existing relic road prism and old crossing CMP. Heavily vegetated road prism, banks and cut/fill slopes.

C DD	O I E C T	A CTIVITY	INFORMATION	146

Refer to section C1 of the instructions		
1. TYPE OF PROJECT (check all that apply)		
\square Agricultural and Irrigation Projects: Diversions, Headgates, Flumes, Riparian Fencing, Ditches, etc.		
\square Buildings/Structures: Accessory Structures, Manufactured Homes, Residential or Commercial Buildings, etc.		
☑ Channel/Bank Projects: Stabilization, Restoration, Alteration, Dredging, Fish Habitat, Vegetation or Tree Removal, or any other work that modifies existing channels or banks.		
☑ Crossing/Roads: Bridge, Culvert, Fords, Road Work, Temporary Access, or any project that crosses over or under a stream or channel.		
☐ Mining Projects: All mining related activities including, Placer Mining, Aggregate Mining, etc.		
☐ Recreation Related Projects: Boat Ramps, Docks, Marinas, etc.		
☐ Other Projects: Cisterns, Debris Removal, Excavation/Pit/Pond, Placement of Fill, Drilling or Directional Boring, Utilities, Wetland Alteration. Any other project type not listed here.		
Refer to section C2 of the instructions		
2. Is this application for an ANNUAL MAINTENANCE PERMIT? \Box Yes \boxtimes No		
If yes, attach an annual plan of operations to this application		
Refer to section C3 of the instructions		
3. Why is this project necessary? State the PURPOSE OR GOAL of the proposed project.		
As part of the Dog Rock Timber Sale, the MT DNRC plans to improve the transportation system in the project area and bring existing roads up to BMP standards. The project proposes the following in-stream work:		
-rehabiliting 1 existing log-corduroy stream crossing that has a high sedimentation risk.		
-replace one undersized CMP on the main Upper Ewing Road.		
-remove three undersized and/or non-functioning CMPs on temporary spur roads.		
-install and remove a 20' cross-laminated timber bridge across a class 1 stream.		
Refer to section C4 of the Instructions		

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- 4. Provide a brief description of the PROPOSED PROJECT PLAN and how it will be accomplished.
- Site 1: Brush out 1200' of old road to access the work site, cut notches in existing log corduroy crossing to facilitate sediment transport capacity.
- Site 2: Install new 36" x 50' CMP
- Site 3: Remove existing CMP after log hauling is complete
- Site 4: Remove existing CMP after log hauling is complete
- Site 5: Install and remove 20' CLT if prism is needed for harvesting (Site 5 optional for Sale Contract)
- Site 6: Remove existing CMP and restore channel function

Refer to section C5 of the instructions

5. What **OTHER ALTERNATIVES** were considered to accomplish the stated purpose of the objective? Why was the proposed alternative selected?

See the Dog Rock Timber Sale Environmental Assessment

Refer to section C6 of the instructions

- 6. What are the **NATURAL RESOURCE BENEFITS** or **POTENTIAL IMPACTS**? Please complete the information requested below to the best of your ability:
 - 6a. Explain any temporary or permanent changes in erosion, sedimentation, turbidity, or increases of potential contaminants. What will be done to minimize impacts?

All sites will be done during low-flow or dry conditions. If the stream is flowing, water will be diverted around the site until the work is complete. Equipment crossings of the channel will be minimized.

6b. Will the project cause temporary or permanent impacts to fish and/or aquatic habitat? What will be done to protect the fisheries and habitat?

No permanent negative impacts to fish populations are expected under this proposal. Temporary impacts to turbidity are likely during removal of the existing CMPs, construction of bypass channels and restoration discharge, however the duration and magnitude of the impacts are expected to occur during a limited portion of the construction window and not likely to have permanent impacts on sedimentation or fish habitat.

6c. What will be done to minimize temporary or permanent impacts to the floodplain, wetlands, or riparian habitat?

All disturbed sites will be grass seeded within 24-hours of construction. Sediment delivery to streams will be filtered through slash filters, sediment fences and/or wattles. Excavation will be limited to the minimum footprint necessary to remove the existing CMPs.

- 6d. What efforts will be made to decrease flooding potential upstream and downstream of the project? All structures are adequately sized to carry at least a 50-year event.
 - 6e. Explain any potential temporary or permanent changes to the water flow or to the bed and banks of the waterbody. What will be done to minimize those changes?

New CMP will be designed to carry at least a 50-year event and will be placed on stream grade. Energy disspiators will be placed at outlets to minimize the risk of degrading the channel.

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6f. How will existing vegetation be protected and its removal minimized? Explain how the site will be revegetated, including weed control plans.

Excavation of soil will be kept to the minimum amount necessary to successfully compact material around each CMP. All equipment will be inspected for weeds prior to entering the project area. During construction and rehabilitation work, riparian vegetation will be removed to the mnimum practicable extent to safely and effectively complete the tasks.

D. CONSTRUCTION DETAILS

Refer to section D1 of the instructions

1. Proposed CONSTRUCTION DATES:

Start: September 1, 2025

End: November 30, 2029

Is any portion of the work already completed? \square Yes \boxtimes No If yes, please describe previously completed work:

Refer to section D2 of the instructions

2. PROJECT DIMENSIONS. Describe the length and width of the project.

Site 1: Existing log corduroy crossing structure 8' to 10' wide across channel. Anticipated excavation limits will be roughly 10' upstream and 10' downstream of crossing.

Site 2: Remove existing CMP and install new 36" x 50' CMP.

Site 3: Remove existing 24" CMP and restore channel

Site 4: Remove existing 24" CMP and restore channel

Site 5: Install and remove 20" CLT. Anticipated excavation limits will be roughly 10' upstream and 10' downstream of crossing. Site 5 optional if temporary bridge (CLT) needed.

Site 6: Relic 24" CMP that has been clogged for years. Remove CMP and restore channel function. Anticipated exvacation limits will be roughly 10' upstream and 10' downstream of crossing.

Refer to section D3 of the instructions

3. **MATERIALS.** Provide the total quantity and source of materials proposed to be used or removed. Note: this may be modified during the permitting process, therefore it is recommended that you do not purchase materials until all permits are issued. List soil/fill type, cubic yards and source, culvert size, rip-rap size, and any other materials to be used or removed on the project.

Cubic yards/ Linear Feet

Size and Type

Source

10 yards 5 yards ¾" crush gravel

Energy dissipators/large talus

Chicken Pit

Refer to section D4 of the Instructions

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r todaptamo, and other waterboar	03		
4. EQUIPMENT . List all equipment that will be used for this project. How will the equipment be used on the bank and/or in the water? Note: all equipment used in the water must be CLEANED , DRAINED , AND DRY .			
Excavators will be used on all CMP and CLT removals and installs. Dump-trucks will be used to haul necessary material to each respective site (gravel, talus).			
Will equipment from out of state be used?	☐ Yes ☐ No ☒ Unknown		
Will the equipment cross west over the Continental Divide to the project site?	☐ Yes ☐ No ☒ Unknown		
Will equipment enter the Flathead Basin? ☐ Yes ☐ No ☒ Unknown			
E. REQUIRED ATTACHMENTS			
Plans and/or drawings of the proposed project should include: a. Plan/Aerial View			
b. An elevation or cross-section view			
c. Dimensions of the project (height, width, depth in linear feet)			
d. Location of storage stockpile materials and location of fill or excavatio	n sites		
e. Drainage facilities			
 f. Location of existing/proposed structures, such as buildings, utilities, reg. g. An arrow indicating north 	oads or, bridges		
h. Site photos			
 Attach a vicinity map or a sketch, which includes: The water body where the project is located, roads, tributaries, and other landmarks. Plan an "X" on the project location. Provide written directions to the site. This is a plan view (looking at the project from above). 			
3. If requesting a Maintenance 310 Permit, attach an Annual Plan of Operation.			
4. Attach an Aquatic Resource Map, which documents the location and boundary of all waters of the U.S. in the project vicinity and includes wetlands and other special aquatic sites. Show the location of the ordinary highwater mark of streams or waterbodies if requesting a Section 404 or Section 10 Permit. Include the ordinary high-water mark delineation on plans or drawings and/or a separate wetland delineation.			
F. ADDITIONAL INFORMATION FOR US ARMY CORPS OF ENGINEERS (USACE) FLOODPLAIN PERMITS	SECTION 404, SECTION 10, AND)	
Refer to section F of the instructions			
Section F should only be filled out by those needing Section 404, Section 10, and/	or Floodplain permits.		
Applicants applying for Section 404 and/or Section 10 permits must complete que Section 404 and/or Section 10 permits, contact the USACE by telephone at 406-44 montana.reg@usace.army.mil.			
Applicants applying for Floodplain permits must complete all of Section F.			
Refer to section F1 of the instructions			

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	ctivity and/or property have permitting history with USACE? If yes, and available, provide the solutions are solved with the previous permits, including no permit required letters and approved
jurisdictional determina	
N/A	
Refer to section F2 of the	instructions
2. Identify the specific N	lationwide Permit(s) that you want to use to authorize the proposed activity.
N/A	
Refer to section F3 of the	instructions
the ordinary high-water	of impacts and the quantity of materials proposed to be placed in wetlands and/or below mark in waters of the United States. Delineations are required of wetland and other specia waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on
	ength and width (or square footage/acreage) for each impact occurring within the waters o s, including wetlands?
N/A	
-	ubic yards of fill material will be placed below the ordinary high-water mark, in a wetland, waters of the United States?
N/A	
Refer to section F4 of the	instructions
4. How will the proposed sheets if necessary.	d project avoid or minimize impacts to waters of the United States? Attach additional
N/A	
Refer to section F5 of the	instructions
waters? If yes, describe	ct(s) be equal to or greater than 0.10 acre of wetland and/or 0.03 acre of stream or other how the applicant is going to compensate (mitigation bank, in-lieu fee program, or) for these unavoidable impacts to waters of the United States.
N/A	
Refer to section F6 of the	instructions
6. Is the proposed activi	ty within any component of the National Wild and Scenic Rivers System, or a river that
has been officially desig	gnated by Congress as a " study river ?" Yes No
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	Refer to section F7 of the instructions 7. Does this activity require permission from the USACE because it will alter or temporarily or permanently				
7. Does this activity require					
occupy or use a USACE authorized civil works project? (Examples include USACE owned levees, Fort Peck Dam,					
and others). \Box Ye	es 🗆 No				
Refer to section F8 of the inst	tructions				
8.List the ENDANGERED AI project location.	ND THREATENED SPECIES and CRITICAL HABITAT(S) that might be present in the				
N/A					
Refer to section F9 of the inst	tructions				
· · · · · · · · · · · · · · · · · · ·	ERTY(S) that are listed, determined to be eligible or are potentially eligible (over 50 National Register of Historic Places.				
N/A					
Refer to section F10 of the in:	structions				
	CAL, STATE, AND FEDERAL PERMITS and indicate whether they were issued, waived, ll required local, state, and federal, or proof of waiver must be issued prior to the mit.				
N/A					
Refer to section F10 of the in-	structions				
across from the project site	DDRESS OF LANDOWNERS adjacent to the project site. This includes properties to and . Note: Some floodplain communities require certified adjoining landowner lists.				
NAME/ADDRESS OF Adjace	. Note: Some floodplain communities require certified adjoining landowner lists.				
	. Note: Some floodplain communities require certified adjoining landowner lists.				
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NAME/ADDRESS OF Adjace NAME/ADDRESS OF Adjace NAME/ADDRESS OF Adjace NAME/ADDRESS OF Adjace Refer to section F11 of the in	. Note: Some floodplain communities require certified adjoining landowner lists. ent Landowner: ent Landowner: ent Landowner: ent Landowner: ent Landowner: ent Landowner:				

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G. SIGNATURE REQUIREMENTS

Refer to section G of the instructions

Some agencies require original signatures for an application to be considered complete. After completing the application form, make the required number of copies and sign each copy. Send the copies with original signatures and additional information required directly to each applicable agency.

The statements contained in this application are true and correct. The applicant possesses the authority to undertake the work described herein or is acting as the duly authorized agent of the landowner. The applicant understands that the granting of a permit does not include landowner permission to access land or construct a project. Inspections of the project site after notice by inspection authorities are hereby authorized.

*By signing or typing my name on the signature line below, I hereby swear and affirm that I am the applicant for this project and am responsible for all information contained in this application.

*APPLICANT (party responsible for project)	
--	--

SAM BRACKEN - MT DNRC Print Name PULL 6/30/25

LANDOWNER (If different from applicant)

DAVE RING

Signature of Landowner

CONTRACTOR (If applicable. Contact agency to determine if contractor signature is required)

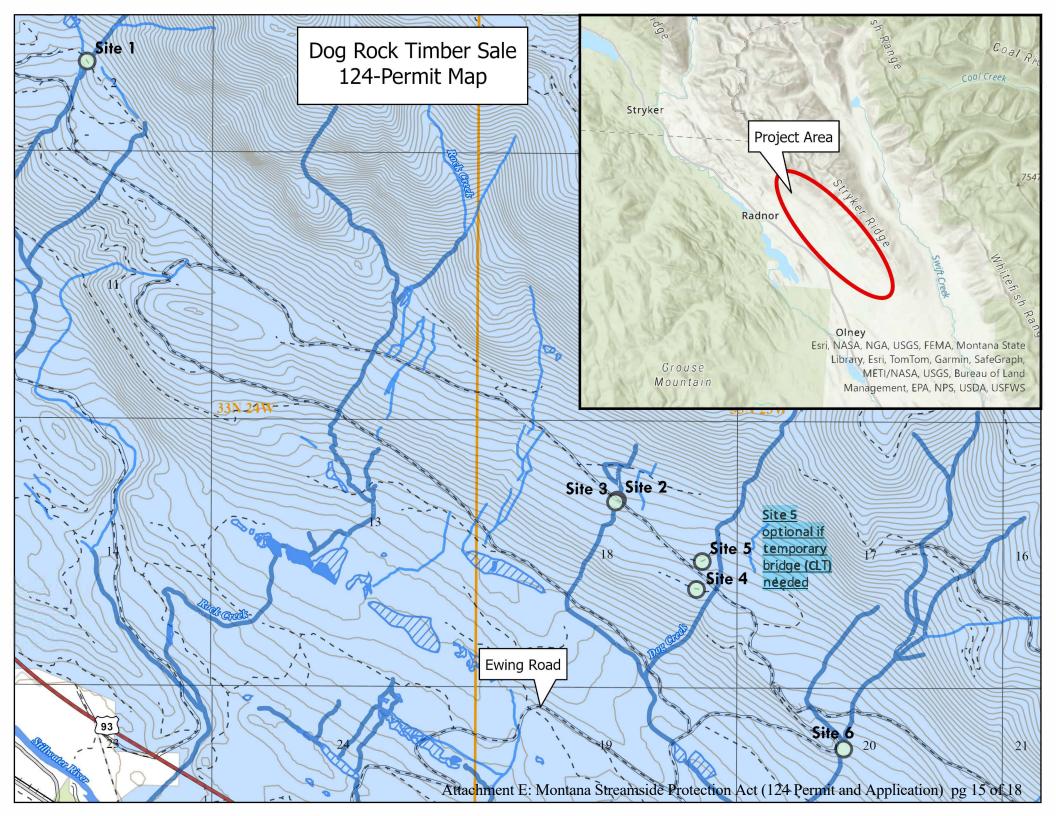
Print Name of Primary Contract

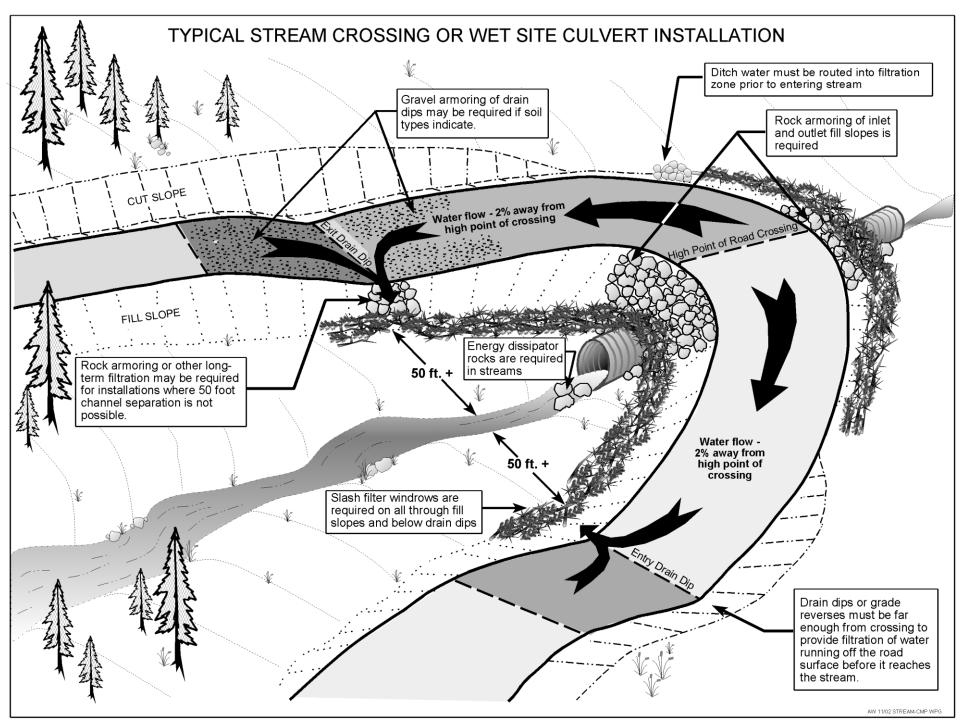
Company/Entity Name (If applicable)

Signature of Contractor

Date

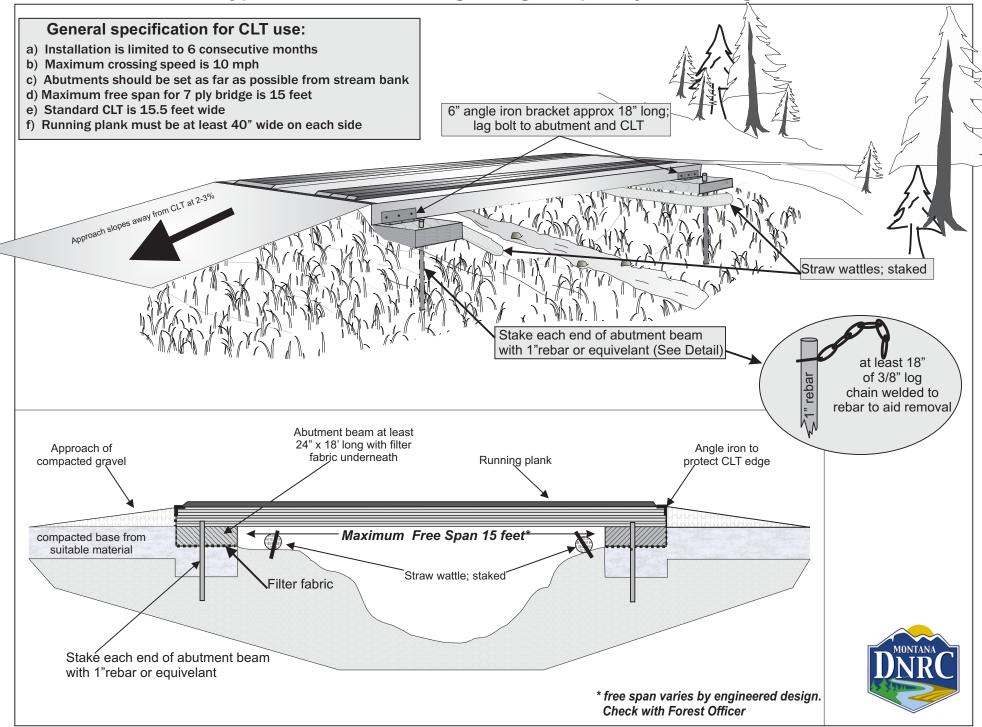
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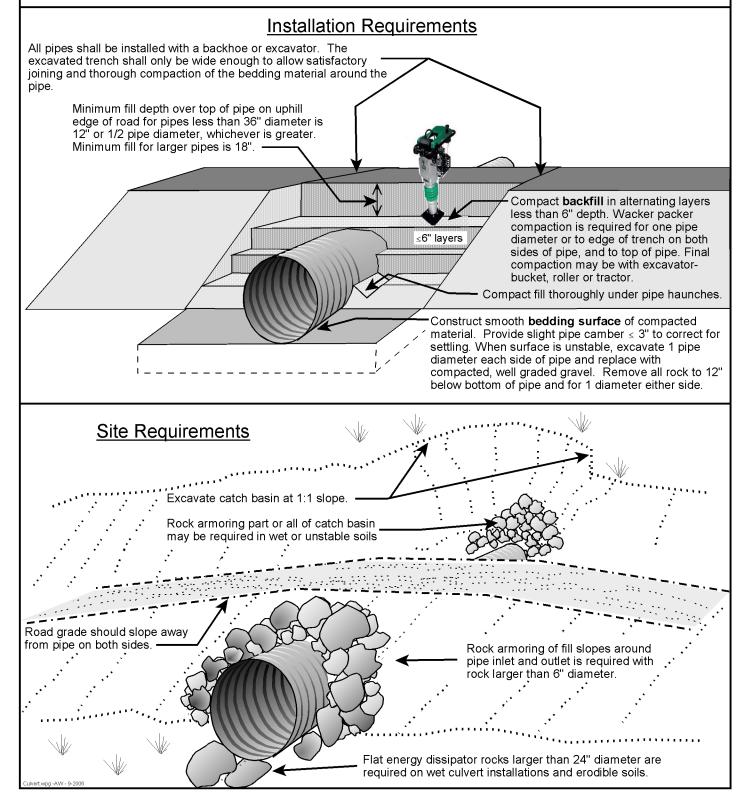
Typical Stream Crossing Using Temporary CLT Bridge



ATTACHMENT B

CULVERT REQUIREMENTS

- ► Exact locations for pipes shall be determined by the Forest Officer after right of way has been cleared.
- ► Backfill shall be select, sorted material. Gravel may be required in road log. If native backfill is used, rocks over 3 inches diameter, organic or frozen materials are not permitted.
- ▶ Pipe shall be protected by adequate fill before equipment is allowed to cross.
- ▶ Pipe that is damaged or improperly installed shall be repaired or replaced at purchaser's expense.
- ► The Forest Officer must be contacted two days before any culvert installation and must be present for any wet site culvert installation.
- ▶ Wet site installations will have additional requirements for timing, erosion control and management.



GUIDELINES FOR LOGGING ACTIVITIES ON OR NEAR BPA RIGHTS-OF-WAY

The Bonneville Power Administration (BPA) wants to keep you and your logging operation safe. Before conducting logging activities adjacent to or under BPA transmission lines, **contact a BPA regional representative before planning logging activities.** See the list of BPA personnel and their territories of responsibility attached below.

The following are special concerns for operations on or near BPA transmission lines:

- Assume all <u>overhead</u> transmission lines <u>are always energized</u>. BPA transmission lines carry high voltage electricity (115kV to 500kV) that can injure or kill if conducted to ground through your equipment, fallen trees, or you.
- Maintain a minimum separation of 25 feet between transmission line conductors and equipment, personnel, and machinery.
- If a tree comes in contact with the transmission line, **DO NOT ATTEMPT TO REMOVE IT!** Quickly remove personnel from the immediate area. **Immediately contact BPA Dittmer Dispatch Center, 24 hours per day, 7 days per week: (800) 392-0816.**
- Do not leave strips of uncut trees (aka logging fringe) between the cut unit boundary and the BPA right-of-way. Trees located near the edge of the right-of-way should be felled away from the transmission lines.
- BPA access roads used for timber sale roads shall be kept reasonably free of equipment, forest products, and debris. BPA may need to have road access for emergencies. In this case "reasonably free" means: roads could be cleared within an hour of notice; and roads would be left clear and passable when the timber sale purchaser or contractors leave the area for more than an hour at a time. After project completion, access roads should be in as good or better condition than that which existed prior to the project.
- Logging trucks and equipment should be parked on the right-of-way only during emergencies. When this occurs, the truck/equipment should be ground with a flexible wire connecting the chassis to an approved ground rod driven into the ground, or by making the connection to ground with a drag chain attached to the truck/equipment chassis.
- Haul roads and skid trail locations must be at least 50 feet from the point where the steel tower legs enter the earth. If this clearance cannot be met, use of the road may be permitted if adequate protection barriers for BPA structures are provided by the use of guard devices (guard rails, posts, Jersey-type barriers, etc...). If guard devices are used, their location and design must be approved by BPA to assure they will protect the structure from vehicle and logging activity incursions.
- No high-lead or skyline yarding should occur across/perpendicular to the power line right-of-way.
- Avoid loaded helicopter flights over transmission facilities. If necessary fly at right angles to the line and cross at a tower location (for better visibility), maintaining a minimum clearance of 100 feet.

- Yarder used near the transmission line should be grounded with approved copper wire attached to an approved copper rod pounded six to eight feet in the ground. Skyline cables should be grounded as described above at the tail hold. Chokers should be allowed to contact the mineral earth prior to contract any personnel or equipment. Track mounted equipment is recommended for use near transmission lines to promote (drain off" of induced voltage. If rubber tire machines are used, a chain should be used to drain off voltage.
- No slash or debris burning on or near the right-of-way **smoke can transmit electricity**. Concentrated columns of smoke from slash burning off right-of-way should be avoided in order to prevent electrical arc. Burning necessary or authorized by the Regional Forest Service District adjacent to the right-of-way will be discussed with BPA District Maintenance personnel prior to writing the burn plan.
- No log decking or storage of logs on the transmission line right-of-way. No storage of flammable materials or carrying of flammable materials by personnel on the right-of-way.
- No loading of logging trucks on the right-of-way. Logging truck shall not be loaded to a height greater than 14 feet above the roadbed when traveling underneath the line.
- No fueling of vehicles or equipment on the right-of-way.
- If a wildfire occurs on or near the right-of-way, immediately contact BPA Dittmer Dispatch Center, 24 hours per day, 7 days per week: (800) 392-0816.
- For extreme safety hazard trees near the transmission line, and with advance notification, BPA may be able to provide personnel at the work site.

• <u>If you have questions, contact the BPA Transmission Field Services Line Fireman III, or the</u> District Natural Resource Specialists (NRS) at:

Area	Line Foreman III	NRS
Northeastern Washington and Northern Idaho	Robert Zeller – 509-631-0056	Craig Fackrell – 509-571-7994
Southern Idaho and Wyoming	Joseph Barnett – 208-681-8774	Cozette DeTray – 509-309-6838
Montana	Michael Stolfus – 406-260-5466	Kyle Goeke – 406-407-4535
Central Washington	Ryan Piche – 509-633-0990	Len Rieman – 360-605-7334
Southeastern Washington and Northeastern Oregon	Toby Cossairt – 509-521-8248	Cozette DeTray – 509-309-6838
North Central Oregon	Fred Wensenk – 564-208-2580	Jake Marti – 360-980-1063
South Central Oregon and California	Darrell Aaby – 541-233-3890	Jake Marti – 360-980-1063