



TIMBER NOTICE OF SALE

SALE NAME: GONE DRY

AGREEMENT NO: 30-091740

AUCTION: September 27, 2016 starting at 10:00 a.m., Northeast Region Office, Colville, WA COUNTY: Stevens

SALE LOCATION: Sale located approximately 12 miles northwest of Colville, WA

PRODUCTS SOLD AND SALE AREA: All green conifer species, (excluding ponderosa pine) 7 inches and greater in diameter at breast height and all green ponderosa pine 8 inches and greater in diameter at breast height, not banded with purple paint in Unit 1 bounded by white timber sale boundary tag on part(s) of Sections 7 and 18 all in Township 37 North, Range 39 East, Sections 12 and 13 all in Township 37 North, Range 38 East, W.M., containing 470 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: BV-SFIS-US09000572)

ESTIMATED SALE VOLUMES AND QUALITY:

Table with columns: Species, Avg Ring DBH, Total MBF, and MBF by Grade (P, SM, 1S, 2S, 3S, 4S, 5S, 6S, UT). Rows include Ponderosa pine, Larch, Douglas fir, Lodgepole, and Sale Total.

MINIMUM BID: \$155,000.00 BID METHOD: Sealed Bids

PERFORMANCE SECURITY: \$31,000.00 SALE TYPE: Lump Sum

EXPIRATION DATE: November 30, 2018 ALLOCATION: Export Restricted

BID DEPOSIT: \$15,500.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Forwarder and Feller Processor. Falling and Yarding will not be permitted from February 1 to July 31 unless authorized in writing by the Contract Administrator due to spring breakup and pine beetle activity.

ROADS: 1.75 stations of required construction. 64.60 stations of required reconstruction. 83.38 stations of required prehaul maintenance. Road construction will not be permitted from November 15 to April 30 unless authorized in writing by the Contract Administrator due to frozen conditions and spring breakup. The hauling of forest products will not be permitted from February 1 to April 30 unless authorized in writing by the Contract Administrator due to spring breakup.

ACREAGE DETERMINATION

CRUISE METHOD: Acreage determined using GPS methods. Acreage shown above is net harvest acres in harvest units. Ponderosa pine: 8.0 - 17.5 inches dbh has a minimum top of 5.6 inch dib. All other species: 7.0 - 17.5 inches dbh has minimum top of 4.6 inch dib. All species



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17.6 inches and greater dbh have a minimum top dib of 40% of dob at 16 feet or a 6 inch top whichever is greater. Utility wood: comprised of non-board foot volume and volume below the minimum top diameter of 5.0 inches or 40% of dob at 16 feet to a minimum of a 2.6 inch top.

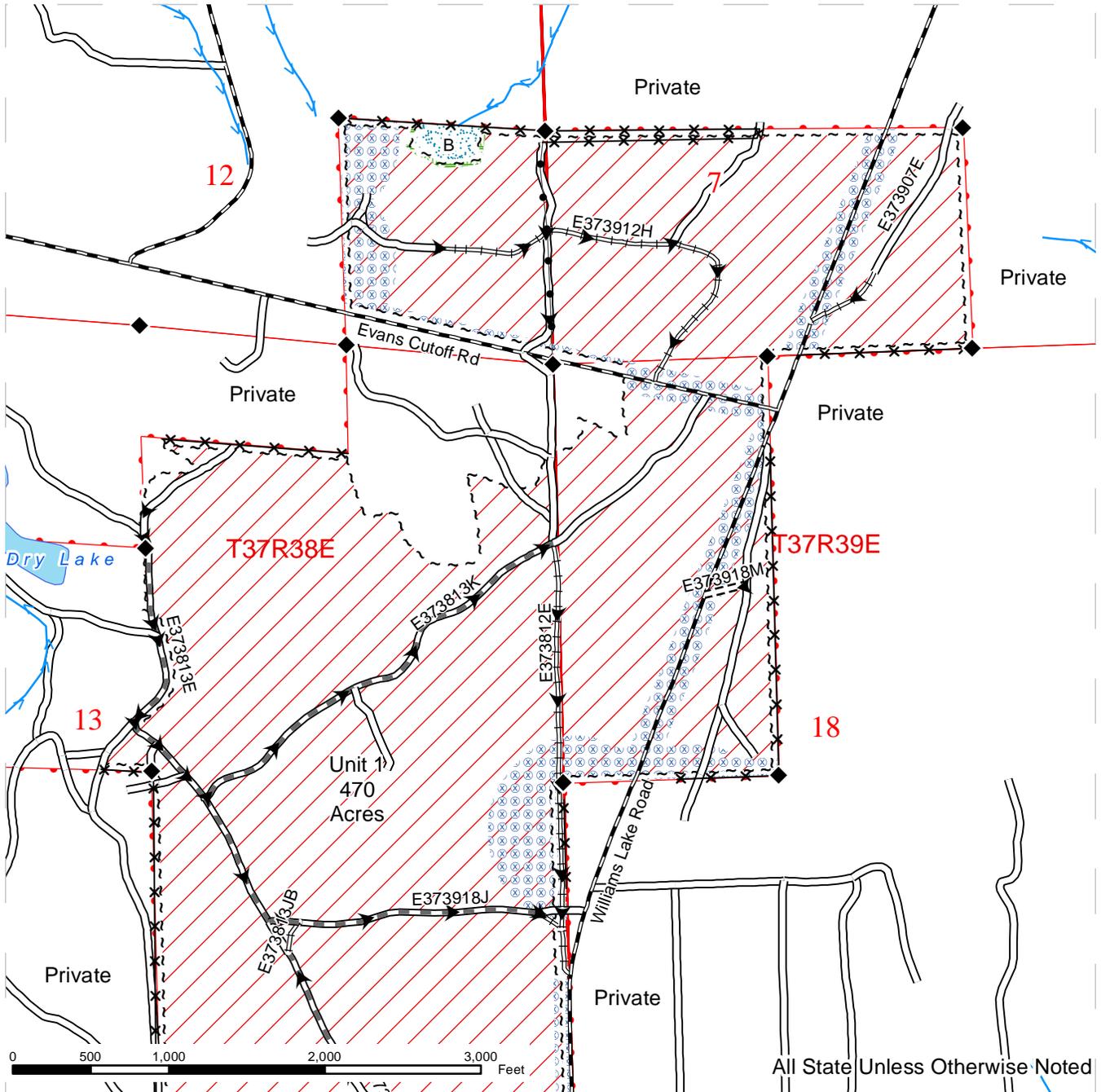
**FEES:** A Stevens County Road Approach Permit fee in the amount of \$15.00 is due within 10 days of day of sale. \$25,134.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

**SPECIAL REMARKS:** Forwarder equipment will be required for this sale.

# TIMBER SALE MAP

**SALE NAME:** GONE DRY  
**AGREEMENT#:** 30-091740  
**TOWNSHIP(S):** T37R38E, T37R39E  
**TRUST(S):** Scientific School(10)

**REGION:** Northeast Region  
**COUNTY(S):** STEVENS  
**ELEVATION RGE:** 1896-1968

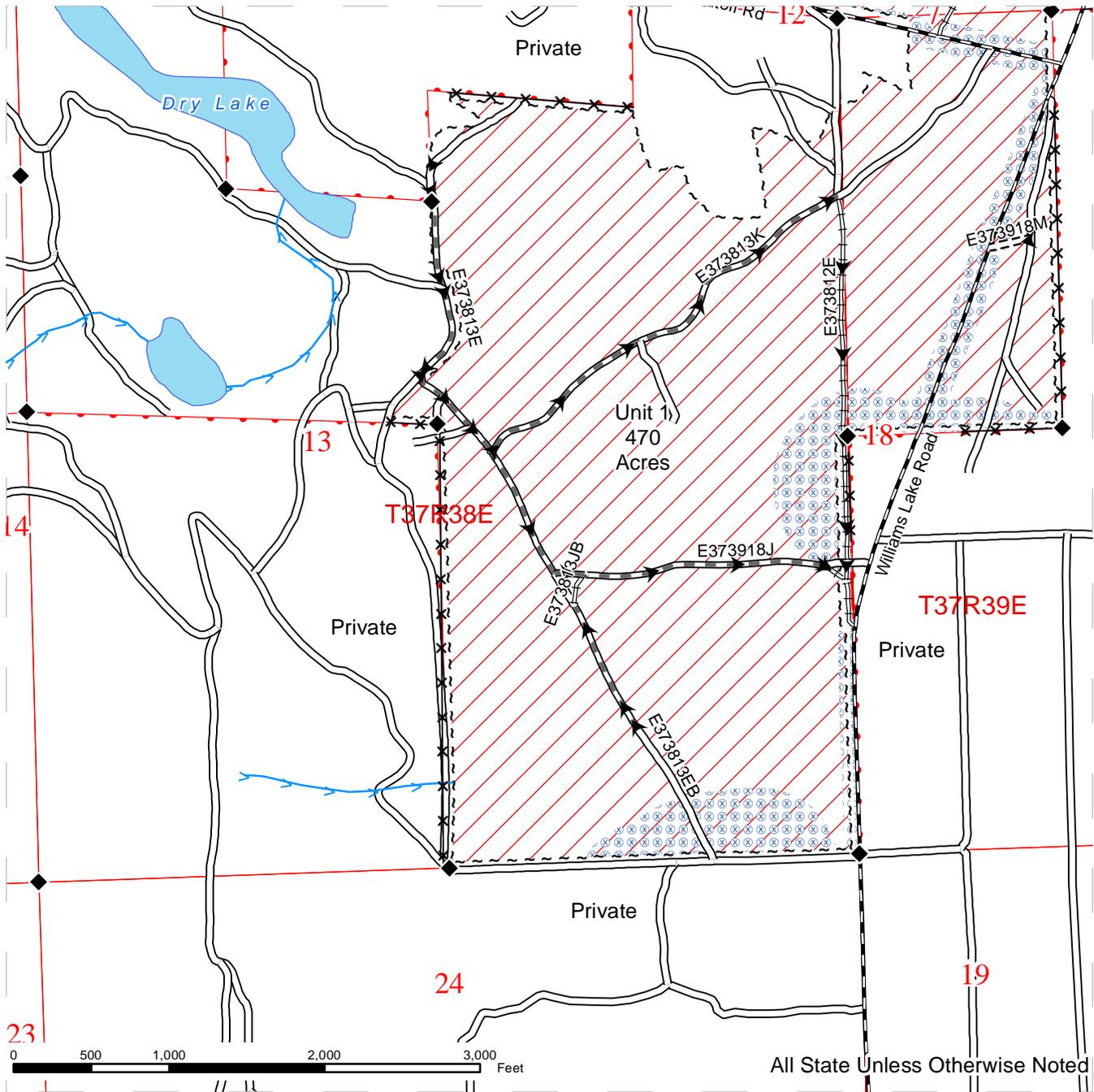


--- Sale Boundary Tags	— County Road	→ Streams
▨ Ground Skidding	— Existing	*-* Fence
⊗ Extreme Hazard Abatement	▬ PreHaul Maintenance	● Powerline
⊙ Type "B" Wetland	==== Required Construction	◆ Monumented Corners
⊕ Wetland Management Zone	▬▬▬ Required Reconstruction	
	➤ Haul Route	

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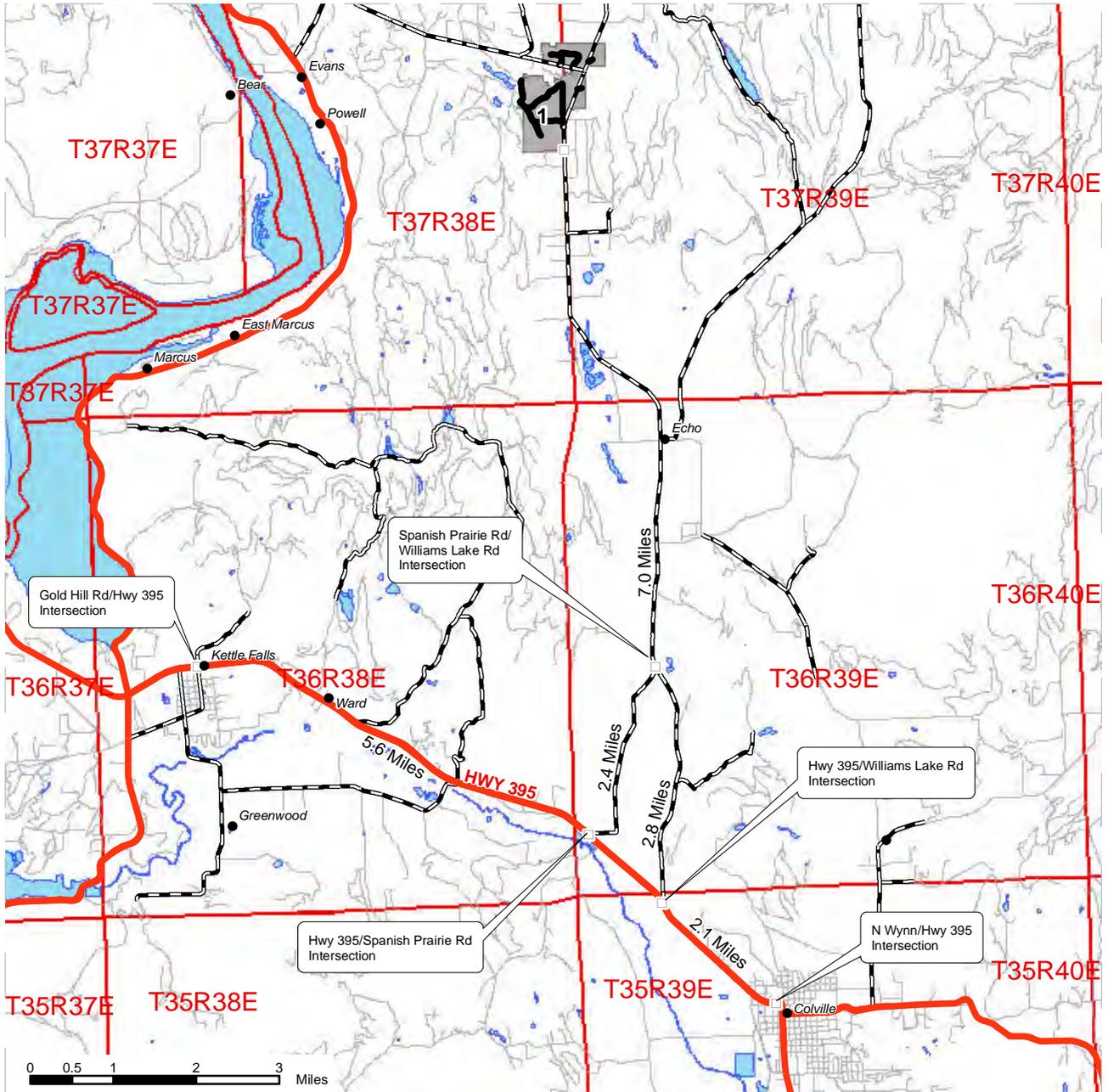
--- Sale Boundary Tags	— County Road	→ Streams
▨ Ground Skidding	— Existing	* * * Fence
⊗ Extreme Hazard Abatement	▬ Pre-Haul Maintenance	● Powerline
	⋮ Required Construction	◆ Monumented Corners
	▬ Required Reconstruction	
	▶ Haul Route	



# DRIVING MAP

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**TRUST(S):** Scientific School(10)

**REGION:** Northeast Region  
**COUNTY(S):** STEVENS  
**ELEVATION RGE:** 1896-1968



	Timber Sale Unit
	County Road
	Highway
	Haul Route
	Other Route
	Milepost Markers

**DRIVING DIRECTIONS:**

The sale is located approximately 11.9 miles northwest of Colville, WA. From the stoplight located at the junction of N. Wynn Street and Highway 395 in Colville, travel northwest on Highway 395 for 2.1 miles and turn right onto Williams Lake Road. Travel north on Williams Lake Road for 9.8 miles to the sale entrance. Turn left at the wooden DNR sign to access the sale.

The sale is located approximately 15.0 miles northeast of Kettle Falls, WA. From the stoplight located at the junction of Gold Hill Rd and Highway 395 in Kettle Falls, travel southeast on Highway 395 for 5.6 miles and turn left onto Spanish Prairie Rd. Travel northeast on Spanish Prairie for 2.4 miles and turn left onto Williams Lake Rd; travel north on Williams Lake Rd for 7.0 miles to the sale entrance. Turn left at the wooden DNR sign to access the sale.



**STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES**

**BILL OF SALE AND CONTRACT FOR  
FOREST PRODUCTS**

**Export Restricted Lump Sum AGREEMENT NO. 30-091740**

**SALE NAME: GONE DRY**

**THE STATE OF WASHINGTON DEPARTMENT OF NATURAL  
RESOURCES, HEREINAFTER ACTING SOLELY, IN ITS PROPRIETARY  
CAPACITY, STATE, AND PURCHASER, AGREE AS FOLLOWS:**

Section G: General Terms

G-001 Definitions

The following definitions apply throughout this contract;

**Bill of Sale and Contract for Forest Products:** Contract between the Purchaser and the State, which sets forth the procedures and obligations of the Purchaser in exchange for the right to remove forest products from the sale area. The Bill of Sale and Contract for Forest Products may include a Road Plan for any road construction or reconstruction, where applicable.

**Contract Administrator:** Region Manager's designee responsible for assuring that the contractual obligations of the Purchaser are met.

**Forest Product:** Any material derived from the forest for commercial use.

**Purchaser:** The company or individual that has entered a Bill of Sale and Contract for Forest Products with the State for the right to harvest and remove forest products from the timber sale area.

Road Construction: Includes building new and maintaining existing forest roads and associated work that may be optional or required as described in the Road Plan.

State: The Washington State Department of Natural Resources, landowner and seller of Forest Products from the timber sale area. The State is represented by the Region Manager as designated on the contract signature page. Contractual obligations to the State are enforced by the Region Manager or the designated Contract Administrator.

Subcontractor: Individual or company employed by the Purchaser to perform a portion or all of the services required by The Bill of Sale and Contract for Forest Products. The Purchaser is responsible for independently negotiating, procuring and paying for all subcontracted services rendered.

G-011 Right to Remove Forest Products and Contract Area

Purchaser was the successful bidder on September 27, 2016 and the sale was confirmed on \_\_\_\_\_. The State, as owner, agrees to sell to Purchaser, and Purchaser agrees to purchase as much of the following forest products as can be cut and removed during the term of this contract: All green conifer species, (excluding ponderosa pine) 7 inches and greater in diameter at breast height and all green ponderosa pine 8 inches and greater in diameter at breast height, not banded with purple paint in Unit 1 bounded by white timber sale boundary tag, located on approximately 470 acres on part(s) of Sections 7, and 18 all in Township 37 North, Range 39 East, Sections 12, and 13 all in Township 37 North, Range 38 East W.M. in Stevens County(s) as designated on the sale area and as shown on the attached timber sale map.

All forest products described above from the bole of the tree that meet or exceed 2 inches diameter inside bark on the small end are eligible for removal. Above ground components of a tree that remain as by-products after the manufacture of logs, including but not limited to tree tops, branches, limbs, needles, leaves, stumps, are not eligible for removal under the terms of this contract.

Forest products purchased under a contract that is designated as export restricted shall not be exported until processed. Forest products purchased under a contract that is designated as exportable may be exported prior to processing.

G-020 Inspection By Purchaser

Purchaser hereby warrants to the State that they have had an opportunity to fully inspect the sale area and the forest products being sold. Purchaser further warrants to the State that they enter this contract based solely upon their own judgment of the value of the forest products, formed after their own examination and inspection of both the timber sale area and the forest products being sold. Purchaser also warrants to the State that they enter this contract without any reliance upon the volume estimates, acreage estimates, appraisals, pre-bid documentation, or any other representations by the State Department of Natural Resources.

## G-031 Contract Term

Purchaser shall complete all work required by this contract prior to November 30, 2018.

## G-040 Contract Term Adjustment - No Payment

Purchaser may request an adjustment in the contract term. A claim must be submitted in writing and received by the State within 30 days after the start of interruption or delay. The claim must also indicate the actual or anticipated length of interruption or delay. The State may grant an adjustment without charge only if the cause for contract term adjustment is beyond Purchaser's control. The cause must be one of the following and the adjustment may be granted only if operations or planned operations under this contract are actually interrupted or delayed:

- a. Road and bridge failures which deny access.
- b. Access road closures imposed by road owner.
- c. Excessive suspensions as provided in clause G-220.
- d. Regulatory actions not arising from Purchaser's failure to comply with this contract which will prevent timber harvest for a period less than 6 months.

## G-051 Contract Term Extension - Payment

Extensions of this contract term may be granted only if, in the judgment of the State, Purchaser is acting in good faith and is endeavoring to remove the forest products conveyed. The term of this contract may be extended for a reasonable time by the State if all of the following conditions are satisfied:

- a. A written request for extension of the contract term must be received prior to the expiration date of the contract.
- b. Completion of all required roads and compliance with all contract and regulatory requirements.
- c. For the first extension, not to exceed 1 year, payment of at least 25 percent of the total contract price.

For the second extension, not to exceed 1 year, payment of at least 90 percent of the total contract price.

The payments shall not include the initial deposit which shall be held according to the provisions of RCW 79.15.100.

- d. Payment of an amount based on 12 percent interest per annum on the unpaid portion of the total contract price.

All payments, except the initial deposit, will be deducted from the total contract price to determine the unpaid portion of the contract.

- e. Payment of \$376.00 per acre per annum for the acres on which an operating release has not been issued .
- f. In no event will the extension charge be less than \$200.00.
- g. Extension payments are non-refundable.

**G-053 Surveys - Sensitive, Threatened, Endangered Species**

Whenever the State determines that a survey for sensitive, threatened, or endangered species is prudent, or when Purchaser determines a survey is prudent and the State agrees, Purchaser shall perform such surveys at Purchaser's expense and to the standards required by the State. The survey information shall be supplied to the State.

**G-060 Exclusion of Warranties**

The PARTIES AGREE that the IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE and ALL OTHER WARRANTIES EXPRESSED OR IMPLIED ARE EXCLUDED from this transaction and shall not apply to the goods sold. For example, THE FOLLOWING SPECIFIC MATTERS ARE NOT WARRANTED, and are EXCLUDED from this transaction:

- a. The MERCHANTABILITY of the forest products. The use of the term "merchantable" in any document is not intended to vary the foregoing.
- b. The CONDITION of the forest products. The forest products will be conveyed "AS IS."
- c. The ACREAGE contained within any sale area. Any acreage descriptions appearing in the timber notice of sale, timber sale contract, or other documents are estimates only, provided solely for administrative and identification purposes.
- d. The VOLUME, QUALITY, OR GRADE of the forest products. The State neither warrants nor limits the amount of timber to be harvested. The descriptions of the forest products to be conveyed are estimates only, made solely for administrative and identification purposes.
- e. The CORRECTNESS OF ANY SOIL OR SURFACE CONDITIONS, PRE-SALE CONSTRUCTION APPRAISALS, INVESTIGATIONS, AND ALL OTHER PRE-BID DOCUMENTS PREPARED BY OR FOR THE STATE. These documents have been prepared for the State's appraisal purposes only.
- f. THAT THE SALE AREA IS FREE FROM THREATENED OR ENDANGERED SPECIES or their habitat. The State is not responsible for any interference with forestry operations that result from the presence of any

threatened or endangered species, or the presence of their habitat, within the sale area.

- g. THAT THE FORESTRY OPERATIONS to be performed under this contract WILL BE FREE FROM REGULATORY ACTIONS by governmental agencies. The State is not responsible for actions to enforce regulatory laws, such as the Washington Forest Practices Act (chapter 76.09 RCW), taken by the Department of Natural Resources or any other agency that may affect the operability of this timber sale.
- h. Items contained in any other documents prepared for or by the State.

G-064 Permits

Purchaser is responsible for obtaining any permits not already obtained by the State that relate to Purchaser's operation. Forest Practice Application / Hydraulic Project Approval permits obtained by the State shall be transferred to Purchaser. Purchaser is responsible for all permits, amendments and renewals.

G-065 Regulatory Disclaimer

The State disclaims any responsibility for, or liability relating to, regulatory actions by any government agency, including actions pursuant to the Forest Practices Act, Ch. 76.09 RCW that may affect the operability of the timber sale.

G-066 Governmental Regulatory Actions

a. Risk

Purchaser shall be responsible for any increased operational costs arising from any applicable foreign or domestic governmental regulation or order that does not cause contract performance to become commercially impracticable or that does not substantially frustrate the purpose of the contract. If impracticability or frustration results from Purchaser's failure to comply with this contract, Purchaser shall remain responsible for payment of the total contract price notwithstanding the impracticability or frustration.

b. Sale Area

When portions of the sale area become subject to a foreign or domestic governmental regulation or order that will likely prevent timber harvest for a period that will exceed the expiration date of this contract, and Purchaser has complied with this contract, the following shall apply:

- i. RCW 79.15.140 shall govern all adjustments to the contract area.

c. Adjustment of Price

The State shall adjust the total contract price by subtracting from the total contract price an amount determined in the following manner: The State shall

cause the timber sale area subject to governmental regulation or order to be measured. The State shall calculate the percentage of the total sale area subject to the governmental regulation or order. The State shall reduce the total contract price by that calculated percentage. However, variations in species, value, costs, or other items pertaining to the affected sale area will be analyzed and included in the adjustment if deemed appropriate by the State. The State will further reduce the total contract price by the reasonable cost of unamortized roads Purchaser constructed but was unable to fully use for removing timber. A reduction in total contract price terminates all of the Purchaser's rights to purchase and remove the timber and all other interest in the affected sale area.

G-070 Limitation on Damage

In the event of a breach of any provision of this contract by the State, the exclusive remedy available to Purchaser will be limited to a return of the initial deposit, unapplied payments, and credit for unamortized improvements made by Purchaser. The State shall not be liable for any damages, whether direct, incidental or consequential.

G-080 Scope of State Advice

No advice by any agent, employee, or representative of the State regarding the method or manner of performing shall constitute a representation or warranty that said method, manner or result thereof will conform to the contract or be suitable for Purchaser's purposes under the contract. Purchaser's reliance on any State advice regarding the method or manner of performance shall not relieve Purchaser of any risk or obligation under the contract. Purchaser retains the final responsibility for its operations under this contract and State shall not be liable for any injuries resulting from Purchaser's reliance on any State advice regarding the method or manner of performance.

G-091 Sale Area Adjustment

The Parties may agree to adjustments in the sale area boundary. The cumulative changes to the sale area during the term of the contract shall not exceed more than four percent of the original sale area. If the sale area is increased, the added forest products become a part of this contract. The State shall determine the volume added and shall calculate the increase to the total contract price using the rates set forth in clause G-101, G-102, or G-103. If the sale area is reduced, the State shall determine the volume to be reduced. The State shall calculate the reduction to the total contract price using the rates set forth in clause G-101, G-102, or G-103.

G-102 Forest Products Not Designated

Any forest products not designated for removal, which must be removed in the course of operations authorized by the State, shall be approved and designated by the Contract Administrator. Added forest products shall become a part of this contract and the Scribner log scale volume, as defined by the National Forest Log Scaling Handbook, shall be determined by the Contract Administrator. Added forest products shall be paid for at the following contract payment rates per MBF Scribner log scale.

The pricing schedule has not been set for the sale.

G-111 Title and Risk of Loss

Title to the forest products under this contract passes to the Purchaser after they are removed from the sale area, if adequate advance payment or payment security has been provided to the State under this contract. Purchaser bears all risk of loss of, or damage to, and has an insurable interest in, the forest products described in this contract from the time the sale is confirmed under RCW 79.15.120. Breach of this contract shall have no effect on this provision.

G-116 Sustainable Forestry Initiative® (SFI) Certification

Forest products purchased under this contract are certified as being in conformance with the Sustainable Forestry Initiative program Standard under certificate number: BV-SFIS-US09000572.

Purchaser shall have at least one person regularly on-site during active operations that have completed training according to the requirements outlined within the SFI® program Standard. Purchaser shall designate in writing the name(s) of the individual(s) who will be on-site and provide proof of their successful completion of an approved training program prior to active operations.

G-120 Responsibility for Work

All work, equipment, and materials necessary to perform this contract shall be the responsibility of Purchaser. Any damage to improvements, except as provided in clause G-121 or unless the State issues an operating release pursuant to clause G-280, shall be repaired promptly to the satisfaction of the State and at Purchaser's expense.

G-121 Exceptions

Exceptions to Purchaser's responsibility in clause G-120 shall be limited exclusively to the following. These exceptions shall not apply where road damage occurs due to Purchaser's failure to take reasonable precautions or to exercise sound forest engineering and construction practices.

Road is defined as the road bed, including but not limited to its component parts, such as subgrade, ditches, culverts, bridges, and cattle guards.

For the purposes of this clause, damage will be identified by the State and is defined as:

1. Failure of (a) required improvements or roads designated in clause C-050, or (b) required or optional construction completed to the point that authorization to haul has been issued;
2. Caused by a single event from forces beyond the control of Purchaser, its employees, agents, or invitees, including independent contractors; and
3. Includes, but is not limited to natural disasters such as earthquakes, volcanic eruptions, landslides, and floods.

The repair work identified by the State shall be promptly completed by Purchaser at an agreed price. The State may elect to accomplish repairs by means of State-provided resources. The State will bear the cost to repair damages caused by a third party. In all other cases, the Purchaser shall bear responsibility for the costs as described below.

For each event, Purchaser shall be solely responsible for the initial \$5,000 in repairs. For repairs in excess of \$5,000, the parties shall share equally the portion of costs between \$5,000 and \$15,000. The State shall be solely responsible for the portion of the cost of repairs that exceed \$15,000.

Nothing contained in clauses G-120 and G-121 shall be construed as relieving Purchaser of responsibility for, or damage resulting from, Purchaser's operations or negligence, nor shall Purchaser be relieved from full responsibility for making good any defective work or materials. Authorization to haul does not warrant that Purchaser built roads are free from material defect and the State may require additional work, at Purchasers expense regardless of cost, to remedy deficiencies at any time.

#### G-140 Indemnity

To the fullest extent permitted by law, Purchaser shall indemnify, defend and hold harmless State, agencies of State and all officials, agents and employees of State, from and against all claims arising out of or resulting from the performance of the contract. "Claim" as used in this contract means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorneys' fees, attributable for bodily injury, sickness, disease or death, or injury to or destruction of tangible property including loss of use resulting therefrom. Purchasers' obligations to indemnify, defend, and hold harmless includes any claim by Purchasers' agents, employees, representatives, or any subcontractor or its employees. Purchaser expressly agrees to indemnify, defend, and hold harmless State for any claim arising out of or incident to Purchasers' or any subcontractors' performance or failure to perform the contract. Purchasers' obligation to indemnify, defend, and hold harmless State shall not be eliminated or reduced by any actual or alleged concurrent negligence of State or its agents, agencies, employees and officials. Purchaser waives its immunity under Title 51 RCW to the extent it is required to indemnify, defend and hold harmless State and its agencies, officials, agents or employees.

#### G-150 Insurance

Purchaser shall, at its cost and expense, buy and maintain insurance of the types and amounts listed below. Failure to buy and maintain the required insurance may result in a breach and/or termination of the contract at State's option. State may suspend Purchaser operations until required insurance has been secured.

All insurance and surety bonds should be issued by companies admitted to do business within the State of Washington and have a rating of A-, Class VII or better in the most recently published edition of Best's Reports. If an insurer is not admitted, all insurance policies and procedures for issuing the insurance policies must comply with Chapter 48.15 RCW and 284-15 WAC.

The State of Washington, Department of Natural Resources region office of sale origin shall be provided written notice before cancellation or non-renewal of any insurance referred to therein, in accord with the following specifications:

1. Insurers subject to Chapter 48.18 RCW (admitted and regulated by the Insurance Commissioner): The insurer shall give the State 45 days advance notice of cancellation or non-renewal. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.
2. Insurers subject to Chapter 48.15 RCW (surplus lines): The State shall be given 20 days advance notice of cancellation. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.

Before starting work, Purchaser shall furnish State of Washington, Department of Natural Resources with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements specified in the contract. Insurance coverage shall be obtained by the Purchaser prior to operations commencing and continually maintained in full force until all contract obligations have been satisfied or an operating release has been signed by the State.

Purchaser shall include all subcontractors as insured under all required insurance policies, or shall furnish separate certificates of insurance and endorsements for each subcontractor. Subcontractor(s) must comply fully with all insurance requirements stated herein. Failure of subcontractor(s) to comply with insurance requirements does not limit Purchaser's liability or responsibility.

The State of Washington, Department of Natural Resources, its elected and appointed officials, agents and employees shall be named as an additional insured on all general liability, excess, umbrella, and property insurance policies.

All insurance provided in compliance with this contract shall be primary as to any other insurance or self-insurance programs afforded to or maintained by State. Purchaser waives all rights against State for recovery of damages to the extent these damages are covered by general liability or umbrella insurance maintained pursuant to this contract.

By requiring insurance herein, State does not represent that coverage and limits will be adequate to protect Purchaser and such coverage and limits shall not limit Purchaser's liability under the indemnities and reimbursements granted to State in this contract.

The limits of insurance, which may be increased as deemed necessary by State of Washington, Department of Natural Resources, shall not be less than as follows:

Commercial General Liability (CGL) Insurance. Purchaser shall maintain general liability (CGL) insurance, and, if necessary, commercial umbrella insurance with a

limit of not less than \$1,000,000.00 per each occurrence. If such CGL insurance contains aggregate limits, the General Aggregate limit shall be at least twice the "each occurrence" limit. CGL insurance shall have products-completed operations aggregate limit of at least two times the "each occurrence" limit. CGL coverage shall include a Logging and Lumbering Endorsement (i.e. Logger's Broad-Form) to cover the events that include, but are not limited to, fire suppression expenses, accidental timber trespasses, and wildfire property damage with limits of not less than \$2,000,000.00 each occurrence.

CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 (or a substitute form providing equivalent coverage). All insurance shall cover liability arising out of premises, operations, independent contractors, products completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another party assumed in a business contract), and contain separation of insured (cross liability) condition.

Employer's Liability "Stop Gap" Insurance. Purchaser shall buy employers liability insurance, and, if necessary, commercial umbrella liability insurance with limits not less than \$1,000,000.00 each accident for bodily injury by accident or \$1,000,000.00 each employee for bodily injury by disease.

Workers' Compensation Coverage. Purchaser shall comply with all State of Washington workers' compensation statutes and regulations. Workers' compensation coverage shall be provided for all employees of Purchaser and employees of any subcontractor or sub-subcontractor. Coverage shall include bodily injury (including death) by accident or disease, which exists out of or in connection with the performance of this contract. Except as prohibited by law, Purchaser waives all rights of subrogation against State for recovery of damages to the extent they are covered by workers' compensation, employer's liability, commercial general liability, or commercial umbrella liability insurance.

If Purchaser, subcontractor or sub-subcontractor fails to comply with all State of Washington workers' compensation statutes and regulations and State incurs fines or is required by law to provide benefits to or obtain coverage for such employees, Purchaser shall indemnify State. Indemnity shall include all fines, payment of benefits to Purchaser or subcontractor employees, or their heirs or legal representatives, and the cost of effecting coverage on behalf of such employees.

Business Auto Policy (BAP). Purchaser shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit not less than \$1,000,000.00 per accident. Such insurance shall cover liability arising out of "Any Auto". Business auto coverage shall be written on ISO form CA 00 01, or substitute liability form providing equivalent coverage. If necessary the policy shall be endorsed to provide contractual liability coverage and cover a "covered pollution cost or expense" as provided in the 1990 or later editions of CA 00 01. Purchaser waives all

rights against State for the recovery of damages to the extent they are covered by business auto liability or commercial umbrella liability insurance.

G-160 Agents

The State's rights and duties will be exercised by the Region Manager at Colville, Washington. The Region Manager will notify Purchaser in writing who is responsible for administering the contract. The Region Manager has sole authority to waive, modify, or amend the terms of this contract in the manner prescribed in clause G-180. No agent, employee, or representative of the State has any authority to bind the State to any affirmation, representation, or warranty concerning the forest products conveyed beyond the terms of this contract.

Purchaser is required to have a person on site during all operations who is authorized to receive instructions and notices from the State. Purchaser shall inform the State in writing who is authorized to receive instructions and notices from the State, and any limits to this person's authority.

G-170 Assignment and Delegation

No rights or interest in this contract shall be assigned by Purchaser without prior written permission of the State. Any attempted assignment shall be void and ineffective for all purposes unless made in conformity with this paragraph. Purchaser may perform any duty through a delegate, but Purchaser is not thereby relieved of any duty to perform or any liability. Any assignee or delegate shall be bound by the terms of the contract in the same manner as Purchaser.

G-180 Modifications

Waivers, modifications, or amendments of the terms of this contract must be in writing signed by Purchaser and the State.

G-190 Contract Complete

This contract is the final expression of the Parties' agreement. There are no understandings, agreements, or representations, expressed or implied, which are not specified in this contract.

G-200 Notice

Notices required to be given under the following clauses shall be in writing and shall be delivered to Purchaser's authorized agent or sent by certified mail to Purchaser's post office address:

G-210 Violation of Contract

G-220 State Suspends Operations

All other notices required to be given under this contract shall be in writing and delivered to the authorized agent or mailed to the Party's post office address. Purchaser agrees to notify the State of any change of address.

## G-210 Violation of Contract

- a. If Purchaser violates any provision of this contract, the Contract Administrator, by written notice, may suspend those operations in violation. If the violation is capable of being remedied, Purchaser has 30 days after receipt of a suspension notice to remedy the violation. If the violation cannot be remedied (such as a violation of WAC 240-15-015) or Purchaser fails to remedy the violation within 30 days after receipt of a suspension notice, the State may terminate the rights of Purchaser under this contract and collect damages.
- b. If the contract expires pursuant to clause G-030 or G-031 without Purchaser having performed all its duties under this contract, Purchaser's right to operate is terminated and Purchaser shall not have the right to remedy the breach. This provision shall not relieve Purchaser of any payment obligations.
- c. The State has the right to remedy the breach in the absence of any indicated attempt by Purchaser or if Purchaser is unable, as determined by the State, to remedy the breach. Any expense incurred by the State shall be charged to Purchaser and shall be paid within 30 days of receipt of billing.
- d. If Purchaser's violation is a result of a failure to make a payment when due, in addition to a. and b. above, interest shall accrue on the unpaid balance at 12 percent per annum, beginning the date payment was due.

## G-220 State Suspends Operation

The Contract Administrator may suspend any operation of Purchaser under this contract when the State is suffering, or there is a reasonable expectation the State will suffer environmental, monetary, or other damage if the operation is allowed to continue.

Purchaser shall be in breach of this contract if the operation continues after the suspension notice or if the operation resumes without prior approval and notice from the Contract Administrator.

Purchaser may request a modification of a suspension within 30 days of the start of suspension through the dispute resolution process in clause G-240. If this process results in a finding that the suspension exceeded the time reasonably necessary to stop or prevent damage to the State, Purchaser is entitled to request a contract term adjustment under clause G-040.

If it reasonably appears that the damage that the State is suffering, or can reasonably be expected to suffer if the operation is allowed to continue, will prevent harvest for a period that will exceed 6 months, and Purchaser has complied with this contract, the provisions of clause G-066 shall govern just as if the harvest was prevented by an applicable foreign or domestic governmental regulation or order.

**G-230** Unauthorized Activity

Any cutting, removal, or damage of forest products by Purchaser, its employees, agents, or invitees, including independent contractors, in a manner inconsistent with the terms of this contract or State law, is unauthorized. Such activity may subject Purchaser to liability for triple the value of said forest products under RCW 79.02.320 or RCW 79.02.300 and may result in prosecution under RCW 79.02.330 or other applicable statutes.

**G-240** Dispute Resolution

The following procedures apply in the event of a dispute regarding interpretation or administration of this contract and the parties agree that these procedures must be followed before a lawsuit can be initiated.

- a. In the event of a dispute, Purchaser must make a written request to the Region Manager for resolution prior to seeking other relief.
- b. The Region Manager will issue a written decision on Purchaser's request within ten business days.
- c. Within ten business days of receipt of the Region Manager's decision, Purchaser may make a written request for resolution to the Deputy Supervisor - Uplands of the Department of Natural Resources.
- d. Unless otherwise agreed, a conference will be held by the Deputy Supervisor - Uplands within 30 calendar days of the receipt of Purchaser's request for review of the Region Manager's written decision. Purchaser and the Region Manager will have an opportunity to present their positions. The Deputy Supervisor - Uplands will issue a decision within a reasonable time of being presented with both Parties' positions.

**G-250** Compliance with All Laws

Purchaser shall comply with all applicable statutes, regulations and laws, including, but not limited to; chapter 27.53 RCW, chapter 68.50 RCW, WAC 240-15 and WAC 296-54. Failure to comply may result in forfeiture of this contract.

**G-260** Venue

This contract shall be governed by the laws of the State of Washington. In the event of a lawsuit involving this contract, venue shall be proper only in Thurston County Superior Court.

**G-270** Equipment Left on State Land

All equipment owned or in the possession of Purchaser, its employees, agents, or invitees, including independent contractors, shall be removed from the sale area and other State land by the termination date of this contract. Equipment remaining unclaimed on State land 60 days after the expiration of the contract period is subject to disposition as provided by law. Purchaser shall pay to the State all costs of moving, storing, and disposing of such equipment. The State shall not be responsible for any

damages to or loss of the equipment or damage caused by the moving, storing or disposal of the equipment.

G-280 Operating Release

An operating release is a written document, signed by the State and Purchaser, indicating that Purchaser has been relieved of certain rights or responsibilities with regard to the entire or a portion of the timber sales contract. Purchaser and State may agree to an operating release for this sale, or portion of this sale, prior to the contract expiration, when all contract requirements pertaining to the release area have been satisfactorily completed. Upon issuance of a release, Purchaser's right to cut and remove forest products on the released area will terminate.

G-310 Road Use Authorization

Purchaser is authorized to use the following State roads and roads for which the State has acquired easements and road use permits; E373918J, E373813JB, E373813EB, E373813E, E373812E, E373813K, E373918M, E373907E and E373918H. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

G-320 Erosion Control

Purchaser shall deliver 100 pounds of grass seed to a location designated by the Contract Administrator. Seed provided shall meet the following specifications.

40% Timothy, 40% Smooth Brome, 20% Aliske Clover

Seed shall be certified weed free, premixed and delivered to Northeast Region Office in 50 pound bags clearly labeled with the timber sale name on each bag.

G-330 Pre-work Conference

Purchaser shall arrange with the Contract Administrator to review this contract and to examine the sale area before beginning any operations. A plan of operations shall be developed and agreed upon by the Contract Administrator and Purchaser before beginning any operations. To the extent that the plan of operations is inconsistent with the contract, the terms of the contract shall prevail. State's acceptance and approval of Purchaser's plan of operations shall not be construed as any statement or warranty that the plan of operations is adequate for Purchaser's purposes or complies with applicable laws.

G-340 Preservation of Markers

Any legal land subdivision survey corners and witness objects are to be preserved. If such are destroyed or disturbed, the Purchaser shall, at the Purchaser's own expense, re-establish them through a licensed land surveyor in accordance with U.S. General Land Office standards. Corners and/or witness objects that must be disturbed or destroyed in the process of road construction or logging shall be adequately referenced and/or replaced in accordance with RCW 58.24.040(8). Such references must be approved by the Contract Administrator prior to removal of said corners and/or witness objects.

G-360 Road Use Reservation

The State shall have the right to use, without charge, all existing roads and any road constructed or reconstructed on State lands by Purchaser under this contract. The State may extend such rights to others. If the State grants such rights to others, the State shall require performance or payment, as directed by the State, for their proportionate share of maintenance based on their use.

G-395 Road Approach Permit

Purchaser must enter into a road approach permit with Stevens County.

Purchaser must provide the State with a copy of the executed permit, or a letter from Stevens County, indicating that a satisfactory road approach permit has been consummated between Purchaser and Stevens County.

G-430 Open Fires

Purchaser shall not set, or allow to be set by Purchaser's employees, agents, invitees and independent contractors, any open fire at any time of the year without first obtaining permission, in writing, from the Contract Administrator.

G-450 Encumbrances

This contract and Purchaser's activities are subject to the following:

DATA MISSING

Section P: Payments and Securities

P-011 Initial Deposit

Purchaser paid DATA MISSING initial deposit, which will be maintained pursuant to RCW 79.15.100(3). If the operating authority on this contract expires without Purchaser's payment of the full amount specified in Clause P-020, the initial deposit will be immediately forfeited to the State, and will be offset against Purchaser's remaining balance due. Any excess initial deposit funds not needed to ensure full payment of the contract price, or not needed to complete any remaining obligations of the Purchaser existing after contract expiration, will be refunded to the Purchaser.

P-020 Payment for Forest Products

Purchaser agrees to pay the total, lump sum contract price of \$37,878.00. The total contract price consists of a \$0.00 contract bid price plus \$37,878.00 in fees. Fees collected shall be retained by the state unless the contract is adjusted via the G-066 clause. Purchaser shall be liable for the entire purchase price, and will not be entitled to any refunds or offsets unless expressly stated in this contract.

THE PURCHASE PRICE SHALL NOT BE AFFECTED BY ANY FACTORS, INCLUDING: the amount of forest products actually present within the contract area, the actual acreage covered by the contract area, the amount or volume of forest products actually cut or removed by purchaser, whether it becomes physically impossible or uneconomic to remove the forest products, and whether the subject forest

products have been lost or damaged by fire or any other cause. The only situations Purchaser may not be liable for the full purchase price are governed by clause G-066, concerning governmental regulatory actions taken during the term of the contract.

P-045 Guarantee of Payment

Purchaser will pay for forest products prior to cutting or will guarantee payment by posting an approved payment security. The amount of cash or payment security shall be determined by the State and shall equal or exceed the value of the cutting proposed by Purchaser.

P-050 Billing Procedure

The State will compute and forward to Purchaser statements of charges provided for in the contract. Purchaser shall deliver payment to the State on or before the date shown on the billing statement.

P-080 Payment Account Refund

Advance payments made under P-045 or P-045.2 remaining on account above the value for the charges shall be returned to Purchaser within 30 days following the final report of charges. Refunds not made within the 30 day period will accrue interest at the interest rate, as established by WAC 332-100-030, computed on a daily basis until paid.

P-090 Performance Security

Purchaser agrees to furnish, within 30 days of the confirmation date, security acceptable to the State in the amount of \$31,000.00. The Security provided shall guarantee performance of all provisions of this contract and payment of any damages caused by operations under this contract or resulting from Purchaser's noncompliance with any rule or law. Acceptable performance security may be in the form of a performance bond, irrevocable letter of credit, cash, savings or certificate of deposit account assignments, and must name the State as the obligee or beneficiary. A letter of credit must comply with Title 62A RCW, Article 5. Performance security must remain in full force over the duration of the contract length. Surety bonds issued shall conform to the issuance and rating requirements in clause G-150. The State shall retain the performance security pursuant to RCW 79.15.100. Purchaser shall not operate unless the performance security has been accepted by the State. If at any time the State decides that the security document or amount has become unsatisfactory, Purchaser agrees to suspend operations and, within 30 days of notification, to replace the security with one acceptable to the State or to supplement the amount of the existing security.

P-100 Performance Security Reduction

The State may reduce the performance security after an operating release has been issued if the State determines that adequate security exists for any remaining obligations of Purchaser.

Section H: Harvesting Operations

H-010 Cutting and Yarding Schedule

Falling and Yarding will not be permitted from February 1 to July 31 unless authorized in writing by the Contract Administrator.

**H-011 Certification of Fallers and Yarder Operators**

All persons engaged in the felling and yarding of timber must receive certification in writing from the Contract Administrator. Certification may be revoked when the Contract Administrator determines that non-compliance of leave tree selection criteria or cut tree selection criteria is occurring, or excessive damage to leave trees or skid trails is occurring.

Excessive damage for leave trees is defined in clause H-012.

Excessive skid trail damage is defined in clause H-015 or H-016.

When leave tree damage exceeds the limits set forth in clause H-012, Purchaser shall be subject to liquidated damages (clause D-040 or D-041).

**H-013 Reserve Tree Damage Definition**

Reserve trees are trees required and designated for retention within the sale boundary. Purchaser shall protect reserve trees from being cut, damaged, or removed during operations.

Reserve tree damage exists when one or more of the following criteria occur as a result of Purchaser's operation, as determined by the Contract Administrator:

- a. A reserve tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 144 square inches.
- b. A reserve tree top is broken or the live crown ratio is reduced below 30 percent.
- c. A reserve tree has more than 1/3 of the circumference of its root system injured such that the cambium layer is exposed.

If the Contract Administrator determines that a reserve tree has been cut or damaged, the Purchaser shall provide a replacement reserve tree of like condition, size, and species within the sale area, as approved by the Contract Administrator. Purchaser may be required to pay liquidated damages for Excessive Reserve Tree Damage as detailed in clause D-041.

Removal of designated reserve trees from the sale area is unauthorized, and may invoke the use of the G-230 'Trespass and Unauthorized Activity' clause. Purchaser is required to leave all cut or damaged reserve trees on site.

**H-015 Skid Trail Requirements**

A skid trail is defined as an area that is used for more than three passes by any equipment.

Purchaser shall comply with the following during the yarding operation:

- a. Skid trails will not exceed 12 feet in width, including rub trees.
- b. Skid trails shall not cover more than 7 percent of the total acreage on one unit.
- c. Skid trail location will be pre-approved by the Contract Administrator.
- d. Except for rub trees, skid trails shall be felled and yarded prior to the felling of adjacent timber.
- e. Rub trees shall be left standing until all timber tributary to the skid trail has been removed.
- f. Excessive soil damage is not permitted. Excessive soil damage is described in clause H-017.
- g. Skid trails will be water barred at the time of completion of yarding, if required by the Contract Administrator.

Purchaser shall not deviate from the requirements set forth in this clause without prior written approval from the Contract Administrator.

H-017 Preventing Excessive Soil Disturbance

Operations may be suspended when soil rutting exceeds 8 inches as measured from the natural ground line. To reduce soil damage, the Contract Administrator may require water bars to be constructed, grass seed to be placed on exposed soils, or other mitigation measures. Suspended operations shall not resume unless approval to do so has been given, in writing, by the Contract Administrator.

H-035 Fall Trees Into Sale Area

Trees shall be felled into the sale area unless otherwise approved by the Contract Administrator.

H-051 Branding and Painting

Purchaser shall provide a State of Washington registered log brand, acceptable to the State, unless the State agrees to furnish the brand. All purchased timber shall be branded in a manner that meets the requirements of WAC 240-15-030(2)(a)(i). All timber purchased under a contract designated as export restricted shall also be painted in a manner that meets the requirements of WAC 240-15-030(2)(a)(ii).

For pulp loads purchased under a contract designated as export restricted, Purchaser shall brand at least 3 logs with legible brands at one end. Also, 10 logs shall be painted at one end with durable red paint.

H-080 Snags Not to be Felled

Snags not required to be felled for safety reasons may be left standing. Snags felled for safety reasons shall not be removed and must remain where felled.

## H-110 Stump Height

Trees shall be cut as close to the ground as practicable. Stump height shall not exceed 12 inches in height measured on the uphill side, or 2 inches above the root collar, whichever is higher.

## H-120 Harvesting Equipment

Forest products sold under this contract shall be felled by feller processor and yarded by forwarder unless authority to use other equipment is granted in writing by the State.

## H-130 Hauling Schedule

The hauling of forest products will not be permitted from February 1 to April 30 unless authorized in writing by the Contract Administrator .

## H-190 Completion of Settings

Operations begun on any setting of the sale area shall be completed before any operation begins on subsequent settings unless authorized in writing by the Contract Administrator.

## H-220 Protection of Residual or Adjacent Trees

Unless otherwise specified by this contract, the Contract Administrator shall identify damaged adjacent or leave trees that shall be paid for according to clause G-230.

## H-230 Tops and Limbs Outside the Sale Boundary

Tops and limbs outside the sale boundary as a result of Purchaser's operation shall be removed concurrently with the yarding operation unless otherwise directed by the Contract Administrator.

## H-260 Fall Leaners

Trees within the Unit that have been pushed over in falling or skidding operations shall be felled.

## Section C: Construction and Maintenance

## C-040 Road Plan

Road construction and associated work provisions of the Road Plan for this sale, dated 2/24/2015 are hereby made a part of this contract.

## C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on E373918J, E373813JB, E373813EB, E373813E, E373812E, E373813K, E373918M, E373907E and E373918H. All work shall be completed to the specifications detailed in the Road Plan.

## C-080 Landing Locations Approved Prior to Construction

Landings shall be marked by Purchaser and approved by the Contract Administrator prior to construction.

C-090 Landing Location

Landings shall be built 100 feet off the Evans Cutoff and Williams Lake County road(s).

Section S: Site Preparation and Protection

S-001 Emergency Response Plan

An Emergency Response Plan (ERP) shall be provided to the Contract Administrator containing but not limited to, valid contact numbers and procedures for medical emergencies, fire, hazardous spills, forest practice violations and any unauthorized or unlawful activity on or in the vicinity of the sale area. The Contract Administrator and the State shall be promptly notified whenever an incident occurs requiring an emergency response.

The ERP must be presented for inspection at the prework meeting and kept readily available to all personnel, including subcontractors, on site during active operations.

S-010 Fire Hazardous Conditions

Purchaser acknowledges that operations under this Contract may increase the risk of fire. Purchaser shall conduct all operations under this agreement following the requirements of WAC 332-24-005 and WAC 332-24-405 and further agrees to use the highest degree of care to prevent uncontrolled fires from starting.

In the event of an uncontrolled fire, Purchaser agrees to provide equipment and personnel working at the site to safely and effectively engage in first response fire suppression activity.

Purchaser's failure to effectively engage in fire-safe operations is considered a breach and may result in suspension of operations.

S-020 Extreme Hazard Abatement

Purchaser shall provide a written Extreme Hazard Abatement plan that meets the requirements of WAC 332-24 prior to the beginning of logging operations. The plan must be acceptable to the Contract Administrator. The plan will identify how Purchaser will accomplish abatement. Purchaser shall also provide, and keep current, a written timetable for completion of all specified work in the plan. The Contract Administrator's acceptance and approval of Purchaser's hazard abatement plan shall not be construed as any statement or warranty that the hazard abatement plan is adequate for Purchaser's purposes or complies with applicable laws.

S-030 Landing Debris Clean Up

Landing debris shall be disposed of in a manner approved in writing by the Contract Administrator.

S-040 Noxious Weed Control

Purchaser shall notify the Contract Administrator in advance of moving equipment onto State lands. Purchaser shall thoroughly clean all off road equipment prior to entry onto

State land to remove contaminated soils and noxious weed seed. If equipment is moved from one DNR project area to another, the Contract Administrator reserves the right to require the cleaning of equipment. Equipment shall be cleaned at a location approved by the Contract Administrator.

S-060 Pump Truck or Pump Trailer

Purchaser shall provide a fully functional pump truck or pump trailer equipped to meet the specifications of WAC 332-24-005 and WAC 332-24-405 during the "closed season" or as extended by the State and shall provide trained personnel to operate this equipment on the sale area during all operating periods.

S-130 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

Purchaser is responsible for understanding and complying with all applicable local, state, and federal hazardous material/waste laws and regulations for operations conducted under this contract. Such regulations pertain to, but may not be limited to, hazardous material storage, handling and transport, personnel protection, release notification and emergency response, cleanup and waste disposal. Purchaser shall be responsible for restoring the site in the event of a spill.

b. Hazardous Materials Spill Prevention

All operations shall be conducted in a manner that avoids the release of hazardous materials, including petroleum products, into the environment (water, air or land).

c. Hazardous Materials Spill Containment, Control and Cleanup

If safe to do so, Purchaser shall take immediate action to contain and control all hazardous material spills. Purchaser shall ensure that enough quick response spill kits capable of absorbing 4 to 6 gallons of oil, coolant, solvent or contaminated water are available on site to quickly address potential spills from any piece of equipment at all times throughout active operations. If large quantities of bulk fuel/other hazardous materials are stored on site, Purchaser must be able to effectively control a container leak and contain & recover a hazmat spill equal to the largest single on site storage container volume. (HAZWOPER reg. 29CFR 1910.120 (j) (1) (vii)).

d. Hazardous Material Release Reporting

Releases of oil or hazardous materials to the environment must be reported according to the State Department of Ecology (ECY). It is the responsibility of the Purchaser to have all emergency contact information readily available and a means of remote communication for purposes of quick notification. In the event of a spill, the Purchaser is responsible for notifying the following:

Appropriate Department of Ecology regional office (contact information below).

DNR Contract Administrator

ECY - Northwest Region:

1-425-649-7000

(Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom counties)

ECY - Southwest Region:

1-360-407-6300

(Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, and Wahkiakum counties)

ECY - Central Region:

1-509-575-2490

(Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, and Yakima counties)

ECY - Eastern Region:

1-509-329-3400

(Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman counties)

S-131 Refuse Disposal

As required by RCW 70.93, All Purchaser generated refuse shall be removed from state lands for proper disposal prior to termination of this contract. No refuse shall be burned, buried or abandoned on state forest lands. All refuse shall be transported in a manner such that it is in compliance with RCW 70.93 and all loads or loose materials shall be covered/secured such that these waste materials are properly contained during transport.

S-140 Fence Repair

Purchaser shall immediately repair all fence damage resulting from operations on this sale to an equal or better condition than existed at the time of sale.

Section D: Damages

D-013 Liquidated Damages or Failure to Perform

The following clauses provide for payments by Purchaser to the State for breaches of the terms of this contract other than failure to perform. These payments are agreed to as liquidated damages and not as penalties. They are reasonable estimates of anticipated harm to the State, which will be caused by Purchaser's breach. These liquidated damages provisions are agreed to by the State and Purchaser with the understanding of the difficulty of proving loss and the inconvenience or infeasibility of obtaining an adequate remedy. These liquidated damages provisions provide greater

certainty for the Purchaser by allowing the Purchaser to better assess its responsibilities under the contract.

Clause P-020 governs Purchaser’s liability in the event Purchaser fails to perform any of the contract requirements other than the below liquidated damage clauses without written approval by the State. Purchaser’s failure to pay for all or part of the forest products sold in this contract prior to expiration of the contract term results in substantial injury to the State. Therefore, Purchaser agrees to pay the State the full lump sum contract price in P-020 in the event of failure to perform.

D-041 Reserve Tree Excessive Damage

When Purchaser’s operations exceed the damage limits set forth in clause H-013, Reserve Tree Damage Definition, and when the Contract Administrator determines that a suitable replacement for a damaged reserve tree is not possible, the damaged trees result in substantial injury to the State. The value of the damaged reserve trees at the time of the breach is not readily ascertainable. Therefore, the Purchaser agrees to pay the State as liquidated damages at the rate of \$1,000.00 per tree for all damaged reserve trees that are not replaced in Unit 1.

IN WITNESS WHEREOF, the Parties hereto have entered into this contract.

STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES

\_\_\_\_\_  
Purchaser

\_\_\_\_\_  
Loren D. Torgerson  
Northeast Region Manager

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Address:

CORPORATE ACKNOWLEDGEMENT

STATE OF \_\_\_\_\_ )

\_\_\_\_\_ )

COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared \_\_\_\_\_

\_\_\_\_\_ to me known to be the \_\_\_\_\_ of the corporation

that executed the within and foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of the corporation, for the uses and purposes therein mentioned, and on oath stated that (he/she was) (they were) authorized to execute said instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

\_\_\_\_\_  
Notary Public in and for the State of

\_\_\_\_\_

My appointment expires \_\_\_\_\_



# WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

## FOREST EXCISE TAX ROAD SUMMARY SHEET

**Region:** Northeast

**Timber Sale Name:** Gone Dry

**Application Number:** 30- 091740

### EXCISE TAX APPLICABLE ACTIVITIES

**Construction:** 175 linear feet  
*Road to be constructed (optional and required) but not abandoned*

**Reconstruction:** 6,460 linear feet  
*Road to be reconstructed (optional and required) but not abandoned*

**Abandonment:** 0 linear feet  
*Abandonment of existing roads not reconstructed under the contract*

**Decommission:** 0 linear feet  
*Road to be made undriveable but not officially abandoned.*

**Pre-Haul Maintenance:** 8,338 linear feet  
*Existing road to receive maintenance work (specifically required by the contract) prior to haul*

### EXCISE TAX EXEMPT ACTIVITIES

**Temporary Optional Construction:** 0 linear feet  
*Optional roads to be constructed and then abandoned*

**Temporary Optional Reconstruction:** 0 linear feet  
*Optional roads to be reconstructed and then abandoned*

**New Abandonment:** 0 linear feet  
*Abandonment of roads constructed or reconstructed under the contract*

All parties must make their own assessment of the taxable or non-taxable status of any work performed under the timber sale contract. The Department of Revenue bears responsibility for determining forest road excise taxes. The Department of Natural Resources developed this form to help estimate the impact of forest excise taxes. However, the information provided may not precisely calculate the actual amount of taxes due. The Department of Revenue is available for consultation by calling 1.800.548.8829.

(Revised 4/09)

## PRE-CRUISE NARRATIVE

Sale Name: <b>Gone Dry</b>	Region: <b>Northeast</b>
Agreement #: <b>30-092349</b>	District: North Columbia
Contact Forester: Nathan Simpkins Phone / Location: 509-685-2733	County(s): Stevens, Stevens
Alternate Contact: Tony Flanagan Phone / Location: <b>509-685-2791</b>	Other information: <a href="#">Click here to enter text.</a>

Type of Sale: Lump Sum	
Harvest System: Ground based - Feller processor and forwarder	100%
Harvest System: Select harvest system <a href="#">Click here to enter text.</a>	<a href="#">Click here to enter percent sale acres.</a>
Enter % of sale acres	
Harvest System: Select harvest system <a href="#">Click here to enter text.</a>	<a href="#">Click here to enter percent sale acres.</a>

### UNIT ACREAGES AND METHOD OF DETERMINATION:

Unit #	Legal Description (Enter only one legal for each unit) Sec/Twp/Rng	Grant or Tract	Gross Proposal Acres	Deductions from Gross Acres (No harvest acres)				Net Harvest Acres	Acreage Determination  (List method and error of closure if applicable)
				RMZ/WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (describe)		
1	13 T37N R38E	10	489.5			19.5		470	GPS (Garmin)
	<a href="#">Enter Sec / Twp / Rng</a>								<a href="#">Choose an item.</a>
	<a href="#">Enter Sec / Twp / Rng</a>								<a href="#">Choose an item.</a>
	<a href="#">Enter Sec / Twp / Rng</a>								<a href="#">Choose an item.</a>
	<a href="#">Enter Sec / Twp / Rng</a>								<a href="#">Choose an item.</a>
	<a href="#">Enter Sec / Twp / Rng</a>								<a href="#">Choose an item.</a>
<b>TOTAL ACRE</b>			489.5			19.5		470	

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**HARVEST PLAN AND SPECIAL CONDITIONS:**

Unit #	Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
1	Harvest all green timber greater than 7 inches DBH to a 4.6 inch top diameter not marked with purple paint, except ponderosa pine. Harvest all green ponderosa pine greater than 8 inches DBH to a 5.6 inch top diameter not marked with purple paint.		6 trees per acre

**OTHER PRE-CRUISE INFORMATION:**

Unit #	Primary,secondary Species / Estimated Volume (MBF)	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	PP-1163Mbf, WL-261Mbf, DF-100Mbf	Access from Williams Lake County Road.	
TOTAL MBF	1524		

**REMARKS:**

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Prepared By: <b>Nathan Simpkins</b> Date: 3/6/2014	Title: <b>Natural Resource Specialist 1</b>	CC: Dan Griggs
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# Cruise Narrative

<b>Sale Name:</b> Gone Dry	<b>Region:</b> Northeast
<b>Agreement Number:</b> 30-091740	<b>District:</b> North Columbia
<b>Lead Cruiser:</b> Dan Griggs	<b>Completion Date:</b> 2/23/2016
<b>Other Cruisers on sale:</b> Jim Putnam	<b>Legal:</b> Sections 12 & 13, T 37 N, R 38 E WM and sections 7 & 18, T 37 N, R 39 E WM.

Unit Acreage Specifications:							
Unit #	Gross Acres	Net Acres	Total Deletions	Existing Roads	Leave Tree Acres	Power Line	Other
1	489.54	470.04	19.50	19.50	0.00		
<b>Total</b>	489.54	470.04	19.50	19.50	0.00	0.00	0.00

## Cruise Sample Design:

This timber sale was cruised using the **variable plot** sampling method. The double basal area system was employed; a small BAF to determine Basal Area (count trees) and a large BAF to determine the Volume-Basal Area Ratio (cruise trees). Each plot was a full plot. Plot locations were created using a computer generated grid, and found using a hand held GPS unit.

Unit #	Small BAF (count)	Large BAF (cruise)	Sighting height	Grid size (plot spacing in feet)	% Cruise to count Target	% Cruise to count Actual	Total number of Plots
1	10.00	27.78	D4H	330 x 220	36.0%	35.9%	286
<b>Total</b>					36.0%	35.5%	286

**Cruise Specifications:**

Minor species cruise intensity:	We grade the first tree of all minor species encountered with the smaller BAF; then followed through with the small BAF to large BAF ratio.
Minimum top dib:	<p><b>Ponderosa pine and red cedar:</b>  Trees less than 17.5" DBH have a minimum top of 5.6" dib.  Trees 17.6" and greater DBH have a minimum top dib of 40% of DOB at 16' or a 6" top whichever is greater.</p> <p><b>All other species:</b>  Trees less than 17.5" DBH have a minimum top of 4.6" dib.  Trees 17.6" and greater DBH have a minimum top dib of 40% of DOB at 16' or a 6" top whichever is greater.</p>
Minimum dbh:	Ponderosa pine: 8.0 inches DBH All other species: 7.0 inches DBH
Log lengths:	Saw logs: 32 feet where possible, minimum of 12 feet Utility: 16 feet where possible, minimum of 12 feet
Take / Leave tree description:	Harvest all green conifers that meet the minimum cruise specifications and are not banded with purple paint.
Commercial species observed in sale area, but not in cruise:	
Utility wood:	Comprised of non-board foot volume and volume below the minimum top diameter of 5" or 40% of DOB at 16' to a minimum of a 2.6" top.
Status codes used:	None
Sort codes used	D – saw log, U – utility log
Species table used:	NE 2 inch
Grade table used:	Eastgrad
Other tables used (cruise adjustment):	

**Field Observations:**

Location:	Northwest Stevens County, 12 miles North of Colville, Washington.
Aspect:	North, East, South and West
Elevation:	1920 to 1960
Slope:	Unit 1 – 0% to 20%, Average 5%
Harvest Methods:	100% Ground base yarding with the longest skidding of 1500 feet.
Stand Composition:	The stands are second growth ponderosa pine and western larch with larger residual trees. There is a minor component of Douglas-fir and lodgepole pine.
Stand Health:	This stand has been logged twice in the last 50 years. Most of the trees with health problems have been removed. We did see a very limited amount of bark beetle damage and mistletoe. The Douglas-fir had poor form and was short.
Timber Quality:	The timber is a mix of good quality ponderosa pine (76%), western larch (16%), Douglas-fir (8%) and lodgepole pine (0.4%).
Non-board Foot Volume:	11 mbf of the total sale volume is comprised of utility wood.
Other Considerations:	

**Trust and Counties:**

Trust 10 – 100%                      Stevens County – 100%

**Prepared by:** Dan Griggs

**Title:** Forest Check Cruiser 1

**CC:** Timber Sales Document Center & File # 30-091740

TC PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																			
T37N R38E S13 Ty00U1 470.04		Project: <b>GONEDRY</b>										Page <b>1</b>									
		Acres <b>470.04</b>										Date <b>3/8/2016</b>									
												Time <b>2:03:47PM</b>									
Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf	
									4-5	6-11	12-16	17+	12-20	21-32	33-55	56-99					
DF	D	3		20		48	48	23	100				100				32	7	62	0.55	.8
DF	D	4		74	1.3	177	175	82	78	22			37	63	22	5	25	0.35	7.0		
DF	U	UT		6	13.1	16	14	7	100				100				16	4	11	0.16	1.3
<b>DF Totals</b>				8	1.8	241	237	111	64	36			33	67	22	5	26	0.36	9.1		
WL	D	2		25	1.4	122	120	57	100				100				32	13	218	1.48	.6
WL	D	3		54	1.0	263	261	122		87	13			100	32	9	112	0.78	2.3		
WL	D	4		19		95	95	44	55	45		5	95	29	5	43	0.34	2.2			
WL	U	UT		2		5	5	3	100				100				15	3	10	0.15	.5
<b>WL Totals</b>				16	.9	485	481	226	12	56	32		2	98	29	8	86	0.66	5.6		
LP	D	3		33		4	4	2	100				100				32	7	70	0.75	.1
LP	D	4		52		7	7	3	100				100				25	5	23	0.30	.3
LP	U	UT		15		2	2	1	100				100				16	4	10	0.11	.2
<b>LP Totals</b>				0		13	13	6	66	34		15	85	23	5	24	0.33	.6			
PP	D	4		32	1.0	753	745	350		91	9		100	32	13	249	1.48	3.0			
PP	D	5		68	1.6	1,562	1,537	722		98	2		9	26	7	66	0.57	23.2			
<b>PP Totals</b>				76	1.4	2,315	2,282	1,073		66	31	3	6	94	26	8	87	0.69	26.2		
<b>Totals</b>					1.4	3,055	3,013	1,416	7	62	29	2	8	92	26	7	73	0.62	41.4		

TC PSTATS		<b>PROJECT STATISTICS</b>							PAGE	1	
		<b>PROJECT GONEDRY</b>							DATE	3/8/2016	
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt	
37N	38E	13	GONE DRY	00U1		470.04	286	744	S	E	
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES				
TOTAL			286	744	2.6						
CRUISE DBH COUNT			172	267	1.6	12,779	2.1				
REFOREST COUNT			89	173	1.9						
BLANKS			25								
100 %											
<b>STAND SUMMARY</b>											
SAMPLE TREES		TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC	
P PINE		183	16.1	14.5	60	4.9	18.5	2,315	2,282	481	479
DOUG FIR		51	8.1	9.5	44	1.3	4.0	241	237	72	72
W LARCH		30	2.7	15.2	76	0.9	3.4	485	481	107	107
LP PINE		3	.4	9.4	55	0.1	.2	13	13	4	4
<b>TOTAL</b>		<b>267</b>	<b>27.2</b>	<b>13.2</b>	<b>57</b>	<b>7.1</b>	<b>26.0</b>	<b>3,055</b>	<b>3,013</b>	<b>664</b>	<b>662</b>
CONFIDENCE LIMITS OF THE SAMPLE											
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR											
CL	68.1	COEFF	<b>SAMPLE TREES - BF</b>				<b># OF TREES REQ.</b>		<b>INF. POP.</b>		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
P PINE		77.7	5.8	211	224	236					
DOUG FIR		59.9	8.5	33	36	39					
W LARCH		50.2	9.5	212	234	256					
LP PINE		53.3	36.9	27	43	59					
<b>TOTAL</b>		<b>89.6</b>	<b>5.5</b>	<b>177</b>	<b>187</b>	<b>197</b>	<b>321</b>	<b>164</b>	<b>80</b>		
CL	68.1	COEFF	<b>TREES/ACRE</b>				<b># OF PLOTS REQ.</b>		<b>INF. POP.</b>		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
P PINE		61.0	3.6	16	16	17					
DOUG FIR		166.1	9.8	7	8	9					
W LARCH		218.6	12.9	2	3	3					
LP PINE		798.0	47.2	0	0	1					
<b>TOTAL</b>		<b>31.7</b>	<b>1.9</b>	<b>27</b>	<b>27</b>	<b>28</b>	<b>40</b>	<b>20</b>	<b>10</b>		
CL	68.1	COEFF	<b>BASAL AREA/ACRE</b>				<b># OF PLOTS REQ.</b>		<b>INF. POP.</b>		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
P PINE		43.7	2.6	18	18	19					
DOUG FIR		160.3	9.5	4	4	4					
W LARCH		212.5	12.6	3	3	4					
LP PINE		751.0	44.4	0	0	0					
<b>TOTAL</b>				<b>26</b>	<b>26</b>	<b>26</b>					
CL	68.1	COEFF	<b>NET BF/ACRE</b>				<b># OF PLOTS REQ.</b>		<b>INF. POP.</b>		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
P PINE		44.3	2.6	2,222	2,282	2,342					
DOUG FIR		168.7	10.0	213	237	261					
W LARCH		213.3	12.6	420	481	542					
LP PINE		766.3	45.3	7	13	19					
<b>TOTAL</b>				<b>3,013</b>	<b>3,013</b>	<b>3,013</b>					
CL	68.1	COEFF	<b>V BAR/ACRE</b>				<b># OF PLOTS REQ.</b>		<b>INF. POP.</b>		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	7	10		
P PINE				120	123	127					
DOUG FIR		95.5	5.6	54	60	66					
W LARCH		49.8	2.9	124	142	160					

TC PSTATS		<b>PROJECT STATISTICS</b>							PAGE	2
		<b>PROJECT GONEDRY</b>							DATE	3/8/2016
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
37N	38E	13	GONE DRY	00U1	470.04	286	744	S	E	
CL	68.1		COEFF		<b>V BAR/ACRE</b>			# OF PLOTS REQ.		
SD:	1.00		VAR.	S.E.%	LOW	AVG	HIGH	5	7	
LP PINE			598.0	35.4	42	76	111			
<b>TOTAL</b>					<i>116</i>	<i>116</i>	<i>116</i>		10	

**Species Summary - Trees, Logs, Tons, CCF, MBF**

T37N R38E S13 Ty00U1 470.0

**Project GONEDRY**  
**Acres 470.04**

**Page No 1**  
**Date: 3/8/2016**  
**Time 2:03:47PM**

Species	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
	Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
P PINE	7,560	12,317	5,427	29.76	18.26	0.73	2,261	2,250	1,088	1,073
W LARCH	1,266	2,628	1,207	39.71	19.13	0.64	503	503	228	226
DOUG FIR	3,784	4,268	966	8.96	7.95	0.38	339	339	113	111
LP PINE	169	261	47	11.51	7.46	0.32	19	19	6	6
<b>Totals</b>	12,779	19,474	7,647	24.34	15.98	0.64	3,123	3,111	1,436	1,416

Wood Type	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
Species	Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
C	12,779	19,474	7,647	24.34	15.98	0.64	3,123	3,111	1,436	1,416
<b>Totals</b>	12,779	19,474	7,647	24.34	15.98	0.64	3,123	3,111	1,436	1,416

**Log Stock Table - MBF**

T37N R38E S13 Ty00U1 470.04

**Project: GONEDRY**  
**Acres 470.04**

**Page 1**  
**Date 3/8/2016**  
**Time 2:03:46PM**

Spp	S T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches									
									2-4	5-6	7-10	11-12	13-14	15-16	17-18	19-20	21-30	31-40
DF		D	3	32	23		23	20.4		10	12							
DF		D	4	14	5		5	4.4		5								
DF		D	4	16	11		11	10.2		10	1							
DF		D	4	17	1		1	1.1		1								
DF		D	4	20	13		13	11.3		13								
DF		D	4	24	13		13	11.6		13								
DF		D	4	30	8		8	7.3		8								
DF		D	4	32	32	3.3	31	27.9		31								
DF		U	UT	14	0		0	.4		0								
DF		U	UT	16	5		5	4.6		4	1							
DF		U	UT	18	2	50.0	1	.9		1								
DF		Totals			113	1.8	111	7.9		5	93	14						
WL		D	2	32	57	1.4	57	25.0			26	11	20					
WL		D	3	32	124		122	54.2		3	86	34						
WL		D	4	14	1		1	.4		0	0							
WL		D	4	16	0		0	.2		0								
WL		D	4	20	1		1	.4		1								
WL		D	4	24	3		3	1.5		3								
WL		D	4	28	4		4	1.7		4								
WL		D	4	32	35		35	15.5		29	6							
WL		U	UT	14	1		1	.5		1								
WL		U	UT	16	1		1	.6		1								
WL		Totals			228		226	16.0		3	41	92	60	11	20			
LP		D	3	32	2		2	33.6			2							
LP		D	4	24	2		2	29.2		2								
LP		D	4	28	1		1	22.6		1								
LP		U	UT	16	1		1	14.6		1								
LP		Totals			6		6	.4		1	3	2						
PP		D	4	24	2	16.7	2	.1				2						
PP		D	4	32	352		349	32.5			108	137	72	18	6	7		
PP		D	5	12	7		7	.6		7	0							
PP		D	5	14	13		13	1.2		11	1							
PP		D	5	16	28	6.9	26	2.4		25	1							

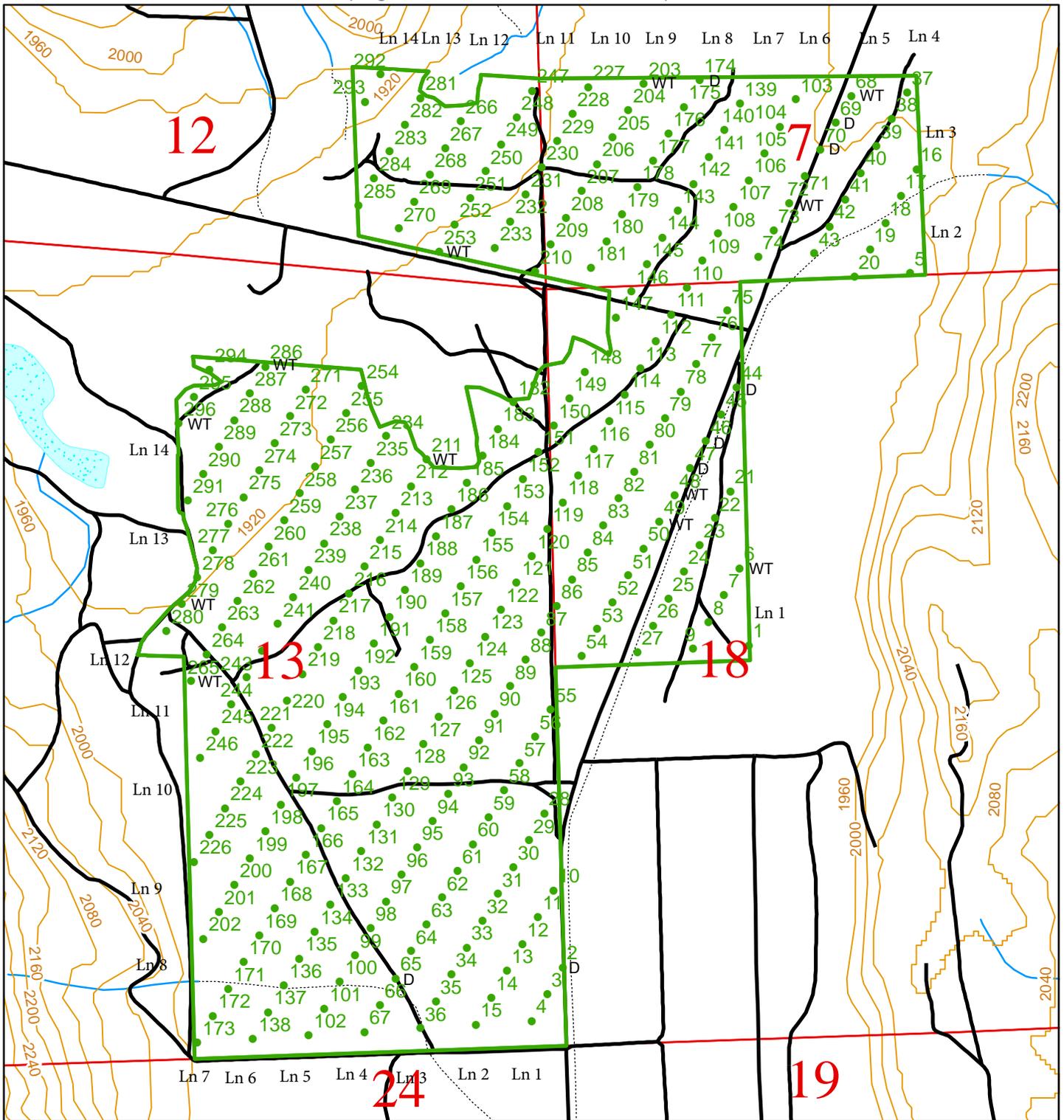
**Log Stock Table - MBF**

T37N R38E S13 Ty00U1 470.04

**Project: GONEDRY**  
**Acres 470.04**

**Page 2**  
**Date 3/8/2016**  
**Time 2:03:46PM**

Spp	S T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches											
									2-4	5-6	7-10	11-12	13-14	15-16	17-18	19-20	21-30	31-40	41-70	71+
PP		D	5	18	6		6	.6		6	1									
PP		D	5	20	16	20.0	12	1.2		12	0									
PP		D	5	24	21		21	2.0		19	2									
PP		D	5	26	13		13	1.2		11	3									
PP		D	5	28	23		23	2.1		23										
PP		D	5	30	27		27	2.6		27										
PP		D	5	32	580	1.2	573	53.4		29	366	178								
PP		Totals			1,088	1.4	1,073	75.7		169	375	286	139	72	18	6	7			
Total		All Species			1,436	1.4	1,416	100.0		8	307	483	346	149	92	18	6	7		



**FMU POLYGON AND SAMPLE POINT INFORMATION**

FMU_NM:	GONE DRY U1	Township:	T37R39E, T37R38E
FMU_ID:	88196	DNR Region:	NORTHEAST
Acres:	491	Total Sample Points:	286
County:	STEVENS	Spacing Between Points:	Width: 330 Height: 220
Walk Through Plot	WT	Point Rotation Degrees:	30
Deleted Plot	D		



Scale 1:12,000

**Legend**

- Sample Points
- FMU polys
- Public Land Survey Sections
- Contours 40-foot



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**  
 Peter Goldmark - Commissioner of Public Lands

FPA/N No: 3020781  
 Effective Date: 04/22/2016  
 Expiration Date: 04/22/2019  
 Shut Down Zone: 687  
 EARR Tax Credit:  Eligible [ ] Non-eligible  
 Reference: DNR / GONE DRY  
 12,13-37-38; 7,18-37-39

**Forest Practices Application/Notification  
 Notice of Decision**

Decision

- Notification Operations shall not begin before the effective date.
- Approved This Forest Practices Application is subject to the conditions listed below.
- Disapproved This Forest Practices Application is disapproved for the reasons listed below.
- Closed Applicant has withdrawn FPA/N.

FPA/N Classification

Number of Years Granted on Multi-Year Request

- Class II  Class III  Class IVG  Class IVS
- 4 years  5 years

Conditions on Approval / Reasons for Disapproval

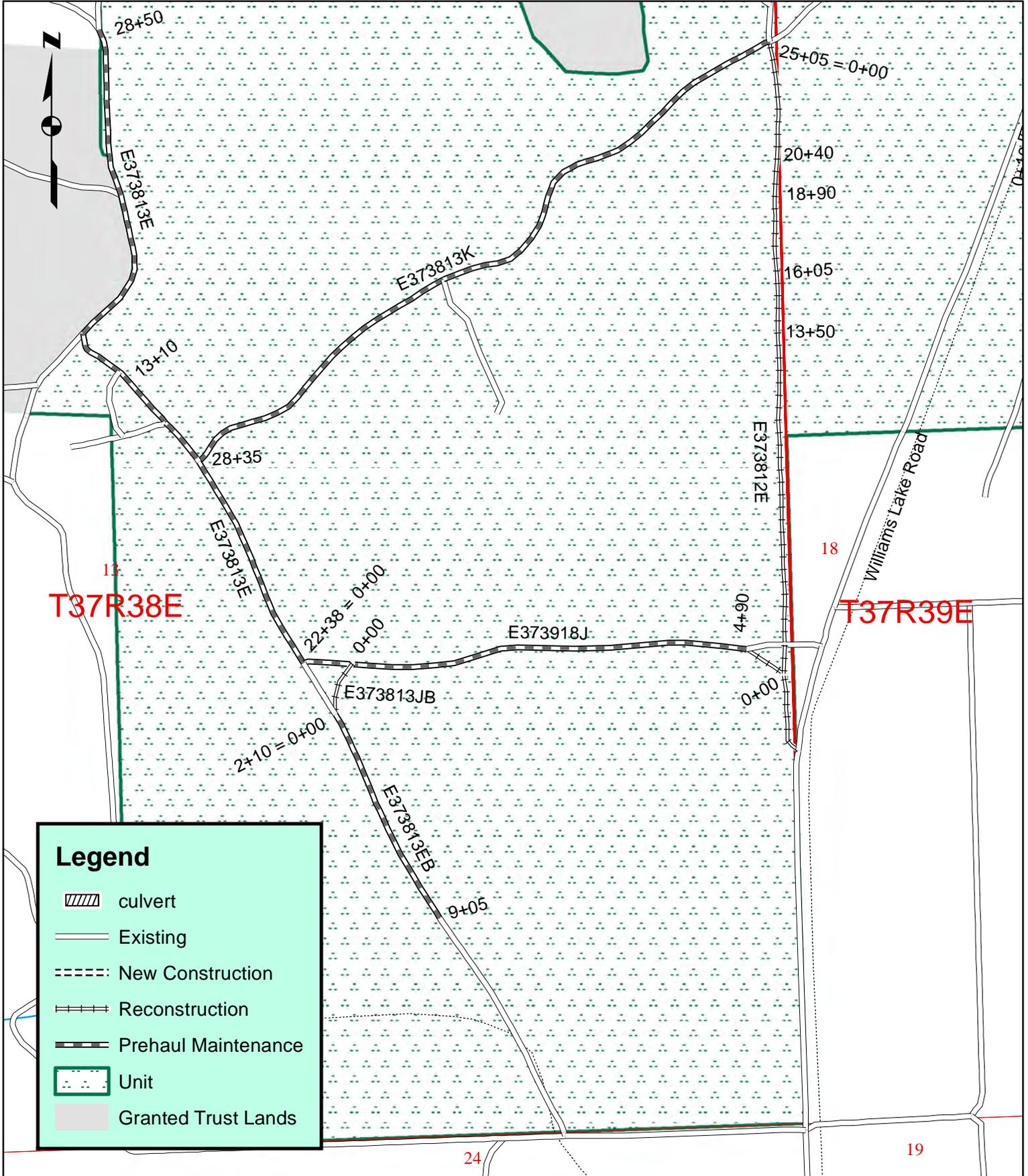
NO CONDITIONS.

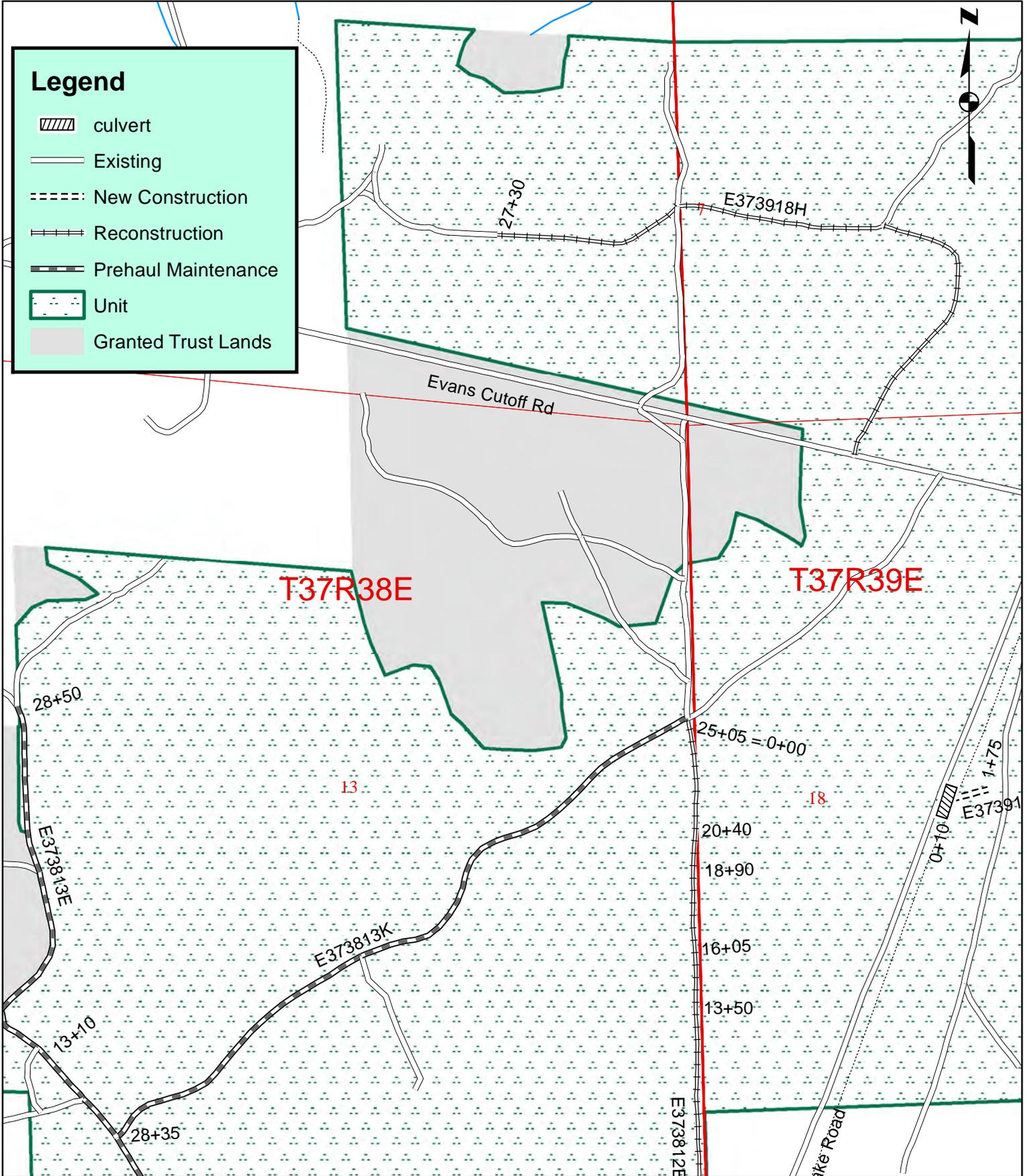
Issued By: ROBERT HINDS Region: Northeast

Title: FOREST PRACTICES FORESTER Date: 04/22/2016

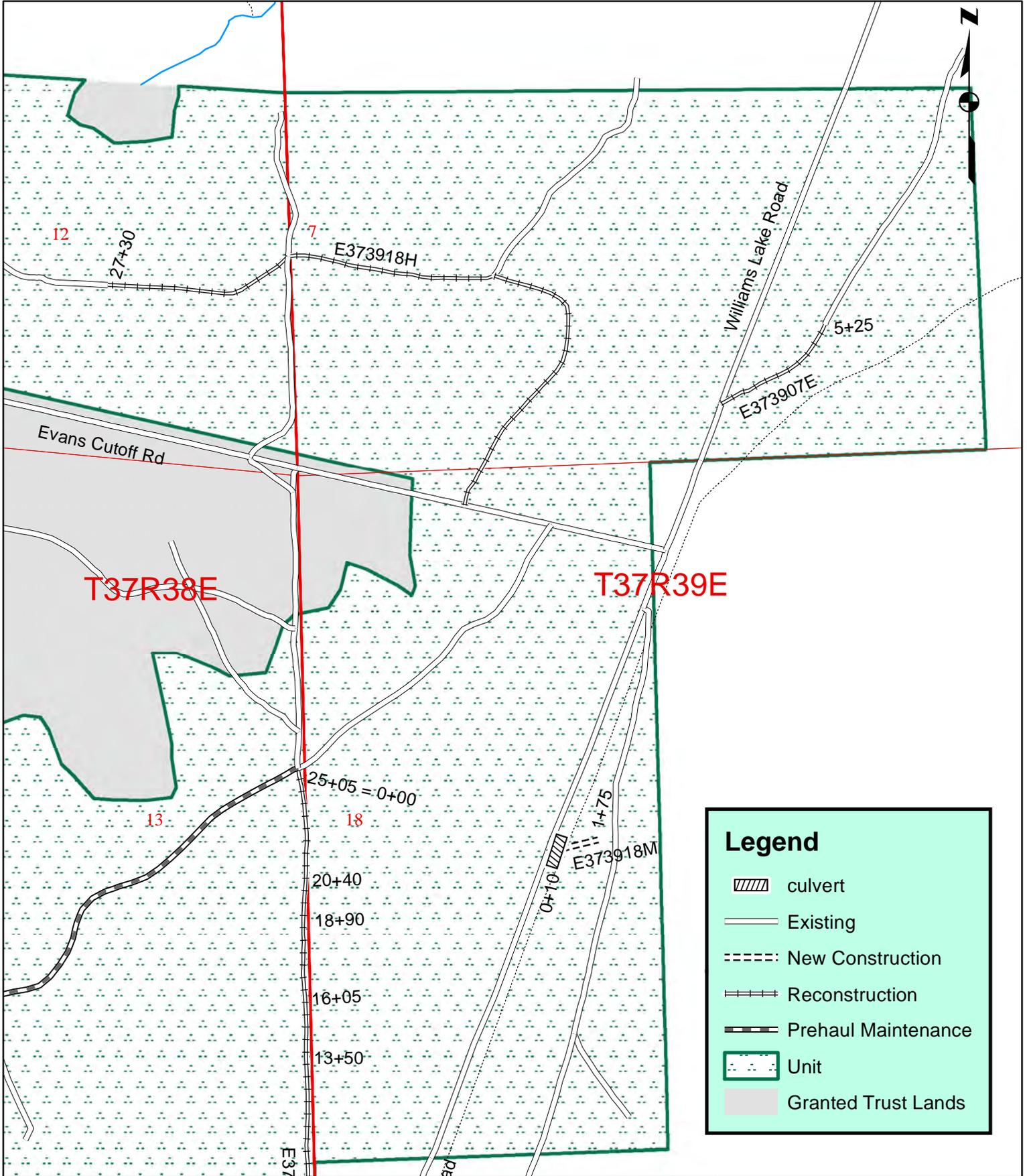
Copies to:  Landowner, Timber Owner and Operator.

Issued in person:  Landowner  Timber Owner  Operator By: Morris Taylor



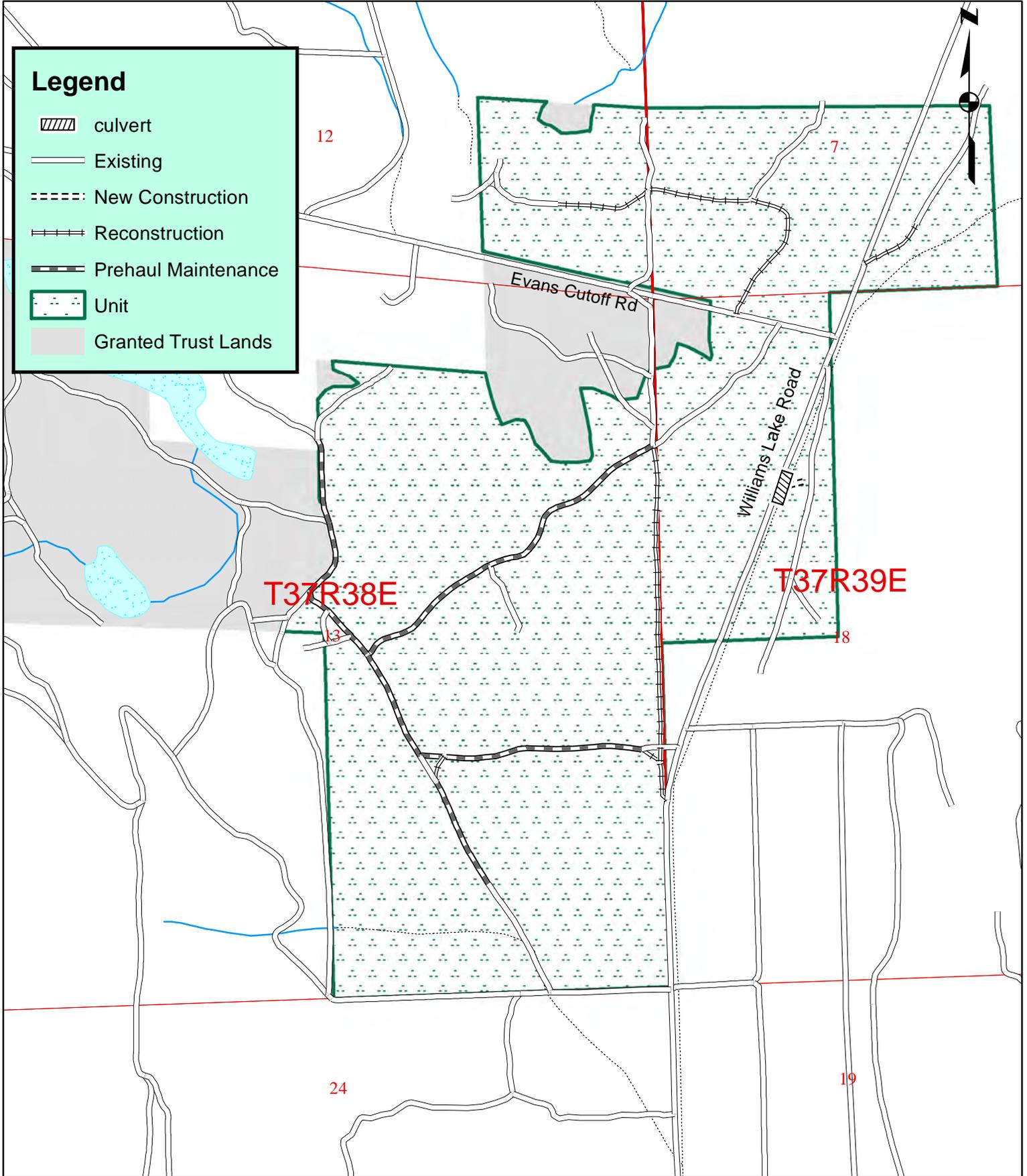


1 inch = 500 feet



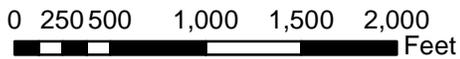
0 125 250 500 750 1,000  
 Feet

1 inch = 500 feet



**Legend**

- culvert
- Existing
- New Construction
- Reconstruction
- Prehaul Maintenance
- Unit
- Granted Trust Lands



1 inch = 1,000 feet

STATE OF WASHINGTON  
DEPARTMENT OF NATURAL RESOURCES

GONE DRY TIMBER SALE ROAD PLAN  
STEVENS COUNTY  
NORTH COLUMBIA DISTRICT

AGREEMENT NO.: 30-091740

STAFF ENGINEER: GENE GIBBS

DATE: 2/24/2015

DRAWN & COMPILED BY: GENE GIBBS

SECTION 0 – SCOPE OF PROJECT

**0-1 ROAD PLAN SCOPE**

Clauses in this road plan apply to all road related work, including landings and rock source development, unless otherwise noted.

**0-2 REQUIRED ROADS**

The specified work on the following roads is required.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
E373918J	0+00 to 4+90	Reconstruction
E373918J	4+90 to 22+38	Prehaul Maintenance
E373813JB	0+00 to 2+10	Reconstruction
E373813EB	0+00 to 9+05	Prehaul Maintenance
E373813E	0+00 to 28+50	Prehaul Maintenance
E373812E	0+00 to 25+05	Reconstruction
E373813K	0+00 to 28+35	Prehaul Maintenance
E373918M	0+00 to 1+75	New Construction
E373907E	0+00 to 5+25	Reconstruction
E373918H	0+00 to 27+30	Reconstruction

**0-4 CONSTRUCTION**

Construction includes, but is not limited to clearing & grubbing, pioneering & decking logs, subgrade construction, rolling dip, cross drain, and culvert installation, Fish passage structure installation, cut & fill, embankment construction, riprap and rock application. Construct to the TYPICAL SECTION SHEET, ROCK LIST, and CULVERT & DRAINAGE LIST, for general specifications, unless otherwise specified in design details.

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
E373918M	0+00 to 1+75	Construct road in accordance to typical section and culvert and drainage sheet. Flare approach to

		Williams Lake road to 40 feet.

**0-5 RECONSTRUCTION**

Reconstruction includes, but is not limited to clearing & grubbing, subgrade reconstruction, rolling dip, cross drain, and culvert installation, cut & fill, embankment construction, riprap and rock application, bridge installation. Reference the TYPICAL SECTION SHEET, ROCK LIST, and CULVERT & DRAINAGE LIST, for general specifications.

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
E373918J	0+00 to 4+90	Reconstruct road in accordance to typical section. Brushing required. Brush in accordance to brushing detail. Widen approach to Williams Lake road to 40 feet, barrow material will be needed. Protect utilities on site, power poles and power lines exist on site.
E373813JB	0+00 to 2+10	Reconstruct road in accordance to typical section. Brushing required. Brush in accordance to brushing detail.
E373812E	0+00 to 25+05	Reconstruct road in accordance to typical section. Brushing required. Brush in accordance to brushing detail. Cut and Fill construction required between stations 13+50 to 16+05 and 18+90 to 20+40. Reconstruct intersection approach to the E373813K to the west to accommodate hauling activities.
E373907E	0+00 to 5+25	Reconstruct road in accordance to typical section. Brushing required. Brush in accordance to brushing detail. Flare approach to Williams Lake road to 40 feet.
E373918H	0+00 to 27+30	Reconstruct road in accordance to typical section. Brushing required. Brush in accordance to brushing detail.

**0-6 PRE-HAUL MAINTENANCE**

Maintenance includes, but is not limited to brushing, clearing, grubbing, subgrade reshaping, rolling dip, cross drain, and culvert installation, grading, riprap and rock application. Reference the TYPICAL SECTION SHEET, ROCK LIST, and CULVERT & DRAINAGE LIST, for general specifications.

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
E373918J	4+90 to 22+38	Reshape road to provide drainage as needed. Reshape ditch at completion of logging activities as needed. Light brushing required. Brush in accordance of brushing detail.
E373813EB	0+00 to 9+05	Reshape road to provide drainage as needed. Reshape ditch at completion of logging activities as needed. Light brushing required. Brush in accordance of brushing detail.
E373813E	0+00 to 28+50	Reshape road to provide drainage as needed. Reshape ditch at completion of logging activities as needed. Light brushing required. Brush in accordance of brushing detail.
E373813K	0+00 to 28+35	Reshape road to provide drainage as needed. Reshape ditch at completion of logging activities as needed. Light brushing required. Brush in accordance of brushing detail.

## SECTION 1 – GENERAL

### 1-1 ROAD PLAN CHANGES

If the Purchaser desires a change from this road plan including, but not limited to relocation, extension, change in design, or adding roads; a revised road plan shall be submitted, in writing, to the Contract Administrator for consideration. The State must approve the submitted plans before construction begins.

### 1-2 UNFORESEEN CONDITIONS

Quantities established in this road plan are minimum acceptable values. Additional quantities required by the state due to unforeseen conditions or Purchaser's choice of construction season or techniques shall be at the Purchaser's expense. Unforeseen conditions include, but are not limited to, solid subsurface rock, subsurface springs, saturated ground, and unstable soils.

**1-3 ROAD DIMENSIONS**

Unless controlled by construction stakes or design data (plan, profile, and cross-sections), road work shall be performed in accordance with the dimensions shown on the TYPICAL SECTION SHEET and the specifications within this road plan.

**1-4 ROAD TOLERANCES**

Road work shall be performed within the tolerance listed below. The tolerance class for each road is listed on the TYPICAL SECTION SHEET.

<u>Tolerance Class</u>	<u>A</u>	<u>B</u>	<u>C</u>
Road and Subgrade Width (feet)	+1.5	+1.5	+2.0
Subgrade Elevation (feet +/-)	0.5	1.0	2.0
Centerline alignment (feet lt./rt.)	1.0	1.5	3.0

**1-6 ORDER OF PRECEDENCE**

Any conflict or inconsistency in the road plan shall be resolved by giving the documents precedence in the following order:

1. Addenda.
2. Designs or Plans. On designs and plans, figured dimensions shall take precedence over scaled dimensions.
3. Road Plan Clauses.
4. Typical Section Sheet.
5. Standard Lists.
6. Standard Details.

In case of any ambiguity or dispute over interpreting the road plan, the Contract Administrator's or designee's decision will be final.

**1-7 TEMPORARY ROAD CLOSURE**

The Purchaser shall notify the Contract Administrator a minimum of 5 calendar days before the closure of any road. Construction shall not close any road for more than 7 consecutive days.

**1-8 REPAIR OR REPLACEMENT OF DAMAGED MATERIALS**

The Purchaser is responsible for the repair or replacement of all materials, roadway infrastructure, and road components damaged during road work or operation activities. Repairs and replacements shall be directed by the Contract Administrator. Repairs to structural materials will be made according to the manufacturer's recommendation, and shall not begin without written approval from the Contract Administrator.

**1-9 DAMAGED METALLIC COATING**

Any damaged galvanized or aluminized coating on existing or new culverts, downspouts, and flumes shall be cleaned and treated with a minimum of two coats of zinc rich paint.

**1-15 ROAD MARKING**

Road work must be in accordance with the state's marked location. All road work is marked as follows:

- Centerline marked in orange flagging for new construction road work.
- Stationing marked with tags/stakes/paint/flagging for new construction, maintenance, reconstruction, decommissioning, and abandonment.

**1-18 REFERENCE POINT DAMAGE**

The Purchaser, at their own expense, shall reset reference points (RPs) that were moved or damaged at any time during construction to their original locations. Excavation and embankment shall not proceed on road segments controlled by said RPs until the Purchaser resets all moved or damaged RPs.

**1-21 HAUL APPROVAL**

The Purchaser shall not use roads constructed, reconstructed, maintained, under this road plan for timber hauling or rock hauling, other than timber cut on the right-of-way, without written approval from the Contract Administrator

**1-22 WORK NOTIFICATIONS**

the Purchaser shall notify the Contract Administrator a minimum of 14 calendar days before any road work begins.

**1-23 ROAD WORK PHASE APPROVAL**

Written approval by Contract Administrator must be received upon completion of the following phases of road work:

- Subgrade approval
- Drainage installation
- Subgrade compaction
- Rock application
- Rock compaction

**1-25 ACTIVITY TIMING RESTRICTION**

Construction restrictions apply to this contract. All construction and transportation of heavy equipment and/or trucks is prohibited between the following dates, except as may be authorized in writing by the Contract Administrator.

November 15 to April 30

**1-26 OPERATING DURING CLOSURE PERIOD**

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTIONS, the Purchaser shall provide a maintenance plan to include further protection of state resources. The Contract Administrator must approve the maintenance plan, in writing, before operation in the closure period. The Purchaser shall be required to maintain all haul roads including those listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER.

**1-29 SEDIMENT RESTRICTION**

Silt-bearing runoff shall not be permitted to go into streams.

**1-30 CLOSURE TO PREVENT DAMAGE**

In accordance with Contract Clause G-220 STATE SUSPENDS OPERATION, the Contract Administrator shall suspend road work or hauling of right-of-way timber, forest products, or rock under the following conditions:

- Wheel track rutting exceeds 4 inches on jaw run/pit run roads.
- Wheel track rutting exceeds 2 inches on crushed rock roads.
- Wheel track rutting exceeds 6 inches on native surface roads.
- Surface or base stability problems persist.
- Weather is such that satisfactory results cannot be obtained in an area of operations.
- In the opinion of the Contract Administrator excessive road damage or rutting may occur.

Operations must stop unless authority to continue working or hauling is granted, in writing, by the Contract Administrator. In the event that surface or base stability problems persist, the Purchaser will be required to cease operations, or perform corrective maintenance or repairs, subject to specifications within this road plan.

**1-32 BRIDGE AND ASPHALT SURFACE RESTRICTION**

Metal tracked equipment shall not be used on bridge or asphalt surfaces at any time. If equipment must be run on bridge or asphalt surfaces, then rubber tired equipment or other methods, as approved in writing by Contract Administrator, shall be used.

Any dirt, rock, or other material tracked or spilled on the bridge or asphalt surface shall be removed immediately. Any damage to the surface(s) shall be repaired at the Purchaser's expense as directed by the Contract Administrator.

**1-33 SNOW PLOWING RESTRICTION**

Snowplowing shall be permitted only after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contact Administrator upon request. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

**1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS**

At existing road approaches to county roads and state highways; any mud, dirt, rock or other material tracked or spilled on the asphalt/chip seal surface shall be removed immediately by the Purchaser.

If additional damage to the surface, signs, guardrails, etc. occurs then the damage shall be repaired, at the Purchaser's expense, as directed by the Contract Administrator when authorized by the county or WSDOT.

**1-43 ROAD WORK AROUND UTILITIES**

Road work in close proximity to a utility is the Purchaser's responsibility to identify any utilities. The Purchaser shall work in accordance with all applicable laws or rules concerning utilities. The Purchaser is responsible for all notification, including "call before you dig", and liabilities associated with the utilities and their rights-of-way. Road work shall not begin without prior notification to the utilities.

SECTION 2 – MAINTENANCE

**2-1 GENERAL ROAD MAINTENANCE**

All roads used under this contract shall be maintained in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS for the entire term of this contract. Maintenance is required even during periods of inactivity.

**2-2 ROAD MAINTENANCE – PURCHASER MAINTENANCE**

Purchaser shall perform maintenance on roads listed in Contract Clause C-050 PURCHASER ROAD MAINTENANCE AND REPAIR in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

**2-4 PASSAGE OF LIGHT VEHICLES**

Purchaser shall maintain the roads in a condition that will allow the passage of light administrative vehicles.

**2-5 MAINTENANCE GRADING – EXISTING ROAD**

A grader shall be used to shape existing surfaces. All grading shall be accomplished using a motor grader with a minimum of 175 horsepower.

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

**3-1 BRUSHING**

Vegetative material up to 3 inches in diameter, including limbs, shall be cut as shown on the BRUSHING DETAIL-D2. Brushing shall be achieved by manual or mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation shall not be disturbed unless directed by the Contract Administrator.

### **3-3 BRUSH REMOVAL**

Remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets.

### **3-5 CLEARING**

Fell all vegetative material larger than 2 inches DBH or over 5 feet high between the marked right-of-way boundaries and within waste and debris areas, or if not marked in the field, between the clearing limits specified on the TYPICAL SECTION SHEET. Clearing shall be completed before starting excavation and embankment.

### **3-7 RIGHT-OF-WAY DECKING**

Deck all right-of-way timber. Decks shall be parallel to the road centerline and placed within the cleared right-of-way. Decks shall be free of dirt, limbs and other right-of-way debris, and removable by standard log loading equipment from the roadbed.

### **3-8 PROHIBITED DECKING AREAS**

Right-of-way timber shall not be decked in the following areas:

- Within the grubbing limits.
- Within 50 feet of any stream.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- On slopes greater than 40%.
- Against standing trees.

### **3-10 GRUBBING**

Remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET. Those stumps outside the grubbing limits but with undercut roots shall also be removed. Stumps over 22 inches diameter shall be split. Stumps over 40 inches shall be quartered. Grubbing shall be completed before starting excavation and embankment.

### **3-20 ORGANIC DEBRIS DEFINITION**

Organic debris is defined as all vegetative material not eligible for removal by Contract Clauses G-010 PRODUCTS SOLD AND SALE AREA or G-011 RIGHT TO REMOVE FOREST PRODUCTS AND CONTRACT AREA, that is larger than one cubic foot in volume within the grubbing limits as shown on the TYPICAL SECTION SHEET.

### **3-21 DISPOSAL COMPLETION**

All disposal of organic debris, except by burning, shall be completed before approval of final maintenance.

### **3-23 PROHIBITED DISPOSAL AREAS**

Organic debris shall not be deposited in the following areas:

- Within 50 feet of a cross drain culvert or powerlines.

- Within 100 feet of a live stream, or wetland, On road subgrades road prism excavation and embankment slopes embankments as shown on the TYPICAL SECTION SHEET.
- On slopes greater than 40%.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush will fall into the ditch or onto the road surface.
- Against standing timber.

**3-24 BURYING ORGANIC DEBRIS RESTRICTED**

Organic debris shall not be buried unless otherwise stated in this plan.

**3-25 SCATTERING ORGANIC DEBRIS**

Organic debris shall be scattered outside of the grubbing limits or in natural openings unless otherwise directed by the Contract Administrator. Where natural openings are unavailable or restrictive, alternative debris disposal methods shall be subject to the written approval of the Contract Administrator.

**3-30 EXCLUSION OF DOZER BLADES**

Dozer blades are not permitted for the piling of organic debris.

**SECTION 4 – EXCAVATION**

**4-1 EXCAVATOR CONSTRUCTION**

The Purchaser shall use a track mounted hydraulic excavator for construction work , unless authorized, in writing, by the Contract Administrator.

**4-2 PIONEERING**

Pioneering shall not extend past construction that will be completed during the current construction season. Pioneering shall not extend more than 1000 feet beyond completed construction unless approved in writing by the Contract Administrator. In addition, the following actions shall be taken as pioneering progresses:

- Drainage shall be provided on all uncompleted construction.
- Road pioneering operations shall not undercut the final cut slope or restrict drainage.
- Culverts at live stream crossings shall be installed during pioneering operations prior to embankment.

**4-3 ROAD GRADE AND ALIGNMENT STANDARDS**

The following road grade and alignment standards shall be followed except as designed:

- Grade and alignment shall have smooth continuity, without abrupt changes in direction.

- Maximum grade shall not exceed 18 percent favorable and 12 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Sag vertical curves shall not have a grade change greater than 5% in 100 feet.
- Crest vertical curves shall not have a grade change greater than 4% in 100 feet.

**4-4 SWITCHBACK STANDARDS**

A switchback is defined as a curved segment of road between a beginning and end of the same curve, where the change of traffic travel direction is greater than 90 degrees. The following standards for switchbacks shall be followed:

- Adverse grades on switchbacks shall not exceed 10%.
- Favorable grades through switchbacks shall not exceed 12%.
- Transition grades entering and leaving switchbacks shall not exceed a 5% grade change.
- Transition grades required to meet switchback grade limitations shall be constructed on the tangents preceding and departing from the switchbacks.

**4-5 CUT SLOPE RATIO**

Unless construction staked or designed excavation slopes shall be constructed no steeper than shown on the following table:

<u>Material Type</u>	<u>Excavation Slope Ratio</u>	<u>Excavation Slope Percent</u>
Common Earth (on side slopes up to 55%)	1:1	100
Common Earth (56% to 70% side slopes)	¾:1	133
Common Earth (on slopes over 70%)	½:1	200
Fractured or loose rock	½:1	200
Hardpan or solid rock	¼:1	400

**4-6 EMBANKMENT SLOPE RATIO**

Unless construction staked or designed, embankment slopes shall be constructed no steeper than shown on the following table:

<u>Material Type</u>	<u>Embankment Slope Ratio</u>	<u>Embankment Slope Percent</u>
Sandy Soils	2:1	50
Common Earth and Rounded Gravel	1½:1	67
Angular Rock	1¼:1	80

**4-7 SHAPING CUT AND FILL SLOPE**

Excavation and embankment slopes shall be constructed to a uniform line and left rough for easier revegetation.

**4-8 CURVE WIDENING**

Curve widening shall be added to the inside of curves as follows:

Minimum 4 feet extra	80 to 100 foot radius curve
Minimum 6 feet extra	60 to 79 foot radius curve

**4-9 EMBANKMENT WIDENING**

Except as construction staked or designed, embankments shall be widened as follows:

<u>Height at Centerline</u>	<u>Subgrade Widening</u>
Less than 6 feet	2 feet
6 feet or over	4 feet

Embankment widening shall be applied equally to both sides of the road to achieve the required width.

**4-14 ONE-FOOT EXCAVATION LIMIT**

Where side slopes are 0% to 15%, the cut at centerline shall not exceed one foot unless approved by the Contract Administrator.

**4-21 TURNOUTS**

Turnouts shall be intervisible with maximum of 1,000 feet between turnouts, unless shown otherwise on drawings. Locations shall be adjusted to fit the final subgrade alignment and sight distances. Minimum dimensions are shown on the TYPICAL SECTION SHEET. Turnouts are subject to written approval from the contract administrator.

**4-22 TURNAROUNDS**

Turnarounds shall be no larger than 30 feet long and 30 feet wide. Locations shall be subject to approval by the Contract Administrator.

**4-25 DITCH CONSTRUCTION AND RECONSTRUCTION**

The Purchaser shall construct or reconstruct ditches into the subgrade as specified on the TYPICAL SECTION SHEET. Excavated slopes shall be consistent with Clause 4-5CUT SLOPE RATIO. Ditches shall be constructed concurrently with construction of the subgrade.

**4-28 DITCH DRAINAGE**

Ditches shall drain to cross-drain culverts and ditchouts.

**4-29 DITCHOUTS**

The Purchaser shall construct ditchouts as identified and as needed and as directed by the Contract Administrator. Ditchouts shall be constructed in a manner that diverts ditch water onto the forest floor and shall have excavation backslopes no steeper than a 1:1 ratio.

#### **4-38 PROHIBITED WASTE DISPOSAL AREAS**

Waste material shall not be deposited in the following areas , except as otherwise specified in this plan:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- Within a riparian management zone.
- On side slopes steeper than 40%.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Against standing timber.
- Outside the clearing limits.
- Waste Disposal areas are subject to written approval from the contract administrator.

#### **4-55 ROAD SHAPING**

The road subgrade and surface shall be shaped as shown on the TYPICAL SECTION SHEET. The subgrade and surface shape shall ensure runoff in an even, un-concentrated manner, and shall be uniform, firm, and rut-free. All grading shall be accomplished using a motor grader with a minimum of 175 horsepower.

#### **4-56 DRY WEATHER SHAPING**

At any time of year, the Contract Administrator may require the application of water to facilitate shaping activities. The method of water application is subject to written approval by the Contract Administrator.

#### **4-60 FILL COMPACTION**

All embankment and waste material shall be compacted. Minimum acceptable compaction is achieved by placing embankments in 1 foot or shallower lifts, and routing excavation equipment over the entire width of each lift.

#### **4-61 SUBGRADE COMPACTION**

Constructed or reconstructed subgrades shall be compacted full width. Subgrade compaction shall be approved, in writing, by the Contract Administrator before rock application or timber haul.

#### **4-62 DRY WEATHER COMPACTION**

At any time of year, the Contract Administrator may require the application of water to facilitate compaction activities. The method of water application is subject to written approval, by the Contract Administrator.

### **SECTION 5 – DRAINAGE**

#### **5-1 REMOVAL OF SHOULDER BERMS**

berms shall be removed from road shoulders to permit the escape of runoff. The construction of ditchouts will be required where ponding will result from the effects of sidecast debris.

**5-5 CULVERTS**

Culverts shall be installed as part of this contract. Culverts shall be installed concurrently with subgrade work and shall be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the CULVERT AND DRAINAGE LIST. Culvert, downspout, and flume lengths shall be adjusted to fit as-built conditions and shall not terminate directly on unprotected soil that will erode. Culverts shall be new steel, aluminum, or polyethylene meeting the material specifications in Clauses 10-15 through 10-23. Culvert placement shall precede embankment construction.

**5-11 UNUSED MATERIALS STATE PROPERTY**

On required roads, any materials that are not installed shall become the property of the state. Purchaser shall stockpile materials as directed by the Contract Administrator.

**5-15 CULVERT INSTALLATION**

Installation shall be in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL and the National Corrugated Metal Pipe Association's "Installation Manual for Corrugated Steel Drainage Structures" and the Corrugated Polyethylene Pipe Association's "Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings". Corrugated Polyethylene pipe shall be installed in a manner consistent with the manufacturer's recommendations.

**5-17 CROSS DRAIN SKEW AND SLOPE**

Cross drains, on road grades in excess of 3%, shall be skewed at least 30 degrees from perpendicular to the road centerline, except where the cross drain is at the low point in the road, culverts shall not be skewed. Cross drain culverts shall be installed at a slope steeper than the incoming ditch grade, but not less than 3% or more than 10%.

**5-18 CULVERT DEPTH OF COVER**

Cross drain culverts shall be installed with a depth of cover of not less than 1 foot of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts shall be installed with a depth of cover specified in the Engineer's design, or to the minimum depth recommended by the culvert manufacturer for the type of cover material over the pipe, whichever is greater.

**5-30 DRIVABLE WATERBAR CONSTRUCTION**

Drivable waterbars shall be constructed in accordance with the DRIVABLE WATERBAR DETAIL and as specified on the CULVERT AND DRAINAGE LIST. Drivable waterbars shall

be installed concurrently with construction of the subgrade and shall be maintained in an operable condition.

**5-31 ROLLING DIP CONSTRUCTION**

Rolling dips shall be constructed in accordance with the ROLLING DIP DETAIL and as specified on the CULVERT & DRAINAGE LIST. Rolling dips shall be installed concurrently with construction of the subgrade and shall be maintained in an operable condition. Minimum frequency of rolling dips shall be at a maximum spacing of 400 feet horizontal or one for every 10 feet of vertical change.

**5-33 NATIVE SURFACE ROADS**

If overwintered, native surface roads shall be waterbarred by November 1. Waterbars shall be constructed according to the attached DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical drop of no more than 10 feet between waterbars or between natural drainage paths, and with a maximum spacing of 300 feet.

SECTION 9 – POST-HAUL ROAD WORK

**9-10 LANDING DRAINAGE**

Purchaser shall provide for drainage of the landing surface as approved, in writing, by the Contract Administrator.

SECTION 10 MATERIALS

**10-15 CORRUGATED STEEL CULVERT**

Metallic coated steel culverts shall meet AASHTO M-36 (ASTM A-760) specifications. Culverts shall be galvanized (zinc coated meeting AASHTO M-218).

**10-17 CORRUGATED PLASTIC CULVERT**

Polyethylene culverts shall meet AASHTO M-294 specifications, or ASTM F-2648 specifications for recycled polyethylene. Culverts shall be Type S – double walled with a corrugated exterior and smooth interior.

**10-21 METAL BAND**

Metal coupling and end bands shall meet the AASHTO specification designated for the culvert and shall have matching corrugations. On culverts 24 inches and smaller, bands shall have a minimum width of 12 inches. On culverts over 24 inches, bands shall have a minimum width of 24 inches.

**10-22 PLASTIC BAND**

Plastic coupling and end bands shall meet the AASHTO specification designated for the culvert. Only fittings supplied or recommended by the culvert manufacturer shall be used. Couplings shall be bell and spigot connector, or split coupling band. Split coupling bands shall have a minimum of four corrugations, two on each side of the pipe joint.

**10-23 GAGE AND CORRUGATION**

Unless otherwise stated in the engineer's design, metal culverts shall conform to the following specifications for gage and corrugation as a function of diameter.

<u>Diameter</u>	<u>Gage</u>	<u>Corrugation</u>
18"	16 (0.064")	2 <sup>2</sup> / <sub>3</sub> " X 1/2"
24" to 48"	14 (0.079")	2 <sup>2</sup> / <sub>3</sub> " X 1/2"
54" to 96"	14 (0.079")	3" X 1"

**FOREST ROAD ACCESS**  
Road Maintenance Specifications

Prior to Acceptance of Contract or Acceptance on Timber Sale

**A. Cuts and Fills**

- (1) Maintain slope lines as constructed. Remove slides from the ditches and roadway. Replace fills to 1 ½:1 slopes with selected material or as directed. Remove overhanging material from cut slopes.
- (2) Material from slides or other sources requiring removal must not be deposited in streams or at locations where it will erode into streams or water courses.
- (3) Undesirable slide materials and debris must not be allowed to contaminate or mix with surface material.

**B. Roadway Surfaces**

- (1) Grade and shape road surface, turnouts and shoulder to original crown, inslope or outslope as directed to provide suitable traveled surface and surface water runoff in an even, unconcentrated manner.
- (2) Blading must not undercut backslopes at bottom of cut slopes.
- (3) Watering may be required to control dust and to retain fine surface rock.
- (4) Desirable surface material shall not be bladed off roadway.
- (5) Replace surface material lost or worn away.
- (6) Remove berms except as otherwise directed by the State.

**C. Drainage**

- (1) Keep ditches and drainage channels at outlets and inlets of culverts clear of obstructions.
- (2) Inspect and clean culverts at least monthly, with additional inspection during storms and periods of high runoff. This must be done even during periods of inactivity.
- (3) Place non erodable material or rock at drainage outfalls.
- (4) Keep silt bearing surface runoff from contaminating live streams.

**D. Structures**

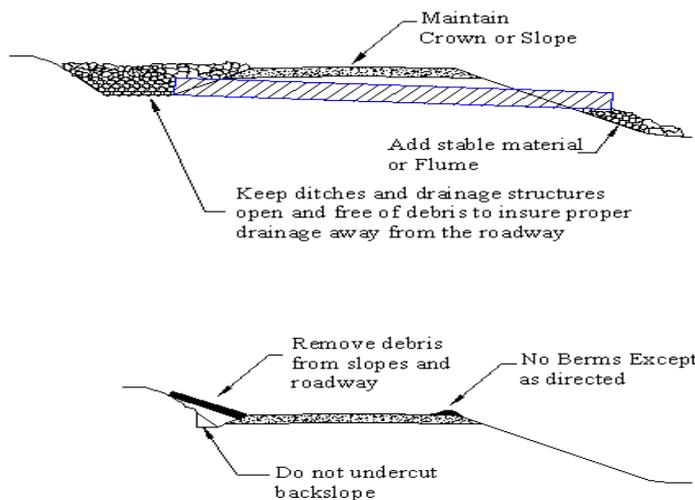
- (1) Repair bridges, culverts, cattle guards, fences and other road structures to conditions required by construction specifications.

**E. Termination of Use, or End of Season**

- (1) Do maintenance work to minimize damage from the elements such as blading to insure correct runoff, ditch and culvert clearing and water bars.

**F. Debris**

- (1) Remove fallen timber, limbs, stumps from slopes and roadway, ditchlines and culvert inlets.

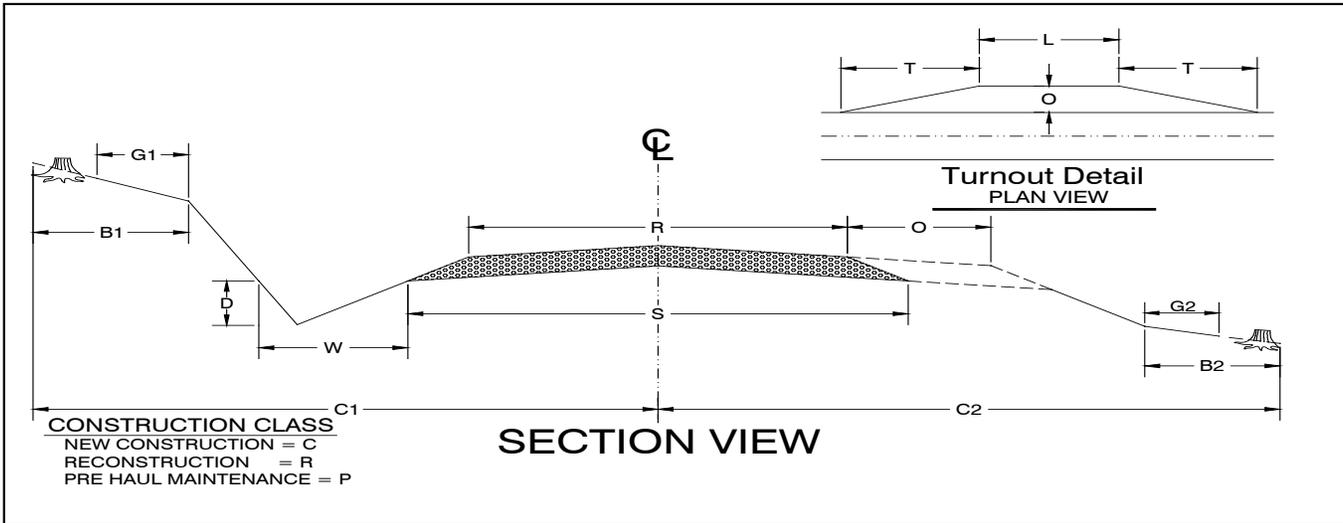


DEPARTMENT OF NATURAL RESOURCES

Application No.: 30-091740

Name of Sale: Gone Dry

TYPICAL SECTION SHEET



ROAD NAME	START STATION	END STATION	CONSTRUCTION CLASS	CONSTRUCTION TYPE	KEYED FILL	SUBGRADE WIDTH (S)	ROAD WIDTH (R)	INSLOPE "/10'	OUTSLOPE "/10'	CROWN " AT CL	DITCH WIDTH (W)	DITCH DEPTH (D)	DITCH 2 SIDES	GRUBBING CUT BANK (G1)	GRUBBING FILL TOE (G2)	ROAD CUT CLEARING (B1)	ROAD FILL CLEARING (B2)	R/W CUT CLEARING (C1)	R/W FILL CLEARING (C2)
E373918J	0+00	4+90	C	R		16	14		4					2	2	4	4		
	4+90	22+38	C	P		14	12			4	2	1							
E373813JB	0+00	2+10	C	R		16	14		4					2	2	4	4		
E373813EB	0+00	9+05	C	P		14	12			4	2	1							
E373813E	0+00	13+10	C	P		14	12			4	2	1							
	13+10	28+50	C	P		14	12		4										
E373812E	0+00	25+05	C	R		14	12		4					2	2	4	4		
E373813K	0+00	28+35	C	P		14	12			4	2	1							
E373918M	0+00	1+75	C	C		14	12		4					2	2	4	4		
E373907E	0+00	5+25	C	R		14	12		4					2	2	4	4		
E373918H	0+00	27+30	C	R		14	12		4					2	2	4	4		

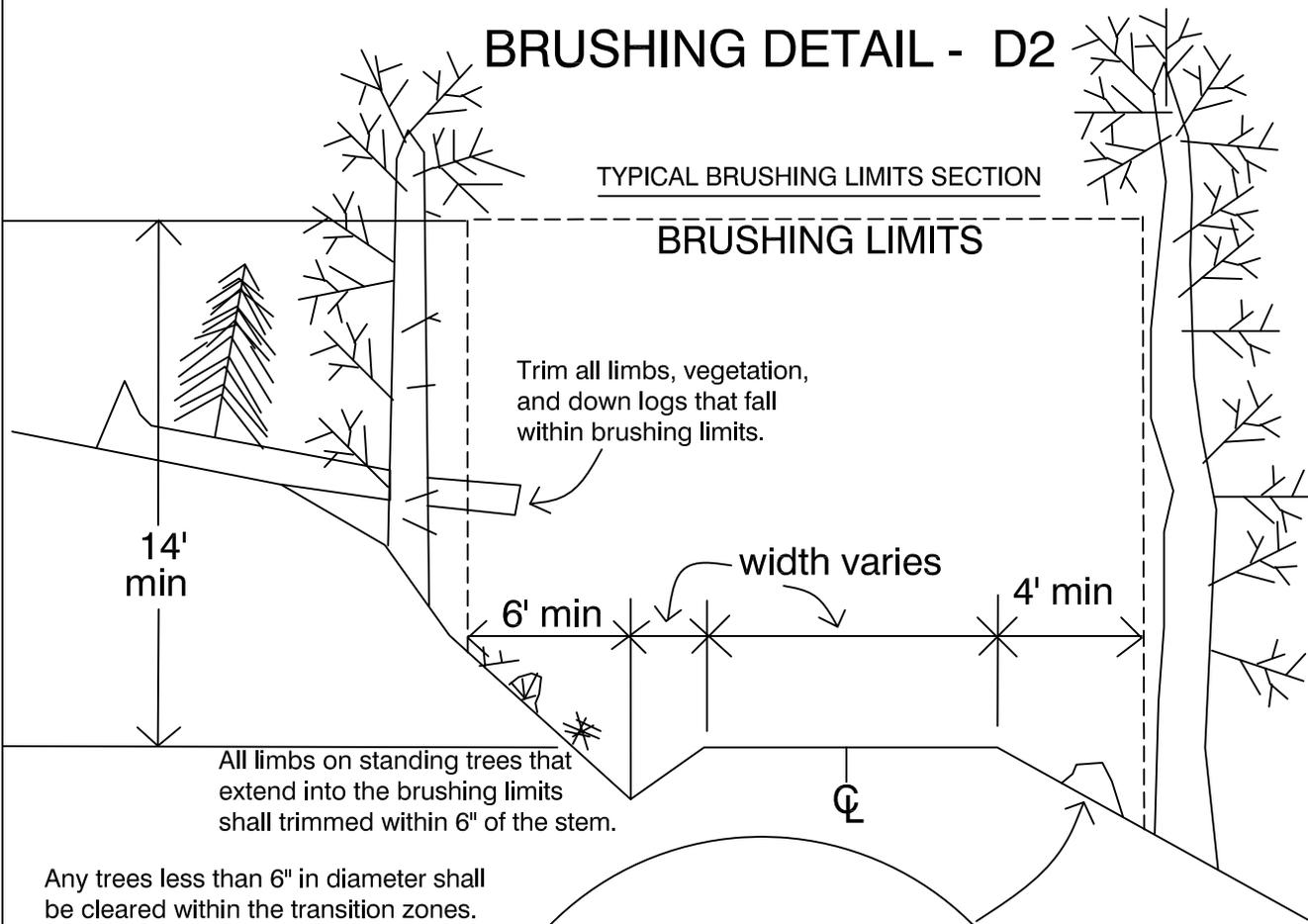




# BRUSHING DETAIL - D2

## TYPICAL BRUSHING LIMITS SECTION

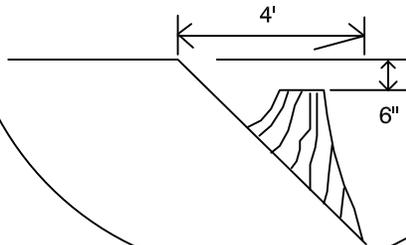
### BRUSHING LIMITS



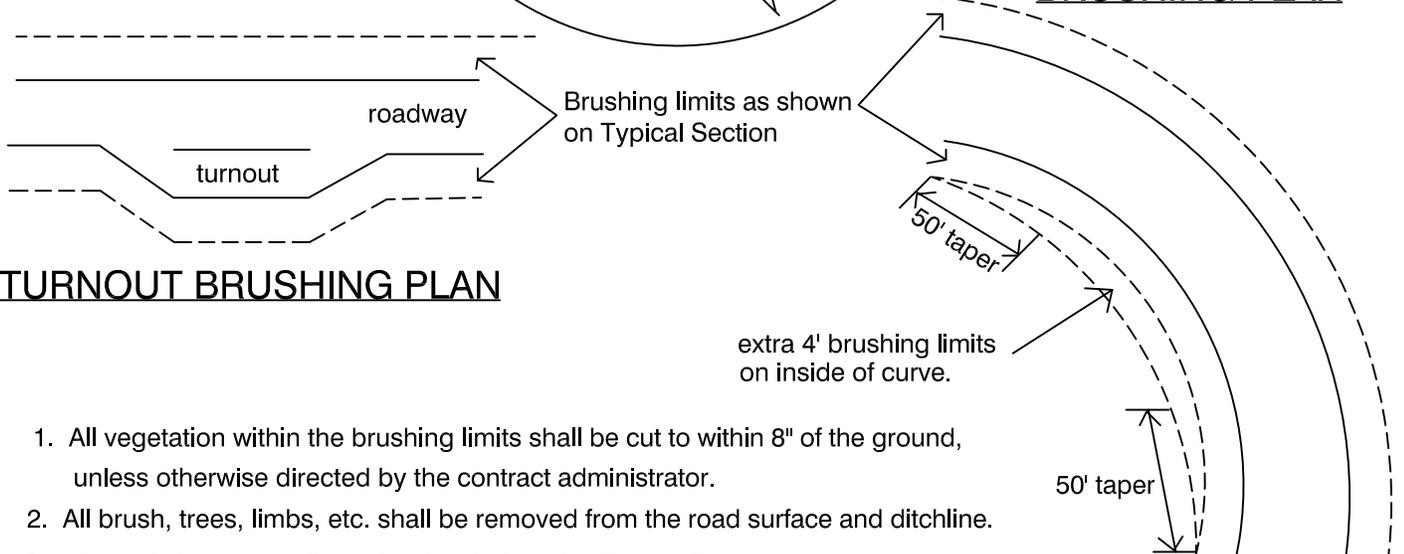
All limbs on standing trees that extend into the brushing limits shall be trimmed within 6" of the stem.

Any trees less than 6" in diameter shall be cleared within the transition zones.

Trim all stumps and vegetation within 4' of edge of road and in ditch to at least 6" below the elevation of the edge of road.



## CURVE BRUSHING PLAN

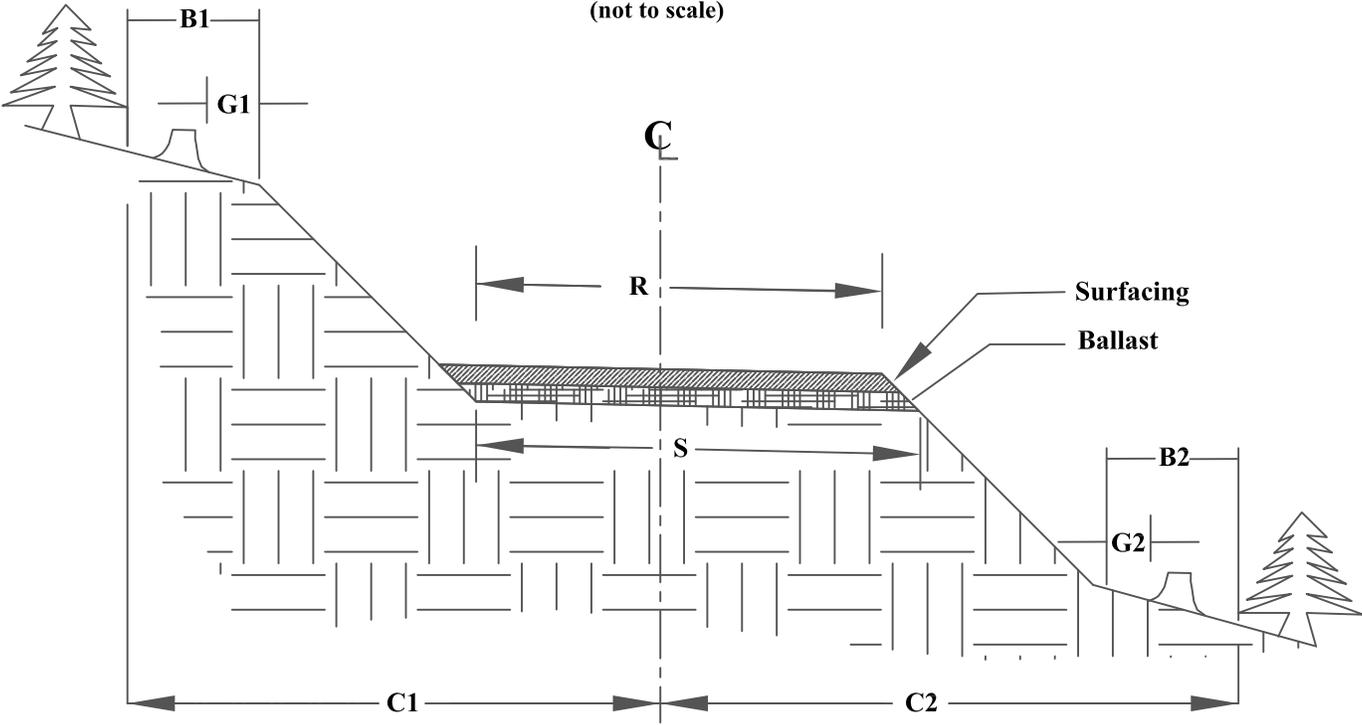


## TURNOUT BRUSHING PLAN

1. All vegetation within the brushing limits shall be cut to within 8" of the ground, unless otherwise directed by the contract administrator.
2. All brush, trees, limbs, etc. shall be removed from the road surface and ditchline.
3. All debris that may roll or migrate into the ditchline shall be removed.

# OUTSLOPED ROAD CROSS-SECTION

## DETAIL D3

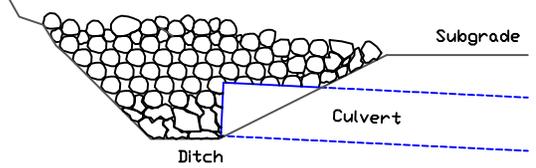
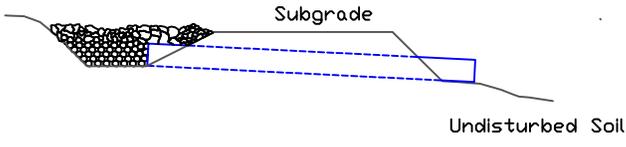


Drawn by: JBB 2/18/03

Revised: JE 01/14/20162

# CULVERT AND DRAINAGE SPECIFICATIONS DETAIL - D1

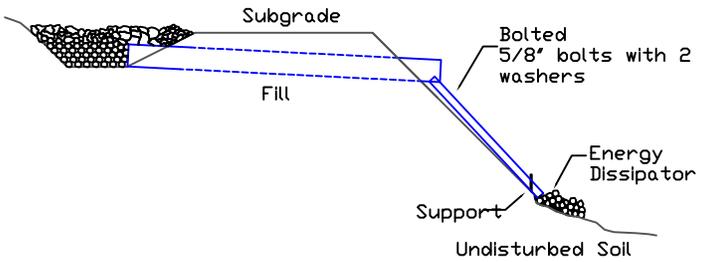
## HEADWALLS



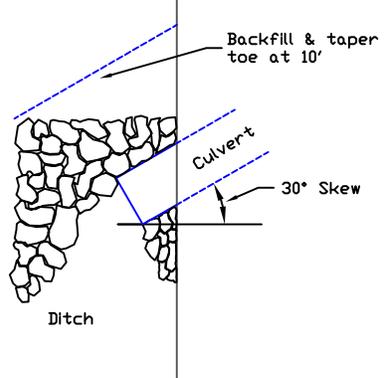
Headwall to be constructed of material that will resist erosion

## FLUME

Use where ground conditions are uniform, providing for stability of flume.

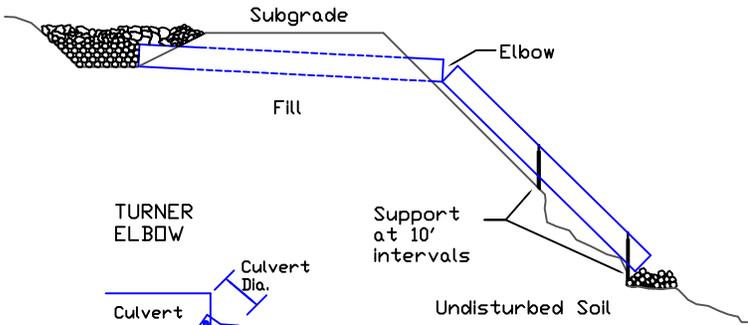


## PLAN VIEW

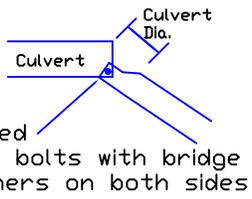


## DOWNSPOUT

Use where ground conditions are irregular.



### TURNER ELBOW

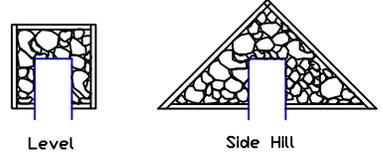


## CULVERT BACKFILL & BASE PREPARATION (For Culverts Less Than 36")

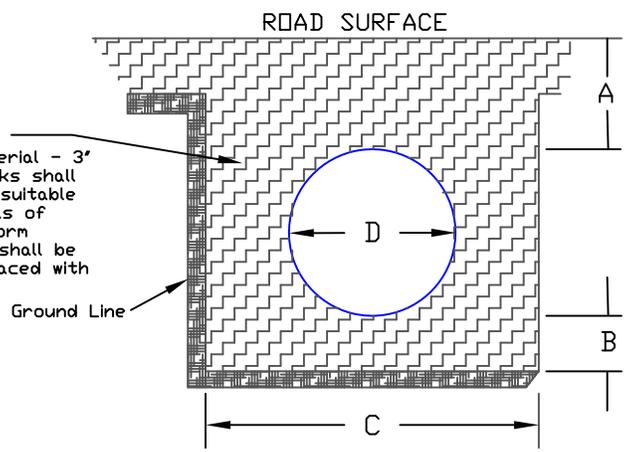
Minimum Cover	Minimum Bed Depth	Min. Trench Width	Nominal Diameter
A	B	C	D
12"	6"	36"	18"
12"	6"	42"	24"
12"	6"	48"	30"
12"	6"	54"	36"

DISSIPATOR SPEC'S  
Size In Culvert Diameters

Area	2 X 2
Depth	1
Aggregate	1/3



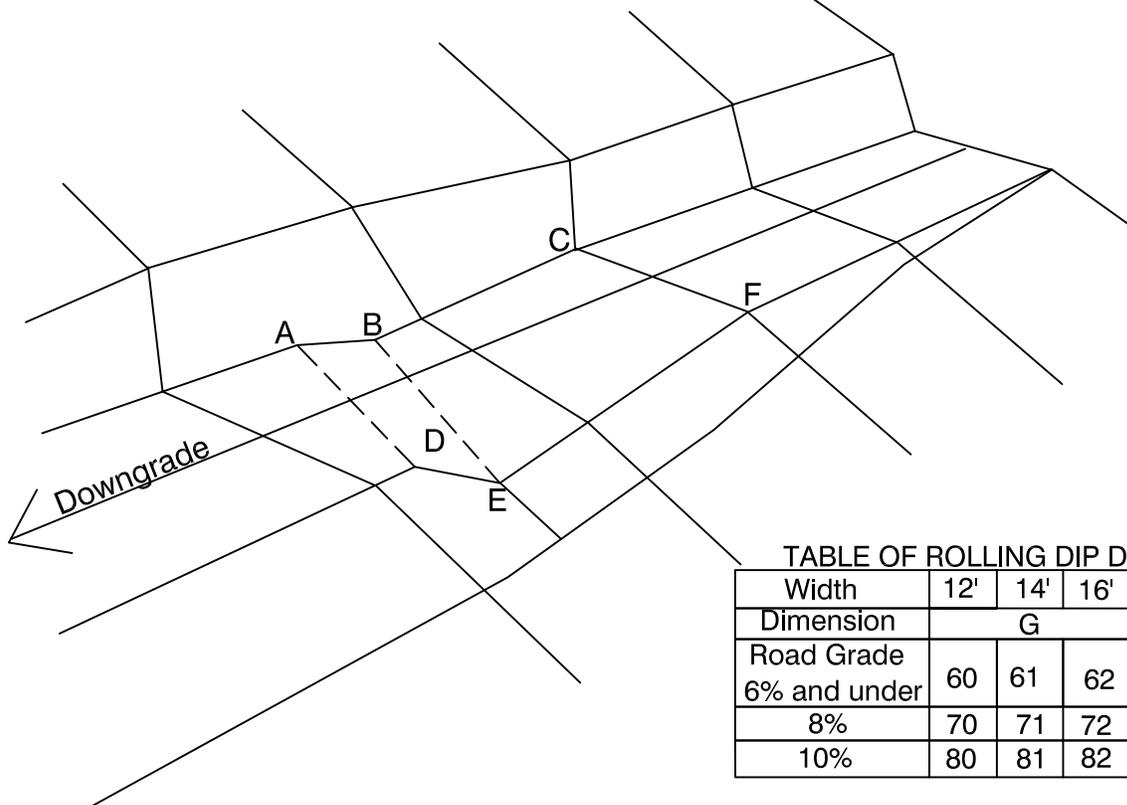
**BEDDING MATERIAL:**  
Use granular material - 3" minus. Large rocks shall be replaced with suitable material. Materials of poor or non-uniform bearing capacity shall be removed and replaced with suitable fill.



# STANDARD 30° ROLLING DIP - D5

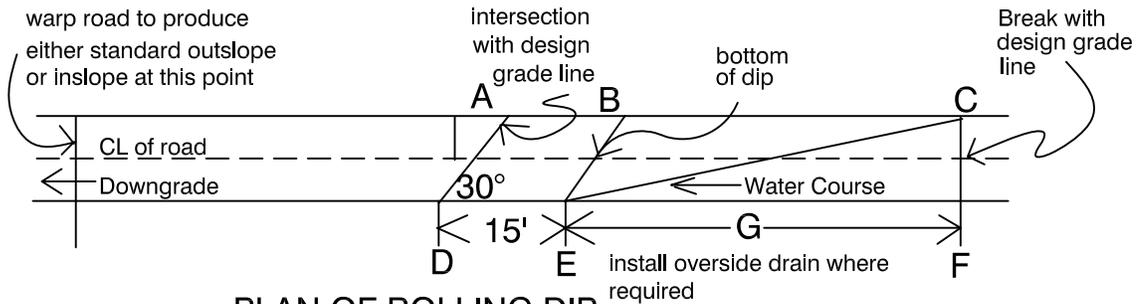
Note: Plan of dip shown is for an outsloped rolling dip. Dips may be either insloped or outsloped. When insloped, dips shall discharge into a culvert, drop inlet, overside drain, or drainage ditch. When outsloped, they shall discharge into an overside drain or on to natural ground. Minimum skew is 30°, and the maximum skew is 45°.

The minimum cross grade from "B" to "E" is 1% greater than the original road grade.

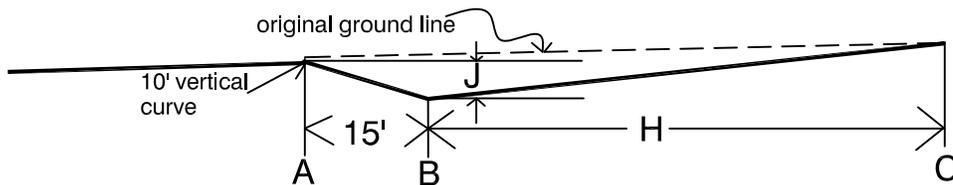


**TABLE OF ROLLING DIP DIMENSIONS**

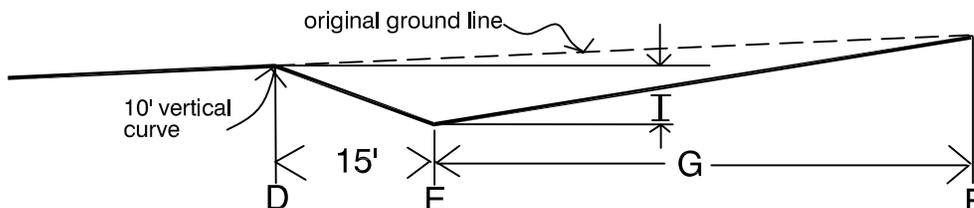
Width	12'	14'	16'	ALL		
Dimension	G			H	I	J
Road Grade 6% and under	60	61	62	52	.8	0.3
8%	70	71	72	62	1.0	0.2
10%	80	81	82	72	1.1	0.1



**PLAN OF ROLLING DIP**

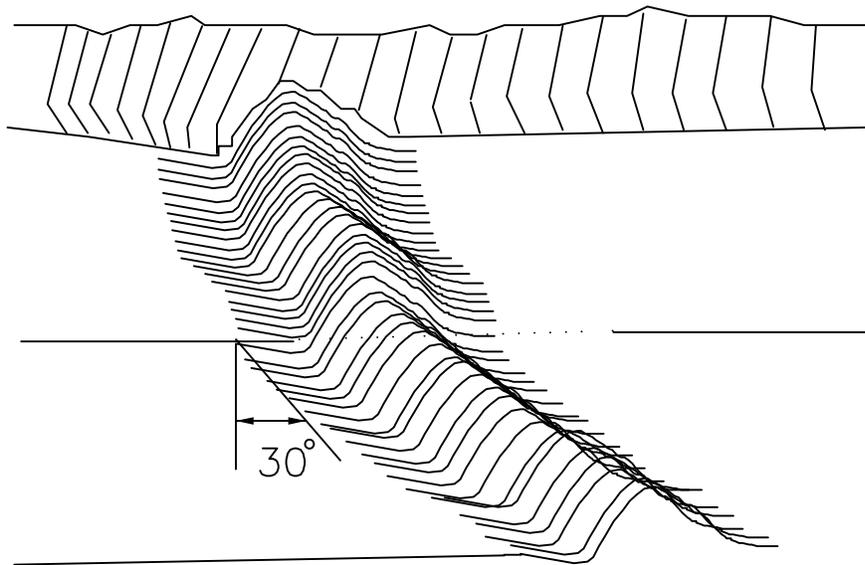


**ROAD PROFILE ALONG A-B-C OF ROLLING DIP**

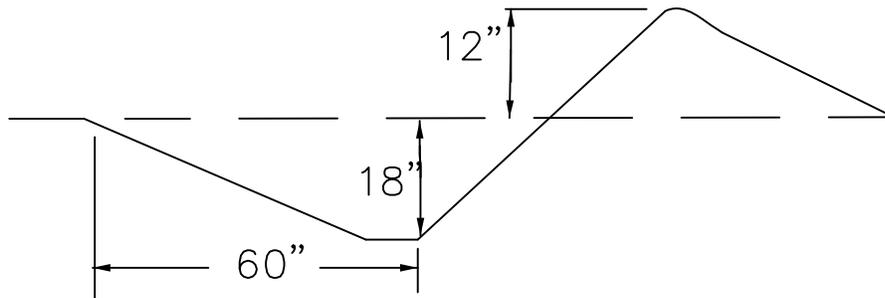


**ROAD PROFILE ALONG D-E-F OF ROLLING DIP**

### Top View

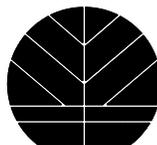


### Side View



1. Waterbar construction for forest roads with little or no traffic.
2. Specifications are average and may be adjusted to conditions.
3. Bottom of waterbar must be outsloped to ensure proper drainage.
4. Rock outlet if steep fill slope is present.

## Driveable Waterbar Detail



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

Northeast Region  
Colville, Washington

Designed By: Stash Slabinski 9/06/05

Drawn By: Stash Slabinski 9/06/05

Revised: 12/17/07

1 OF 1

# Sale Name: Gone Dry SUMMARY - Road Development Costs

REGION: Northeast

CONTRACT #: 30-092349

ENGINEER: Gene Gibbs

DISTRICT: North Columbia

DATE: 2/24/2015

	<i>Construction</i>	<i>Reconstruction</i>	<i>Maintenance</i>	<i>Deactivation</i>	
<b>ROAD NUMBERS:</b>	E373918M	E373918J, E373813JB, E373812E, E373907E, E373918H	E373918J, E373813EB, E373813E, E373813K		Additional Items
<b>ROAD STANDARD:</b>	<i>Construction</i>	<i>Reconstruction</i>	<i>Maintenance</i>	<i>Deactivation</i>	<i>Additional Items</i>
<b>NUMBER OF STATIONS:</b>	<i>1.75</i>	<i>64.60</i>	<i>83.38</i>		
<b>CLEARING &amp; GRUBBING:</b>	\$35	\$1,368			
<b>EXCAVATION AND FILL:</b>	\$438	\$3,929			
<b>MISC. MAINTENANCE:</b>	\$11	\$1,249	\$1,376		
<b>ROAD ROCK:</b>					
<b>ADDITIONAL ROCK:</b>					
<b>CULVERTS AND FLUMES:</b>	\$882				
<b>STRUCTURES/MATERIALS:</b>					

<b>TOTAL COSTS:</b>	\$1,366	\$6,546	\$1,376	\$0	\$0
<i>COST PER STATION:</i>	<i>\$781</i>	<i>\$101</i>	<i>\$17</i>	<i>\$0</i>	<i>\$0</i>

	\$/per move	# of moves	Total
<b>MOBILIZATION:</b>	\$300	<b>3</b>	\$900

**TOTAL (All Roads) =** \$10,188  
**SALE VOLUME mbf =** 1,416  
**TOTAL \$/MBF =** \$7

Engineer's Notes: