TIMBER NOTICE OF SALE

SALE NAME: Q BUCK CENTRAL

AGREEMENT NO: 30-103207

AUCTION: November 15, 2022 starting at 10:00 a.m., COUNTY: Okanogan
Northeast Region Office, Colville, WA

SALE LOCATION: Sale located approximately 17 miles west of Okanogan, WA.

PRODUCTS SOLD AND SALE AREA: All green conifer species except for leave trees banded with orange paint and all standing snags excluding ponderosa pine, except for two standing snags per acre in Units 1 and 2 bounded by white timber sale boundary tags and all right of way timber bounded by orange right of way tags.

All forest products above located on part(s) of Sections 4 all in Township 33 North, Range 24 East, Sections 28, 29, 32 and 33 all in Township 34 North, Range 24 East, W.M., containing 121 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: PwC-SFIFM-513)

ESTIMATED SALE VOLUMES AND QUALITY:

<table>
<thead>
<tr>
<th>Species</th>
<th>Avg DBH</th>
<th>Ring Count</th>
<th>Total MBF</th>
<th>P SM</th>
<th>1S</th>
<th>2S</th>
<th>3S</th>
<th>4S</th>
<th>5S</th>
<th>6S</th>
<th>UT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas fir</td>
<td>17.3</td>
<td>1,366</td>
<td>795</td>
<td>494</td>
<td>77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>17.1</td>
<td>530</td>
<td>254</td>
<td>276</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Larch</td>
<td>11.9</td>
<td>55</td>
<td>42</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spruce</td>
<td>21</td>
<td>25</td>
<td>13</td>
<td>11</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale Total</td>
<td></td>
<td>1,976</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MINIMUM BID: $231,000.00

BID METHOD: Sealed Bids

PERFORMANCE SECURITY: $46,200.00

SALE TYPE: Lump Sum

EXPIRATION DATE: November 30, 2025

ALLOCATION: Export Restricted

BID DEPOSIT: $23,100.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Rubber tired skidder, Track skidder, and Ground based equipment. Falling and Yarding will not be permitted from March 1 to May 1 unless authorized in writing by the Contract Administrator due to spring breakup.

ROADS: 38.47 stations of required construction. 218.32 stations of required prehaul maintenance. 13.03 stations of abandonment. Road construction will not be permitted from November 15 to May 1 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 March 1 to May 1 unless authorized in writing by the Contract Administrator due to spring breakup.

ACREAGE DETERMINATION
TIMBER NOTICE OF SALE

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 4.6 inch dib. All other species: 7.0 - 17.5 inches dbh has minimum top of 4.6 inch dib. All species 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.

FEES: $33,592.00 is due on day of sale. $9.00 per MBF is due upon removal. These are in addition to the bid price.

SPECIAL REMARKS: No operations associated with timber harvest, hauling or road work in portions of Unit 1, all of Unit 2 and associated roads will be permitted from March 1 to August 1 or later if the known goshawk nest is active during the year of harvest.
SALE NAME:  Q BUCK CENTRAL  
AGREEMENT #:  30-103207  
TOWNSHIP(S):  T33R24E, T34R24E  
TRUST(S):  Common School and Indemnity (3)  
REGION:  Northeast Region  
COUNTY(S):  Okanogan  
ELEVATION RGE:  3280-4120  

UNIT 1  
50 ACRES  

UNIT 2  
70 ACRES  

T33R24E, T34R24E  
3280-4120  

Public Land Survey Townships  
DNR Managed Lands  
Variable Retention Harvest  
existing roads  
required pre-haul maintenance  
required construction  
required abandonment  
right of way tags = 1 acre  
haul route  

Streams  
Survey Monument  

Prepared By: rmi490  
Modification Date: rmi490 7/7/2022
DRIVING DIRECTIONS:

From Okanogan, WA, travel approximately 17 miles west on State Route 20 to DNR road E332405K on north side of highway. Turn right (north) off of highway and proceed through stretch gate. Unit 2 is located approximately 1 mile from the highway.

Unit 1 may be reached by continuing an additional 0.75 miles on State Route 20 past Unit 2 to Buck Mtn Lookout Road (E332405A). Continue on E332405A for 1.5 miles and turn right at the fork onto road E332404A. Unit 1 is located approximately 0.25 miles from fork.
**DRIVING DIRECTIONS:**

From Okanogan, WA, travel approximately 17 miles west on State Route 20 to DNR road E332405K on north side of highway. Turn right (north) off of highway and proceed through stretch gate. Unit 2 is located approximately 1 mile from the highway.

Unit 1 may be reached by continuing an additional 0.75 miles on State Route 20 past Unit 2 to Buck Mtn Lookout Road (E332405A). Continue on E332405A for 1.5 miles and turn right at the fork onto road E332404A. Unit 1 is located approximately 0.25 miles from fork.
STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

BILL OF SALE AND CONTRACT FOR
FOREST PRODUCTS

Export Restricted Lump Sum AGREEMENT NO. 30-0103207

SALE NAME: Q BUCK CENTRAL

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 into 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 November 15, 2022 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 except for leave trees banded with orange paint and all standing snags excluding ponderosa pine, except for two standing snags per acre in Units 1 and 2 bounded by white timber sale boundary tags and all right of way timber bounded by orange right of way tags.

All forest products above located on approximately 121 acres on part(s) of Section 4 in Township 33 North, Range 24 East, Sections 28, 29, 32, and 33 all in Township 34 North, Range 24 East W.M. in Okanogan 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, 2025.

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 $261.00 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 Northwest Log Rules Eastside, 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.
<table>
<thead>
<tr>
<th>Contract Item</th>
<th>Appraised Price</th>
<th>Overbid Factor</th>
<th>Overbid Price</th>
<th>Overbid Fees</th>
<th>Contract Payment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas fir</td>
<td>$129.14</td>
<td>0</td>
<td>$0.00</td>
<td>$9.00</td>
<td>$9.00</td>
</tr>
<tr>
<td>Larch</td>
<td>$118.81</td>
<td>0</td>
<td>$0.00</td>
<td>$9.00</td>
<td>$9.00</td>
</tr>
<tr>
<td>Ponderosa pine</td>
<td>$85.06</td>
<td>0</td>
<td>$0.00</td>
<td>$9.00</td>
<td>$9.00</td>
</tr>
<tr>
<td>Spruce</td>
<td>$119.31</td>
<td>0</td>
<td>$0.00</td>
<td>$9.00</td>
<td>$9.00</td>
</tr>
<tr>
<td>Other</td>
<td>$90.29</td>
<td>0</td>
<td>$0.00</td>
<td>$9.00</td>
<td>$9.00</td>
</tr>
</tbody>
</table>

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: PwC-SFIFM-513.

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.

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.

Road is defined as the road bed, including but not limited to its component parts, such as cut and fill slopes, 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.

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 Purchaser's 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. Purchaser's obligations to indemnify, defend, and hold harmless includes any claim by Purchaser's 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 Purchaser's or any subcontractors' performance or failure to perform the contract. Purchaser's 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 via endorsement 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 address of record:

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 Operations

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; E332404A, E332405A, E332405J, E332405K, E342432Q and E342433T. 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 250 pounds of grass seed to a location designated by the Contract Administrator. Seed provided shall meet the following specifications.

40% Hard Fescue, 40% Streambank Wheatgrass, 20% Intermediate Wheatgrass
Seed shall be certified weed free, premixed and delivered to the Omak Work Center 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-370 Blocking Roads

Purchaser shall not block the E332404A, E332405A, E332405J, E332405K, E342432Q and E342433T roads, unless authority is granted in writing by the Contract Administrator.

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:

Lease, including the terms and provisions thereof,
For: Permit Range
In Favor of: Gebbers Farms, Inc.
Disclosed by Application No.: 11-C69448
Granted: 1/1/2014
Expires: 12/31/2023

Lease, including the terms and provisions thereof,
For: Permit Range
In Favor of: Chiliwist Grazing Association
Disclosed by Application No.: 11-D69449
Granted: 1/1/2014
Expires: 12/31/2023

Lease, including the terms and provisions thereof,
For: Permit Range
In Favor of: Sonya Gebbers Taylor
Disclosed by Application No.: 11-C69450
Lease, including the terms and provisions thereof,
For: Permit Range
In Favor of: Gebbers Farms, Inc.
Disclosed by Application No.: 11-C69451
Granted: 1/1/2014
Expires: 12/31/2023

Lease, including the terms and provisions thereof,
For: Permit Range
In Favor of: Dan Gebbers
Disclosed by Application No.: 11-B69461
Granted: 1/1/2013
Expires: 12/31/2022

Lease, including the terms and provisions thereof,
For: Permit Range
In Favor of: Chiliwist Grazing Association
Disclosed by Application No.: 11-B69462
Granted: 1/1/2013
Expires: 12/31/2022

Easement, including the terms and provisions thereof,
For: State Road
In Favor of: Washington State Department of Transportation
Disclosed by Application No.: 50-SR1064
Granted: 9/7/1967
Expires: Indefinite

Easement, including the terms and provisions thereof,
For: Overhead Power Lines and Fiber Optic Cable
In Favor of: Okanogan County PUD No. 1
Disclosed by Application No.: 50-087167
Granted: 5/17/2013
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-002682
Granted: 11/21/1972
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Stream
In Favor of: DNR
Disclosed by Application No.: 78-002826
Granted: 1/23/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Stream
In Favor of: DNR
Disclosed by Application No.: 78-002827
Granted: 1/23/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003472
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003473
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003474
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003475
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Pond
In Favor of: DNR
Disclosed by Application No.: 78-003481
Granted: 3/28/1973
Expires: Indefinite

Water Right, including the terms and provisions thereof,
For: Spring
In Favor of: DNR
Disclosed by Application No.: 78-003482
Granted: 3/28/1973
Expires: Indefinite

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 $51,376.00. The total contract price consists of a $0.00 contract bid price plus $51,376.00 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 $46,200.00. 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-001 Operations Outside the Sale Boundaries

No operations shall occur outside the sale boundaries, as described within the contract, unless approved in writing by the State.

H-010 Cutting and Yarding Schedule

Falling and Yarding will not be permitted from March 1 to May 1 unless authorized in writing by the Contract Administrator.

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 100 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 unit containing the damaged leave tree, 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 ‘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 16 feet in width, including rub trees.

b. Skid trails shall not cover more than 10 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 10 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-050 Rub Trees
Trees designated for cutting along skid trails and cable corridors shall be left standing as rub trees until all timber that is tributary to the skid trail or cable corridor has been removed.

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-060 Skid Trail Locations
Locations of skid trails must be marked by Purchaser and approved by the Contract Administrator prior to the felling of timber.

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 harvested and removed using D6 equivalent or smaller ground skidding equipment and ground based harvesting equipment. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

H-130 Hauling Schedule
The hauling of forest products will not be permitted from March 1 to May 1 unless authorized in writing by the Contract Administrator.
H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

a. Whole tree yarding is required in Units 1 and 2.

b. Hand felling of trees may be necessary in some units.

c. Slash piled at landings shall be separated from the road prism.

d. If the standing dead is removed, Purchaser shall leave two standing snags per acre from the larger diameter class when safe to do so.

e. No operations associated with timber harvest, hauling or road work in portions of Unit 1, all of Unit 2 and associated roads will be permitted from March 1 to August 1 or later if the known goshawk nest is active during the year of harvest.

f. If snow plowing occurs, berms shall be removed as designated by the Contract Administrator.

g. No operations associated with timber harvest, hauling, or road work will be permitted within 1/2 mile of an active northern goshawk nest from March 1 and August 1 or later if young are still on the nest.

Permission to do otherwise must be granted 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-210 Log Length Hauling Restrictions

The maximum log length hauled from the sale area shall not exceed 42 feet unless otherwise approved 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 Units 1 and 2 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 3/25/2022 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair
Purchaser shall perform work at their own expense on E332404A, E332405A, E332405J, E332405K, E342432Q and E342433T roads. 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 50 feet off the E332404A, E332405A, E332405J, E332405K, E342432Q and E342433T road(s).

C-130 Dust Abatement
Purchaser shall abate dust on the E332404A, E332405A, E332405J, E332405K, E342432Q and E342433T roads used for hauling from May 1 to November 15 as directed by the Contract Administrator.

C-140 Water Bars
Purchaser shall, as directed by the Contract Administrator, construct water bars across haul roads, skid trails and fire trails as necessary to control soil erosion and water pollution.

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-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-070 Water Supply

Purchaser shall provide, during the "closed season", a water supply with a minimum capacity of 1000 gallons for rapid filling of pump trucks or trailers at a location designated by the Contract Administrator.

S-100 Stream Cleanout

Slash or debris which enters any stream as a result of operations under this contract and which is identified by the Contract Administrator shall be removed and deposited in a stable position. Removal of slash or debris shall be accomplished in a manner that avoids damage to the natural stream bed and bank vegetation.

S-120 Stream Protection

No timber shall be felled into, across, or yarded through any stream.

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 or other releases of hazardous material/waste during operations conducted under this contract.

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 10 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 covered in part a., the Purchaser is responsible for immediately notifying all the following:

-Department of Emergency Management at 1-800-258-5990
-National Response Center at 1-800-424-8802
-Appropriate Department of Ecology (ECY) at 1-800-645-7911
-DNR Contract Administrator

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.
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 the unit in which the tree was damaged.
SIGNATURES

This agreement may be executed in any number of counterparts (including by electronic mail in portable document format (.pdf), or by facsimile) each of which shall be deemed an original but all of which, when taken together, shall constitute one and the same Agreement binding on all parties.

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

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

______________________  ________________________  
Purchaser                 Ken McNamee  
______________________  ________________________  
Print Name                 Northeast Region Manager  

Date:    ________________  Date:    _________________  
Address:  

CORPORATE ACKNOWLEDGEMENT
(Required for both LLC and Inc. Entities)

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: Q BUCK CENTRAL

Application Number: 30-103207

EXCISE TAX APPLICABLE ACTIVITIES

Construction: 3,847 linear feet
Road to be constructed (optional and required) but not abandoned

Reconstruction: 0 linear feet
Road to be reconstructed (optional and required) but not abandoned

Abandonment: 1,303 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: 21,832 linear feet
Existing road to receive maintenance work (optional and required) prior to haul

EXCISE TAX EXEMPT ACTIVITIES

Temporary Construction: 0 linear feet
Roads to be constructed (optional and required) and then abandoned

Temporary Reconstruction: 0 linear feet
Roads to be reconstructed (optional and required) and then abandoned

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 9/18)
### PRE-CRUISE NARRATIVE

**Sale Name:** Q Buck Central  
**Region:** Northeast

<table>
<thead>
<tr>
<th>Agreement #:</th>
<th>30-103207</th>
<th>District: South Okanogan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Forester:</td>
<td>Steven Hanson</td>
<td>County(s): Choose a county, Okanogan</td>
</tr>
<tr>
<td>Phone / Location:</td>
<td>509-322-8437</td>
<td></td>
</tr>
</tbody>
</table>

| Alternate Contact: | Jake Townsend | Other information: |
| Phone / Location: | 509-429-0545 | Click here to enter text. |

<table>
<thead>
<tr>
<th>Type of Sale:</th>
<th>Lump Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvest System:</td>
<td>Ground based</td>
</tr>
<tr>
<td>Special Management areas:</td>
<td></td>
</tr>
<tr>
<td>Other conditions (# leave trees, etc.):</td>
<td></td>
</tr>
</tbody>
</table>

### UNIT ACREAGES AND METHOD OF DETERMINATION:

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Legal Description</th>
<th>Grant or Trust</th>
<th>Gross Proposal Acres</th>
<th>Deductions from Gross Acres (No harvest acres)</th>
<th>Net Harvest Acres</th>
<th>Acreage Determination (List method and error of closure if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>T34 R24 S28, 29, 32, 33</td>
<td>03</td>
<td>50.6</td>
<td>0.0</td>
<td>50.6</td>
<td>GPS (Garmin)</td>
</tr>
<tr>
<td>2</td>
<td>T34 R24 S32, 33 T33 R24 S4</td>
<td>03</td>
<td>69.7</td>
<td>0.0</td>
<td>69.7</td>
<td>GPS (Garmin)</td>
</tr>
<tr>
<td>ROW U3</td>
<td>T34 R24 S32, 33</td>
<td>03</td>
<td>0.6</td>
<td>0.0</td>
<td>0.6</td>
<td>GPS (Garmin)</td>
</tr>
<tr>
<td>TOTAL ACRES</td>
<td></td>
<td></td>
<td>120.9</td>
<td>0.0</td>
<td>120.9</td>
<td></td>
</tr>
</tbody>
</table>

### HARVEST PLAN AND SPECIAL CONDITIONS:

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)</th>
<th>Special Management areas:</th>
<th>Other conditions (# leave trees, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Marked leave with orange paint.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**ROW**

U3 Tagged with orange ROW tags

**OTHER PRE-CRUISE INFORMATION:**

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Primary, secondary Species / Estimated Volume (MBF)</th>
<th>Access information (Gates, locks, etc.)</th>
<th>Photos, traverse maps required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>795</td>
<td>Will need sled or ATV for winter access. Access is easier with ATV during summer months.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1281</td>
<td>Will need sled or ATV for winter access. Access is easier with ATV during summer months.</td>
<td></td>
</tr>
<tr>
<td>ROW U3</td>
<td>49</td>
<td>Will need sled or ATV for winter access. Access is easier with ATV during summer months.</td>
<td></td>
</tr>
<tr>
<td>TOTAL MBF</td>
<td>2,125</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:**

For road acreage deductions, 15 feet was used for management standard roads and 12 feet was used for secondary/tertiary roads.

**Prepared By:** Steven Hanson  
**Date:** 02/22/2022  
**Title:** NRS2  
**CC:**
Timber Sale Cruise Report
Buck Central

Sale Name: Q BUCK CENTRAL
Sale Type: LUMP SUM
Region: NORTHEAST, NORTHEAST
District: SO OKANOGAN, SO OKANOGAN
Lead Cruiser: Kevin Parkinson
Other Cruisers: Jake Culp

Cruise Narrative:
Location:
Legal – Sections 28, 29, 32 and 33, T 34N, R 24 E. and Section 4, T 33N, R 24E, WM.
General – Units are 30 miles east of Okanogan, Wa. in Okanogan County.
Access – The sale location for units is based off of State Highway 20.

Cruise Design:
This sale was cruised using variable radius plots, utilizing the cruise-count method. The walk-through method was used on plots near boundaries. Each plot was a full plot.

Minor species cruise intensity:
We grade the first tree of all minor species encountered; then follow the set cruise design.

Min. DBH: 8” DBH for ponderosa pine and 7” DBH for all other species
Log Length: 32’ logs where possible, minimum of 12’ lengths
Top DIB: Trees less than 17.5” DBH 4.6” DIB for all species; Trees 17.6” and greater DBH have a minimum top DOB of 40% of DOB at 16’ or a 6” top, whichever is greater.

Take/Leave Prescription: Cut all conifers not marked with Orange paint.

Cruise Acres determination: FMA unit acreages with existing road acreages removed.

Stand composition: The stands are second growth, Douglas-fir, ponderosa pine, with minor components of, Engelmann spruce, western larch. Legacy trees are present within the sale area.

Timber quality: Timber to be harvested is comprised of domestic quality Douglas-fir (69%), ponderosa pine (16%), western larch (2%), Engelmann spruce (1%).

Stand health/defect: Older timber in the sale area can be rough, with branch clusters, sweep, and crooks. Other defects noted include mistletoe, dead and dying tops, forks, spike knots, wind and snow damage.

Aspect: North, East, South and West Elevation: 3800’- 4100’.

Harvesting methods: 100% ground based.

Slope:
Unit 1- 0-40%; Avg: 18%
Unit 2- 0-24%; Avg: 11%

Other considerations/remarks: This sale exists on fairly rolling ground with some steep pitches.
Trust: All units are associated with Trust 3.

### Timber Sale Notice Volume (MBF)

<table>
<thead>
<tr>
<th></th>
<th>DBH</th>
<th>Rings/In</th>
<th>Age</th>
<th>All</th>
<th>2 Saw</th>
<th>3 Saw</th>
<th>4 Saw</th>
<th>5 Saw</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>17.3</td>
<td></td>
<td></td>
<td>1,366</td>
<td>795</td>
<td>494</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>17.1</td>
<td></td>
<td></td>
<td></td>
<td>531</td>
<td></td>
<td>254</td>
<td>276</td>
</tr>
<tr>
<td>WL</td>
<td>11.9</td>
<td></td>
<td></td>
<td>55</td>
<td>41</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>21.0</td>
<td></td>
<td></td>
<td>25</td>
<td>13</td>
<td>11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>16.4</td>
<td></td>
<td></td>
<td>1,976</td>
<td>808</td>
<td>546</td>
<td>346</td>
<td>276</td>
</tr>
</tbody>
</table>

### Timber Sale Notice Weight (tons)

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>2 Saw</th>
<th>3 Saw</th>
<th>4 Saw</th>
<th>5 Saw</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>7,850</td>
<td>4,198</td>
<td>3,076</td>
<td>576</td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>2,795</td>
<td></td>
<td>1,187</td>
<td>1,608</td>
<td></td>
</tr>
<tr>
<td>WL</td>
<td>356</td>
<td>276</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>130</td>
<td>53</td>
<td>67</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>11,130</td>
<td>4,251</td>
<td>3,419</td>
<td>1,852</td>
<td>1,608</td>
</tr>
</tbody>
</table>

### Timber Sale Overall Cruise Statistics (Cut + Leave Trees)

<table>
<thead>
<tr>
<th>BA (sq ft/acre)</th>
<th>BA SE (%)</th>
<th>V-BAR (bf/sq ft)</th>
<th>V-BAR SE (%)</th>
<th>Net Vol (bf/acre)</th>
<th>Vol SE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>132.0</td>
<td>4.7</td>
<td>144.5</td>
<td>3.6</td>
<td>19,088</td>
<td>5.9</td>
</tr>
</tbody>
</table>

### Timber Sale Unit Cruise Design

<table>
<thead>
<tr>
<th>Unit</th>
<th>Design</th>
<th>Cruise Acres</th>
<th>FMA Acres</th>
<th>N Plots</th>
<th>N Cruise Plots</th>
<th>N Void Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q BUCK CENTRAL U1</td>
<td>B1C: VR, 1 BAF (27.78) Measure/Count Plots, Sighting Ht = 4.5 ft</td>
<td>50.6</td>
<td>50.6</td>
<td>28</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Q BUCK CENTRAL U2</td>
<td>B1C: VR, 1 BAF (33.61) Measure/Count Plots, Sighting Ht = 4.5 ft</td>
<td>69.7</td>
<td>69.7</td>
<td>37</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Q BUCK CENTRAL ROW U3</td>
<td>B1: VR, 1 BAF (27.78) Measure All, Sighting Ht = 4.5 ft</td>
<td>0.6</td>
<td>0.6</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td>120.9</td>
<td>120.9</td>
<td>66</td>
<td>19</td>
<td>2</td>
</tr>
</tbody>
</table>
## Timber Sale Log Grade x Sort Summary

<table>
<thead>
<tr>
<th>Sp</th>
<th>Status</th>
<th>Grade</th>
<th>Sort</th>
<th>Dia</th>
<th>Len</th>
<th>BF Gross</th>
<th>BF Net</th>
<th>Defect %</th>
<th>Tons</th>
<th>MBF Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>2</td>
<td>SAW</td>
<td>14</td>
<td>32</td>
<td>6,704</td>
<td>6,567</td>
<td>2.1</td>
<td>4,197.8</td>
<td>795.2</td>
</tr>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>3</td>
<td>SAW</td>
<td>8.2</td>
<td>32</td>
<td>4,078</td>
<td>4,078</td>
<td>0.0</td>
<td>3,076.2</td>
<td>493.8</td>
</tr>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>4</td>
<td>SAW</td>
<td>5.6</td>
<td>21</td>
<td>635</td>
<td>635</td>
<td>0.0</td>
<td>575.7</td>
<td>77.0</td>
</tr>
<tr>
<td>ES</td>
<td>LIVE</td>
<td>2</td>
<td>SAW</td>
<td>17.5</td>
<td>32</td>
<td>106</td>
<td>106</td>
<td>0.0</td>
<td>52.7</td>
<td>12.9</td>
</tr>
<tr>
<td>ES</td>
<td>LIVE</td>
<td>3</td>
<td>SAW</td>
<td>8.7</td>
<td>32</td>
<td>89</td>
<td>89</td>
<td>0.0</td>
<td>67.0</td>
<td>10.8</td>
</tr>
<tr>
<td>ES</td>
<td>LIVE</td>
<td>4</td>
<td>SAW</td>
<td>5.1</td>
<td>14</td>
<td>12</td>
<td>12</td>
<td>0.0</td>
<td>9.8</td>
<td>1.4</td>
</tr>
<tr>
<td>PP</td>
<td>LIVE</td>
<td>4</td>
<td>SAW</td>
<td>13.4</td>
<td>32</td>
<td>2,101</td>
<td>2,101</td>
<td>0.0</td>
<td>1,187.0</td>
<td>254.4</td>
</tr>
<tr>
<td>PP</td>
<td>LIVE</td>
<td>5</td>
<td>SAW</td>
<td>7.3</td>
<td>26</td>
<td>2,322</td>
<td>2,280</td>
<td>1.8</td>
<td>1,607.9</td>
<td>276.1</td>
</tr>
<tr>
<td>WL</td>
<td>LIVE</td>
<td>3</td>
<td>SAW</td>
<td>7.8</td>
<td>32</td>
<td>343</td>
<td>343</td>
<td>0.0</td>
<td>276.2</td>
<td>41.5</td>
</tr>
<tr>
<td>WL</td>
<td>LIVE</td>
<td>4</td>
<td>SAW</td>
<td>5.2</td>
<td>23</td>
<td>110</td>
<td>110</td>
<td>0.0</td>
<td>79.3</td>
<td>13.3</td>
</tr>
</tbody>
</table>

## Timber Sale Log Sort x Diameter Bin Summary

<table>
<thead>
<tr>
<th>Sp</th>
<th>Bin</th>
<th>Status</th>
<th>Sort</th>
<th>Dia</th>
<th>Len</th>
<th>BF Net</th>
<th>Defect %</th>
<th>Tons</th>
<th>MBF Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>5 - 8</td>
<td>LIVE</td>
<td>Domestic</td>
<td>6.5</td>
<td>27</td>
<td>2,510</td>
<td>0.0</td>
<td>2,138.5</td>
<td>304.0</td>
</tr>
<tr>
<td>DF</td>
<td>9 - 11</td>
<td>LIVE</td>
<td>Domestic</td>
<td>9.9</td>
<td>31</td>
<td>2,340</td>
<td>0.0</td>
<td>1,606.5</td>
<td>283.4</td>
</tr>
<tr>
<td>DF</td>
<td>12 - 14</td>
<td>LIVE</td>
<td>Domestic</td>
<td>12.6</td>
<td>32</td>
<td>3,067</td>
<td>0.0</td>
<td>2,046.0</td>
<td>371.5</td>
</tr>
<tr>
<td>DF</td>
<td>15 - 19</td>
<td>LIVE</td>
<td>Domestic</td>
<td>16.7</td>
<td>32</td>
<td>2,666</td>
<td>3.1</td>
<td>1,621.0</td>
<td>322.8</td>
</tr>
<tr>
<td>DF</td>
<td>20+</td>
<td>LIVE</td>
<td>Domestic</td>
<td>21.4</td>
<td>32</td>
<td>697</td>
<td>7.0</td>
<td>437.7</td>
<td>84.3</td>
</tr>
<tr>
<td>ES</td>
<td>5 - 8</td>
<td>LIVE</td>
<td>Domestic</td>
<td>5.1</td>
<td>14</td>
<td>12</td>
<td>0.0</td>
<td>9.8</td>
<td>1.4</td>
</tr>
<tr>
<td>ES</td>
<td>9 - 11</td>
<td>LIVE</td>
<td>Domestic</td>
<td>9.0</td>
<td>27</td>
<td>89</td>
<td>0.0</td>
<td>67.0</td>
<td>10.8</td>
</tr>
<tr>
<td>ES</td>
<td>12 - 14</td>
<td>LIVE</td>
<td>Domestic</td>
<td>14.5</td>
<td>32</td>
<td>22</td>
<td>0.0</td>
<td>11.4</td>
<td>2.7</td>
</tr>
<tr>
<td>ES</td>
<td>15 - 19</td>
<td>LIVE</td>
<td>Domestic</td>
<td>15.0</td>
<td>32</td>
<td>14</td>
<td>0.0</td>
<td>7.1</td>
<td>1.8</td>
</tr>
<tr>
<td>ES</td>
<td>20+</td>
<td>LIVE</td>
<td>Domestic</td>
<td>20.4</td>
<td>32</td>
<td>69</td>
<td>0.0</td>
<td>34.3</td>
<td>8.4</td>
</tr>
<tr>
<td>PP</td>
<td>5 - 8</td>
<td>LIVE</td>
<td>Domestic</td>
<td>6.8</td>
<td>25</td>
<td>1,413</td>
<td>2.9</td>
<td>1,038.3</td>
<td>171.1</td>
</tr>
<tr>
<td>PP</td>
<td>9 - 11</td>
<td>LIVE</td>
<td>Domestic</td>
<td>9.8</td>
<td>32</td>
<td>867</td>
<td>0.0</td>
<td>569.6</td>
<td>105.0</td>
</tr>
<tr>
<td>PP</td>
<td>12 - 14</td>
<td>LIVE</td>
<td>Domestic</td>
<td>13.1</td>
<td>32</td>
<td>1,855</td>
<td>0.0</td>
<td>1,065.8</td>
<td>224.7</td>
</tr>
<tr>
<td>PP</td>
<td>15 - 19</td>
<td>LIVE</td>
<td>Domestic</td>
<td>16.5</td>
<td>32</td>
<td>246</td>
<td>0.0</td>
<td>121.2</td>
<td>29.7</td>
</tr>
<tr>
<td>WL</td>
<td>5 - 8</td>
<td>LIVE</td>
<td>Domestic</td>
<td>6.3</td>
<td>28</td>
<td>375</td>
<td>0.0</td>
<td>297.9</td>
<td>45.4</td>
</tr>
<tr>
<td>WL</td>
<td>9 - 11</td>
<td>LIVE</td>
<td>Domestic</td>
<td>10.4</td>
<td>32</td>
<td>78</td>
<td>0.0</td>
<td>57.6</td>
<td>9.4</td>
</tr>
</tbody>
</table>
# Cruise Unit Report

## Q BUCK CENTRAL U1

### Unit Sale Notice Volume (MBF): Q BUCK CENTRAL U1

<table>
<thead>
<tr>
<th>Sp</th>
<th>DBH</th>
<th>Rings/In</th>
<th>Age</th>
<th>All</th>
<th>2 Saw</th>
<th>3 Saw</th>
<th>4 Saw</th>
<th>5 Saw</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>17.6</td>
<td></td>
<td></td>
<td>659</td>
<td>405</td>
<td>224</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>17.6</td>
<td></td>
<td></td>
<td>118</td>
<td>49</td>
<td>69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>14.0</td>
<td></td>
<td></td>
<td>11</td>
<td>10</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WL</td>
<td>10.7</td>
<td></td>
<td></td>
<td>7</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>16.7</td>
<td></td>
<td></td>
<td>795</td>
<td>405</td>
<td>237</td>
<td>84</td>
<td>69</td>
</tr>
</tbody>
</table>

### Unit Cruise Design: Q BUCK CENTRAL U1

<table>
<thead>
<tr>
<th>Design</th>
<th>Cruise Acres</th>
<th>FMA Acres</th>
<th>N Plots</th>
<th>N Cruise Plots</th>
<th>N Void Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1C: VR, 1 BAF (27.78) Measure/Count Plots, Sighting Ht = 4.5 ft</td>
<td>50.6</td>
<td>50.6</td>
<td>28</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

### Unit Cruise Summary: Q BUCK CENTRAL U1

<table>
<thead>
<tr>
<th>Sp</th>
<th>Cruised Trees</th>
<th>All Trees</th>
<th>Trees/Plot</th>
<th>Ring-Count Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>29</td>
<td>93</td>
<td>3.3</td>
<td>0</td>
</tr>
<tr>
<td>PP</td>
<td>4</td>
<td>25</td>
<td>0.9</td>
<td>0</td>
</tr>
<tr>
<td>ES</td>
<td>1</td>
<td>2</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>WL</td>
<td>2</td>
<td>2</td>
<td>0.1</td>
<td>0</td>
</tr>
<tr>
<td>ALL</td>
<td>36</td>
<td>122</td>
<td>4.4</td>
<td>0</td>
</tr>
</tbody>
</table>

### Unit Cruise Statistics (Cut + Leave Trees): Q BUCK CENTRAL U1

<table>
<thead>
<tr>
<th>Sp</th>
<th>BA (sq ft/acre)</th>
<th>BA CV (%)</th>
<th>BA SE (%)</th>
<th>V-BAR (bf/sq ft)</th>
<th>V-BAR CV (%)</th>
<th>V-BAR SE (%)</th>
<th>Net Vol (bf/acre)</th>
<th>Vol CV (%)</th>
<th>Vol SE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>92.3</td>
<td>47.8</td>
<td>9.0</td>
<td>160.0</td>
<td>23.3</td>
<td>4.3</td>
<td>14,759</td>
<td>53.2</td>
<td>10.0</td>
</tr>
<tr>
<td>PP</td>
<td>24.8</td>
<td>165.1</td>
<td>31.2</td>
<td>131.0</td>
<td>15.7</td>
<td>7.8</td>
<td>3,250</td>
<td>165.9</td>
<td>32.2</td>
</tr>
<tr>
<td>ES</td>
<td>2.0</td>
<td>367.2</td>
<td>69.4</td>
<td>112.3</td>
<td>0.0</td>
<td>0.0</td>
<td>223</td>
<td>367.2</td>
<td>69.4</td>
</tr>
<tr>
<td>WL</td>
<td>2.0</td>
<td>529.2</td>
<td>100.0</td>
<td>69.5</td>
<td>18.1</td>
<td>12.8</td>
<td>138</td>
<td>529.5</td>
<td>100.8</td>
</tr>
<tr>
<td>ALL</td>
<td>121.0</td>
<td>28.1</td>
<td>5.3</td>
<td>151.8</td>
<td>27.1</td>
<td>4.5</td>
<td>18,369</td>
<td>39.0</td>
<td>7.0</td>
</tr>
</tbody>
</table>
## Unit Summary: Q BUCK CENTRAL U1

<table>
<thead>
<tr>
<th>Sp</th>
<th>Status</th>
<th>Rx</th>
<th>N</th>
<th>D</th>
<th>DBH</th>
<th>BL</th>
<th>THT</th>
<th>BF</th>
<th>BF</th>
<th>Defect</th>
<th>TPA</th>
<th>BA</th>
<th>RD</th>
<th>MBF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gross</td>
<td>Net</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>CUT</td>
<td>29</td>
<td>ALL</td>
<td>17.6</td>
<td>65</td>
<td>81</td>
<td>13,139</td>
<td>13,013</td>
<td>1.0</td>
<td>48.2</td>
<td>81.4</td>
<td>19.4</td>
<td>658.5</td>
</tr>
<tr>
<td>ES</td>
<td>LIVE</td>
<td>CUT</td>
<td>1</td>
<td>ALL</td>
<td>14.0</td>
<td>50</td>
<td>61</td>
<td>223</td>
<td>223</td>
<td>0.0</td>
<td>1.9</td>
<td>2.0</td>
<td>0.5</td>
<td>11.3</td>
</tr>
<tr>
<td>PP</td>
<td>LIVE</td>
<td>CUT</td>
<td>4</td>
<td>ALL</td>
<td>17.6</td>
<td>69</td>
<td>91</td>
<td>2,340</td>
<td>2,340</td>
<td>0.0</td>
<td>10.6</td>
<td>17.9</td>
<td>4.3</td>
<td>118.4</td>
</tr>
<tr>
<td>WL</td>
<td>LIVE</td>
<td>CUT</td>
<td>2</td>
<td>ALL</td>
<td>10.7</td>
<td>46</td>
<td>56</td>
<td>138</td>
<td>138</td>
<td>0.0</td>
<td>3.2</td>
<td>2.0</td>
<td>0.6</td>
<td>7.0</td>
</tr>
<tr>
<td>ALL</td>
<td>LIVE</td>
<td>CUT</td>
<td>36</td>
<td>ALL</td>
<td>17.2</td>
<td>64</td>
<td>81</td>
<td>15,840</td>
<td>15,714</td>
<td>0.8</td>
<td>63.9</td>
<td>103.2</td>
<td>24.8</td>
<td>795.1</td>
</tr>
<tr>
<td>ALL</td>
<td>ALL</td>
<td>ALL</td>
<td>36</td>
<td>ALL</td>
<td>17.2</td>
<td>64</td>
<td>81</td>
<td>15,840</td>
<td>15,714</td>
<td>0.8</td>
<td>63.9</td>
<td>103.2</td>
<td>24.8</td>
<td>795.1</td>
</tr>
</tbody>
</table>
### Cruise Unit Report
#### Q BUCK CENTRAL U2

#### Unit Sale Notice Volume (MBF): Q BUCK CENTRAL U2

<table>
<thead>
<tr>
<th>Sp</th>
<th>DBH</th>
<th>Rings/In Age</th>
<th>All</th>
<th>2 Saw</th>
<th>3 Saw</th>
<th>4 Saw</th>
<th>5 Saw</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>16.8</td>
<td></td>
<td>692</td>
<td>376</td>
<td>269</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>17.0</td>
<td></td>
<td>412</td>
<td>205</td>
<td>207</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WL</td>
<td>12.1</td>
<td></td>
<td>48</td>
<td>38</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>15.9</td>
<td></td>
<td>1,152</td>
<td>376</td>
<td>308</td>
<td>262</td>
<td>207</td>
</tr>
</tbody>
</table>

#### Unit Cruise Design: Q BUCK CENTRAL U2

<table>
<thead>
<tr>
<th>Design</th>
<th>Cruise Acres</th>
<th>FMA Acres</th>
<th>N Plots</th>
<th>N Cruise Plots</th>
<th>N Void Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1C: VR, 1 BAF (33.61) Measure/Count Plots, Sighting Ht = 4.5 ft</td>
<td>69.7</td>
<td>69.7</td>
<td>37</td>
<td>8</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Unit Cruise Summary: Q BUCK CENTRAL U2

<table>
<thead>
<tr>
<th>Sp</th>
<th>Cruised Trees</th>
<th>All Trees</th>
<th>Trees/Plot</th>
<th>Ring-Count Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>12</td>
<td>73</td>
<td>2.0</td>
<td>0</td>
</tr>
<tr>
<td>PP</td>
<td>14</td>
<td>75</td>
<td>2.0</td>
<td>0</td>
</tr>
<tr>
<td>WL</td>
<td>4</td>
<td>6</td>
<td>0.2</td>
<td>0</td>
</tr>
<tr>
<td>ALL</td>
<td>30</td>
<td>154</td>
<td>4.2</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Unit Cruise Statistics (Cut + Leave Trees): Q BUCK CENTRAL U2

<table>
<thead>
<tr>
<th>Sp</th>
<th>BA (sq ft/acre)</th>
<th>BA CV (%)</th>
<th>BA SE (%)</th>
<th>V-BAR (bf/sq ft)</th>
<th>V-BAR CV (%)</th>
<th>V-BAR SE (%)</th>
<th>Net Vol (bf/acre)</th>
<th>Vol CV (%)</th>
<th>Vol SE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>66.3</td>
<td>98.9</td>
<td>16.3</td>
<td>160.7</td>
<td>29.3</td>
<td>8.5</td>
<td>10,656</td>
<td>103.1</td>
<td>18.3</td>
</tr>
<tr>
<td>PP</td>
<td>68.1</td>
<td>77.6</td>
<td>12.8</td>
<td>118.4</td>
<td>27.5</td>
<td>7.4</td>
<td>8,064</td>
<td>82.3</td>
<td>14.7</td>
</tr>
<tr>
<td>WL</td>
<td>5.5</td>
<td>272.4</td>
<td>44.8</td>
<td>125.8</td>
<td>11.6</td>
<td>5.8</td>
<td>685</td>
<td>272.7</td>
<td>45.2</td>
</tr>
<tr>
<td>ALL</td>
<td>139.9</td>
<td>41.8</td>
<td>6.9</td>
<td>138.7</td>
<td>30.2</td>
<td>5.5</td>
<td>19,405</td>
<td>51.6</td>
<td>8.8</td>
</tr>
</tbody>
</table>

#### Unit Summary: Q BUCK CENTRAL U2

<table>
<thead>
<tr>
<th>Sp</th>
<th>Status</th>
<th>Rx</th>
<th>N</th>
<th>D</th>
<th>DBH</th>
<th>BL</th>
<th>THT</th>
<th>BF Gross</th>
<th>BF Net</th>
<th>Defect</th>
<th>TPA</th>
<th>BA</th>
<th>RD</th>
<th>MBF Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>CUT</td>
<td>12</td>
<td>ALL</td>
<td>16.8</td>
<td>63</td>
<td>80</td>
<td>10,074</td>
<td>9,926</td>
<td>1.5</td>
<td>40.1</td>
<td>61.8</td>
<td>15.1</td>
<td>691.9</td>
</tr>
<tr>
<td>PP</td>
<td>LIVE</td>
<td>CUT</td>
<td>14</td>
<td>ALL</td>
<td>17.0</td>
<td>61</td>
<td>79</td>
<td>5,987</td>
<td>5,913</td>
<td>1.2</td>
<td>31.7</td>
<td>50.0</td>
<td>12.1</td>
<td>412.2</td>
</tr>
<tr>
<td>Sp</td>
<td>Status</td>
<td>Rx</td>
<td>N</td>
<td>D</td>
<td>DBH</td>
<td>BL</td>
<td>THT</td>
<td>BF Gross</td>
<td>BF Net</td>
<td>Defect %</td>
<td>TPA</td>
<td>BA</td>
<td>RD</td>
<td>MBF Net</td>
</tr>
<tr>
<td>----</td>
<td>--------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
<td>---------</td>
<td>--------</td>
<td>----------</td>
<td>------</td>
<td>------</td>
<td>-----</td>
<td>---------</td>
</tr>
<tr>
<td>WL</td>
<td>LIVE</td>
<td>CUT</td>
<td>4</td>
<td>ALL</td>
<td>12.1</td>
<td>62</td>
<td>80</td>
<td>685</td>
<td>685</td>
<td>0.0</td>
<td>6.8</td>
<td>5.5</td>
<td>1.6</td>
<td>47.8</td>
</tr>
<tr>
<td>ALL</td>
<td>LIVE</td>
<td>CUT</td>
<td>30</td>
<td>ALL</td>
<td>16.5</td>
<td>62</td>
<td>80</td>
<td>16,746</td>
<td>16,525</td>
<td>1.3</td>
<td>78.6</td>
<td>117.2</td>
<td>28.8</td>
<td>1,151.8</td>
</tr>
<tr>
<td>ALL</td>
<td>ALL</td>
<td>ALL</td>
<td>30</td>
<td>ALL</td>
<td>16.5</td>
<td>62</td>
<td>80</td>
<td>16,746</td>
<td>16,525</td>
<td>1.3</td>
<td>78.6</td>
<td>117.2</td>
<td>28.8</td>
<td>1,151.8</td>
</tr>
</tbody>
</table>
**Cruise Unit Report**

**Q BUCK CENTRAL ROW U3**

### Unit Sale Notice Volume (MBF): Q BUCK CENTRAL ROW U3

<table>
<thead>
<tr>
<th>Sp</th>
<th>DBH</th>
<th>Rings/In</th>
<th>Age</th>
<th>All</th>
<th>2 Saw</th>
<th>3 Saw</th>
<th>4 Saw</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>24.9</td>
<td>16</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>26.7</td>
<td>14</td>
<td>13</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td>25.7</td>
<td>30</td>
<td>27</td>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Unit Cruise Design: Q BUCK CENTRAL ROW U3

<table>
<thead>
<tr>
<th>Design</th>
<th>Cruise Acres</th>
<th>FMA Acres</th>
<th>N Plots</th>
<th>N Cruise Plots</th>
<th>N Void Plots</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1: VR, 1 BAF (27.78) Measure All, Sighting Ht = 4.5 ft</td>
<td>0.6</td>
<td>0.6</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

### Unit Cruise Summary: Q BUCK CENTRAL ROW U3

<table>
<thead>
<tr>
<th>Sp</th>
<th>Cruised Trees</th>
<th>All Trees</th>
<th>Trees/Plot</th>
<th>Ring-Count Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>4</td>
<td>4</td>
<td>4.0</td>
<td>0</td>
</tr>
<tr>
<td>ES</td>
<td>3</td>
<td>3</td>
<td>3.0</td>
<td>0</td>
</tr>
<tr>
<td>ALL</td>
<td>7</td>
<td>7</td>
<td>7.0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Unit Cruise Statistics (Cut + Leave Trees): Q BUCK CENTRAL ROW U3

<table>
<thead>
<tr>
<th>Sp</th>
<th>BA (sq ft/acre)</th>
<th>BA CV (%)</th>
<th>BA SE (%)</th>
<th>V-BAR (bf/sq ft)</th>
<th>V-BAR CV (%)</th>
<th>V-BAR SE (%)</th>
<th>Net Vol (bf/acre)</th>
<th>Vol CV (%)</th>
<th>Vol SE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>111.1</td>
<td>0.0</td>
<td>0.0</td>
<td>235.7</td>
<td>11.6</td>
<td>5.8</td>
<td>26,185</td>
<td>11.6</td>
<td>5.8</td>
</tr>
<tr>
<td>ES</td>
<td>83.3</td>
<td>0.0</td>
<td>0.0</td>
<td>276.2</td>
<td>19.8</td>
<td>11.4</td>
<td>23,022</td>
<td>19.8</td>
<td>11.4</td>
</tr>
<tr>
<td>ALL</td>
<td>194.5</td>
<td>0.0</td>
<td>0.0</td>
<td>253.0</td>
<td>17.0</td>
<td>6.4</td>
<td>49,208</td>
<td>17.0</td>
<td>6.4</td>
</tr>
</tbody>
</table>

### Unit Summary: Q BUCK CENTRAL ROW U3

<table>
<thead>
<tr>
<th>Sp</th>
<th>Status</th>
<th>Rx</th>
<th>N</th>
<th>D</th>
<th>DBH</th>
<th>BL</th>
<th>THT</th>
<th>BF Gross</th>
<th>BF Net</th>
<th>Defect %</th>
<th>TPA</th>
<th>BA</th>
<th>RD</th>
<th>MBF Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF</td>
<td>LIVE</td>
<td>CUT</td>
<td>4</td>
<td>ALL</td>
<td>24.9</td>
<td>91</td>
<td>115</td>
<td>26,185</td>
<td>26,185</td>
<td>0.0</td>
<td>32.9</td>
<td>111.1</td>
<td>22.3</td>
<td>15.7</td>
</tr>
<tr>
<td>ES</td>
<td>LIVE</td>
<td>CUT</td>
<td>3</td>
<td>ALL</td>
<td>26.7</td>
<td>89</td>
<td>114</td>
<td>23,022</td>
<td>23,022</td>
<td>0.0</td>
<td>21.4</td>
<td>83.3</td>
<td>16.1</td>
<td>13.8</td>
</tr>
<tr>
<td>ALL</td>
<td>LIVE</td>
<td>CUT</td>
<td>7</td>
<td>ALL</td>
<td>25.6</td>
<td>90</td>
<td>114</td>
<td>49,208</td>
<td>49,208</td>
<td>0.0</td>
<td>54.3</td>
<td>194.5</td>
<td>38.4</td>
<td>29.5</td>
</tr>
<tr>
<td>ALL</td>
<td>ALL</td>
<td>ALL</td>
<td>7</td>
<td>ALL</td>
<td>25.6</td>
<td>90</td>
<td>114</td>
<td>49,208</td>
<td>49,208</td>
<td>0.0</td>
<td>54.3</td>
<td>194.5</td>
<td>38.4</td>
<td>29.5</td>
</tr>
</tbody>
</table>
Cruise Unit Report
Q BUCK CENTRAL ROW U4

Unit Sale Notice Volume (MBF): Q BUCK CENTRAL ROW U4
No data were provided for this table.

Unit Cruise Design: Q BUCK CENTRAL ROW U4
No data were provided for this table.

Unit Cruise Summary: Q BUCK CENTRAL ROW U4
No data were provided for this table.

Unit Cruise Statistics (Cut + Leave Trees): Q BUCK CENTRAL ROW U4
No data were provided for this table.

Unit Summary: Q BUCK CENTRAL ROW U4
No data were provided for this table.
FMA Name: Q BUCK CENTRAL U2
N Plots: 48
Plot Spacing: 269.9 ft
Grid Name: Q BUCK CENTRAL U2
Acres Treated: 69.7
Main Azimuth: 26.8 deg
<table>
<thead>
<tr>
<th>FMA Name: Q BUCK CENTRAL ROW U4</th>
<th>N Plots: 1</th>
<th>Plot Spacing: 165.8 ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid Name: Q BUCK CENTRAL ROW U4 - 1</td>
<td>Acres Treated: 0.6</td>
<td>Main Azimuth: 40.5 deg</td>
</tr>
</tbody>
</table>
Decision

☐ Notification Accepted 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.

☐ Withdrawn Applicant has withdrawn the Forest Practices Application/Notification (FPA/N).

☐ Closed All forest practices obligations are met.

FPA/N Classification

☐ Class II ☒ Class III ☐ Class IVG ☐ Class IVS

Number of Years Granted on Multi-Year Request

☐ 4 years ☐ 5 years

Conditions on Approval/Reasons for Disapproval

NO ADDITIONAL CONDITIONS APPLY

Note: Apply grass seed and mulch to exposed soils adjacent to stream crossings immediately after construction. See WAC 222-24-030(4).
**Appeal Information**

You have thirty (30) days to **file** (i.e., **actually deliver**) an appeal in writing of this Decision and any related State Environmental Policy Act (SEPA) determinations to the Pollution Control Hearings Board, the Attorney General’s Office, and the Department of Natural Resources’ region office. See RCW 76.09.205. The appeal period starts when the applicant receives this decision, which usually happens electronically on the date indicated below.

You must file your appeal at all three addresses below:

<table>
<thead>
<tr>
<th>Pollution Control Hearings Board</th>
<th>Office of the Attorney General Natural Resources Division</th>
<th>Department Of Natural Resources Northeast Region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical Address</strong></td>
<td><strong>Physical Address</strong></td>
<td><strong>Physical Address</strong></td>
</tr>
<tr>
<td>1111 Israel Road, SW</td>
<td>1125 Washington Street, SE</td>
<td>225 S Silke Road</td>
</tr>
<tr>
<td>Suite 301</td>
<td>Olympia, WA 98604</td>
<td>Colville, WA 99114</td>
</tr>
<tr>
<td>Tumwater, WA 98501</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mailing address</strong></td>
<td><strong>Mailing Address</strong></td>
<td></td>
</tr>
<tr>
<td>Post Office Box 40903</td>
<td>Post Office Box 40100</td>
<td></td>
</tr>
<tr>
<td>Olympia, WA 98504-0903</td>
<td>Olympia, WA 98504-0100</td>
<td></td>
</tr>
</tbody>
</table>

Information regarding the Pollution Control Hearings Board can be found at: [http://www.eluho.wa.gov/](http://www.eluho.wa.gov/)

**Other Applicable Laws**

Operating as described in this application/notification does not ensure compliance with the Endangered Species Act, or other federal, state, or local laws.

**Transfer of Forest Practices Application/Notification (WAC 222-20-010)**

Use the “Notice of Transfer of Approved Forest Practices Application/Notification” form. This form is available at region offices and on the Forest Practices website [https://www.dnr.wa.gov/programs-and-services/forest-practices/](https://www.dnr.wa.gov/programs-and-services/forest-practices/). Notify DNR of new Operators within 48 hours.

**Continuing Forestland Obligations (RCW 76.09.060, RCW 76.09.070, RCW 76.09.390, and WAC 222-20-055)**

Obligations include reforestation, road maintenance and abandonment plans, conversions of forestland to non-forestry use and/or harvest strategies on perennial non-fish habitat (Type Np) waters in Eastern Washington.

Before the sale or transfer of land or perpetual timber rights subject to continuing forest and obligations, the seller must notify the buyer of such an obligation on a form titled “Notice of Continuing Forest Land Obligation”. The seller and buyer must both sign the “Notice of Continuing Forest Land Obligation” form and send it to the DNR Region Office for retention. This form is available at DNR region offices.

If the seller fails to notify the buyer about the continuing forestland obligation, the seller must pay the buyer’s costs related to continuing forestland obligations, including all legal costs and reasonable attorneys’ fees incurred by the buyer in enforcing the continuing forestland obligation against the seller.

Failure by the seller to send the required notice to DNR at the time of sale will be prima facie evidence in an action by the buyer against the seller for costs related to the continuing forestland obligation prior to sale.

---

**DNR Affidavit of Mailing**

On this day 6/22/2022, I placed in the United States mail at **Colville**, WA, postage paid, a true and accurate copy of this document. Notice of Decision FPA #3025800

Anna V. Fox

(Printed Name)

Signature

October 2020 - Notice of Decision – DNR Affidavit of Mailing
STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

BUCK CENTRAL TIMBER SALE ROAD PLAN
OKANOGAN COUNTY
SOUTH OKANOGAN DISTRICT
NORTHEAST REGION

AGREEMENT NO.: 30-103207
STAFF ENGINEER: COLIN ROJAS

DATE: 3/25/22
DRAWN & COMPILED BY: COLIN ROJAS

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.

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>E332404A</td>
<td>52.56</td>
<td>Pre Haul Maintenance</td>
</tr>
<tr>
<td>E332405A</td>
<td>85.31</td>
<td>Pre Haul Maintenance</td>
</tr>
<tr>
<td>E332405J</td>
<td>37.78</td>
<td>Pre Haul Maintenance</td>
</tr>
<tr>
<td>E332405J</td>
<td>13.03</td>
<td>Abandonment</td>
</tr>
<tr>
<td>E332405K</td>
<td>42.67</td>
<td>Pre Haul Maintenance</td>
</tr>
<tr>
<td>E342432Q</td>
<td>24.09</td>
<td>Construction</td>
</tr>
<tr>
<td>E342433T</td>
<td>14.38</td>
<td>Construction</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>E342432Q</td>
<td>24.09</td>
<td>See sections 3, 4, and 5</td>
</tr>
<tr>
<td>E342433T</td>
<td>14.38</td>
<td>See sections 3, 4, and 5</td>
</tr>
</tbody>
</table>
0-6 PRE-HAUL MAINTENANCE
Maintenance includes, but is not limited to brushing, subgrade reshaping, subgrade lifting, rolling dip, and culvert installation, grading, riprap and rock application. Reference the TYPICAL SECTION SHEET, ROCK LIST, and CULVERT & DRAINAGE LIST, for general specifications. Boundaries

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>E332404A</td>
<td>0+00 to 52+56</td>
<td>Brushing, Grubbing, grading, and curve widening</td>
</tr>
<tr>
<td>E332405A</td>
<td>0+00 to 85+31</td>
<td>Grading</td>
</tr>
<tr>
<td>E332405J</td>
<td>0+00 to 37+78</td>
<td>Brushing, Grubbing, grading, and Culvert Installation</td>
</tr>
<tr>
<td>E332405K</td>
<td>0+00 to 42+67</td>
<td>Light Brushing and dip installations</td>
</tr>
</tbody>
</table>

0-7 POST-HAUL MAINTENANCE
This project includes post-haul road maintenance listed in Clause 9-5 POST-HAUL MAINTENANCE.

0-9 DECOMMISSIONING
This project includes decommissioning listed in Clause 9-20 ROAD DECOMMISSIONING.

0-10 ABANDONMENT
This project includes abandonment listed in Clause 9-21 ROAD ABANDONMENT.

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 will 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
Purchaser shall perform road work within the tolerances listed below. The tolerance class for each road is listed on the TYPICAL SECTION SHEET. These tolerances do not supersede clauses 1-6, 4-3, and 4-4.

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

1-6 ORDER OF PRECEDENCE
Any conflict or inconsistency in the road plan will 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.

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 21 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 cut ends, or damaged galvanized or aluminized coating on existing or new bridge components, culverts, downspouts, and flumes must be cleaned and treated with a minimum of two coats of zinc rich paint or cold galvanizing compound.
1-15 ROAD MARKING
Purchaser shall perform road work in accordance with the state’s marked location. All road work is marked as follows:
  ▪ Road work and maintenance is marked with orange flagging or red tipped stakes

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 construction
  ▪ Drainage installation
  ▪ Subgrade compaction

1-25 ACTIVITY TIMING RESTRICTION
No operation of road construction equipment will be allowed on weekends or state recognized holidays, without written approval from the Contract Administrator.

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 15th to April 30th

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 at their own expense.

1-29 SEDIMENT RESTRICTION
Purchaser shall not allow silt-bearing runoff to enter any 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 4 inches on crushed rock roads.
- Wheel track rutting exceeds 8 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, Purchaser shall cease operations, or perform corrective maintenance or repairs, subject to specifications within this road plan.

1-33  SNOW PLOWING RESTRICTION
Snowplowing shall be permitted only after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contract 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
Purchaser shall immediately remove any mud, dirt, rock, or other material tracked or spilled on to county roads and state highways.

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

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.

2-4  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.

2-6 **CLEANING CULVERTS**
All inlets and outlets of culverts shall be cleaned before the haul of timber and shall be subject to the written approval of the Contract Administrator.

2-7 **CLEANING DITCHES, HEADWALLS, AND CATCH BASINS**
Purchaser shall clean all ditches and catch basins. Work shall be completed before haul of timber.

**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.

3-2 **BRUSHING RESTRICTION**
Pulling, digging, pushing over, and other non-cutting methods used for vegetation removal shall not be used for brushing. The Purchaser is required to submit a detailed list of equipment and methods to be used during brushing, for approval by the Contract Administrator before starting work. Excavator buckets, log loaders and similar equipment shall not be used for brushing unless otherwise approved in writing by the Contract Administrator.

3-3 **BRUSH REMOVAL**
Remove brushing debris from the road surface, ditch lines, 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.

3-12 STUMP PLACEMENT
Grubbed stumps shall be placed outside of the clearing limits as directed by the Contract Administrator and in compliance with all other clauses in this road plan. Stumps shall be piled. Piles shall be dirt free and piled with a hydraulic excavator.

3-14 STUMPS WITHIN DESIGNATED WASTE AREAS
Purchaser is not required to remove stumps within waste areas if they are cut flush with the ground.

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, shall be completed before approval of final maintenance.

3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS
Waste areas for organic debris shall be located within the cleared right-of-way or in natural openings approved in writing by the Contract Administrator.

3-23 PROHIBITED DISPOSAL AREAS
Organic debris shall not be deposited in the following areas:
- Within 50 feet of a cross drain culvert.
- 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
Purchaser shall not bury organic debris unless otherwise stated in this plan.

3-30 EXCLUSION OF DOZER BLADES
Dozer blades are not permitted for the piling of organic debris.

3-31 PILING
Organic debris shall be piled. Debris piles shall be made to be burnable, clean, tight, and free of rock or soil. Piles shall be made no closer than 20 feet from standing timber, and no higher than 10 feet. Debris piles shall be placed within the cleared right-of-way, or in natural openings, as designated by the Contract Administrator. Placement of debris piles outside of the right-of-way limits is subject to the written approval of the Contract Administrator.

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
Purchaser shall construct excavation slopes no steeper than shown on the following table:

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

4-6 EMBANKMENT SLOPE RATIO
Unless construction staked or designed, embankment slopes shall be constructed no steeper than shown on the following table:

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Embankment Slope Ratio</th>
<th>Embankment Slope Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandy Soils</td>
<td>2:1</td>
<td>50</td>
</tr>
<tr>
<td>Common Earth and Rounded Gravel</td>
<td>1½:1</td>
<td>67</td>
</tr>
<tr>
<td>Angular Rock</td>
<td>1¾:1</td>
<td>80</td>
</tr>
</tbody>
</table>

4-7 SHAPING CUT AND FILL SLOPE
Purchaser shall construct excavation and embankment slopes to a uniform line and left rough for easier revegetation.

4-8 CURVE WIDENING

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
<th>Curve Widening (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E332404A</td>
<td>33+02</td>
<td>30’</td>
</tr>
<tr>
<td>E332404A</td>
<td>38+61</td>
<td>20’</td>
</tr>
</tbody>
</table>
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.

4-19 **CROSSING DITCH LINE ON NEWELY CONSTRUCTED ROADS**
For the following roads, purchaser shall fill in the ditch line with common borrow material to haul over if the ditch is free of water. If the ditch is flowing with water, logs or a temporary culvert shall be laid down in the ditch to allow water to flow freely. After termination of use, the ditch line is to be reconfigured.

4-20 **SUBGRADE DIMENSIONS FOR INTERSECTIONS**
On the following roads, Purchaser shall construct the subgrade to the dimensions shown on the INTERSECTION DETAIL.

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>E342432Q</td>
<td>0+00 to 0+75</td>
</tr>
</tbody>
</table>

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 4-5 CUT SLOPE RATIO. Ditches shall be constructed concurrently with construction of the subgrade.

4-27 **DITCH WORK – MATERIAL USE PROHIBITED**
Purchaser shall not pull ditch material across the road or mix in on gravel surfaces. Excavated material must be scattered outside the grubbing limits.

4-28 **DITCH DRAINAGE**
Ditches must drain to cross-drain culverts or ditchouts.

4-29 **DITCHOUTS**
The Purchaser shall construct ditch outs as identified and as needed and as directed by the Contract Administrator. Ditch outs shall be constructed in a manner that diverts ditch
water onto the forest floor and shall have excavation back slopes no steeper than a 1:1 ratio.

4-35 WASTE MATERIAL DEFINITION
Waste material is defined as all dirt, rock, mud, or related material that is extraneous or unsuitable for construction material. Waste material, as used in Section 4 EXCAVATION, is not organic debris.

4-36 DISPOSAL OF WASTE MATERIAL
Waste material may be side cast on side slopes up to 45% if the waste material is compacted and free of organic debris. On side slopes greater than 45%, all excavation shall be end hauled or pushed to designated embankment sites and waste areas.

4-37 WASTE AREA LOCATION
Purchaser shall deposit waste material in the listed designated areas. Additional waste areas may also be identified or approved by the Contract Administrator. The amount of material allowed in a waste area is as listed below.

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>E332404A</td>
<td>33+87 to 35+41</td>
<td>Waste Area in road. Lift sag in road</td>
</tr>
<tr>
<td>E332404A</td>
<td>39+20</td>
<td>Waste material out of road prism up to 80 cubic yards</td>
</tr>
</tbody>
</table>

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 45%.
- 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. Except as otherwise specified in this plan, a vibratory plate compactor or tamper shall be used for areas specifically requiring keyed embankment construction, and for embankment segments too narrow to accommodate equipment. Compaction with a plate compactor shall be made by a minimum of three full coverages; each lift shall not exceed 6 inches in depth.

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 ditch outs will be required where ponding will result from the effects of side cast 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.

5-15 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%, must 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 will not be skewed. Cross drain culverts must 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.

5-20 ENERGY DISSIPATERS
Energy dissipaters shall be installed to prevent erosion and are subject to approval by the Contract Administrator. The type of energy dissipater and the amount of material shall be consistent with the specifications listed on the CULVERT AND DRAINAGE SPECIFICATION DETAIL. Energy dissipaters will be consistent with light loose rip rap specifications.

5-25 CATCH BASINS
Catch basins shall be constructed to resist erosion in accordance with CULVERT AND DRAINAGE SPECIFICATION DETAIL. Minimum dimensions of catch basins are 4 feet wide and 4 feet long with back slopes consistent with Clause 4-5 CUT SLOPE RATIO.

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS
Headwalls shall be constructed in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all permanent cross drain culverts. Rock used for headwalls shall meet the specifications for Light Loose Rip Rap. Rock shall be placed on shoulders, slopes, and around culvert inlets and outlets. Minimum specifications require that rock be placed at a width of one culvert diameter on each side of the culvert opening, and to a height of one culvert diameter above the top of the culvert. Rock shall not restrict the flow of water into culvert inlets or catch basins. Placement shall be by zero-drop-height method only. No placement by end dumping or dropping of rock shall be allowed.

5-30 DRIVABLE WATERBAR CONSTRUCTION
Purchaser shall construct drivable waterbars in accordance with the DRIVABLE WATERBAR DETAIL.
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 water barred by November 1. Water bars 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 water bars or between natural drainage paths, and with a maximum spacing of 300 feet.

SECTION 6 – ROCK AND SURFACING

6-5 ROCK FROM COMMERCIAL SOURCE
Rock used in accordance with the quantities on the ROCK LIST may be obtained from any commercial source at the Purchaser's expense. Rock sources will be subject to written approval by the Contract Administrator before their use.

6-21 IN-PLACE PROCESSING
The Purchaser may use in-place processing, such as a grid roller or other method, if suitable crushing can be demonstrated to meet the surfacing size restrictions. The use of in-place processing methods is subject to written approval by the Contract Administrator.

6-21 FRACTURE REQUIREMENT FOR ROCK
A minimum of 50% by visual inspection of coarse aggregate shall have at least one fractured face. Coarse aggregate is the material retained on each specification sieve sized 1/4-inch and above, if that sieve retains more than 5% of the total sample.

6-28 1 ¾-INCH MINUS CRUSHED ROCK

% Passing 1 ¾” square sieve 100%
% Passing 5/8” square sieve 50 - 80%
% Passing U.S. #4 sieve 30 - 50%
% Passing U.S. #40 sieve 3 - 18%
% Passing U.S. #200 sieve 5%

The portion of aggregate retained on the No. 4 sieve may not contain more than 0.2 percent organic debris and trash. All percentages are by weight.

6-50 LIGHT LOOSE RIP RAP
Light loose rip rap must consist of angular, hard, sound, and durable stone. It must be free from segregation, seams, cracks, and other defects tending to destroy its resistance
to weather. Light loose rip rap must be free of rock fines, soil, organic debris or other extraneous material, and must meet the following requirements:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Approximate Size Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% to 90%</td>
<td>500 lbs. to 1 ton (18”- 28”)</td>
</tr>
<tr>
<td>15% to 80%</td>
<td>50 lbs. to 500 lbs. (8”- 18”)</td>
</tr>
<tr>
<td>10% to 20%</td>
<td>3 inch to 50 lbs. (3”- 8”)</td>
</tr>
</tbody>
</table>

6-51 HEAVY LOOSE RIP RAP
Heavy loose rip rap must consist of angular, hard, sound, and durable stone. It must be free from segregation, seams, cracks, and other defects tending to destroy its resistance to weather. Heavy loose rip rap must be free of rock fines, soil, organic debris or other extraneous material, and must meet the following requirements:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Size Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>30% to 90%</td>
<td>1 ton to 2 ton (28”- 36”)</td>
</tr>
<tr>
<td>30% to 70%</td>
<td>500 lbs. to 1 ton (18”- 28”)</td>
</tr>
<tr>
<td>20% to 50%</td>
<td>50 lbs. to 500 lbs. (8”- 18”)</td>
</tr>
<tr>
<td>10% to 20%</td>
<td>3 inch to 50 lbs. (3”- 8”)</td>
</tr>
</tbody>
</table>

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH
Measurement of specified rock depths, are defined as the compacted depth(s) using the compaction methods required in this road plan. Estimated quantities specified in the ROCK LIST are compacted yards. Purchaser shall apply adequate amounts of rock to meet the specified rock depths. Specified rock depths are minimum requirements, and are not subject to reduction.

6-70 APPROVAL BEFORE ROCK APPLICATION
Purchaser shall obtain written approval from the Contract Administrator before rock application

6-71 ROCK APPLICATION
Purchaser shall apply rock in accordance with the specifications and quantities shown on the Rock List. Rock must be spread, shaped, and compacted full width concurrent with rock hauling operations.

6-76 DRY WEATHER ROCK COMPACTION
The Contract Administrator may require the application of water to facilitate compaction of the rock surfacing. The method of water application is subject to approval by the Contract Administrator.

6-80 WATERING FOR DUST ABATEMENT
Purchaser shall use water for dust abatement
SECTION 7 – STRUCTURES

7-57  CULVERT SHAPE CONTROL
Purchaser shall monitor the culvert shape during backfill and compaction. Special attention must be paid to maintaining the structure’s rise dimensions, concentricity, and smooth uniform curvature. If compaction methods are resulting in peaking or deflection of the culvert, Purchaser shall modify the compaction method to achieve the appropriate end result.

7-70  GATE CLOSURE
Purchaser shall keep gates closed at all times. All gates must be closed at termination of use, unless authorized in writing by the contract administrator.

SECTION 9 – POST-HAUL ROAD WORK

9-3  CULVERT MATERIAL REMOVED FROM STATE LAND
Culverts removed from roads become the property of the Purchaser and must be removed from state land.

9-5  POST-HAUL MAINTENANCE
Purchaser shall perform post-haul maintenance in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>E332404A</td>
<td>0+00 to 52+56</td>
<td>Grading</td>
</tr>
<tr>
<td>E332405A</td>
<td>0+00 to 85+31</td>
<td>Grading</td>
</tr>
<tr>
<td>E332405J</td>
<td>0+00 to 31+15</td>
<td>Grading</td>
</tr>
<tr>
<td>E332405K</td>
<td>0+00 to 42+67</td>
<td>Grading</td>
</tr>
</tbody>
</table>

9-10  LANDING DRAINAGE
Purchaser shall provide for drainage of the landing surface as approved, in writing, by the Contract Administrator.

9-11  LANDING EMBANKMENT
Landing embankments shall be sloped to original construction specifications.

9-20  ROAD DECOMMISSIONING
Purchaser shall decommission the following roads before the termination of this contract

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>E332405J</td>
<td>31+15 to 37+78</td>
<td>Light Decomissioning: 1,2,3,4,5,6,7</td>
</tr>
<tr>
<td>E342432Q</td>
<td>0+00 to 24+09</td>
<td>Light Decomissioning: 1,2,3,4,5,6,7</td>
</tr>
<tr>
<td>E342433T</td>
<td>6+34 to 14+38</td>
<td>Light Decomissioning: 1,4,5,6</td>
</tr>
</tbody>
</table>
9-21 ROAD ABANDONMENT
Purchaser shall abandon the following roads before the termination of this contract. Work must be in accordance with the ROAD ABANDONMENT CROSS SECTIONS DETAIL.

<table>
<thead>
<tr>
<th>Road</th>
<th>Stations</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>E332405J</td>
<td>37+78 to 50+81</td>
<td>Light Abandonment</td>
</tr>
</tbody>
</table>

9-22 LIGHT ABANDONMENT
- Remove road shoulder berms except as directed.
- Construct non-drivable waterbars according to the attached NON-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 100 feet, or as marked in the field.
- Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 percent grade.
- Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
- Block roads with earthen barricades in accordance with the attached EARTHEN BARRICADE DETAIL.
- Remove culverts
- Scatter woody debris onto abandoned road surfaces.

9-23 LIGHT DECOMISSIONING
1. Construct NON-DRIVABLE waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL from the start of the road, to the nearest stream crossing, 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 100 feet, or as marked in the field.
2. Construct Drivable waterbars beyond stream crossing according to the attached drivable waterbard detail.
3. Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 percent grade.
4. Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
5. Block roads with earthen barricades in accordance with the attached EARTHEN BARRICADE DETAIL.
6. Scatter woody debris and dead and down in road
7. Remove temporary culverts and return stream banks back to original state.

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)

10-21 METAL BAND
Metal coupling and end bands must meet the AASHTO specification designated for the culvert and must have matching corrugations. Culverts 24 inches and smaller must have bands with a minimum width of 12 inches. Culverts over 24 inches must have bands with a minimum width of 24 inches.

10-24 GAUGE 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.

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Gauge</th>
<th>Corrugation</th>
</tr>
</thead>
<tbody>
<tr>
<td>18&quot;</td>
<td>16 (0.064&quot;)</td>
<td>2 2/3&quot; X 1/2&quot;</td>
</tr>
<tr>
<td>24&quot; to 48&quot;</td>
<td>14 (0.079&quot;)</td>
<td>2 2/3&quot; X 1/2&quot;</td>
</tr>
<tr>
<td>54&quot; to 96&quot;</td>
<td>12 (0.109&quot;)</td>
<td>3&quot; X 1&quot;</td>
</tr>
<tr>
<td>ROAD NAME</td>
<td>START STATION</td>
<td>END STATION</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>E332404A</td>
<td>0+00</td>
<td>52+56</td>
</tr>
<tr>
<td>E332405A</td>
<td>0+00</td>
<td>85+31</td>
</tr>
<tr>
<td>E332405J</td>
<td>0+00</td>
<td>37+78</td>
</tr>
<tr>
<td>E332405J</td>
<td>37+78</td>
<td>50+81</td>
</tr>
<tr>
<td>E332405K</td>
<td>0+00</td>
<td>42+67</td>
</tr>
<tr>
<td>E342432Q</td>
<td>0+00</td>
<td>24+09</td>
</tr>
<tr>
<td>E342433T</td>
<td>0+00</td>
<td>14+38</td>
</tr>
</tbody>
</table>

A= Abandon

Date: 3/25/2022
<table>
<thead>
<tr>
<th>Diameter (in)</th>
<th>Gauge</th>
<th>Skew</th>
<th>Culvert (ft)</th>
<th>Downspout</th>
<th>Flume</th>
<th>Inlet C.Y.</th>
<th>Outlet C.Y.</th>
<th>Catchbasin</th>
</tr>
</thead>
<tbody>
<tr>
<td>E332404A 30+73</td>
<td>18</td>
<td>16</td>
<td>30</td>
<td>32</td>
<td>1,2,3,10,11</td>
<td>1. Install Headwall - See Detail D1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E332405J 35+54</td>
<td>24</td>
<td>14</td>
<td>40</td>
<td>1,2,3,10,11</td>
<td>2. Install Catchbasin - See Detail D1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E332405K 18+01</td>
<td>X</td>
<td>9</td>
<td>3</td>
<td>Armor Ditch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E332405K 33+83</td>
<td>X</td>
<td>9</td>
<td>3</td>
<td>Armor Catchbasin - See Detail D1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E332405K 35+47</td>
<td>X</td>
<td>9</td>
<td>3</td>
<td>Armor Catchbasin - See Detail D1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E342432Q 3+54</td>
<td>24</td>
<td>14</td>
<td>38</td>
<td>1,2,3,10,11</td>
<td>6. Light Loose RipRap</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E342433T 6+34</td>
<td>24</td>
<td>14</td>
<td>3</td>
<td>7. Step Bevel Pipe Ends</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- 1. Install Energy dissipator - See D1
- 2. Install Headwall - See Detail D1
- 3. Armor Catchbasin - See Detail D1
- 4. Armor Ditch
- 5. Heavy Loose RipRap
- 6. Light Loose RipRap
- 7. Step Bevel Pipe Ends
- 8. Remove Existing Pipe
- 9. See Routing Ditch Detail D1
- 10. See Pipe Installation Detail D1
STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
Application No.: 30-103207 Name of Sale: Buck Central

ROCK LIST

1. ROCK DEPTHS ARE DEFINED AS COMPACTED DEPTHS.
2. LOOSE YARD QUANTITIES ARE DEPENDANT ON SOURCE.
3. ROCK SLOPES SHALL BE 1.5(H) : 1(V).
4. ALL ROCK SOURCES ARE SUBJECT TO APPROVAL BY THE CONTRACT ADMINISTRATOR.

<table>
<thead>
<tr>
<th>ROAD NAME</th>
<th>START STATION</th>
<th>END STATION</th>
<th>SUBGRADE WIDTH (ft)</th>
<th>BALLAST SOURCE</th>
<th>BALLAST WIDTH (ft)</th>
<th>BALLAST QTY (cu.yd./sta)</th>
<th>SURFACE SOURCE</th>
<th>SURFACE WIDTH (ft)</th>
<th>SURFACE DEPTH (in)</th>
<th>SURFACE QTY (cu.yd./sta)</th>
<th>FABRIC WIDTH (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E332405J</td>
<td>35+04</td>
<td>36+04</td>
<td>0</td>
<td>12</td>
<td>6</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E342432Q</td>
<td>3+04</td>
<td>4+04</td>
<td>0</td>
<td>12</td>
<td>6</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E342433T</td>
<td>5+84</td>
<td>6+84</td>
<td>0</td>
<td>12</td>
<td>6</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

DATE: 3/25/2022
FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Cuts and Fills
- Maintain slope lines to a stable gradient compatible with the construction materials. Remove slides from ditches and the roadway. Repair fill-failures, in accordance with Clause 4-6 EMBANKMENT SLOPE RATIO, with selected material or material approved by the Contract Administrator. Remove overhanging material from the top of cut slopes.
- Waste material from slides or other sources shall be placed and compacted in stable locations identified in the road plan or approved by the Contract Administrator, so that sediment will not deliver to any streams or wetlands.
- Slide material and debris shall not be mixed into the road surface materials, unless approved by the Contract Administrator.

Surface
- Grade and shape the road surface, turnouts, and shoulders to the original shape on the as directed, to provide a smooth, rut-free traveled surface and maintain surface water runoff in an even, unconcentrated manner.
- Blading shall not undercut the backslope or cut into geotextile fabric on the road.
- If required by the Contract Administrator, water shall be applied as necessary to control dust and retain fine surface rock.
- Surface material shall not be bladed off the roadway. Replace surface material when lost or worn away, or as directed by the Contract Administrator.
- Remove shoulder berms, created by grading, to facilitate drainage, except as marked or directed by the Contract Administrator.
- For roads with geotextile fabric: spread surface aggregate to fill in soft spots and wheel ruts (barrel spread) to prevent damage to the geotextile fabric.

Drainage
- Prevent silt bearing road surface and ditch runoff from delivering sediment to any streams or wetlands.
- Maintain rolling dips and drivable waterbars as needed to keep them functioning as intended.
- Maintain headwalls to the road shoulder level with material that will resist erosion.
- Maintain energy dissipaters at culvert outlets with non-erodible material or rock.
- Keep ditches, culverts, and other drainage structures clear of obstructions and functioning as intended.
- Inspect and clean culverts at least monthly, with additional inspections during storms and periods of high runoff. This shall be done even during periods of inactivity.

Structures
- Repair culverts, bridges, gates, fences, cattle guards, signs, and other road structures as required because of purchaser use. Repairs shall be subject to Contract Administrator’s approval.
FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Preventative Maintenance
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season
- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris
- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.
NOTE: 10 yards of heavy loose rip rap or 10 yards of 14" diameter and larger stumps shall be placed in front of and in the spoils berm.

Note: 1 of stumps or rip rap shall be partially buried in the spoils berm and/or road surface.
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.
CULVERT AND DRAINAGE SPECIFICATIONS DETAIL - D1

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

- Subgrade
- Fill
- Bolted 5/8" bolts with 2 washers
- Support
- Undisturbed Soil

**HEADWALLS**
Headwall to be constructed of material that will resist erosion.

- Subgrade
- Culvert
- Ditch

**DOWNSPOUT**
Use where ground conditions are irregular.

- Subgrade
- Fill
- Elbow
- Support at 10' intervals
- Undisturbed Soil
- Bolted 5/8" bolts with bridge washers on both sides

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

<table>
<thead>
<tr>
<th>Minimum Cover</th>
<th>Minimum Bed Depth</th>
<th>Min. Trench Width</th>
<th>Nominal Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6'</td>
<td>36'</td>
<td>18'</td>
</tr>
<tr>
<td>12'</td>
<td>6'</td>
<td>42'</td>
<td>24'</td>
</tr>
<tr>
<td>18'</td>
<td>6'</td>
<td>48'</td>
<td>30'</td>
</tr>
<tr>
<td>12'</td>
<td>6'</td>
<td>54'</td>
<td>36'</td>
</tr>
</tbody>
</table>

**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.

**DISSIPATOR SPEC'S**
Size in Culvert Diameters

- Area 2 x 2
- Depth 1
- Aggregate 1/3

**PLAN VIEW**
- Backfill & taper toe at 10'
- 30° Skew

**ROAD SURFACE**
- Ground Line
- Level
- Side Hill
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.
Notes:

1. WATERBAR CONSTRUCTION FOR FOREST ROADS WITH NO TRAFFIC. SPECIFICATIONS ARE AVERAGE AND MAY BE ADJUSTED TO CONDITIONS.

2. TIE BERM INTO BANK. IF DITCH EXISTS, TIE CUT INTO DITCH.

3. CONSTRUCT CROSS DRAIN BERM APPROXIMATELY 24 IN. HIGH.

4. CUT WATERBAR A MINIMUM OF 18 IN.

5. ENSURE PROPER DRAINAGE AT OUTLET.

6. SKEW WATERBAR 30 DEGREES DOWNGRADE WITH ROAD CENTERLINE.
STANDARD 45° ROLLING DIP

PLAN OF ROLLING DIP

intersection to design grade  bottom of dip (flat)  break with design grade

A  45°  B  G (ft)

D  20 ft  E  H (ft)  C

20 ft  5 ft  C

downgrade

CUT BANK

1.4 ft deep

Original Slope

FILL SLOPE

1.4 ft deep

Original Slope

Downgrade

ROLLING DIP DEMENSIONS

<table>
<thead>
<tr>
<th>Widths of 10' through 14'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
</tr>
<tr>
<td>Grade ≤ 4%</td>
</tr>
<tr>
<td>Grade = 6%</td>
</tr>
<tr>
<td>Grade = 8%</td>
</tr>
</tbody>
</table>
### Bald Goat - Road Development Costs

**REGION:** Northeast  
**CONTRACT #:** 30-10  
**ENGINEER:** Colin Ro  
**DISTRICT:** Highlands  
**DATE:** 6/17/21

<table>
<thead>
<tr>
<th>ROAD NUMBERS:</th>
<th>Construction</th>
<th>Reconstruction</th>
<th>Maintenance</th>
<th>Abandon</th>
</tr>
</thead>
<tbody>
<tr>
<td>E342342Q</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E34233T</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ROAD STANDARD:</th>
<th>Construction</th>
<th>Reconstruction</th>
<th>Maintenance</th>
<th>Abandon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| NUMBER OF STATIONS: | 38.47 | 0.00 | 218.32 | 13.03 |

| CLEARING, GRUBBING, GRADING | $307.76 | $0 | $10,512.02 | $0 |
| EXCAVATION AND FILL: | $13,464.50 | $0 | $7,200.00 | $651.50 |
| MISC. MAINTENANCE: | $0 | $0 | $0 | $0 |
| ROAD ROCK: | $2,342.40 | $0 | $1,171.20 | $0 |
| ADDITIONAL ROCK: | $0 | $0 | $0 | $0 |
| CULVERTS AND FLUMES: | $6,345.88 | $0 | $4,368.66 | $0 |
| WATERBARS/DIPS: | $500.00 | $185.00 | $0 |

**TOTAL COSTS:**  
$22,961 | $0 | $23,437 | $652

**COST PER STATION:**  
$597 | $0 | $107 | $50

| MOBILIZATION: | $300 | 6 | $1,800 |

**TOTAL (All Roads) =**  
$50,295

**SALE VOLUME mbf =**  
1,976
TOTAL $/MBF = $25

Engineer's Notes: