WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

# TIMBER NOTICE OF SALE

***SALE NAME**: Q OVERLOOK* ***AGREEMENT NO**: 30-103842*

**AUCTION:** April 25, 2023 starting at 10:00 a.m., Northeast Region Office, Colville, WA **COUNTY:** Okanogan

**SALE LOCATION:** Sale located approximately 14 miles northwest of Loomis, WA.

**PRODUCTS SOLD AND SALE AREA:** All conifer species except for leave trees bounded by yellow leave tree area tags, two standing snags and two down logs per acre in Units 1 and 3 bounded by white timber sale boundary tags; All conifer species except for leave trees banded with blue paint, two standing snags and two down logs per acre in Units 4, 5 and 6 bounded by white timber sale boundary tags; and all right of way timber bounded by orange right of way boundary tags.

All forest products above located on part(s) of Sections 25, 26, 35 and 36 all in Township 40 North, Range 24 East, W.M., containing 182 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:**

| Species | Avg DBH | Ring Count | Total MBF | MBF by Grade P | SM | 1S | 2S | 3S | 4S | 5S | 6S | UT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lodgepole | 9.4 | | 766 | | | | | 486 | 280 | | | |
| Spruce | 10.8 | | 519 | | | | 90 | 330 | 99 | | | |
| Alpine fir | 10.3 | | 517 | | | | | 352 | 165 | | | |
| Douglas fir | 21.9 | | 139 | | | | 98 | 37 | 4 | | | |
| Sale Total | | | 1,941 | | | | | | | | | |

**MINIMUM BID:** $95,000.00 **BID METHOD:** Sealed Bids

**PERFORMANCE SECURITY:** $19,000.00 **SALE TYPE:** Lump Sum

**EXPIRATION DATE:** November 1, 2024 **ALLOCATION:** Export Restricted

**BID DEPOSIT:** $9,500.00 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 15 to June 1 unless authorized in writing by the Contract Administrator due to spring breadup. Falling and Yarding will not be permitted from May 1 to August 1 in Units 5 and 6 unless in writing by the State due to wildlife timing restrictions.

**ROADS:** 90.44 stations of required construction. 16.52 stations of required reconstruction. 177.56 stations of required prehaul maintenance. 19.46 stations of decommissioning. Road construction will not be permitted from March 15 to June 1 unless authorized in writing by the Contract Administrator due to spring breakup. Road construction will not be permitted from May 1 to August 1 in Units 5 and 6 unless authorized in writing by the

State due to wildlife timing restrictions. The hauling of forest products will not be permitted from March 15 to June 1 unless authorized in writing by the Contract Administrator due to sping breakup.

**ACREAGE DETERMINATION**

**CRUISE METHOD:** Acreage determined using GPS methods. Acreage shown above is net harvest acres in harvest units. All 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.

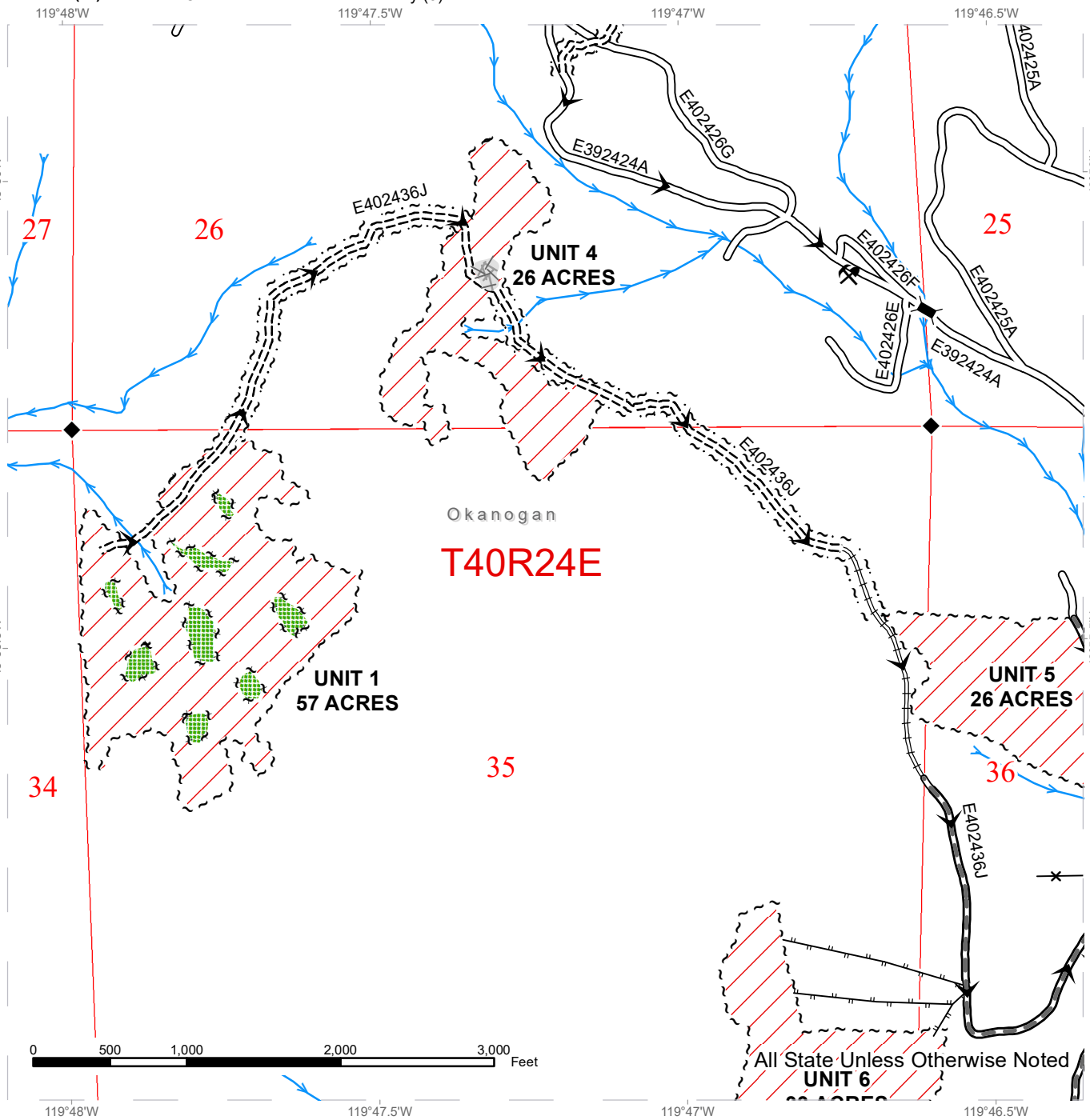
**FEES:** $32,997.00 is due on day of sale. $9.00 per MBF is due upon removal. These are in addition to the bid price.

**SPECIAL REMARKS:** Locked gate restrict access to Units 1, 4, 5 and 6. Contact the Northeast Region Office at (509) 684-7474 for access. Unit 2 has been dropped from the sale.

# TIMBER SALE MAP

**SALE NAME:** Q OVERLOOK
**AGREEMENT #:** 30-103842
**TOWNSHIP(S):** T40R24E
**TRUST(S):** Common School and Indemnity (3)

**REGION:** Northeast Region
**COUNTY(S):** Okanogan
**ELEVATION RGE:** 5480-6320




Public Land Survey Sections
DNR Managed Lands
Variable Retention Harvest
Leave Tree Area
Sale Boundary Tags
Leave Tree Tags
Right of Way Tags = 11 Acres
Existing Roads
Required Pre-Haul Maintenance
Required Construction
Required Reconstruction
Designated Skid Trail
Haul Route
Streams
Fence
Equipment Limitation Zone
Survey Monument
Bridge
Gate
Rock Pit

N

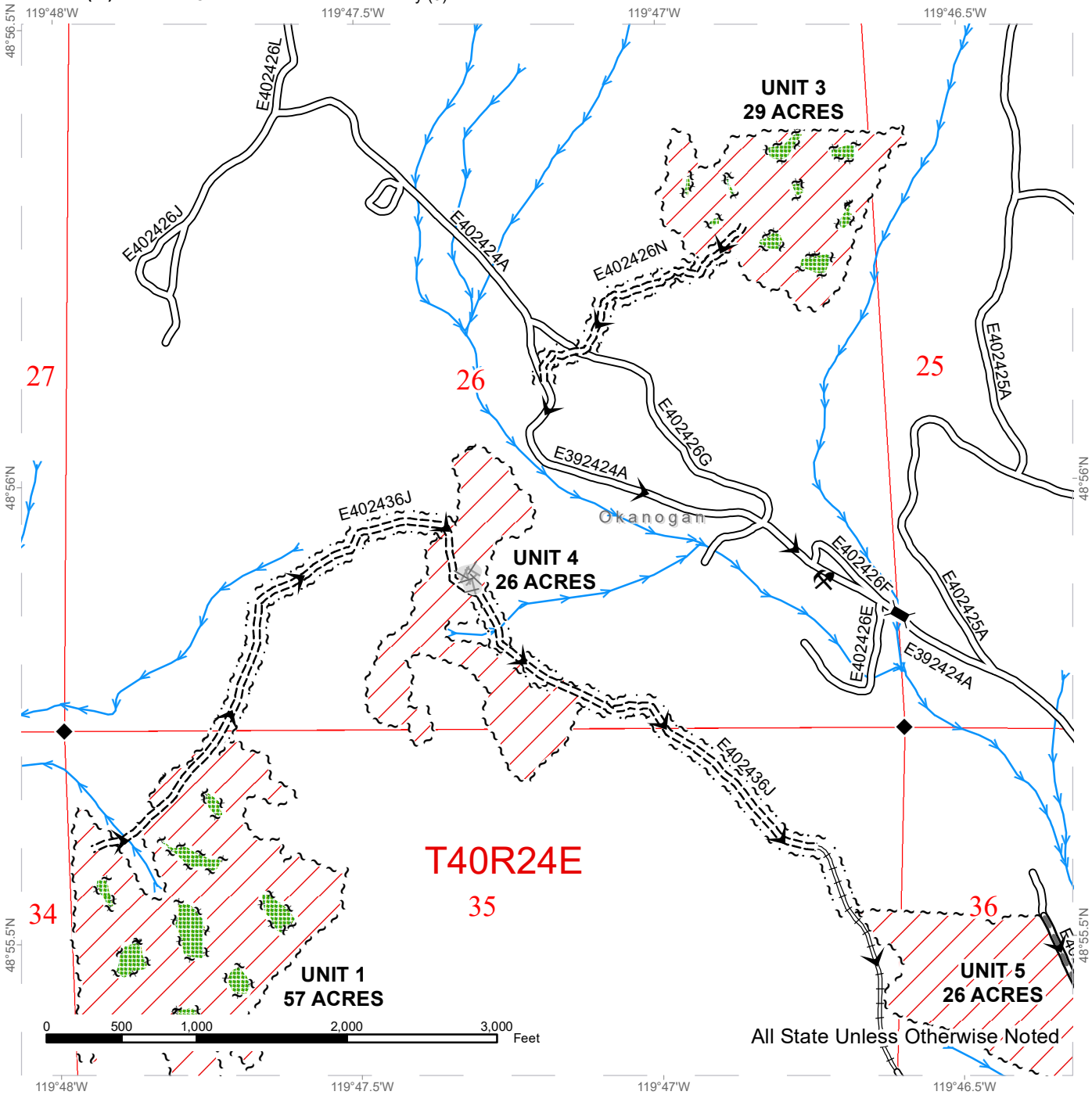
Prepared By: rmil490

Modification Date: rmil490 9/29/2022

# TIMBER SALE MAP

**SALE NAME:** Q OVERLOOK
**AGREEMENT #:** 30-103842
**TOWNSHIP(S):** T40R24E
**TRUST(S):** Common School and Indemnity (3)

**REGION:** Northeast Region
**COUNTY(S):** Okanogan
**ELEVATION RGE:** 5480-6320




| | | |
|---|---|---|
| Public Land Survey Sections | Existing Roads | Streams |
| DNR Managed Lands | Required Pre-Haul Maintenance | Equipment Limitation Zone |
| Variable Retention Harvest | Required Construction | Survey Monument |
| Leave Tree Area | Required Reconstruction | Bridge |
| Sale Boundary Tags | Haul Route | Rock Pit |
| Leave Tree Tags | | |
| Right of Way Tags = 11 Acres | | |

N

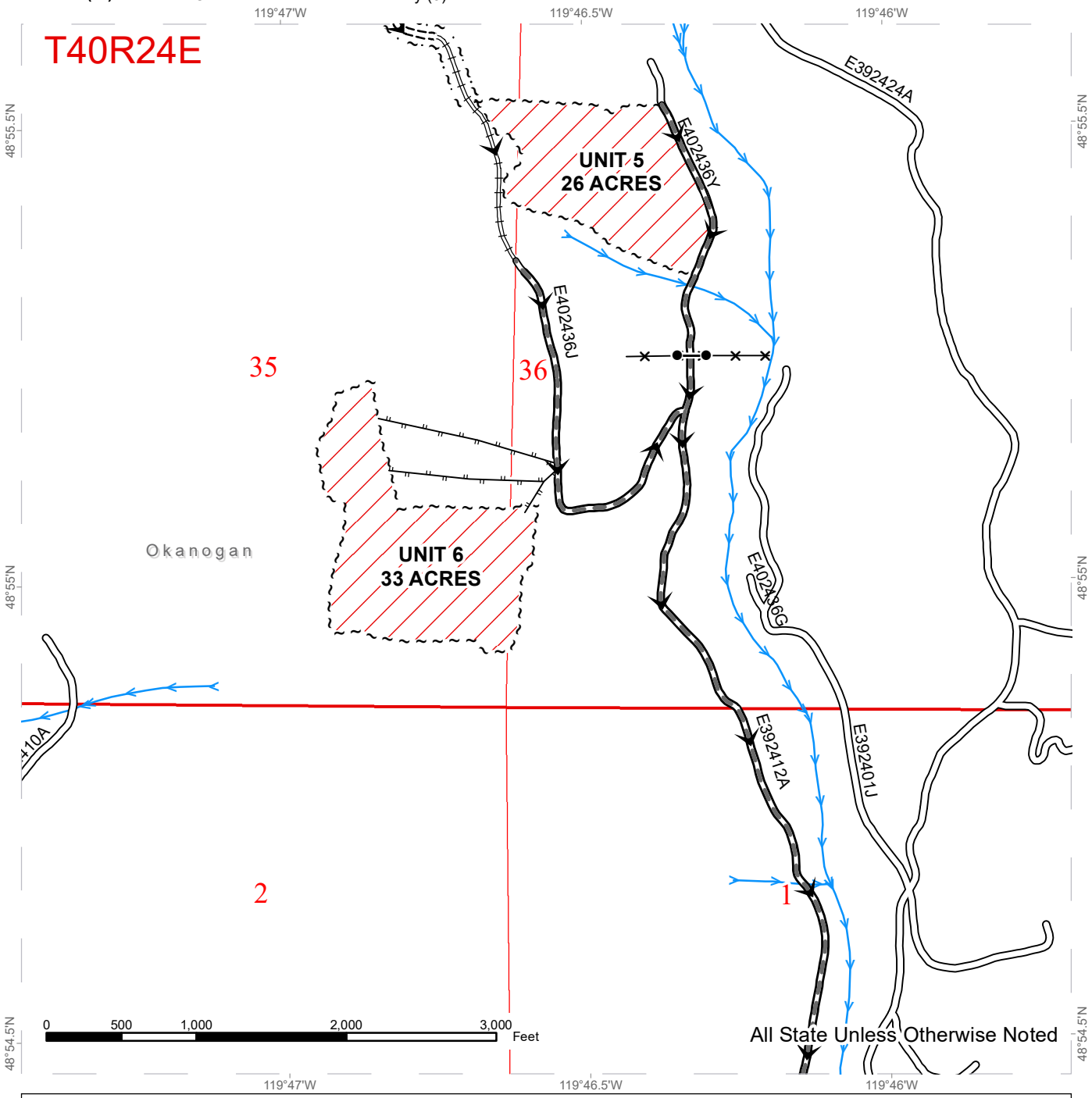
Prepared By: rmil490

Modification Date: rmil490 9/29/2022

# TIMBER SALE MAP

**SALE NAME:** Q OVERLOOK
**AGREEMENT #:** 30-103842
**TOWNSHIP(S):** T40R24E
**TRUST(S):** Common School and Indemnity (3)

**REGION:** Northeast Region
**COUNTY(S):** Okanogan
**ELEVATION RGE:** 5480-6320




Public Land Survey Sections
DNR Managed Lands
Variable Retention Harvest
Sale Boundary Tags
Right of Way Tags = 11 Acres
Existing Roads
Required Pre-Haul Maintenance
Required Construction
Required Reconstruction
Designated Skid Trail
Haul Route
Streams
Fence
Gate
N

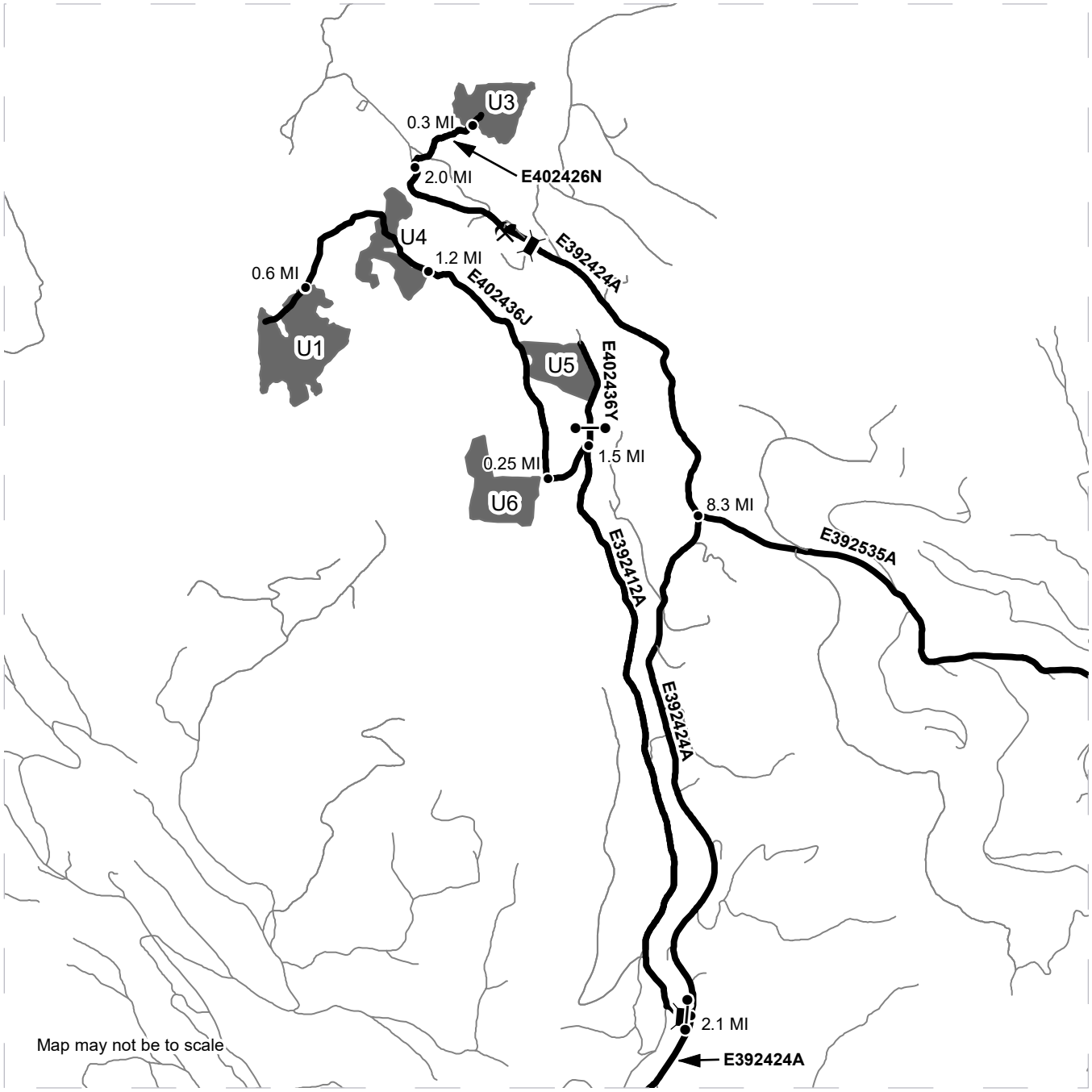
Prepared By: rmil490

Modification Date: rmil490 9/29/2022

# DRIVING MAP

**SALE NAME:** Q OVERLOOK
**AGREEMENT#:** 30-103842
**TOWNSHIP(S):** T40R24E
**TRUST(S):** Common School and Indemnity (3), Natural Resources Conservation Area (75)

**REGION:** Northeast Region
**COUNTY(S):** Okanogan
**ELEVATION RGE:** 5480-6320




Timber Sale Unit
Haul Route
Other Route
Bridge
Gate
Distance Indicator
Rock Pit

***DRIVING DIRECTIONS:***
From Loomis travel north on Loomis Oroville Rd for 2.1 miles. Turn left on Toats Coulee Rd (E392525A). Continue on Toats Coulee Rd for 7.7 miles and then turn right onto the Ninemile Rd (E392424A). For Units 1, 4, 5, and 6 continue up Ninemile Rd for 2.1 miles then turn left onto E392412A. Continue on this road for 1.5 miles and this will lead you to road E402436Y which will give you access to Unit 5. For Units 1, 4 and 6 turn left onto E402436J and in about 0.25 miles you will reach Unit 6. Continuing on E402436J for 1.2 miles you will reach Unit 4 and Unit 1 is 0.6 miles past Unit 4. To Unit 3 from the junction of Ninemile Rd and the E392412A Rd continue on Ninemile Rd for 4 miles and at the junction veer right onto E402426N Rd and continue for 0.3 miles to access Unit 3. An alternate route to access Unit 3 is to turn right onto Chopaka Mountain Rd (E392535A) from Toats Coulee after 1.5 miles. Continue on Chopaka Mountain Rd (which turns into Ninemile at mile 8.3 miles) for 12.4 miles for access to Unit 3.

N

Prepared By: rmil490

Modification Date: rmil490 11/7/2022

# DRIVING MAP

**SALE NAME:** Q OVERLOOK
**AGREEMENT#:** 30-103842
**TOWNSHIP(S):** T40R24E
**TRUST(S):** Common School and Indemnity (3), Natural Resources Conservation Area (75)

**REGION:** Northeast Region
**COUNTY(S):** Okanogan
**ELEVATION RGE:** 5480-6320

Timber Sale Unit
Haul Route
Bridge
Distance Indicator
Gate
Rock Pit
Town

***DRIVING DIRECTIONS:***

From Loomis travel north on Loomis Oroville Rd for 2.1 miles. Turn left on Toats Coulee Rd (E392525A). Continue on Toats Coulee Rd for 7.7 miles and then turn right onto the Ninemile Rd (E392424A). For Units 1, 4, 5, and 6 continue up Ninemile Rd for 2.1 miles then turn left onto E392412A. Continue on this road for 1.5 miles and this will lead you to road E402436Y which will give you access to Unit 5. For Units 1, 4 and 6 turn left onto E402436J and in about 0.25 miles you will reach Unit 6. Continuing on E402436J for 1.2 miles you will reach Unit 4 and Unit 1 is 0.6 miles past Unit 4. To Unit 3 from the junction of Ninemile Rd and the E392412A Rd continue on Ninemile Rd for 4 miles and at the junction veer right onto E402426N Rd and continue for 0.3 miles to access Unit 3. An alternate route to access Unit 3 is to turn right onto Chopaka Mountain Rd (E392535A) from Toats Coulee after 1.5 miles. Continue on Chopaka Mountain Rd (which turns into Ninemile at mile 8.3 miles) for 12.4 miles for access to Unit 3.

N

Prepared By: rmil490

Modification Date: rmil490 11/7/2022

**STATE OF WASHINGTON**
**DEPARTMENT OF NATURAL RESOURCES**

# BILL OF SALE AND CONTRACT FOR FOREST PRODUCTS

**Export Restricted Lump Sum AGREEMENT NO. 30-0103842**

**SALE NAME: Q OVERLOOK**

**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 April 25, 2023 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 conifer species except for leave trees bounded by yellow leave tree area tags, two standing snags and two down logs per acre in Units 1 and 3 bounded by white timber sale boundary tags; All conifer species except for leave trees banded with blue paint, two standing snags and two down logs per acre in Units 4, 5 and 6 bounded by white timber sale boundary tags; and all right of way timber bounded by orange right of way boundary tags.

All forest products above located on approximately 182 acres on part(s) of Sections 25, 26, 35, and 36 all in Township 40 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 1, 2024.

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 $285.00 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.

The pricing schedule has not been set for the sale.

G-106 Adding Naturally Damaged Forest Products

Any forest products not designated for removal that are seriously damaged by disease, insects or wind, or that may contribute seriously to the spread of insect or disease damage may be added to this sale by the State's Contract Administrator. Additions must be in unlogged areas of the sale and added volume shall not exceed an amount equal to 10 percent of the original advertised volume. Added forest products become a part of this contract and shall be paid for at the rate set forth in clause G-101, G-102 or G-103.

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 Purchasers expense regardless of cost, to remedy deficiencies at any time.

G-140 Indemnity

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

required to indemnify, defend and hold harmless State and its agencies, officials, agents or employees.

G-150 Insurance

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

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

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

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

2. Insurers subject to Chapter 48.15 RCW (surplus lines): The State shall be given 20 days advance notice of cancellation. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.

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

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

The State of Washington, Department of Natural Resources, its elected and appointed officials, agents and employees shall be named as an additional insured 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; E392412A, E402426M, E402426N, E402436J, E402436Y, Ninemile (E392424A), Toats Coulee (E392525A), and Chopaka Mountain (E392535A). 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 190 pounds of grass seed to a location designated by the Contract Administrator. Seed provided shall meet the following specifications.

40% Mountain Brome, 30% Sherman Big Bluegrass 30% Idaho Fescue
Seed shall be certified weed free, premixed and delivered to Highlands Fire Camp in 50 pound bags clearly labeled with the timber 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 E392525A (Toats Coulee), E392535A (Chopaka Mountain) and E392424A (Ninemile) roads, unless authority is granted in writing by the Contract Administrator.

G-380 Road Easement and Road Use Permit Requirements

Purchaser agrees to comply with the terms and conditions of the attached:

Easement 53 with USFS dated March 17, 1989
Easement 307 with Woodard dated May 29, 1961
Easement 308 with McDaniel dated May 24, 1961

G-430 Open Fires

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

G-450 Encumbrances

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

DATA MISSING

Section P: Payments and Securities

P-011 Initial Deposit

Purchaser paid DATA MISSING initial deposit, which will be maintained pursuant to RCW 79.15.100(3). If the operating authority on this contract expires without Purchaser's payment of the full amount specified in Clause P-020, the initial deposit will be immediately forfeited to the State, and will be offset against Purchaser's

remaining balance due. Any excess initial deposit funds not needed to ensure full payment of the contract price, or not needed to complete any remaining obligations of the Purchaser existing after contract expiration, will be refunded to the Purchaser.

P-020 Payment for Forest Products

Purchaser agrees to pay the total, lump sum contract price of $50,466.00. The total contract price consists of a $0.00 contract bid price plus $50,466.00 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 $19,000.00. The Security provided shall guarantee performance of all provisions of this contract and payment of any damages caused by operations under this contract or resulting from Purchaser's noncompliance with any rule or law. Acceptable performance security may be in the form of a performance bond, irrevocable letter of credit, cash, savings or certificate of deposit account assignments, and must name the State as the obligee or beneficiary. A letter of credit must comply with Title 62A RCW, Article 5. Performance security must remain in full force over the duration of the contract length. Surety bonds issued shall conform

to the issuance and rating requirements in clause G-150. The State shall retain the performance security pursuant to RCW 79.15.100. Purchaser shall not operate unless the performance security has been accepted by the State. If at any time the State decides that the security document or amount has become unsatisfactory, Purchaser agrees to suspend operations and, within 30 days of notification, to replace the security with one acceptable to the State or to supplement the amount of the existing security.

P-100 Performance Security Reduction

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

Section H: Harvesting Operations

H-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 15 to June 1 in Units 1, 3 and 4 and from May 1 to August 1 in Unit 5 and 6 unless authorized in writing by the Contract Administrator.

H-011 Certification of Fallers and Yarder Operators

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

Excessive damage for leave trees is defined in clause H-012.
Excessive damage for reserve trees is defined in clause H-013.

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

When leave tree damage exceeds the limits set forth in clause H-012,
Purchaser shall be subject to liquidated damages (clause D-040)
When reserve tree damage exceeds the limits set forth in clause H-013,
Purchaser shall be subject to liquidated damages (clause D-041).

H-013 Reserve Tree Damage Definition

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

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

a. A reserve tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 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 15 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-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 15 to June 1 on the Toats Coulee (E392525A), Chopaka Mountain (392535A), Ninemile (E392424A0), E392412A, E402436J, E402426N roads and from March 15 to August 1 on the E402436Y road unless authorized in writing by the Contract Administrator.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

a. Hand felling of trees and retrieval with bull line and chokers may be required in isolated areas of units.

b. Road salts shall not be applied to roads for dust abatement or removing of ice from road surfaces.

c. All slash shall be piled at landings or hauled back into the unit for erosion control where designated by the Contract Administrator.

d. Slash that is piled at landings shall be separated from the road prism at completion of harvest.

e. Appropriate warning signs shall be posted at location designated by the Contract Administrator.

f. If snow plowing occurs, snow berms shall be removed at locations designated by the Contract Administrator to allow surface water to drain from roads.

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

h. If the down and standing dead are removed, Purchaser shall leave two down logs per acre and two standing snags per acre from the larger diameter classes when safe to do so.

Permission to do otherwise must be granted in writing by the Contract Administrator.

H-142 Wildlife Timing Restrictions

The following wildlife timing restrictions apply to this contract and shall be in place in the locations shown on the attached timber sale map.

Harvesting operations, including road construction, road maintenance, timber felling, yarding and hauling will not be permitted from May 1 to August 1 in Units 5 and 6 due to Lynx timing restrictions.

Permission to do otherwise must be granted in writing by the State

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 45 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-250 Additional Falling Requirements

Within all units, all non-merchantable live stems greater than 2 inches in diameter or 3 feet in height not banded with blue paint, shall be felled concurrently with felling operations. Areas of young or immature timber may be excluded from this requirement by the Contract Administrator.

H-260 Fall Leaners

Trees within all units 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 10/3/2022 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on E392412A, E402436J, E402426N and E402436Y roads. All work shall be completed to the specifications detailed in the Road Plan.

C-060 Designated Road Maintainer

If required by the State, Purchaser shall perform maintenance and replacement work as directed by the Contract Administrator on Toats Coulee (E393535A), Chopaka Mountain (E392535A) and Ninemile (E392424A) roads. Purchaser shall furnish a statement in a form satisfactory to the State showing the costs incurred while performing this work. Costs shall be based on the rates set forth in the equipment rate schedule on file at the Region office or Engineering Division in Olympia. The State shall reimburse Purchaser for said costs within 30 days of receipt and approval of the statement.

C-080 Landing Locations Approved Prior to Construction

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

C-130 Dust Abatement

Purchaser shall abate dust on the E392412A, E402426N, E402436J, E402436Y, Ninemile (E392424A), Toats Coulee (E392525A), and Chopaka Mountain (E392535A) roads used for hauling from June 1 November 1.

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-035 Logging Debris Clean Up

Slash and debris created from harvest activities shall be treated 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-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.

S-140 Fence Repair

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

Section D: Damages

D-013 Liquidated Damages or Failure to Perform

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

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

D-041 Reserve Tree Excessive Damage

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

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<br>DEPARTMENT OF NATURAL RESOURCES |
|---|---|
| _____<br>Purchaser | _____<br>Pat Ryan Acting<br>Northeast Region Manager |
| _____<br>Print Name | |
| Date: _____<br>Address: | Date: _____ |

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 OVERLOOK

**Application Number:** 30- 103842

## EXCISE TAX APPLICABLE ACTIVITIES

**Construction:** 9,044 **linear feet**
***Road to be constructed (optional and required) but not abandoned***

**Reconstruction:** 1,652 **linear feet**
***Road to be reconstructed (optional and required) but not abandoned***

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

**Decommission:** 1,946 **linear feet**
***Road to be made undriveable but not officially abandoned.***

**Pre-Haul Maintenance:** 17,756 **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 contact. 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 Overlook** | Region: **Northeast** |
| Agreement #: **30-103842** | District: Highlands |
| Contact Forester: Chelsea Schaefer<br>Phone / Location: 509-640-0550 | County(s): Choose a county, Okanogan |
| Alternate Contact: Matt Smith<br>Phone / Location: **509-995-7968** | Other information:<br>Click here to enter text. |

| | |
|---|---|
| Type of Sale: Lump Sum | |
| Harvest System: Ground based Track and wheel tired skidder w/buncher | 100% of sale acres is ground based |
| Harvest System: Select harvest system Click here to enter text.<br><br>Enter % of sale acres | Click here to enter percent sale acres. |
| Harvest System: Select harvest system Click here to enter text. | Click here to enter percent sale acres. |

## UNIT ACREAGES AND METHOD OF DETERMINATION:

| **Unit #**<br>**Harvest R/W or RMZ WMZ** | **Legal Description**<br>(Enter only one legal for each unit)<br>**Sec/Twp/Rng** | **Grant or Trust** | **Gross Proposal Acres** | **Deductions from Gross Acres (No harvest acres)** | | | | **Net Harvest Acres** | **Acreage Determination**<br>(List method and error of closure if applicable) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | **RMZ/ WMZ Acres** | **Leave Tree Acres** | **Existing Road Acres** | **Other Acres (describe)** | | |
| 1 | T40 R24E S35 | | 57.3 | | 6.2 | | | 51.1 | GPS (Garmin) |
| 3 | T40 R24E S26, 25 | | 28.9 | | 2.8 | | | 26.1 | GPS (Garmin) |
| 4 | T40 R24E S26, 35 | | 26.4 | | | | | 26.4 | GPS (Garmin) |
| 5 | T40 R24E S35, 36 | | 25.9 | | | .4 | | 25.5 | GPS (Garmin) |
| 6 | T40 R24E S35, 36 | | 32.7 | | | | | 32.7 | GPS (Garmin) |
| ROW A | T40 R24E S26 | | 10.8 | | | | | 10.8 | GPS (Garmin) |
| **TOTAL ACRES** | | | 182 | | 9 | .4 | | 172.6 | |



*Revised 03/15/2010 (FRCD)*

## HARVEST PLAN AND SPECIAL CONDITIONS:

| Unit # | Harvest Prescription: (Leave, take, paint color, tags, flagging etc.) | Special Management areas: | Other conditions (# leave trees, etc.) |
|---|---|---|---|
| 1 | Boundaries marked with white "Timber Sale Boundary" tags, orange flashers, and pink flagging. Leave tree areas bound are in yellow tags. Remove all trees outside of the LTAs while leaving 2 of the largest snag per acre | | Minimum of 13 leave trees will be left per acre. This sale complies with Loomis Landscape Plan. |
| 3 | Boundaries marked with white "Timber Sale Boundary" tags, orange flashers, and pink flagging. Leave tree areas are marked in yellow tags, remove all trees outside of the LTA while leaving 2 of the largest snag per acre. | | Minimum of 13 leave trees will be left per acre. This sale complies with Loomis Landscape Plan. |
| 4 | Boundaries marked with white "Timber Sale Boundary" tags, orange flashers, and pink flagging. Leave trees painted in blue, remove all trees unmarked while leaving 2 of the largest snag per acre. | | Minimum of 13 leave trees will be left per acre. This sale complies with Loomis Landscape Plan. |
| 5 | Boundaries marked with white "Timber Sale Boundary" tags, orange flashers, and pink flagging. Leave trees painted in blue, remove all trees unmarked while leaving 2 of the largest snag per acre. | | Minimum of 13 leave trees will be left per acre. This sale complies with Loomis Landscape Plan. Old blue paint was covered with black paint. |
| 6 | Boundaries marked with white "Timber Sale Boundary" tags, orange flashers, and pink flagging. Leave trees painted in blue, remove all trees unmarked while leaving 2 of the largest snag per acre. | | Minimum of 13 leave trees will be left per acre. This sale complies with Loomis Landscape Plan. |

## OTHER PRE-CRUISE INFORMATION:

| Unit # | Primary,secondary Species / Estimated Volume (MBF) | Access information (Gates, locks, etc.) | Photos, traverse maps required |
|---|---|---|---|
| 1 | LP/ES - 572 MBF | Accessed from Nine Mile road and hike from corner of meadow 1.3 miles past Chopaka Lake turn. | region provided maps |
| 3 | LP/SAF- 179 MBF | Accessed from Nine Mile road and hike from turnout 1.4 miles past Chopaka Lake turn. | region provided maps |
| 4 | LP/SAF-222 MBF | Accessed from Nine Mile road and hike from corner of meadow 1.3 miles past Chopaka Lake turn. | region provided maps |
| 5 | LP/ES- 496 MBF | Accessed from E392412A off Nine Mile road. Use DNR best key and drive 2.4 | region provided maps |

| | | | |
|---|---|---|---|
| | | miles and then can hike to the unit. | |
| 6 | LP/ES- 439 MBF | Accessed from E392412A off Nine Mile road. Use DNR best key and drive 2.4 miles and then can hike to the unit. | region provided maps |
| TOTAL MBF | 1,908 MBF | | region provided maps |

**REMARKS:**

| | | |
|---|---|---|
| **Prepared By: Chelsea Schaefer**<br>**Date:** **08/15/2022** | **Title: Forester** | **CC:** |

# Timber Sale Cruise Report
# Overlook

**Sale Name:** Q OVERLOOK

**Sale Type:** LUMP SUM

**Region:** NORTHEAST,NORTHEAST

**District:** HIGHLANDS,HIGHLANDS

**Lead Cruiser:** Jake Culp

**Other Cruisers:**

**Cruise Narrative:**
Location:
Legal - Sections 25, 26, 35, and 36 of T40N R24E WM.
General - Approx. 10 miles northwest of Loomis, WA in Okanogan County.
Access - All units are accessed from Ninemile Creek Rd. via Toats Coulee Rd.

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. No count plots were done in the ROW, all were cruised.
-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 PP and RC, 7" DBH for all other species
-Log Length: 32' logs where possible, minimum of 12' lengths
-Top DIB: Trees less than 17.5" DBH have a minimum top of 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:
For Units 1 and 3, cut all trees outside of the tagged Leave Tree Areas which are marked with yellow tags, leaving two of the largest snags per acre. For Units 4, 5, and 6, cut all trees not marked with blue paint, leaving two of the largest snags per acre.

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

Stand composition:
Units 1, 3, and 4 consist largely of small diameter, fire regenerated lodgepole pine and subalpine fir. However, Units 1 and 4 also contain pockets of unburnt, mature timber including Douglas fir and Engelmann spruce. Units 5 and 6 are mature, second growth subalpine fir and Engelmann spruce with large residual and legacy Douglas fir, and also minor components of lodgepole pine.

Timber quality:
Timber to be harvested is comprised of domestic quality lodgepole pine (39%), Engelmann spruce (27%), subalpine fir (27%), and Douglas fir (7%). Most of the volume in the sale is going to come from the small diameter, 3 Saw lodgepole logs.

Stand health/defect:
Older timber in the sale area can be rough, with branch clusters, sweep, and crooks. Other defects noted include forks, spike knots, wind and snow damage. Defect for the sale as whole is around 3%. Units 5 and 6 contain many dead, standing subalpine fir, roughly around 10-20% based on a quick visual estimate. Pini rot was also seen in in a few of the large residual Douglas fir in these two units.

Aspect:
Northeast, Northwest, East, South, Southeast

Elevation:
5480'-6240'

Harvesting methods:
100% ground based

Slope:
Unit 1- Max 35%, Avg. 22%
Unit 3- Max 40%, Avg. 10%
Unit 4- Max 36%, Avg. 11%
Unit 5- Max 35%, Avg. 13%
Unit 6- Max 42%, Avg. 25%

Other considerations/remarks:
Many of the units and the ROW have areas with large boulders and rocks, which could potentially affect skidding and road building. Sale is at high elevations, so snow should be considered if harvesting later in the season.

Trust:
This sale is 100% Trust 3.

## Timber Sale Notice Volume (MBF)

| | | | | MBF Volume by Grade | | | |
|---|---|---|---|---|---|---|---|
| Sp | DBH | Rings/In | Age | All | 2 Saw | 3 Saw | 4 Saw |
| LP | 9.4 | | | 766 | | 486 | 280 |
| ES | 10.8 | | | 519 | 90 | 329 | 99 |
| AF | 10.3 | | | 517 | | 352 | 165 |
| DF | 21.9 | | | 139 | 98 | 37 | 4 |
| ALL | 10.4 | | | 1,941 | 188 | 1,204 | 549 |

## Timber Sale Notice Weight (tons)

| | Tons by Grade | | | |
|---|---|---|---|---|
| Sp | All | 2 Saw | 3 Saw | 4 Saw |
| LP | 4,276 | | 2,810 | 1,466 |
| ES | 2,738 | 397 | 1,758 | 583 |
| AF | 2,726 | | 1,844 | 882 |
| DF | 843 | 556 | 254 | 33 |
| ALL | 10,583 | 954 | 6,666 | 2,964 |

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

| BA (sq ft/acre) | BA SE (%) | V-BAR (bf/sq ft) | V-BAR SE (%) | Net Vol (bf/acre) | Vol SE (%) |
|---|---|---|---|---|---|
| 103.5 | 4.6 | 119.6 | 2.9 | 13,004 | 5.6 |

## Timber Sale Unit Cruise Design

| Unit | Design | Cruise Acres | FMA Acres | N Plots | N Cruise Plots | N Void Plots |
|---|---|---|---|---|---|---|
| Q OVERLOOK U1 | B1C: VR, 1 BAF (25.15) Measure/ Count Plots, Sighting Ht = 4.5 ft | 57.3 | 57.4 | 30 | 8 | 0 |
| Q OVERLOOK U3 | B1C: VR, 1 BAF (25.15) Measure/ Count Plots, Sighting Ht = 4.5 ft | 28.9 | 28.9 | 19 | 6 | 1 |
| Q OVERLOOK U4 | B1C: VR, 1 BAF (25.15) Measure/ Count Plots, Sighting Ht = 4.5 ft | 26.4 | 26.4 | 16 | 6 | 0 |
| Q OVERLOOK U5 | B1C: VR, 1 BAF (33.61) Measure/ Count Plots, Sighting Ht = 4.5 ft | 25.5 | 25.9 | 17 | 6 | 0 |
| Q OVERLOOK U6 | B1C: VR, 1 BAF (33.61) Measure/ Count Plots, Sighting Ht = 4.5 ft | 32.7 | 33.2 | 24 | 8 | 0 |
| Q OVERLOOK ROW | B1: VR, 1 BAF (25.15) Measure All, Sighting Ht = 4.5 ft | 10.8 | 10.8 | 12 | 12 | 5 |
| All | | 181.6 | 182.5 | 118 | 46 | 6 |

## Timber Sale Log Grade x Sort Summary

| Sp | Status | Grade | Sort | Dia | Len | BF Gross | BF Net | Defect % | Tons | MBF Net |
|---|---|---|---|---|---|---|---|---|---|---|
| AF | LIVE | 3 SAW | Domestic | 7.3 | 32 | 2,004 | 1,938 | 3.3 | 1,844.3 | 351.9 |
| AF | LIVE | 4 SAW | Domestic | 5.2 | 24 | 933 | 911 | 2.4 | 881.8 | 165.4 |
| DF | LIVE | 2 SAW | Domestic | 14.8 | 32 | 578 | 540 | 6.5 | 556.4 | 98.0 |
| DF | LIVE | 3 SAW | Domestic | 8.2 | 31 | 211 | 203 | 3.7 | 253.7 | 36.9 |
| DF | LIVE | 4 SAW | Domestic | 6.8 | 15 | 22 | 22 | 0.0 | 33.0 | 4.0 |
| ES | LIVE | 2 SAW | Domestic | 12.9 | 32 | 497 | 497 | 0.0 | 397.2 | 90.2 |
| ES | LIVE | 3 SAW | Domestic | 7.4 | 32 | 1,830 | 1,813 | 0.9 | 1,757.9 | 329.3 |
| ES | LIVE | 4 SAW | Domestic | 5.1 | 24 | 549 | 547 | 0.4 | 583.2 | 99.3 |
| LP | LIVE | 3 SAW | Domestic | 6.6 | 32 | 2,856 | 2,677 | 6.3 | 2,809.6 | 486.1 |
| LP | LIVE | 4 SAW | Domestic | 5.1 | 24 | 1,614 | 1,542 | 4.4 | 1,465.9 | 280.1 |

## Timber Sale Log Sort x Diameter Bin Summary

| Sp | Bin | Status | Sort | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|---|---|---|---|---|---|---|---|---|---|
| AF | 5 - 8 | LIVE | Domestic | 5.8 | 27 | 2,258 | 2.0 | 2,158.7 | 410.0 |
| AF | 9 - 11 | LIVE | Domestic | 9.9 | 32 | 591 | 6.8 | 567.4 | 107.2 |
| DF | 5 - 8 | LIVE | Domestic | 6.7 | 22 | 64 | 0.0 | 87.0 | 11.5 |
| DF | 9 - 11 | LIVE | Domestic | 9.6 | 32 | 162 | 4.6 | 199.7 | 29.4 |
| DF | 12 - 14 | LIVE | Domestic | 13.2 | 32 | 216 | 6.6 | 217.1 | 39.3 |
| DF | 15 - 19 | LIVE | Domestic | 16.4 | 32 | 323 | 6.5 | 339.2 | 58.7 |
| ES | 5 - 8 | LIVE | Domestic | 5.8 | 27 | 1,589 | 1.2 | 1,625.5 | 288.5 |
| ES | 9 - 11 | LIVE | Domestic | 9.8 | 32 | 772 | 0.0 | 715.6 | 140.1 |

| Sp | Bin | Status | Sort | Dia | Len | BF Net | Defect % | Tons | MBF Net |
|---|---|---|---|---|---|---|---|---|---|
| ES | 12 - 14 | LIVE | Domestic | 12.3 | 32 | 362 | 0.0 | 305.2 | 65.8 |
| ES | 15 - 19 | LIVE | Domestic | 15.6 | 32 | 134 | 0.0 | 91.9 | 24.4 |
| LP | 5 - 8 | LIVE | Domestic | 5.6 | 27 | 4,028 | 4.5 | 4,047.6 | 731.4 |
| LP | 9 - 11 | LIVE | Domestic | 9.6 | 32 | 192 | 24.4 | 228.0 | 34.8 |

# Cruise Unit Report
# Q OVERLOOK U1

## Unit Sale Notice Volume (MBF): Q OVERLOOK U1

| | | | | MBF Volume by Grade | | | |
|---|---|---|---|---|---|---|---|
| Sp | DBH | Rings/In | Age | All | 2 Saw | 3 Saw | 4 Saw |
| LP | 9.2 | | | 298 | | 189 | 109 |
| ES | 10.8 | | | 206 | 14 | 160 | 31 |
| AF | 10.1 | | | 68 | | 45 | 23 |
| ALL | 9.9 | | | 572 | 14 | 394 | 164 |

## Unit Cruise Design: Q OVERLOOK U1

| Design | Cruise Acres | FMA Acres | N Plots | N Cruise Plots | N Void Plots |
|---|---|---|---|---|---|
| B1C: VR, 1 BAF (25.15) Measure/Count Plots, Sighting Ht = 4.5 ft | 57.3 | 57.4 | 30 | 8 | 0 |

## Unit Cruise Summary: Q OVERLOOK U1

| Sp | Cruised Trees | All Trees | Trees/Plot | Ring-Count Trees |
|---|---|---|---|---|
| LP | 18 | 65 | 2.2 | 0 |
| ES | 15 | 35 | 1.2 | 0 |
| AF | 4 | 12 | 0.4 | 0 |
| ALL | 37 | 112 | 3.7 | 0 |

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

| Sp | BA (sq ft/acre) | BA CV (%) | BA SE (%) | V-BAR (bf/sq ft) | V-BAR CV (%) | V-BAR SE (%) | Net Vol (bf/acre) | Vol CV (%) | Vol SE (%) |
|---|---|---|---|---|---|---|---|---|---|
| LP | 54.5 | 102.2 | 18.7 | 95.4 | 32.2 | 7.6 | 5,200 | 107.2 | 20.1 |
| ES | 29.3 | 135.2 | 24.7 | 138.2 | 30.5 | 7.9 | 4,054 | 138.6 | 25.9 |
| AF | 10.1 | 155.4 | 28.4 | 128.2 | 21.2 | 10.6 | 1,290 | 156.8 | 30.3 |
| ALL | 93.9 | 52.6 | 9.6 | 112.3 | 36.0 | 5.9 | 10,545 | 63.7 | 11.3 |

## Unit Summary: Q OVERLOOK U1

| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AF | LIVE | CUT | 4 | ALL | 10.1 | 56 | 70 | 1,183 | 1,183 | 0.0 | 16.6 | 9.2 | 2.9 | 67.8 |
| ES | LIVE | CUT | 15 | ALL | 10.8 | 57 | 72 | 3,644 | 3,591 | 1.5 | 40.9 | 26.0 | 7.9 | 205.7 |
| LP | LIVE | CUT | 18 | ALL | 9.2 | 49 | 60 | 5,633 | 5,200 | 7.7 | 118.0 | 54.5 | 18.0 | 298.0 |

| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALL | LIVE | CUT | 37 | ALL | 9.7 | 51 | 63 | 10,460 | 9,974 | 4.7 | 175.5 | 89.7 | 28.8 | 571.5 |
| ALL | ALL | ALL | 37 | ALL | 9.7 | 51 | 63 | 10,460 | 9,974 | 4.7 | 175.5 | 89.7 | 28.8 | 571.5 |

# Cruise Unit Report
# Q OVERLOOK U3

## Unit Sale Notice Volume (MBF): Q OVERLOOK U3

| | | | | MBF Volume by Grade | | |
|---|---|---|---|---|---|---|
| Sp | DBH | Rings/In | Age | All | 3 Saw | 4 Saw |
| LP | 8.4 | | | 172 | 67 | 105 |
| AF | 10.3 | | | 7 | 7 | |
| ALL | 8.4 | | | 179 | 74 | 105 |

## Unit Cruise Design: Q OVERLOOK U3

| Design | Cruise Acres | FMA Acres | N Plots | N Cruise Plots | N Void Plots |
|---|---|---|---|---|---|
| B1C: VR, 1 BAF (25.15) Measure/Count Plots, Sighting Ht = 4.5 ft | 28.9 | 28.9 | 19 | 6 | 1 |

## Unit Cruise Summary: Q OVERLOOK U3

| Sp | Cruised Trees | All Trees | Trees/Plot | Ring-Count Trees |
|---|---|---|---|---|
| ES | | 1 | 0.1 | 0 |
| LP | 18 | 54 | 2.8 | 0 |
| AF | 1 | 4 | 0.2 | 0 |
| ALL | 19 | 59 | 3.1 | 0 |

## Unit Cruise Statistics (Cut + Leave Trees): Q OVERLOOK U3

| Sp | BA (sq ft/acre) | BA CV (%) | BA SE (%) | V-BAR (bf/sq ft) | V-BAR CV (%) | V-BAR SE (%) | Net Vol (bf/acre) | Vol CV (%) | Vol SE (%) |
|---|---|---|---|---|---|---|---|---|---|
| ES | 1.3 | 435.9 | 100.0 | | | | | | |
| LP | 71.5 | 55.3 | 12.7 | 100.1 | 21.8 | 5.1 | 7,156 | 59.5 | 13.7 |
| AF | 5.3 | 435.9 | 100.0 | 86.4 | 0.0 | 0.0 | 458 | 435.9 | 100.0 |
| ALL | 78.1 | 55.7 | 12.8 | 99.2 | 21.6 | 5.0 | 7,745 | 59.7 | 13.7 |

## Unit Summary: Q OVERLOOK U3

| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AF | LIVE | CUT | 1 | ALL | 10.3 | 52 | 64 | 229 | 229 | 0.0 | 4.6 | 2.6 | 0.8 | 6.6 |
| LP | LIVE | CUT | 18 | ALL | 8.4 | 49 | 60 | 6,162 | 5,964 | 3.2 | 154.8 | 59.6 | 20.6 | 172.3 |
| ALL | LIVE | CUT | 19 | ALL | 8.5 | 49 | 60 | 6,390 | 6,192 | 3.1 | 159.4 | 62.2 | 21.4 | 179.0 |
| ALL | ALL | ALL | 19 | ALL | 8.5 | 49 | 60 | 6,390 | 6,192 | 3.1 | 159.4 | 62.2 | 21.4 | 179.0 |

# Cruise Unit Report
# Q OVERLOOK U4

## Unit Sale Notice Volume (MBF): Q OVERLOOK U4

| | | | | MBF Volume by Grade | | |
|---|---|---|---|---|---|---|
| Sp | DBH | Rings/In | Age | All | 3 Saw | 4 Saw |
| LP | 9.5 | | | 168 | 140 | 27 |
| AF | 8.4 | | | 37 | 20 | 16 |
| ES | 8.7 | | | 18 | 7 | 11 |
| ALL | 9.1 | | | 222 | 167 | 55 |

## Unit Cruise Design: Q OVERLOOK U4

| Design | Cruise Acres | FMA Acres | N Plots | N Cruise Plots | N Void Plots |
|---|---|---|---|---|---|
| B1C: VR, 1 BAF (25.15) Measure/Count Plots, Sighting Ht = 4.5 ft | 26.4 | 26.4 | 16 | 6 | 0 |

## Unit Cruise Summary: Q OVERLOOK U4

| Sp | Cruised Trees | All Trees | Trees/Plot | Ring-Count Trees |
|---|---|---|---|---|
| LP | 14 | 40 | 2.5 | 0 |
| ES | 3 | 11 | 0.7 | 0 |
| AF | 6 | 10 | 0.6 | 0 |
| ALL | 23 | 61 | 3.8 | 0 |

## Unit Cruise Statistics (Cut + Leave Trees): Q OVERLOOK U4

| Sp | BA (sq ft/acre) | BA CV (%) | BA SE (%) | V-BAR (bf/sq ft) | V-BAR CV (%) | V-BAR SE (%) | Net Vol (bf/acre) | Vol CV (%) | Vol SE (%) |
|---|---|---|---|---|---|---|---|---|---|
| LP | 62.9 | 71.6 | 17.9 | 106.3 | 17.6 | 4.7 | 6,686 | 73.7 | 18.5 |
| ES | 17.3 | 196.7 | 49.2 | 109.5 | 37.4 | 21.6 | 1,893 | 200.2 | 53.7 |
| AF | 15.7 | 209.6 | 52.4 | 97.7 | 26.4 | 10.8 | 1,536 | 211.3 | 53.5 |
| ALL | 95.9 | 52.6 | 13.2 | 105.5 | 21.8 | 4.6 | 10,116 | 57.0 | 13.9 |

## Unit Summary: Q OVERLOOK U4

| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AF | LIVE | CUT | 6 | ALL | 8.4 | 51 | 63 | 1,486 | 1,383 | 7.0 | 36.8 | 14.1 | 4.9 | 36.5 |
| ES | LIVE | CUT | 3 | ALL | 8.7 | 49 | 60 | 689 | 689 | 0.0 | 15.2 | 6.3 | 2.1 | 18.2 |
| LP | LIVE | CUT | 14 | ALL | 9.5 | 52 | 64 | 6,407 | 6,352 | 0.9 | 121.3 | 59.7 | 19.4 | 167.7 |

| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALL | LIVE | CUT | 23 | ALL | 9.2 | 51 | 63 | 8,582 | 8,423 | 1.9 | 173.3 | 80.2 | 26.4 | 222.4 |
| ALL | ALL | ALL | 23 | ALL | 9.2 | 51 | 63 | 8,582 | 8,423 | 1.9 | 173.3 | 80.2 | 26.4 | 222.4 |

# Cruise Unit Report
# Q OVERLOOK U5

## Unit Sale Notice Volume (MBF): Q OVERLOOK U5

| | | | | MBF Volume by Grade | | | |
|---|---|---|---|---|---|---|---|
| Sp | DBH | Rings/In | Age | All | 2 Saw | 3 Saw | 4 Saw |
| AF | 10.6 | | | 284 | | 206 | 78 |
| DF | 22.9 | | | 121 | 98 | 19 | 4 |
| ES | 10.3 | | | 76 | 37 | 21 | 18 |
| LP | 11.6 | | | 16 | | 11 | 5 |
| ALL | 11.6 | | | 496 | 135 | 256 | 105 |

## Unit Cruise Design: Q OVERLOOK U5

| Design | Cruise Acres | FMA Acres | N Plots | N Cruise Plots | N Void Plots |
|---|---|---|---|---|---|
| B1C: VR, 1 BAF (33.61) Measure/Count Plots, Sighting Ht = 4.5 ft | 25.5 | 25.9 | 17 | 6 | 0 |

## Unit Cruise Summary: Q OVERLOOK U5

| Sp | Cruised Trees | All Trees | Trees/Plot | Ring-Count Trees |
|---|---|---|---|---|
| WL | | 1 | 0.1 | 0 |
| AF | 10 | 40 | 2.4 | 0 |
| DF | 4 | 26 | 1.5 | 0 |
| ES | 3 | 10 | 0.6 | 0 |
| LP | 1 | 2 | 0.1 | 0 |
| ALL | 18 | 79 | 4.6 | 0 |

## Unit Cruise Statistics (Cut + Leave Trees): Q OVERLOOK U5

| Sp | BA (sq ft/acre) | BA CV (%) | BA SE (%) | V-BAR (bf/sq ft) | V-BAR CV (%) | V-BAR SE (%) | Net Vol (bf/acre) | Vol CV (%) | Vol SE (%) |
|---|---|---|---|---|---|---|---|---|---|
| WL | 2.0 | 412.3 | 100.0 | | | | | | |
| AF | 79.1 | 60.0 | 14.6 | 144.2 | 24.1 | 7.6 | 11,404 | 64.7 | 16.4 |
| DF | 51.4 | 103.7 | 25.1 | 184.8 | 15.6 | 7.8 | 9,501 | 104.9 | 26.3 |
| ES | 19.8 | 135.2 | 32.8 | 187.6 | 54.9 | 31.7 | 3,709 | 145.9 | 45.6 |
| LP | 4.0 | 282.3 | 68.5 | 158.1 | 0.0 | 0.0 | 625 | 282.3 | 68.5 |
| ALL | 156.2 | 38.7 | 9.4 | 163.7 | 30.3 | 7.1 | 25,562 | 49.2 | 11.8 |

## Unit Summary: Q OVERLOOK U5

| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AF | LIVE | CUT | 10 | ALL | 10.6 | 59 | 74 | 11,396 | 11,119 | 2.4 | 125.8 | 77.1 | 23.7 | 283.5 |
| DF | LIVE | CUT | 4 | ALL | 22.9 | 84 | 106 | 5,075 | 4,750 | 6.4 | 9.0 | 25.7 | 5.4 | 121.1 |
| ES | LIVE | CUT | 3 | ALL | 10.3 | 56 | 70 | 2,967 | 2,967 | 0.0 | 27.3 | 15.8 | 4.9 | 75.7 |
| LP | LIVE | CUT | 1 | ALL | 11.6 | 70 | 88 | 765 | 625 | 18.3 | 5.4 | 4.0 | 1.2 | 15.9 |
| ALL | LIVE | CUT | 18 | ALL | 11.6 | 60 | 76 | 20,203 | 19,461 | 3.7 | 167.5 | 122.6 | 35.1 | 496.3 |
| ALL | ALL | ALL | 18 | ALL | 11.6 | 60 | 76 | 20,203 | 19,461 | 3.7 | 167.5 | 122.6 | 35.1 | 496.3 |

# Cruise Unit Report
# Q OVERLOOK U6

## Unit Sale Notice Volume (MBF): Q OVERLOOK U6

| | | | | MBF Volume by Grade | | | |
|---|---|---|---|---|---|---|---|
| Sp | DBH | Rings/In | Age | All | 2 Saw | 3 Saw | 4 Saw |
| ES | 11.2 | | | 216 | 39 | 139 | 38 |
| AF | 10.3 | | | 118 | | 73 | 46 |
| LP | 12.5 | | | 80 | | 70 | 11 |
| DF | 14.8 | | | 18 | | 18 | |
| ALL | 11.2 | | | 433 | 39 | 300 | 94 |

## Unit Cruise Design: Q OVERLOOK U6

| Design | Cruise Acres | FMA Acres | N Plots | N Cruise Plots | N Void Plots |
|---|---|---|---|---|---|
| B1C: VR, 1 BAF (33.61) Measure/Count Plots, Sighting Ht = 4.5 ft | 32.7 | 33.2 | 24 | 8 | 0 |

## Unit Cruise Summary: Q OVERLOOK U6

| Sp | Cruised Trees | All Trees | Trees/Plot | Ring-Count Trees |
|---|---|---|---|---|
| ES | 10 | 33 | 1.4 | 0 |
| AF | 6 | 28 | 1.2 | 0 |
| DF | 1 | 19 | 0.8 | 0 |
| LP | 4 | 12 | 0.5 | 0 |
| ALL | 21 | 92 | 3.8 | 0 |

## Unit Cruise Statistics (Cut + Leave Trees): Q OVERLOOK U6

| Sp | BA (sq ft/acre) | BA CV (%) | BA SE (%) | V-BAR (bf/sq ft) | V-BAR CV (%) | V-BAR SE (%) | Net Vol (bf/acre) | Vol CV (%) | Vol SE (%) |
|---|---|---|---|---|---|---|---|---|---|
| ES | 46.2 | 93.0 | 19.0 | 157.4 | 34.1 | 10.8 | 7,274 | 99.1 | 21.8 |
| AF | 39.2 | 125.5 | 25.6 | 112.2 | 40.8 | 16.7 | 4,401 | 132.0 | 30.6 |
| DF | 26.6 | 139.3 | 28.4 | 129.7 | 0.0 | 0.0 | 3,452 | 139.3 | 28.4 |
| LP | 16.8 | 166.8 | 34.1 | 146.3 | 19.2 | 9.6 | 2,459 | 167.9 | 35.4 |
| ALL | 128.8 | 43.3 | 8.8 | 136.5 | 35.4 | 7.7 | 17,585 | 55.9 | 11.7 |

## Unit Summary: Q OVERLOOK U6

| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AF | LIVE | CUT | 6 | ALL | 10.3 | 52 | 65 | 3,800 | 3,615 | 4.9 | 55.7 | 32.2 | 10.0 | 118.2 |
| DF | LIVE | CUT | 1 | ALL | 14.8 | 76 | 95 | 545 | 545 | 0.0 | 3.5 | 4.2 | 1.1 | 17.8 |
| ES | LIVE | CUT | 10 | ALL | 11.2 | 57 | 71 | 6,612 | 6,612 | 0.0 | 61.4 | 42.0 | 12.6 | 216.2 |
| LP | LIVE | CUT | 4 | ALL | 12.5 | 67 | 84 | 2,764 | 2,459 | 11.0 | 19.7 | 16.8 | 4.8 | 80.4 |
| ALL | LIVE | CUT | 21 | ALL | 11.2 | 57 | 71 | 13,722 | 13,232 | 3.6 | 140.3 | 95.2 | 28.4 | 432.7 |
| ALL | ALL | ALL | 21 | ALL | 11.2 | 57 | 71 | 13,722 | 13,232 | 3.6 | 140.3 | 95.2 | 28.4 | 432.7 |

# Cruise Unit Report
# Q OVERLOOK ROW

## Unit Sale Notice Volume (MBF): Q OVERLOOK ROW

| | | | | MBF Volume by Grade | | |
|---|---|---|---|---|---|---|
| Sp | DBH | Rings/In | Age | All | 3 Saw | 4 Saw |
| LP | 7.9 | | | 32 | 9 | 23 |
| AF | 8.9 | | | 5 | 3 | 2 |
| ES | 9.2 | | | 3 | 2 | 1 |
| ALL | 8.1 | | | 40 | 14 | 26 |

## Unit Cruise Design: Q OVERLOOK ROW

| Design | Cruise Acres | FMA Acres | N Plots | N Cruise Plots | N Void Plots |
|---|---|---|---|---|---|
| B1: VR, 1 BAF (25.15) Measure All, Sighting Ht = 4.5 ft | 10.8 | 10.8 | 12 | 12 | 5 |

## Unit Cruise Summary: Q OVERLOOK ROW

| Sp | Cruised Trees | All Trees | Trees/Plot | Ring-Count Trees |
|---|---|---|---|---|
| LP | 15 | 15 | 1.3 | 0 |
| AF | 2 | 2 | 0.2 | 0 |
| ES | 2 | 2 | 0.2 | 0 |
| ALL | 19 | 19 | 1.6 | 0 |

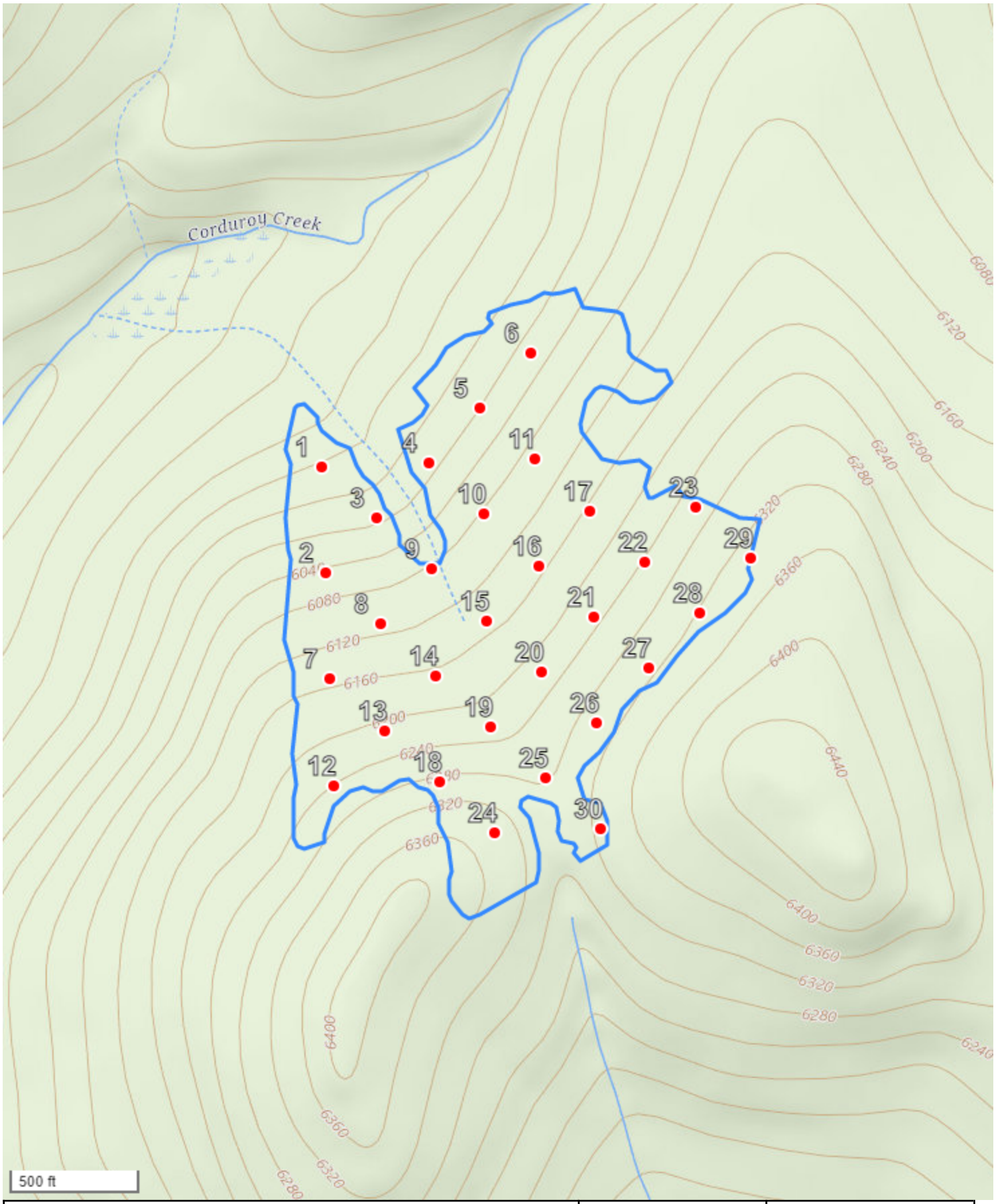
## Unit Cruise Statistics (Cut + Leave Trees): Q OVERLOOK ROW

| Sp | BA (sq ft/acre) | BA CV (%) | BA SE (%) | V-BAR (bf/sq ft) | V-BAR CV (%) | V-BAR SE (%) | Net Vol (bf/acre) | Vol CV (%) | Vol SE (%) |
|---|---|---|---|---|---|---|---|---|---|
| LP | 31.4 | 113.8 | 32.8 | 93.8 | 14.8 | 3.8 | 2,949 | 114.7 | 33.1 |
| AF | 4.2 | 233.5 | 67.4 | 102.6 | 11.2 | 7.9 | 430 | 233.8 | 67.9 |
| ES | 4.2 | 346.4 | 100.0 | 67.2 | 48.7 | 34.4 | 282 | 349.8 | 105.8 |
| ALL | 39.8 | 109.3 | 31.5 | 91.9 | 18.8 | 4.3 | 3,660 | 110.9 | 31.8 |

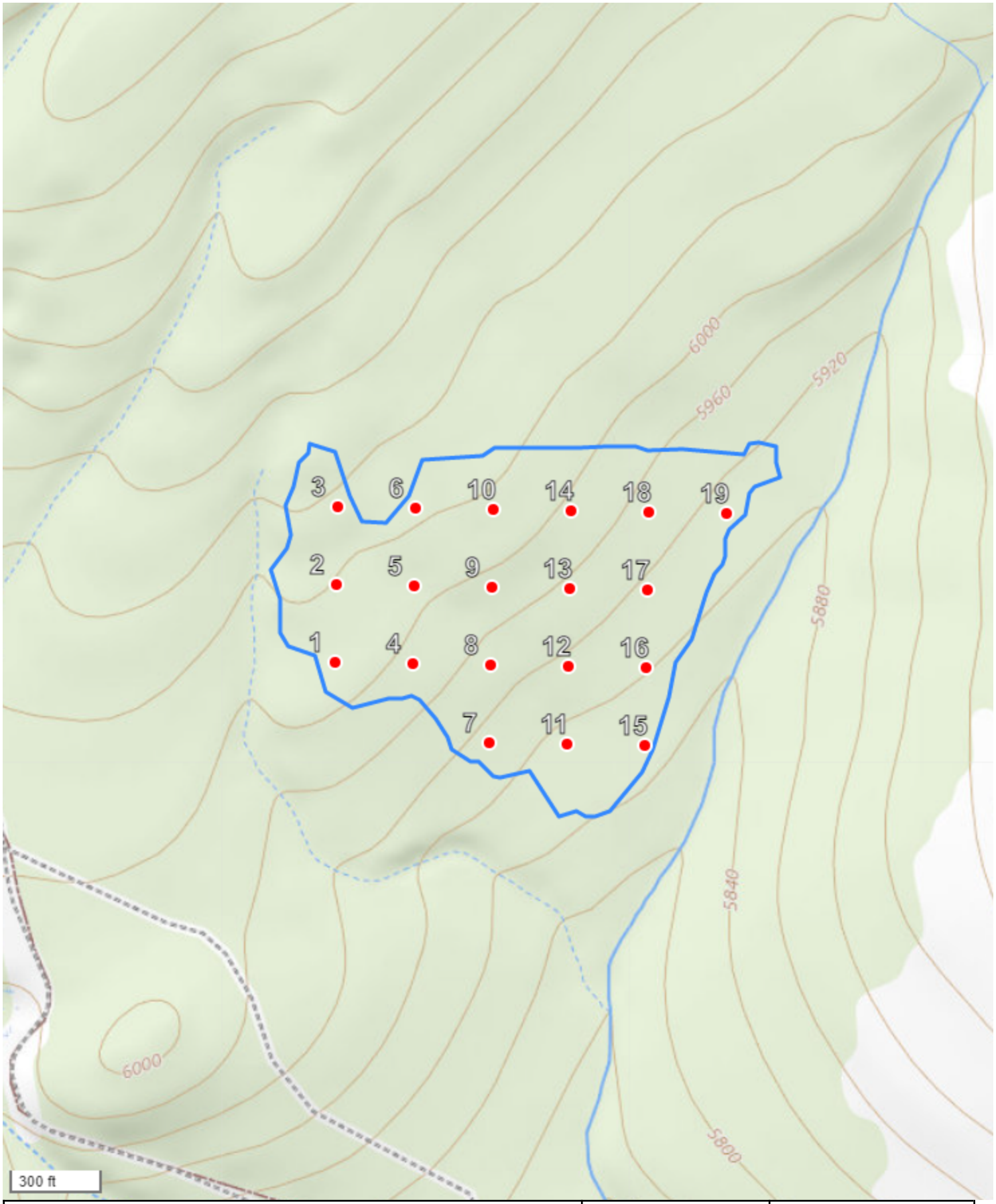
## Unit Summary: Q OVERLOOK ROW

| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AF | LIVE | CUT | 2 | ALL | 8.9 | 48 | 59 | 450 | 430 | 4.5 | 9.7 | 4.2 | 1.4 | 4.6 |
| ES | LIVE | CUT | 2 | ALL | 9.2 | 55 | 68 | 319 | 282 | 11.6 | 9.1 | 4.2 | 1.4 | 3.0 |
| LP | LIVE | CUT | 15 | ALL | 7.9 | 46 | 55 | 2,949 | 2,949 | 0.0 | 92.4 | 31.4 | 11.2 | 31.8 |

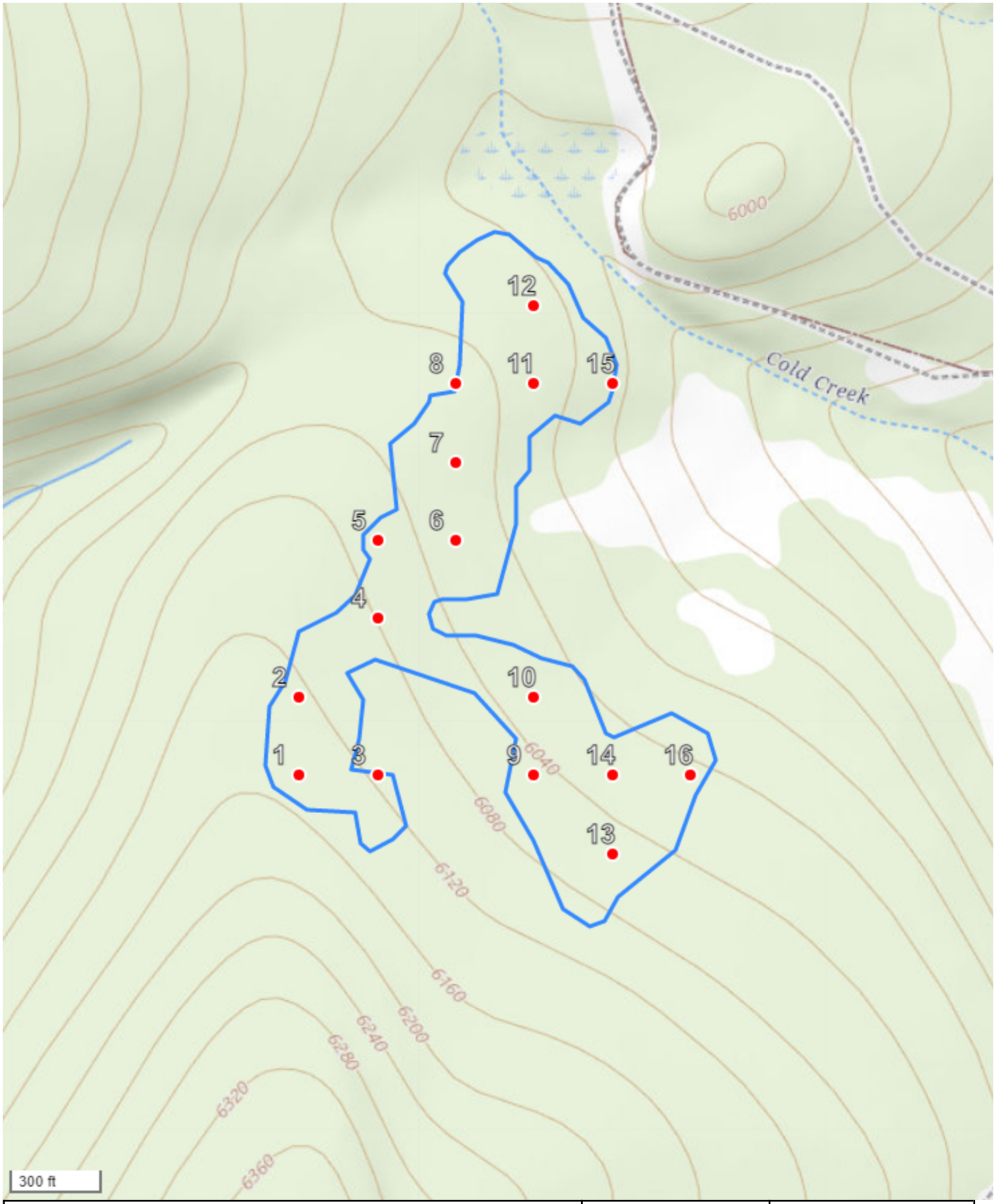
| Sp | Status | Rx | N | D | DBH | BL | THT | BF Gross | BF Net | Defect % | TPA | BA | RD | MBF Net |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALL | LIVE | CUT | 19 | ALL | 8.1 | 47 | 56 | 3,718 | 3,660 | 1.5 | 111.2 | 39.8 | 14.0 | 39.5 |
| ALL | ALL | ALL | 19 | ALL | 8.1 | 47 | 56 | 3,718 | 3,660 | 1.5 | 111.2 | 39.8 | 14.0 | 39.5 |



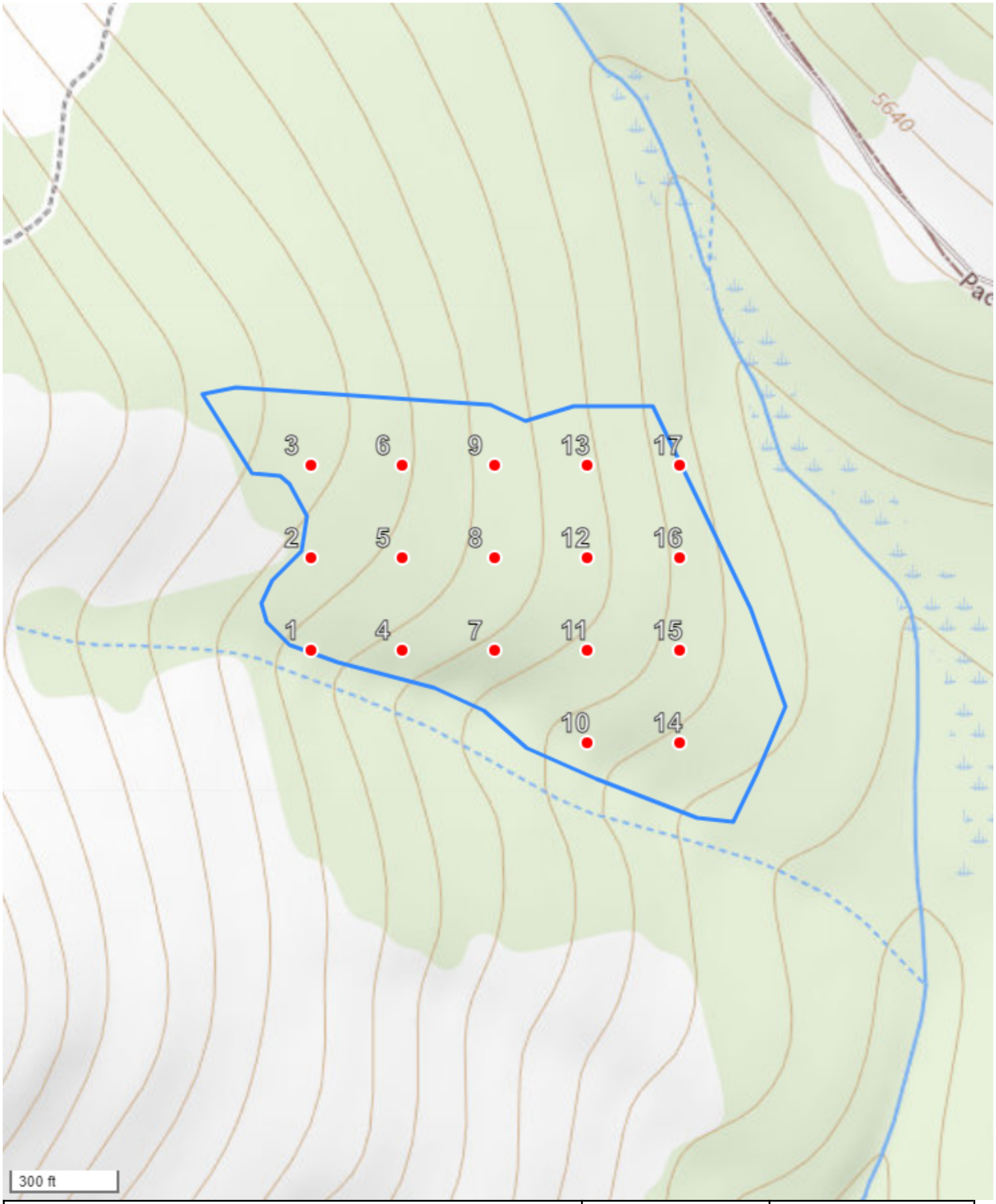

| | | |
|---|---|---|
| **FMA Name:** Q OVERLOOK U1 | **N Plots:** 30 | **Plot Spacing:** 288.1 ft |
| **Grid Name:** Q OVERLOOK U1 - 2 | **Acres Treated:** 57.3 | **Main Azimuth:** 43 deg |



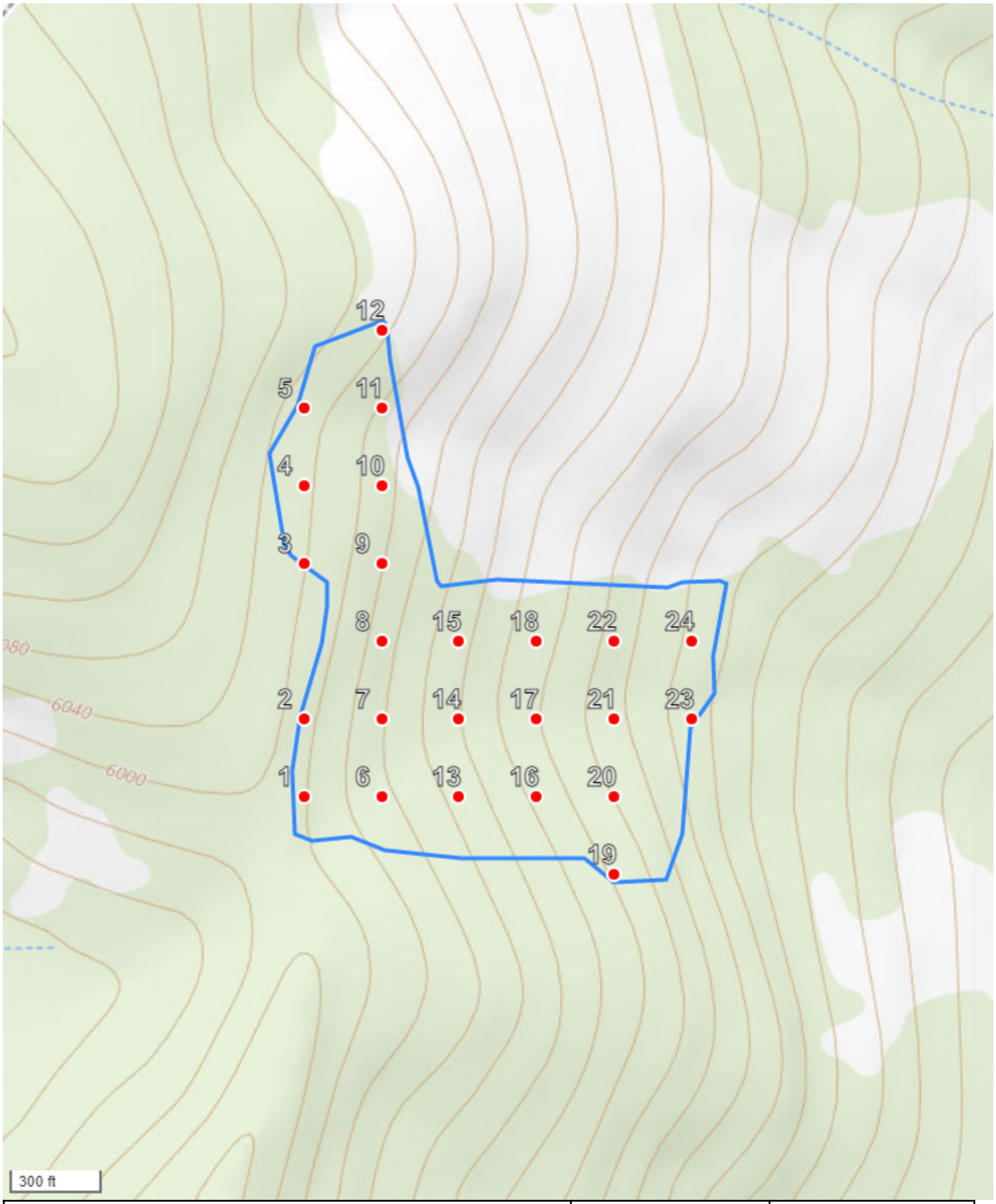

| | | |
|---|---|---|
| **FMA Name:** Q OVERLOOK U3 | **N Plots:** 19 | **Plot Spacing:** 250.3 ft |
| **Grid Name:** Q OVERLOOK U3 - 1 | **Acres Treated:** 28.9 | **Main Azimuth:** 1 deg |



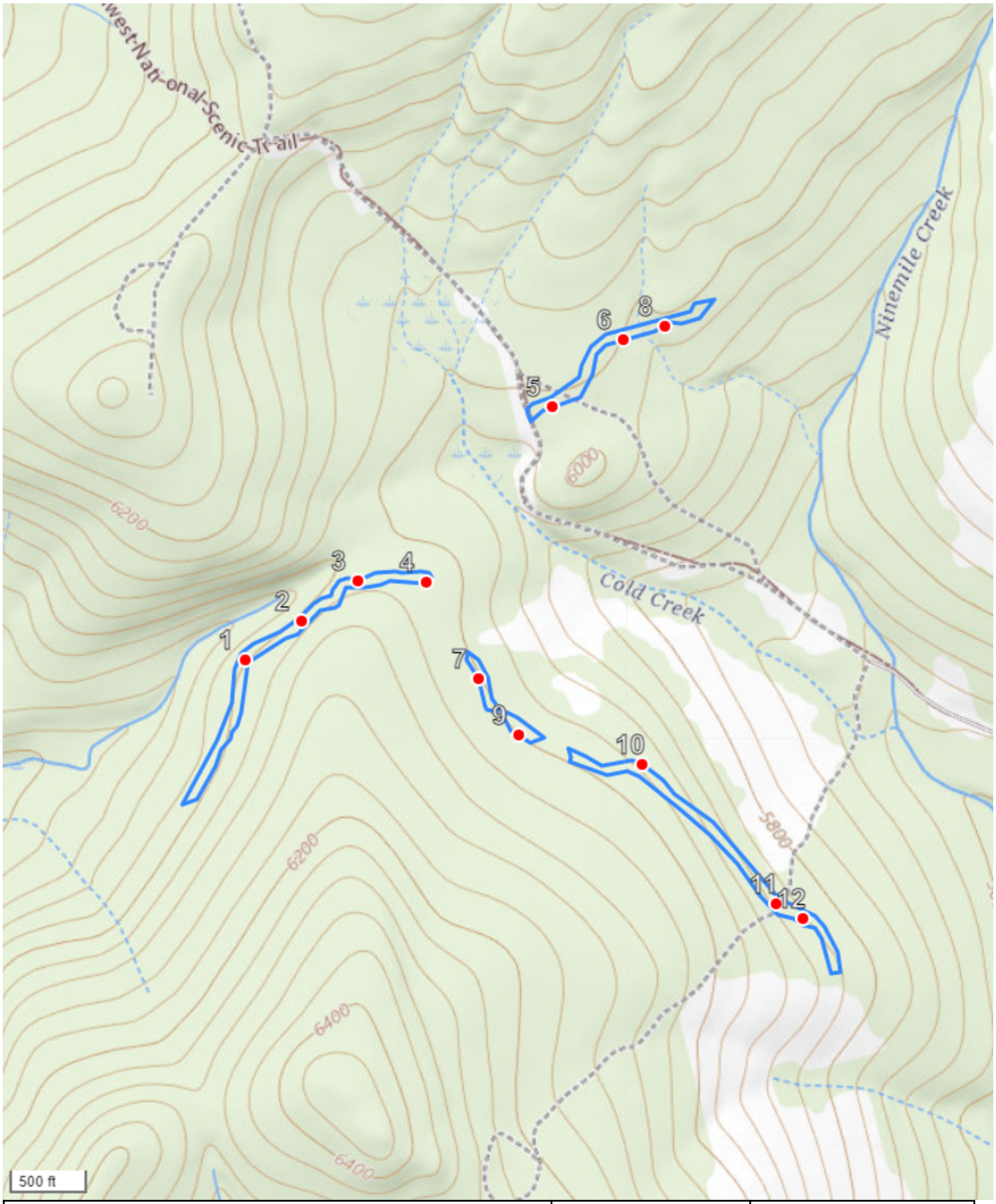

| | | |
|---|---|---|
| **FMA Name:** Q OVERLOOK U4 | **N Plots:** 16 | **Plot Spacing:** 252.3 ft |
| **Grid Name:** Q OVERLOOK U4 - 1 | **Acres Treated:** 26.4 | **Main Azimuth:** 0 deg |




| | | |
|---|---|---|
| **FMA Name:** Q OVERLOOK U5 | **N Plots:** 17 | **Plot Spacing:** 250.2 ft |
| **Grid Name:** Q OVERLOOK U5 - 1 | **Acres Treated:** 25.9 | **Main Azimuth:** 0 deg |




| | | |
|---|---|---|
| **FMA Name:** Q OVERLOOK U6 | **N Plots:** 24 | **Plot Spacing:** 250.3 ft |
| **Grid Name:** Q OVERLOOK U6 - 1 | **Acres Treated:** 33.17 | **Main Azimuth:** 0 deg |




| | | |
|---|---|---|
| **FMA Name:** Q OVERLOOK ROW | **N Plots:** 12 | **Plot Spacing:** 197.8 ft |
| **Grid Name:** Q OVERLOOK ROW - 1 | **Acres Treated:** 10.81 | **Main Azimuth:** 27.7 deg |

Forest Practices Application/Notification

# Notice of Decision

**FPA/N No:** 30226001

**Effective Date:** 10/19/2022

**Expiration Date:** 10/19/2025

**Shut Down Zone:** 678 W

**EARR Tax Credit:** ☒ Eligible ☐ Non-eligible

**Reference:** 25, 26, 35, 36-40-24
Q Overlook

## 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**

Approved with no conditions
No timing limitations apply

**Issued By:** Erica Christie-Jones

**Region:** Northeast

**Title:** Forest Practices Forester

**Date:** 10/19/2022

**Copies to:** Landowner, ☐ Timber Owner ☐ Operator

**Issued in person:** ☒ Landowner ☐ Timber Owner ☐ Operator

**By:** _____

**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:**

| Pollution Control Hearings Board | Office of the Attorney General Natural Resources Division | Department Of Natural Resources Northeast Region |
|---|---|---|
| Physical Address<br>1111 Israel Road, SW<br>Suite 301<br>Tumwater, WA 98501<br><br>Mailing address<br>Post Office Box 40903<br>Olympia, WA 98504-0903 | Physical Address<br>1125 Washington Street, SE<br>Olympia, WA 98504<br><br>Mailing Address<br>Post Office Box 40100<br>Olympia, WA 98504-0100 | Physical and Mailing Address<br>225 S Silke Rd<br>Colville, WA 99114 |

Information regarding the Pollution Control Hearings Board can be found at: 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/review-applications-fpars/forest-practices-forms-and. 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 10/19/2022, I placed in the United States mail at **Colville**, WA, postage paid, a true and accurate copy of this document. Notice of Decision FPA # 30226001

Ragene Christensen
*(Printed Name)*

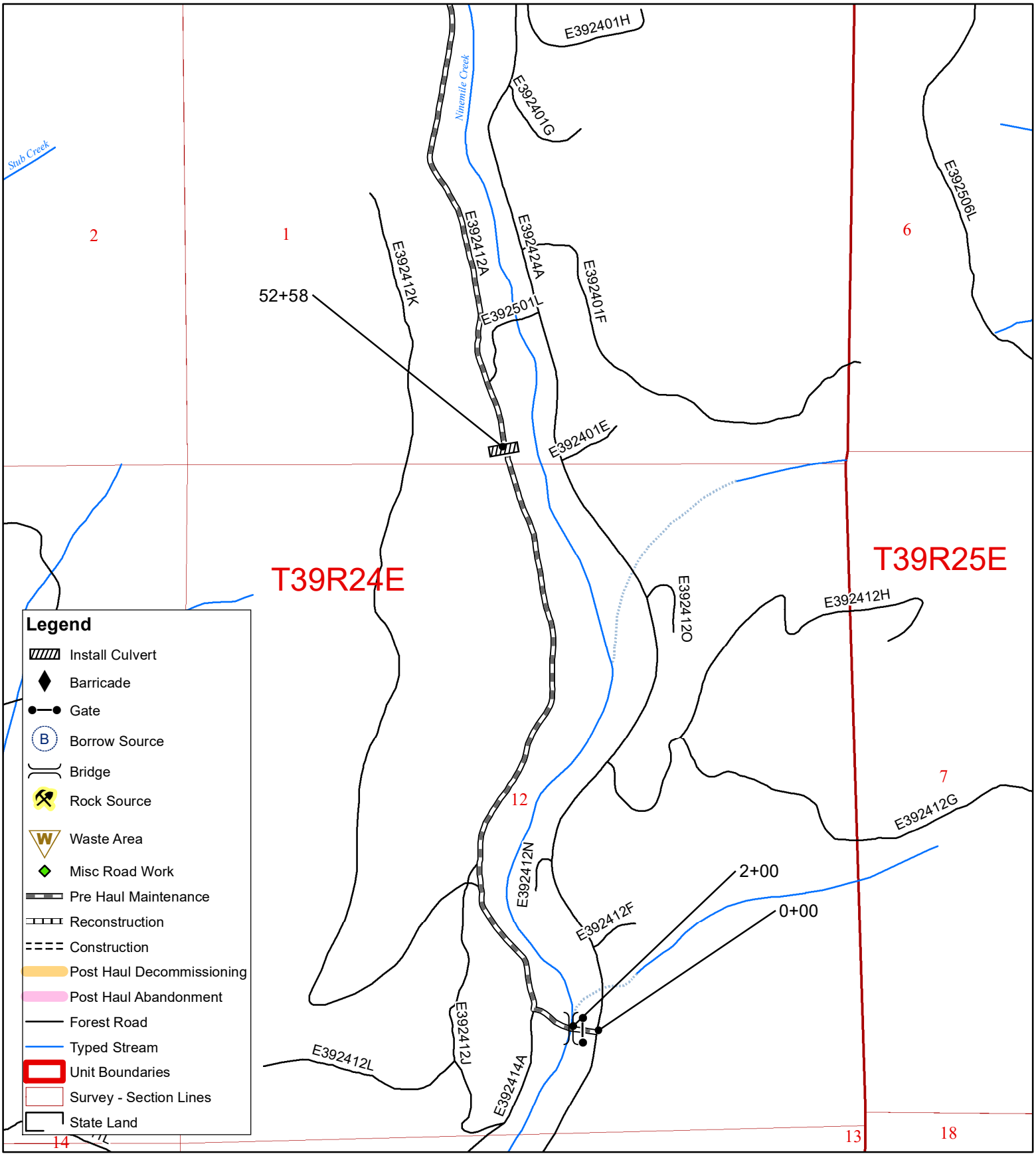
Ragene Christensen
*(Signature)*

# Washington State Department of Natural Resources

Sale Name: Overlook
Agreement No.: 30-103842

Road Plan Map


Region: Northeast
County: Okanogan




0 500 1,000 2,000 Feet

1 inch = 1,000 feet

Drawn by M. Karnstein

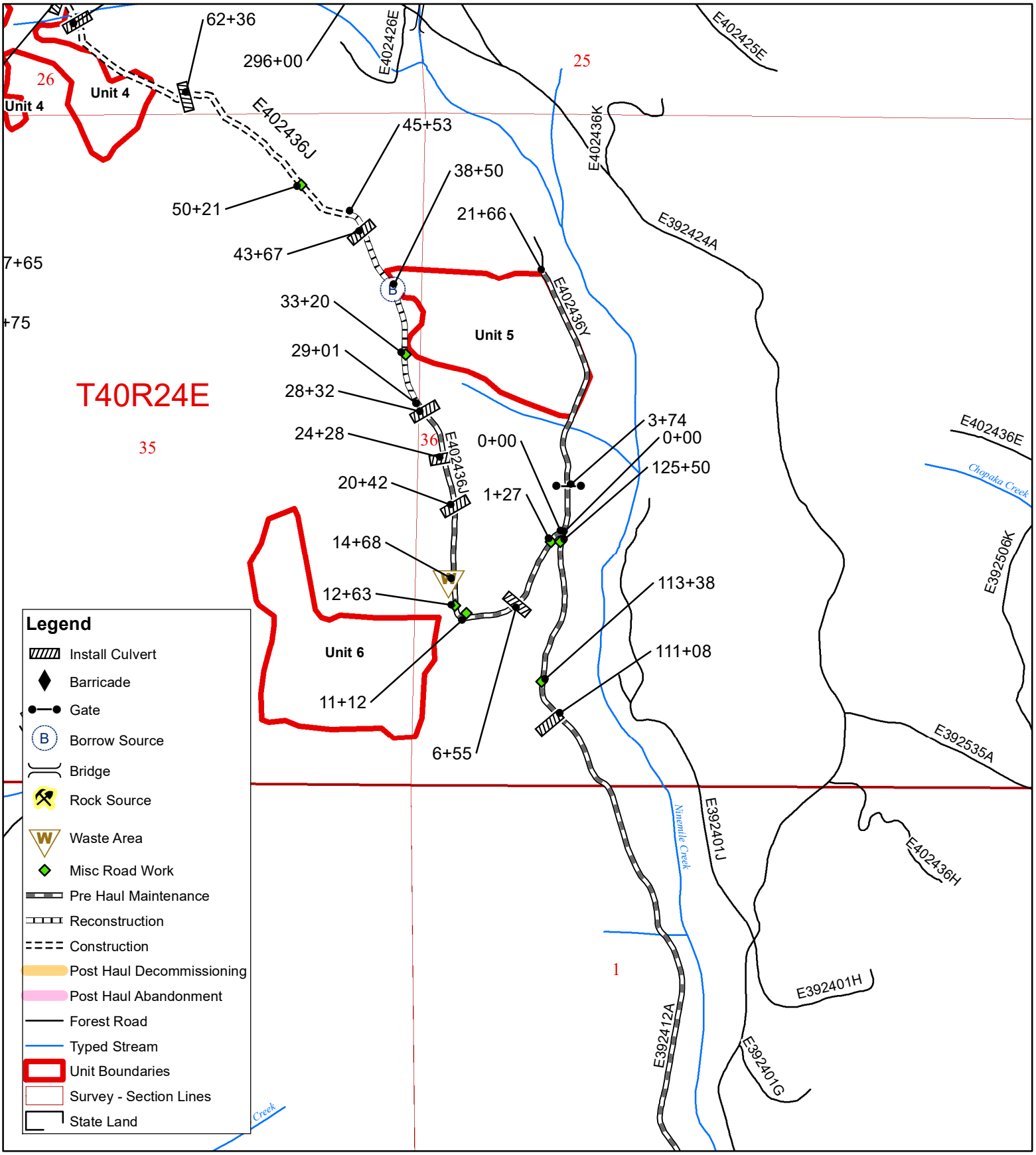
N

# Washington State Department of Natural Resources

Sale Name: Overlook
Agreement No.: 30-103842

Road Plan Map
Page 2 of 4

Region: Northeast
County: Okanogan




0 500 1,000 2,000 Feet

1 inch = 1,000 feet

Drawn by M. Karnstein

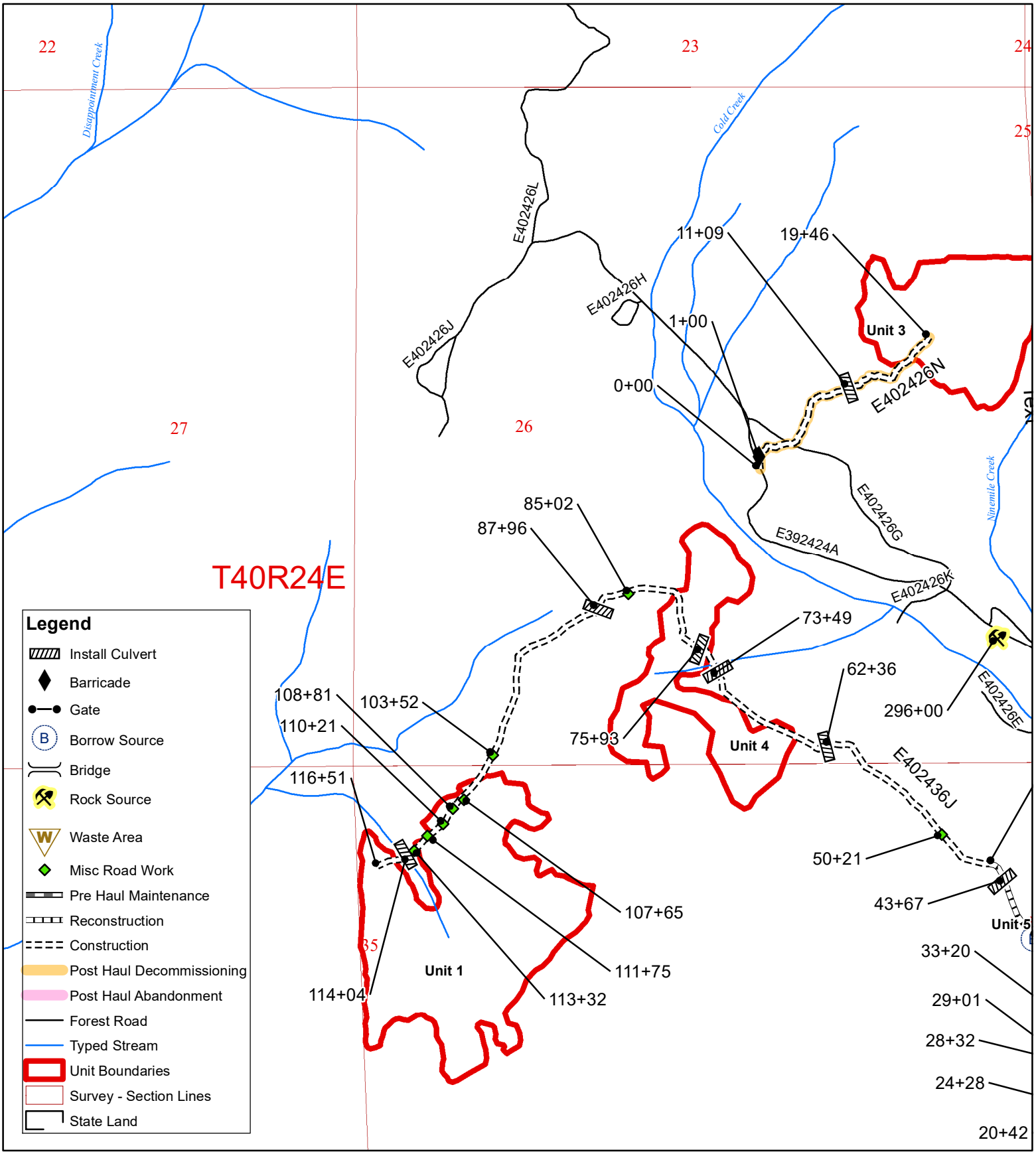
N

# Washington State Department of Natural Resources

Sale Name: Overlook
Agreement No.: 30-103842

Road Plan Map
Page 3 of 4

Region: Northeast
County: Okanogan




0 495 990 1,980 Feet

1 inch = 1,000 feet

Drawn by M. Karnstein

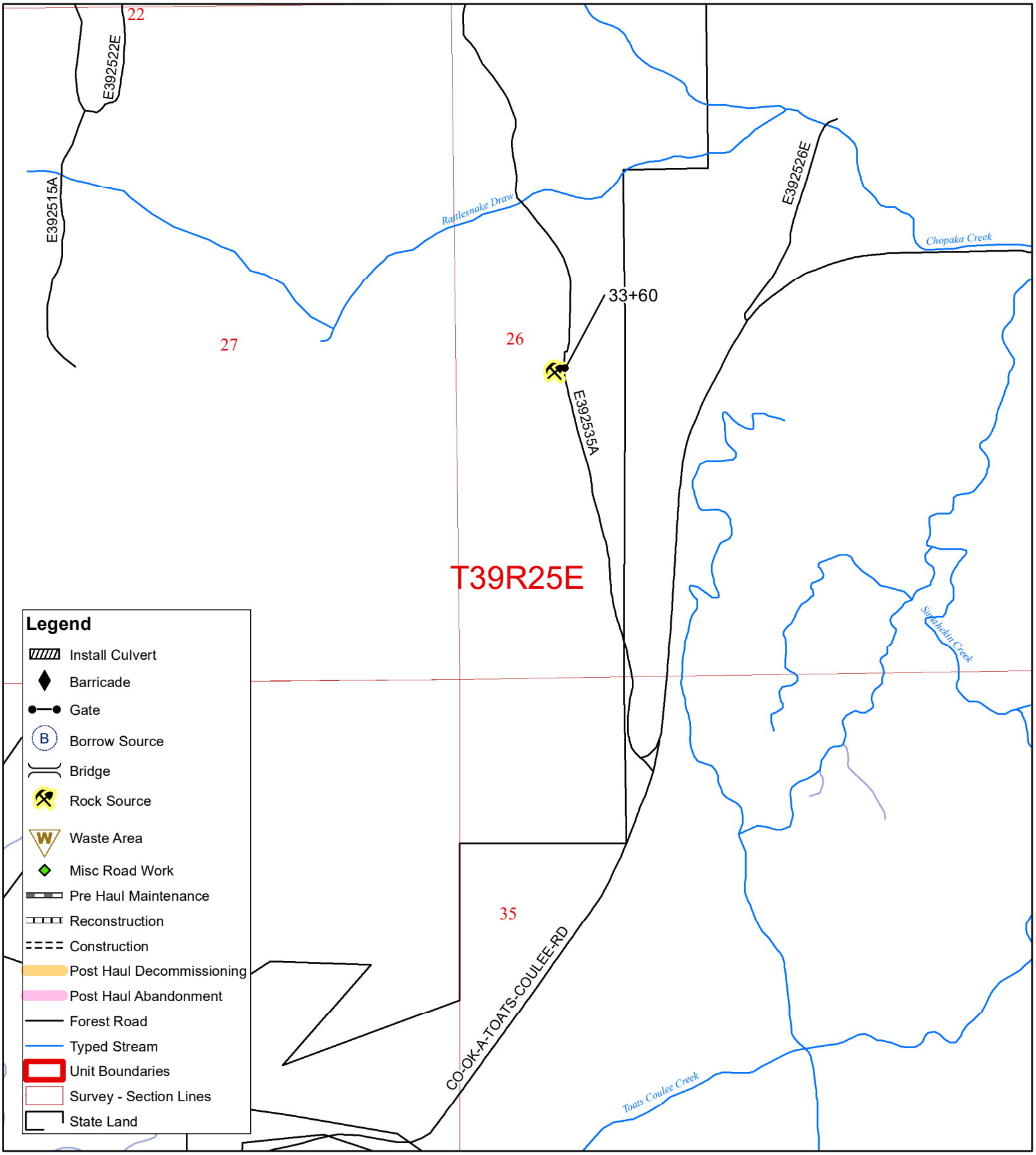
N

# Washington State Department of Natural Resources

Sale Name: Overlook
Agreement No.: 30-103842

Road Plan Map


Region: Northeast
County: Okanogan




0 500 1,000 2,000 Feet

1 inch = 1,000 feet

Drawn by M. Karnstein

N

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

OVERLOOK TIMBER SALE ROAD PLAN
OKANOGAN COUNTY
HIGHLANDS DISTRICT
NORTHEAST REGION

AGREEMENT NO.: 30-103842 STAFF ENGINEER: MACKENZIE KARNSTEIN

DATE: 10-03-2022 DRAWN & COMPILED BY: MACKENZIE KARNSTEIN

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.

| Road | Stations | Type |
|---|---|---|
| E392412A | 126.89 | Pre-Haul Maintenance |
| E402426N | 19.46 | Construction |
| E402426N | 19.46 | Decommissioning |
| E402436J | 29.01 | Pre-Haul Maintenance |
| E402436J | 16.52 | Reconstruction |
| E402436J | 70.98 | Construction |
| E402436Y | 21.66 | Pre-Haul Maintenance |

**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. See sections 3, 4, and 5.

| Road | Stations | Requirements |
|---|---|---|
| E402426N | 0+00 to 19+46 | See sections 3, 4, and 5. |
| E402436J | 45+53 to 116+51 | See sections 3, 4, and 5. |

**0-5 RECONSTRUCTION**

This project includes, but is not limited to the following reconstruction requirements:

| Road | Stations | Requirements |
|---|---|---|
| E402436J | 29+01 to 45+53 | Blade, shape, install culvert, apply rock install sediment trap, realign existing vertical curve, brushing. Waterbar after use. |

Reconstruction requirements are further described in sections 3, 4, and 5.

**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.

| Road | Stations | Requirements |
|---|---|---|
| E392412A | 0+00 to 126+89 | Blade, shape, install culverts, apply rock, realign existing horizontal curve, clean culvert(s) and ditches,brushing, grubbing. Waterbar after use. |
| E402436J | 0+00 to 29+01 | Blade, shape, install culverts, apply rock, widen existing horizontal curve, clean culvert(s) and ditches, brushing, grubbing. Waterbar after use. |
| E402436Y | 0+00 to 21+66 | Blade, shape, clean culvert(s), brushing, grubbing. Waterbar after use. |

Pre-haul maintenance requirements are further described in sections 3, 4, and 5.

**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.

## 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 must be submitted in writing to the Contract Administrator for consideration. Before work begins, Purchaser shall obtain approval from the State for the submitted plan.

**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**

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

**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.

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

**1-6 ORDER OF PRECEDENCE**

Any conflict or inconsistency in the road plan 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.
6. Standard Details.
7. Road Plan maps.

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**

Purchaser shall notify the Contract Administrator a minimum of 5 calendar days before the closure of any road. Construction may not close any road for more than 21 calendar days.

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

Purchaser shall repair or replace all materials, roadway infrastructure, and road components damaged during road work or operation activities. The Contract Administrator will direct repairs and replacements. Repairs to structural materials must be made in accordance with the manufacturer's recommendation, and may 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.

**1-10 WSDOT STANDARD SPECIFICATION REFERENCE**

References in this road plan to "WSDOT Standard Specifications" mean the Washington State Department of Transportation's Standard Specifications for Road, Bridge, and Municipal Construction 2012 (M41-10).

**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, construction stakes, and/or orange or red paint on trees.

**1-18 REFERENCE POINT DAMAGE**

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

**1-20 COMPLETE BY DATE**

Purchaser shall complete road work, except decommissioning and abandonment, before the start of timber haul.

**1-21 HAUL APPROVAL**

Purchaser shall not use roads under this road plan for any hauling other than timber cut on the right-of-way, without written approval from the Contract Administrator.

**1-22 WORK NOTIFICATIONS**

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

**1-23 ROAD WORK PHASE APPROVAL**

Purchaser shall obtain written approval from the Contract Administrator upon completion of each of the following phases of road work:

- Subgrade construction
- Drainage installation

**1-25 ACTIVITY TIMING RESTRICTION**

The operation of road construction equipment is not allowed on weekends or state recognized holidays, unless authorized in writing by the Contract Administrator.

The specified activities are not allowed during the listed closure period(s) unless authorized in writing by the Contract Administrator.

| Road | Activity | Closure Period |
|---|---|---|
| All roads | Construction and/or transporation of heavy equipment | March 15 to June 1 |

**1-26 OPERATING DURING CLOSURE PERIOD**

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTION, Purchaser shall provide a maintenance plan to include further protection of state resources. Purchaser shall obtain written approval from the Contract Administrator for the maintenance plan, and shall put preventative measures in place before operating during the closure period. Purchaser is 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 will suspend road work or hauling 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 6 inches on native surface roads.
- Surface or base stability problems persist.
- Weather is such that satisfactory results cannot be obtained in an area of operations.
- When, 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. Before and during any suspension, Purchaser shall protect the work from damage or deterioration.

**1-32 BRIDGE SURFACE RESTRICTION**

The use of metal tracked equipment is not allowed on bridge surfaces at any time. If Purchaser must run equipment on bridge surfaces, then rubber tired equipment or other methods, approved in writing by Contract Administrator, must be used.

If tracked equipment is used on bridge surfaces, Purchaser shall immediately cease all road construction and hauling operations. Purchaser shall remove any dirt, rock, or other material tracked or spilled on the bridge surface(s) and have surface(s) evaluated by the Region Engineer or their designee for any damage caused by transporting equipment. Any damage to the surface(s) will be repaired, at the Purchaser's expense, as directed by the Contract Administrator.

After repairs, Purchaser shall have bridges load rated by a Registered Professional Engineer licensed in the State of Washington. All load rating reports, calculations, or drawings must be stamped by the licensed engineer and submitted to the Contract Administrator prior to allowing any work to continue. All damage to the bridge from transporting equipment will be repaired at the Purchaser's expense.

**1-33 SNOW PLOWING RESTRICTION**

Snowplowing will be allowed after the execution of a written SNOW PLOWING AGREEMENT to be prepared by the purchaser. The plan is subject to written approval by the Contract Administrator before any snow plowing operations. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

## SECTION 2 – MAINTENANCE

**2-1 GENERAL ROAD MAINTENANCE**

Purchaser shall maintain all roads used under this contract 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 road(s) in a condition that will allow the passage of light administrative vehicles.

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

Purchaser shall use a grader to shape the existing surface before timber haul. Purchaser shall accomplish all grading using a motor grader with a minimum of 175 horsepower.

**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 ditches, headwalls, and catchbasins. Work shall be completed before haul of timber.

**2-9 REMOVAL OF ROAD SURFACE ROCKS**

On crushed rock and native surface roads, Purchaser shall remove rocks greater than 2" in height from the road prism to ensure drivability of the surface. Rocks may be removed manually or through the use of motorized equipment to grind, drill, or fully extract rocks. Road surface must be filled with crushed rock or native material to match the existing road surface. Purchaser shall bring the road grade back to the original level, subject to the approval of the Contract Administrator.

## SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

**3-1 BRUSHING**

Purchaser shall cut vegetative material up to 3 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by manual or mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation may not be disturbed unless directed by the Contract Administrator. Purchaser shall remove brushing debris from ditchlines, and culvert inlets and outlets.

**3-2 BRUSHING RESTRICTION**

Pulling, digging, pushing over, and other non-cutting methods used for vegetation removal may not be used for brushing. Purchaser shall 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 may not be used for brushing unless otherwise approved in writing by the Contract Administrator.

**3-5 CLEARING**

Purchaser shall fall 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 must be completed before starting excavation and embankment.

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

Purchaser shall deck all right-of-way timber. Decks must be parallel to the road centerline and placed within the cleared right-of-way. Decks must 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**

Purchaser shall not deck right-of-way timber 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**

Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET. Purchaser shall also remove stumps with undercut roots outside the grubbing limits. Purchaser shall remove stumps using a hydraulic mounted excavator unless authorized in writing by the Contract Administrator. Stumps over 22 inches diameter must be split. Stumps over 40 inches must be quartered. Grubbing must be completed before starting excavation and embankment.

**3-12 STUMP PLACEMENT**

Purchaser shall place grubbed stumps 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.

| Road | Waste Area Location |
|---|---|
| E402436J | 14+68 |

**3-20 ORGANIC DEBRIS DEFINITION**

Organic debris is defined as all vegetative material not eligible for removal by Contract Clause 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**

Purchaser shall remove all organic debris from the road surface, ditchlines, and culvert inlets and outlets. Purchaser shall complete all disposal of organic debris, before approval of final maintenance.

**3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS**

Waste areas for organic debris are located as listed below and within the cleared right-of-way, or in natural openings, as designated by the Contract Administrator.

| Road | Disposal Location |
|---|---|
| E402436J | 14+68 |

**3-23 PROHIBITED DISPOSAL AREAS**

Purchaser shall not place organic debris in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland.
- On road subgrades, or excavation and embankment slopes.
- On slopes greater than 40%.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush can 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.

**3-25 SCATTERING ORGANIC DEBRIS**

Purchaser shall scatter organic debris in natural openingsunless otherwise detailed in this road plan. Where natural openings are unavailable or restrictive, alternate debris disposal methods are subject to the written approval of the Contract Administrator.

**3-30 EXCLUSION OF DOZER BLADES**

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

**3-31 PILING**

Organic debris shall be piled. Debris piles shall be made to be burnable, clean, tight, and free of rock or soil. Debris piles shall be made no closer than 20 feet from standing timber and no higher than 10 feet in areas specified in Clause 3-22DESIGNATED WASTE AREA FOR ORGANIC DEBRIS, within the cleared right-of-way, or in natural openings, as designated by the Contract Administrator. Piles must be free of rock and soil.

**3-32 END HAULING ORGANIC DEBRIS**

On slopes greater than 45%, Purchaser shall end haul or push organic debris to the designated waste areas specified in Clause 3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS or to a waste area designated by the Contract Administrator.

## SECTION 4 – EXCAVATION

### 4-1 EXCAVATOR CONSTRUCTION

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 may not extend more than 1000 feet beyond completed construction unless approved in writing by the Contract Administrator. In addition, the following actions must be taken as pioneering progresses:

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

### 4-3 ROAD GRADE AND ALIGNMENT STANDARDS

Purchaser shall follow these standards for road grade and alignment except as designed:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 12 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 8% in 100 feet.
- Maximum grade change for crest vertical curves is 8% 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. Purchaser shall follow these standards for switchbacks except where designed in this road plan:

- Maximum adverse grades for switchbacks is 10%.
- Maximum favorable grades for switchbacks is 12%.
- Maximum transition grades entering and leaving switchbacks is a 5% grade change.
- Transition grades required to meet switchback grade limitations must 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, unless construction staked or designed:

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

**4-6 EMBANKMENT SLOPE RATIO**

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

| Material Type | Embankment Slope Ratio | Embankment Slope Percent |
|---|---|---|
| Sandy Soils | 2:1 | 50 |
| Common Earth and Rounded Gravel | 1½:1 | 67 |
| Angular Rock | 1¼:1 | 80 |

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

Purchaser shall construct excavation and embankment slopes to a uniform line and left rough for easier revegetation.

**4-8 CURVE WIDENING**

The minimum widening placed on the inside of curves is:

- 6 feet for curves of 50 to 79 feet radius.
- 4 feet for curves of 80 to 100 feet radius.

**4-9 EMBANKMENT WIDENING**

The minimum embankment widening is:

- 2 feet for embankment heights at centerline of 2 to 6 feet.
- 4 feet for embankment heights at centerline of greater than 6 feet.

Purchaser shall apply embankment widening equally to both sides of the road to achieve the required width.

**4-10 WIDEN THE EXISTING SUBGRADE**

On the following road(s), Purchaser shall widen the subgrade and fill slopes to the dimensions shown on the TYPICAL SECTION SHEET. If necessary, Purchaser shall

reconstruct excavation slopes to provide sufficient width for the road surface and any ditches.

| Road | Stations* | Curve Widening (ft) | Notes |
|---|---|---|---|
| E392412A | 125+50 to 126+89 | 10 | Curve ends on E402436J |
| E402436J | 0+00 to 1+27 | 10 | Curve begins on E392412A |
| E402436J | 11+12 to 12+63 | 10 | |

*Stationing includes 60 foot taper at the beginning and 60 foot taper at the end of curve widening.

**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.

| Road | Station |
|---|---|
| E402426N | 0+00 to 0+50 |

**4-20 SUBGRADE DIMENSIONS FOR INTERSECTIONS**

On the following road(s), Purchaser shall construct or reconstruct the subgrade to the dimensions shown on the INTERSECTION DETAIL.

| Road | Stations |
|---|---|
| E402426N | 0+00 to 0+50 |

**4-21 TURNOUTS**

Purchaser shall construct turnouts intervisible with a maximum distance of 1,000 feet between turnouts unless otherwise shown on drawings. Locations may be adjusted to fit the final subgrade alignment and sight distances. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

**4-22 TURNAROUNDS**

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

**4-25 DITCH CONSTRUCTION AND RECONSTRUCTION**

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 must be constructed concurrently with construction of the subgrade.

**4-27 DITCH WORK – MATERIAL USE PROHIBITED**

Purchaser shall not pull ditch material across the rocked roads or mix in with the road surface. Excavated material must be scattered outside the grubbing limits where side slopes are less than 45%. On side slopes greater than 45%, excavated material must be end hauled to the location specified in Clause 4-37 WASTE AREA LOCATION.

**4-28 DITCH DRAINAGE**

Ditches must drain to cross-drain culverts or ditchouts. Ditches shall not drain into streams or stream culverts.

**4-29 DITCHOUTS**

The Purchaser shall construct ditch outs as identified on the CULVERT LIST, 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 prevents sediment delivery into streams. Ditch outs 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**

Purchaser may sidecast waste material on side slopes up to 45% if the waste material is compacted and free of organic debris. On side slopes greater than 45%, all waste material must be end hauled or pushed to the designated embankment sites and waste areas identified in Clause 4-37 WASTE AREA LOCATION.

**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 at the discretion of the Contract Administrator.

| Road | Waste Area Location |
|---|---|
| E402436J | 14+68 |

**4-38 PROHIBITED WASTE DISPOSAL AREAS**

Purchaser shall not deposit waste material 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.
- Within a wetland management zone.
- On side slopes steeper than 45%.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Within the operational area for cable landings.
- Against standing timber.
- Outside the clearing limits.

**4-46 COMMON BORROW**

Common borrow consists of soil, and/or aggregate that is non-plastic and contains no more than 5% clay, organic debris, or trash by volume. The material is considered non-plastic if the fines in the sample cannot be rolled, between the hand and a smooth surface, into a thread at any moisture content. Common borrow material must be free of rocks greater than 6 inches in any dimension.

**4-49 COMMON BORROW SOURCE**

Purchaser shall obtain borrow material from the listed borrow source(s). Development of the borrow source must be in accordance with Section 4-5 CUT SLOPE RATIO.

| Road | Stations | Location | Type |
|---|---|---|---|
| E402436J | 38+50 | Road excavation and left side of roadway | Common Borrow |

**4-50 COMMON BORROW APPLICATION**

Purchaser shall apply borrow as needed in order to meet specifications outlined in Clause 4-10 WIDEN THE EXISTING SUBGRADE and Clause 4-20 SUBGRADE DIMENSIONS FOR INTERSECTIONS. Borrow must be spread, shaped, and compacted full width concurrent with hauling operations.

| Road | Stations | Type |
|---|---|---|
| E402436J | 61+17 to 63+52 | Common Borrow |

| | | |
|---|---|---|
| E402436J | 72+80 | Common Borrow |
| E402436J | 75+73 | Common Borrow |
| E402436J | 83+19 | Common Borrow |
| E402436J | 83+99 | Common Borrow |
| E402436J | 85+02 | Common Borrow |

**4-55 ROAD SHAPING**

Purchaser shall shape the subgrade and surface as shown on the TYPICAL SECTION SHEET. The subgrade and surface shape must ensure runoff in an even, un-concentrated manner, and must 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**

Purchaser shall compact constructed and reconstructed subgrades by routing equipment over the entire width except ditch. Purchaser shall obtain written approval from the Contract Administrator for subgrade compaction 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.

**4-70 SUBGRADE REINFORCEMENT**

On the following road(s), Purchaser shall provide and install geotextile fabric on the road subgrade to promote stabilization, reinforcement, and filtration. Geotextile fabric must be at least 17 feet wide for the length of installation and overlap by a minimum of 2 feet at all joints. The geotextile fabric must be covered with a minimum of 12 inches of compacted pit run rock and 6 inches of compacted 1 ½ -inch minus crushed rock, as

specified in Clause 6-30 2-INCH MINUS CRUSHED ROCK and Clause 6-41 PIT RUN ROCK. Geotextile fabric must meet the specifications in Clause 10-3 GEOTEXTILE FOR STABILIZATION. Unused material, including all geotextile material delivered to state land, will remain the property of the state. Purchaser shall stockpile unused materials as directed by the Contract Administrator.

| Road | Stations |
|---|---|
| E402436J | 61+86 to 62+86 |

SECTION 5 – DRAINAGE

**5-1 REMOVAL OF SHOULDER BERMS**

Purchaser shall remove berms from road shoulders to permit the escape of runoff. The construction of ditchouts is required where ponding could result from the effects of sidecast debris.

**5-5 CULVERTS**

Purchaser shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must 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 may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil.

**5-6 CULVERT TYPE**

Purchaser shall install culverts made of new steel material in accordance with Clauses 10-15 through 10-24.

**5-12 UNUSED MATERIALS STATE PROPERTY**

On required roads, any materials listed on the CULVERT AND DRAINAGE LIST that are not installed will become the property of the state. Purchaser shall stockpile materials as directed by the Contract Administrator.

**5-15 CULVERT INSTALLATION**

Culvert installation must 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". Culverts 18 inch diameter and over shall be banded using lengths of no less than 10 feet, and no more than one length less than 16 feet**.** Shorter section of banded culvert shall be installed at the inlet end.

**5-16 APPROVAL FOR LARGER CULVERT INSTALLATION**

Purchaser shall obtain written approval from the Contract Administrator for the installation of culverts 30 inches in diameter and over before backfilling.

**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 must 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 must be installed with a depth of cover specified in the Engineer's design and recommended by the culvert manufacturer for the type and size of the pipe.

**5-20 ENERGY DISSIPATERS**

Purchaser shall install energy dissipaters at culvert inlets and outlets to prevent erosion. Energy dissipater installation is subject to approval by the Contract Administrator. The type of energy dissipater and the amount of material must be consistent with the specifications listed on the CULVERT AND DRAINAGE SPECIFICATION. Rock used for energy dissipaters must be light loose rip rap. Placement must with a zero-drop-height only. No placement by end dumping or dropping of rock is allowed. Light loose rip rap shall meet the specifications in Clause 6-50 LIGHT LOOSE RIP RAP.

**5-21 DOWNSPOUTS AND FLUMES**

Downspouts and flumes longer than 15 feet must be staked on both sides at a maximum interval of 10 feet with 6-foot heavy-duty steel posts, and fastened securely to the posts with 1/2-inch bolts**.**

**5-25 CATCH BASINS**

Purchaser shall construct catch basins 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**

Purchaser shall construct headwalls in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all permanent cross drain culverts. Rock used for headwalls must meet the specifications for Light Loose Rip Rap. Rock must 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 may not restrict the flow of water into culvert inlets or catch basins. Placement must be with a zero-drop-height only. No placement by end dumping or dropping of rock is allowed. Light loose rip rap shall meet the specifications in Clause 6-50 LIGHT LOOSE RIP RAP.

**5-27 ARMORING FOR CULVERTS**

At the following culvert(s), Purchaser shall place Light Loose Rip Rap in conjunction with or immediately following construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets as designated on Culvert and Drainage List and attached culvert design(s), or as directed by the Contract Administrator. Rock may not restrict the flow of water into culvert inlets or catch basins. Placement must be with a zero-drop-height only. No placement by end dumping or dropping of rock is allowed. Light loose rip rap shall meet the specifications in Clause 6-50 LIGHT LOOSE RIP RAP.

| Road | Stations | Rock Type | Volume (CY)* |
|---|---|---|---|
| E392412A | 52+58 | Light Loose Rip Rap | 2 |
| E392412A | 111+08 | Light Loose Rip Rap | 2 |
| E402426N | 11+09 | Light Loose Rip Rap | 2 |
| E402436J | 6+55 | Light Loose Rip Rap | 2 |
| E402436J | 20+42 | Light Loose Rip Rap | 2 |
| E402436J | 24+28 | Light Loose Rip Rap | 2 |
| E402436J | 28+32 | Light Loose Rip Rap | 2 |
| E402436J | 43+67 | Light Loose Rip Rap | 2 |
| E402436J | 62+36 | Light Loose Rip Rap | 2 |
| E402436J | 73+49 | Light Loose Rip Rap | 2 |
| E402436J | 75+93 | Light Loose Rip Rap | 2 |
| E402436J | 87+96 | Light Loose Rip Rap | 2 |
| E402436J | 114+04 | Light Loose Rip Rap | 2 |

*Quantity refers to compacted volume.

Armoring for stream crossing culverts and cross-drain culverts is outlined in the CULVERT LIST.

**5-28 ARMORING FOR ARMORED DIPS**

At the following locations, Purchaser shall place Light Loose Rip Rap in accordance with the ARMORED ROLLING DIP DETAIL. Placement must be with a zero-drop-height only. No placement by end dumping or dropping of rock is allowed. Light loose rip rap shall meet the specifications in Clause 6-33 3-INCH MINUS CRUSHED ROCK.

| Road | Stations | Rock Type | Volume (CY)* |
|---|---|---|---|
| E402436J | 85+02 | 3-Inch Minus | 10 |
| E402436J | 103+52 | 3-Inch Minus | 10 |
| E402436J | 107+65 | 3-Inch Minus | 10 |
| E402436J | 108+81 | 3-Inch Minus | 10 |
| E402436J | 110+21 | 3-Inch Minus | 10 |
| E402436J | 111+76 | 3-Inch Minus | 10 |
| E402436J | 113+32 | 3-Inch Minus | 10 |

*Quantity refers to compacted volume.

**5-30 DRIVABLE WATERBAR CONSTRUCTION**

Purchaser shall construct drivable waterbars in accordance with the DRIVABLE WATERBAR DETAIL. Minimum frequency of drivable waterbars shall be at a maximum spacing of 400 feet horizontal or one for every 10 feet of vertical change. Where grade exceeds 15% slope, minimum frequency of drivable waterbars shall be at a maximum spacing of 150 feet horizontal.

**5-31 ROLLING DIP CONSTRUCTION**

Purchaser shall construct rolling dips in accordance with the ROLLING DIP DETAIL and as specified on the CULVERT AND DRAINAGE LIST. Rolling dips must be installed concurrently with construction of the subgrade and must be maintained in an operable condition.

**5-40 ARMORED DIP CONSTRUCTION**

Armored dips shall be constructed in locations indicated on the "CULVERT AND DRAINAGE LIST" and in accordance with the ARMORED DIP DETAIL. Dips shall be installed at the time of construction and shall be maintained in an operable condition. Dips shall be installed with a crawler tractor. Use of other equipment shall not be permitted without prior written approval of the Contract Administrator.

**5-33 NATIVE SURFACE ROADS**

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

SECTION 6 – ROCK AND SURFACING

**6-2 ROCK SOURCE ON STATE LAND**

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following source(s) on state land at no charge to the Purchaser. Purchaser shall obtain written approval from the Contract Administrator for the use of material from any other source. Purchaser shall notify the Contract Administrator a minimum of 5 calendar days before starting any operations in the listed locations.

| Source | Location | Rock Type | Comments |
|---|---|---|---|
| E392424A (Nine Mile Rd.) | STA 296+00 | 2-Inch Minus Surface Rock | Excavate pit floor at uniform depth, no deeper than 4.0'. Pit walls shall be no steeper than a 2:1 slope. |
| E392535A (Chopaka Grade) | STA 33+60 | Pit Run Rock, 3-inch Minus Surface Rock | - |

## 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 are subject to written approval by the Contract Administrator before their use.

## 6-11 ROCK SOURCE DEVELOPMENT PLAN BY PURCHASER

The Contractor shall submit a rock source development plan to the Contract Administrator. The plan must be approved before the use of rock from State Land. Upon completion of operations, the rock source shall be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator. The Purchaser shall notify the Contract Administrator a minimum of 5 calendar days before starting any operations in the rock source.

Rock source development plans prepared by the Contractor must show the following information:

- Rock source location.
- Rock source overview showing access roads, development areas, stockpile locations, waste areas, and floor drainage.
- Rock source profiles showing development areas, bench locations including widths, and wall faces including heights.
- Rock source reclamation plan describing how the area will be left in a condition that will ensure public safety and minimize environmental impacts.

## 6-12 ROCK SOURCE SPECIFICATIONS

Rock sources must be in accordance with the following specifications:

- Pit walls may not be undermined or over steepened. The maximum slope of the walls must be consistent with recognized engineering standards for the type of material being excavated in accordance with the following table:

| Material | Maximum Slope Ratio (Horiz. :Vert.) | Maximum Slope Percent |
|---|---|---|
| Sand | 2:1 | 50 |
| Gravel | 1.5:1 | 67 |
| Common Earth | 1:1 | 100 |
| Fractured Rock | 0.5:1 | 200 |
| Solid Rock | 0:1 | vertical |

- Pit walls must be maintained in a condition to minimize the possibility of the walls sliding or failing.
- The width of pit benches must be a minimum of 1.5 times the maximum length of the largest machine used.

- The surface of pit floors and benches must be uniform and free-draining at a minimum 2% outslope gradient.
- All operations must be carried out in compliance with all regulations of the Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration and Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.
- All vehicle access to the top of the pit faces must be blocked.

**6-21 IN-PLACE PROCESSING**

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.

**6-22 FRACTURE REQUIREMENT FOR ROCK**

A minimum of 50% by visual inspection of coarse aggregate must 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.

**6-23 ROCK GRADATION TYPES**

Purchaser shall provide **or** manufacture rock in accordance with the types and amounts listed in the ROCK LIST. Rock must meet the following specifications for gradation and uniform quality. The exact point of evaluation for conformance to specifications will be determined by the Contract Administrator.

**6-30 2-INCH MINUS CRUSHED ROCK**

| | |
|---|---|
| % Passing 2” square sieve | 100% |
| % Passing 1” square sieve | 50 - 85% |
| % Passing U.S. #4 sieve | 30 - 50% |
| % Passing U.S. #40 sieve | 16% maximum |
| % Passing U.S. #200 sieve | 5% maximum |

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.

**6-33 3-INCH MINUS CRUSHED ROCK**

| | |
|---|---|
| % Passing 3” square sieve | 100% |
| % Passing 2” square sieve | 65 - 95% |
| % Passing 3/4” square sieve | 28 - 70% |
| % Passing U.S. #4 sieve | 10 - 35% |
| % Passing U.S. #200 sieve | 0 - 10% |

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.

**6-41 PIT RUN ROCK**

No more than 50 percent of the rock may be larger than 8 inches in any dimension and no rock may be larger than 12 inches in any dimension. Pit Run rock may not contain trash and may not contain more than 5 percent by weight of organic debris and dirt. Rock may require processing to meet this specification.

**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:

| Quantity | Approximate Size Range |
|---|---|
| 20% to 90% | 500 lbs. to 1 ton (18”- 28”) |
| 15% to 80% | 50 lbs. to 500 lbs. (8”- 18”) |
| 10% to 20% | 3 inch to 50 lbs. (3”- 8”) |

**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.

**6-73 ROCK FOR WIDENED PORTIONS**

Purchaser shall apply rock to turnarounds, turnouts, and areas with curve widening to the same depth and specifications as the traveled way.

**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

**7-5 STRUCTURE DEBRIS**

Purchaser shall not allow debris from the installation or removal of structures to enter any stream. Components removed from existing structures(s) must be removed from state land. Purchaser shall maintain a clean jobsite, with all materials stored away from the high water mark or other area presenting a risk of the materials entering a stream. Debris entering any stream must be removed immediately, and placed in the site(s) designated for stockpiling or disposal. Purchaser shall retrieve all material carried downstream from the jobsite.

**7-6 STREAM CROSSING INSTALLATION**

Purchaser shall install stream crossing structures in accordance with the manufacturer's requirements.

**7-7 BANK PROTECTION FOR STREAM CROSSING STRUCTURES**

Purchaser must construct bank protection in accordance with the stream crossing, design, specifications, and details.

**7-56 STEEL PIPE, PIPE ARCH, AND STRUCTURAL PLATE INSTALLATION**

Purchaser shall install steel pipe, pipe arches, and structural plate culverts in accordance with the National Corrugated Steel Pipe Association "Installation Manual for Corrugated Steel Pipe, Pipe Arches, and Structural Plate." Installation is subject to the inspection and approval of the Contract Administrator before placement and backfill. The latest edition of the NCSPA Installation Manual can be found at www.ncspa.org.

**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 metal gates closed and locked except during periods of haul. Purchaser shall keep 4-wire gates closed during periods of haul except for passing vehicles, unless approved by the Contract Administrator. All gates that remain open during haul must be locked or securely fastened in the open position. All gates must be closed at termination of use.

| Road | Station | Type |
|---|---|---|
| E392412A | 2+00 | Metal |
| E402436Y | 3+74 | 4-Wire |

SECTION 8 – EROSION CONTROL

**8-1 SEDIMENT CONTROL STRUCTURES**

On the following road(s), Purchaser shall install sediment trap(s). Sediment control shall be accomplished by constructing a sediment trap 5 feet in width, 5 feet in length, and 3 feet in depth, or other methods as approved in writing by the Contract Administrator>.**>**

| Road | Stations |
|---|---|
| E402436J | 33+20 |

SECTION 9 – POST-HAUL ROAD WORK

**9-1 EARTHEN BARRICADES**

Purchaser shall construct barricades in accordance with the SPOILS BERM DETAIL. Barricades shall be constructed on the following roads after the completion of timber haul and before the termination of this contract.

| Road | Stations |
|---|---|
| E402426N | 1+00 |

**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.

**9-10 LANDING DRAINAGE**

Purchaser shall provide for drainage of the landing surface, to the approval, in writing, of the Contract Administrator.

**9-11 LANDING EMBANKMENT**

Purchaser shall slope landing embankments to the original construction specifications.

**9-20 ROAD DECOMMISSIONING**

Purchaser shall decommission the following roads before the termination of this contract.

| Road | Stations | Type |
|---|---|---|
| E402426N | 0+00 to 19+46 | Light Decommissioning |

**9-22 LIGHT DECOMMISSIONING**

- 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.

SECTION 10 MATERIALS

**10-3 GEOTEXTILE FOR STABILIZATION**

Geotextiles must meet the following minimum requirements for strength and property qualities, and must be designed by the manufacturer to be used for stabilization or reinforcement, and filtration. Material must be free of defects, cuts, and tears.

| | ASTM Test | Requirements |
|---|---|---|
| Type | -- | Woven |
| Apparent opening size | D 4751 | No. 40 max |
| Water permittivity | D 4491 | 0.10 $sec^{-1}$ |
| Grab tensile strength | D 4632 | 315 lb |
| Grab tensile elongation | D 4632 | 15% |
| Puncture strength | D 6241 | 150 lb |
| Tear strength | D 4533 | 112 lb |
| Ultraviolet stability | D 4355 | 50% retained after 500 hours of exposure |

**10-15 CORRUGATED STEEL CULVERT**

Metallic coated steel culverts must meet AASHTO M-36 (ASTM A-760) specifications. Culverts must 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 must conform to the following specifications for gage and corrugation as a function of diameter.

| Diameter | Gauge | Corrugation |
|---|---|---|
| 18"-36" | 16 (0.064") | 2 $^{2}/_{3}$" X $^{1}/_{2}$" |
| 48" | 14 (0.079") | 2 $^{2}/_{3}$" X $^{1}/_{2}$" |
| 54" to 96" | 12 (0.109") | 3" X 1" |

**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.

**Sturctures**

- 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**

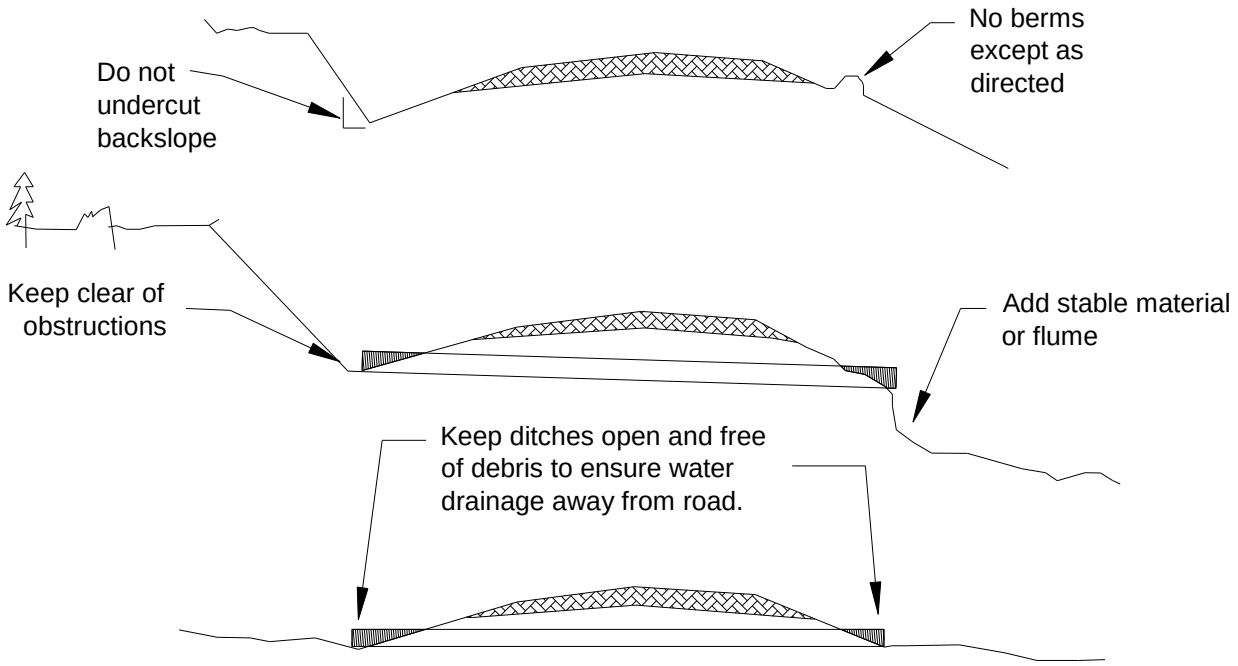
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

**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.



STATE OF WASHINGTON

# DEPARTMENT OF NATURAL RESOURCES

**Application No.: 30-103842** **Name of Sale: Overlook** **Date: 08-11-2022**

# CULVERT & DRAINAGE LIST

| Road Name | Station | CULVERT | | | LENGTH | | | RIPRAP | | | Ditch | Staked | Rolling Dip | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Diameter (in) | Gauge | Skew | Culvert (ft) | Downspout | Flume | Inlet C.Y. | Outlet C.Y. | Catchbasin | | | | |
| E392412A | 52+58 | 18 | 16 | | 28 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E392412A | 111+08 | 18 | 16 | | 30 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E392412A | 113+38 | | | | | | | | 1 | | | | | 11 |
| E402426N | 11+09 | 18 | 16 | | 34 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E402436J | 6+55 | 18 | 16 | | 28 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E402436J | 20+42 | 18 | 16 | | 30 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E402436J | 24+28 | 18 | 16 | | 34 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E402436J | 28+32 | 18 | 16 | | 32 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E402436J | 43+67 | 18 | 16 | | 30 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E402436J | 50+21 | | | | | | | | | | | | Y | 9 |
| E402436J | 62+36 | 18 | 16 | | 32 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E402436J | 73+49 | 24 | 16 | | 38 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E402436J | 75+93 | 18 | 16 | | 30 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E402436J | 85+02 | | | | | | | | | | | | Y | 12 |
| E402436J | 87+96 | 18 | 16 | | 36 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |
| E402436J | 103+52 | | | | | | | | | | | | Y | 12 |
| E402436J | 107+65 | | | | | | | | | | | | Y | 12 |
| E402436J | 108+81 | | | | | | | | | | | | Y | 12 |
| E402436J | 110+21 | | | | | | | | | | | | Y | 12 |
| E402436J | 111+75 | | | | | | | | | | | | Y | 12 |
| E402436J | 113+32 | | | | | | | | | | | | Y | 12 |
| E402436J | 114+04 | 24 | 16 | | 38 | | | 1 | 1 | | | | | 1,2,3,6,10,11 |

## STRUCTURE NOTES

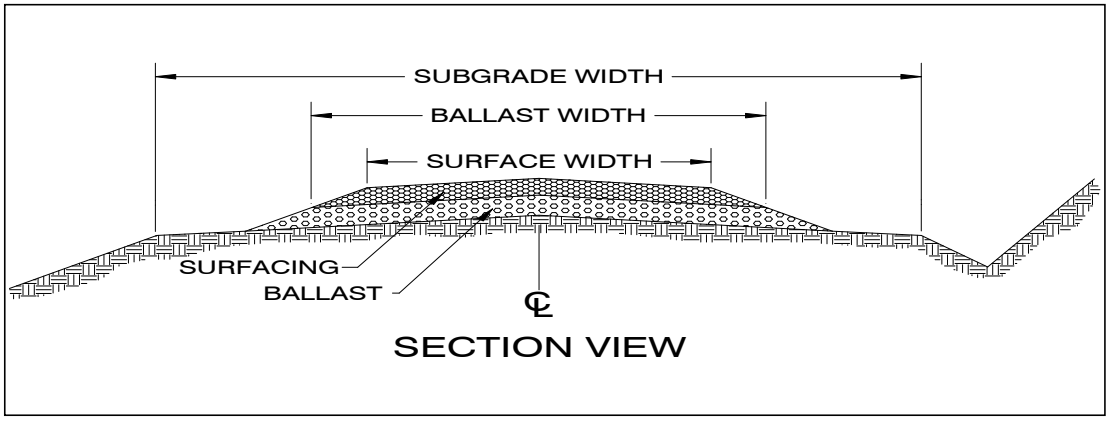
1. Install Headwall - See Detail D1
2. Install Catchbasin - See Detail D1
3. Armor Catchbasin - See Detail D1
4. Armor Ditch
5. Heavy Loose RipRap
6. Light Loose RipRap
7. Step Bevel Pipe Ends
8. Remove Existing Pipe
9. See Rolling Dip Detail D5
10. See Pipe Installation Detail D1
11. Install Energy dissipator - See D1
12. Install Armored Dip - See D6

**STATE OF WASHINGTON**

DEPARTMENT OF NATURAL RESOURCES

**Application No.: 30-103842** **Name of Sale: Overlook Timbersale**

# 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.

| ROAD NAME | START STATION | END STATION | SUBGRADE WIDTH (ft) | BALLAST* SOURCE | BALLAST* WIDTH (ft) | BALLAST* DEPTH (in) | BALLAST* QTY (cu.yd./sta) | BALLAST QTY (cu.yd. total) | SURFACE SOURCE | SURFACE WIDTH (ft) | SURFACE DEPTH (in) | SURFACE QTY (cu.yd./sta) | SURFACE QTY (cu.yd. total) | SURFACE SPECIFICATION* | FABRIC WIDTH (ft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E402426N | 10+59 | 11+59 | | | | | 0 | 0.0 | | 14 | 4 | 18 | 18 | A | |
| E402436J | 11+12 | 12+63 | | | | | 0 | 0.0 | | 27 | 2 | 17 | 25 | B | |
| E402436J | 19+92 | 20+92 | | | | | 0 | 0.0 | | 14 | 4 | 18 | 18 | A | |
| E402436J | 23+78 | 24+78 | | | | | 0 | 0.0 | | 14 | 4 | 18 | 18 | A | |
| E402436J | 27+82 | 28+82 | | | | | 0 | 0.0 | | 14 | 4 | 18 | 18 | A | |
| E402436J | 43+17 | 44+17 | | | | | 0 | 0.0 | | 14 | 4 | 18 | 18 | A | |
| E402436J | 61+86 | 62+86 | | | 16.5 | 12 | 67 | 66.7 | | 13.5 | 6 | 26 | 26 | A | 17 |
| E402436J | 72+99 | 73+99 | | | | | 0 | 0.0 | | 14 | 4 | 18 | 18 | A | |
| E402436J | 113+54 | 114+54 | | | | | 0 | 0.0 | | 14 | 4 | 18 | 18 | A | |

**DATE: 08-11-2022**

*Ballast refers to Pit Run Rock. See Clause 6-41.

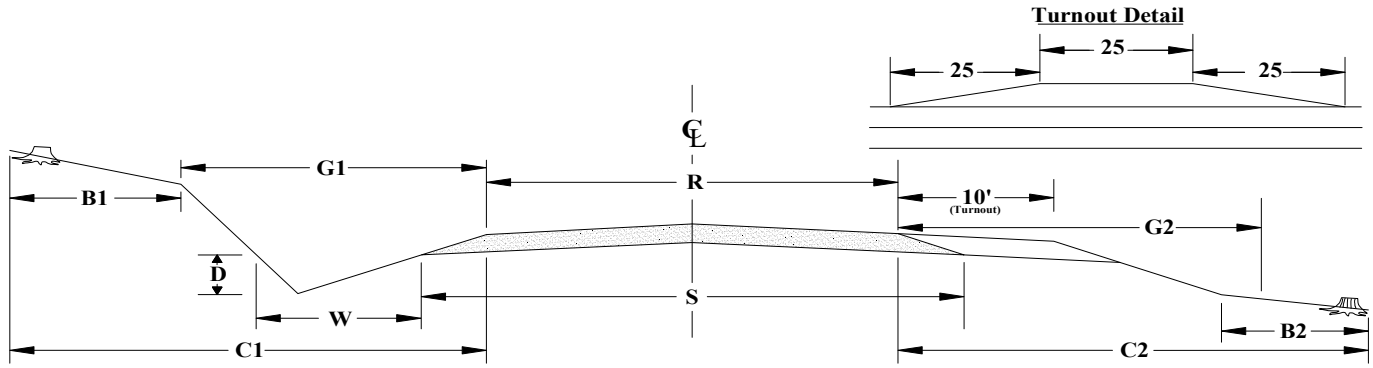
** "A" calls for 2-Inch Minus Rock, "B" calls for 3-Inch Minus Rock

State of Washington

# Department of Natural Resources

**Application No. : 30-103842** **Name of Sale: Overlook**

# Typical Section Sheet

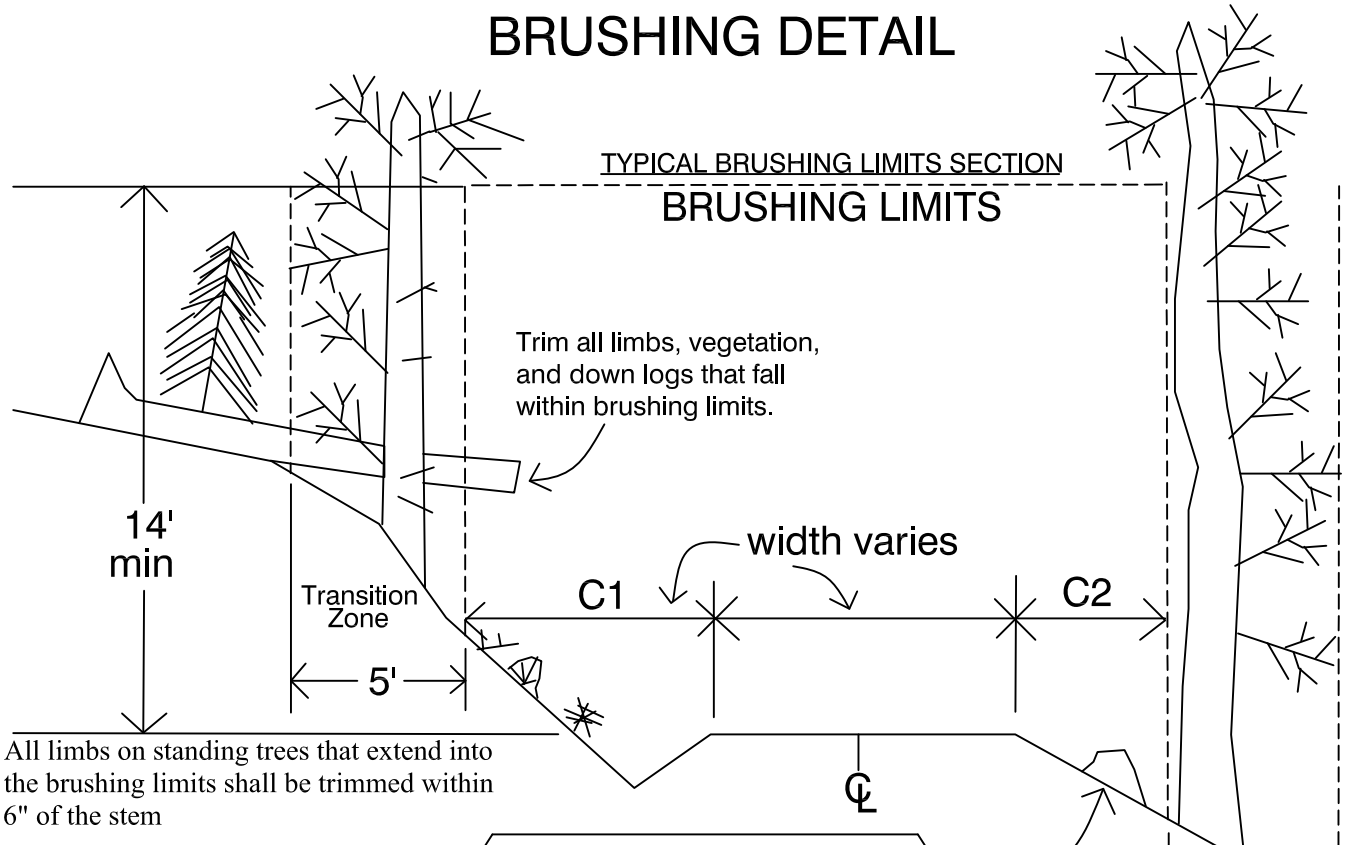



**CONSTRUCTION CLASS**
NEW CONSTRUCTION - C
RECONSTRUCTION - R
PRE HAUL MAINTENANCE - P

| ROAD NAME | START STATION | END STATION | CONSTRUCTION CLASS | SUBGRADE WIDTH (S) | ROAD WIDTH ( R ) | INSLOPE "/10' | OUTSLOPE "/10' | CROWN " AT CL | DITCH WIDTH (W) | DITCH DEPTH (D) | DITCH 2 SIDES | | | GRUBBING CUT BANK (C | GRUBBING FILL TOE (G2 | ROAD CUT CLEARING (B | ROAD FILL CLEARING (I | R/W CUT CLEARING (C1) | R/W FILL CLEARING (C2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E392412A | 0+00 | 52+58 | P | | 12 | | 4 | | | | | | | 3 | 3 | | | 6 | 6 |
| E392412A | 52+58 | 58+76 | P | | 12 | | | 3 | 3 | 1 | | | | 3 | 3 | | | 6 | 6 |
| E392412A | 58+76 | 111+08 | P | | 12 | | 4 | | | | | | | 3 | 3 | | | 6 | 6 |
| E392412A | 111+08 | 116+08 | P | | 12 | | | 3 | 3 | 1 | | | | 3 | 3 | | | 6 | 6 |
| E392412A | 116+08 | 126+89 | P | | 12 | | 4 | | | | | | | 3 | 3 | | | 6 | 6 |
| E402426N | 0+00 | 10+59 | C | 14 | | | 4 | | | | | | | | | 6 | 6 | | |
| E402426N | 10+59 | 11+59 | C | 14 | | | | 3 | 3 | 1 | | | | | | 6 | 6 | | |
| E402426N | 11+59 | 19+46 | C | 14 | | | 4 | | | | | | | | | 6 | 6 | | |
| E402436J | 0+00 | 6+55 | P | | 12 | | 4 | | | | | | | 3 | 3 | | | 6 | 6 |
| E402436J | 6+55 | 14+15 | P | | 12 | | | 3 | 3 | 1 | | | | 3 | 3 | | | 6 | 6 |
| E402436J | 14+15 | 24+28 | P | | 12 | | 4 | | | | | | | 3 | 3 | | | 6 | 6 |
| E402436J | 24+28 | 25+26 | P | | 12 | | | 3 | 3 | 1 | | | | 3 | 3 | | | 6 | 6 |
| E402436J | 25+26 | 28+32 | P | | 12 | | 4 | | | | | | | 3 | 3 | | | 6 | 6 |
| E402436J | 28+32 | 29+01 | P | | 12 | | | 3 | 3 | 1 | | | | 3 | 3 | | | 6 | 6 |
| E402436J | 29+01 | 34+65 | R | | 12 | | | 3 | 3 | 1 | | | | 3 | 3 | | | 6 | 6 |
| E402436J | 34+65 | 42+67 | R | | 12 | | 4 | | | | | | | 3 | 3 | | | 6 | 6 |
| E402436J | 42+67 | 44+93 | R | | 12 | | | 3 | 3 | 1 | | | | 3 | 3 | | | 6 | 6 |
| E402436J | 44+93 | 45+53 | R | | 12 | | 4 | | | | | | | 3 | 3 | | | 6 | 6 |
| E402436J | 45+53 | 108+81 | C | 14 | | | 4 | | | | | | | | | 6 | 6 | | |
| E402436J | 108+81 | 113+32 | C | 14 | | | | 3 | 3 | 1 | | | | | | 6 | 6 | | |
| E402436J | 113+32 | 116+51 | C | 14 | | | 4 | | | | | | | | | 6 | 6 | | |
| E402436Y | 0+00 | 21+66 | P | | 12 | | 4 | | | | | | | 3 | 3 | | | 6 | 6 |

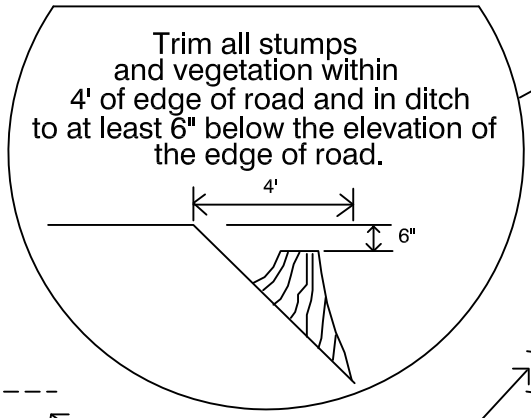
**Date: 08-11-2022**

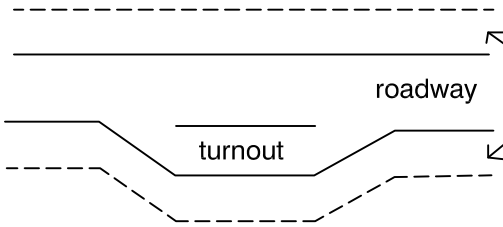
# BRUSHING DETAIL




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

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

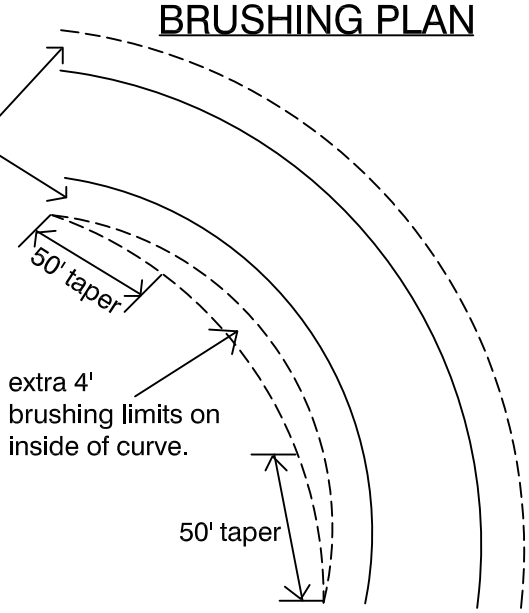



Brushing limits as shown on typical section

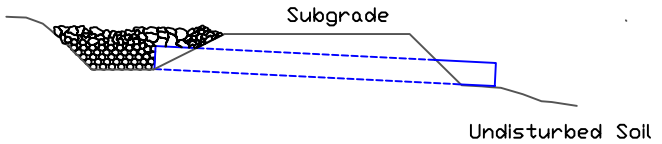
## TURNOUT BRUSHING PLAN

## CURVE BRUSHING PLAN

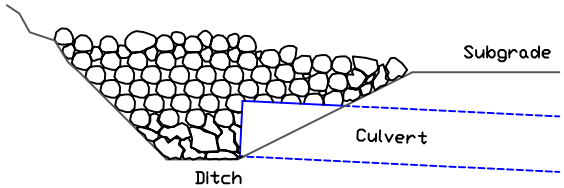



1. All vegetation within the brushing limits shall be cut to within 8" of the ground unless otherwise directed by the contract administrator.
2. All brush, trees limbs, etc. shall be removed from the road surface and ditchline.
3. All debris that may roll or migrate into the ditchline shall be removed.

# CULVERT AND DRAINAGE SPECIFICATIONS DETAIL - D1

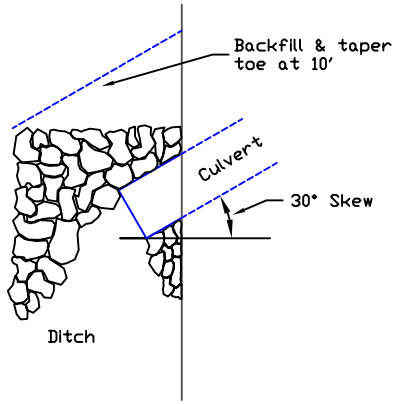



HEADWALLS



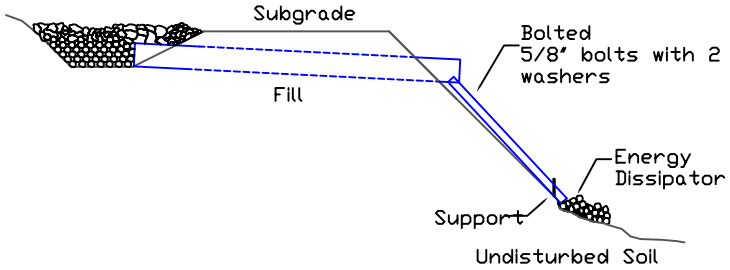

Headwall to be constructed of material that will resist erosion

PLAN VIEW




FLUME

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



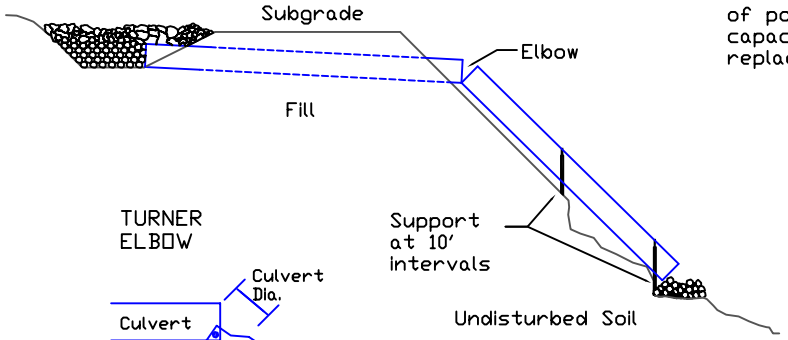

| Minimum Cover | Minimum Bed Depth | Min. Trench Width | Nominal Diameter |
|---|---|---|---|
| A | B | C | D |
| 12" | 6" | 36" | 18" |
| 12" | 6" | 42" | 24" |
| 12" | 6" | 48" | 30" |
| 12" | 6" | 54" | 36" |

CULVERT BACKFILL & BASE PREPARATION

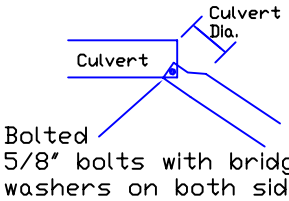
(For Culverts Less Than 36")

DOWNSPOUT

Use where ground conditions are irregular.



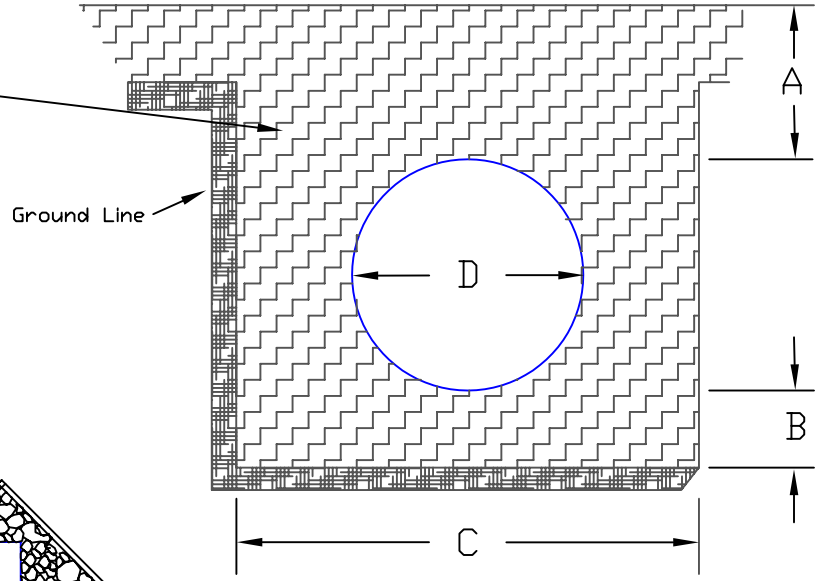

TURNER ELBOW




BEDDING MATERIAL:

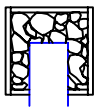
Use granular material - 3" minus. Large rocks shall be replaced with suitable material. Materials of poor or non-uniform bearing capacity shall be removed and replaced with suitable fill.

ROAD SURFACE

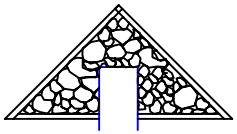



DISSIPATOR SPEC'S
Size in Culvert Diameters

| | |
|---|---|
| Area | 2 X 2 |
| Depth | 1 |
| Aggragate | 1/3 |



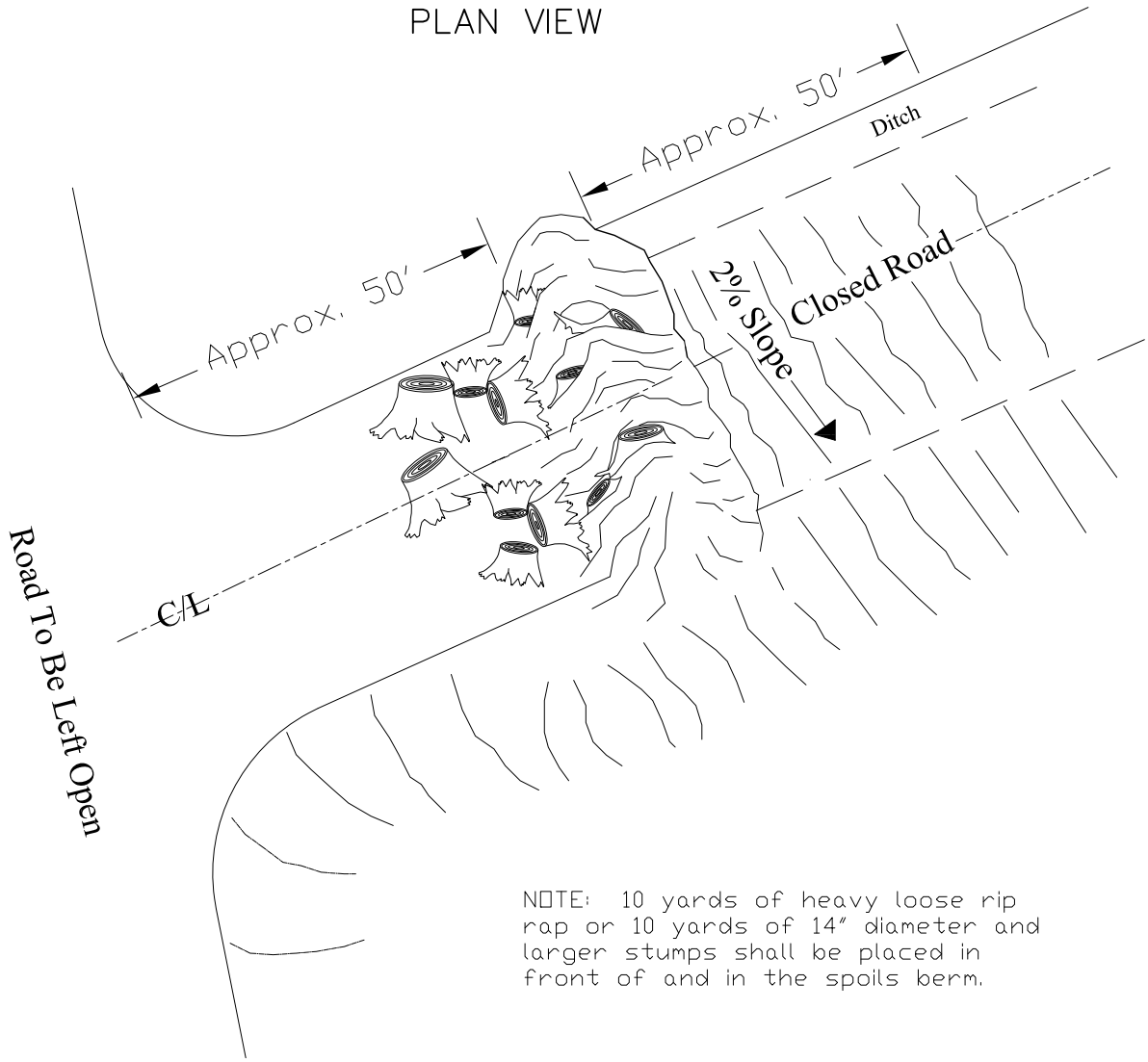
Level



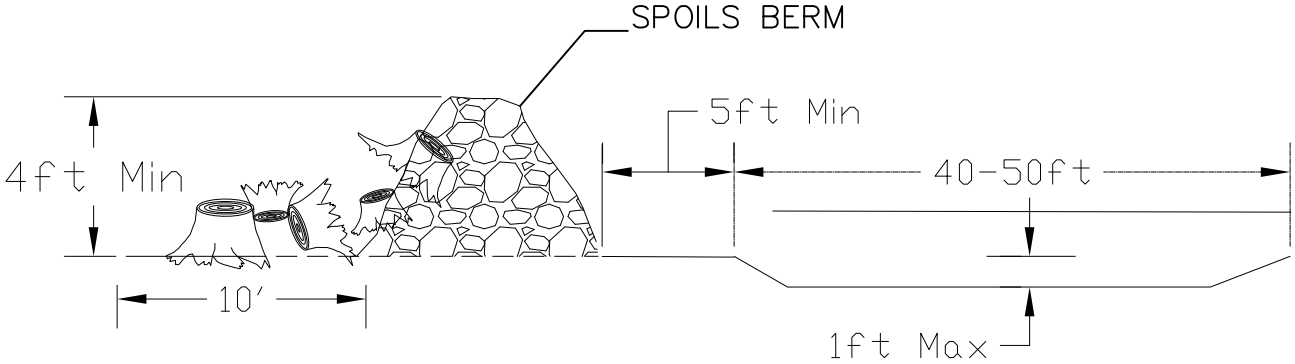
Side Hill

# SPOILS BERM DETAIL-D8

PLAN VIEW



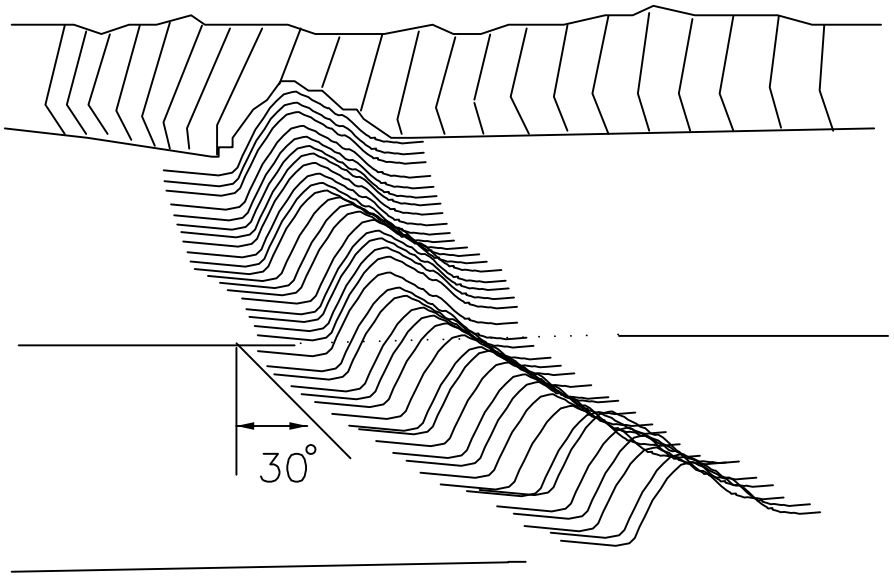

NOTE: 10 yards of heavy loose rip rap or 10 yards of 14" diameter and larger stumps shall be placed in front of and in the spoils berm.



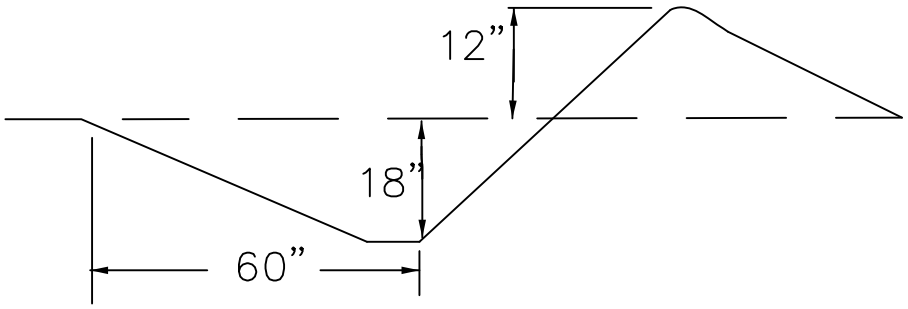

Note: $\frac{1}{3}$ of stumps or rip rap shall be partially buried in the spoils berm and/or road surface.

Revised 8-29-2008

Top View




Side View




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

# Driveable Waterbar Detail

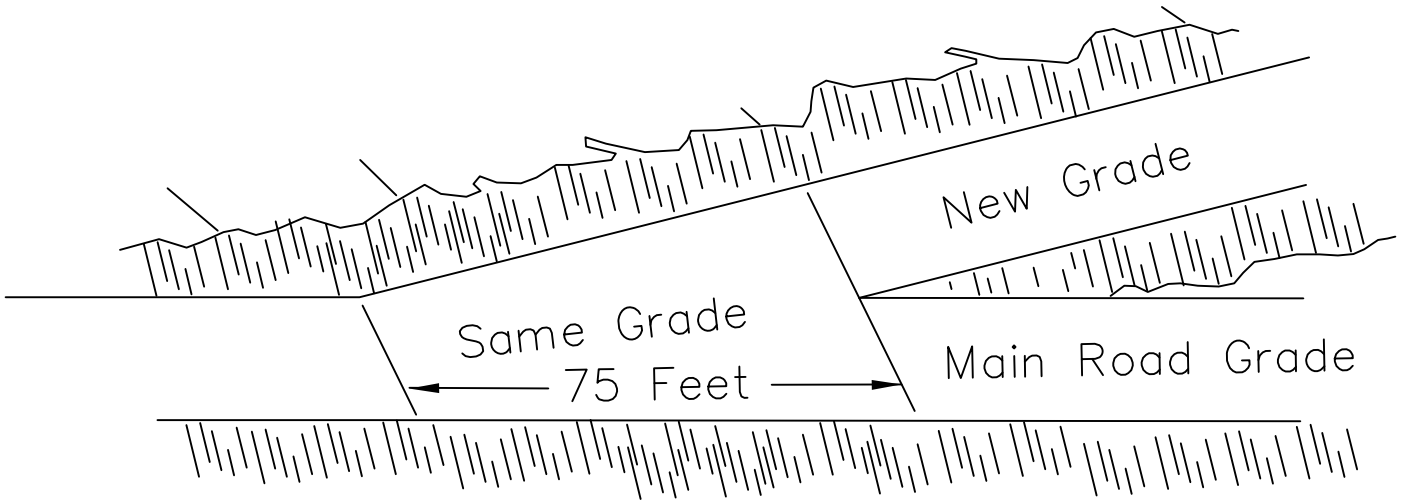
WASHINGTON STATE DEPARTMENT OF
Natural Resources

Northeast Region
Colville, Washington

| | | |
|---|---|---|
| Designed By: | Stash Slabinski | 9/06/05 |
| Drawn By: | Stash Slabinski | 9/06/05 |

Revised:

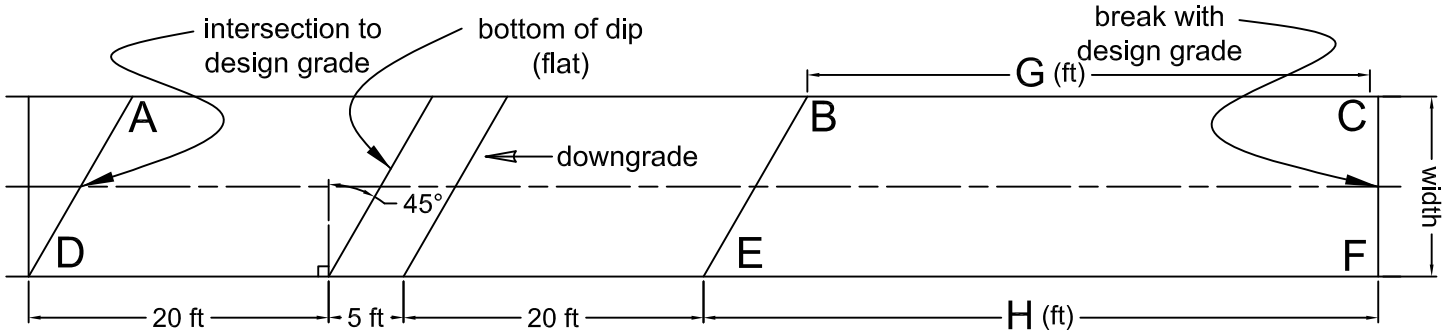
# Intersection Detail



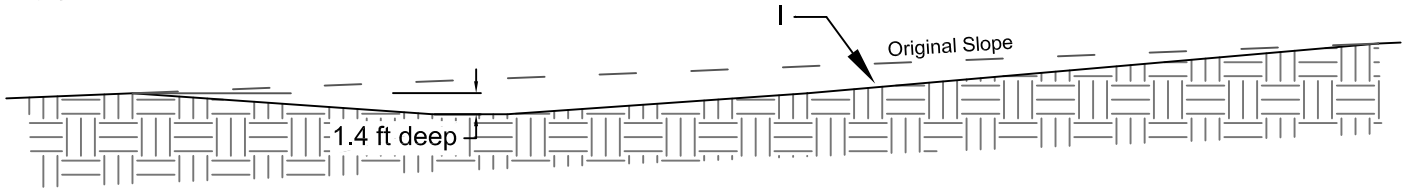

Main road and spur must have he same grade until there is horizontal separation from each other.

# STANDARD 45° ROLLING DIP

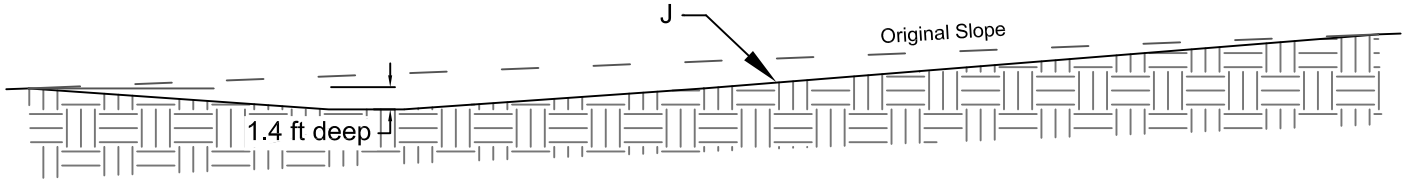
## PLAN OF ROLLING DIP

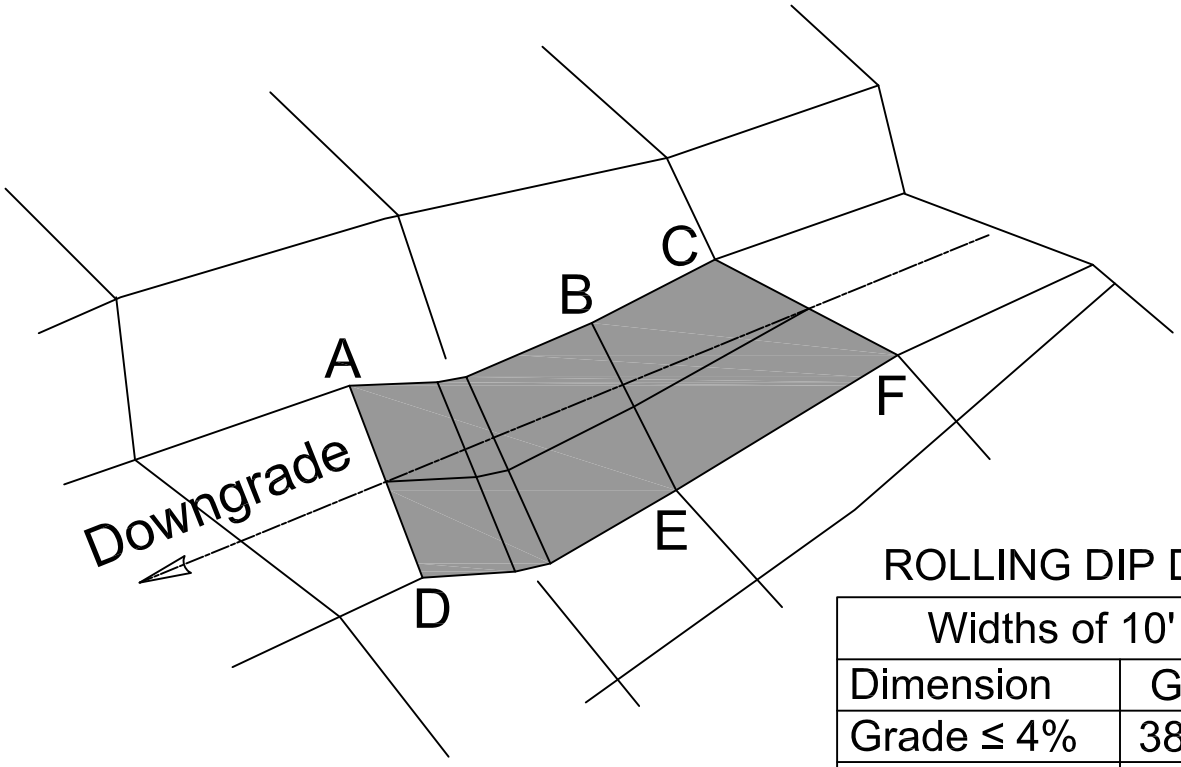



CUT BANK




FILL SLOPE



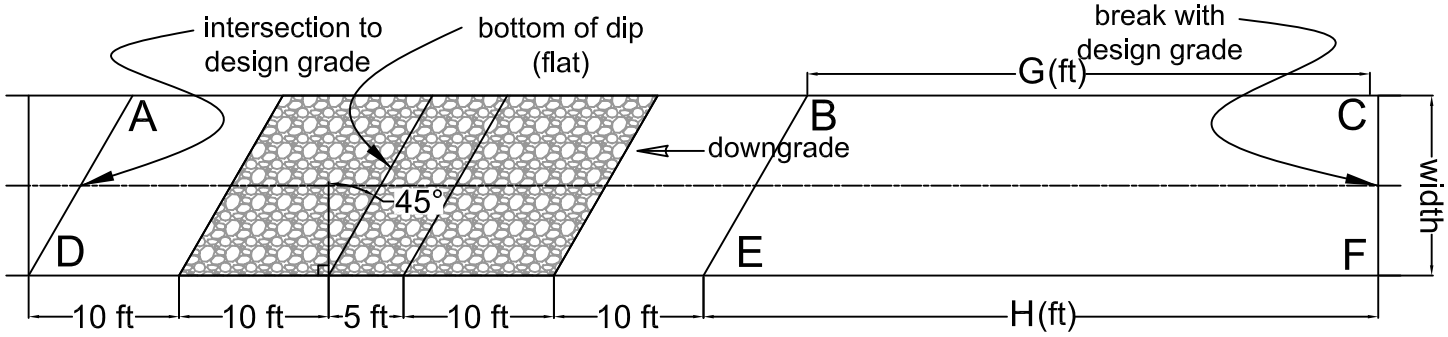

## ROLLING DIP DEMENSIONS

| Widths of 10' through 14' | | | | |
|---|---|---|---|---|
| Dimension | G | H | I | J |
| Grade ≤ 4% | 38' | 45' | 9% | 8% |
| Grade = 6% | 48' | 55' | 11% | 11% |
| Grade = 8% | 58' | 65' | 14% | 14% |

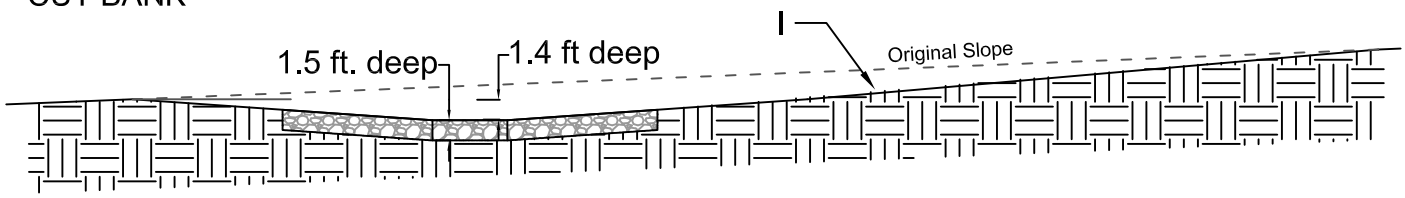
Erica Kemp 05/2008

# ARMORED ROLLING DIP - D6

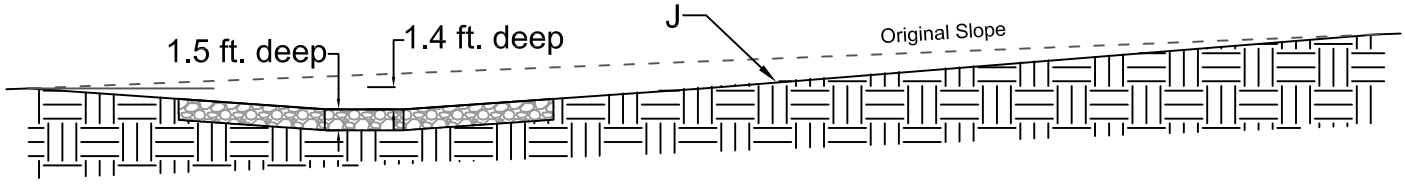
## PLAN OF ARMORED ROLLING DIP

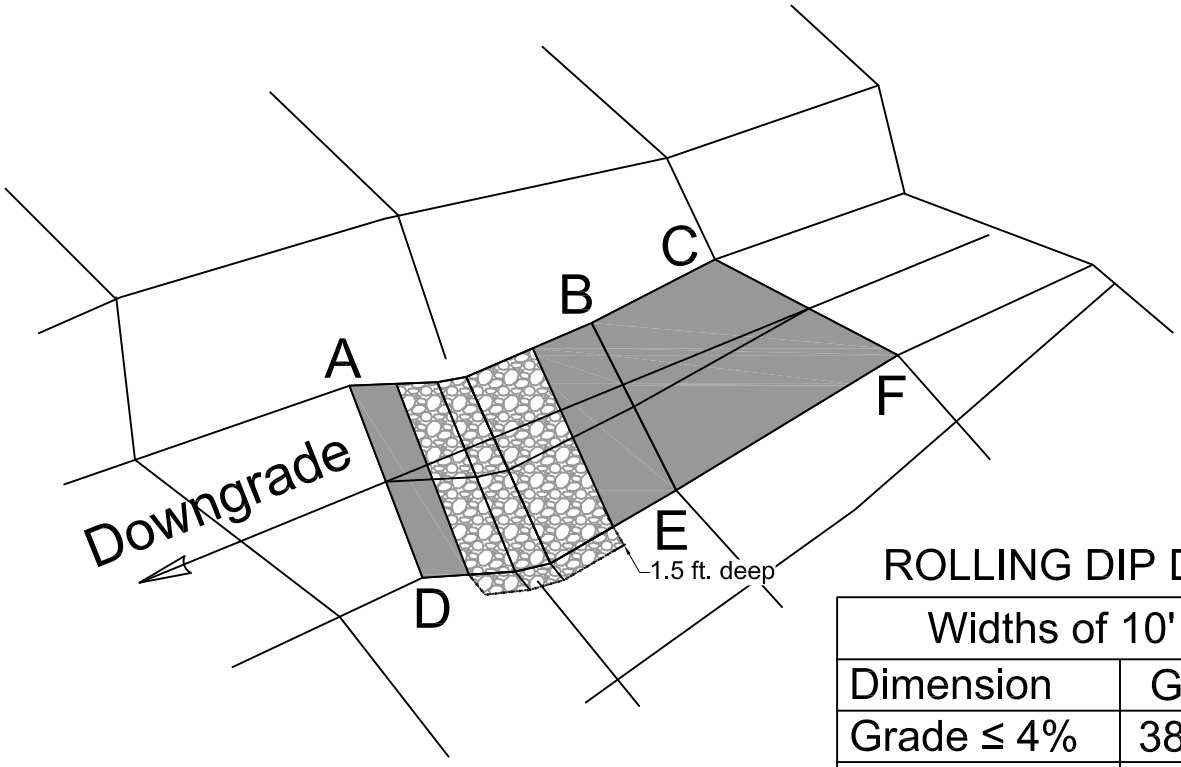



CUT BANK




FILL SLOPE



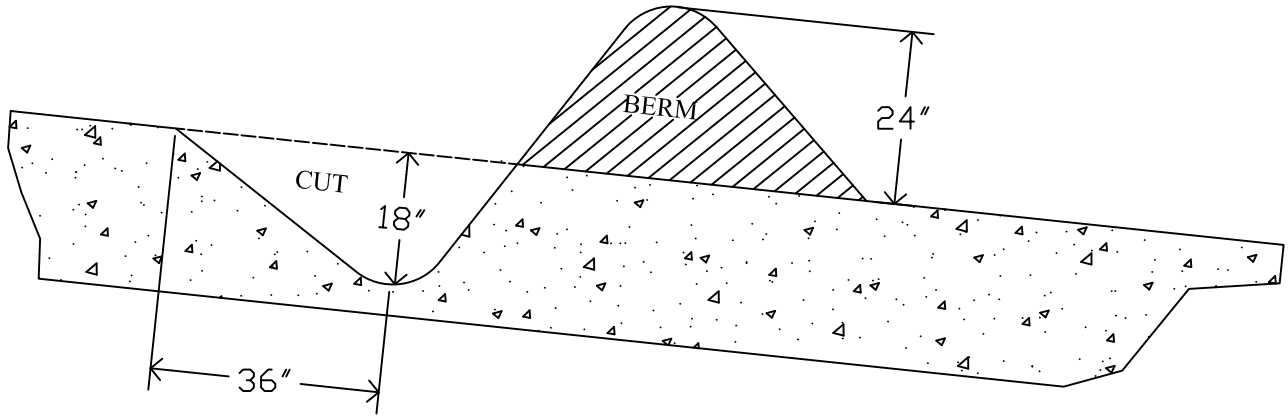




## ROLLING DIP DEMENSIONS

| Widths of 10' through 14' | | | | |
|---|---|---|---|---|
| Dimension | G | H | I | J |
| Grade ≤ 4% | 38' | 45' | 9% | 8% |
| Grade = 6% | 48' | 55' | 11% | 11% |
| Grade = 8% | 58' | 65' | 14% | 14% |

Zach Day 12/2014

# Non-Driveable Water Bar Detail




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.

| Non-Driveable Waterbar Detail | | | |
|---|---|---|---|
| Northeast Region<br>Colville, Washington | | | WASHINGTON STATE DEPARTMENT OF<br>Natural Resources |
| Designed By: | Stash Slabinski | 4/21/05 | |
| Drawn By: | Stash Slabinski | 4/21/05 | Revised: 1 OF 1 |

# Overlook FIT - Road Development Costs

REGION: Northeast CONTRACT: Overlook ENGINEER: Mackenzie Karnstein

DISTRICT: Highlands DATE: Aug-22

| | *Construction* | *Reconstruction* | *Maintenance* | *Deactivation* | *Decommission* |
|---|---|---|---|---|---|
| **ROAD NUMBERS:** | E402426M, E402426N, E402436J | E402436J | E392412A, E402436J, E402436Y | | E392426N |
| **ROAD STANDARD:** | *Construction* | *Reconstruction* | *Maintenance* | *Deactivation* | *Decommission* |
| **NUMBER OF STATIONS:** | ***90.44*** | ***16.52*** | ***177.56*** | ***0.00*** | ***19.46*** |
| **CLEARING & GRUBBING:** | $0.00 | $ 462.56 | $ 18,050.68 | $ - | 250 |
| **EXCAVATION AND FILL:** | $ 45,294.28 | $ 446.04 | $ 4,729.14 | | |
| **MISC. MAINTENANCE:** | $ 3,508.33 | $ 291.67 | $ 5,275.00 | | |
| **ROAD ROCK:** | $ 5,929.79 | $ 328.84 | $ 1,785.11 | | |
| **ADDITIONAL ROCK:** | | | | | |
| **CULVERTS AND FLUMES:** | $10,545 | $1,552 | $10,911 | | |
| **STRUCTURES/MATERIALS:** | $ - | $0 | $0 | | |

| | | | | | |
|---|---|---|---|---|---|
| **TOTAL COSTS:** | $65,278 | $3,081 | $40,751 | $0 | $250 |
| *COST PER STATION:* | *$722* | *$186* | *$230* | *$0* | *$13* |

| | $/per move | # of moves | Total |
|---|---|---|---|
| **MOBILIZATION:** | | | $2,100 |

| | | |
|---|---|---|
| **TOTAL (All Roads)** | = | $111,460 |
| **SALE VOLUME mbf** | = | 1,941 |
| **TOTAL $/MBF** | = | $57 |

Engineer's Notes: