



TIMBER NOTICE OF SALE

SALE NAME: SHADY GROVE VDT

AGREEMENT NO: 30-106097

AUCTION: September 26, 2024 starting at 10:00 a.m., **COUNTY:** Skamania
Pacific Cascade Region Office, Castle Rock, WA

SALE LOCATION: Sale located approximately 4 miles north of Stevenson, WA

**PRODUCTS SOLD
AND SALE AREA:**

All timber, except leave trees bound by yellow "Leave Tree Area" tags, leaves trees marked with a ring of blue paint, all downed timber greater than 10 inches in diameter and all timber described in Schedule A bound by the following:

Unit 1, white "Timber Sale Boundary" tags with pink flagging, CG-2200 road and pink flagging, gaps are marked with blue "Special Management Area" tags with pink flagging and pink flag line;

Unit 2, white "Timber Sale Boundary" tags with pink flagging and the CG-2200B road;

Unit 3, white "Timber Sale Boundary" tags with pink flagging and the CG-2200 road;

Unit 4, white "Timber Sale Boundary" tags with pink flagging and pink flag line;

Unit 5, 6, 7, 8, 9, 10, 11 ROW, orange "Right-of-way" tags;

All forest products above located on part(s) of Sections 18 and 19 all in Township 3 North, Range 8 East, Section 13 all in Township 3 North, Range 7.5 East, Sections 13 and 24 all in Township 3 North, Range 7 East, W.M., containing 156 acres, more or less.

CERTIFICATION: This sale is certified under the Sustainable Forestry Initiative® program Standard (cert no: BVC-SFIFM-018227)

ESTIMATED SALE VOLUMES AND QUALITY:

Species	Avg DBH	Ring Count	Total MBF	Total \$/MBF	MBF by Grade								
					1P	2P	3P	SM	1S	2S	3S	4S	UT
Douglas fir	19.5	7	3,792	\$280.00			34	646		1,671	1,208	220	13
Grand fir	19.2		343	\$45.00						228	101	13	1
Hemlock	16.8		96	\$45.00						45	40	10	1
Red alder	12.1		26	\$64.00						4	2	18	3
Sale Total			4,257										

MINIMUM BID: \$280/MBF (est. value \$1,084,000.00) **BID METHOD:** Sealed Bids

PERFORMANCE SECURITY: \$100,000.00 **SALE TYPE:** MBF Scale

EXPIRATION DATE: October 31, 2027 **ALLOCATION:** Export Restricted

BIDDABLE SPECIES: Douglas fir

BID DEPOSIT: \$108,400.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.



TIMBER NOTICE OF SALE

HARVEST METHOD: This sale is estimated to be 100 percent ground based harvest. Ground-based yarding is restricted to sustained slopes of 40 percent or less. For additional harvest requirements, refer to clause H-140 in the contract. Ground Based Yarding will not be permitted from November 1 to April 30 unless authorized in writing by the Contract Administrator.

ROADS: 31.86 stations of required construction. 9.77 stations of required reconstruction. 3.28 stations of optional construction. 11.19 stations of optional reconstruction. 296.94 stations of required prehaul maintenance. 54.40 stations of abandonment.

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the CG-2116 Pit located in Section 24, T3N, R7E5, W.M. on state land at no charge to the Purchaser.

Rock used in accordance with the quantities on the ROCK LIST may be obtained from any commercial source at the Purchaser's expense. The hauling of forest products will not be permitted from November 1 to April 30 unless authorized in writing by the Contract Administrator.

ACREAGE DETERMINATION

CRUISE METHOD: The sale acres were determined by GPS. The sale area was cruised using a variable plot cruise method.

FEES: Check in the amount of \$4,000.00 made payable to Sam Rsjord for RUP, must be provided to DNR within 30 days of auction. DNR will forward the check to Sam Rsjord. \$72,369.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

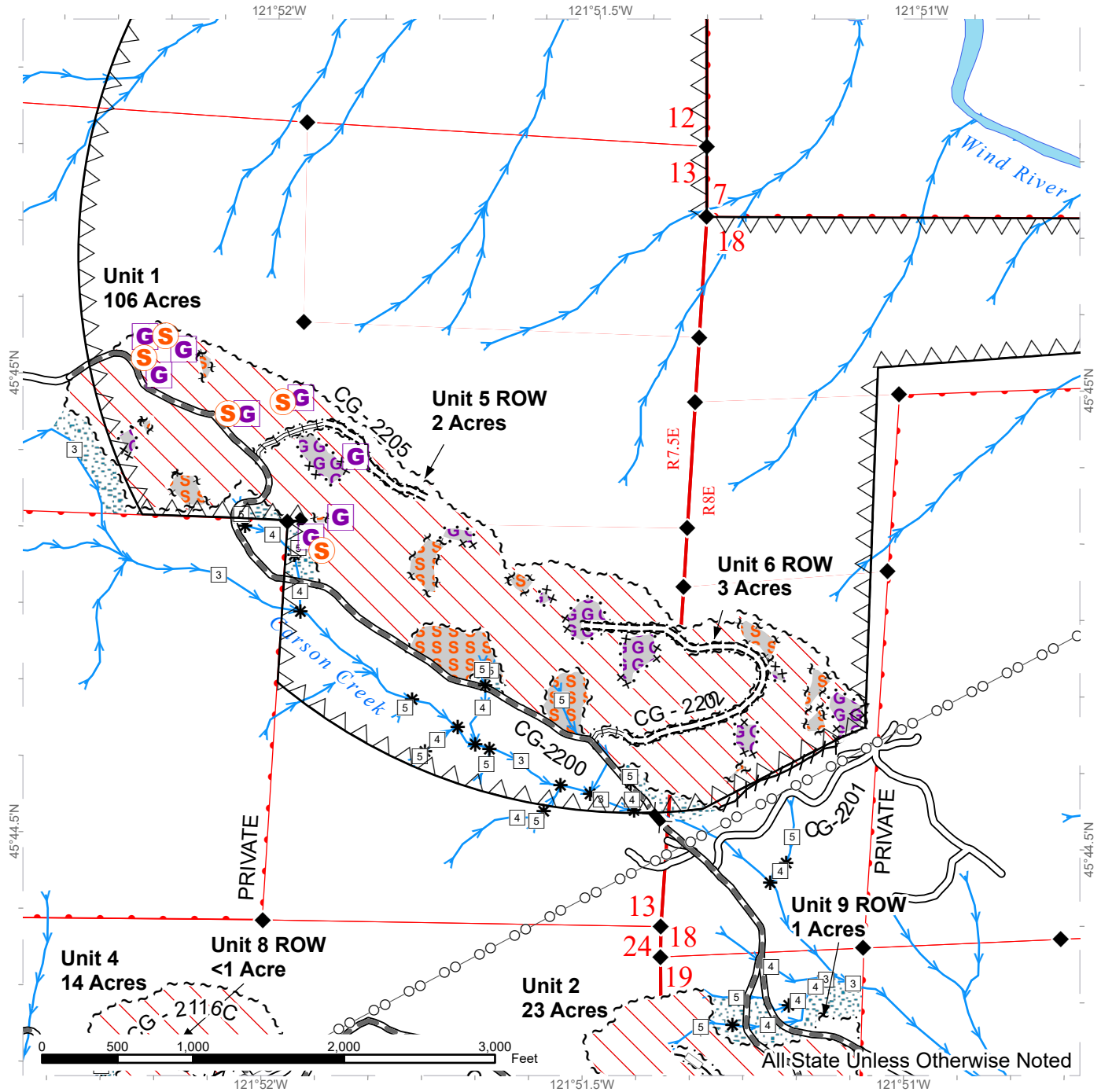
SPECIAL REMARKS: Estimated 324 MBF HQ 3 Saw DF, 952 MBF HQ 2 Saw DF, 646 MBF Special Mill Douglas-fir and 121 MBF of pole quality timber. See cruise for further details.

Timing restriction for all activities and operations associated with Unit 1, 5 and 6 from March 1 to August 31. See clause H-142 for further details.

TIMBER SALE MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT #: 30-106097
TOWNSHIP(S): T3R7E, T3R7.5E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1602-2298

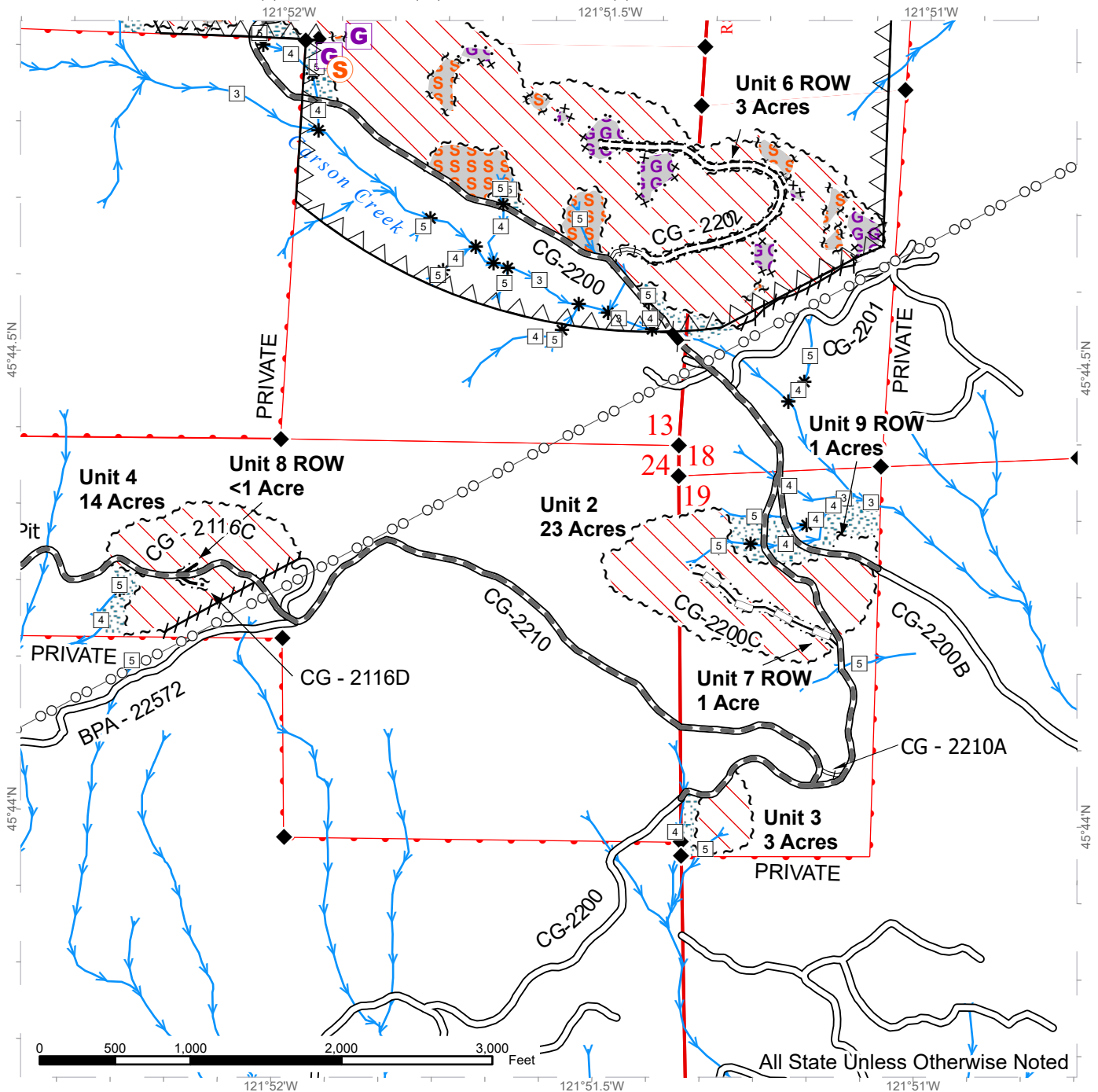


Variable Density Thinning	Stream Type	Optional Reconstruction
Skip Area	Stream Type Break	Timing Restriction
Gap Area	Streams	Survey Monument
Riparian Mgt Zone	Power Lines	Bridge
Sale Boundary Tags	Existing Roads	Gap <1/4 Acre
Special Mgmt Area	Required Pre-Haul Maintenance	Skip <1/4 Acre
Leave Tree Tags	Required Construction	Property Line
Right of Way Tags	Required Reconstruction	
Flag Line	Optional Construction	

TIMBER SALE MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT #: 30-106097
TOWNSHIP(S): T3R7E, T3R7.5E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1602-2298



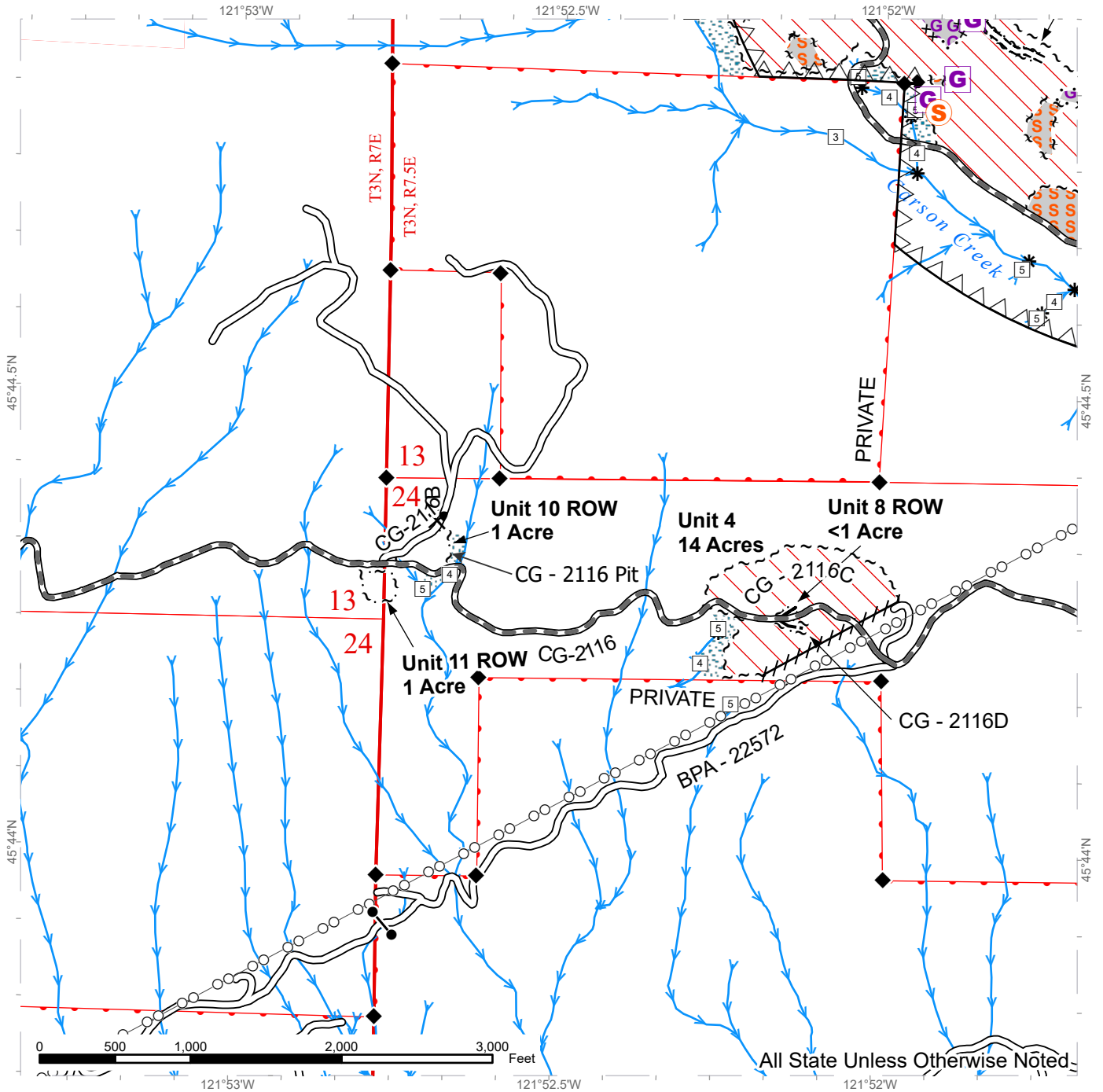
Variable Density Thinning	Stream Type	Optional Reconstruction
Skip Area	Stream Type Break	Timing Restriction
Gap Area	Streams	Survey Monument
Riparian Mgt Zone	Power Lines	Bridge
Sale Boundary Tags	Existing Roads	Gap <1/4 Acre
Special Mgmt Area	Required Pre-Haul Maintenance	Skip <1/4 Acre
Leave Tree Tags	Required Construction	Property Line
Right of Way Tags	Required Reconstruction	
Flag Line	Optional Construction	



TIMBER SALE MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT #: 30-106097
TOWNSHIP(S): T3R7E, T3R7.5E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1602-2298



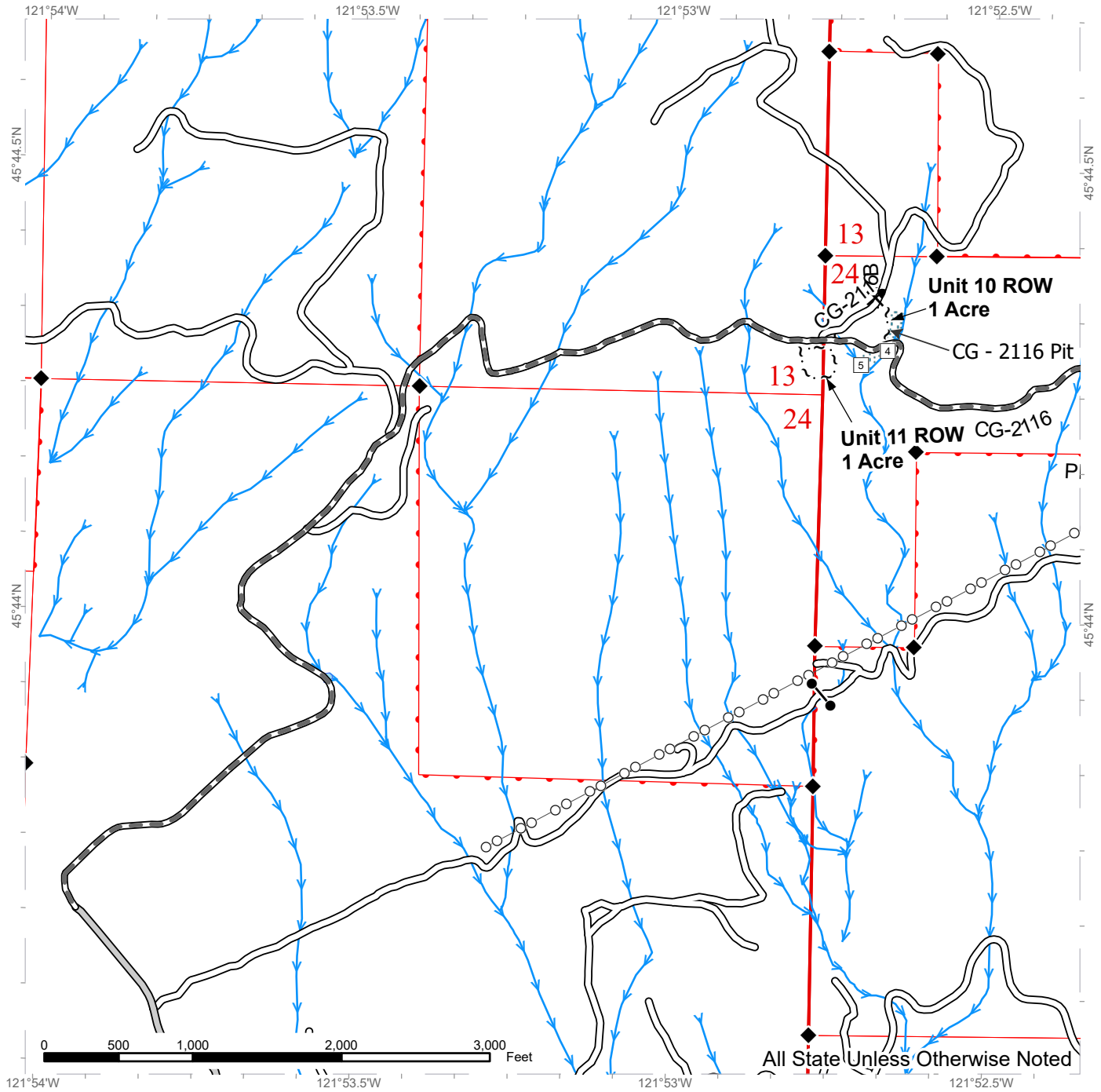
All State Unless Otherwise Noted

Variable Density Thinning	Stream Type	Timing Restriction
Skip Area	Stream Type Break	Survey Monument
Gap Area	Streams	Gap <1/4 Acre
Riparian Mgt Zone	Power Lines	Skip <1/4 Acre
Sale Boundary Tags	Existing Roads	Rock Pit
Special Mgmt Area	Required Pre-Haul Maintenance	Gate
Leave Tree Tags	Required Construction	Property Line
Right of Way Tags	Required Reconstruction	
Flag Line	Optional Construction	

TIMBER SALE MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT #: 30-106097
TOWNSHIP(S): T3R7E, T3R7.5E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1602-2298



Riparian Mgt Zone	Stream Type	Timing Restriction
Right of Way Tags	Stream Type Break	Survey Monument
Streams	Power Lines	Rock Pit
County Road	Existing Roads	Gate
Required Pre-Haul Maintenance		Property Line



DRIVING MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT#: 30-106097
TOWNSHIP(S): T3R7E, T3R7.5E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1602-2298



- Timber Sale Unit
- Highway
- Haul Route
- Other Road
- Milepost Markers
- Distance Indicator
- Town
- Bridge
- Rock Pit

DRIVING DIRECTIONS:

From Highway 14, (mile marker 44.5) Stevenson, turn north on Columbia Street. At the next intersection (Approximately 300 feet), turn right (east) on NW Vancouver Ave. Travel approximately 250 feet and turn north on E Loop Road for approximately 250 feet. Merge onto NW Kanaka Creek Road for approximately 2.0 miles. Turn left (west) onto Skaar Road for approximately 0.6 miles and continue onto the CG-2100. Travel northeast on the CG-2100 for approximately 1.0 miles and turn right (east) onto the CG-2116. Travel east on the CG-2116 for approximately 0.7 miles until you reach Units 10 and 11. Continue traveling east on the CG-2116 for approximately 0.6 miles to reach Unit 4. Travel approximately 0.2 and turn northeast on the CG-2210. Travel approximately 0.7 miles until you reach the CG-2200 Road. Turn right (south) on the CG-2200 for approximately 0.2 miles to access Unit 3. From Unit 3, travel north on the CG-2200 for approximately 0.5 miles to reach Unit 2. From Unit 2, continue north on the CG-2200 for approximately 0.6 miles to reach Unit 1.



**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

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

Export Restricted MBF Scale AGREEMENT NO. 30-0106097

SALE NAME: SHADY GROVE VDT

**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-010 Products Sold and Sale Area

Purchaser was the successful bidder on September 26, 2024 and the sale was confirmed on _____. The State, as owner, agrees to sell to Purchaser, and Purchaser agrees to purchase, cut, and remove the following forest products: All timber, except leave trees bound by yellow "Leave Tree Area" tags, leaves trees marked with a ring of blue paint, all downed timber greater than 10 inches in diameter and all timber described in Schedule A bound by the following:

Unit 1, white "Timber Sale Boundary" tags with pink flagging, CG-2200 road and pink flagging, gaps are marked with blue "Special Management Area" tags with pink flagging and pink flag line;

Unit 2, white "Timber Sale Boundary" tags with pink flagging and the CG-2200B road;

Unit 3, white "Timber Sale Boundary" tags with pink flagging and the CG-2200 road;

Unit 4, white "Timber Sale Boundary" tags with pink flagging and pink flag line;

Unit 5, 6, 7, 8, 9, 10, 11 ROW, orange "Right-of-way" tags;

All forest products described above located on approximately 156 acres on part(s) of Sections 18, and 19 all in Township 3 North, Range 8 East, Section 13 all in Township 3 North, Range 7.5 East, Sections 13, and 24 all in Township 3 North, Range 7 East W.M. in Skamania County(s) as shown on the attached timber sale map and as designated on the sale area.

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-025 Schedules

The following attached schedules are hereby incorporated by reference:

Schedule	Title
A	Shady Grove VDT

G-030 Contract Term

Purchaser shall remove the forest products conveyed and complete all work required by this contract prior to October 31, 2027.

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-050 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 contract value based on the contract payment rate and advertised volume.

For the second extension, not to exceed 1 year, payment of at least 90 percent of the contract value based on the contract payment rate base and advertised volume.

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 timber value of the contract.

To determine the unpaid portion of the contract, multiply the contract payment rate for each item by the remaining volume for each item based on the volumes from the Timber Notice of Sale. In addition, all cash deposits that can be used for timber payments, except the initial deposit, will be deducted from the unpaid portion of the contract.

- e. Payment of \$3.00 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-061 Inadvertent Discovery of Cultural Resources

Purchaser acknowledges that cultural resources as defined in WAC 222-16-010 may exist within the timber sale area and that the existence and location of such resources may be unknown at the time this contract is executed. Purchaser has a duty to exercise due care in its operations and in the event any human skeletal remains are discovered by the Purchaser or the State during the course of operations Purchaser shall immediately halt operations and notify local law enforcement in the most expeditious manner possible then notifying the Contract Administrator. In the event cultural resources are discovered by the Purchaser or the State during the course of operations Purchaser shall immediately halt operations and notify the Contract Administrator.

Any potential resources shall not be removed or disturbed. Purchaser shall resume operations as directed in writing by the Contract Administrator.

G-062 Habitat Conservation Plan

The State has entered into a Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services) to address state trust land management issues relating to compliance with the Federal Endangered Species Act. The activities to be carried out under this contract are located within the State's HCP area and are subject to the terms and conditions of the HCP, and the Services' Incidental Take Permit Nos. TE812521-1 and 1168 (collectively referred to as ITP), or as amended hereafter by the Services. The ITP authorizes the incidental take of certain federally listed threatened and endangered species, as specified in the ITP conditions. All HCP materials, including the ITP, are available for review at the State's Regional Offices and the administrative headquarters in Olympia, Washington.

By signing this contract, Purchaser agrees to comply with the terms and conditions of the ITP, and the HCP, which shall become terms of this contract. The State agrees to authorize the lawful activities of the Purchaser carried out pursuant to this contract, PROVIDED the Purchaser remains in compliance with the terms and conditions of both the HCP and ITP. The requirements set forth in this contract are intended to comply with the terms and conditions of the HCP and ITP. Accordingly, non-compliance with the terms and conditions of the HCP and ITP will render the authorization provided in this paragraph void, be deemed a breach of the contract and may subject Purchaser to liability for violation of the Endangered Species Act.

Any modifications to the contract shall be proposed in writing by Purchaser, shall continue to meet the terms and conditions of the HCP and ITP, and shall require the prior written approval of the Region Manager before taking effect.

G-063 Incidental Take Permit Notification Requirements

- a. Purchaser shall immediately notify the Contract Administrator of new locations of permit species covered by the Incidental Take Permits (ITP) that are discovered within the area covered by the State's Habitat Conservation Plan (HCP), including, but not limited to: locations of occupied murrelet habitat; spotted owl nest sites; wolves; grizzly bears; nests, communal roosts, or feeding concentrations of bald eagles; peregrine falcon nests; Columbian white-tailed deer; Aleutian Canada geese; Oregon silverspot butterflies; and additional stream reaches found to contain bull trout. Purchaser is required to notify the Contract Administrator upon discovery of any fish species found in streams or bodies of water classified as non-fish bearing. In all circumstances, notification must occur within a 24 hour time period.
- b. Upon locating any live, dead, injured, or sick specimens of any permit species covered by the ITP, Purchaser shall immediately notify the Contract Administrator. Purchaser shall notify the Contract Administrator if there is any doubt as to the identification of a discovered permit species. Purchaser may be required to take certain actions to help the Contract Administrator

safeguard the well-being of any live, injured or sick specimens of any permit species discovered, until the proper disposition of such specimens can be determined by the Contract Administrator. Any such requirements will be explained to Purchaser by the Contract Administrator during the Pre-Work Conference. In all circumstances, notification must occur within a 24 hour time period.

- c. Purchaser shall refer to a specific ITP number, ITP TE812521-1 or ITP 1168 (copies which are located in the region office) in all correspondence and reports concerning permit activities.
- d. Provisions and requirements of the ITP shall be clearly presented and explained to Purchaser by Contract Administrator during the Pre-Work Conference as per contract clause G-330. All applicable provisions of the ITP and this schedule must be presented and clearly explained by Purchaser to all authorized officers, employees, contractors, or agents of Purchaser conducting authorized activities in the timber sale area. Any questions Purchaser may have about the ITP should be directed to the Contract Administrator.

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-090 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, added forest products become a part of this contract and shall be paid for at the same rate and manner as other forest products under this contract.

G-100 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 become a part of this contract and shall be paid for at the same rate and manner as other forest products under this contract.

G-110 Title and Risk of Loss

Title to the forest products conveyed passes at confirmation of the sale. Purchaser bears the risk of loss of or damage to and has an insurable interest in the forest products in this contract from the time of confirmation of the sale of forest products. In the event of loss of or damage to the forest products after passage of title, whether the cause is foreseeable or unforeseeable, the forest products shall be paid for by Purchaser. Breach of this contract shall have no effect on this provision. Title to the forest products not removed from the sale area within the period specified in this contract shall revert to the State as provided in RCW 79.15.100.

G-116 Sustainable Forestry Initiative® (SFI®) Certification

Forest products purchased under this contract are certified as being in conformance with the Sustainable Forestry Initiative 2022 Forest Management Standard under certificate number: BVC-SFIFM-018227.

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 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 Castle Rock, 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; CG-2100 (Sta. 0+00-57+16), CG-2116, CG-2116B, CG-2200 (Sta. 97+17-207+78), CG-2200B (Sta. 0+00-10+57), CG-2200C, CG-2202, CG-2205, CG-2210, CG-2210A, CG-2216C and CG-2216D. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

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 CG-2100, CG-2110, CG-2116, CG-2200 and CG-2200B 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:

RUP #55-106287 between State and Sam Rsjord dated 3/19/2024. Permit shall begin on 9/26/2024 and terminate on 09/26/2027.

G-396 Public Hauling Permit

The hauling of forest products, rock or equipment may require a state, county, or city hauling permit. Purchaser is responsible for obtaining any necessary permit and any costs associated with extra maintenance or repair levied by the permitting agency. Purchaser must provide the Contract Administrator with a copy of the executed permit.

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-010 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 the 'Payment for Forest Products' clause, 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-021 Payment for Forest Products

Purchaser agrees to pay the following rates per MBF Scribner net log scale for forest products conveyed and cut or removed from the sale area plus \$72,369.00 on day of sale and \$9.00 per MBF upon removal in fees. Fees collected shall be retained by the state unless the contract is adjusted via the G-066 clause.

DATA MISSING

Species that are conveyed but are not listed in the table above shall be paid for at a rate to be determined by the State.

Utility logs, special cull and peelable cull logs of all species, included on loads of logs that are required to be removed and scaled per clause H-150 will be paid for on an adjusted gross scale basis at the rate of \$20.00 per MBF plus fees.

P-027 Payment for Removal of Optional Forest Products

Purchaser agrees to weigh all loads and pay the rate of \$2.00 per ton for forest products approved for removal from the sale area under clause H-157.

P-040 Weighing and Scaling Costs

Purchaser agrees to pay for all scaling and weighing costs for logs and other products sold under this contract. Purchaser also agrees to pay for all costs associated with the transmission and reporting of scale or weight data.

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-070 Payment for Products: Damage, Theft, Loss, or Mismatch

Forest products included in this agreement which are destroyed, damaged, stolen, lost, or mismatched shall be paid for by Purchaser on demand of the State. The rates contained in clause P-021 shall apply.

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 \$100,000.00. 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 L: Log Definitions and Accountability

L-010 Forest Products Conveyed

Forest products conveyed are all logs or parts of logs described by the 'Products Sold and Sale Area' (G-010) clause meeting the removal requirements listed in the 'Required Removal of Forest Products' (H-150) clause.

L-020 Short Logs - Peeler Blocks

Logs or parts of logs which are removed from the sale area that fail to meet the minimum gross length requirements shall be scaled and graded as short logs or peeler blocks. Such material shall be paid for at the forest products rates specified in this contract.

L-040 Utility Logs

Utility logs are logs that meet the minimum utility log standards as described by the log scaling rules applicable for this contract.

L-060 Load Tickets

Purchaser shall complete and use load tickets as directed by the Contract Administrator and, if required, use other identification as directed by the State to ensure accounting of forest products removed from the sale area. A load ticket must be fixed, as designated by the Contract Administrator, to each truck and trailer load prior to leaving the landing.

Purchaser shall account for all load tickets issued by the Contract Administrator and return unused tickets at termination of the contract, or as otherwise required by the Contract Administrator. Unused tickets not returned shall be subject to liquidated damages per clause D-030.

The State may also treat load tickets either not accounted for or not returned as lost forest products per clause P-070. All costs associated with computing the billings for lost forest products shall be borne by Purchaser

L-071 Log and Load Reporting Service

This contract requires the use of a State approved third party Log and Load Reporting Service (LLRS). Purchaser shall ensure log volume measurement data and/or load and weight data is received by the LLRS within 1 business day of logs being measured or weighed. Purchaser agrees to pay the LLRS for log and load data supplied to the State.

If during the term of this contract, the State discontinues use of the LLRS, the State will notify the Purchaser in writing and the Purchaser will then be responsible to send log scale and/or weight information to the State.

L-080 Scaling Rules

Determination of volume and grade of any forest products shall be conducted by a state approved third party scaling organization and in accordance with the Westside log scaling and grading rules and Scribner Volume Table, revised July 1, 1972, contained in the Northwest Log Rules Eastside and Westside Log Scaling Handbook (developed and produced by the Northwest Log Rules Advisory Group) and in effect on the date of confirmation of this contract.

Special scaling specifications shall be noted on the State's Brand Designation form which is hereby incorporated to this contract by reference.

L-110 State Approval of Log Scaling and Weighing Locations

Forest Product measurement and weighing facilities required by this contract must be approved by the State. Forest products sold under the contract which require log scaling shall be scaled, measured, or counted by a State approved third party log scaling organization. Forest products sold under the contract which require weighing shall be weighed at a location that meets Washington State Department of Agriculture approval.

Prior to forest products being hauled, the Contract Administrator must authorize in writing the use of State approved measurement and/or weighing facilities that are at or enroute to final destinations. Forest products from this sale shall be measured or weighed at facilities, which are currently approved for use by the State and are currently authorized for this sale. The State reserves the right to verify load volume and weights with State employees or contractors at the State's own expense. The State reserves the right to revoke the authorization of previously approved measurement locations.

L-120 Long Log Taper Distribution

Forest products over 40 feet long plus trim shall be segment scaled and the lower segment diameters shall be determined using actual taper. In order to utilize taper rules for determining segment diameters for poles and pilings greater than 40 feet in length plus trim, Purchaser must request use of a Pole and Piling Scaling Specification Agreement on file in the region office. Approval for usage of a special Pole and Piling Scaling Specification Agreement may be granted at the sole discretion of the State.

Following State approval for usage of the Pole and Piling Scaling Specification Agreement, the Brand Designation form shall be amended to incorporate the long log taper rules. The volume reported by the scaling organization for forest products over 40 feet plus trim will be expanded by 5 percent and the additional 5 percent volume shall be billed to the purchaser at the contract rate.

L-130 Conversion Factors

Forest products removed from the sale area that are not measured in units specified in the 'Payment for Forest Products' clause of this contract shall be converted to board feet using Department of Natural Resources' standard conversion factors.

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

Ground Based Yarding will not be permitted from November 1 to April 30 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-012 Leave Tree Damage Definition

Leave trees are trees required for retention within the sale boundary. Purchaser shall protect leave trees from being cut, damaged, or removed during operations.

Leave tree damage exists when more than 5 percent of the leave trees are damaged in a unit and when one or more of the following criteria occur as a result of Purchaser's operation, as determined by the Contract Administrator:

- a. A leave tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 100 square inches.

- b. A leave tree top is broken or the live crown ratio is reduced below 30 percent.
- c. A leave 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 leave tree has been cut or damaged, the Purchaser may be required to pay liquidated damages for Excessive Leave Tree Damage as detailed in clause D-040.

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 12 feet in width, including rub trees.
- b. Skid trails shall not cover more than 10 percent of the total acreage on one unit.

- c. Skid trail location will be pre-approved by the Contract Administrator.
- d. Except for rub trees, skid trails shall be felled and yarded prior to the felling of adjacent timber.
- e. Rub trees shall be left standing until all timber tributary to the skid trail has been removed.
- f. Excessive soil damage is not permitted. Excessive soil damage is described in clause H-017.
- g. Skid trails will be water barred at the time of completion of yarding, if required by the Contract Administrator.

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

H-017 Preventing Excessive Soil Disturbance

Operations may be suspended when soil rutting exceeds 12 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-025 Timing Requirements for Timber Removal

All timber must be removed within 30 days of being felled.

H-030 Timber Falling

Trees shall be felled and logs shall be bucked to obtain the greatest practicable utilization of forest products and other valuable materials conveyed.

H-035 Fall Trees Into Sale Area

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

H-040 Purchaser Harvest Plan

Purchaser shall, as part of the plan of operations, prepare an acceptable harvest plan for all units. The plan shall address the felling, bucking and yarding, which are part(s) of this contract. The harvest plan shall be approved by the Contract Administrator prior to beginning the harvest operation. Purchaser shall not deviate from the harvest plan without prior written approval by the Contract Administrator.

H-052 Branding and Painting

Forest products shall be branded with a brand furnished by the State prior to removal from the landing. All purchased timber shall be branded in a manner that meets the requirements of WAC 240-15-030(2)(a)(i). All timber purchased under a contract designated as export restricted shall also be painted in a manner that meets the requirements of WAC 240-15-030(2)(a)(ii).

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

H-060 Skid Trail Locations

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

H-080 Snags Not to be Felled

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

H-110 Stump Height

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

H-120 Harvesting Equipment

Forest products sold under this contract shall be harvested and removed using shovel or tracked skidder with equipment limitation outlined in clause H-140. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

H-125 Log Suspension Requirements

Lead-end suspension is required for all yarding activities.

H-126 Tailholds on State Land

If Purchaser tailholds on State land, methods to minimize damage to live trees outside the sale area shall be employed and must be approved in writing by the Contract Administrator.

H-127 Tailholds on Private Land

If Purchaser chooses to tailhold on private property, Purchaser shall obtain permit(s) and assumes responsibility for all costs and damages associated with the permit(s). Purchaser must provide the State with a copy of the executed permit(s) or a letter from the landowner indicating that a satisfactory tailhold permit(s) has been consummated between Purchaser and the landowner.

H-130 Hauling Schedule

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

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

- A. Active Haul Routes will be posted with CB channels by Purchaser.
- B. Ground based yarding equipment shall only operate during dry soil conditions.
- C. Ground based yarding equipment will not be permitted on sustained slopes over 40 percent.
- D. Areas of root rot identified by the fallers or the Contract Administrator shall be marked around the perimeter by high stumping or marking the top of the stump with an "X" in all Units.

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

H-141 Additional Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

- A. Sediment delivery from roads will not be allowed. Hauling operations will be shut down as needed until conditions improve or work can be completed that eliminates the delivery of sediment.
- B. Within shovel logging areas, the shovel operator shall break up concentrations of logging debris greater than 10 feet by 10 feet to allow exposure of natural soils to ensure proper reforestation.
- C. All trees 60 inches Diameter at Breast Height (DBH) and greater shall not be felled unless for safety reasons. If trees 60 inches DBH or greater needs to be felled for safety reasons, trees will be left where felled.

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

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.

Northern Spotted Owl - Timing restrictions are described as no operation of heavy equipment within the critical nesting season (March 1 to August 31). Heavy equipment is identified as felling, yarding, and loading equipment for logging, and road maintenance and construction equipment in Unit 1, 5 and 6.

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

H-150 Required Removal of Forest Products

Purchaser shall remove from the sale area and present for scaling or weighing all forest products conveyed in the G-010 clause that meet the following minimum dimensions:

Species	Net bd ft	Log length (ft)	Log dib
Conifer	10	12	5
Hardwood	20	16	5

The State may treat failure to remove forest products left on the sale area that meet the above specifications as a breach of this contract. At the State's option, forest products that meet the above specifications and are left on the sale area may be scaled for volume or measured and converted to weight by the State or a third party scaling organization and billed to Purchaser at the contract payment rate. All costs associated with scaling, measuring and computing the billing will be borne by the Purchaser.

H-157 Optional Removal of Forest Products Not Designated

If in the course of operations, Purchaser decides to remove forest products that are below the minimum designated removal specifications per the 'Required Removal of Forest Products' (H-150), the payment rates in clause P-027 shall apply.

Forest products designated as optional shall be decked separately from forest products designated as required for removal. Prior to removal from the sale area, optional forest products as described in this clause must be inspected and approved by the Contract Administrator. Optional forest products may not be mixed with forest products that are required for removal by this contract and shall be removed from the sale area in separate truck loads using load tickets specified by the Contract Administrator.

All material removed under this clause is subject to the same log and load accountability rules as defined in the Log Definitions and Accountability section of this contract. Purchaser shall follow the payment procedures as required in the P-052 clause and will submit a separate summary report for all forest products removed from the sale area under the authority of this clause.

H-160 Mismatch

Mismatch is defined as forest products remaining on the sale area that would have met the specifications in clause H-150 if bucking lengths had been varied to include such products.

The State may treat mismatch as a breach of this contract. At the State's option, forest products that are left on the sale area may be scaled for volume by the State or a third party scaling organization and billed to Purchaser at the contract payment rate. All costs associated with scaling and computing the billing will be borne by Purchaser.

H-180 Removal of Specialized Forest Products or Firewood

Prior to the removal of conveyed specialized forest products or firewood from the sale area, Purchaser and the State shall agree in writing to the method of accounting for/and removal of such products.

H-190 Completion of Settings

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

H-220 Protection of Residual or Adjacent Trees

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

H-230 Tops and Limbs Outside the Sale Boundary

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

Section C: Construction and Maintenance

C-040 Road Plan

Road construction and associated work provisions of the Road Plan for this sale, dated 3/4/2024 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on CG-2100 (Sta. 0+00-57+16), CG-2116, CG-2116B, CG-2200 (Sta. 97+17-207+78), CG-2200B (Sta. 0+00-10+57), CG-2200C, CG-2202, CG-2205, CG-2210, CG-2210A, CG-2216C and CG-2216D 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 all roads not listed in clause C-050. 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-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-050 Cessation of Operations for Low Humidity

When the humidity is 30 percent or lower on the sale area, all operations must cease unless authority to continue is granted by the State in writing.

S-060 Pump Truck or Pump Trailer

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

S-070 Water Supply

Purchaser shall provide, during the "closed season", a water supply with a minimum capacity of 300 gallons for rapid filling of pump trucks or trailers at a location designated by the Contract Administrator.

S-100 Stream Cleanout

Slash or debris which enters all streams 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-110 Resource Protection

No ground based equipment may operate within 30 feet from type 4 RMZ's unless authority is granted in writing by the Contract Administrator.

S-130 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

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

Purchaser shall be responsible for restoring the site in the event of a spill or other releases of hazardous material/waste during operations conducted under this contract.

b. Hazardous Materials Spill Prevention

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

c. Hazardous Materials Spill Containment, Control and Cleanup

If safe to do so, Purchaser shall take immediate action to contain and control all hazardous material spills. Purchaser shall ensure that enough quick response spill kits capable of absorbing 10 gallons of oil, coolant, solvent or contaminated water are available on site to quickly address potential spills from any piece of equipment at all times throughout active operations. If large quantities of bulk fuel/other hazardous materials are stored on site, Purchaser must be able to effectively control a container leak and contain & recover a hazmat spill equal to the largest single on site storage container volume. (HAZWOPER reg. 29CFR 1910.120 (j) (1) (vii)).

d. Hazardous Material Release Reporting

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

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

S-131 Refuse Disposal

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

Section D: Damages

D-010 Liquidated Damages

The clauses in the DAMAGES section of this contract provide for payments by Purchaser to the State for certain breaches of the terms of this contract. These payments are agreed to as liquidated damages and not as penalties. They are reasonable estimates of anticipated harm to the State 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.

D-020 Failure to Remove Forest Products

Purchaser's failure to remove all or part of the forest products sold in this agreement prior to the expiration of the contract term results in substantial injury to the State. The value of the forest products sold at the time of breach is not readily ascertainable. Purchaser's failure to perform disrupts the State's management plans, the actual cost of which is difficult to assess. A resale involves additional time and expense and is not an adequate remedy. Therefore, Purchaser agrees to pay the State as liquidated damages a sum calculated using the following formula:

$$LD = .35V-ID-P+C+A$$

Where:

- LD = Liquidated Damage value.
- V = The unremoved value at the date of breach of contract. The value is determined by subtracting the removal volume to date from the State's cruise volume multiplied by the contract bid rates.
- ID = Initial Deposit paid at date of contract that has not been applied to timber payments.
- P = Advance payments received but not yet applied to specific contract requirements.
- C = Charges assessed for contract requirements completed prior to breach of contract but not paid for.
- A = Administrative Fee = \$2,500.00.

The above formula reflects the Purchaser's forfeiture of the initial deposit in accordance with clause P-010 by deducting the initial deposit from the amount owed. In no event shall the liquidated damages be less than zero. Interest on the liquidated damage is owed from the date of breach until final payment, calculated using the following formula: $\text{Interest} = r \times \text{LD} \times N$.

Where:

- r = daily equivalent of an annual interest at current interest rate as established by WAC 332-100-030.
- LD = Liquidated damage value.
- N = Number of days from date of breach to date payment is received.

D-030 Inadequate Log Accountability

Removal of forest products from the sale area without adequate branding and/or valid load tickets attached to the load and scaling forest products in a location other than the facility approved by the State can result in substantial injury to the State. Failure to properly account for loads and scaling and/or weighing information can result in loss to the State. The potential loss from not having proper branding, ticketing, scaling and/or weighing location and accountability is not readily ascertainable. Purchaser's failure to perform results in a loss of log weight and scale accountability, increases the potential for unauthorized removal of forest products, and increases the State's administration costs, the actual costs of which are difficult to assess.

Enforcement actions for unauthorized removal of forest products for each improperly branded load, improperly ticketed load, lost or unaccounted for tickets, or use of a facility not authorized for this sale or improper submission of scaling data are impractical, expensive, time consuming and are not an adequate remedy. Therefore, Purchaser agrees to pay the State, as liquidated damages, a sum of \$100 each time a

load of logs does not have branding as required in the contract, \$250 each time a load of logs does not have a load ticket as required by the contract, \$250 each time a load ticket has not been filled out as required by the plan of operations, \$250 each time a load is weighed or scaled at a location not approved as required under this contract, \$250 each time a log ticket summary report is not submitted properly, and if a third party Log and Load Reporting Service is required, \$250 each time scaling or weight data is not properly submitted to the Log and Load Reporting Service per clause L-071, and \$250 each unused ticket that is not returned to the State, for any reason.

D-040 Leave Tree Excessive Damage

When Purchaser's operations exceed the damage limits set forth in clause H-012, Leave Tree Damage Definition, the trees damaged result in substantial injury to the State. The value of the damaged leave trees at the time of the breach is not readily ascertainable. Therefore, Purchaser agrees to pay the State as liquidated damages at the rate of \$1,000.00 per tree for all damaged trees in all VDT units.

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 VRH 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
DEPARTMENT OF NATURAL RESOURCES

Purchaser

Scott Sargent

Print Name

Pacific Cascade Region Manager

Date: _____

Date: _____

Address: _____

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

STATE OF _____)

COUNTY OF _____)

On this _____ day of _____, 20____, before me personally appeared _____

_____ to me known to be the _____ of the corporation

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

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

Notary Public in and for the State of

My appointment expires _____

Schedule A
Shady Grove VDT

Schedule A

UPLAND ENHANCEMENT THINNING PRESCRIPTIONS

Variable Density Thinning (VDT) prescription for Unit 1

Harvest Douglas-fir (DF), Western Hemlock (WH), red alder (RA), Noble Fir (NF), Grand Fir (GF) trees, except in designated gaps, unless approved by CA. Western Red Cedar and Bigleaf Maple trees shall not be cut. Trees less than 10” and over 30” shall not be cut.

The thinning activity will be a thinning from the middle, retaining the most dominant and younger trees (to promote diversity) on the site. The residual basal area should be 160 - 200 sq.ft./acre

Within the thinning unit, the following shall apply:

- Trees marked with a ring of blue paint are leave trees that shall not be cut.
- Trees marked with a ring of orange paint are take trees that are required to be cut. Orange-painted trees should be cut first, and then other trees may be cut to achieve the 160-200 sq.ft./acre basal area target.
- Gaps are marked with blue “Special Management Area” tags and pink flagging facing inside the gap.
 - O All trees within gaps shall be harvested except for blue painted leave trees.
- Skips are marked with yellow “Leave Tree Area” tags and pink flagging facing outside the skip.
 - O Timber in skips shall not be cut. Yarding through skips will not be permitted.
- Logging damage to advanced conifer regeneration shall be avoided where operationally feasible.
- All snags felled for safety reasons must remain on-site and shall be left as close as possible to their original location.

Variable Density Thinning (VDT) prescription for Units 2 and 4.

Harvest Douglas-fir (DF), Western Hemlock (WH), red alder (RA). Western Red Cedar and Bigleaf Maple trees shall not be cut.

The thinning activity will be a thinning from below, retaining the most dominant and healthy trees on the site. The residual basal area should be 130 - 150 sq.ft./acre

- All snags felled for safety reasons must remain on-site and shall be left as close as possible to their original location.

Variable Density Thinning (VDT) prescription for Unit 3

Harvest Douglas-fir (DF), Western Hemlock (WH), Noble fir (NF), and red alder (RA). Western Red Cedar and Bigleaf Maple trees shall not be cut. Trees less than 10” and over 30” shall not be cut.

The thinning activity will be a thinning from the middle, retaining the most dominant and younger healthy trees on the site. The residual basal area should be 160 - 200 sq.ft./acre

PRE-CRUISE NARRATIVE

Sale Name: Shady Grove VDT	Region: Pacific Cascade
Agreement #: 30-106097	District: Yacolt
Contact Forester: John Choate Phone / Location: 360-827-5867	County(s): Skamania, Choose a county
Alternate Contact: Ben Jeske Phone / Location: 360-480-2412	Other information: Click here to enter text.

Type of Sale: MBF Scale	
Harvest System: Ground based Click here to enter text.	100%
Harvest System: Uphill Cable Click here to enter text.	0%
Enter % of 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 # Harvest R/W or RMZ WMZ	Legal Description (Enter only one legal for each unit) Sec/Twp/Rng	Grant or Trust	Gross Proposal Acres	Deductions from Gross Acres (No harvest acres)				Net Harvest Acres	Acreage Determinati on (List method and error of closure if applicable)
				RMZ/ WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (Potentially Unstable Slopes)		
1	S13/T3N/R7.5E	9/10	131	8	11 (skips)	6	0	106	GPS (Trimble)
2	S19/T3N/R8E	1/10	27	3	0	1	<1	23	GPS (Trimble)
3	S19/T3N/R8E	1	5	2	0	<1	0	3	GPS (Trimble)
4	S24/T3N/R7.5E	10	17	2	0	1	0	14	GPS (Trimble)
5 ROW	S13/T3N/R7.5E	9/10	2	0	0	0	0	2	GPS (Trimble)
6 ROW	S13/T3N/R7.5E	9/10	3	0	0	0	0	3	GPS (Trimble)
7 ROW	S19/T3N/R8E	1	1	0	0	0	0	1	GPS (Trimble)
8 ROW	S24/T3N/R7.5E	10	<1	0	0	0	0	<1	GPS (Trimble)

9 ROW	S19/T3N/R8E	1	3	2	0	<1	0	1	GPS (Trimble)
10 ROW	S24/T3N/R7.5E	10	3	2	0	<1	0	1	GPS (Trimble)
11 ROW	S13/T3N/R7E	10	1	0	0	0	0	1	GPS (Trimble)
TOTAL ACRES			194	18	11	9	<1	156	

HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
1	Unit 1 is a Variable Density Thinning bounded by White "Timber Sale Boundary" tags, pink flagging and the CG-2200 road.	Gaps are bounded by Blue "Special Management Area" tags and pink flagging facing outside the gap; Clumped leave trees are bounded by yellow "Leave Tree Area" tags and pink flagging. Take trees are marked with a ring of Orange paint. Leave trees are marked with a ring of Blue paint..	Thin from the middle to a residual basal area of 160 – 200 sq.ft./acre
2	Unit 2 is a Variable Density Thinning bounded by White "Timber Sale Boundary" tags and pink flagging		Thin from below to a residual basal area of 130-160 sq. ft./acre
3	Unit 3 is a Variable Density Thinning bounded by White "Timber Sale Boundary" tags, pink flagging and the CG-2200 road.		Thin from the middle to a residual basal area of 160 – 200 sq.ft./acre
4	Unit 4 is a Variable Density Thinning bounded by White "Timber Sale Boundary" tags and pink flagging		Thin from below to a residual basal area of 130-160 sq. ft./acre
5	Unit 5 is a Right-of-Way Harvest bounded by orange "Right-of-Way" tags. Road centerlines are marked with an wood stake and orange flagging.		
6	Unit 6 is a Right-of-Way Harvest bounded by orange "Right-of-Way" tags. Road centerlines are marked with an wood stake and orange flagging.		

7	Unit 7 is a Right-of-Way Harvest bounded by orange "Right-of-Way" tags. Road centerlines are marked with an wood stake and orange flagging.		
8	Unit 8 is a Right-of-Way Harvest bounded by orange "Right-of-Way" tags. Road centerlines are marked with an wood stake and orange flagging.		
9	Unit 9 is a Right-of-Way Harvest bounded by orange "Right-of-Way" tags.		
10	Unit 10 is a Right-of-Way Harvest bounded by orange "Right-of-Way" tags.		
11	Unit 11 is a Right-of-Way Harvest bounded by orange "Right-of-Way" tags.		

OTHER PRE-CRUISE INFORMATION:

Unit #	Primary,secondary Species / Estimated Volume (MBF)	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	DF,RA / 2,969 MBF		Timber Sale Map Scale: 1" = 1000' Logging Plan Map Scale: 1" = 500'
2	DF,RA / 409 MBF		
3	DF,RA / 168 MBF		
4	DF,RA / 159 MBF		
5	DF,WH / 189 MBF		
6	DF,WH / 112 MBF		
7	DF,RA / 23 MBF		
8	DF,RA / 11 MBF		
9	DF,RA / 21 MBF		
10	DF / 8 MBF		
11	DF / 11 MBF		
TOTAL MBF	4,257 MBF		

REMARKS:

--

Prepared By: John Choate Date: 9/21/23	Title: State Lands Forester 2	CC:
---	-------------------------------	-----

Timber Sale Cruise Report Shady Grove

Sale Name: SHADY GROVE VDT

Sale Type: MBF SCALE

Region: PACIFIC CASC,PACIFIC CASC

District: YACOLT,YACOLT

Lead Cruiser: AMDouglas

Other Cruisers:BEWarnstadt

Cruise Narrative:

Location:

Shady Grove is located 3 miles northeast of Stevenson, WA. Access is provided by SR-14, Kanaka Creek Road, and the CG-2100 & 2200 forest roads. All units in the sale have direct road access.

Cruise Design: VDT Unit 1 was cruised with a 62.5 BAF sighted at 4.5'. Plots were measured with a cruise to count plot ratio of 1:2. VDT U4 was cruised with a 40 BAF sighted at 4.5' and a cruise to count plot ratio of 2:1. The rest of this sale was cruised with all cruise plots sighted at 4.5' and BAFs are listed on page 2. Conifers were cruised to 40' preferred log lengths and hardwoods were cruised to 30' preferred lengths. Units 1 and 3 thinning were cruised to leave a target residual basal over 160. Units 2 and 4 were cruised to leave a target residual basal of 140. No Western Red Cedar or Bigleaf Maple to be cut unless in Unit 1 GAPS or Right of Ways. No trees over 30" or under 10" to be cut in Units 1 and 3 unless in Right of Ways or painted orange.

Timber Quality:

All units contain a dominant overstory of Douglas-fir. Unit 1 has a fair amount of Grand Fir and Western Hemlock. Most units have a trace of RA, RC, and MA.

In units 2, 4, and 7-11; timber is young, small-diameter, "plantation style" fir.

Units 1,3,5,and 6 contain older cohorts. The Douglas-fir in these units is large. Most boles display excellent form, show minimal defect, and contain high quality segments. There is an opportunity to harvest some large Poles in Unit 1.

Logging and Stand Conditions:

A majority of the timber sale is laid out on flat ground. Projected harvesting methods are 100% ground-based. The understory in most places is clear. Unit 1 contains some tangled patches of vine maple. Small, scattered mortality pockets were observed in Units 1 and 3.

General Remarks:

Unit 1 VDT contains skips and gaps. Skips are the equivalent of leave tree areas. Gaps are tagged "cut-all" areas within the thinning. Gap acreage was subtracted and cruised separately for Unit 1.

Timber Sale Notice Volume (MBF)

Sp	DBH	Rings/In	Age	MBF Volume by Grade						
				All	Peeler	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	19.5	7.2		3,792	34	646	1,671	1,208	220	13
GF	19.2			343			228	101	13	1
WH	16.8			96			45	40	10	1
RA	12.1			26			4	2	18	3
ALL	19.0	7.2		4,257	34	646	1,948	1,350	261	18

Timber Sale Notice Weight (tons)

Sp	Tons by Grade						
	All	Peeler	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	26,952	178	3,928	11,176	9,544	2,039	85
GF	2,505			1,535	849	111	12
WH	881			379	375	121	7
RA	223			40	18	145	20
ALL	30,561	178	3,928	13,129	10,785	2,416	123

Timber Sale Overall Cruise Statistics

BA (sq ft/acre)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR SE (%)	Net Vol (bf/acre)	Vol SE (%)
294.5	2.9	169.9	1.8	51,690	3.6

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
SHADY GROVE VDT U1	B1C: VR, 1 BAF (62.5) Measure/ Count Plots, Sighting Ht = 4.5 ft	98.7	118.6	104	37	2
Unit 1 GAPS	B1: VR, 1 BAF (62.5) Measure All, Sighting Ht = 4.5 ft	7.1		7	7	0
SHADY GROVE VDT U2	B1C: VR, 1 BAF (40) Measure/ Count Plots, Sighting Ht = 4.5 ft	22.7	23.6	23	13	0
SHADY GROVE VDT U3	B1: VR, 1 BAF (54.44) Measure All, Sighting Ht = 4.5 ft	3.2	3.5	5	5	0
SHADY GROVE VDT U4	B1C: VR, 1 BAF (40) Measure/ Count Plots, Sighting Ht = 4.5 ft	14.4	15.4	15	10	0
SHADY GROVE VDT ROW U5	B1: VR, 1 BAF (62.5) Measure All, Sighting Ht = 4.5 ft	1.7	1.7	2	2	0

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
SHADY GROVE VDT ROW U6	B1: VR, 1 BAF (62.5) Measure All, Sighting Ht = 4.5 ft	3.1	3.1	3	3	0
SHADY GROVE VDT ROW U7	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	1.3	1.3	2	2	0
SHADY GROVE VDT ROW U8	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.4	0.4	1	1	0
SHADY GROVE VDT ROW U9	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.9	0.9	2	2	0
SHADY GROVE VDT ROW U10	B1: VR, 1 BAF (27.78) Measure All, Sighting Ht = 4.5 ft	1.3	1.6	2	2	0
SHADY GROVE VDT ROW U11	B1: VR, 1 BAF (27.78) Measure All, Sighting Ht = 4.5 ft	0.9	0.9	2	2	0
All		155.7	171.0	168	86	2

Timber Sale Log Grade x Sort Summary

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
DF	LIVE	2 SAW	Domestic	13.7	40	3,884	3,687	5.1	3,973.4	574.1
DF	LIVE	2 SAW	HQ-A	14.3	40	1,333	1,327	0.4	1,410.5	206.7
DF	LIVE	2 SAW	HQ-B	15.0	40	4,881	4,783	2.0	4,855.3	744.8
DF	LIVE	2 SAW	Pole	15.6	40	936	936	0.0	937.0	145.7
DF	LIVE	3 PEELER	HQ-A	28.7	40	221	221	0.0	178.3	34.4
DF	LIVE	3 SAW	Domestic	8.6	39	5,768	5,650	2.1	7,219.5	879.6
DF	LIVE	3 SAW	HQ-B	10.3	40	2,106	2,080	1.2	2,298.2	323.9
DF	LIVE	3 SAW	Pole	10.2	40	29	29	0.0	26.5	4.4
DF	LIVE	4 SAW	Domestic	5.7	28	1,443	1,407	2.5	2,028.5	219.0
DF	LIVE	4 SAW	Pole	5.0	36	7	7	0.0	10.8	1.1
DF	LIVE	CULL	Cull	6.7	8	87	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	16.9	40	4,182	4,146	0.8	3,928.3	645.6
DF	LIVE	UTILITY	Pulp	5.5	14	82	82	0.0	85.3	12.8
GF	LIVE	2 SAW	Domestic	14.6	40	1,497	1,462	2.4	1,534.5	227.6
GF	LIVE	3 SAW	Domestic	8.5	39	658	648	1.4	848.5	100.9
GF	LIVE	4 SAW	Domestic	5.7	22	87	85	1.8	110.6	13.3
GF	LIVE	CULL	Cull	7.3	9	6	0	100.0	0.0	0.0
GF	LIVE	UTILITY	Pulp	7.7	12	9	9	0.0	11.8	1.4
RA	LIVE	2 SAW	Domestic	16.7	30	40	24	40.0	39.6	3.7
RA	LIVE	3 SAW	Domestic	10.8	30	14	11	24.5	18.1	1.6
RA	LIVE	4 SAW	Domestic	5.4	29	120	113	5.6	145.1	17.6
RA	LIVE	CULL	Cull	5.0	17	2	0	100.0	0.0	0.0

Sp	Status	Grade	Sort	Dia	Len	BF Gross	BF Net	Defect %	Tons	MBF Net
RA	LIVE	UTILITY	Pulp	5.0	24	20	20	0.0	19.8	3.1
WH	LIVE	2 SAW	Domestic	14.4	40	299	291	2.7	378.7	45.3
WH	LIVE	3 SAW	Domestic	8.8	39	265	255	3.7	374.6	39.7
WH	LIVE	4 SAW	Domestic	5.1	32	67	65	2.6	121.5	10.1
WH	LIVE	CULL	Cull	12.9	4	12	0	100.0	0.0	0.0
WH	LIVE	UTILITY	Pulp	7.8	14	5	5	0.0	6.5	0.7

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Pole	5.0	36	7	0.0	10.8	1.1
DF	5 - 7	LIVE	Pulp	5.5	14	82	0.0	85.3	12.8
DF	5 - 7	LIVE	Cull	5.7	7	0	100.0	0.0	0.0
DF	5 - 7	LIVE	Domestic	5.9	32	2,769	1.7	3,877.7	431.1
DF	8 - 11	LIVE	Cull	9.2	7	0	100.0	0.0	0.0
DF	8 - 11	LIVE	Domestic	9.8	39	4,214	2.5	5,301.5	656.1
DF	8 - 11	LIVE	Pole	10.2	40	29	0.0	26.5	4.4
DF	8 - 11	LIVE	HQ-B	10.4	40	2,080	1.2	2,298.2	323.9
DF	12 - 19	LIVE	Cull	12.7	3	0	100.0	0.0	0.0
DF	12 - 19	LIVE	Domestic	13.9	40	3,598	5.1	3,913.2	560.3
DF	12 - 19	LIVE	HQ-B	14.9	40	4,621	1.9	4,715.7	719.5
DF	12 - 19	LIVE	Pole	15.4	40	936	0.0	937.0	145.7
DF	12 - 19	LIVE	HQ-A	16.0	40	4,671	0.8	4,656.8	727.3
DF	20+	LIVE	HQ-B	20.7	40	162	3.6	139.7	25.2
DF	20+	LIVE	Domestic	20.8	40	162	2.2	128.9	25.2
DF	20+	LIVE	HQ-A	21.8	40	1,024	0.5	860.4	159.4
GF	5 - 7	LIVE	Domestic	6.0	30	255	1.0	340.9	39.7
GF	5 - 7	LIVE	Pulp	6.5	12	9	0.0	11.8	1.4
GF	5 - 7	LIVE	Cull	7.3	9	0	100.0	0.0	0.0
GF	8 - 11	LIVE	Domestic	9.5	37	479	1.7	618.2	74.6
GF	12 - 19	LIVE	Domestic	14.8	40	1,462	2.4	1,534.5	227.6
RA	5 - 7	LIVE	Cull	5.0	17	0	100.0	0.0	0.0
RA	5 - 7	LIVE	Pulp	5.0	24	20	0.0	19.8	3.1
RA	5 - 7	LIVE	Domestic	5.3	31	113	5.6	145.1	17.6
RA	8 - 11	LIVE	Domestic	10.8	30	11	24.5	18.1	1.6
RA	12 - 19	LIVE	Domestic	16.7	30	24	40.0	39.6	3.7
WH	5 - 7	LIVE	Domestic	5.6	33	107	2.0	203.7	16.7
WH	5 - 7	LIVE	Pulp	5.9	14	5	0.0	6.5	0.7

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
WH	5 - 7	LIVE	Cull	7.4	2	0	100.0	0.0	0.0
WH	8 - 11	LIVE	Domestic	9.9	37	213	4.2	292.5	33.1
WH	12 - 19	LIVE	Domestic	14.4	40	291	2.7	378.7	45.3
WH	12 - 19	LIVE	Cull	16.3	5	0	100.0	0.0	0.0

Cruise Unit Report SHADY GROVE VDT U1

Unit Sale Notice Volume (MBF): SHADY GROVE VDT U1

Sp	DBH	Rings/In	Age	MBF Volume by Grade						
				All	Peeler	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	19.6	7.2		2,610	25	442	1,241	789	105	8
GF	19.5			268			177	82	8	1
WH	17.1			85			45	30	9	0
RA	23.0			5			4	2		
ALL	19.4	7.2		2,969	25	442	1,468	903	122	8

Unit Cruise Design: SHADY GROVE VDT U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (62.5) Measure/Count Plots, Sighting Ht = 4.5 ft	98.7	118.6	104	37	2

Unit Cruise Summary: SHADY GROVE VDT U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
MA		12	0.1	0
RC		6	0.1	0
DF	90	466	4.5	2
GF	14	36	0.3	0
WH	10	17	0.2	0
RA	1	1	0.0	0
ALL	115	538	5.2	2

Unit Cruise Statistics: SHADY GROVE VDT 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 (%)
MA	7.2	368.4	36.1						
RC	3.6	717.6	70.4						
DF	280.0	48.2	4.7	191.3	23.3	2.5	53,578	53.5	5.3
GF	21.6	275.3	27.0	180.7	23.3	6.2	3,910	276.3	27.7
WH	10.2	372.7	36.5	130.9	33.9	10.7	1,337	374.2	38.1
RA	0.6	1,019.8	100.0	90.1	0.0	0.0	54	1,019.8	100.0
ALL	323.3	36.2	3.5	188.4	25.3	2.4	60,917	44.2	4.3

Unit Summary: SHADY GROVE VDT U1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	90	ALL	19.5	96	124	27,106	26,444	2.4	66.6	138.2	31.3	2,610.0
GF	LIVE	CUT	14	ALL	18.3	91	116	2,775	2,715	2.2	8.2	15.0	3.5	268.0
RA	LIVE	CUT	1	ALL	23.0	80	91	88	54	38.7	0.2	0.6	0.1	5.3
WH	LIVE	CUT	10	ALL	17.4	69	87	904	865	4.3	4.0	6.6	1.6	85.4
ALL	LIVE	CUT	115	ALL	19.3	94	121	30,873	30,079	2.6	79.0	160.5	36.5	2,968.8
ALL	ALL	ALL	115	ALL	19.3	94	121	30,873	30,079	2.6	79.0	160.5	36.5	2,968.8

Cruise Unit Report Unit 1 GAPS

Unit Sale Notice Volume (MBF): Unit 1 GAPS

Sp	DBH	Rings/In	Age	MBF Volume by Grade					
				All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	20.6	7.0		362	109	143	97	12	2
GF	19.6			43		34	6	2	0
WH	14.0			4			4		
ALL	20.1	7.0		409	109	176	108	14	2

Unit Cruise Design: Unit 1 GAPS

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (62.5) Measure All, Sighting Ht = 4.5 ft	7.1		7	7	0

Unit Cruise Summary: Unit 1 GAPS

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
MA		1	0.1	0
DF	27	29	4.1	1
GF	4	4	0.6	0
WH	1	1	0.1	0
ALL	32	35	5.0	1

Unit Cruise Statistics: Unit 1 GAPS

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 (%)
MA	8.9	264.6	100.0						
DF	258.9	73.0	27.6	211.5	21.7	4.2	54,770	76.1	27.9
GF	35.7	198.4	75.0	167.8	41.0	20.5	5,993	202.6	77.7
WH	8.9	264.6	100.0	69.2	0.0	0.0	618	264.6	100.0
ALL	312.5	41.6	15.7	202.2	27.2	4.8	63,187	49.7	16.5

Unit Summary: Unit 1 GAPS

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	27	ALL	20.6	101	129	51,603	50,993	1.2	104.2	241.1	53.1	362.1
GF	LIVE	CUT	4	ALL	19.6	80	102	6,298	5,993	4.8	17.0	35.7	8.1	42.6
WH	LIVE	CUT	1	ALL	14.0	24	49	677	618	8.6	8.4	8.9	2.4	4.4
ALL	LIVE	CUT	32	ALL	20.1	93	120	58,578	57,604	1.7	129.6	285.7	63.6	409.0
ALL	ALL	ALL	32	ALL	20.1	93	120	58,578	57,604	1.7	129.6	285.7	63.6	409.0

Cruise Unit Report SHADY GROVE VDT U2

Unit Sale Notice Volume (MBF): SHADY GROVE VDT U2

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	16.5			168	49	98	21
ALL	16.5			168	49	98	21

Unit Cruise Design: SHADY GROVE VDT U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	22.7	23.6	23	13	0

Unit Cruise Summary: SHADY GROVE VDT U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
MA		13	0.6	0
DF	18	97	4.2	2
ALL	18	110	4.8	2

Unit Cruise Statistics: SHADY GROVE VDT U2

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 (%)
MA	22.6	237.5	49.5						
DF	168.7	51.5	10.7	125.3	22.7	5.3	21,145	56.3	12.0
ALL	191.3	37.8	7.9	125.3	22.7	5.3	23,979	44.1	9.5

Unit Summary: SHADY GROVE VDT U2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	18	ALL	15.9	68	95	7,667	7,412	3.3	42.9	59.1	14.8	168.2
ALL	LIVE	CUT	18	ALL	15.9	68	95	7,667	7,412	3.3	42.9	59.1	14.8	168.2
ALL	ALL	ALL	18	ALL	15.9	68	95	7,667	7,412	3.3	42.9	59.1	14.8	168.2

Cruise Unit Report SHADY GROVE VDT U3

Unit Sale Notice Volume (MBF): SHADY GROVE VDT U3

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	Spec Mill	2 Saw	3 Saw	4 Saw
DF	24.2	8.0		159	52	81	24	2
ALL	24.2	8.0		159	52	81	24	2

Unit Cruise Design: SHADY GROVE VDT U3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (54.44) Measure All, Sighting Ht = 4.5 ft			5	5	0

Unit Cruise Summary: SHADY GROVE VDT U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RC		2	0.4	0
DF	20	33	6.6	1
ALL	20	35	7.0	1

Unit Cruise Statistics: SHADY GROVE VDT 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 (%)
RC	21.8	223.6	100.0						
DF	359.3	46.2	20.7	228.0	20.5	4.6	81,904	50.6	21.2
ALL	381.1	39.1	17.5	228.0	20.5	4.6	86,868	44.2	18.1

Unit Summary: SHADY GROVE VDT U3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	20	ALL	24.2	111	142	50,720	49,639	2.1	68.2	217.8	44.3	158.8
ALL	LIVE	CUT	20	ALL	24.2	111	142	50,720	49,639	2.1	68.2	217.8	44.3	158.8
ALL	ALL	ALL	20	ALL	24.2	111	142	50,720	49,639	2.1	68.2	217.8	44.3	158.8

Cruise Unit Report SHADY GROVE VDT U4

Unit Sale Notice Volume (MBF): SHADY GROVE VDT U4

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	13.1	7.0		177	5	120	49	3
RA	8.6			11			11	
ALL	12.2	7.0		189	5	120	60	3

Unit Cruise Design: SHADY GROVE VDT U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1C: VR, 1 BAF (40) Measure/Count Plots, Sighting Ht = 4.5 ft	14.4	15.4	15	10	0

Unit Cruise Summary: SHADY GROVE VDT U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
RC		1	0.1	0
WH		1	0.1	0
DF	30	94	6.3	1
RA	4	5	0.3	0
ALL	34	101	6.7	1

Unit Cruise Statistics: SHADY GROVE VDT 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 (%)
RC	2.7	387.3	100.0						
WH	2.7	387.3	100.0						
DF	250.7	18.6	4.8	104.9	27.7	5.1	26,301	33.3	7.0
RA	13.3	314.0	81.1	73.9	27.3	13.7	985	315.1	82.2
ALL	269.3	19.8	5.1	103.4	28.7	4.9	27,838	34.9	7.1

Unit Summary: SHADY GROVE VDT U4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	30	ALL	13.7	53	74	12,901	12,311	4.6	114.6	117.3	31.7	177.3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
RA	LIVE	CUT	4	ALL	8.6	30	51	861	788	8.4	26.4	10.7	3.6	11.3
ALL	LIVE	CUT	34	ALL	12.9	49	70	13,762	13,099	4.8	141.0	128.0	35.3	188.6
ALL	ALL	ALL	34	ALL	12.9	49	70	13,762	13,099	4.8	141.0	128.0	35.3	188.6

Cruise Unit Report SHADY GROVE VDT ROW U5

Unit Sale Notice Volume (MBF): SHADY GROVE VDT ROW U5

Sp	DBH	Rings/In	Age	MBF Volume by Grade						
				All	Peeler	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	23.1			106	9	43	32	20	2	
RA	9.5			6					3	3
ALL	16.4			112	9	43	32	20	5	3

Unit Cruise Design: SHADY GROVE VDT ROW U5

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (62.5) Measure All, Sighting Ht = 4.5 ft	1.7	1.6	2	2	0

Unit Cruise Summary: SHADY GROVE VDT ROW U5

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	8	8	4.0	0
RA	2	2	1.0	0
ALL	10	10	5.0	0

Unit Cruise Statistics: SHADY GROVE VDT ROW 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 (%)
DF	250.0	141.4	100.0	248.5	28.2	10.0	62,133	144.2	100.5
RA	62.5	141.4	100.0	58.8	0.2	0.2	3,673	141.4	100.0
ALL	312.5	84.9	60.0	210.6	48.0	15.2	65,805	97.5	61.9

Unit Summary: SHADY GROVE VDT ROW U5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	8	ALL	23.1	102	134	63,274	62,133	1.8	85.9	250.0	52.0	105.6
RA	LIVE	CUT	2	ALL	9.5	28	37	3,673	3,673	0.0	127.0	62.5	20.3	6.2
ALL	LIVE	CUT	10	ALL	16.4	58	76	66,947	65,805	1.7	212.9	312.5	72.3	111.9
ALL	ALL	ALL	10	ALL	16.4	58	76	66,947	65,805	1.7	212.9	312.5	72.3	111.9

Cruise Unit Report SHADY GROVE VDT ROW U6

Unit Sale Notice Volume (MBF): SHADY GROVE VDT ROW U6

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	20.5			144	91	46	6	1
GF	15.7			33	16	13	3	0
ALL	19.2			177	108	59	9	1

Unit Cruise Design: SHADY GROVE VDT ROW U6

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (62.5) Measure All, Sighting Ht = 4.5 ft	3.1	3.1	3	3	0

Unit Cruise Summary: SHADY GROVE VDT ROW U6

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	12	12	4.0	0
GF	3	3	1.0	0
ALL	15	15	5.0	0

Unit Cruise Statistics: SHADY GROVE VDT ROW 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 (%)
DF	250.0	90.1	52.0	185.7	18.3	5.3	46,418	92.0	52.3
GF	62.5	173.2	100.0	168.7	16.2	9.4	10,543	174.0	100.4
ALL	312.5	40.0	23.1	182.3	17.9	4.6	56,961	43.8	23.6

Unit Summary: SHADY GROVE VDT ROW U6

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	12	ALL	20.5	97	124	47,497	46,418	2.3	109.1	250.0	55.2	143.9
GF	LIVE	CUT	3	ALL	15.7	77	108	10,543	10,543	0.0	46.5	62.5	15.8	32.7
ALL	LIVE	CUT	15	ALL	19.2	91	119	58,040	56,961	1.9	155.6	312.5	71.0	176.6
ALL	ALL	ALL	15	ALL	19.2	91	119	58,040	56,961	1.9	155.6	312.5	71.0	176.6

Cruise Unit Report SHADY GROVE VDT ROW U7

Unit Sale Notice Volume (MBF): SHADY GROVE VDT ROW U7

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	21.1			20	13	5	2
RA	11.0			3			3
ALL	16.7			23	13	5	5

Unit Cruise Design: SHADY GROVE VDT ROW U7

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	1.3	1.3	2	2	0

Unit Cruise Summary: SHADY GROVE VDT ROW U7

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	7	7	3.5	0
RA	2	2	1.0	0
ALL	9	9	4.5	0

Unit Cruise Statistics: SHADY GROVE VDT ROW U7

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 (%)
DF	140.0	20.2	14.3	110.8	17.2	6.5	15,509	26.5	15.7
RA	40.0	141.4	100.0	60.6	3.5	2.5	2,424	141.5	100.0
ALL	180.0	15.7	11.1	99.6	27.7	9.2	17,934	31.8	14.4

Unit Summary: SHADY GROVE VDT ROW U7

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	7	ALL	21.1	74	90	16,204	15,509	4.3	57.7	140.0	30.5	20.2
RA	LIVE	CUT	2	ALL	11.0	38	52	2,424	2,424	0.0	60.6	40.0	12.1	3.2
ALL	LIVE	CUT	9	ALL	16.7	55	71	18,628	17,934	3.7	118.3	180.0	42.5	23.3
ALL	ALL	ALL	9	ALL	16.7	55	71	18,628	17,934	3.7	118.3	180.0	42.5	23.3

Cruise Unit Report SHADY GROVE VDT ROW U8

Unit Sale Notice Volume (MBF): SHADY GROVE VDT ROW U8

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	16.0			11	3	7	2
ALL	16.0			11	3	7	2

Unit Cruise Design: SHADY GROVE VDT ROW U8

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.4	0.4	1	1	0

Unit Cruise Summary: SHADY GROVE VDT ROW U8

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	6	6	6.0	0
ALL	6	6	6.0	0

Unit Cruise Statistics: SHADY GROVE VDT ROW U8

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 (%)
DF	240.0	0.0	0.0	117.6	9.8	4.0	28,228	9.8	4.0
ALL	240.0	0.0	0.0	117.6	9.8	4.0	28,228	9.8	4.0

Unit Summary: SHADY GROVE VDT ROW U8

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	6	ALL	16.0	71	92	28,228	28,228	0.0	171.9	240.0	60.0	11.3
ALL	LIVE	CUT	6	ALL	16.0	71	92	28,228	28,228	0.0	171.9	240.0	60.0	11.3
ALL	ALL	ALL	6	ALL	16.0	71	92	28,228	28,228	0.0	171.9	240.0	60.0	11.3

Cruise Unit Report SHADY GROVE VDT ROW U9

Unit Sale Notice Volume (MBF): SHADY GROVE VDT ROW U9

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	20.8			15	12	2	1	
WH	14.7			6		5	1	0
ALL	18.0			21	12	7	2	0

Unit Cruise Design: SHADY GROVE VDT ROW U9

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	0.9	0.9	2	2	0

Unit Cruise Summary: SHADY GROVE VDT ROW U9

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	6	6	3.0	0
WH	3	3	1.5	0
ALL	9	9	4.5	0

Unit Cruise Statistics: SHADY GROVE VDT ROW U9

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 (%)
DF	120.0	47.1	33.3	141.4	14.8	6.0	16,969	49.4	33.9
WH	60.0	47.1	33.3	112.6	29.4	17.0	6,756	55.5	37.4
ALL	180.0	15.7	11.1	131.8	20.9	7.0	23,725	26.1	13.1

Unit Summary: SHADY GROVE VDT ROW U9

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	6	ALL	20.8	84	104	17,154	16,969	1.1	50.9	120.0	26.3	15.3
WH	LIVE	CUT	3	ALL	14.7	65	81	7,594	6,756	11.0	50.9	60.0	15.6	6.1
ALL	LIVE	CUT	9	ALL	18.0	75	93	24,748	23,725	4.1	101.8	180.0	42.0	21.4
ALL	ALL	ALL	9	ALL	18.0	75	93	24,748	23,725	4.1	101.8	180.0	42.0	21.4

Cruise Unit Report SHADY GROVE VDT ROW U10

Unit Sale Notice Volume (MBF): SHADY GROVE VDT ROW U10

Sp	DBH	Rings/In	Age	MBF Volume by Grade	
				All	4 Saw
DF	9.4			8	8
ALL	9.4			8	8

Unit Cruise Design: SHADY GROVE VDT ROW U10

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (27.78) Measure All, Sighting Ht = 4.5 ft	1.3	1.6	2	2	0

Unit Cruise Summary: SHADY GROVE VDT ROW U10

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	7	7	3.5	0
ALL	7	7	3.5	0

Unit Cruise Statistics: SHADY GROVE VDT ROW U10

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 (%)
DF	97.2	20.2	14.3	63.0	17.2	6.5	6,127	26.5	15.7
ALL	97.2	20.2	14.3	63.0	17.2	6.5	6,127	26.5	15.7

Unit Summary: SHADY GROVE VDT ROW U10

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	7	ALL	9.4	29	44	6,127	6,127	0.0	201.8	97.2	31.7	8.0
ALL	LIVE	CUT	7	ALL	9.4	29	44	6,127	6,127	0.0	201.8	97.2	31.7	8.0
ALL	ALL	ALL	7	ALL	9.4	29	44	6,127	6,127	0.0	201.8	97.2	31.7	8.0

Cruise Unit Report SHADY GROVE VDT ROW U11

Unit Sale Notice Volume (MBF): SHADY GROVE VDT ROW U11

Sp	DBH	Rings/In	Age	MBF Volume by Grade	
				All	4 Saw
DF	9.5			11	11
ALL	9.5			11	11

Unit Cruise Design: SHADY GROVE VDT ROW U11

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B1: VR, 1 BAF (27.78) Measure All, Sighting Ht = 4.5 ft	0.9	0.8	2	2	0

Unit Cruise Summary: SHADY GROVE VDT ROW U11

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	13	13	6.5	0
ALL	13	13	6.5	0

Unit Cruise Statistics: SHADY GROVE VDT ROW U11

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 (%)
DF	180.6	10.9	7.7	70.7	29.4	8.1	12,774	31.3	11.2
ALL	180.6	10.9	7.7	70.7	29.4	8.1	12,774	31.3	11.2

Unit Summary: SHADY GROVE VDT ROW U11

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	13	ALL	9.5	34	54	13,051	12,774	2.1	366.8	180.6	58.6	11.5
ALL	LIVE	CUT	13	ALL	9.5	34	54	13,051	12,774	2.1	366.8	180.6	58.6	11.5
ALL	ALL	ALL	13	ALL	9.5	34	54	13,051	12,774	2.1	366.8	180.6	58.6	11.5



Forest Practices Application/Notification Notice of Decision

FPA/N No: 2942413

Effective Date: 5/22/2024

Expiration Date: 5/22/2027

Shut Down Zone: 660 ; 660S

EARR Tax Credit: Eligible Non-eligible

Reference: Shady Grove TBS
30-106097

Decision

- Notification Accepted Operations shall not begin before the effective date.
- Approved This Forest Practices Application is subject to the conditions listed below.
- Disapproved This Forest Practices Application is disapproved for the reasons listed below.
- Withdrawn Applicant has withdrawn the Forest Practices Application/Notification (FPA/N).
- Closed All forest practices obligations are met.

FPA/N Classification

Class II Class III Class IVG Class IVS

Number of Years Granted on Multi-Year Request

4 years 5 years

Conditions on Approval/Reasons for Disapproval

No additional conditions.

Issued By: Michael Rutledge

Region: Pacific Cascade Region

Title: Forest Practices Forester

Date: 5/22/2024

Copies to: Landowner, Timber Owner, and Operator

Issued in person: LO TO OP

By: [Signature]

Date: 5/22/2024

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 Pacific Cascade Region
<u>Physical Address</u> 1111 Israel Road, SW Suite 301 Tumwater, WA 98501	<u>Physical Address</u> 1125 Washington Street, SE Olympia, WA 98504	<u>Physical Address</u> 601 Bond Rd Castle Rock WA 98611
<u>Mailing address</u> Post Office Box 40903 Olympia, WA 98504-0903	<u>Mailing Address</u> Post Office Box 40100 Olympia, WA 98504-0100	<u>Mailing Address</u> Post Office Box 280 Castle Rock, WA 98611-0280

Information regarding the Pollution Control Hearings Board can be found at: <https://eluhu.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.

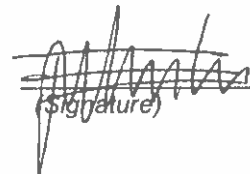
DNR Declaration of Mailing



_____ caused the Notice of Decision for FPA/N No. to be placed in the United States mail at Castle Rock, WA, postage paid. I declare under penalty of perjury of the laws of the State of Washington, that the foregoing is true and correct.

5/10/2024
(Date)

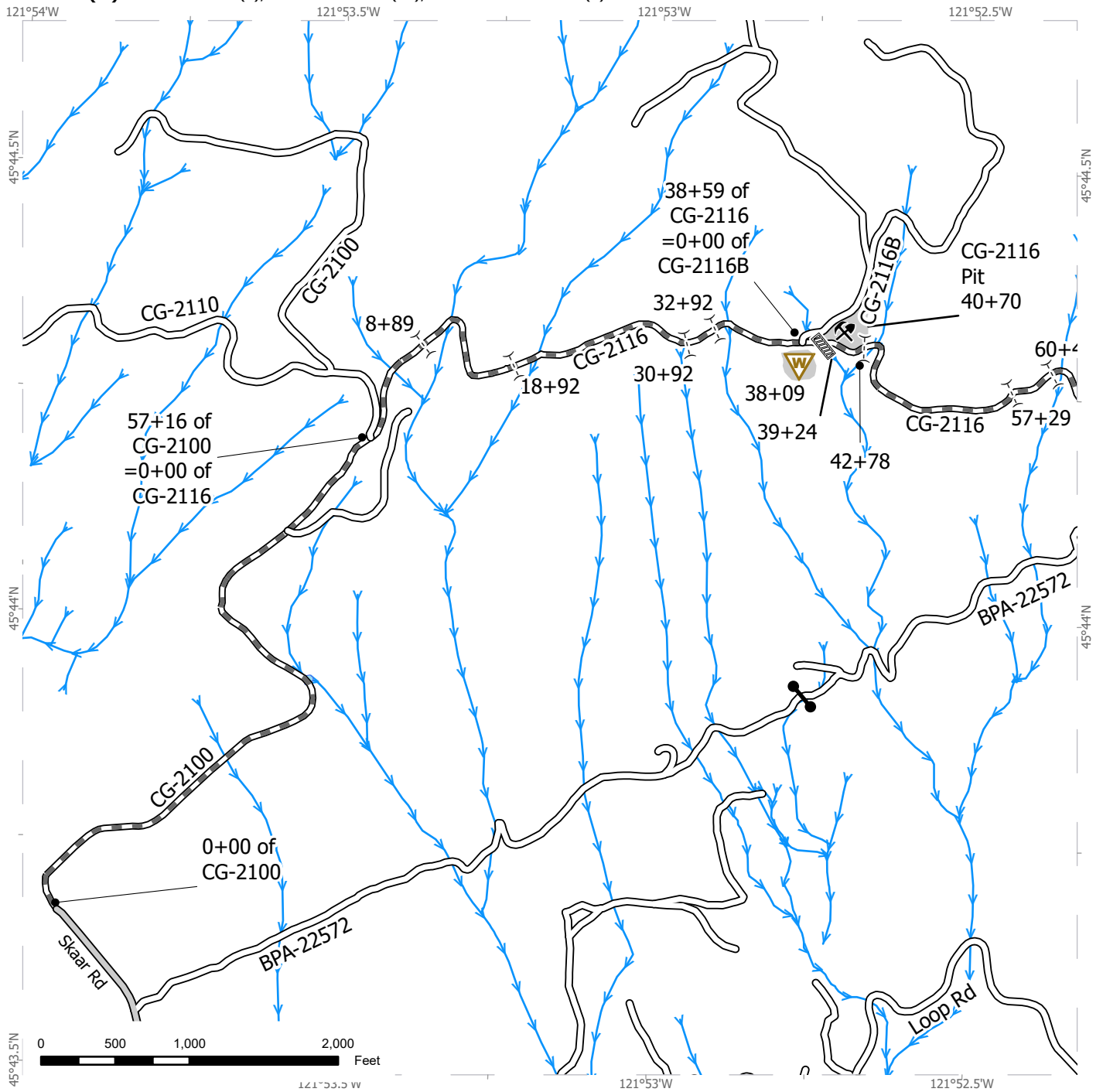
Castle Rock, WA
(City & State where signed)


(Signature)

ROAD PLAN MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT #: 30-106097
TOWNSHIP(S): T3R7E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1602-2290



County Road	Cross-drain Culvert	Harvest Unit
Existing Roads	Culvert	Rock Pit
Required Pre-Haul Maintenance	Gate (PCP 1-1)	Waste Area
Streams		

Prepared By: acc490

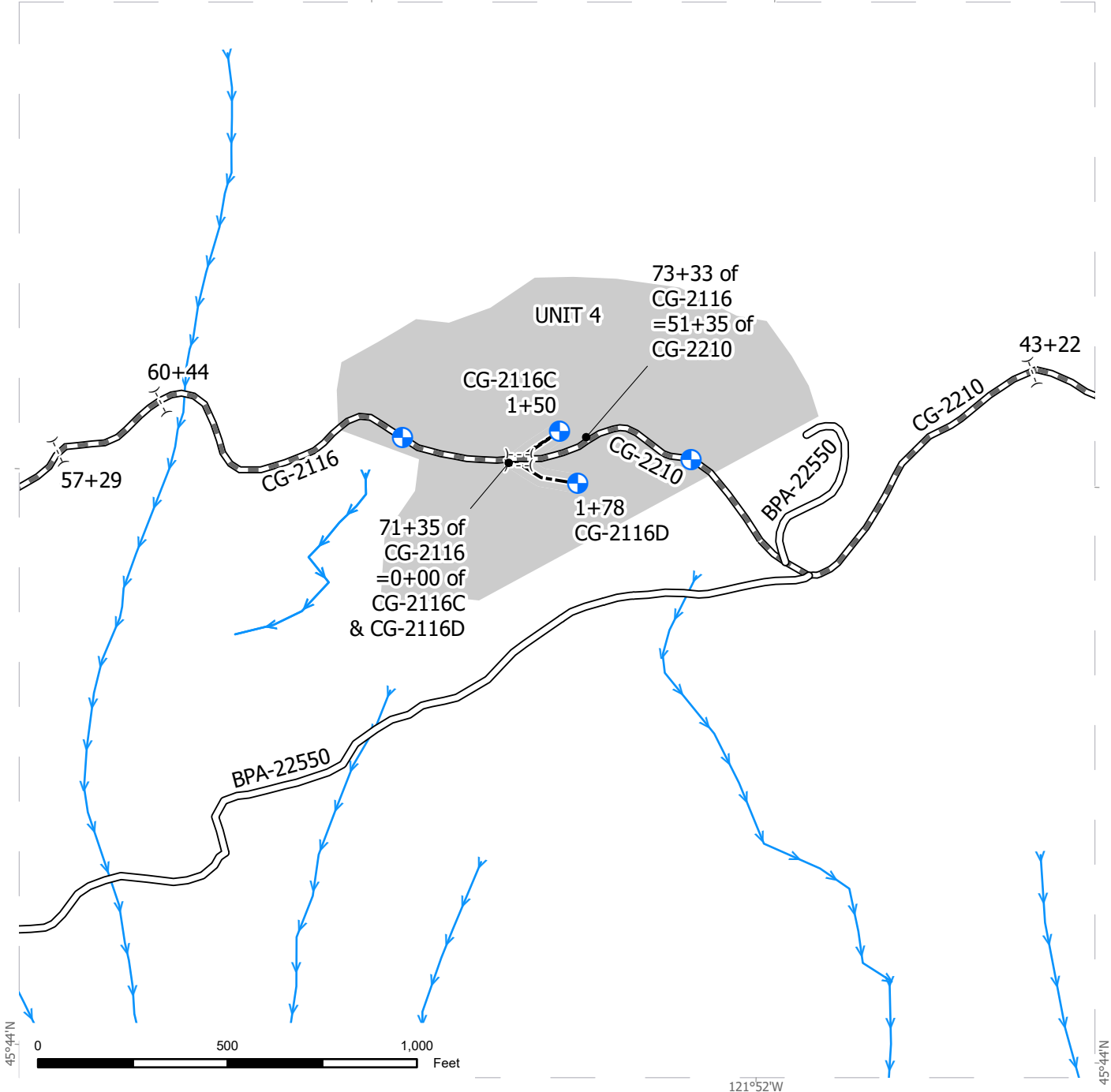
Modification Date: acc490 4/15/2024

ROAD PLAN MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT #: 30-106097
TOWNSHIP(S): T3R7E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1602-2290

121°52'W



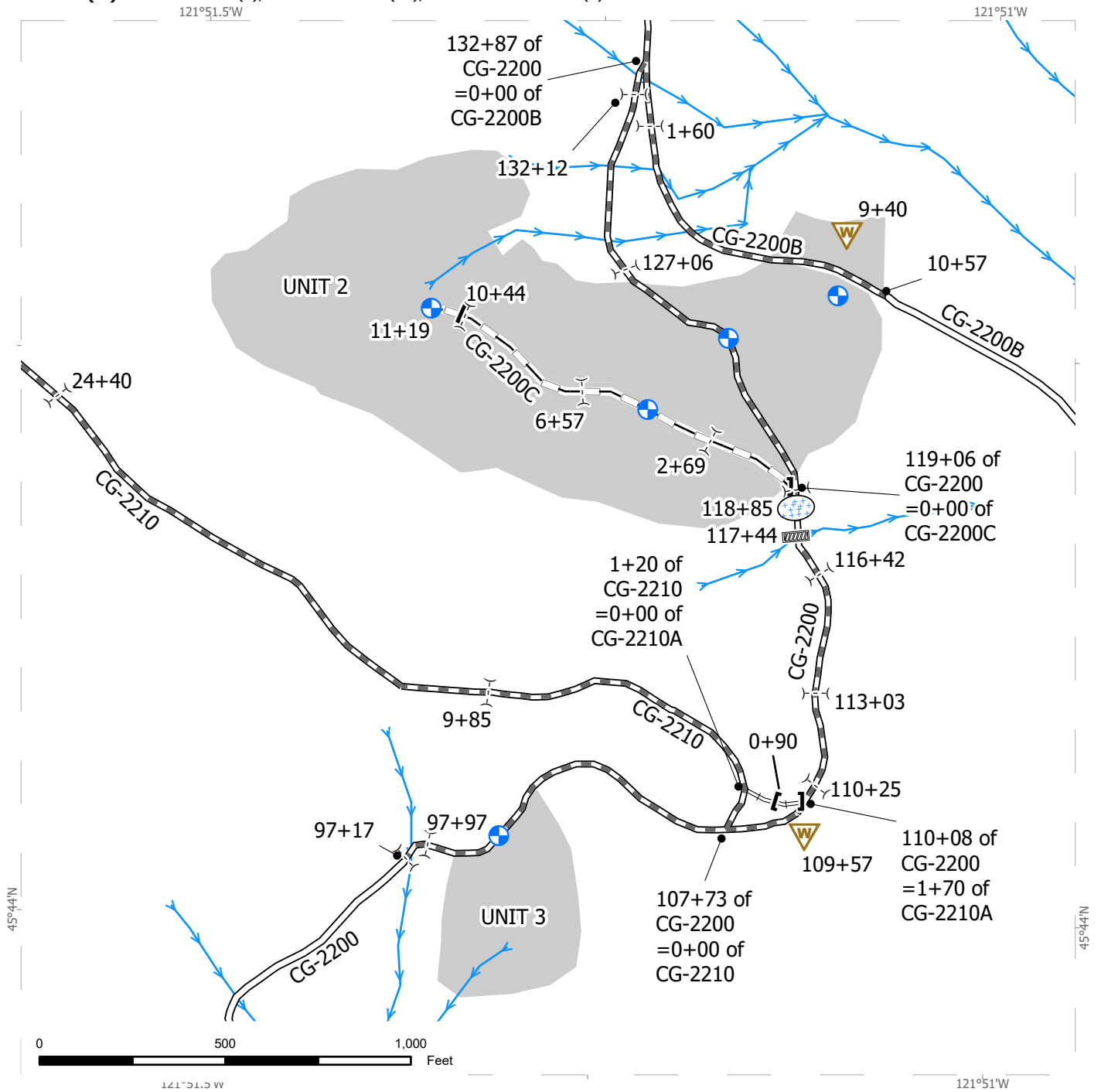
Existing Roads	Cross-drain Culvert	Harvest Unit
Required Pre-Haul Maintenance	Landing - Proposed	
Optional Construction		
Streams		



ROAD PLAN MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT #: 30-106097
TOWNSHIP(S): T3R7E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)
 121°51.5'W

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1602-2290

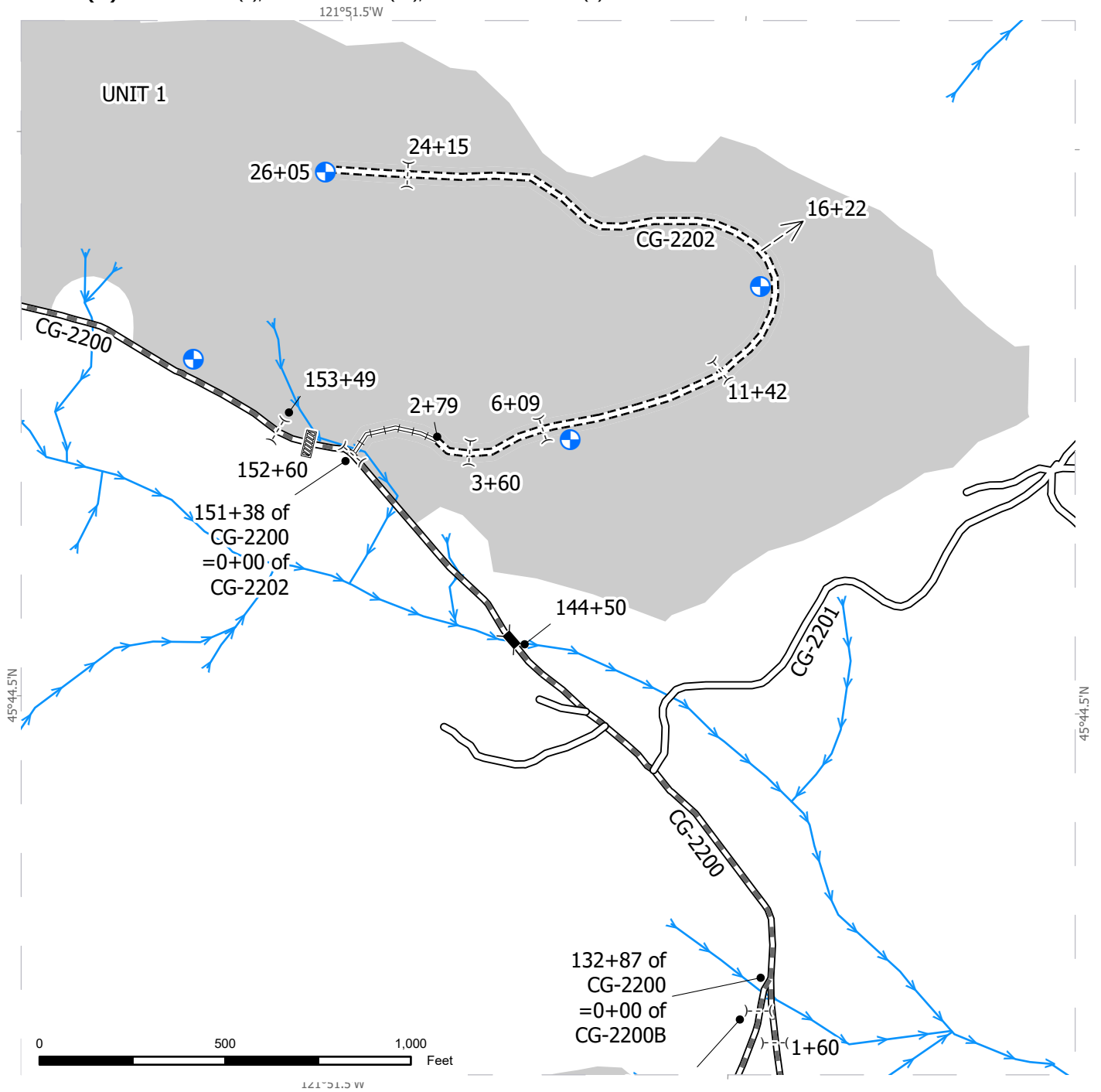


Existing Roads	Cross-drain Culvert	Harvest Unit
Required Pre-Haul Maintenance	Culvert Removal	
Required Reconstruction	End Haul Area	
Optional Reconstruction	Culvert	
Streams	Landing - Proposed	
	Waste Area	

ROAD PLAN MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT #: 30-106097
TOWNSHIP(S): T3R7E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1602-2290



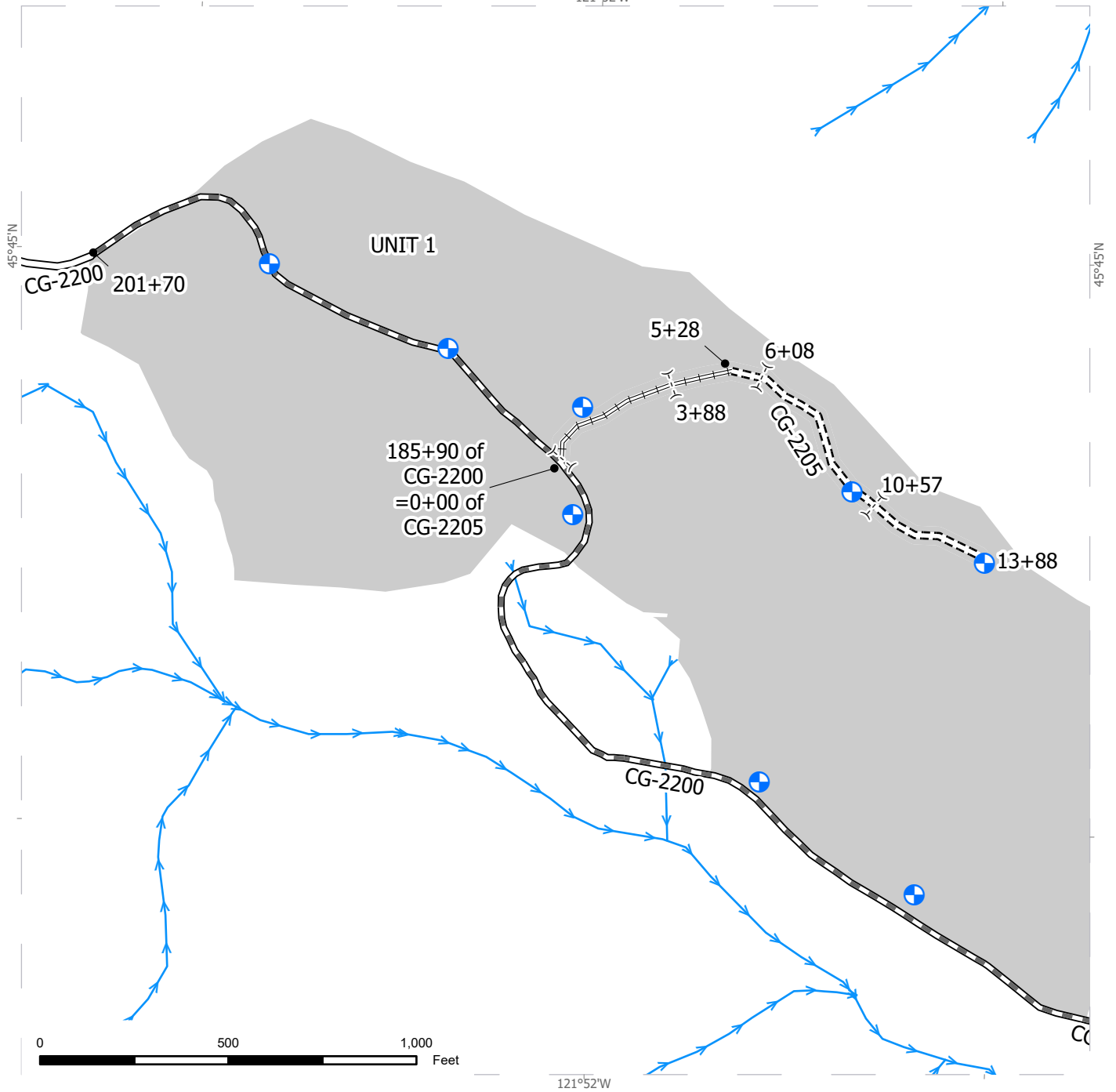
Existing Roads	Cross-drain Culvert	Harvest Unit
Required Pre-Haul Maintenance	Ditchout	
Required Construction	Bridge	
Required Reconstruction	Culvert	
Streams	Landing - Proposed	

ROAD PLAN MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT #: 30-106097
TOWNSHIP(S): T3R7E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1602-2290

121°52'W



Existing Roads	Cross-drain Culvert	Harvest Unit
Required Pre-Haul Maintenance	Landing - Proposed	
Required Construction		
Required Reconstruction		
Streams		



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

SHADY GROVE VDT TIMBER SALE ROAD PLAN
SKAMANIA COUNTY
THREE CORNER ROCK UNIT, YACOLT DISTRICT
PACIFIC CASCADE REGION

AGREEMENT NO.: 30-106097

STAFF ENGINEER: DAVID STONE

DRAWN & COMPILED BY: ALICIA COMPTON
& DAVID STONE

SECTION 0 – SCOPE OF PROJECT

0-1 ROAD PLAN SCOPE

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

0-2 REQUIRED ROADS

The specified work on the following roads is required.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
CG-2100	0+00 to 57+16	Pre-haul Maintenance
CG-2116	0+00 to 73+33	Pre-haul Maintenance
CG-2200	97+17 to 201+70	Pre-haul Maintenance
CG-2200B	0+00 to 10+57	Pre-haul Maintenance
CG-2210	0+00 to 51+35	Pre-haul Maintenance
CG-2210A	0+00 to 1+70	Reconstruction
CG-2202	0+00 to 2+79	Reconstruction
CG-2202	2+79 to 26+05	Construction
CG-2205	0+00 to 5+28	Reconstruction
CG-2205	5+28 to 13+88	Construction

0-3 OPTIONAL ROADS

The specified work on the following roads is not required. Any optional roads built by the Purchaser must meet all the specifications in the road plan.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
CG-2116C	0+00 to 1+50	Construction
CG-2116D	0+00 to 1+78	Construction
CG-2200C	0+00 to 11+19	Reconstruction

0-4 CONSTRUCTION

Construction includes, but is not limited to: clearing; grubbing; right-of-way debris disposal; excavation and embankment to sub-grade; turnout, turnaround and landing construction; acquisition and installation of drainage structures; shaping subgrade; manufacture and application of rock; compaction of earthwork and rock; and acquisition and application of erosion control materials.

0-5 RECONSTRUCTION

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
CG-2200C CG-2202 CG-2205 CG-2210A	0+00 to 11+19 0+00 to 2+79 0+00 to 5+28 0+00 to 1+70	Clear, grub, widen subgrade, excavate ditchlines, grade, shape, and compact subgrade surface in accordance to TYPICAL SECTION SHEET. Right-of-way debris disposal. Compact embankment material. Reconstruct road grade according to stakes and reference points marked in the field. Acquire and install drainage structures in accordance to CULVERT LIST. Manufacture and apply rock in accordance to ROCK LIST. Grade, shape, and compact rock.

0-6 PRE-HAUL MAINTENANCE

This project includes, but is not limited to the following pre-haul maintenance requirements:

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
CG-2100 CG-2116 CG-2200 CG-2200B CG-2210	0+00 to 57+16 0+00 to 73+33 97+17 to 201+70 0+00 to 10+57 0+00 to 51+35	Grade, shape, and compact existing surface in accordance to TYPICAL SECTION SHEET. Manufacture and apply rock in accordance to ROCK LIST. Grade, shape, and compact rock. Clean and widen ditchlines in accordance to TYPICAL SECTION SHEET at locations specified in Clause 2-7. Acquire and install drainage structures in accordance to CULVERT LIST. Install SEDIMENT CONTROL STRUCTURES at locations specified in Clause 8-1.

0-10 ABANDONMENT

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

0-12 DEVELOP ROCK SOURCE

Purchaser may develop an existing rock source. Rock source development will involve requirements listed in the ROCK SOURCE DEVELOPMENT PLAN. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

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.

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

1-6 ORDER OF PRECEDENCE

Any conflict or inconsistency in the road plan 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.

1-8 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.

1-15 ROAD MARKING

Purchaser shall perform road work in accordance with the state’s marked location. All road work is marked as follows:

- Four-foot stakes with orange flagging, orange paint, and/or aluminum reference tags for all road types. Right-of-Way (ROW) boundary tags – on roads with designated ROW harvest units.

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 before the start of timber haul, unless authorized in writing by the Contract Administrator.

1-21 HAUL APPROVAL

Purchaser shall not use roads under this road plan for timber hauling, rock hauling, or right-of-way hauling, without written approval from the Contract Administrator.

1-22 WORK NOTIFICATIONS

Purchaser shall notify the Contract Administrator a minimum of 5 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 and drainage installation
- Waste area construction
- Subgrade compaction
- Rock pit development
- Rock application and compaction
- Abandonment/Decommissioning

1-25 ACTIVITY TIMING RESTRICTION

The specified activities are not allowed during the listed closure periods unless authorized in writing by the Contract Administrator. Restrictions for hauling forest products are specified in Contract Clause H-130 Hauling Schedule.

<u>Road</u>	<u>Activity</u>	<u>Closure Period</u>
CG-2100, CG-2116, CG-2116C, CG-2116D, CG-2200 (97+17 to 144+50), CG-2200B, CG-2200C, CG-2210, & CG-2210A	Construction, Reconstruction, Pre-haul Maintenance, Abandonment & Rock Source Work	October 1 to April 30

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING 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 including those listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER. If other operators are using, or desire to use these designated maintainer roads, a joint operating plan must be developed. All parties shall follow this plan.

1-28 TIMING RESTRICTION FOR NORTHERN SPOTTED OWL

On the following roads, any road work, right-of-way timber falling and yarding, rock pit operation, or heavy equipment operation is not allowed from March 1 through August 31. This restriction does not apply to hauling timber, rock, or equipment.

<u>Road</u>
CG-2200 (144+50 to 201+70), CG-2202, & CG-2205

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 roads.
- Wheel track rutting exceeds 2 inches on crushed rock roads.
- Wheel track rutting exceeds 2 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.

1-32 BRIDGE AND ASPHALT SURFACE RESTRICTION

The use of metal tracked equipment is not allowed on bridge or asphalt surfaces at any time. If Contractor must run equipment on bridge or asphalt surfaces, then rubber tired equipment or other methods, approved in writing by Contract Administrator, must be used. Other methods must meet the following criteria: Material utilized to protect the deck surface from tracked equipment damage must be of substantial thickness, durability and width to support the machine weight and prevent grousers from touching the bridge deck and asphalt surfaces. The only exception when metal tracked equipment on bridges is allowed, is when a bridge has a designed crushed rock surface for the decking.

If tracked equipment is used on bridge or asphalt 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 or asphalt surfaces and have surfaces evaluated by the District Engineer or their designee for any damage caused by transporting equipment. Any damage to the surfaces will be repaired, at the Purchaser's expense, as directed by the Contract Administrator.

1-33 SNOW PLOWING RESTRICTION

Snowplowing will be allowed after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contract Administrator upon request. Purchaser shall contact the Contract Administrator prior to each time snow plowing occurs on a signed SNOW PLOWING AGREEMENT. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS

Purchaser shall immediately remove any mud, dirt, rock, or other material tracked or spilled on to county roads and state highways.

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

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

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.

2-2 ROAD MAINTENANCE – PURCHASER MAINTENANCE

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

2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER

Purchaser may be required to perform maintenance on roads listed in Contract Clause C-060 DESIGNATED ROAD MAINTAINER as directed by the Contract Administrator. Purchaser shall maintain roads in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-4 PASSAGE OF LIGHT VEHICLES

Purchaser shall maintain the following roads 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 applying rock. Purchaser shall accomplish all grading using a motor grader with a minimum of 175 horsepower

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following roads, Purchaser shall clean ditches, headwalls, and catch basins. Pulling ditch material across the road or mixing in with the road surface is not allowed. Scatter material down slope outside of cleared right-of-way.

<u>Road</u>	<u>Stations</u>
CG-2116	0+00 to 73+33
CG-2200	97+17 to 201+70
CG-2200B	0+00 to 10+57
CG-2210	0+00 to 51+35
CG-2210A	0+00 to 1+70

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

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 45%.
- Against standing trees.
- On slopes above a cut bank.

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. 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 must be positioned upright, with root wads in contact with the forest floor on stable locations.

3-14 STUMPS WITHIN DESIGNATED WASTE AREAS

Purchaser is not required to remove stumps within waste areas if they are cut flush with the ground.

3-20 ORGANIC DEBRIS DEFINITION

Organic debris is defined as all vegetative material not eligible for removal by Contract 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 clearing and waste area limits.

3-21 DISPOSAL COMPLETION

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

3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS

Waste areas for organic debris are located as listed below and at areas approved in writing by the Contract Administrator.

<u>Excavation Location - Road/Pit</u>	<u>Waste Area Location</u>
CG-2200C	On the Left side of the CG-2200B at Station 9+40
CG-2210A	On the Right side of the CG-2200 at Station 109+57
CG-2116 Pit	On the Right side of the CG-2116 at station 38+09

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 45%.
- 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.
- On slopes above a cut bank.

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 outside of the clearing limits in natural openings downhill side of the road, unless otherwise detailed in this road plan and as directed by the Contract Administrator.

3-32 END HAULING ORGANIC DEBRIS

On the following roads and 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 located by the Contract Administrator.

<u>Road/Pit</u>	<u>Stations</u>
CG-2200C	0+00 to 10+44
CG-2210A	0+90 to 1+70
CG-2116 Pit	Locations on Pit Development Plan Map

SECTION 4 – EXCAVATION

4-2 PIONEERING

Pioneering may 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:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 13 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 6% in 100 feet.
- Maximum grade change for crest vertical curves is 4% in 100 feet.

4-4 SWITCHBACK STANDARDS

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

- Maximum adverse grades for switchbacks is 10% of the curve radius.
- 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:

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

4-6 EMBANKMENT SLOPE RATIO

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

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

4-7 SHAPING CUT AND FILL SLOPE

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 3 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 roads, 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 and turnouts.

<u>Road</u>	<u>Stations</u>
CG-2200C	0+00 to 11+19
CG-2202	0+00 to 2+79
CG-2205	0+00 to 5+28
CG-2210A	0+00 to 1+70

4-12 FULL BENCH CONSTRUCTION

On the following roads, and where side slopes exceed 45%, Purchaser shall use full bench construction for the entire subgrade width. Purchaser shall end haul waste material to the location specified in Clause 4-37 WASTE AREA LOCATION.

<u>Road</u>	<u>Full Bench Location</u>	<u>Comments</u>
CG-2200C	0+00 to 10+44	End haul all material. Material that is devoid of organic debris may be used as fill embankment.
CG-2210A	0+90 to 1+70	

4-21 TURNOUTS

Purchaser shall construct turnouts intervisible with a maximum distance of 1000 feet between turnouts. Locations may be adjusted to fit the final subgrade alignment and sight distances. Location changes are subject to written approval by the Contract Administrator. Minimum dimensions are shown on the ROCK LIST.

4-22 TURNAROUNDS

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

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

Purchaser shall construct and reconstruct ditches into the subgrade as specified on the TYPICAL SECTION SHEET. Ditches must be constructed concurrently with construction of the subgrade.

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-29 DITCHOUTS

Purchaser shall construct ditchouts as identified on the CULVERT LIST and as directed by the Contract Administrator. Ditchouts must be constructed in a manner that diverts ditch water onto the forest floor and must have excavation backslopes 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.

<u>Excavation Location - Road/Pit</u>	<u>Waste Area Location</u>	<u>Comments</u>
CG-2200C	On the Left side of the CG-2200B at Station 9+40	Pile Organic material separately from all other waste
CG-2210A	On the Right side of the CG-2200 at Station 109+57	
CG-2116 Pit	On the Right side of the CG-2116 at station 38+09	

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.

4-48 NATIVE MATERIAL

Native material consists of naturally occurring material that is free of organic debris, trash, and rocks greater than 4 inches in any dimension.

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.

4-56 DRY WEATHER SHAPING

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

Purchaser shall compact all embankment and waste material in accordance with the COMPACTION LIST by routing equipment over the entire width of each lift. A plate compactor must be used for areas specifically requiring keyed embankment construction and for embankment, waste area, and segments too narrow to accommodate equipment.

4-61 SUBGRADE COMPACTION

Purchaser shall compact constructed and reconstructed subgrades in accordance with the COMPACTION LIST by routing equipment over the entire width except ditch. Purchaser shall obtain written approval from the Contract Administrator for subgrade compaction before rock application and timber haul.

4-62 DRY WEATHER COMPACTION

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.

4-63 EXISTING SURFACE COMPACTION

Purchaser shall compact maintained road surfaces in accordance with the COMPACTION LIST by routing equipment over the entire width.

SECTION 5 – DRAINAGE

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 LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts must be new material and meet the specifications in Clauses 10-15 through 10-24.

5-6 CULVERT TYPE

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

5-12 UNUSED MATERIALS STATE PROPERTY

On required roads, any materials listed on the CULVERT 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, LIVE STREAM INSTALLATION PROCEDURE, the National Corrugated Metal Pipe Association's "Installation Manual for Corrugated Steel Drainage Structures", and the Corrugated Polyethylene Pipe Association's "Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings". Corrugated Polyethylene pipe must be installed in a manner consistent with the manufacturer's recommendations. Culvert replacement in a live stream must be in accordance with LIVE STREAM REMOVAL PROCEDURE, Forest Practices Agreement, and Clause 7-5.

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

All 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, and as recommended by the culvert manufacturer for the type and size of the pipe.

5-20 ENERGY DISSIPATERS

Purchaser shall install energy dissipaters in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all culverts on the CULVERT LIST that specify the placement of rock. 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 LIST. Placement must with a zero-drop-height only. No placement by end dumping or dropping of rock is allowed.

5-25 CATCH BASINS

Purchaser shall construct catch basins in accordance with CULVERT AND DRAINAGE SPECIFICATION DETAIL. Minimum dimensions of catch basins are 3 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 cross drain culverts. 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. Rock must be set in place by machine. Placement must be with a zero-drop-height only. No placement by end dumping or dropping of rock is allowed. Rock type must meet the specifications in Clause 6-50 LIGHT LOOSE RIP RAP.

5-27 ARMORING FOR STREAM CROSSING CULVERTS

At the following culverts, Purchaser shall place rock in conjunction with construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets as designated on the CULVERT LIST and as directed by the Contract Administrator. Rock may not restrict the flow of water into culvert inlets or catch basins. Rock must be set in place by machine. Placement must be with a zero-drop-height only. No placement by end dumping or dropping of rock is allowed. Rock type must meet the specifications in Clause 6-50 LIGHT LOOSE RIP RAP.

<u>Road</u>	<u>Stations</u>	<u>Rock Type</u>
CG-2116	39+24	LIGHT LOOSE RIP RAP
CG-2200	117+44 & 152+60	LIGHT LOOSE RIP RAP

5-33 NATIVE SURFACE ROADS

If overwintered, native surface roads must be waterbarred by October 1. Purchaser shall construct waterbars according to the attached NON-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 200 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 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. If other operators are using, or desire to use the rock source, a joint operating plan must be developed. All parties shall follow this plan. Purchaser shall notify the Contract Administrator a minimum of 5 business days before starting any operations in the listed locations.

<u>Source</u>	<u>Location</u>
CG-2116 Pit	NW¼ NW¼ Sec. 24, T03N, R07E5, W.M.

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.

6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

Purchaser shall conduct rock source development and use at the following sources, in accordance with the written ROCK SOURCE DEVELOPMENT PLAN prepared by the state and included in this road plan. Upon completion of operations, the rock source must be left in the condition specified in the ROCK SOURCE DEVELOPMENT PLAN, and approved in writing by the Contract Administrator. Purchaser shall notify the Contract Administrator a minimum of 5 business days before starting any operations in the rock source.

<u>Source</u>	<u>Location</u>
CG-2116 Pit	NW¼ NW¼ Sec. 24, T03N, R07E5, W.M.

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 greater than 1/4-inch in size.

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 during manufacture and placement into a stockpile. The exact point of evaluation for conformance to specifications will be determined by the Contract Administrator. Purchaser shall provide a sieve analysis upon request from the Contract Administrator. Gradation specifications shall be in accordance with Clause 6-29, 6-34, 6-50, and the Rock Crushing Compliance Procedure.

6-29 1 ½-INCH MINUS CRUSHED ROCK

% Passing 1 ½" square sieve	100%
% Passing 1" square sieve	70 - 90%
% Passing 5/8" square sieve	50 - 80%
% Passing U.S. #4 sieve	30 - 50%
% Passing U.S. #40 sieve	3 - 18%
% Passing U.S. #200 sieve	7.5% 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.

6-34 3-INCH JAW RUN ROCK

% Passing 3" square sieve	100%
% Passing 1 ½" square sieve	45 - 65%

Ballast rock must be 100% equal to, or smaller than, 3 inches in at least one dimension. Rock may contain no more than 5 percent organic debris and trash. All percentages are by weight.

6-50 LIGHT LOOSE RIP RAP

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

<u>Quantity</u>	<u>Approximate Size Range</u>
20% to 90%	18" - 28"
15% to 80%	8" - 18"
10% to 20%	3" - 8"

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

Measurement of specified rock depths, are defined as the compacted depths using the compaction methods required in this road plan. Estimated quantities specified in the ROCK LIST are loose 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. Unless otherwise stated in Clause 6-75 OPTIONAL ROCK EXCEPTION.

6-56 ROCK MEASUREMENT BY TRUCK VOLUME

Measurement of Spot Rocking, Landing, Junction, Culvert Bedding and Backfill, and Rip Rap Rock is on a cubic yard truck measure basis. The Contract Administrator will measure each truck box before rock hauling. An average of such volumes for each truck will be used to tally the volume hauled. The Contract Administrator may periodically require that a load be flattened off and its volume calculated. Purchaser shall maintain load tally sheets for each truck as shown in ROCK ACCOUNTABILITY DETAIL and shall give them to the Contract Administrator or mail them to the Pacific Cascade Region Office on a weekly basis during rocking operations.

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for completed subgrade and drainage installation, including inlet and outlet armor and subgrade compaction, 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. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width.

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.

6-75 OPTIONAL ROCK EXCEPTION

On the following roads, if hauling takes place from June 1 to September 30 the Purchaser may place less rock than shown on the ROCK LIST when approved in writing by the Contract Administrator.

If less rock is applied, Purchaser shall submit a written plan, for approval, describing how these roads will be constructed, used, maintained, and treated post-haul. Purchaser shall meet post-haul specifications in Section 9 POST-HAUL ROAD WORK, the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS, or other conditions of the approved plan.

<u>Road</u>	<u>Stations</u>
CG-2116C	0+00 to 1+50
CG-2116D	0+00 to 1+78
CG-2200C	0+00 to 11+19

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.

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 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 Waste Areas. 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, Forest Practices Agreement, and LIVE STREAM INSTALLATION PROCEDURE .

SECTION 8 – EROSION CONTROL

8-1 SEDIMENT CONTROL STRUCTURES

On the following roads, Purchaser shall install sediment traps in ditchlines in accordance with the SEDIMENT TRAP DETAIL. On all roads, sediment control in ditchlines shall be accomplished by using sediment traps or other methods, as directed by the Contract Administrator.

<u>Road</u>	<u>Stations</u>
CG-2116	31+67, 31+77, 32+07, 32+17, 39+04, 43+33, & 43+43
CG-2200	159+90, 160+30, 174+06, & 174+46

8-2 PROTECTION FOR EXPOSED SOIL

Purchaser shall provide and evenly spread a 4-inch layer of straw to all exposed soils within 100 feet of a stream or wetland. Soils must be covered before the first anticipated storm event. Soils may not sit exposed during any rain event.

8-15 REVEGETATION

Purchaser shall spread grass seed on all exposed soils within the grubbing limits resulting from road work activities using. Other methods of covering must be approved in writing by the Contract Administrator.

<u>Road</u>	<u>Location</u>	<u>Qty (lbs)*</u>	<u>Abandonment</u>
CG-2116	Ditchline work 0+00 to 73+33, Landing, & Waste Area	41.3	
CG-2200	Ditchline work 97+17 to 201+70, Landings, & Waste Area	48.4	
CG-2200B	Ditchline work 0+00 to 10+57, Landing, & Waste Area	10.5	
CG-2210	0+00 to 51+35	19.7	
CG-2210A	0+00 to 1+70	2.4	
CG-2202	0+00 to 26+05	38.7	81.2
CG-2205	0+00 to 13+88	21.9	43.2
CG-2116C	0+00 to 1+50	2.9	4.8
CG-2116D	0+00 to 1+78	3.3	5.6
CG-2200C	0+00 to 11+19	17.4	34.8
CG-2116 Pit	Pit perimeter, Access Road, & Bench	12.8	

*Quantities are estimates only. Actual quantities may vary and are the responsibility of the Purchaser.

8-16 REVEGETATION SUPPLY

The Purchaser shall provide the grass seed.

8-17 REVEGETATION TIMING

Purchaser shall revegetate during the first available opportunity after road work is completed. Soils may not be allowed to sit exposed for longer than one month without receiving revegetation treatment unless otherwise approved in writing by the Contract Administrator.

8-19 ASSURANCE FOR SEEDED AREA

Purchaser shall ensure the growth of a uniform and dense crop at least 75% coverage of 3-inch tall grass. Purchaser shall reapply the grass seed in areas that have failed to germinate or have been damaged through any cause, restore eroded or disturbed areas, clean up and properly dispose of eroded materials, and reapply the grass seed at no additional cost to the state.

8-25 GRASS SEED

Purchaser shall evenly spread the seed mixture listed below on all exposed soil inside the grubbing limits at a rate of 40 pounds per acre of exposed soil. Grass seed must meet the following specifications:

1. Weed seed may not exceed 0.5% by weight.
2. All seed species must have a minimum 90% germination rate, unless otherwise specified.
3. Seed must be certified.
4. Seed must be furnished in standard containers showing the following information:
 - a. Common name of seed
 - b. Net weight
 - c. Percent of purity
 - d. Percentage of germination
 - e. Percentage of weed seed and inert material
5. Seed must conform to the following mixture unless a comparable mix is approved in writing by the Contract Administrator.

<u>Kind and Variety of Seed in Mixture</u>	<u>% by Weight</u>	<u>Minimum % germination</u>
Perennial Rye	25-35	90
Red Fescue	40-50	90
Highland Bent	5-15	85
Red and White Clover	10-20	90
Inert and Other Crop	0.5	

SECTION 9 – POST-HAUL ROAD WORK

9-1 EARTHEN BARRICADES

Purchaser shall construct barricades in accordance with the EARTHEN BARRICADE DETAIL.

<u>Road</u>	<u>Stations</u>
CG-2116C	0+10
CG-2116D	0+10
CG-2200C	0+10
CG-2202	0+10
CG-2205	0+10

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.

9-11 LANDING EMBANKMENT

Purchaser shall slope landing embankments to the original construction specifications.

9-12 LANDING EMBANKMENT REMOVAL

Purchaser shall reduce or relocate the landing embankment. Place excavated material in a waste area designated by the Contract Administrator.

9-21 ROAD ABANDONMENT

Purchaser shall abandon the following roads before the termination of this contract by the specified date. Work must be in accordance with the ROAD ABANDONMENT CROSS SECTIONS DETAIL and Clause 9-22 LIGHT ABANDONMENT.

<u>Road</u>	<u>Stations</u>	<u>Type</u>	<u>Date</u>
CG-2200C	0+00 to 11+19	LIGHT	Before the termination of this contract
CG-2202	0+00 to 26+05	LIGHT	
CG-2205	0+00 to 13+88	LIGHT	
CG-2116C	0+00 to 1+50	LIGHT	
CG-2116D	0+00 to 1+78	LIGHT	

9-22 LIGHT ABANDONMENT:

- Remove road shoulder berms except as directed.
- Construct non-drivable waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing which will produce a vertical drop of no more than 10 feet between waterbars or between natural drainage paths and with a maximum spacing of 200 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 shall be outsloped to provide positive drainage. Outlets shall be on stable locations.
- Remove culverts and leave the resulting trench open. The removed fill material shall be placed and compacted in a location that will not erode into any Type 1 through 5 waters or wetlands. Slope all trench walls and approach embankments no steeper than 1.5:1.
- Scatter woody debris onto abandoned road surfaces.
- Block roads with earthen barricades according to the attached EARTHEN BARRICADE DETAIL.
- Apply grass seed concurrently with abandonment to all exposed soil within the old roadway limits and in accordance with Section 8 EROSION CONTROL.
- Provide and evenly spread a 4-inch layer of straw to all exposed soils within 100 feet of a stream.

SECTION 10 MATERIALS

10-15 CORRUGATED STEEL CULVERT

Metallic coated steel culverts must meet AASHTO M-36 (ASTM A-760) specifications. Culverts must be must be aluminized (aluminum type 2 coated meeting AASHTO M-274).

10-17 CORRUGATED PLASTIC CULVERT

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

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.

10-22 PLASTIC BAND

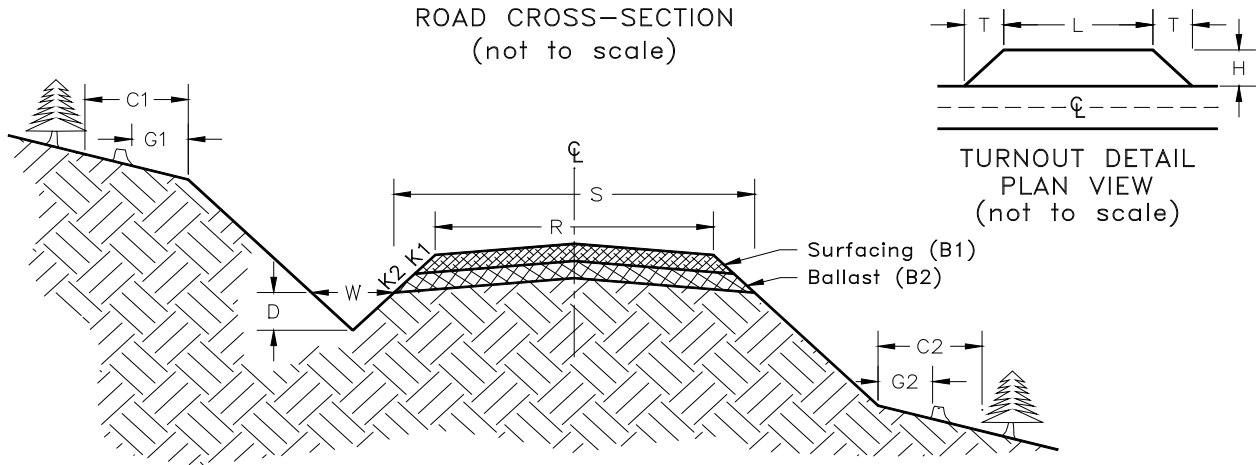
Plastic coupling and end bands must meet the AASHTO specification designated for the culvert. Only fittings supplied or recommended by the culvert manufacturer may be used. Couplings must be split coupling band. Split coupling bands must have a minimum of four corrugations, two on each side of the pipe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

10-24 GAUGE AND CORRUGATION

Metal culverts must conform to the following specifications for gage and corrugation as a function of diameter.

<u>Diameter</u>	<u>Gauge</u>	<u>Corrugation</u>
18"	16 (0.064")	2 ² / ₃ " X 1/2"
24" to 48"	14 (0.079")	2 ² / ₃ " X 1/2"

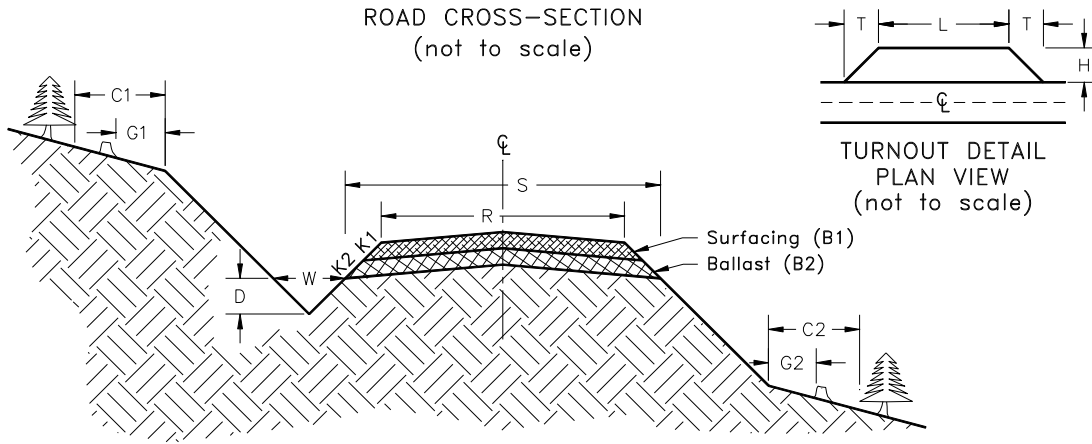
TYPICAL SECTION SHEET



Road Number	From Station	To Station	Tolerance Class	Subgrade Width (feet)	Road Width (feet)	Ditch		Crown at CL (%)	Grubbing Limits (feet)		Clearing Limits (feet)	
						Width (feet)	Depth (feet)		G1	G2	C1	C2
				S	R	W	D		G1	G2	C1	C2
CG-2100	0+00	57+16	A	--	12	3	1	4	NA	NA	NA	NA
CG-2116	0+00	73+33	A	--	12	3	1	4	NA	NA	NA	NA
CG-2200	97+17	201+70	A	--	12	3	1	4	NA	NA	NA	NA
CG-2200B	0+00	10+57	A	--	12	3	1	4	NA	NA	NA	NA
CG-2210	0+00	51+35	A	--	12	3	1	4	NA	NA	NA	NA
CG-2210A	0+00	1+70	A	--	12	3	1	4	3	3	ROW TAGS	
* CG-2116C	0+00	1+50	C	16	12	3	1	4	3	3	ROW TAGS	
* CG-2116D	0+00	1+78	C	16	12	3	1	4	3	3	ROW TAGS	
* CG-2200C	0+00	11+19	C	16	12	3	1	4	3	3	ROW TAGS	
CG-2202	0+00	26+05	C	16	12	3	1	4	3	3	ROW TAGS	
CG-2205	0+00	13+88	C	16	12	3	1	4	3	3	ROW TAGS	

* Optional Roads

ROCK LIST
(Page 1 of 4)



BALLAST

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth (inches)	C.Y./ Station	# of Stations	C.Y. Subtotal	Rock Source	Turnout		
									Length (feet)	Width (feet)	Taper (feet)
			K2	B2					L	H	T
3" JAW RUN											
CG-2202	0+00	2+79	1½:1	12	63	2.79	176	CG-2116 Pit			
CURVE	--	--	1½:1	12	--	--	18				
WIDENING											
JUNCTION	0+00		--	--	--	--	28				
CG-2202	2+79	26+05	1½:1	12	63	23.26	1,465				
CURVE	--	--	1½:1	12	--	--	73				
WIDENING											
TURNOUT	--	--	1½:1	12	38/TO	3 TO's	114		50	10	25
LANDING	--	--	--	--	41/Landing	3 Landings	123				
CG-2205	0+00	5+28	1½:1	12	63	5.28	333				
CURVE	--	--	1½:1	12	--	--	17				
WIDENING											
TURNOUT	--	--	1½:1	12	38/TO	1 TO's	38	50	10	25	
JUNCTION	0+00		--	--	--	--	28				
LANDING	--	--	--	--	41/Landing	1 Landings	41				
CG-2205	5+28	13+88	1½:1	12	63	8.60	542				
CURVE	--	--	1½:1	12	--	--	28				
WIDENING											
TURNOUT	--	--	1½:1	12	38/TO	1 TO's	38	50	10	25	
LANDING	--	--	--	--	41/Landing	2 Landing	82				

ROCK LIST
(Page 2 of 4)

BALLAST CONTINUED

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth (inches)	C.Y./ Station	# of Stations	C.Y. Subtotal	Rock Source	Turnout		
									Length (feet)	Width (feet)	Taper (feet)
			K2	B2					L	H	T
3" JAW RUN											
* CG-2116C	0+00	1+50	1½:1	9	46	1.50	69	CG-2116 Pit			
* CURVE WIDENING	--	--	1½:1	9	--	--	4				
* JUNCTION		0+00	--	--	--	--	18				
* LANDING	--	--	--	--	41/Landing	1 Landing	41				
* CG-2116D	0+00	1+78	1½:1	9	46	1.78	82				
* CURVE WIDENING	--	--	1½:1	9	--	--	5				
* JUNCTION		0+00	--	--	--	--	14				
* LANDING	--	--	--	--	41/Landing	1 Landing	41				
* CG-2200C	0+00	11+19	1½:1	9	46	11.19	515				
* CURVE WIDENING	--	--	1½:1	9	--	--	21				
* TURNOUT	--	--	1½:1	9	28/TO	1 TO	28		50	10	25
* JUNCTION		0+00	--	--	--	--	12				
* LANDING	--	--	--	--	41/Landing	2 Landings	82				
CG-2116 LANDING	--	--	--	--	41/Landing	1 Landing	41				
CG-2200 LANDING	--	--	--	--	41/Landing	8 Landings	328				
CG-2200B LANDING	--	--	--	--	41/Landing	1 Landing	41				
CG-2210 LANDING	--	--	--	--	41/Landing	1 Landing	41				
CG-2210A	0+00	1+70	SPOT ROCK		--	--	50				

*Optional Rock

Required JAW RUN BALLAST TOTAL **3,645** Cubic Yards
Optional JAW RUN BALLAST TOTAL **932** Cubic Yards

ROCK LIST
(Page 3 of 4)

SURFACE

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth (inches)	C.Y./ Station	# of Stations	C.Y. Subtotal	Rock Source	Turnout		
									Length (feet)	Width (feet)	Taper (feet)
			K1	B1					L	H	T
					1 1/2-INCH MINUS						
CG-2100	0+00	57+16		SPOT ROCK	--	--	260	CG-2116 Pit			
CG-2116	0+00	73+33	1½:1	6	30	73.33	2,200				
CURVE	--	--	1½:1	6	--	--	110				
WIDENING	--	--	1½:1	6	--	--	110				
TURNOUT	--	--	1½:1	6	19/TO	9 TO	171		50	10	25
JUNCTION	0+00		--	--	12/JNCT	1 JNCTS	12				
CULVERT BEDDING & BACKFILL			--	--	--	--	100				
CG-2200	97+17	201+70	1½:1	6	30	104.53	3,136				
CURVE	--	--	1½:1	6	--	--	157				
WIDENING	--	--	1½:1	6	--	--	157				
TURNOUT	--	--	1½:1	6	19/TO	14 TO	266		50	10	25
CULVERT BEDDING & BACKFILL			--	--	--	--	160				
CG-2200B	0+00	10+57	1½:1	6	30	10.57	317				
CURVE	--	--	1½:1	6	--	--	16				
WIDENING	--	--	1½:1	6	--	--	16				
TURNOUT	--	--	1½:1	6	19/TO	1 TO	19	50	10	25	
JUNCTION	0+00		--	--	12/JNCT	1 JNCTS	24				
CULVERT BEDDING & BACKFILL			--	--	--	--	10				
CG-2210	0+00	51+35	1½:1	6	30	51.35	1,541				
CURVE	--	--	1½:1	6	--	--	77				
WIDENING	--	--	1½:1	6	--	--	77				
TURNOUT	--	--	1½:1	6	19/TO	6 TO	114	50	10	25	
JUNCTION	0+00		--	--	12/JNCT	1 JNCTS	12				
CULVERT BEDDING & BACKFILL			--	--	--	--	30				
CG-2210A	0+00	1+70	1½:1	6	30	1.70	51				
CURVE	--	--	1½:1	6	--	--	8				
WIDENING	--	--	1½:1	6	--	--	8				
JUNCTION	0+00 & 1+70		--	--	12/JNCT	2 JNCTS	24				

Required 1 1/2 -INCH MINUS CRUSHED SURFACE TOTAL **8,815** Cubic Yards

ROCK LIST
(Page 4 of 4)

RIP-RAP

Road Number	From Station	To Station	Rock Slope	Compacted Rock Depth	C.Y./ Station	# of Stations	C.Y. Total	Rock Source
			K1	B1				
Culvert headwall, energy dissipators and armor					LIGHT LOOSE RIPRAP			CG-2116 Pit, or Rock found during excavation on road Construction and Reconstruction
CG-2116 Culverts	--	--	--	--	--	--	47.5	
CG-2200 Culverts	--	--	--	--	--	--	57.0	
CG-2200B Culvert	--	--	--	--	--	--	5.5	
CG-2210 Culverts	--	--	--	--	--	--	16.5	
CG-2202 Culverts	--	--	--	--	--	--	9.0	
CG-2205 Culverts	--	--	--	--	--	--	4.0	
CG-2116C Culverts	--	--	--	--	--	--	1.0	
CG-2116D Culverts	--	--	--	--	--	--	1.0	
CG-2200C Culverts	--	--	--	--	--	--	13.5	

Required LIGHT LOOSE RIPRAP TOTAL 155.0 Cubic Yards

CULVERT LIST
(Page 1 of 2)

Road Number	Location	Culvert			Armoring (Cubic Yards)			Backfill Material	Bedding Material	Culvert Marker (Y/N)	Remarks
		Dia. (inches)	Length (feet)	Type	Inlet	Outlet	Type				
CG-2116	8+89	18	34	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	18+92	18	34	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	30+92	18	34	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	32+92	18	34	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	39+24	24	34	XX	1.0	8.0	LL	CR-15cy	CR-5cy	N	T5 Creek
	42+78	18	34	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	57+29	18	44	XX	0.5	5.0	LL	CR-10cy	CR-10cy	N	Cross drain
	60+44	18	34	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
CG-2200	97+97	18	30	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	110+25	18	38	XX	0.5	5.0	LL	CR-10cy	CR-5cy	N	Cross drain
	113+03	18	30	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	116+42	18	38	XX	0.5	5.0	LL	CR-10cy	CR-5cy	N	Cross drain
	117+44	24	36	XX	1.0	8.0	LL	CR-20cy	CR-5cy	N	Replace existing culvert -T5 Creek
	118+85	-	-	-	-	-	-	CR-25cy	-	-	Remove existing culvert and back fill with Crushed Rock
	119+06	18	34	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	127+06	18	34	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	132+12	18	30	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	152+60	24	30	XX	1.0	6.0	LL	CR-15cy	CR-5cy	N	Redirect Creek above from old skid trail to this original drainage site -T5 Creek
	153+49	18	34	XX	0.5	2.0	LL	CR-5cy	CR-5cy	N	Cross drain
CG-2200B	1+60	18	30	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
CG-2210	9+85	18	34	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	24+40	18	30	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
	43+22	18	34	XX	0.5	5.0	LL	CR-5cy	CR-5cy	N	Cross drain
CG-2116C	0+00	18	50	XX	0.5	0.5	LL	NT	NT	N	Cross drain – install in existing ditchline
CG-2116D	0+00	18	40	XX	0.5	0.5	LL	NT	NT	N	Cross drain – install in existing ditchline
CG-2200C	2+69	18	34	XX	0.5	5.0	LL	NT	NT	N	Cross drain
	6+57	18	30	XX	0.5	5.0	LL	NT	NT	N	Cross drain
	10+44	18	30	XX	0.5	2.0	LL	NT	NT	N	Cross drain
CG-2202	0+00	18	60	XX	0.5	0.5	LL	NT	NT	N	Cross drain – install in existing ditchline
	3+60	18	30	XX	0.5	3.0	LL	NT	NT	N	Cross drain
	6+09	18	30	XX	0.5	0.5	LL	NT	NT	N	Cross drain

CULVERT LIST
(Page 2 of 2)

<u>Road Number</u>	<u>Location</u>	<u>Culvert</u>			<u>Armoring (Cubic Yards)</u>			<u>Backfill Material</u>	<u>Bedding Material</u>	<u>Culvert Marker (Y/N)</u>	<u>Remarks</u>
		<u>Dia. (inches)</u>	<u>Length (feet)</u>	<u>Type</u>	<u>Inlet</u>	<u>Outlet</u>	<u>Type</u>				
CG-2202 continued	11+42	18	30	XX	0.5	0.5	LL	NT	NT	N	Cross drain
	16+22	--	--	--	--	--	--	--	--	--	Ditchout Right
	24+15	18	30	XX	0.5	2.0	LL	NT	NT	N	Cross drain
CG-2205	0+00	18	60	XX	0.5	0.5	LL	NT	NT	N	Cross drain – install in existing ditchline
	3+88	18	30	XX	0.5	0.5	LL	NT	NT	N	Cross drain
	6+08	18	30	XX	0.5	0.5	LL	NT	NT	N	Cross drain
	10+57	18	30	XX	0.5	0.5	LL	NT	NT	N	Cross drain – no skew

Key:

- CR - Crushed Rock – 1 ½ " Minus
- NT - Native (bank run)
- LL - Light Loose Riprap
- HL - Heavy Loose Riprap
- PD - Polyethylene Pipe Dual Wall
- AM - Aluminized Metal
- XX - PD or AM

COMPACTION LIST

Road	From Station	To Station	Type	Max Depth Per Lift (inches)	Equipment Type	Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
All Waste Areas	All	All	Waste Area	12	Excavation	28,000	3	--
All roads	All	All	Embankment	12	Excavation	28,000	4	--
All roads	All	All	Subgrade	12	Vibratory Smooth Drum	20,000	4	5
All roads	All	All	3 " Jaw Run	12	Vibratory Smooth Drum	20,000	4	5
All roads	All	All	1 1/2" Minus	6	Vibratory Smooth Drum	20,000	4	5
All - Culvert Bedding & Backfill Rock	All		1 1/2" Minus	12	Vibratory Plate Compactor	Varies	Varies	

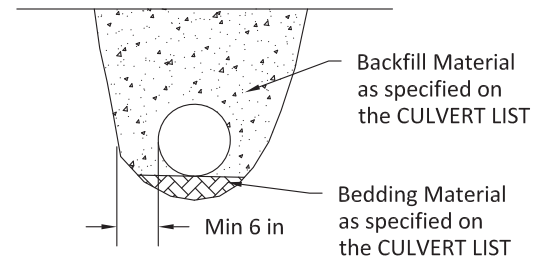
CULVERT AND DRAINAGE SPECIFICATION DETAIL
PAGE 1 OF 2

INSTALLATION REQUIREMENTS:

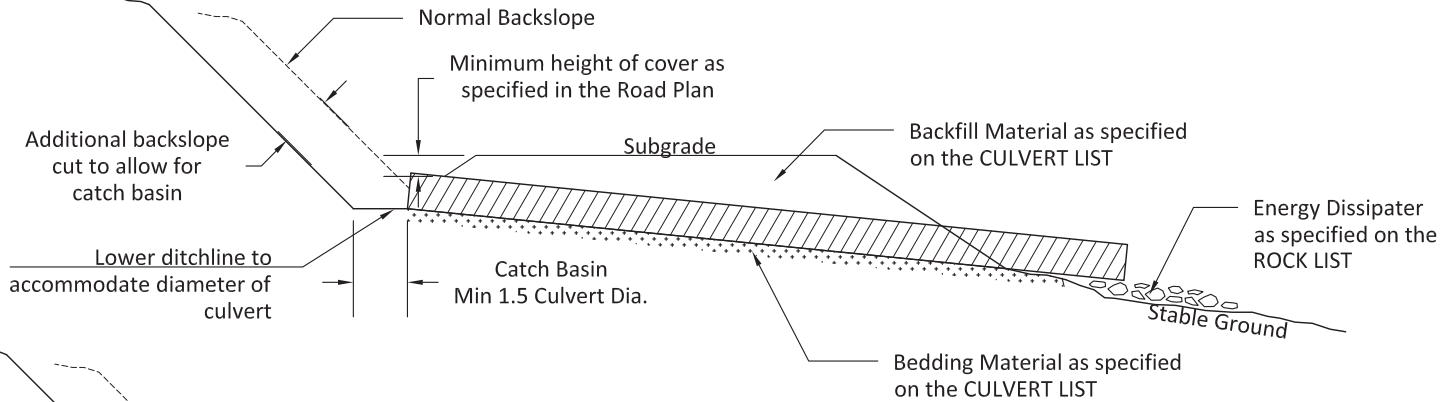
1. Proper preparation of foundation and placement of any required bedding material shall precede the installation of all culverts. This includes necessary leveling of the native trench bottom and compaction of required bedding material to form a uniform, dense, unyielding base. The pipe must be uniformly supported along the barrel.
2. Backfill material shall be compacted under the culvert haunches, around the sides, and above the culvert in accordance with the COMPACTION LIST.

ALL DRAWINGS ARE NOT TO SCALE

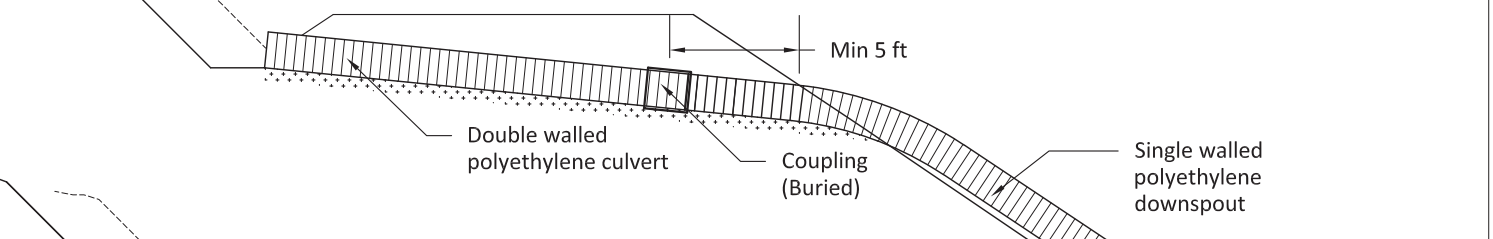
CROSS SECTION



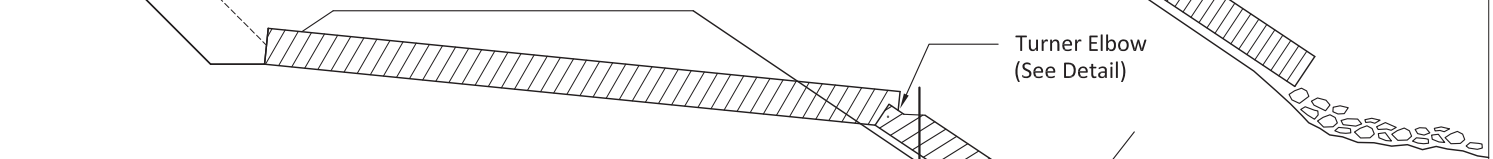
CULVERT PROFILE (TYPICAL)



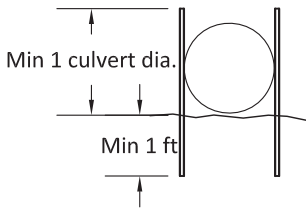
CULVERT WITH DOWNSPOUT OPTION 1



CULVERT WITH DOWNSPOUT OPTION 2

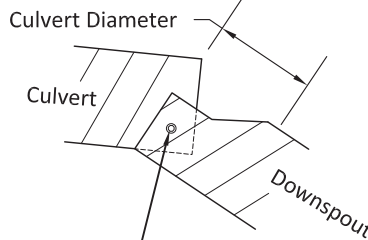


SUPPORT STAKES



Stake Material: T-post with rust protection coating.
Connections: Bolt support stakes to the culvert with $\frac{5}{8}$ " u-bolts, with washers on both the inside and outside of the culvert.
Alternative staking methods may be approved, in writing, by the Contract Administrator.

TURNER ELBOW

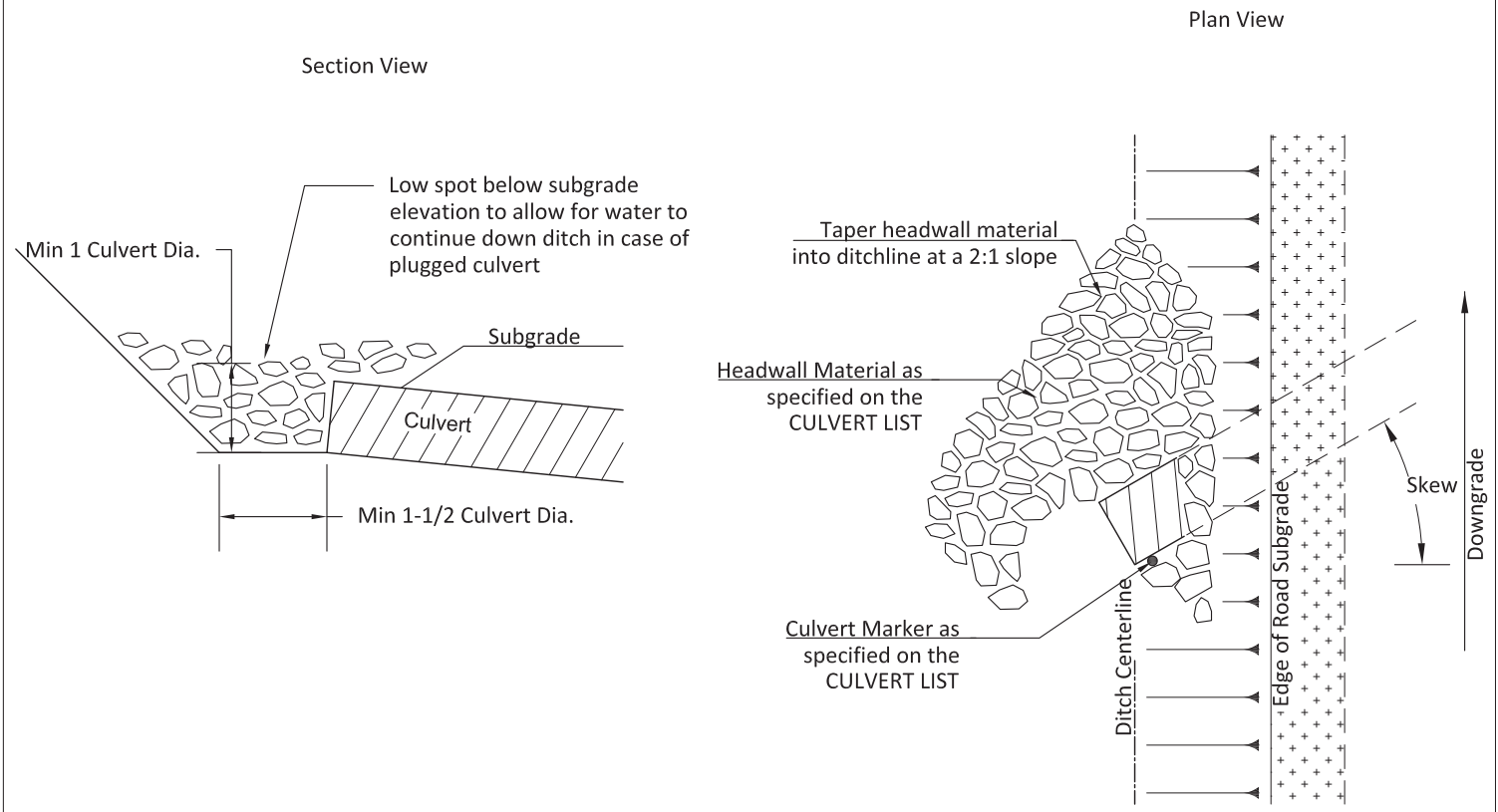


Bolted with $\frac{5}{8}$ " galvanized bolts and washers (both sides)
Downspout must be 6 inches larger in diameter than the culvert.

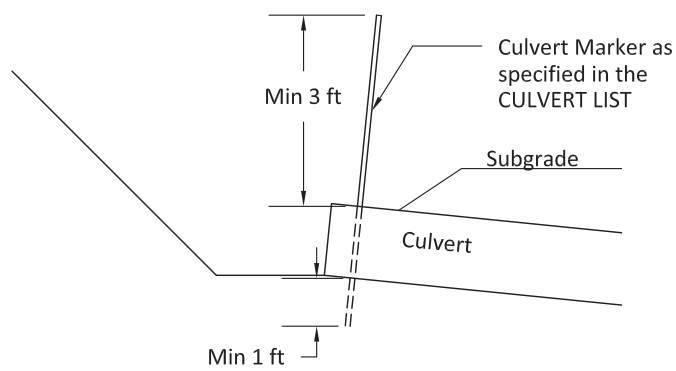
Support Stakes (See Detail)

CULVERT AND DRAINAGE SPECIFICATION DETAIL
PAGE 2 OF 2

HEADWALLS

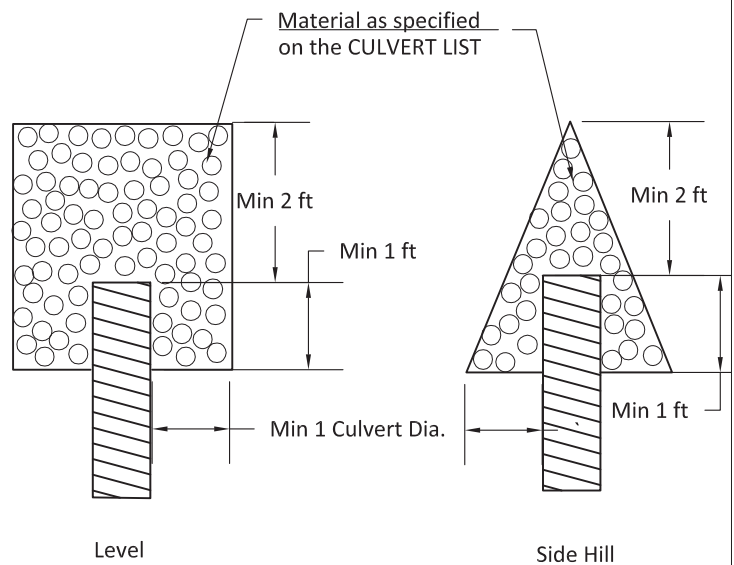


CULVERT MARKERS



Culvert Marker Material: 1 Inch I.D., Schedule 40 PVC Pipe, White. Marker must be capped on the top.
 Culvert Marker Placement: Place on uphill side of culvert, between corrugations if possible.
 Alternative culvert marker types may be approved, in writing, by the Contract Administrator.

ENERGY DISSIPATORS



Min Energy Dissipater Depth: 1 Culvert Dia.

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Page 1 of 2

Cuts and Fills

- Maintain slope lines to a stable gradient compatible with the cut slope/fill slope ratios. 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 TYPICAL SECTION SHEET 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.

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Page 2 of 2

Preventative Maintenance

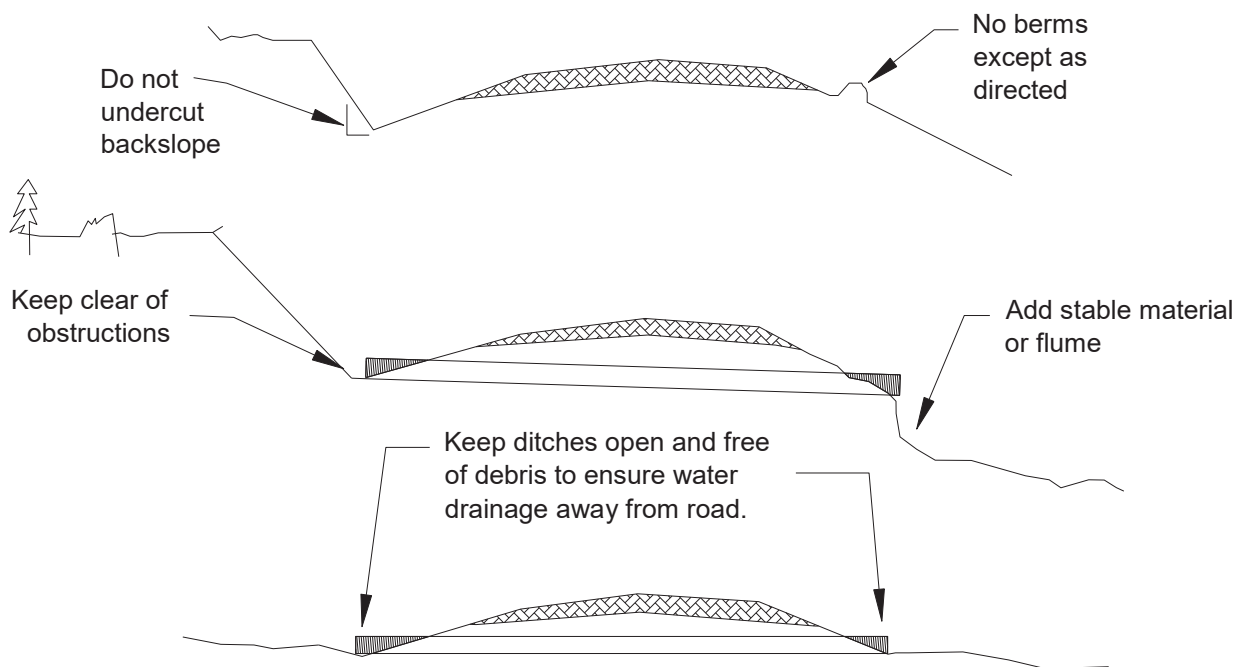
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

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.



LIVE STREAM INSTALLATION PROCEDURE

Order of work is as follows, deviations shall be approved, in writing, by the Contract Administrator.

- 1) Purchaser shall notify the Contract Administrator of intent to start project, and a pre-work conference shall be held before move in of equipment. Contract Administrator will designate a representative that will remain on site at all times when work is being performed in creek channel.
- 2) Work period shall be restricted to the permitted times stated in an approved FPA. Work period on Np and Ns streams that are not covered by an FPA shall be permitted only during the dry weather seasonal low flow period between June 1 and October 1; any work outside of this timing restriction may be granted in writing by the Contract Administrator only during unseasonably low flows.
- 3) Assemble the items on the Materials List onsite before proceeding.
- 4) Set up pumps (one as backup).
- 5) Dam up stream with sandbags and line floor of dam with plastic (to prevent sub-surface water flow), place clean rock on plastic to hold in place, and key leading edge of plastic into channel bottom - see SETTLING POND AND PUMP DETAIL. Build a settling pond at culvert outlet. Fill may need to be removed before the settling pond installation due to space limitations. Pump clean water at catch basin around work site and back into stream. Dirty water shall be pumped away from site and onto forest floor a minimum of 200 feet from live streams. Silt fence shall be erected at base of fill slope and bottom edge of fence shall be keyed into slope and held in place with rocks to prevent water from flowing under the silt fence.
- 6) Remove remainder of fill and culvert.
- 7) Remove settling pond.
- 8) Cover exposed soils within 100 feet of all live streams with straw (minimum depth of 4 inches) and grass seed.

Materials List:

- 3 pumps, (one as a backup) The clean water pump (dam at culvert catch basin) shall have a minimum capacity of 1200 gallons per minute. The dirty water pump (settling pond) and the backup pump shall each have a minimum capacity of 600 gpm. Culvert removal should not start during rain or threat of rain;
- plastic sheet;
- silt fence and stakes;
- bales of straw

LIVE STREAM REMOVAL PROCEDURE

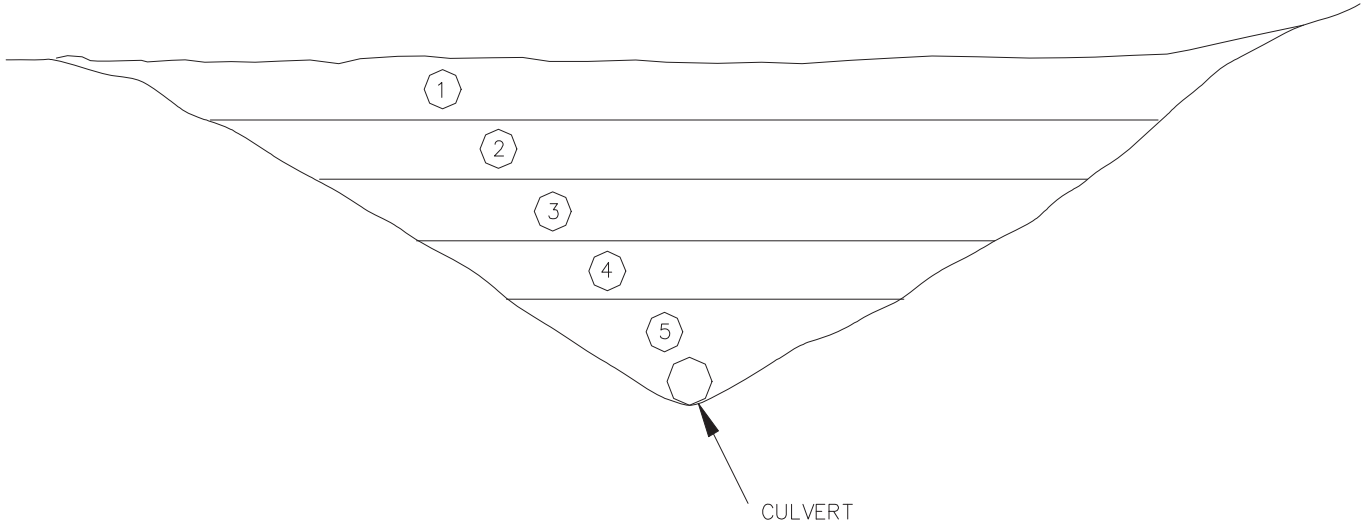
Order of work is as follows, deviations shall be approved, in writing, by the Contract Administrator.

- 1) Purchaser shall notify the Contract Administrator of intent to start project, and a pre-work conference shall be held before move in of equipment. Contract Administrator will designate a representative that will remain on site at all times when work is being performed in creek channel.
- 2) Work period shall be restricted to the permitted times stated in an approved FPA. Work period on Np and Ns streams that are not covered by an FPA shall be permitted only during dry weather and seasonal low flow period between June 1 and October 1; any work outside of this timing restriction may be granted in writing by the Contract Administrator only during unseasonably low flows.
- 3) Assemble the items on the Materials List onsite before proceeding.
- 4) Set up pumps (one as backup).
- 5) Dam up stream with sandbags and line floor of dam with plastic (to prevent sub-surface water flow), place clean rock on plastic to hold in place, and key leading edge of plastic into channel bottom - see SETTLING POND AND PUMP DETAIL. Build a settling pond at culvert outlet. Fill may need to be removed before the settling pond installation due to space limitations. Pump clean water at catch basin around work site and back into stream. Dirty water shall be pumped away from site and onto forest floor a minimum of 200 feet from live streams. Silt fence shall be erected at base of fill slope and bottom edge of fence shall be keyed into slope and held in place with rocks to prevent water from flowing under the silt fence.
- 6) Remove 95% of fill (see FILL REMOVAL DETAIL). Excavated channel slopes shall be consistent with requirements stated in Clauses 9-2, 9-22 and 9-24.
- 7) Remove remainder of fill, logs from fill, and any culverts.
- 8) Remove settling pond.
- 9) Cover exposed soils within 100 feet of all live streams with weed free straw (minimum depth of 4 inches) and grass seed.

Materials List:

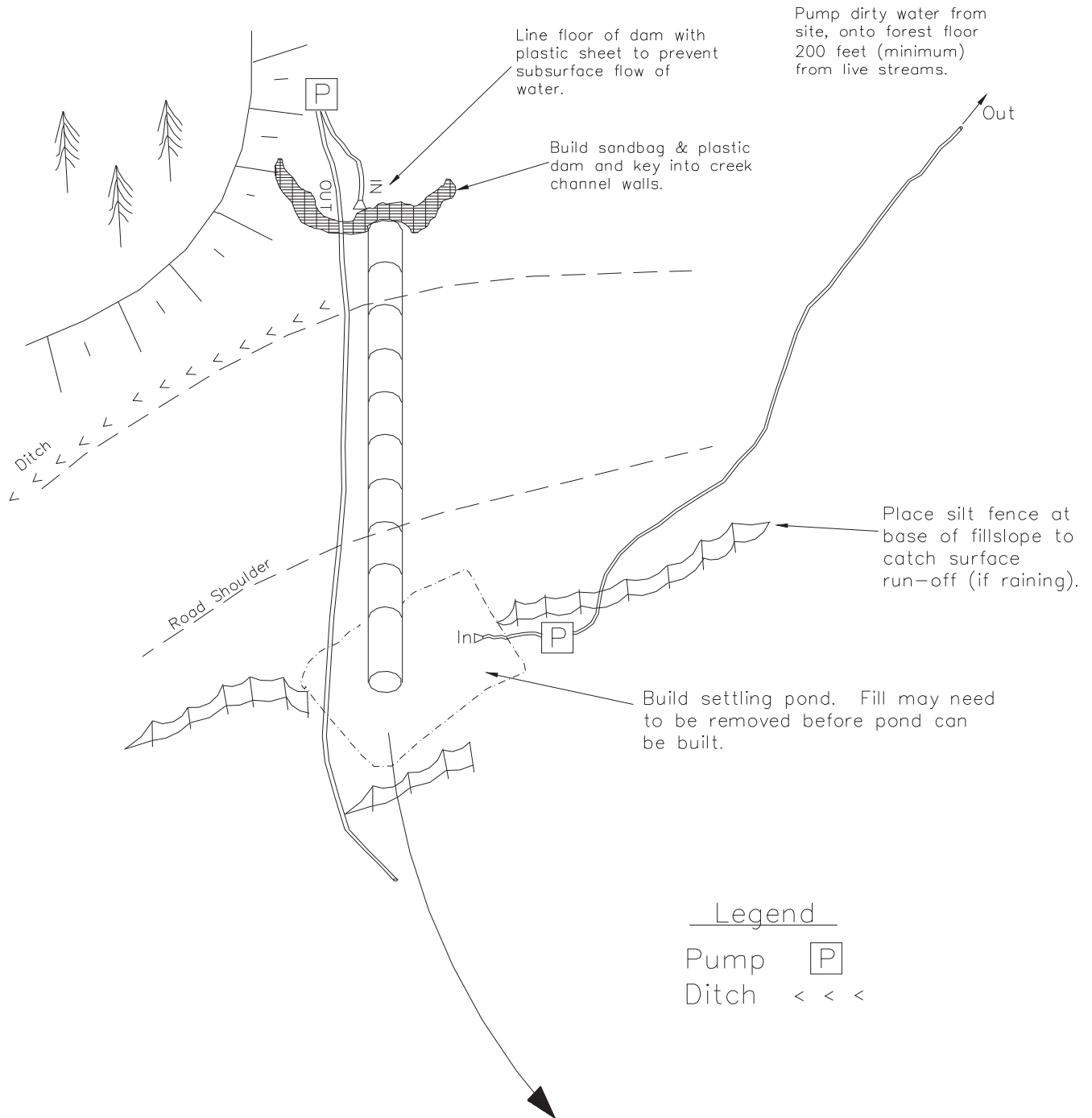
- 3 pumps, (one as a backup) The clean water pump (dam at culvert catch basin) shall have a minimum capacity of 1200 gallons per minute. The dirty water pump (settling pond) and the backup pump shall each have a minimum capacity of 600 gpm. Culvert removal should not start during rain or threat of rain;
- plastic sheet;
- silt fence and stakes;
- bales of weed free straw

FILL REMOVAL DETAIL



- Remove fill in layers not to exceed 3 feet.

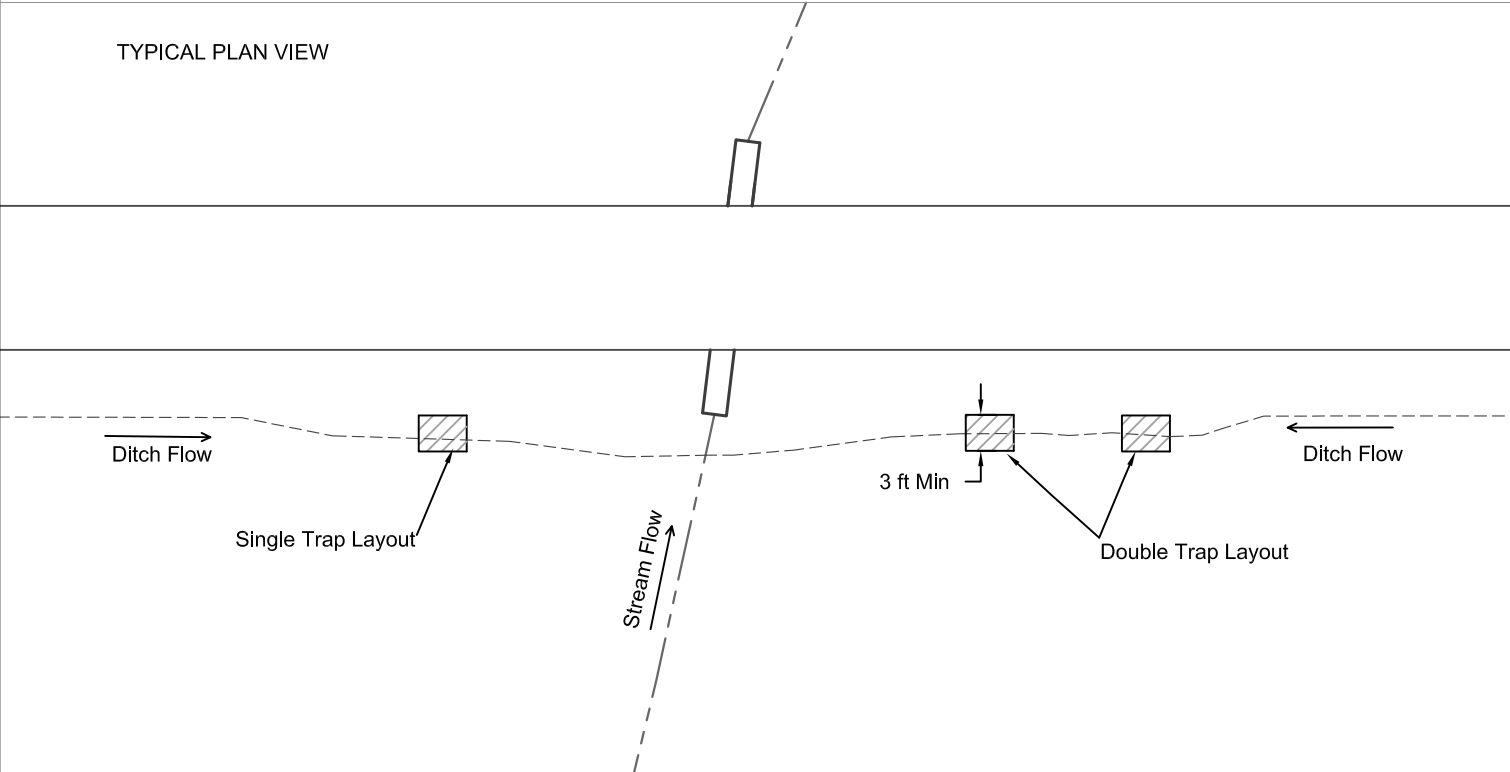
SETTLING POND AND PUMP DETAIL



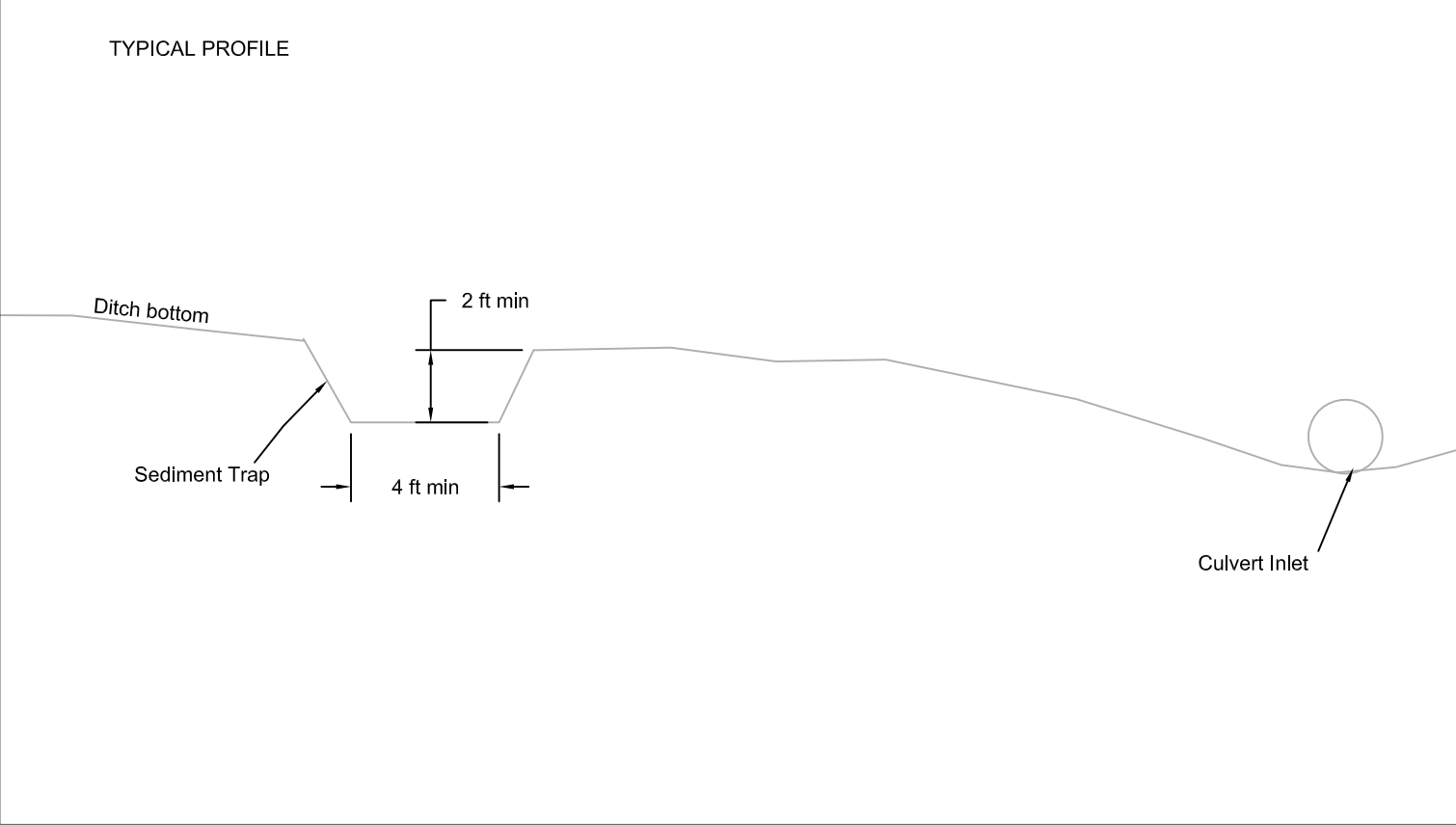
SEDIMENT TRAP DETAIL

No Scale

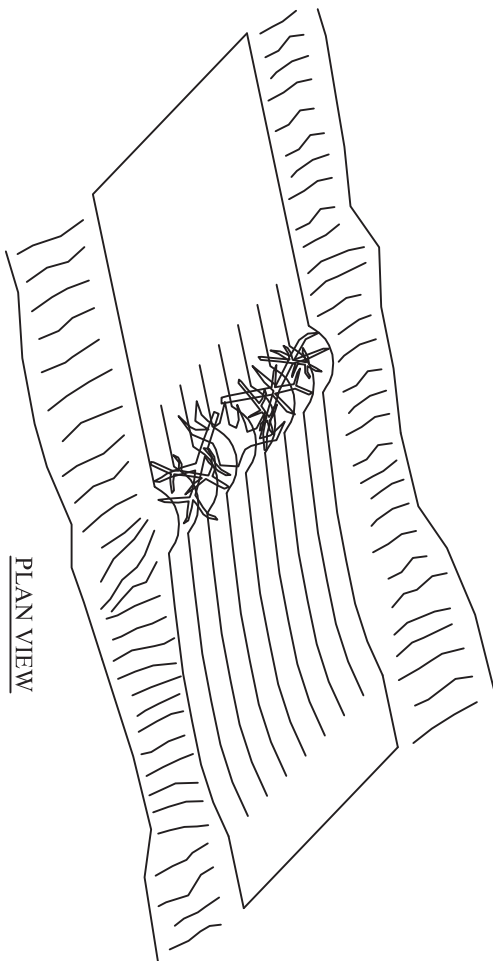
TYPICAL PLAN VIEW



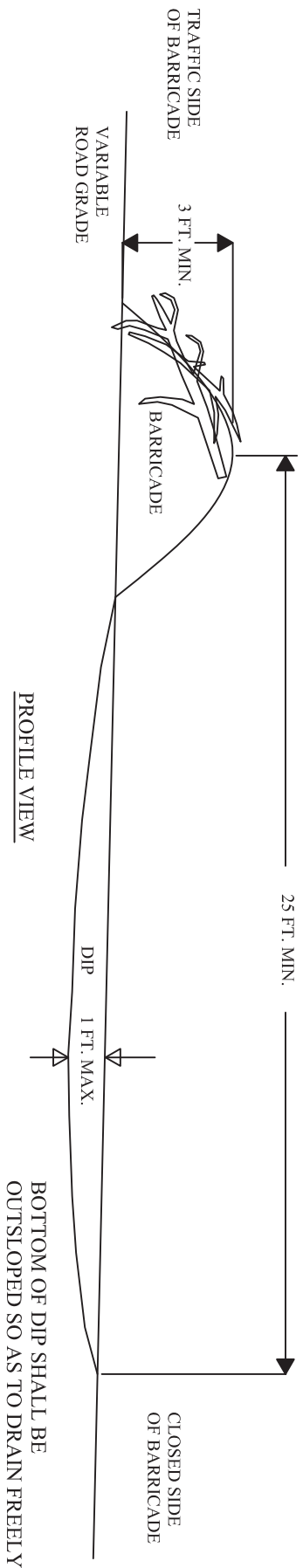
TYPICAL PROFILE



EARTHEN BARRICADE DETAIL

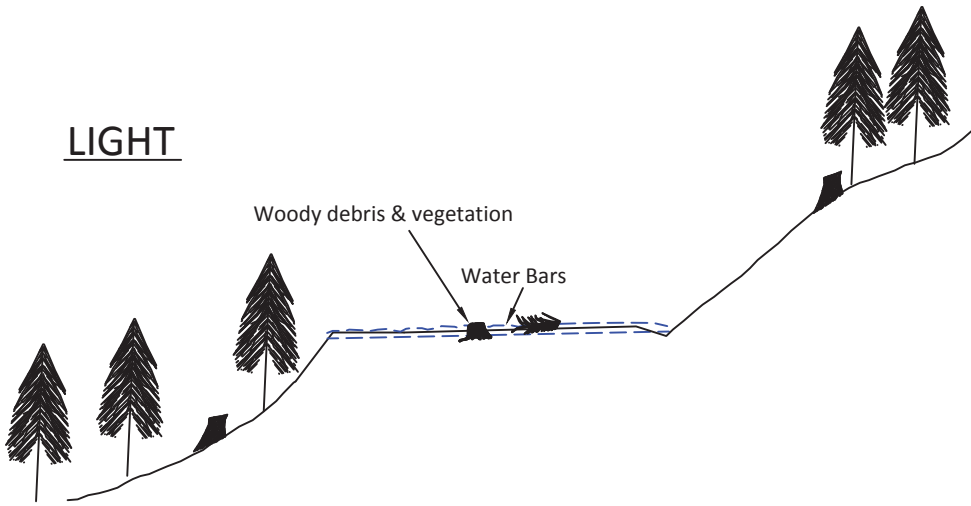


SLASH AND ROOT WADS SHALL BE INCORPORATED INTO THE TRAFFIC SIDE OF THE BARRICADE.

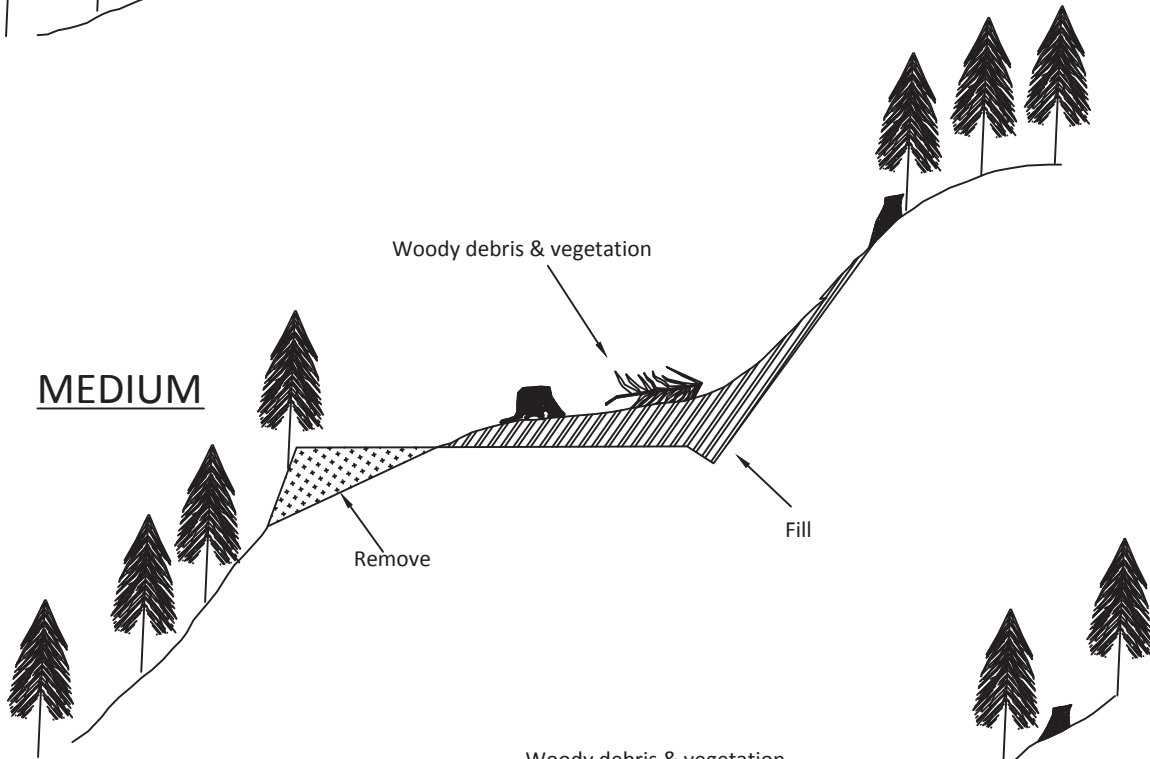


ROAD ABANDONMENT CROSS SECTIONS

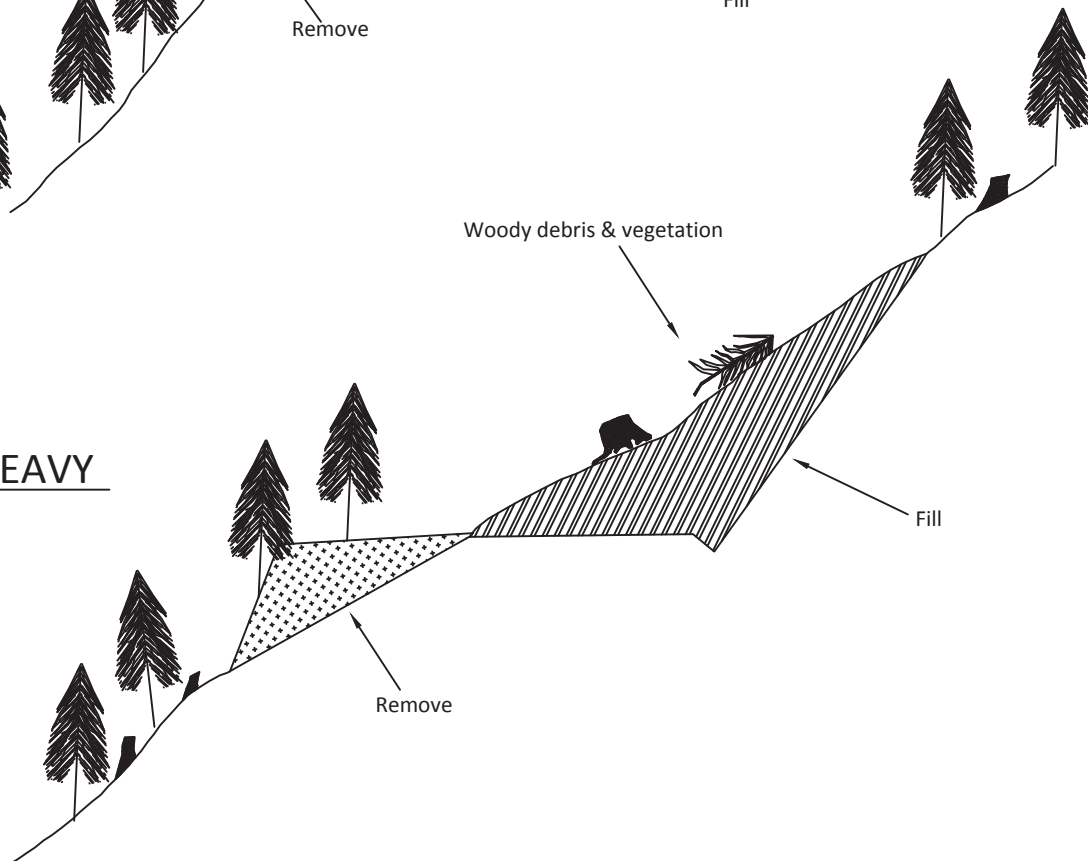
LIGHT



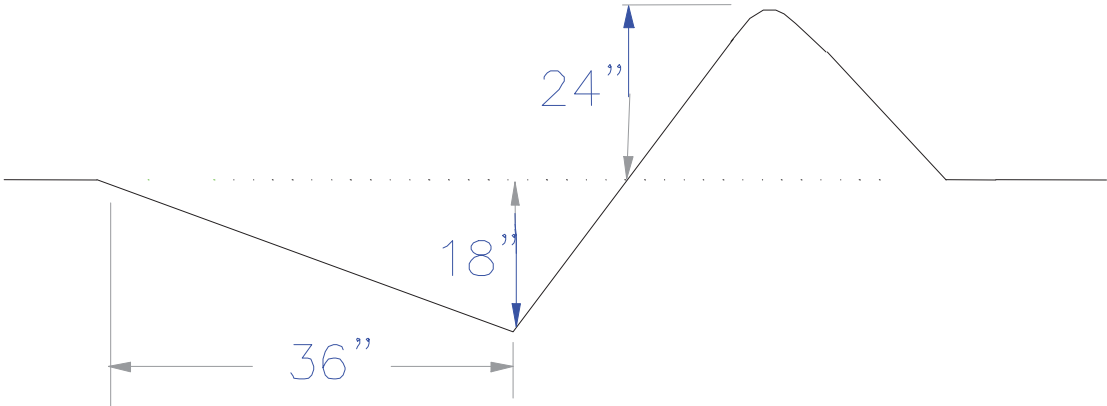
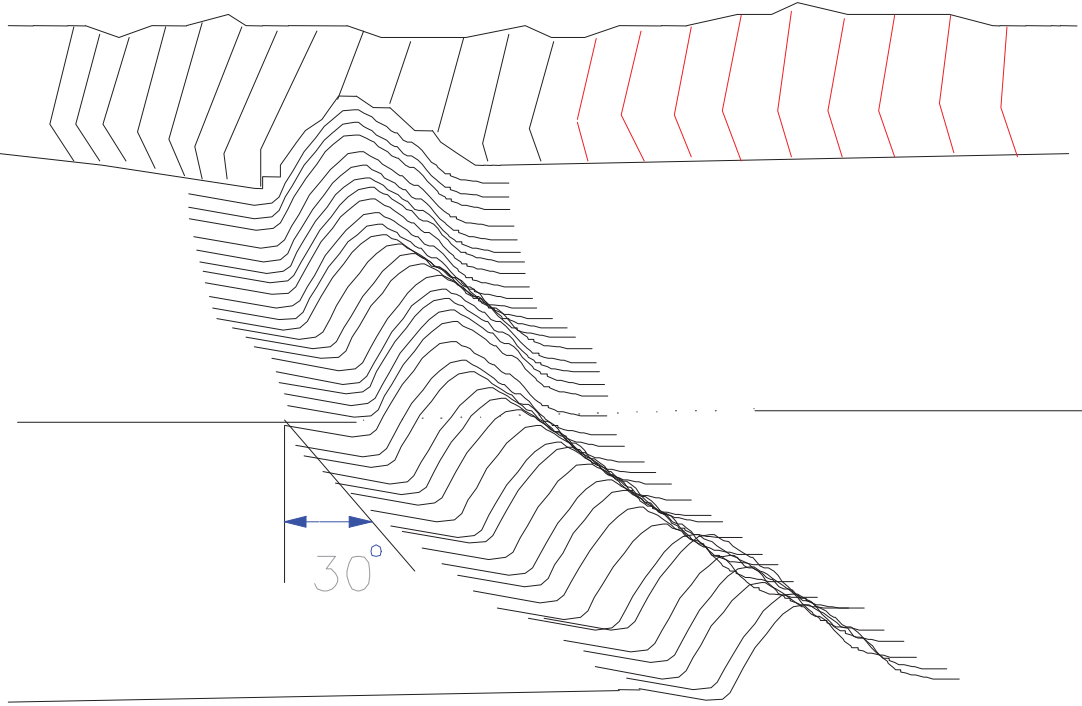
MEDIUM



HEAVY



NON-DRIVABLE WATER BAR DETAIL



Rock Crushing Compliance Procedure

Phase I. Equipment Adjustment

- Step 1:** At start up of crushing operations, the contractor will notify the contract administrator when the rock meets the gradation specifications in the contract. None of the rock crushed during this calibration period will be counted toward the amount required to be crushed, and this rock must be kept separate from accepted rock crushed later.
- Step 2:** The contract administrator and the contractor will test the rock. Two samples will be taken. If the rock meets specifications, crushing may begin. If the rock does not meet specifications, return to Step 1.

Phase II. Production

- Step 3:** The contract administrator and the contractor will continue periodic testing to ensure that rock stays in spec. Testing will take place according to the following schedule:
- After the first 500 yards
 - After every 1,000 yards thereafter
- a) Any time a sample is out of spec, but is within 5%*, the contractor will be notified and a second sample will be taken later in the day. If the second sample meets specifications, the rock crushed during that day will be accepted. If the second sample also fails to meet spec, none of the rock crushed since the last acceptable test will be counted toward the amount to be crushed.
- b) Any time a sample is out of spec and is more than 5% off in any category, none of the rock crushed since the last acceptable test will be accepted and that rock must be kept separate from the stockpile. Return to Step 1.
- c) Contractors are strongly encouraged to take their own samples regularly and keep their operations in spec to avoid unnecessary expenses.
- * The 5% will be applied only to sieve specs for 2" to ¼"; rock that is out of spec in larger sizes must be kept separate from the acceptable rock.

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
PACIFIC CASCADE REGION

INFORMATIONAL BLASTING PLAN

Timber Sale/Project Name: _____ App./Project No.: _____

1. Blaster-in-Charge: Name: _____

Company: _____

Address: _____

Telephone: _____

2. Quarry Name/Location: _____

3. Total Estimated Cubic Yards in Blast (loose): _____

4. Hole Spacing: _____

5. Burden: _____

6. Hole Diameter: _____

7. Hole Depth: _____

8. Sub Drill: _____

9. Number of Holes: _____

10. Stemming Depth: _____

11. Explosive (mfg., name, density, %, V.O.D.): _____

12. Type and Size of Primer (if applicable): _____

13. Total Weight of Primers for Shot: _____

14. Calculated Powder Factor/Cubic Yard: _____

15. Number of Delays (in M.S.): _____

M-126PAC (03/04)

INFORMATIONAL BLASTING PLAN

Page 2 of 3

16. Number of Holes Fired on Each Delay: _____

17. Total Amount of Explosives Fired on Each Delay: _____

18. Type of Blasting Machine: _____

19. Date, Start Drilling: _____

20. Date and Time, Start Loading: _____

21. Date and Time of Blast (approx.): _____

INFORMATIONAL BLASTING PLAN

Page 3 of 3

22. Detail drawing of delay system (show hole pattern and delays in milliseconds). Attach additional sheets if required:

23. Typical cross-section of hole (show primer, main charge, sub drill, and stemming):

23. Submitted by: _____ Date: _____

24. Received by: _____ Date: _____

Note: Attach copies of manufacturer=s data sheet(s) for explosive and caps.

M-126PAC (03/04)

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
PACIFIC CASCADE REGION

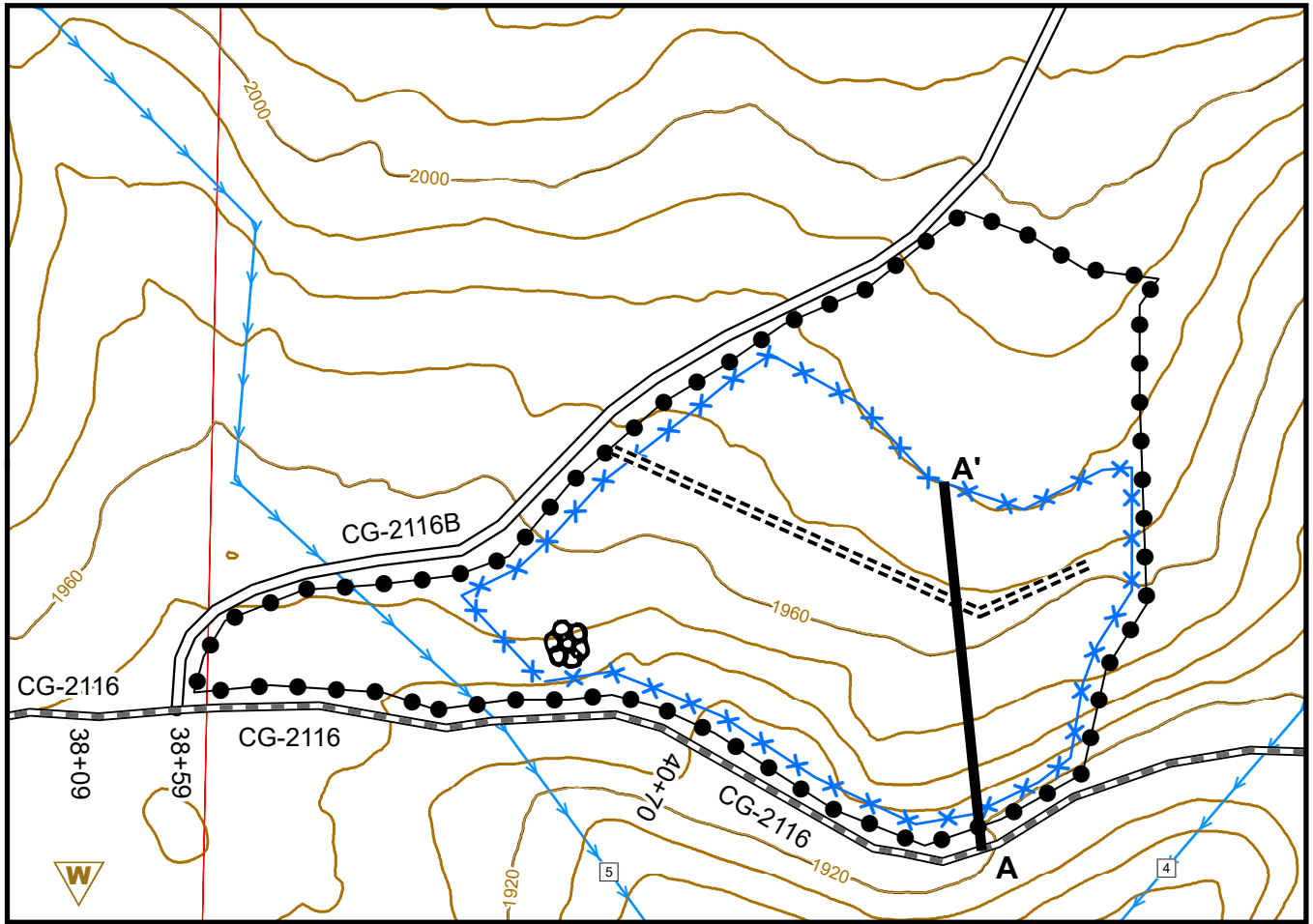
ROCK SOURCE DEVELOPMENT PLAN

CG-2116 Pit – NW¼ NW¼ Section 24, Township 03 North, Range 07 East 5, W.M.
(Page 1 of 2)

1. Development shall take place in mining areas as indicated on the Pit Development Plan Maps for all Pits.
2. All vegetation including stumps shall be cleared a minimum of 25 feet beyond the top of all working faces. Trees shall be cleared to a minimum of $\frac{3}{4}$ of the height of the tallest tree adjacent to the pit. The Contractor shall maintain a minimum of 15 foot wide area stripped to rock from the pit face at all times. All Clearing shall be approved in writing by the Contract Administrator prior to overburden removal.
3. Overburden from the CG-2116 Pit shall be end hauled to the waste area at Station 38+09 on the CG-2116. All waste material shall be compacted. Minimal acceptable compaction is achieved by placing waste material in 1 foot or shallower lifts and routing excavation equipment over entire width of the lifts. All Overburden removal shall be approved in writing by the Contract Administrator prior to any drilling operation and or rock extraction.
4. Root wads and organic debris larger than one cubic foot in volume shall be separated from overburden material and piled in the designated Waste Area.
5. The Operator shall submit an informational drilling and shooting plan to the Contract Administrator 5 working days prior to any drilling. (Form #M-126PAC)
6. Drilling may begin when the Contract Administrator has approved, in writing, all of the Clearing, Grubbing, and Overburden removal. Purchaser shall block access roads and trails before blasting operations.
7. Pit faces shall not exceed 30 feet in height. All pit faces shall be sloped no steeper than $\frac{1}{4}$:1.
8. Working bench width shall be a minimum of 20 feet.
9. The pit floor shall have continuity of slope and be left in a smooth and neat condition, providing drainage at a minimum of 2 percent. All knobs, bumps, or extrusions shall be removed to the designated floor level by excavation or drill and shoot techniques. The installation of a culvert may be necessary to drain water from the pit floor in locations where the pit floor is adjacent to a road. The location of the culvert shall be subject to approval of the Contract Administrator. No sediment shall enter live water.
10. The location and amount of material to be placed in a temporary stockpile are subject to approval of the Contract Administrator. All stock piled material shall be maintained in a neat and useable condition.
11. Oversize material remaining in the rock source at the conclusion of use shall not exceed 5 percent of the total volume mined during that operation. Oversize material is defined as rock fragments larger than two feet in any direction and not larger than two cubic yards in volume. At the conclusion of operations, all remaining oversize material shall be placed at the location shown on the Pit Development Plan Map and as directed by the Contract Administrator in a location outside of the future development.
12. At the end of operations, pit faces and walls shall be scaled and cleared of loose and overhanging material and shall not be undermined or over steepened; benches shall have safety berms constructed or access blocked to highway vehicles. Access roads/trails shall have Non-driveable waterbars constructed in accordance with the NON-DRIVEABLE WATER BAR DETAIL as directed by the Contract Administrator. Upon completion of operations in the pit, the area will be left in a condition that will not endanger public safety, damage property, or be hazardous to human life.
13. All exposed soil in the waste area, access roads, and exposed banks shall be grass seeded in accordance with Road Plan Clauses 8-15 and 8-25.
14. All operations shall be carried out in compliance with all regulations of:
 - a. Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration.
 - b. "Safety Standards for Construction Work" (296-155 WAC), Washington Department of Labor and Industries.
15. The Operator shall submit an informational drilling and shooting report to the Contract Administrator after blasting has occurred. (Form #M-126PAC)
16. The pit area shall be worked and left in a condition that future operations may proceed in an orderly manner. Upon completion of operations, the site shall be cleared of all temporary structures/equipment and rubbish, access roads shall be blocked with riprap at locations as directed by the Contract Administrator, and shall be left in a neat and presentable condition. At the completion of rock source operations, Contractor shall ask Contract Administrator for written approval of final rock source condition and compliance with the terms of this plan.

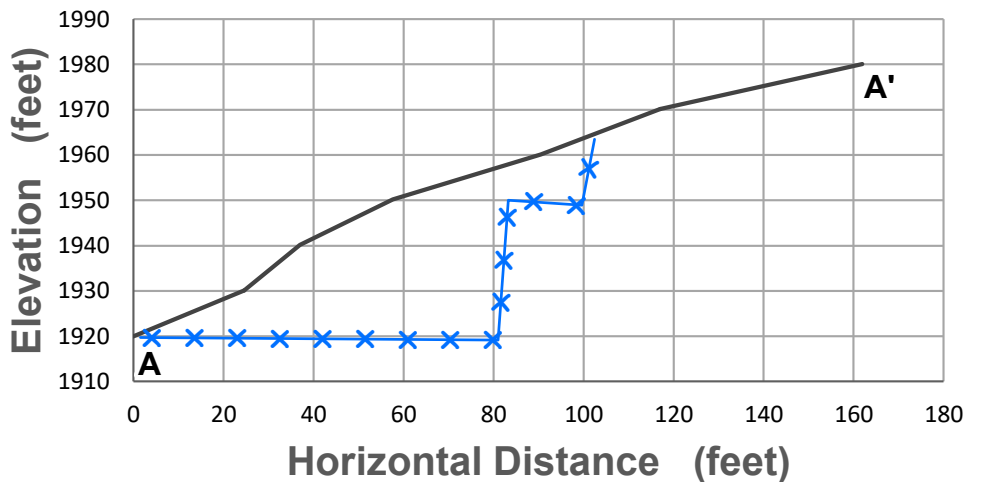
CG-2116 Pit

NW1/4 NW1/4 Sec. 24, T03N, R07E5, W.M.
Page 2 of 2



- Existing Roads
- Required Pre-Haul Maintenance
- Streams
- Property Line
- Rock Pit Boundary
- Mining Area Boundary
- Access Road
- Contours 10 ft
- Waste Area
- Profile Line
- Oversize Rock Storage Area

Profile "A"



SUMMARY - Road Development Costs

REGION: Pacific Cascade
DISTRICT: Yacolt

SALE/PROJECT NAME: Shady Grove VDT

AGREEMENT #: 30-106097

ROAD NUMBERS:	CG-2116C, CG-2116D, CG-2202, & CG-2205	CG-2200C, CG-2202, CG-2205, & CG-2210A	CG-2100, CG-2116, CG-2200, CG-2200B, & CG-2210	
ROAD STANDARD:	Construction	Reconstruction	Maintenance	
NUMBER OF STATIONS:	35.14	20.96	296.94	
CLEARING & GRUBBING, EXCAVATION AND FILL, MISC., & ADDITIONAL REQ.:	\$14,507.79	\$27,043.92	\$26,239.02	
ROAD ROCK:				
	Optional:	\$4,670.38	\$13,337.31	\$0.00
	Required:	\$52,806.61	\$16,638.84	\$175,935.88
	Total:	\$57,476.99	\$29,976.15	\$175,935.88
STOCKPILE/PIT DEVELOPMENT:	\$0.00	\$0.00	\$0.00	
CULVERTS AND FLUMES:	\$7,654.69	\$5,092.33	\$18,896.54	
STRUCTURES:	\$0.00	\$0.00	\$0.00	
DUST ABATEMENT	\$0.00	\$0.00	\$0.00	
MOBILIZATION:	\$1,359.97	\$1,050.89	\$3,770.82	
TOTAL COSTS:	\$80,999.44	\$63,163.29	\$224,842.26	
COST PER STATION:	\$2,305	\$3,014	\$757	
ROAD DEACTIVATION & ABANDONMENT COSTS:	\$6,667.41	\$3,631.19	\$0.00	
	10% OVERHEAD AND GENERAL EXPENSE =		\$37,930.36	
	TOTAL (All Roads) =		\$417,233.95	
	TOTAL (Minus Optional Rock) =		\$399,226.26	
	SALE VOLUME MBF =		4,257	
	TOTAL \$/MBF =		\$98.01	
	TOTAL \$/MBF (Minus Optional Rock) =		\$93.78	

Profit and Risk costs are accounted on an individual basis.

Compiled by: David Stone

Date: March 4, 2024

SUMMARY OF ROAD

Sale:	Shady Grove VDT		Road:	CG-2100	
Required Pre-Haul Maintenance-	57+16 <hr/> 1.08	stations miles	Required Reconstruction	0.00 <hr/> 0.00	stations miles
Required Abandonment-	0.00 <hr/> 0.00	stations miles	Optional Reconstruction -	0.00 <hr/> 0.00	stations miles
			Required Construction -	0.00 <hr/> 0.00	stations miles
			Optional Construction -	0.00 <hr/> 0.00	stations miles

PRE-HAUL MAINTENANCE

CLEARING

EXCAVATION

MISC.

Grade and shape existing road surface -	57.16	stations @	\$27.10	per station	\$1,549.04
Roll shaped road surface w/ vibratory roller prior to rocking -	57.16	stations @	\$14.40	per station	\$823.10

ENDHAUL

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$2,372.14**

RECONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts & Bands

0	LF of 18"	\$0.00		0	LF of 24"	\$0.00
0	LF of 30"	\$0.00		0	LF of 36"	\$0.00 w/bevel
0	LF of 42"	\$0.00	w/gasket-bevel	0	LF of 48"	\$0.00
0	LF of 54"	\$0.00		0	LF of 60"	\$0.00
0	LF of 66"	\$0.00		0	LF of 72"	\$0.00
		\$0.00				\$0.00

Half Rounds

0	LF of 24"	\$0.00		0	LF of 30"	\$0.00
0	LF of 36"	\$0.00		0	LF of 42"	\$0.00
		\$0.00				\$0.00

Culvert Stakes & Markers

0	stakes	\$0.00
0	markers	\$0.00
		\$0.00

TOTAL CULVERTS **\$0.00**

ROCK

0+00 to 57+16 Spot Rock	260	cy. of	1 1/2" Minus	@	\$19.12	per c.y.=	\$4,971.20
							TOTAL ROCK

\$4,971.20

ADDITIONAL REQUIREMENTS

TOTAL ADDITIONAL REQUIREMENTS **\$0.00**

ABANDONMENT

TOTAL ABANDONMENT **\$0.00**

Required Pre-Haul Maintenance-	\$7,343.34	Required Reconstruction	\$0.00			
Required Abandonment-	\$0.00	Optional Reconstruction -	\$0.00			SUBTOTAL
Required Construction -	\$0.00	Optional Construction -	\$0.00			\$7,343.34
						TOTAL
						\$7,343.34
						COST PER STATION
						\$128.47

SUMMARY OF ROAD

Sale: Shady Grove VDT

Road: CG-2116

Required Pre-Haul Maintenance- 73+33 stations 1.39 miles	Required Reconstruction - 0.00 stations 0.00 miles	Required Construction - 0.00 stations 0.00 miles
Required Abandonment- 0.00 stations 0.00 miles	Optional Reconstruction - 0.00 stations 0.00 miles	Optional Construction - 0.00 stations 0.00 miles

PRE-HAUL MAINTENANCE

CLEARING

EXCAVATION

Construct sediment traps- see clause 8-1 -	7	@	\$62.50	each	\$437.50
Construct waste area, includes clearing grubbing & piling of organic debris -	3.0	hours @	\$402.00	per hour	\$1,206.00
Excavate ditchline and scatter material/ clean ditch - 0+00 to 73+33	73.33	stations @	\$19.95	per station	\$1,462.93

MISC.

Grade and shape existing road surface -	73.33	stations @	\$27.10	per station	\$1,987.24
Roll shaped road surface w/ vibratory roller prior to rocking -	73.33	stations @	\$14.40	per station	\$1,055.95
Construct landings -	1	@	\$185.50	each	\$185.50
Grass seed -	41.3	lbs @	\$11.00	per lb	\$454.30

ENDHAUL

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$7,684.82**

RECONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts

248	LF of 18"	\$6,155.26	34	LF of 24"	\$984.06
0	LF of 30"	\$0.00	0	LF of 36"	\$0.00
0	LF of 42"	\$0.00	0	LF of 48"	\$0.00
0	LF of 54"	\$0.00	0	LF of 60"	\$0.00
0	LF of 66"	\$0.00	0	LF of 72"	\$0.00
		\$6,155.26			\$984.06

Half Rounds

0	LF of 24"	\$0.00	0	LF of 30"	\$0.00
0	LF of 36"	\$0.00	0	LF of 42"	\$0.00
		\$0.00			\$0.00

Culvert Stakes & Markers

0	stakes	\$0.00
0	markers	\$0.00
		\$0.00

TOTAL CULVERTS **\$7,139.32**

ROCK

0+00 to	73+33	2,493	cy. of	1 1/2" Minus	@	\$16.99	per c.y.=	\$42,356.07
Culvert Bedding & Backfill		100	cy. of	1 1/2" Minus	@	\$15.30	per c.y.=	\$1,530.00
Energy Dissipator/Headwall - culverts		47.5	cy. of	Riprap LL	@	\$17.03	per c.y.=	\$808.93
Landing		41	cy. of	3" Jaw Run	@	\$15.64	per c.y.=	\$641.24
								TOTAL ROCK

\$45,336.24

ADDITIONAL REQUIREMENTS

Live stream diversion at culvert installation sites -	1.5	hours @	\$30.00	per hour	\$45.00
Compact bedding & backfill material -	100	c.y. @	\$0.60	per c.y.	\$60.00
Straw Mulching near streams -	0.1	acres @	\$1,050.00	per acre	\$105.00
					TOTAL ADDITIONAL REQUIREMENTS

\$210.00

ABANDONMENT

TOTAL ABANDONMENT **\$0.00**

Required Pre-Haul Maintenance- \$60,370.38	Required Reconstruction - \$0.00	
Required Abandonment- \$0.00	Optional Reconstruction - \$0.00	
Required Construction - \$0.00	Optional Construction - \$0.00	

SUBTOTAL **\$60,370.38**

TOTAL **\$60,370.38**

COST PER STATION **\$823.27**

SUMMARY OF ROAD

Sale: Shady Grove VDT

Road: CG-2200

Required Pre-Haul Maintenance -	104+53 1.98	stations miles	Required Reconstruction -	0.00	stations miles
Required Abandonment-	0.00	stations miles	Optional Reconstruction -	0.00	stations miles
			Required Construction -	0.00	stations miles
			Optional Construction -	0.00	stations miles

PRE-HAUL MAINTENANCE

CLEARING

EXCAVATION

Construct sediment traps- see clause 8-1 -	4	@	\$62.50	each	\$250.00
Construct waste area, includes clearing grubbing & piling of organic debris -	0.7	hours @	\$402.00	per hour	\$281.40
Excavate ditchline and scatter material/ clean ditch - 97+17 to 201+70	104.53	stations @	\$19.95	per station	\$2,085.37

MISC.

Grade and shape existing road surface -	104.53	stations @	\$27.10	per station	\$2,832.76
Roll shaped road surface w/ vibratory roller prior to rocking -	104.53	stations @	\$14.40	per station	\$1,505.23
Construct landings -	8	@	\$185.50	each	\$1,484.00
Grass seed -	48.4	lbs @	\$11.00	per lb	\$532.40

ENDHAUL

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$8,971.16**

RECONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts

268	LF of 18"	\$6,660.44	66	LF of 24"	\$1,912.06
0	LF of 30"	\$0.00	0	LF of 36"	\$0.00
0	LF of 42"	\$0.00	0	LF of 48"	\$0.00
0	LF of 54"	\$0.00	0	LF of 60"	\$0.00
0	LF of 66"	\$0.00	0	LF of 72"	\$0.00
		\$6,660.44			\$1,912.06

Half Rounds

0	LF of 24"	\$0.00	0	LF of 30"	\$0.00
0	LF of 36"	\$0.00	0	LF of 42"	\$0.00
		\$0.00			\$0.00

Culvert Stakes & Markers

0	stakes	\$0.00
0	markers	\$0.00
		\$0.00

TOTAL CULVERTS **\$8,572.50**

ROCK

97+17 to 201+70	3,559	cy. of	1 1/2" Minus	@	\$20.39	per c.y.=	\$72,568.01
Culvert Bedding & Backfill	160	cy. of	1 1/2" Minus	@	\$18.41	per c.y.=	\$2,945.60
Energy Dissipator/Headwall - culverts	57.0	cy. of	Riprap LL	@	\$21.76	per c.y.=	\$1,240.32
Landings	328	cy. of	3" Jaw Run	@	\$20.07	per c.y.=	\$6,582.96
							TOTAL ROCK

\$83,336.89

ADDITIONAL REQUIREMENTS

Live stream diversion at culvert installation sites -	4.0	hours @	\$30.00	per hour	\$120.00
Compact bedding & backfill material -	160	c.y. @	\$0.60	per c.y.	\$96.00
Remove culverts - 117+44 & 118+85	1.5	hours @	\$178.00	per hour	\$267.00
Remove culverts from state lands -	2	@	\$125.00	each	\$250.00
Straw Mulching near streams -	0.2	acres @	\$1,050.00	per acre	\$210.00

TOTAL ADDITIONAL REQUIREMENTS **\$943.00**

ABANDONMENT

TOTAL ABANDONMENT **\$0.00**

Required Pre-Haul Maintenance -	\$101,823.55	Required Reconstruction -	\$0.00		
Required Abandonment-	\$0.00	Optional Reconstruction -	\$0.00	SUBTOTAL	\$101,823.55
Required Construction -	\$0.00	Optional Construction -	\$0.00	TOTAL	\$101,823.55

COST PER STATION \$974.11

SUMMARY OF ROAD

Sale: Shady Grove VDT Road: CG-2200B

Required Pre-Haul Maintenance- 10+57 stations <div style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black;">0.20</div> miles	Required Reconstruction - 0.00 stations <div style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black;">0.00</div> miles	Required Construction - 0.00 stations <div style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black;">0.00</div> miles
Required Abandonment- 0.00 stations <div style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black;">0.00</div> miles	Optional Reconstruction - 0.00 stations <div style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black;">0.00</div> miles	Optional Construction - 0.00 stations <div style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black;">0.00</div> miles

PRE-HAUL MAINTENANCE

CLEARING

EXCAVATION

Construct waste area, includes clearing grubbing & piling of organic debris -	2.0	hours @	\$402.00	per hour	\$804.00
Excavate ditchline and scatter material/ clean ditch - 0+00 to 10+57	10.57	stations @	\$16.63	per station	\$175.78

MISC.

Grade and shape existing road surface -	10.57	stations @	\$27.10	per station	\$286.45
Roll shaped road surface w/ vibratory roller prior to rocking -	10.57	stations @	\$14.40	per station	\$152.21
Construct landing -	1	@	\$185.50	each	\$185.50
Grass seed -	10.5	lbs @	\$11.00	per lb	\$115.50

ENDHAUL

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$1,849.24**

RECONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts

30	LF of 18"	\$747.68	0	LF of 24"	\$0.00
0	LF of 30"	\$0.00	0	LF of 36"	\$0.00
0	LF of 42"	\$0.00	0	LF of 48"	\$0.00
0	LF of 54"	\$0.00	0	LF of 60"	\$0.00
0	LF of 66"	\$0.00	0	LF of 72"	\$0.00
		\$747.68			\$0.00

Half Rounds

0	LF of 24"	\$0.00	0	LF of 30"	\$0.00
0	LF of 36"	\$0.00	0	LF of 42"	\$0.00
		\$0.00			\$0.00

Culvert Stakes & Markers

0	stakes	\$0.00			
0	markers	\$0.00			
		\$0.00			

TOTAL CULVERTS **\$747.68**

ROCK

0+00 to 10+57	376	cy. of	1 1/2" Minus	@	\$20.08	per c.y.=	\$7,550.08
Energy Dissipator/Headwall - culverts	5.5	cy. of	Riprap LL	@	\$21.89	per c.y.=	\$120.40
Landing	41	cy. of	3" Jaw Run	@	\$18.78	per c.y.=	\$769.98
Bedding/Backfill- culverts	10	cy. of	1 1/2" Minus	@	\$18.49	per c.y.=	\$184.90
						TOTAL ROCK	\$8,625.36

ADDITIONAL REQUIREMENTS

Compact bedding & backfill material -	10	c.y. @	\$0.60	per c.y.	\$6.00
				TOTAL ADDITIONAL REQUIREMENTS	\$6.00

ABANDONMENT

TOTAL ABANDONMENT **\$0.00**

Required Pre-Haul Maintenance- \$11,228.28	Required Reconstruction - \$0.00	
Required Abandonment- \$0.00	Optional Reconstruction - \$0.00	SUBTOTAL \$11,228.28
Required Construction - \$0.00	Optional Construction - \$0.00	TOTAL \$11,228.28
		COST PER STATION \$1,062.28

SUMMARY OF ROAD

Sale: Shady Grove VDT Road: CG-2210

Required Pre-Haul Maintenance-	51+35 0.97	stations miles	Required Reconstruction -	0.00	stations miles
Required Decommissioning-	0.00	stations miles	Optional Reconstruction -	0.00	stations miles
			Optional Construction -	0.00	stations miles

PRE-HAUL MAINTENANCE

CLEARING

EXCAVATION

Excavate ditchline and scatter material/ clean ditch - 0+00 to 51+35 51.35 stations @ \$19.95 per station \$1,024.43

MISC.

Grade and shape existing road surface - 51.35 stations @ \$27.10 per station \$1,391.59
 Roll shaped road surface w/ vibratory roller prior to rocking - 51.35 stations @ \$14.40 per station \$739.44
 Construct landing - 1 @ \$185.50 each \$185.50
 Grass seed - 19.7 lbs @ \$11.00 per lb \$216.70

ENDHAUL

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$4,184.66**

RECONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CULVERTS - MATERIALS & INSTALLATION

<u>Culverts</u>			
98	LF of 18"	\$2,437.04	0 LF of 24" \$0.00
0	LF of 30"	\$0.00	0 LF of 36" \$0.00
0	LF of 42"	\$0.00	0 LF of 48" \$0.00
0	LF of 54"	\$0.00	0 LF of 60" \$0.00
0	LF of 66"	\$0.00	0 LF of 72" \$0.00
		\$2,437.04	\$0.00
<u>Half Rounds</u>			
0	LF of 24"	\$0.00	0 LF of 30" \$0.00
0	LF of 36"	\$0.00	0 LF of 42" \$0.00
		\$0.00	\$0.00
<u>Culvert Stakes & Markers</u>			
0	stakes	\$0.00	
0	markers	\$0.00	
		\$0.00	

TOTAL CULVERTS **\$2,437.04**

ROCK

0+00 to 51+35 1,744 cy. of 1 1/2" Minus @ \$18.46 per c.y.= \$32,194.24
 Energy Dissipator/Headwall - culverts 16.5 cy. of Riprap LL @ \$19.24 per c.y.= \$317.46
 Landing 41 cy. of 3" Jaw Run @ \$15.99 per c.y.= \$655.59
 Bedding/Backfill- culverts 30 cy. of 1 1/2" Minus @ \$16.63 per c.y.= \$498.90

TOTAL ROCK **\$33,666.19**

ADDITIONAL REQUIREMENTS

Compact bedding & backfill material - 30 c.y. @ \$0.60 per c.y. \$18.00

TOTAL ADDITIONAL REQUIREMENTS **\$18.00**

DECOMMISSIONING

TOTAL ABANDONMENT **\$0.00**

Required Pre-Haul Maintenance-	\$40,305.89	Required Reconstruction -	\$0.00	
Required Decommissioning-	\$0.00	Optional Reconstruction -	\$0.00	SUBTOTAL
Required Construction -	\$0.00	Optional Construction -	\$0.00	\$40,305.89
				TOTAL
				\$40,305.89
				COST PER STATION
				\$784.92

SUMMARY OF ROAD

Sale: Shady Grove VDT

Road: CG-2210A

Required Pre-Haul Maintenance - 0.00 stations miles	Required Reconstruction - 1+70 stations miles Optional Reconstruction - 0.00 stations miles	Required Construction - 0.00 stations miles Optional Construction - 0.00 stations miles
---	--	--

PRE-HAUL MAINTENANCE

CLEARING

EXCAVATION

MISC.

ENDHAUL - by trucking

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

RECONSTRUCTION

CLEARING/GRUBBING

EXCAVATION

Road approach widening - 0+90 to 1+70 - Ex & load, C&G, & WA compaction	5.0	hours @	\$280.00	per hour	\$1,400.00
Excavate ditchline -	1.70	stations @	\$33.25	per station	\$56.53
Grade and shape subgrade -	1.70	stations @	\$22.55	per station	\$38.34

FILL

MISC.

Roll subgrade w/ vibratory roller prior to rocking -	1.70	stations @	\$18.00	per station	\$30.60
Grass seed -	1.60	lbs @	\$11.00	per lbs	\$17.60

ENDHAUL - by trucking

To Waste Area @ 109+57 on CG-2200	3.5	hours @	\$165.00	per hour	\$577.50
-----------------------------------	-----	---------	----------	----------	----------

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$2,140.37**

CONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts

0 LF of 18" \$0.00	0 LF of 24" \$0.00
0 LF of 30" \$0.00	0 LF of 36" \$0.00
0 LF of 42" \$0.00	0 LF of 48" \$0.00
0 LF of 54" \$0.00	0 LF of 60" \$0.00
0 LF of 66" \$0.00	0 LF of 72" \$0.00
<u>\$0.00</u>	<u>\$0.00</u>

Half Rounds

0 LF of 24" \$0.00	0 LF of 30" \$0.00
0 LF of 36" \$0.00	0 LF of 42" \$0.00
<u>\$0.00</u>	<u>\$0.00</u>

Culvert Stakes & Markers

0 stakes \$0.00	
0 markers \$0.00	
<u>\$0.00</u>	<u>TOTAL CULVERTS</u>

\$0.00

ROCK

0+00 to 1+70	83	cy. of	1 1/2" Minus	@	\$18.93	per c.y.=	\$1,571.19
0+00 to 1+70 Spot Rock	50	cy. of	3" Jaw Run	@	\$18.68	per c.y.=	\$934.00
							<u>TOTAL ROCK</u>

\$2,505.19

ADDITIONAL REQUIREMENTS

TOTAL ADDITIONAL REQUIREMENTS **\$0.00**

DECOMMISSIONING

TOTAL DECOMMISSIONING **\$0.00**

Optional Pre-Haul Maintenance - \$0.00	Required Reconstruction - \$4,645.56	
Required Decommissioning - \$0.00	Optional Reconstruction - \$0.00	SUBTOTAL \$4,645.56
Required Construction - \$0.00	Optional Construction - \$0.00	

TOTAL \$4,645.56

COST PER STATION \$2,732.68

SUMMARY OF ROAD

Sale:	Shady Grove VDT		Road: CG-2202
Required Pre-Haul Maintenance-	0.00	stations miles	Required Reconstruction -
			2+79
			stations miles
Required Abandonment-	26+05	stations miles	Optional Reconstruction -
	0.49		0.00
			stations miles
			Optional Construction -
			23+26
			stations miles
			0.44
			stations miles
			0.00
			stations miles

PRE-HAUL MAINTENANCE

ENDHAUL	TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC.	\$0.00
----------------	---	---------------

RECONSTRUCTION

CLEARING/GRUBBING

Scattering Organic Debris	0.13	acres @	\$1,010.00	per acre	\$131.30
Remove large stumps -	1	@	\$117.00	each	\$117.00

EXCAVATION

Reconstruct and Widen Road Prism/with ditchline - includes embankment	2.79	stations @	\$93.80	per station	\$261.70
Grade and shape subgrade -	2.79	stations @	\$22.55	per station	\$62.91

FILL

MISC.

Roll subgrade w/ vibratory roller prior to rocking -	2.79	stations @	\$18.00	per station	\$50.22
Grass seed -	4.0	lbs @	\$11.00	per lbs	\$44.00

ENDHAUL	TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC.	\$667.13
----------------	---	-----------------

CONSTRUCTION

CLEARING/GRUBBING

Scattering Organic Debris	2.67	acres @	\$1,010.00	per acre	\$2,696.70
Remove large stumps -	11	@	\$117.00	each	\$1,287.00

EXCAVATION

Road Construction Earthwork - common - includes embankment	23.26	sta. @	\$134.00	per sta. =	\$3,116.84
Construct ditchouts - 16+22	1	@	\$91.00	each	\$91.00
Grade and shape subgrade -	23.26	stations @	\$22.55	per station	\$524.51

FILL

MISC.

Roll subgrade w/ vibratory roller prior to rocking -	23.26	stations @	\$18.00	per station	\$418.68
Construct turnout -	3	@	\$91.00	each	\$273.00
Construct landing -	3	@	\$185.50	each	\$556.50
Grass seed -	34.7	lbs @	\$11.00	per lbs	\$381.70

ENDHAUL

To Waste Area @ 28+24 on CG-2031A	0	cy. @	\$3.63	per c.y.=	\$0.00
Organic Debris - To Waste Area @ 28+24 on CG-2031A	0	cy. @	\$5.22	per c.y.=	\$0.00

	TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC.	\$9,345.93
--	---	-------------------

CULVERTS - MATERIALS & INSTALLATION

Culverts & Bands

180	LF of 18"	\$4,465.90		0	LF of 24"	\$0.00
0	LF of 30"	\$0.00		0	LF of 36"	\$0.00 w/bevel
0	LF of 42"	\$0.00 w/gasket-bevel		0	LF of 48"	\$0.00
0	LF of 54"	\$0.00 w/gasket-bevel		0	LF of 60"	\$0.00
0	LF of 66"	\$0.00		0	LF of 72"	\$0.00
		\$4,465.90				\$0.00

Half Rounds

0	LF of 24"	\$0.00		0	LF of 30"	\$0.00
0	LF of 36"	\$0.00		0	LF of 42"	\$0.00
		\$0.00				\$0.00

Culvert Stakes & Markers

0	stakes	\$0.00	
0	markers	\$0.00	
		\$0.00	

	TOTAL CULVERTS	\$4,465.90
--	----------------	-------------------

ROCK

Energy Dissipator/Headwall - culverts	9.0	cy. of	Riprap LL	@	\$23.36	per c.y.=	\$210.24
2+79 to 36+28	1,775	cy. of	3" Jaw Run	@	\$20.93	per c.y.=	\$37,150.75
0+00 to 2+79	222	cy. of	3" Jaw Run	@	\$20.29	per c.y.=	\$4,504.38

	TOTAL ROCK	\$41,865.37
--	------------	--------------------

ADDITIONAL REQUIREMENTS

	TOTAL ADDITIONAL REQUIREMENTS	\$0.00
--	-------------------------------	---------------

ABANDONMENT

Construct waterbar -	12	@	\$98.00	each	\$1,176.00
Construct Earthen Barricade -	1	@	\$188.00	each	\$188.00
Grass seed -	81.2	lbs @	\$11.00	per lbs	\$893.20
Remove culvert -	3.7	hours @	\$178.00	per hour	\$658.60
Remove culverts from state lands -	5	@	\$125.00	total	\$625.00
Scatter woody debris -	3.7	hours @	\$178.00	per hour	\$658.60

	TOTAL ABANDONMENT	\$4,199.40
--	-------------------	-------------------

Required Pre-Haul Maintenance-	\$0.00	Required Reconstruction -	\$6,659.81		
Required Abandonment-	\$4,199.40	Optional Reconstruction -	\$0.00	SUBTOTAL	\$60,543.73
Required Construction -	\$49,684.52	Optional Construction -	\$0.00	TOTAL	\$60,543.73
				COST PER STATION	\$2,324.14

SUMMARY OF ROAD

Sale:	Shady Grove VDT		Road: CG-2205
Required Pre-Haul Maintenance-	0.00	stations miles	Required Reconstruction -
			5+28 0.10
			stations miles
Required Abandonment-	13+88 0.26	stations miles	Optional Reconstruction -
			0.00
			stations miles
			Required Construction -
			8+60 0.16
			stations miles
			Optional Construction -
			0.00
			stations miles

PRE-HAUL MAINTENANCE

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

RECONSTRUCTION

CLEARING/GRUBBING

Scatter Organic Debris	0.24	acres @	\$1,010.00	per acre	\$242.40
Remove large stumps -	2	@	\$117.00	each	\$234.00

EXCAVATION

Reconstruct and Widen Road Prism/with ditchline - includes embankment	5.28	stations @	\$93.80	per station	\$495.26
Grade and shape subgrade -	5.28	stations @	\$22.55	per station	\$119.06

FILL

MISC.

Roll subgrade w/ vibratory roller prior to rocking -	5.28	stations @	\$18.00	per station	\$95.04
Construct turnout -	1	@	\$91.00	each	\$91.00
Construct landing -	1	@	\$185.50	each	\$185.50
Grass seed -	8.1	lbs @	\$11.00	per lbs	\$89.10

ENDHAUL

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$1,551.36**

CONSTRUCTION

CLEARING/GRUBBING

Scatter organic debris	0.99	acres @	\$1,010.00	per acre	\$999.90
Remove large stumps -	4	@	\$117.00	each	\$468.00

EXCAVATION

Road Construction Earthwork - common - includes embankment work	8.60	sta. @	\$134.00	per sta. =	\$1,152.40
Grade and shape subgrade -	8.60	stations @	\$22.55	per station	\$193.93

FILL

MISC.

Roll subgrade w/ vibratory roller prior to rocking -	8.60	stations @	\$18.00	per station	\$154.80
Construct turnout -	1	@	\$91.00	each	\$91.00
Construct landings -	2	@	\$185.50	each	\$371.00
Grass seed -	13.8	lbs @	\$11.00	per lbs	\$151.80

ENDHAUL

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$3,582.83**

CULVERTS - MATERIALS & INSTALLATION

Culverts & Bands

150	LF of 18"	\$3,718.22		0	LF of 24"	\$0.00
0	LF of 30"	\$0.00		0	LF of 36"	\$0.00
0	LF of 42"	\$0.00		0	LF of 48"	\$0.00
0	LF of 54"	\$0.00		0	LF of 60"	\$0.00
0	LF of 66"	\$0.00		0	LF of 72"	\$0.00
		\$3,718.22				\$0.00

Half Rounds

0	LF of 24"	\$0.00		0	LF of 30"	\$0.00
0	LF of 36"	\$0.00		0	LF of 42"	\$0.00
		\$0.00				\$0.00

Culvert Stakes & Markers

0	stakes	\$0.00			
0	markers	\$0.00			
		\$0.00			

TOTAL CULVERTS **\$3,718.22**

ROCK

Energy Dissipator/Headwall - culverts	4.0	cy. of	Riprap LL	@	\$24.92	per c.y. =	\$99.68
5+28 to 13+88	690	cy. of	3" Jaw Run	@	\$21.87	per c.y. =	\$15,090.30
0+00 to 5+28	457	cy. of	3" Jaw Run	@	\$21.63	per c.y. =	\$9,884.91
							TOTAL ROCK
							\$25,074.89

ADDITIONAL REQUIREMENTS

TOTAL ADDITIONAL REQUIREMENTS **\$0.00**

ABANDONMENT

Construct waterbar -	6	@	\$98.00	each	\$588.00
Construct Earthen Barricade -	1	@	\$188.00	each	\$188.00
Grass seed -	43.2	lbs @	\$11.00	per lbs	\$475.20
Remove culverts -	3.0	hours @	\$178.00	per hour	\$534.00
Remove culverts from state lands -	4	@	\$125.00	each	\$500.00
Scatter woody debris -	2.0	hours @	\$178.00	per hour	\$356.00

TOTAL ABANDONMENT **\$2,641.20**

Required Pre-Haul Maintenance-	\$0.00
-----------------------------------	--------

Required Reconstruction -	\$13,896.03
------------------------------	-------------

SUBTOTAL **\$36,568.50**

Required Abandonment-	\$2,641.20
-----------------------	------------

Optional Reconstruction -	\$0.00
------------------------------	--------

Required Construction -	\$20,031.27
-------------------------	-------------

Optional Construction -	\$0.00
----------------------------	--------

TOTAL \$36,568.50

COST PER STATION \$2,634.62

SUMMARY OF ROAD

Sale:	Shady Grove VDT		Road: CG-2116C
Required Haul Maintenance-	Pre- 0.00 stations 0.00 miles	Required Reconstruction - 0.00 stations 0.00 miles	Required Construction - 0.00 stations 0.00 miles
Required Abandonment-	1+50 stations 0.03 miles	Optional Reconstruction - 0.00 stations 0.00 miles	Optional Construction - 1+50 stations 0.03 miles

PRE-HAUL MAINTENANCE

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

RECONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CONSTRUCTION

CLEARING/GRUBBING

Scattering Organic Debris	0.15	acres @	\$1,010.00	per acre	\$151.50
Remove large stumps -	1	@	\$117.00	each	\$117.00

EXCAVATION -

Road Construction Earthwork - common - includes embankment	1.50	sta. @	\$134.00	per sta. =	\$201.00
Grade and shape subgrade -	1.50	stations @	\$22.55	per station	\$33.83

FILL

MISC.

Roll subgrade w/ vibratory roller prior to rocking -	1.50	stations @	\$18.00	per station	\$27.00
Construct landing -	1	@	\$185.50	each	\$185.50
Grass seed - includes	2.9	lbs @	\$11.00	per lbs	\$31.90

ENDHAUL - by trucking

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$747.73**

CULVERTS - MATERIALS & INSTALLATION

<u>Culverts</u>					
50	LF of 18"	\$1,232.68		0	LF of 24" \$0.00
0	LF of 30"	\$0.00		0	LF of 36" \$0.00
0	LF of 42"	\$0.00		0	LF of 48" \$0.00
0	LF of 54"	\$0.00	w/gasket-bevel	0	LF of 60" \$0.00 w/gasket-bevel
0	LF of 66"	\$0.00		0	LF of 72" \$0.00
		\$1,232.68			\$0.00
<u>Half Rounds</u>					
0	LF of 24"	\$0.00		0	LF of 30" \$0.00
0	LF of 36"	\$0.00		0	LF of 42" \$0.00
		\$0.00			\$0.00
<u>Culvert Stakes & Markers</u>					
0	stakes	\$0.00			
0	markers	\$0.00			
		\$0.00			
				TOTAL CULVERTS	

\$1,232.68

ROCK

Energy Dissipator/Headwall - culvert	1.0	cy. of	Riprap LL	@	\$17.81 per c.y.= \$17.81
0+00 to 1+50	132	cy. of	3" Jaw Run	@	\$16.91 per c.y.= \$2,232.12
					TOTAL ROCK

\$2,249.93

ADDITIONAL REQUIREMENTS

TOTAL ADDITIONAL REQUIREMENTS **\$0.00**

ABANDONMENT

Construct waterbar -	1	@	\$98.00	each	\$98.00
Construct Earthen Barricade -	1	@	\$188.00	each	\$188.00
Grass seed -	4.8	lbs @	\$11.00	per lbs	\$52.80
Remove culvert -	0.8	hours @	\$178.00	per hour	\$142.40
Remove culvert from state lands -	1	@	\$125.00	each	\$125.00
Scatter woody debris -	0.2	hours @	\$178.00	per hour	\$35.60
					TOTAL ABANDONMENT

\$641.80

Required Pre-Haul Maintenance-	\$0.00	Required Reconstruction -	\$0.00	
Required Abandonment-	\$641.80	Optional Reconstruction -	\$0.00	SUBTOTAL
Required Construction -	\$0.00	Optional Construction -	\$4,230.34	\$4,872.14
				TOTAL
				\$4,872.14
				COST PER STATION
				\$3,248.09

SUMMARY OF ROAD

Sale: Shady Grove VDT

Road: CG-2116D

Required Pre-Haul Maintenance-	0.00	stations miles	Required Reconstruction -	0.00	stations miles	Required Construction -	0.00	stations miles
Required Abandonment-	1+78 0.03	stations miles	Optional Reconstruction -	0.00	stations miles	Optional Construction -	1+78 0.03	stations miles

PRE-HAUL MAINTENANCE

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

RECONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CONSTRUCTION

CLEARING/GRUBBING

Scattering Organic Debris	0.18	acres @	\$1,010.00	per acre	\$181.80
Remove large stumps -	1	@	\$117.00	each	\$117.00

EXCAVATION

Road Construction Earthwork - common - includes embankment work	1.78	sta. @	\$134.00	per sta. =	\$238.52
Grade and shape subgrade -	1.78	stations @	\$22.55	per station	\$40.14

FILL

MISC.

Roll subgrade w/ vibratory roller prior to rocking -	1.78	stations @	\$18.00	per station	\$32.04
Construct landings -	1	@	\$185.50	each	\$185.50
Grass seed -	3.3	lbs @	\$11.00	per lbs	\$36.30

ENDHAUL

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$831.30**

CULVERTS - MATERIALS & INSTALLATION

Culverts

40	LF of 18"	\$990.18	0	LF of 24"	\$0.00
0	LF of 30"	\$0.00	0	LF of 36"	\$0.00
0	LF of 42"	\$0.00	0	LF of 48"	\$0.00
0	LF of 54"	\$0.00	0	LF of 60"	\$0.00
0	LF of 66"	\$0.00	0	LF of 72"	\$0.00
		\$990.18			\$0.00

Half Rounds

0	LF of 24"	\$0.00	0	LF of 30"	\$0.00
0	LF of 36"	\$0.00	0	LF of 42"	\$0.00
		\$0.00			\$0.00

Culvert Stakes & Markers

0	stakes	\$0.00
0	markers	\$0.00
		\$0.00

TOTAL CULVERTS **\$990.18**

ROCK

Energy Dissipator/Headwall - culvert	1.0	cy. of	Riprap LL	@	\$17.81	per c.y.=	\$17.81
0+00 to 1+78	142	cy. of	3" Jaw Run	@	\$16.92	per c.y.=	\$2,402.64
							TOTAL ROCK

\$2,420.45

ADDITIONAL REQUIREMENTS

TOTAL ADDITIONAL REQUIREMENTS **\$0.00**

ABANDONMENT

Construct waterbar -	1	@	\$98.00	each	\$98.00
Construct Earthen Barricade -	1	@	\$188.00	each	\$188.00
Grass seed -	5.6	lbs @	\$11.00	per lbs	\$61.60
Remove culvert -	0.7	hours @	\$178.00	per hour	\$124.60
Remove culvert from state lands -	1	@	\$125.00	total	\$125.00
Scatter woody debris -	0.3	hours @	\$178.00	per hour	\$53.40

TOTAL ABANDONMENT **\$650.60**

Required Pre-Haul Maintenance-	\$0.00	Required Reconstruction -	\$0.00	
Required Abandonment-	\$650.60	Optional Reconstruction -	\$0.00	SUBTOTAL \$4,892.53
Required Construction -	\$0.00	Optional Construction -	\$4,241.93	TOTAL \$4,892.53

COST PER STATION \$2,748.61

SUMMARY OF ROAD

Sale: Shady Grove VDT

Road: CG-2200C

Required Pre-Haul Maintenance-	0.00	stations miles	Required Reconstruction -	0.00	stations miles	Required Construction -	0.00	stations miles
Required Abandonment-	11+19	stations miles	Optional Reconstruction -	11+19	stations miles	Optional Construction -	0.00	stations miles
	0.21			0.21			0.00	

PRE-HAUL MAINTENANCE

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

RECONSTRUCTION

CLEARING/GRUBBING

Scatter Organic Debris	0.03	acres @	\$1,010.00	per acre	\$30.30
Endhaul Organic debris - pile Organic Debris at waste area -	0.39	acres @	\$1,400.00	per acre	\$546.00
Remove large stumps -	4.0	@	\$117.00	each	\$468.00

EXCAVATION

Reconstruct road prism/with ditchline, & embankment - 10+44 to 11+19	0.75	stations @	\$122.35	per station	\$91.76
Reconstruct and widen road prism/with ditchline - 0+00 to 10+44	3,557	cy. @	\$2.30	per c.y.	\$8,181.10
Grade and shape subgrade -	11.19	stations @	\$22.55	per station	\$252.33

FILL

Waste Area Compaction - earthwork	3,557	hours @	\$0.50	per hour	\$1,778.50
-----------------------------------	-------	---------	--------	----------	------------

MISC.

Roll subgrade w/ vibratory roller prior to rocking -	11.19	stations @	\$18.00	per station	\$201.42
Construct turnout -	1	@	\$91.00	each	\$91.00
Construct landings -	2	@	\$185.50	each	\$371.00
Grass seed -	17.4	lbs @	\$11.00	per lbs	\$191.40

ENDHAUL

To Waste Area @ 9+40 on CG-2200B - 0+00 to 10+44	3,557	cy. @	\$2.86	per c.y.	\$10,173.02
Organic Debris - To Waste Area @ 9+40 on CG-2200B - 0+00 to 10+44	107	cy. @	\$2.89	per c.y.	\$309.23

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$22,685.06**

CONSTRUCTION

TOTAL CLEARING, GRUBBING, EXCAVATION, FILL, and MISC. **\$0.00**

CULVERTS - MATERIALS & INSTALLATION

Culverts

94	LF of 18"	\$2,340.04	0	LF of 24"	\$0.00
0	LF of 30"	\$0.00	0	LF of 36"	\$0.00
0	LF of 42"	\$0.00	0	LF of 48"	\$0.00
0	LF of 54"	\$0.00	0	LF of 60"	\$0.00
0	LF of 66"	\$0.00	0	LF of 72"	\$0.00
		\$2,340.04			\$0.00

Half Rounds

0	LF of 24"	\$0.00	0	LF of 30"	\$0.00
0	LF of 36"	\$0.00	0	LF of 42"	\$0.00
		\$0.00			\$0.00

Culvert Stakes & Markers

0	stakes	\$0.00			
0	markers	\$0.00			
		\$0.00			

TOTAL CULVERTS **\$2,340.04**

ROCK

Energy Dissipator/Headwall - culverts	13.5	cy. of	Riprap LL	@	\$21.42	per c.y.=	\$289.17
0+00 to 11+19	658	cy. of	3" Jaw Run	@	\$19.83	per c.y.=	\$13,048.14
							TOTAL ROCK

\$13,337.31

ADDITIONAL REQUIREMENTS

TOTAL ADDITIONAL REQUIREMENTS **\$0.00**

ABANDONMENT

Construct waterbars -	5.00	@	\$98.00	each	\$490.00
Construct Earthen Barricade -	1.00	@	\$188.00	each	\$188.00
Grass seed -	34.8	lbs @	\$11.00	per lbs	\$382.80
Remove culverts -	2.5	hours @	\$178.00	per hour	\$445.00
Remove culverts from state lands -	3.00	@	\$125.00	total	\$375.00
Scatter woody debris -	1.6	hours @	\$178.00	per hour	\$284.80

TOTAL ABANDONMENT **\$2,165.60**

Required Pre-Haul Maintenance-	\$0.00	Required Reconstruction -	\$0.00		
Required Abandonment-	\$2,165.60	Optional Reconstruction -	\$38,362.41	SUBTOTAL	\$40,528.01
Required Construction -	\$0.00	Optional Construction -	\$0.00	TOTAL	\$40,528.01
				COST PER STATION	\$3,621.81

ROCK DEVELOPMENT COST SUMMARY

Pit:	CG-2116	Location:	NW¼ NW¼ Sec. 24, T03N, R07E5, W.M.
Sale:	Shady Grove VDT	Road:	13547. CY
Swell:	1.30	Stockpile:	c.y.
Shrinkage:	0.00	Total Truck Loads:	13547. CY
Drill Pct.:	100%	In Place Total:	10421 CY

Access Road Construction	2.2 Stations	\$223.33 /Station	\$491.33
Pit Development & Cleanup including Clearing and Grubbing of Waste Area, Endhaul and place overburden, Grass Seeding.			
in Waste Area, spread and compact.	\$5.34 /cu.yd x	2300.0 cu.yds.	\$12,282.00
Drill & Shoot:	\$3.65 /cu.yd x	10421.0 cu.yds.	\$38,036.65
Rip Rock:	\$2.50 /cu.yd x	0 cu.yds.	\$0.00
Push Rock:	\$1.35 /cu.yd x	13547.0 cu.yds.	\$18,288.45
Load Crusher:	\$0.75 /cu.yd x	13392.0 cu.yds.	\$10,044.00
Crush 3" Jaw Run Rock:	\$4.05 /cu.yd x	4577 cu.yds.	\$18,536.85
Crush 1½" Minus Rock:	\$5.35 /cu.yd x	8815 cu.yds.	\$47,160.25
Load Crushed Rock in Truck:	\$0.75 /cu.yd x	13392.0 cu.yds.	\$10,044.00
Load Rip Rap Rock in Truck:	\$2.50 /cu.yd x	155.0 cu.yds.	\$387.50
	\$0.00 /ton x	0 tons =	\$0.00
	\$0.00 /ton x	0 tons =	\$0.00
	\$0.00 /ton x	0 tons =	\$0.00
	\$0.00 /cu.yd x	0 cu.yds.	\$0.00
		Subtotal	\$155,271.03

Move In/Set-up Mobile Jaw	1	@	\$1,041.32	=	\$1,041.32
Move In/Set-up Mobile 2 Stage Crusher	1	@	\$1,340.14	=	\$1,340.14
Move In/Set-up 3 Stage Crusher	0	@	\$0.00	=	\$0.00
Move In and set up Drill and Compressor	1	@	\$650.91	=	\$650.91
Move in Roller and Compactor	0	@	\$549.73	=	\$0.00
Move in Grader	0	@	\$461.32	=	\$0.00
Move in D-8	1	@	\$653.97	=	\$653.97
Move in Loader	1	@	\$615.14	=	\$615.14
Move in Excavator	2	@	\$575.89	=	\$1,151.78
Move in Trucks	5	@	\$213.54	=	\$1,067.70
Move in Water Truck	0	@	\$0.00	=	\$0.00
					Subtotal \$6,520.96

TOTAL PRODUCTION COSTS \$161,791.99

Base Cost = \$11.94 Per Cu.Yd.

Road Segment	Haul Cost /cu.yd.	Proc Cost /cu.yd.	Base Cst. /cu.yd.	Cost /cu.yd.	Number Cu. Yds	Speed (Mi/hr.)	One-Way Dist (ft)	ROCK COST
CG-2100 0+00 to 57+16 Spot Rock 1 1/2" Minus	\$5.48	\$1.70	\$11.94	\$19.12	260	17	8929	\$4,971.20
CG-2116 0+00 to 73+33 1 1/2" Minus	\$3.35	\$1.70	\$11.94	\$16.99	2493	15	2750	\$42,356.07
CG-2116 Culvert Bedding & Backfill 1 1/2" Minus	\$2.46	\$0.90	\$11.94	\$15.30	100	12	1560	\$1,530.00
CG-2116 Landing 3" Jaw Run	\$2.80	\$0.90	\$11.94	\$15.64	41	15	2755	\$641.24
CG-2116 LL Energy Dissipator/Headwall - culverts	\$3.29	\$1.80	\$11.94	\$17.03	47.5	12	1560	\$808.93
CG-2200 97+17 to 201+70 1 1/2" Minus	\$6.75	\$1.70	\$11.94	\$20.39	3559	17	12368	\$72,568.01
CG-2200 Culvert Bedding & Backfill 1 1/2" Minus	\$5.57	\$0.90	\$11.94	\$18.41	160	17	10652	\$2,945.60
CG-2200 LL Energy Dissipator/Headwall - culverts	\$8.02	\$1.80	\$11.94	\$21.76	57.0	12	10652	\$1,240.32
CG-2200 Landings 3" Jaw Run	\$7.23	\$0.90	\$11.94	\$20.07	328	17	15174	\$6,582.96
CG-2200B 0+00 to 10+57 1 1/2" Minus	\$6.44	\$1.70	\$11.94	\$20.08	376	17	11520	\$7,550.08
CG-2200B LL Energy Dissipator/Headwall - culverts	\$8.15	\$1.80	\$11.94	\$21.89	5.5	12	10887	\$120.40
CG-2200B Landing 3" Jaw Run	\$5.94	\$0.90	\$11.94	\$18.78	41	17	11667	\$769.98
CG-2200B Bedding/Backfill- culverts 1 1/2" Minus	\$5.65	\$0.90	\$11.94	\$18.49	10	17	10887	\$184.90
CG-2210 0+00 to 51+35 1 1/2" Minus	\$4.82	\$1.70	\$11.94	\$18.46	1744	17	7114	\$32,194.24
CG-2210 LL Energy Dissipator/Headwall - culverts	\$5.50	\$1.80	\$11.94	\$19.24	16.5	12	5816	\$317.46
CG-2210 Landing 3" Jaw Run	\$3.15	\$0.90	\$11.94	\$15.99	41	15	3596	\$655.59
CG-2210 Bedding/Backfill- culverts 1 1/2" Minus	\$3.79	\$0.90	\$11.94	\$16.63	30	17	5816	\$498.90
CG-2210A 0+00 to 1+70 1 1/2" Minus	\$5.29	\$1.70	\$11.94	\$18.93	83	17	8406	\$1,571.19
CG-2210A 0+00 to 1+70 Spot Rock 3" Jaw Run	\$5.29	\$1.45	\$11.94	\$18.68	50	17	8406	\$934.00
CG-2202 LL Energy Dissipator/Headwall - culverts	\$9.62	\$1.80	\$11.94	\$23.36	9.0	12	13710	\$210.24
CG-2202 2+79 to 26+05 3" Jaw Run	\$7.54	\$1.45	\$11.94	\$20.93	1775	17	14532	\$37,150.75
CG-2202 0+00 to 2+79 3" Jaw Run	\$6.90	\$1.45	\$11.94	\$20.29	222	17	12787	\$4,504.38
CG-2205 LL Energy Dissipator/Headwall - culverts	\$11.18	\$1.80	\$11.94	\$24.92	4.0	12	16714	\$99.68
CG-2205 5+28 to 13+88 3" Jaw Run	\$8.48	\$1.45	\$11.94	\$21.87	690	17	17071	\$15,090.30
CG-2205 0+00 to 5+28 3" Jaw Run	\$8.24	\$1.45	\$11.94	\$21.63	457	17	16426	\$9,884.91
CG-2116C LL Energy Dissipator/Headwall - culvert	\$4.07	\$1.80	\$11.94	\$17.81	1.0	12	3065	\$17.81
CG-2116C 0+00 to 1+50 3" Jaw Run	\$3.52	\$1.45	\$11.94	\$16.91	132	15	3178	\$2,232.12
CG-2116D LL Energy Dissipator/Headwall - culvert	\$4.07	\$1.80	\$11.94	\$17.81	1.0	12	3065	\$17.81
CG-2116D 0+00 to 1+78 3" Jaw Run	\$3.53	\$1.45	\$11.94	\$16.92	142	15	3199	\$2,402.64
CG-2200C LL Energy Dissipator/Headwall - culverts	\$7.68	\$1.80	\$11.94	\$21.42	13.5	12	10003	\$289.17
CG-2200C 0+00 to 11+19 3" Jaw Run	\$6.44	\$1.45	\$11.94	\$19.83	658	15	10185	\$13,048.14
				Total C.Y.	13547.0		Sub Total	\$263,389.02

TOTAL ROCKING COSTS \$263,389.02

Road Building Move-In Calculations

Sale: Shady Grove VDT

LOWBOY HAUL (Round Trip)		
DIST. (mi)	ROADWAY	AVE SPEED (mph)
44.5	Highway	45
2.3	County/ Mainline	17
1.7	Steep Grades	10

No.	EQUIPMENT DESCRIPTION	Move in Cost	Pilot Cars	within Area			Within		
				Move (\$/mile)	Begin Mileage	End Mileage	Total Miles	Area Cost	Total Cost
0	Brush Cutter	\$400.10		\$17.80	0.00	0.00	0	\$0.00	\$0.00
1	Graders	\$626.17		\$19.83	0.00	0.00	5	\$99.15	\$725.32
0	Loader (Small)	\$400.10		\$15.00	0.00	0.00	0	\$0.00	\$0.00
0	Loader (Med. & Large)	\$626.17		\$17.00	0.00	0.00	0	\$0.00	\$0.00
1	Rollers & Compactors	\$400.10		\$27.14	0.00	0.00	5	\$135.70	\$535.80
0	Drill & Compressor	\$400.10		\$35.60	0.00	0.00	0	\$0.00	\$0.00
1	Excavators (Small)	\$400.10		\$50.00	0.00	0.00	5	\$250.00	\$650.10
1	Excavators (Large)	\$787.65	2	\$56.00	0.00	0.00	5	\$280.00	\$1,168.83
0	Tired Backhoes/Skidders	\$626.17		\$12.50	0.00	0.00	0	\$0.00	\$0.00
1	Tractors (D6)	\$626.17		\$32.43	0.00	0.00	2	\$64.86	\$691.03
0	Tractors (D7)	\$626.17		\$30.00	0.00	0.00	0	\$0.00	\$0.00
1	Tractor (D8)	\$787.65	2	\$57.43	0.00	0.00	5	\$287.15	\$1,175.98
3	Dump Truck (10 cy +)	\$213.54		\$11.00	0.00	0.00	6	\$198.00	\$1,234.62
0	Dump Truck (Off Hiway)	\$575.89		\$9.00	0.00	0.00	0	\$0.00	\$0.00
0	Water Truck (1500 Gal)	\$163.07		\$10.50	0.00	0.00	0	\$0.00	\$0.00
0	Water Truck (2500 Gal)	\$190.24		\$12.25	0.00	0.00	0	\$0.00	\$0.00

	TOTAL MOVE-IN COSTS: \$6,181.68
--	--



WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOREST EXCISE TAX ROAD SUMMARY SHEET

Region: Pacific Cascade

Timber Sale Name: SHADY GROVE VDT

Application Number: 30- 106097

EXCISE TAX APPLICABLE ACTIVITIES

Construction: 0 linear feet
Road to be constructed (optional and required) but not abandoned

Reconstruction: 170 linear feet
Road to be reconstructed (optional and required) but not abandoned

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

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

Pre-Haul Maintenance: 29,694 linear feet
Existing road to receive maintenance work (optional and required) prior to haul

EXCISE TAX EXEMPT ACTIVITIES

Temporary Construction: 3,514 linear feet
Roads to be constructed (optional and required) and then abandoned

1,926 linear feet

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

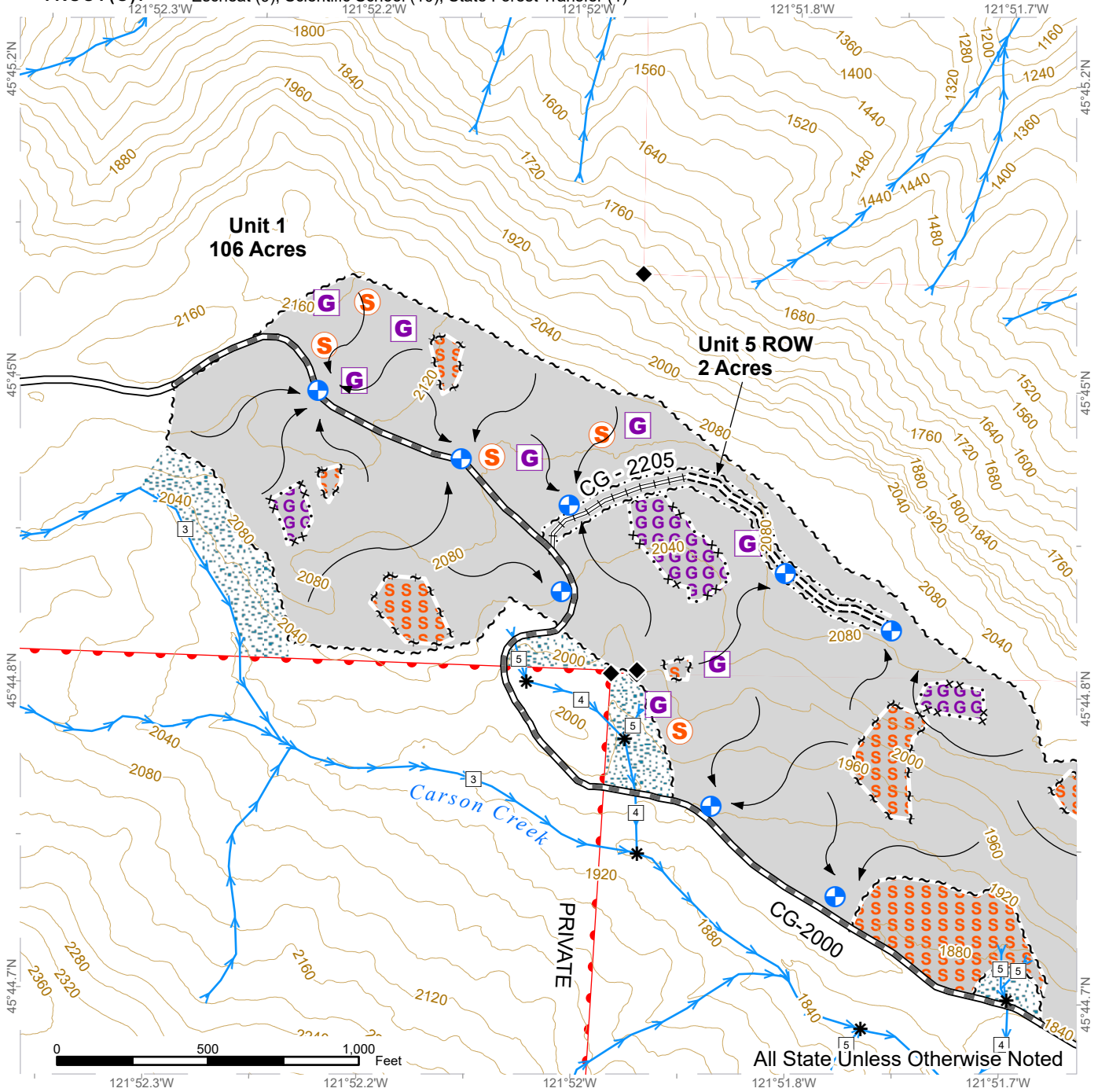
All parties must make their own assessment of the taxable or non-taxable status of any work performed under the timber sale contract. The Department of Revenue bears responsibility for determining forest road excise taxes. The Department of Natural Resources developed this form to help estimate the impact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

(Revised 9/18)

LOGGING PLAN MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT#: 30-106097
TOWNSHIP(S): T3R7E, T3R7.5E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1000-2307

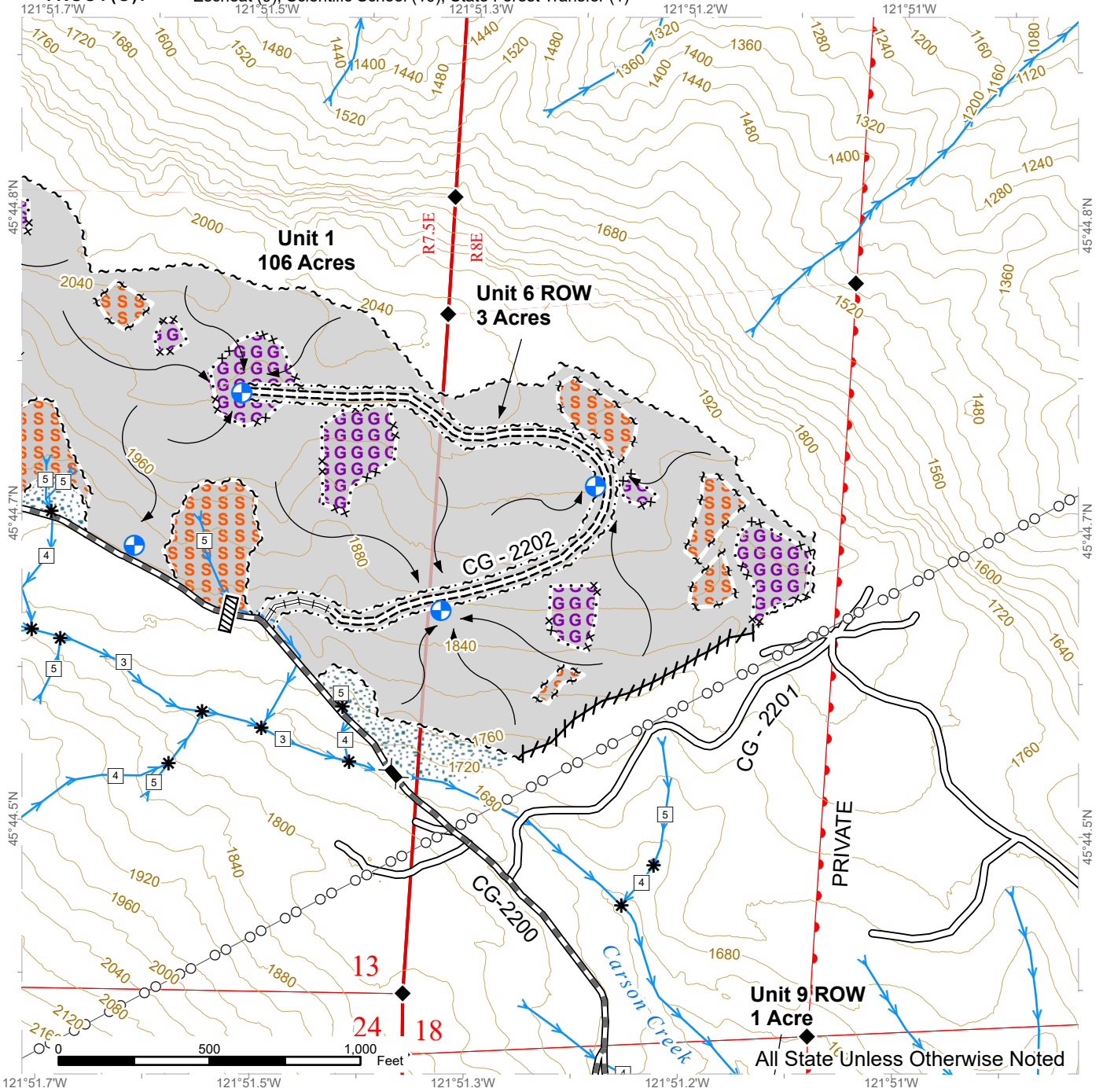


	Ground Harvest		Right of Way Tags		Streams
	Harvest Units		Existing Roads		Stream Type
	Skip		Required Pre-Haul Maintenance		Stream Type Break
	Gap		Required Construction		Landing - Proposed
	Riparian Mgt Zone		Required Reconstruction		Gap <1/4 Acre
	Sale Boundary Tags		Property Line		Skip <1/4 Acre
	Special Mgmt Area				Survey Monument
	Leave Tree Tags				

LOGGING PLAN MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT#: 30-106097
TOWNSHIP(S): T3R7E, T3R7.5E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1000-2307



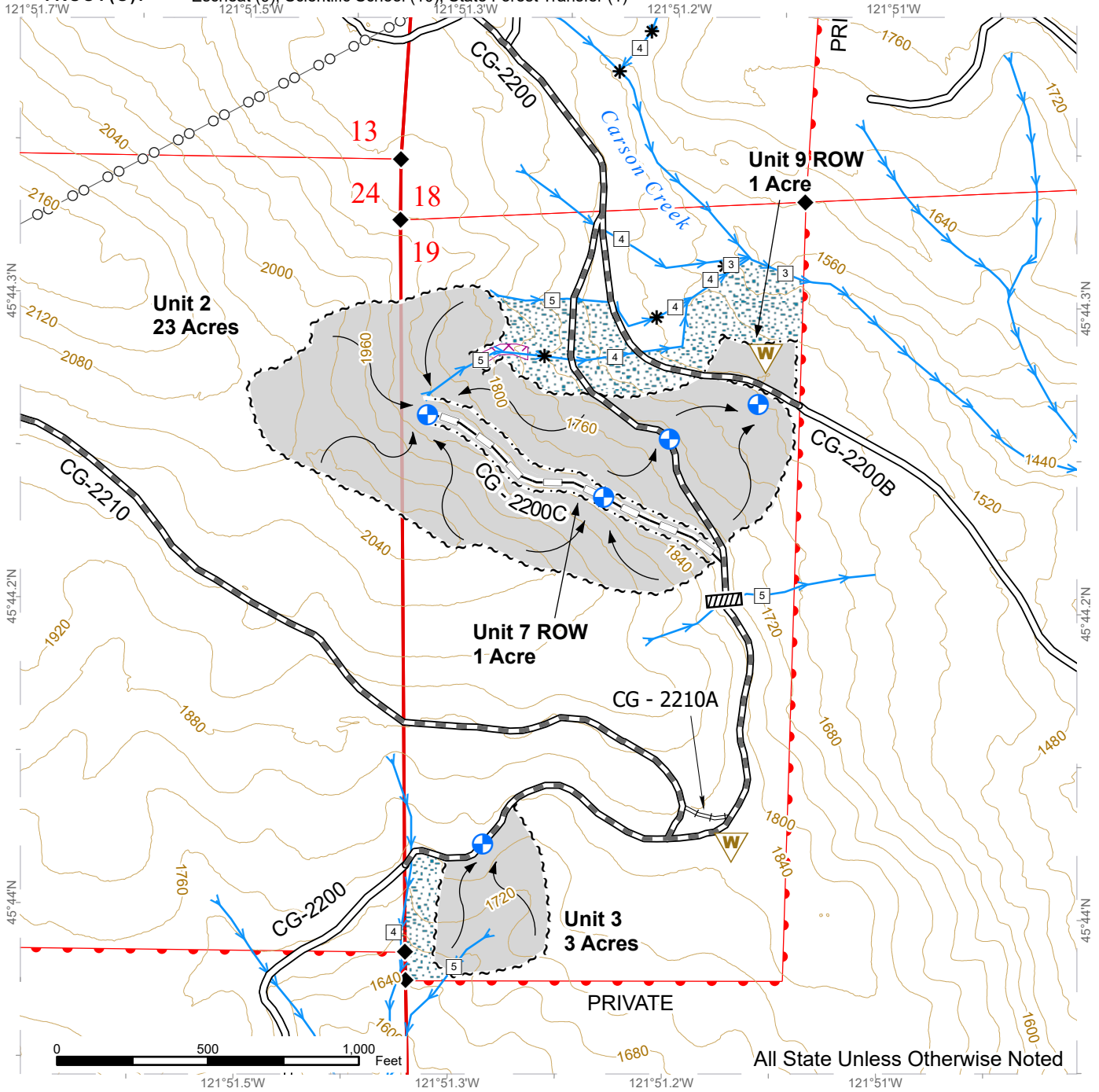
	Ground Harvest		Leave Tree Tags		Streams
	Harvest Units		Right of Way Tags		Stream Type
	Skip		Flag Line		Stream Type Break
	Gap		Existing Roads		Bridge
	Riparian Mgt Zone		Required Pre-Haul Maintenance		Culvert
	Power Lines		Required Construction		Landing - Proposed
	Sale Boundary Tags		Required Reconstruction		Survey Monument
	Special Mgmt Area		Property Line		



LOGGING PLAN MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT#: 30-106097
TOWNSHIP(S): T3R7E, T3R7.5E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1000-2307



All State Unless Otherwise Noted

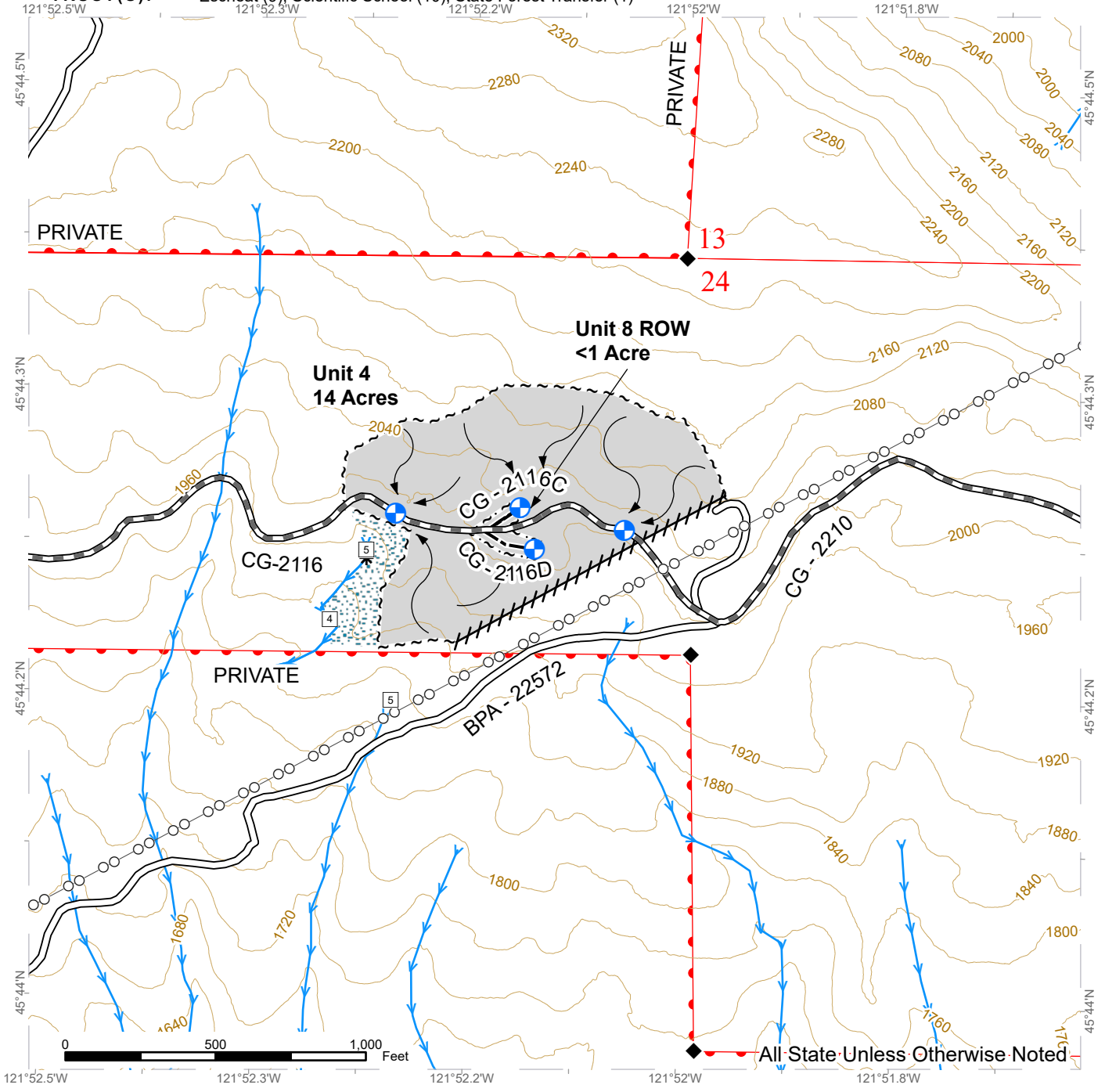
	Ground Harvest		Existing Roads		Streams
	Harvest Units		Required Pre-Haul Maintenance		Stream Type
	Riparian Mgt Zone		Required Reconstruction		Stream Type Break
	Potentially Unstable Slopes		Optional Reconstruction		Culvert
	Power Lines		Property Line		Landing - Proposed
	Sale Boundary Tags				Waste Area
	Right of Way Tags				Survey Monument



LOGGING PLAN MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT#: 30-106097
TOWNSHIP(S): T3R7E, T3R7.5E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1000-2307



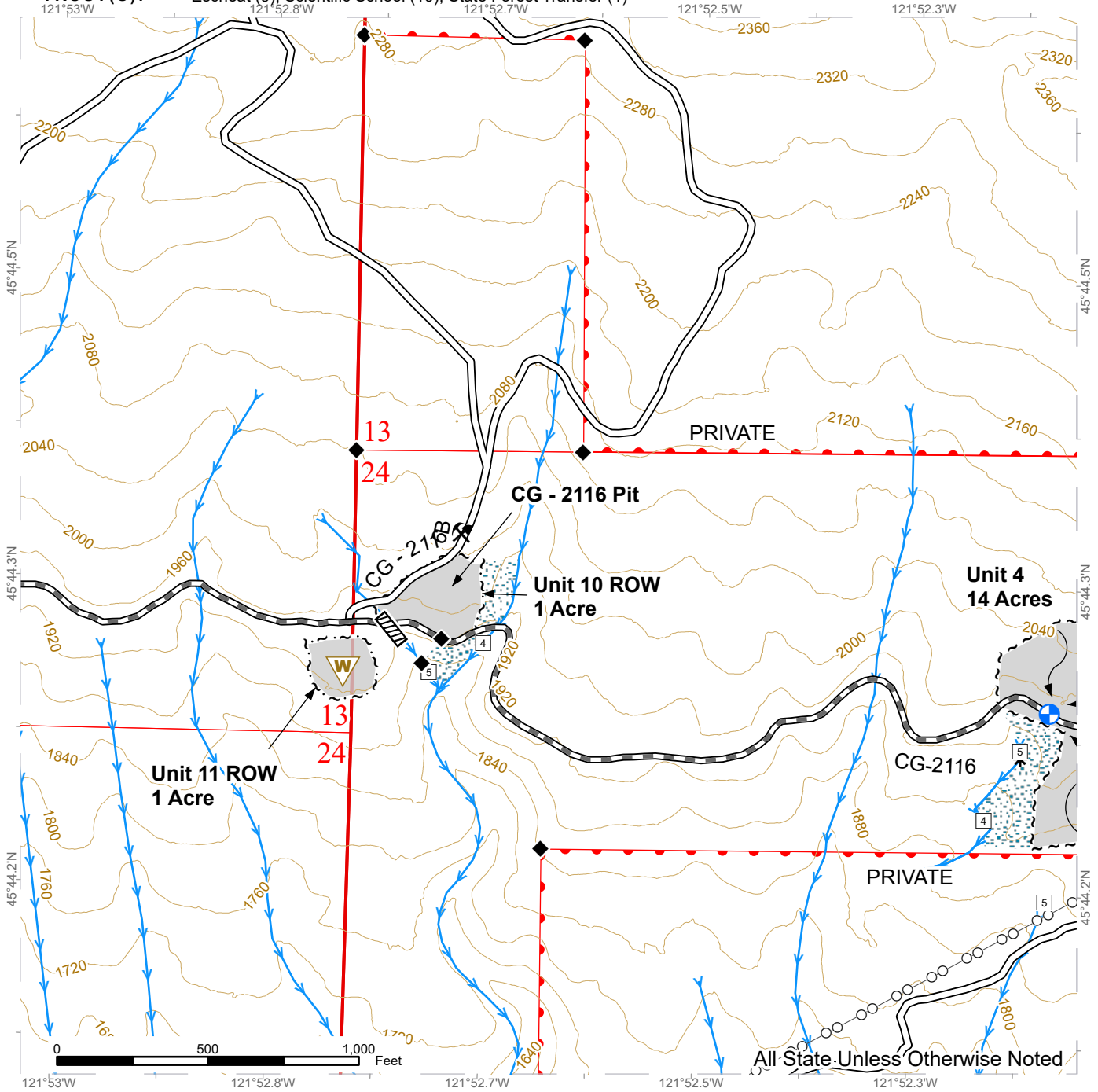
Ground Harvest	Existing Roads	Streams
Harvest Units	Required Pre-Haul Maintenance	Stream Type
Riparian Mgt Zone	Optional Construction	Stream Type Break
Power Lines	Property Line	Landing - Proposed
Sale Boundary Tags		Survey Monument
Right of Way Tags		
Flag Line		



LOGGING PLAN MAP

SALE NAME: SHADY GROVE VDT
AGREEMENT#: 30-106097
TOWNSHIP(S): T3R7E, T3R7.5E, T3R8E
TRUST(S): Escheat (9), Scientific School (10), State Forest Transfer (1)

REGION: Pacific Cascade Region
COUNTY(S): Skamania
ELEVATION RGE: 1000-2307



Ground Harvest	Existing Roads	Streams
Harvest Units	Required Pre-Haul Maintenance	Stream Type
Riparian Mgt Zone	Property Line	Stream Type Break
Power Lines		Culvert
Sale Boundary Tags		Landing - Proposed
Right of Way Tags		Rock Pit
		Waste Area
		Survey Monument



ROAD USE PERMIT

Permit No. 55-106287

THIS PERMIT, made and entered into this 13th day of February 2024 by and between the State of Washington, acting by and through the Department of Natural Resources (herein called the "Grantee") and Sam Rsjord (herein called the "Grantor")

Conveyance. Grantor, for and in consideration of the terms and conditions specified herein, hereby grants and conveys to the Grantee, for the purpose of hauling timber and rock, a non-exclusive permit to use a road over and across a strip of land, hereinafter defined as the "premises," in the NW1/4 of the SW1/4 of Section 24, Township 3 North, Range 7 East, W.M., in Skamania County, State of Washington. The location of said premises located approximately as shown on Exhibit B attached hereto. The word premises when used herein means a strip of land whether or not there is an existing road located thereon. The word "road" shall mean roads now existing or hereafter constructed on the premises, or any segment of such road.

The permit is subject to the terms and conditions hereinafter set out.

Consideration. The consideration paid by the Grantee to Grantor is as follows: \$4,000.00.

Term-Date of Expiration. This permit shall begin on **09/26/2024** and terminate on **09/26/2027**, or earlier when requested by the Grantee; provided, however, that this permit may be suspended or terminated upon the breach of any of the conditions herein.

Reservations. Grantor reserves all rights incident to fee ownership of the premises and the profits thereon (including timber) and the right of use for any purpose including but not limited to the right to remove profits within the premises; the right at all times to cross and re-cross the premises at any place on grade or otherwise; and the right to use, maintain, patrol, reconstruct or repair the premises. Grantor may grant to third parties any and all rights reserved.

Compliance with Laws. For all activities conducted pursuant to this Permit, each party shall, at its own expense, comply with all applicable laws in effect now and as hereafter modified.

Permittees. The Grantee may permit its respective employees, agents, contractors, licensees, lessees, purchasers of timber or other profits and their agents, herein individually referred to as "Permittee" and collectively referred to as "Permittees", to exercise the rights granted to the Grantee herein. Acts or omissions of the Permittees operating under this Permit shall be deemed an act of the Grantee. Restrictions or requirements placed on the Grantee herein shall apply equally to the Permittees.

Maintenance. Maintenance is defined as work normally necessary to preserve and keep the roads in their present condition or as hereafter improved. At a minimum, the roads will be maintained to meet applicable forest practice standards set forth in Chapter 222-24 WAC as now written or hereafter amended.

When a road is being used solely by one party; that party shall be solely responsible for maintaining that portion of the road so used to the standards existing at the time sole use is commenced. During periods when either party and/or other parties with an easement or license jointly use the road(s), or any portion thereof, the cost of maintenance and resurfacing shall be allocated among such users on the basis of their respective use including that of their Permittees.

During periods of joint maintenance, the users shall meet at times to be set by mutual agreement and establish necessary maintenance provisions. Such provisions shall include, but not be limited to the following:

The appointment of a maintainer, which may be one of the parties or any third party, to perform or contract the maintenance;

The extent of resurfacing necessary to keep the road safe and to reduce environmental impacts; and

A method of payment by which each party using the road or a portion thereof shall pay it's pro rata share of the cost of maintenance and resurfacing.

Repairs. Grantee shall repair, or cause to be repaired at its sole cost, that damage to the Road arising out of it's use which is in excess of that which it would cause through normal and prudent usage. Damage caused by an unauthorized user shall be repaired at the expense of the Grantee if the Grantee is the sole user of the road, the Grantor if the Grantor is the sole user of the road and shared jointly if there is joint use of the road.

Improvements. Unless the parties agree in writing to share the cost of improvements in advance of such improvements being made, such improvements shall be solely for the account of the improver.

Prior rights. This permit is subject to any rights and valid claims previously conveyed by Grantor, and to any rights and valid claims pending on said premises. Grantee rights herein are subject to all matters of public record and to all prior unrecorded or recorded easements, permits, leases and options affecting said lands or Grantee rights across, over or upon such lands. Grantee rights herein are also subject to the rights of the Grantor to use its own lands for any and all legal purposes including the use of the land by third parties with the permission of the Grantor.

Operational Restrictions. Site-specific operational requirements are listed in Exhibit C. Non-compliance with these requirements shall constitute a breach of contract and may result in the Grantor suspending operations until the breach is remedied.

Damage. Grantee shall take all reasonable precautions to protect Grantor-owned timber, crops and improvements. The Grantee must notify the Grantor two (2) weeks in advance of completion of said operations for the purpose of inspection for compliance with the terms hereof. Grantee shall pay Grantor for any damage to timber, crops and improvements not identified and paid for under the terms and conditions of this Permit. Grantor shall appraise the damage at market value at the time of damage and bill Grantee for said damages at said value.

Waste. Grantee shall not cause nor permit any filling activity to occur in or on the premises, except by prior written approval of the Grantor. Grantee shall not deposit refuse, garbage, or other waste matter or use, store, generate, process, transport, handle, release, or dispose of any hazardous substance, or other pollutants in or on the premises except in accordance with all applicable laws. The term hazardous substance means any substance or material as those terms are now or are hereafter defined or regulated under any federal, state, or local law including but not limited to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA 42 USC 9601 *et seq.*), or the Washington Model Toxic Control Act (MTCA RCW 70.105D.010.). Grantee shall immediately notify the Grantor if the Grantee becomes aware of any release or threatened release of hazardous substance on the premises or adjoining property. If a release of hazardous substance occurs in, on, under, or above the premises arising out of any action of the Grantee, its contractors, subcontractors, invitees, agents, employees, licensees, or permittees, the Grantee shall, at its sole expense, promptly take all actions necessary or advisable to clean up, contain, and remove the hazardous substance in accordance with applicable laws.

Survey Markers. Grantee shall not destroy any land survey monuments marking local control points, geodetic control points, and land boundary survey corners without prior written approval from the landowner, which shall not be unreasonably withheld. Land survey monuments that must necessarily be disturbed or destroyed during construction or maintenance activities must be adequately referenced and replaced, at the Grantee's expense, under the direction of a Professional Land Surveyor, licensed in the State of Washington, in accordance with all applicable laws of the State of Washington in force at the time of construction, including but not limited to RCW 58.24, and all Department of Natural Resources regulations pertaining to preservation of such monuments. As directed under Chapter 332-120 WAC, a Land Surveyor or Engineer must submit an application with the Department of Natural Resources for permission to temporarily remove or destroy a survey monument.

Fire Prevention and Control. The Grantee shall be responsible for satisfying the requirements of the laws of the State of Washington pertaining to Forest Protection and, in addition thereto, the Grantee shall during the closed season of April 15 through October 15 contact Grantor who shall determine any extra requirements pertaining to burning procedure, blasting, watchman, extra

patrol, pumpers, tankers, fire hoses, fire tools, etc., which are deemed necessary for prevention and suppression of fire which may result from the Grantee's operations.

Insurance by the State. The State of Washington, including all its agencies and departments, is self-insured for all exposures to tort liability, general liability, property damage liability and vehicle liability, as provided in statute, but only as respects the negligence of the State.

The limits of insurance shall not be less than as follows:

Commercial General Liability (CGL) insurance with a limit of not less than \$1,000,000 per each occurrence or Personal Liability insurance, as applicable, under a personal liability policy, commercial liability insurance policy, or package property and liability insurance policy. If such CGL insurance contains aggregate limits, the general aggregate limits shall be at least twice the "each occurrence" limit, and the products-completed operations aggregate limit shall be at least twice the "each occurrence" limit.

Employer's liability ("Stop Gap") insurance, and if necessary, commercial umbrella liability insurance with limits not less than \$1,000,000 each accident for bodily injury by accident or \$1,000,000 each employee for bodily injury by disease.

Business Auto Policy (BAP) insurance, and if necessary, commercial umbrella liability insurance with a limit of not less than \$1,000,000 per accident, with such insurance covering liability arising out of "Any Auto".

All contractors, subcontractors, or other permittees of the State must comply with all State of Washington workers' compensation statutes and regulations.

All insurance should be purchased on an occurrence basis and should be issued by companies admitted to do business within the State of Washington and have a rating of A- or better in the most recently published edition of Best's Reports. Any exception to the State's requirements shall be reviewed and approved in advance by the Risk Manager for the Department of Natural Resources. 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.

Before using any said rights granted herein, Grantee shall furnish Grantor with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements specified above. Certificate(s) must reference the State's permit number.

Contractors, sub-contractors and permittees of Grantee must comply with all insurance requirements stated herein. Failure of contractors, sub-contractors and permittees to comply with

State's insurance requirements does not limit Grantee liability or responsibility.

Grantee shall furnish upon request certificates of insurance and endorsements for any or all Permittees.

All insurance provided by the Grantee in compliance with this agreement shall be primary as to any other insurance or self-insurance programs afforded to or maintained by State. Grantee 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 agreement.

Indemnity by the State. State shall defend, indemnify and hold harmless the Grantor from all claims that arise out of the negligence of the State or its Permittees in the use of the permit. A "claim" as used in this section means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorneys' fees, attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property including the resulting loss of use. Notwithstanding the foregoing, States obligation to defend, indemnify, and hold harmless the Grantor from any judgment, decree or arbitration award shall extend only to the percentage of negligence of Grantee and its Permittee in contribution to such claim. State waives its immunity under Title 51 RCW only to the extent it is required to indemnify, defend and hold harmless Grantor and its Permittee. This indemnification shall survive the expiration or termination of the permit.

Notice. Unless otherwise specified herein, any notices required or permitted under this Permit may be delivered personally, sent by facsimile machine or mailed certified, return receipt requested, to the following addresses or to such other place as the parties hereafter direct. Notice will be deemed given upon delivery or upon confirmation of facsimile, whichever is applicable.

To Grantee:
DEPARTMENT OF NATURAL RESOURCES
Pacific Cascade Region Attn: ROW
P.O. Box 280
Castle Rock, WA 98611

To Grantor:
Sam Rsjord
621 SKARR ROAD
STEVENSON, WA 98648
509-427-7072

Integrated Agreement; Modification. This Permit constitutes the entire agreement and understanding of the parties with respect to the subject matter of the Permit and supersedes all prior negotiations and representations. This Permit may not be modified except in writing signed by the parties. The parties agree to execute any additional documents reasonably necessary to effectuate the provisions and purposes of this Permit.

Severability. If any provision of this Permit is held to be invalid or unenforceable, this provision shall not affect or invalidate the remainder of this Permit, and to this end the provisions of this Permit are declared to be severable. If any such invalidity becomes known or apparent to the

parties, the parties agree to negotiate promptly in good faith in an attempt to amend such provision as nearly as possible to be consistent with the intent of this Permit.

Waiver. Failure of either party to insist upon the strict performance of any of the terms and conditions of this Permit, or failure to exercise any rights or remedies provided in this Permit or by law, or to notify the other party in the event of breach, shall not release the other party of any of its obligations under this Permit, nor shall any purported oral modification or rescission of this Permit by either party operate as a waiver of any of the terms hereof. No waiver by either party of any breach, default, or violation of any term, warranty, representation, agreement, covenant, right, condition, or provision of this Permit shall constitute waiver of any subsequent breach, default, or violation of the same or other term, warranty, representation, agreement, covenant, right, condition, or provision.

Assignment. This Permit, and any of the rights granted herein, shall not be assigned without prior written consent of Grantor, except that said rights granted herein may be used by any Permittee, while engaged in the Grantee's operations.

Construction. The terms of this Permit shall be given their ordinary meaning unless defined herein and shall not be presumptively construed against either party.

Exhibits. All exhibits referred to in this Permit are deemed to be incorporated in this Permit in their entirety.

Headings. The headings in this Permit are for convenience only and are not intended to, and shall not be construed to, limit, enlarge, or affect the scope or intent of this Permit nor the meaning of any of its provisions.

Counterparts. This Permit may be executed in one or more counterparts, each of which shall be deemed an original, and all of which counterparts together shall constitute the same instrument which may be sufficiently evidenced by one counterpart. Execution of this Permit at different times and places by the parties shall not affect its validity so long as all the parties execute a counterpart of this Permit.

IN WITNESS WHEREOF, the parties hereto have caused this Permit to be executed as below subscribed.

WASHINGTON STATE DEPARMENT OF
NATURAL RESOURCES



By: Scott Sargent

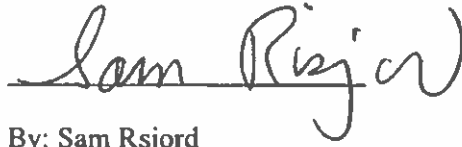
Title: Pacific Cascade Region Manager

Address:
P.O. Box 280
Castle Rock, WA 98611

Phone No. 360-577-2025

Date: 3/19/2024

GRANTOR



By: Sam Rsjord

Title: Owner

Address:
621 SKARR ROAD
STEVENSON, WA 98648

Phone No. 509-427-7072

Date: Feb 13, 24

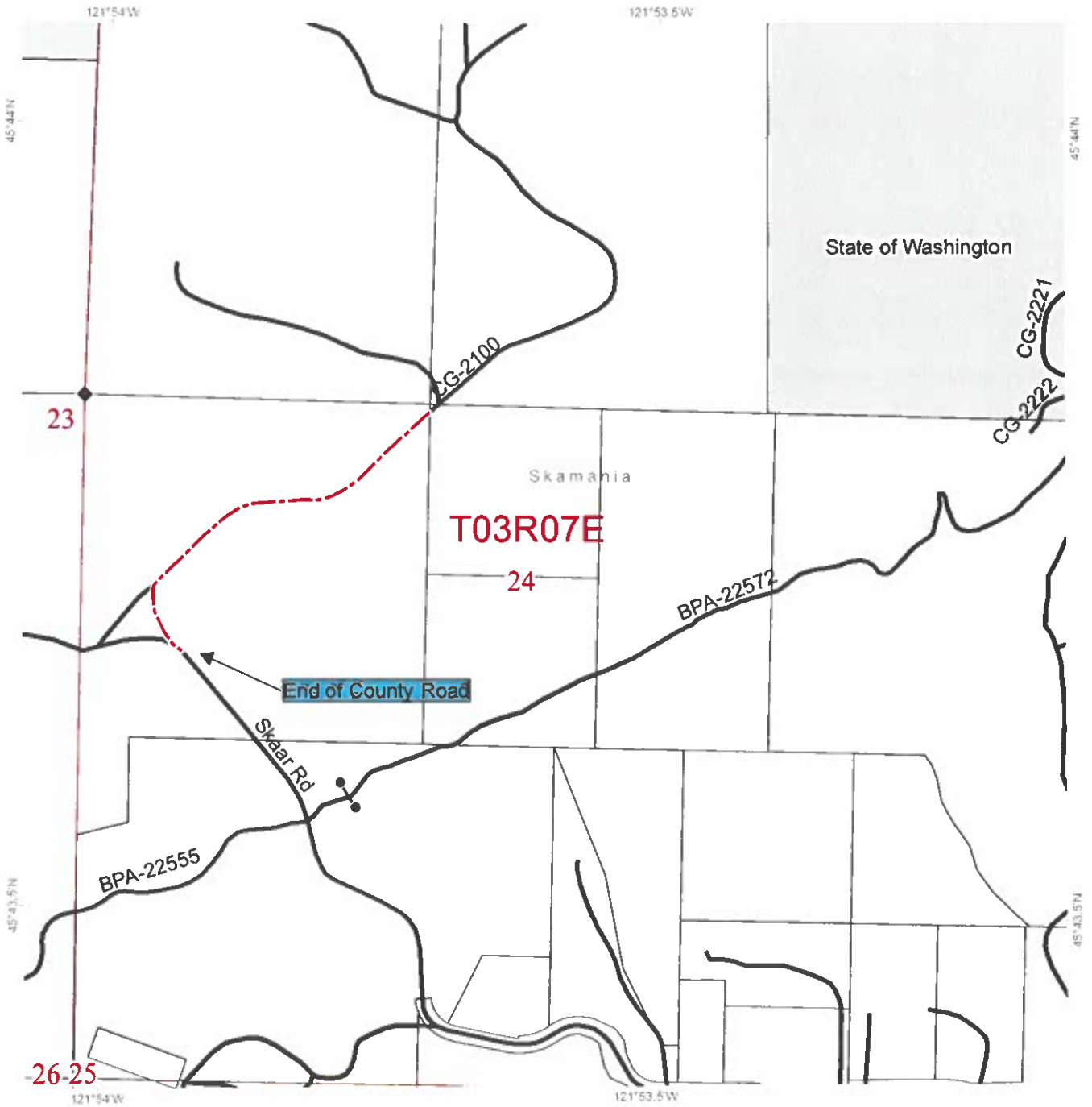
Exhibit A
Legal Description

NW1/4 of the SW1/4 of Section 24, Township 3 North, Range 7 East, W.M. in Skamania County, State of Washington.

EXHIBIT B

TOWNSHIP(S): S24 T03NR07E
TRUST(S): 01

REGION: PACIFIC CASCADE
COUNTY(S): SKAMANIA



- RUP 55-106287
- DNR Trust Lands
- Road
- Survey - Township Lines
- Public Land Survey Sections
- County Parcels

0 0.05 0.1 0.2 Miles

N
W E
S