



TIMBER NOTICE OF SALE

SALE NAME: PICTURE MORA

AGREEMENT NO: 30-103765

AUCTION: October 25, 2023 starting at 10:00 a.m., Olympic Region Office, Forks, WA

COUNTY: Clallam

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

PRODUCTS SOLD AND SALE AREA:

All timber excluding downed red cedar, and trees marked with a band of blue paint or bounded out by leave tree area tags; bounded by timber sale boundary tags and property line in Units 1, 2, 3, 8, 9, 11, and 14; timber sale boundary tags in Units 5, 7, 12, 15, and 16; timber sale boundary tags, property line, and the D-3400 Road in Unit 4.

All timber bounded by right of way harvest boundary tags in Units 6, 10, and 13.

All forest products above located on part(s) of Sections 23 and 24 all in Township 28 North, Range 15 West, Sections 25 all in Township 29 North, Range 15 West, Sections 28 all in Township 29 North, Range 14 West, W.M., containing 185 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:

Table with columns: Species, Avg DBH, Ring Count, Total MBF, and MBF by Grade (1P, 2P, 3P, SM, 1S, 2S, 3S, 4S, UT). Rows include Douglas fir, Hemlock, Spruce, Red alder, Redcedar, and Sale Total.

MINIMUM BID: \$990,000.00

BID METHOD: Sealed Bids

PERFORMANCE

SECURITY: \$100,000.00

SALE TYPE: Lump Sum

EXPIRATION DATE: October 31, 2025

ALLOCATION: Export Restricted

BID DEPOSIT: \$99,000.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Ground Based (94%), Cable (6%). Forest products sold under this contract shall be harvested and removed using cable, cable-tethered, and ground based equipment. Cable-tethered equipment is limited to sustained slopes of 75 percent and less. Ground based equipment is limited to tracked equipment on sustained slopes that are 45 percent and less. Rubber tired skidder must meet rutting and skidding requirements and harvest plan must be submitted and approved by the Contract Administrator. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.



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There is a 30' Equipment Limitations Zones (ELZ) on all typed water.

ROADS: 4.75 stations of optional construction. 1162.40 stations of optional prehaul maintenance. 52.90 stations of decommissioning. All road activities on the D-3400.1, D-5230.6, D-5230.61, D-5230.62, and D-5230.1 will not be permitted from October 15 to April 15 unless authorized in writing by the Contract Administrator. All road activity on the D-5102-DET will not be permitted from October 1 to June 30 unless authorized in writing by the Contract Administrator. Culvert install and removal, decommissioning on the D-3400.1 will not be permitted from October 15 to June 30 unless authorized in writing by the Contract Administrator. Purchaser shall complete pre-haul, post haul, and decommissioning road work on the D-3400.1 (station 0+00 to 33+80) by September 30, 2024. In Mora Pit Purchaser must scalp 4" of rock off the stripped area before use on the D-3400.1 road. Scalped material is to be stockpiled on pit floor away from overburden and may be used on other roads. Road construction will not be permitted from October 15 to April 15 unless authorized in writing by the Contract Administrator.

ACREAGE DETERMINATION

CRUISE METHOD: Sale acreage was 100% GPS'd. Sale units were cruised using a variable plot sample.

FEES: \$97,835.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in addition to the bid price.

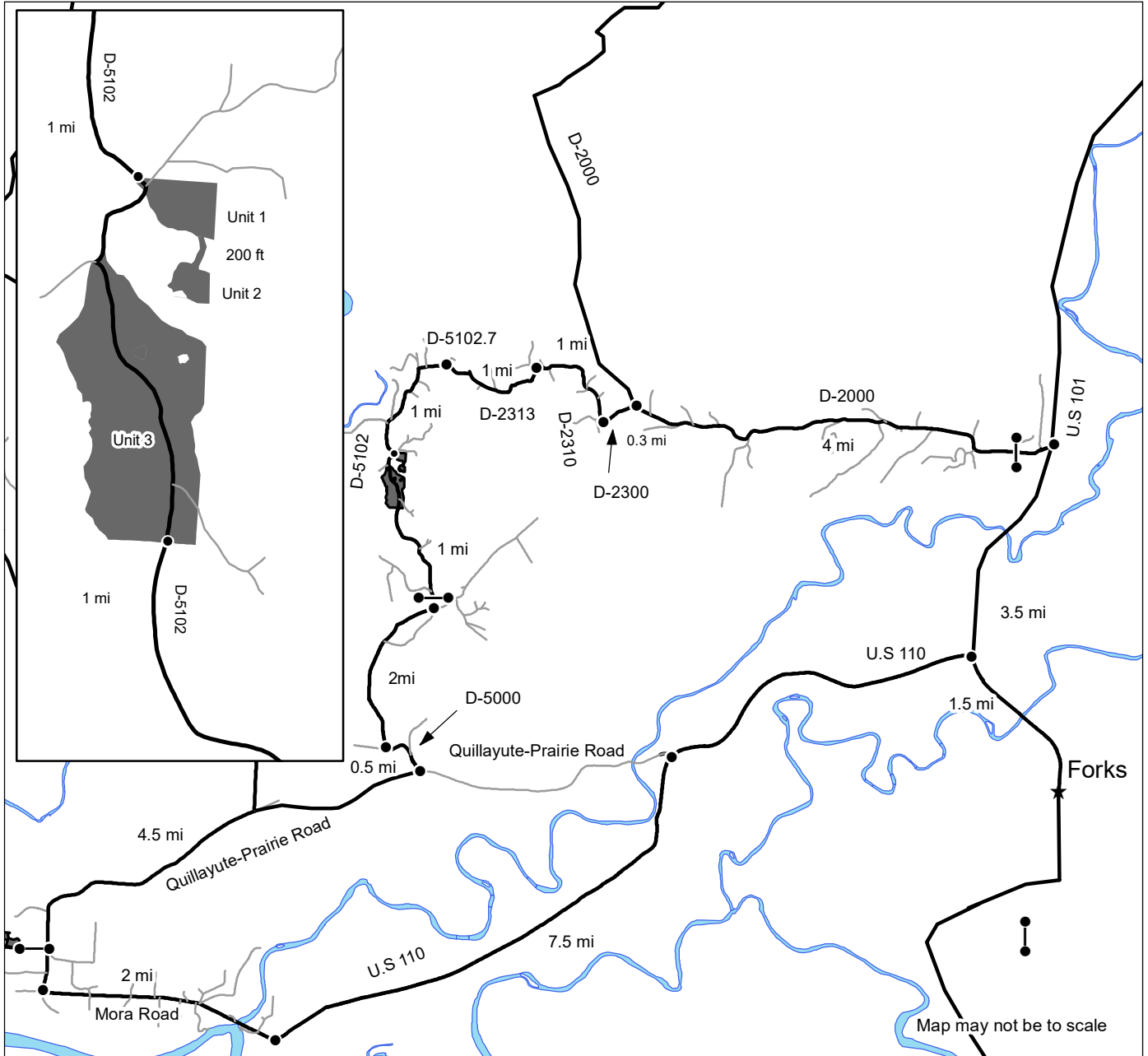
SPECIAL REMARKS: There is a locked gate located on the Loop Pit, Mora Pit, and the D-5210 road. Contact Olympic Region Dispatch at 360-374-2800 to obtain a AA-1key.

Cultural Resources Technician needs to be on site for installation and removal of crossing C1 (station 17+50)

DRIVING MAP

SALE NAME: PICTURE MORA
AGREEMENT#: 30-103765
TOWNSHIP(S): T28R15W, T29R14W, T29R15W
TRUST(S): State Forest Transfer (1)

REGION: Olympic Region
COUNTY(S): Clallam
ELEVATION RGE: 20'-420'



	Timber Sale Unit
	Haul Route
	Other Road
	Gate (AA1)
	Rock Pit
	Open Water

DRIVING DIRECTIONS:

Unit 1: From Forks, drive 3.5 miles north on U.S. 101. Turn left on the D-2000, continue for 4 miles. Turn left on the D-2300, continue for 0.3 miles. Turn right on the D-2310, and continue for 1 mile. Turn left on the D-2313 and continue for 1 mile. Head 1 mile west to merge onto the D-5102.7 and then the D-5102 to reach unit 1.

Unit 2: From unit 1 walk 200 feet across the RMZ to reach unit 2.

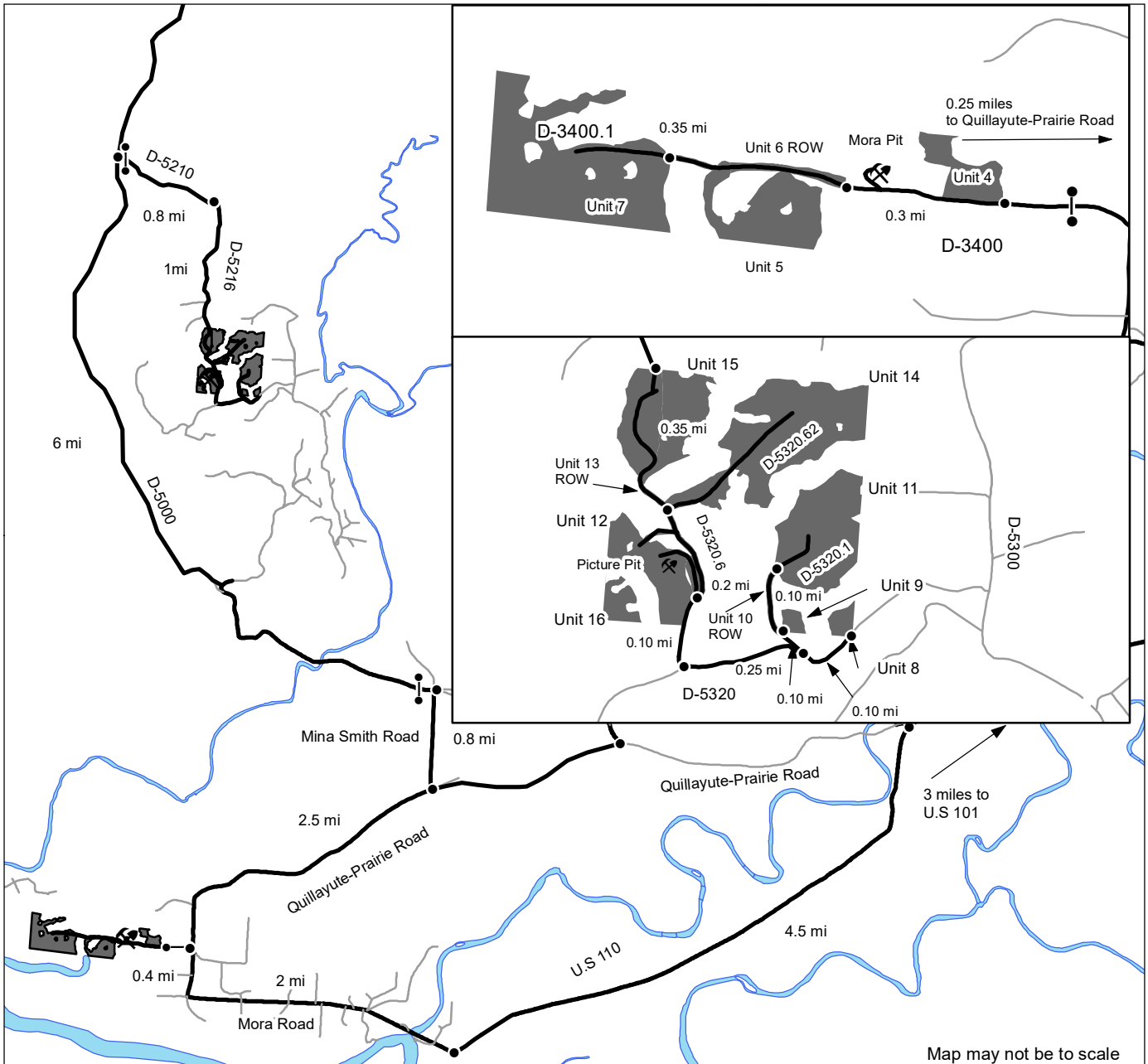
Unit 3: From Forks drive 1.5 miles north. Turn left on U.S. 110, head straight for 7.5 miles. Turn right on Mora Road. In 2 miles turn right on the Quillayute-Prairie Road. In 4.5 miles turn left on the D-5000 and continue for 0.5 miles. Turn right on the D-5100 and head north for 2 miles. Turn left on the D-5102 and continue for 1 mile to reach unit 3.



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Map may not be to scale

	Timber Sale Unit
	Haul Route
	Other Road
	Gate (AA1)
	Rock Pit
	Open Water

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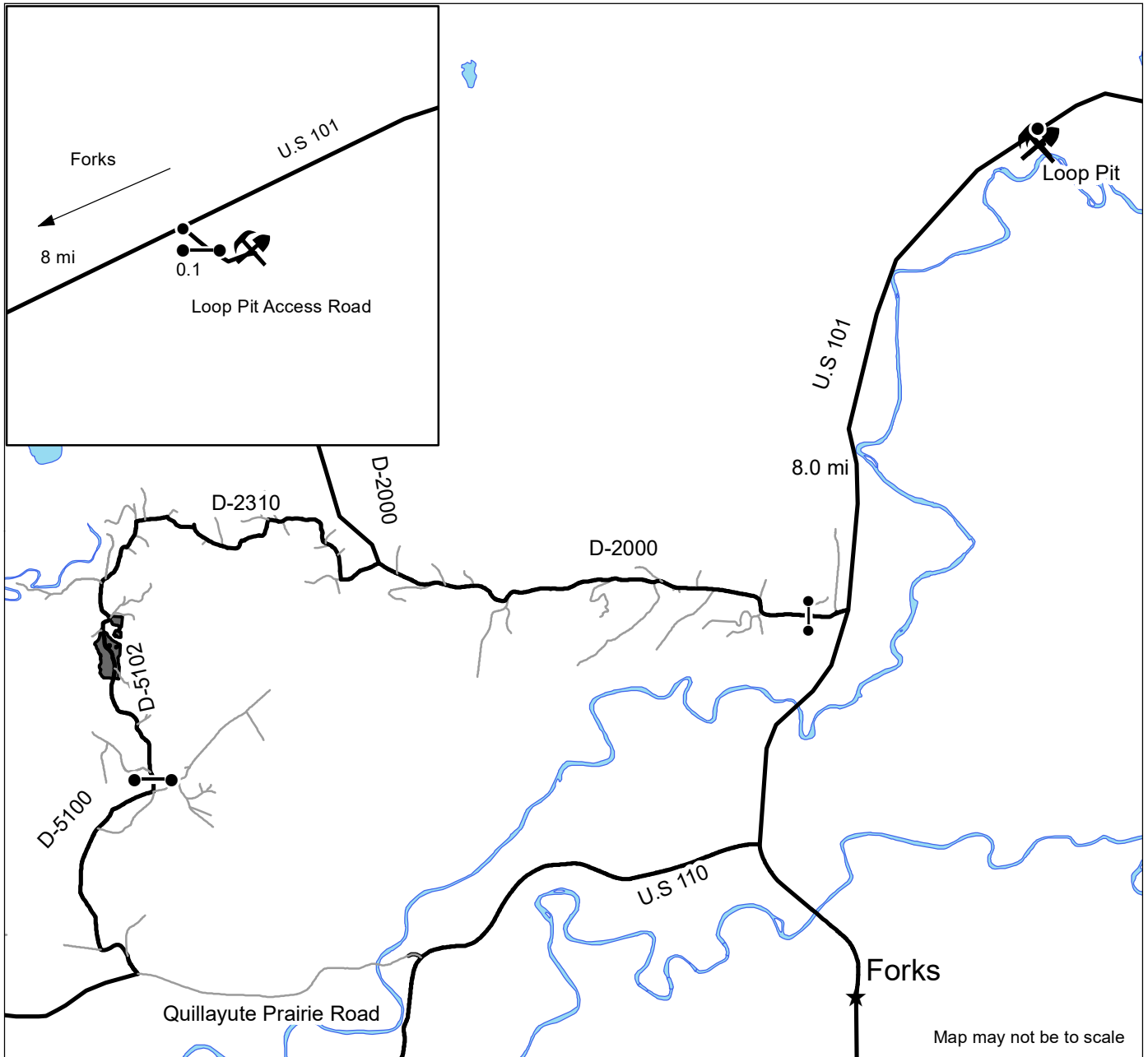
Unit 4: From Forks drive 1.5 miles north. Turn left on U.S 110, head straight for 7.5 miles. Turn right on Mora Road. In 2 miles turn right on the Quillayute-Prairie Road. In 0.4 miles turn left on the D-3400 and continue for 0.25 miles to reach unit 4.
 Unit 5: From Unit 4, continue on the D-3400.1 for 0.3 miles to reach unit 5.
 Unit 6 ROW: Unit 6 is located along the D-3400.1
 Unit 7: From Unit 5, continue on the D-3400.1 for 0.35 miles to reach unit 7.
 Unit 15: From the D-3400 junction, continue on the Quillayute-Prairie Road for 2.5 miles and turn left on Mina Smith Road. Head straight for 0.8 miles turn left on the D-5000 and continue straight for 6 miles. Turn right on the D-5210. In 0.8 miles turn onto the D-5216. Head south for 1 mile to reach unit 15.
 Unit 14: Drive 0.35 miles south on the D-5320.6 and turn left on to the D-5320.62 to reach unit 14.
 Unit 13 ROW: located along the D-5320.6.
 Unit 12: from the D-5320.6/D-5320.62, head south on the D-5320.6 for 0.2 miles to reach unit 12.
 Unit 9: From Unit 12, drive 0.10 miles to the D-5320. Turn left on the D-5320.1 in 0.25 miles. Continue for 0.10 to reach unit 9.
 Unit 10 ROW: Unit 10 is located along the D-5320.1.
 Unit 11: From unit 9, continue on the D-5320.1 for 0.10 miles to reach unit 11.
 Unit 8: From the D-5320/D-5320.1 junction, head east on the D-5320 for 0.10 miles to reach unit 8.
 Unit 16: Walk across the RMZ between unit 12 and unit 16 to reach unit 16.
 Rock Pits: Mora Pit is located at the entrance of unit 6, on the D-3400 and Picture Pit is located at the end of the D-5320.61.



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	Other Road
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	Rock Pit

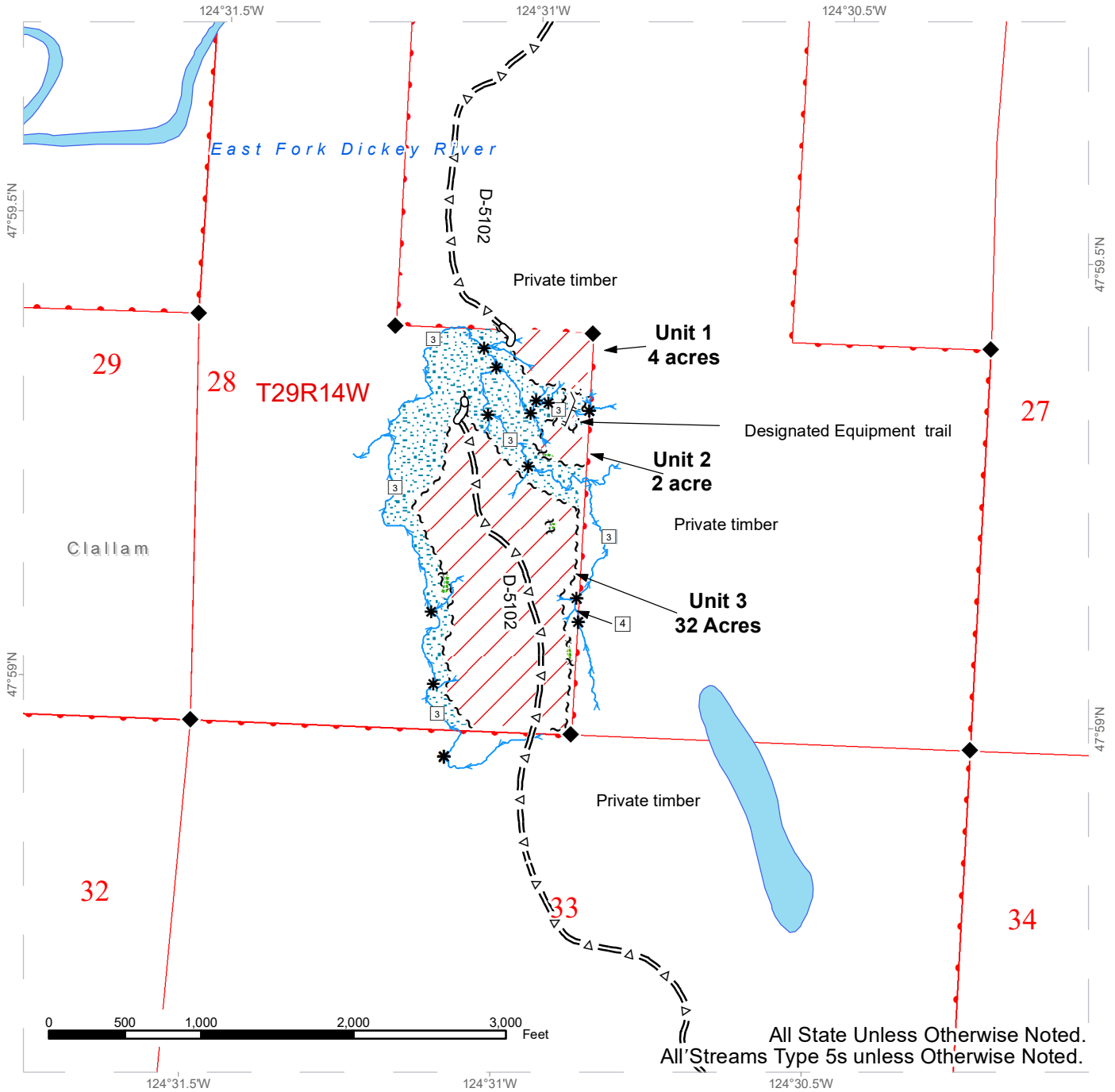
DRIVING DIRECTIONS:
 Loop Pit: From Forks drive 8 miles north on U.S 101, turn right on Loop Pit Access Road. continue for 0.1 miles to reach Loop Pit.



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All State Unless Otherwise Noted.
All Streams Type 5s unless Otherwise Noted.

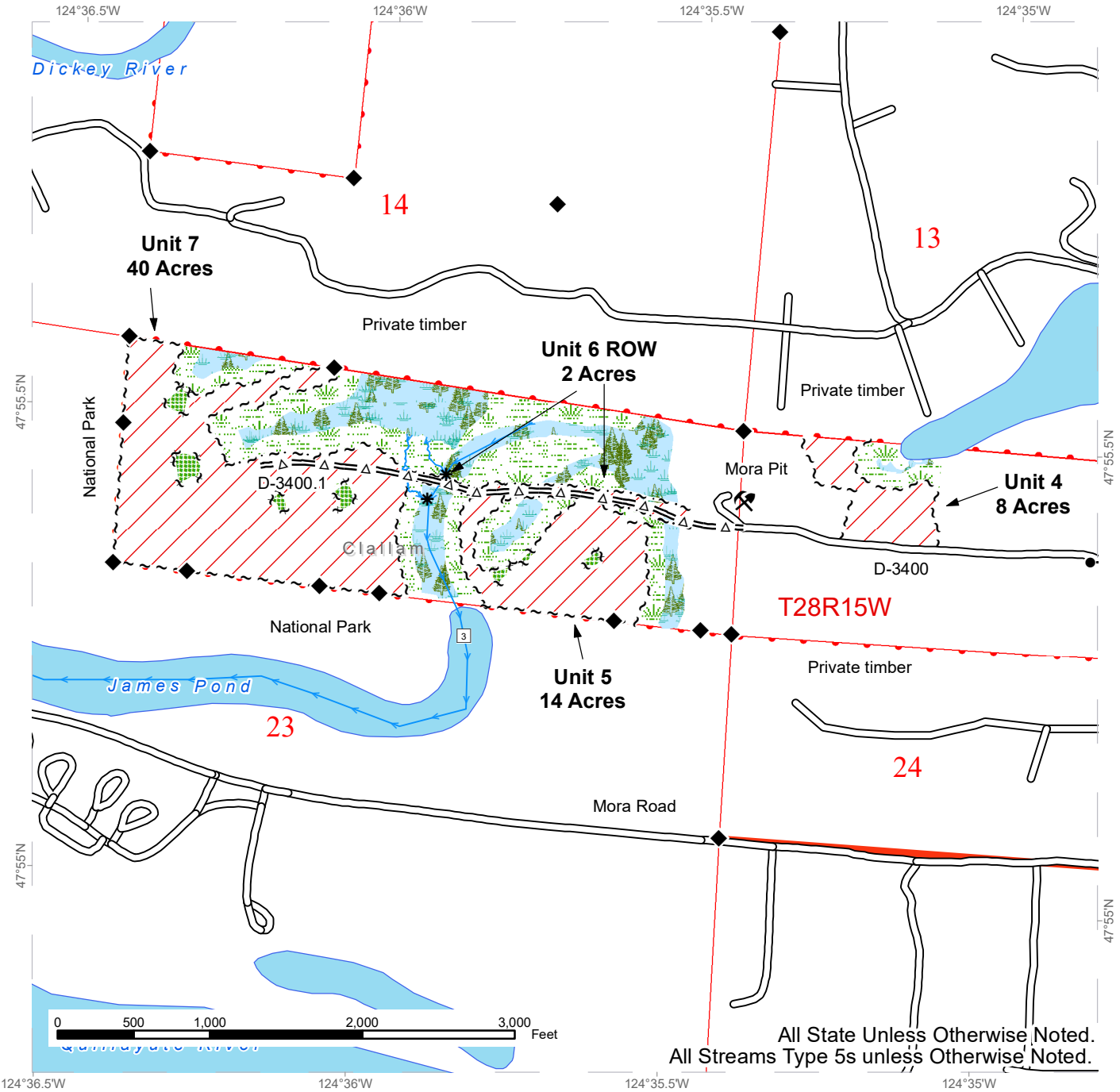
~ ~ ~ Sale Boundary Tags	Riparian Mgt Zone	Public Land Survey Sections
~ ~ ~ Leave Tree Tags	Existing Roads	Public Land Survey Townships
~ ~ ~ Right of Way Tags	Optional Pre-Haul Maintenance	DNR Managed Lands
Streams	Designated Skid Trail	
Variable Retention Harvest	Stream Type	
Leave Tree Area	Stream Type Break	
	Survey Monument	



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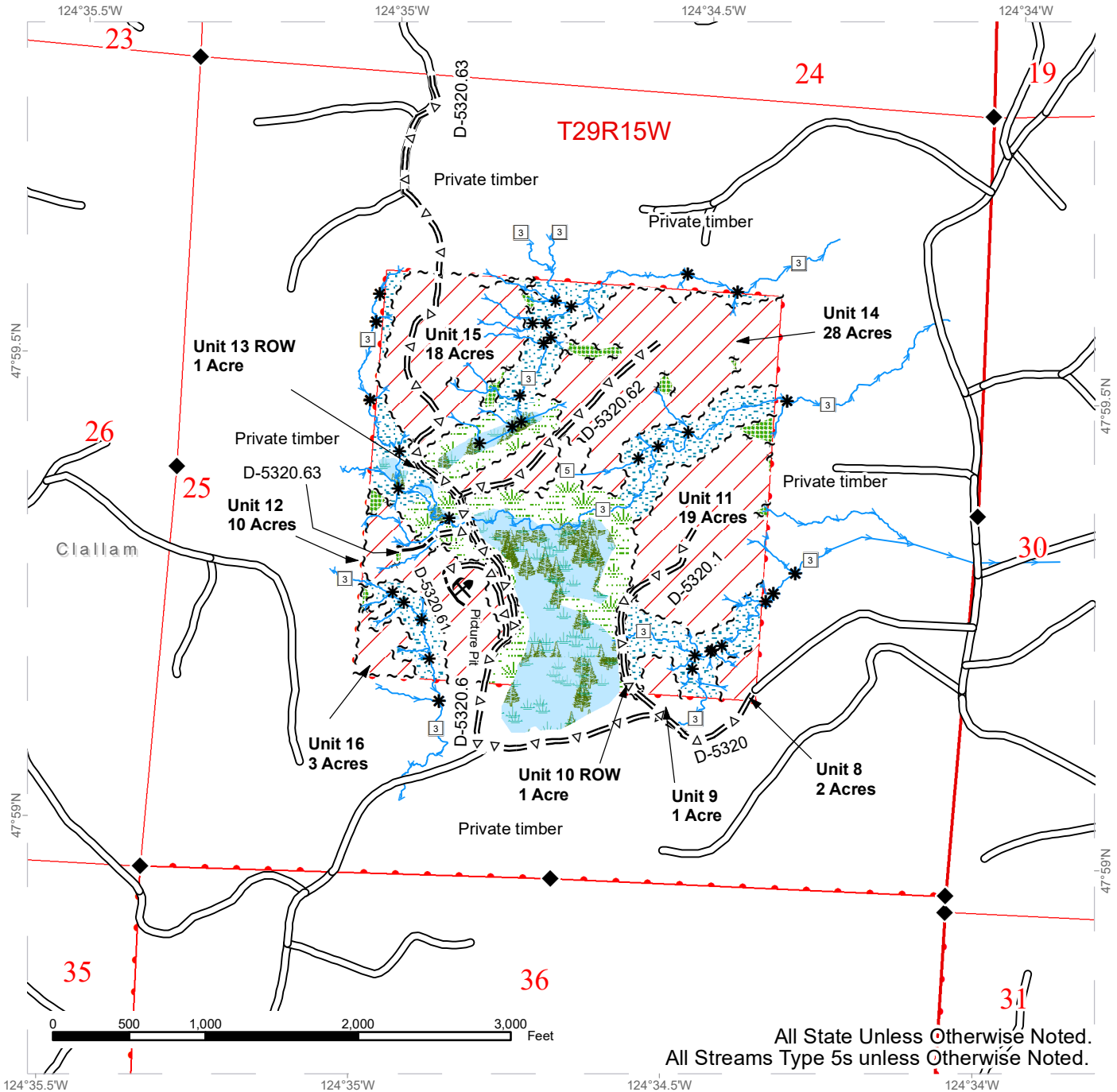
~ ~ ~ Sale Boundary Tags	Wetland Mgt Zone	Gate (AA1)
~ ~ ~ Leave Tree Tags	Existing Roads	Rock Pit
~ ~ ~ Right of Way Tags	= Δ = Optional Pre-Haul Maintenance	Public Land Survey Sections
Streams	Stream Type	Public Land Survey Townships
Variable Retention Harvest	* Stream Type Break	DNR Managed Lands
Leave Tree Area	◆ Survey Monument	
Forested Wetland		



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~ ~ ~ Sale Boundary Tags	Leave Tree Area	* Stream Type Break
~ ~ ~ Leave Tree Tags	Riparian Mgt Zone	◆ Survey Monument
~ ~ ~ Right of Way Tags	Forested Wetland	⚡ Rock Pit
~ ~ ~ Right of Way Tags	Wetland Mgt Zone	□ Public Land Survey Sections
Streams	Existing Roads	□ Public Land Survey Townships
Variable Retention Harvest	Optional Pre-Haul Maintenance	□ DNR Managed Lands
	Optional Construction	
	Stream Type	



**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

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

Export Restricted Lump Sum AGREEMENT NO. 30-0103765

SALE NAME: PICTURE MORA

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

Section G: General Terms

G-001 Definitions

The following definitions apply throughout this contract;

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

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

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

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

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

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

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

G-011 Right to Remove Forest Products and Contract Area

Purchaser was the successful bidder on October 25, 2023 and the sale was confirmed on _____. The State, as owner, agrees to sell to Purchaser, and Purchaser agrees to purchase as much of the following forest products as can be cut and removed during the term of this contract: All timber excluding downed red cedar, and trees marked with a band of blue paint or bounded out by leave tree area tags; bounded by timber sale boundary tags and property line in Units 1, 2, 3, 8, 9, 11, and 14; timber sale boundary tags in Units 5, 7, 12, 15, and 16; timber sale boundary tags, property line, and the D-3400 Road in Unit 4.

All timber bounded by right of way harvest boundary tags in Units 6, 10, and 13.

All forest products above located on approximately 185 acres on part(s) of Sections 23, and 24 all in Township 28 North, Range 15 West, Section 25 in Township 29 North, Range 15 West, Section 28 in Township 29 North, Range 14 West W.M. in Clallam County(s) as designated on the sale area and as shown on the attached timber sale map.

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

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

G-020 Inspection By Purchaser

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

estimates, appraisals, pre-bid documentation, or any other representations by the State Department of Natural Resources.

G-025 Schedules

The following attached schedules are hereby incorporated by reference:

Schedule	Title
A	SLASH PILING SPECS
B	GREEN TREE RETENTION PLAN

G-031 Contract Term

Purchaser shall complete all work required by this contract prior to October 31, 2025.

G-040 Contract Term Adjustment - No Payment

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

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

G-051 Contract Term Extension - Payment

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

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

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

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

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

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

- e. Payment of \$937.00 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-091 Sale Area Adjustment

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

G-101 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 the Scribner log scale volume, as defined by the Northwest Log Rules Advisory Group, shall be determined by the Contract Administrator. Added forest products shall be paid for at the following contract payment rates per Mbf Scribner log scale.

The pricing schedule has not been set for the sale.

G-111 Title and Risk of Loss

Title to the forest products under this contract passes to the Purchaser after they are removed from the sale area, if adequate advance payment or payment security has been provided to the State under this contract. Purchaser bears all risk of loss of, or damage to, and has an insurable interest in, the forest products described in this contract from

the time the sale is confirmed under RCW 79.15.120. Breach of this contract shall have no effect on this provision.

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

Forest products purchased under this contract are certified as being in conformance with the Sustainable Forestry Initiative 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 Forks, 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; D-2000, D-2300, D-2310, D-2313, D-3400, D-3400.1, D-5000, D-5100, D-5102 south, D-5102 north, D-5102.7, D-5210, D-5216, D-5320, D-5320.1, D-5320.61, D-5320.62, D-5320.63, D-5320.6, and Loop Pit Access road. 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 D-2000, D-2300, D-2313, D-5000, D-5100, D-5102.7, D-5210, D-5216, D-3400, and the D-5320.6, 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:

55-000050 D-5000_D-5100 Supplement 1971

55-000050 Mina Smith Supplement 1986
55-095574 Easement Exchange 2021
55-000938 Original Easement 1973
55-000938 Easement Supplement 1980
55-101887 Easement Exchange 2022
55-000050 Original Easement D 5000 1971

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.

Section P: Payments and Securities

P-011 Initial Deposit

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

P-020 Payment for Forest Products

Purchaser agrees to pay the total, lump sum contract price of \$149,630.00. The total contract price consists of a \$0.00 contract bid price plus \$149,630.00 in fees. Fees collected shall be retained by the state unless the contract is adjusted via the G-066 clause. Purchaser shall be liable for the entire purchase price, and will not be entitled to any refunds or offsets unless expressly stated in this contract.

THE PURCHASE PRICE SHALL NOT BE AFFECTED BY ANY FACTORS, INCLUDING: the amount of forest products actually present within the contract area, the actual acreage covered by the contract area, the amount or volume of forest products actually cut or removed by purchaser, whether it becomes physically impossible or uneconomic to remove the forest products, and whether the subject forest products have been lost or damaged by fire or any other cause. The only situations Purchaser may not be liable for the full purchase price are governed by clause G-066, concerning governmental regulatory actions taken during the term of the contract.

P-045 Guarantee of Payment

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

P-050 Billing Procedure

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

P-080 Payment Account Refund

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

P-090 Performance Security

Purchaser agrees to furnish, within 30 days of the confirmation date, security acceptable to the State in the amount of \$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 H: Harvesting Operations

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-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-018 Temporary Stream Crossings

A temporary stream crossing is required to access Unit 2.

Purchaser shall comply with the following during the yarding operation:

- a. Adhere to the approved Hydraulic Permit Application (HPA) or Forest Practice Application (FPA) with approved hydraulic project work, if required, amend a current FPA or obtain a new FPA prior to commencing any new stream crossing construction.
- b. Location of the temporary stream crossing must be approved by the Contract Administrator.
- c. A temporary stream crossing shall not exceed 30 feet in width, including rub trees.
- d. Purchaser shall suspend operations during periods of wet weather when a high potential for sediment delivery into typed waters may occur.
- e. Temporary stream crossings shall be removed at the time of completion of yarding as 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-051 Branding and Painting

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

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

H-080 Snags Not to be Felled

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

H-120 Harvesting Equipment

Forest products sold under this contract shall be harvested and removed using cable, cable-tethered, and ground based equipment. Cable-tethered equipment is limited to sustained slopes of 75 percent and less. Ground based equipment is limited to tracked equipment on sustained slopes that are 45 percent and less. Rubber tired skidder must meet rutting and skidding requirements and harvest plan must be submitted and approved by the Contract Administrator. 30' Equipment Limitations Zones (ELZ) on all typed water. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

H-130 Hauling Schedule

The hauling of forest products will not be permitted on the D-3400.1, D-5230.6, D-5230.61, D-5230.62, and the D-5230.1 from November 1 to April 30, or on the D5102-DET October 1 to June 30 unless authorized in writing by the Contract Administrator.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

1. Purchaser shall immediately repair all gate damage resulting from operations to an equal or better condition than existed at the time of the sale.
2. While felling timber, two Warning signs must be posted on the D-3400.1, D-5102, D-5320.6, D-5320.1 and D-5320.62 roads.
3. Yarding equipment shall not cross live streams without an FPHP.
4. Purchaser shall fully suspend one end of logs above the ground during logging operations.

5. The Purchaser shall notify all employees and contractors working on this sale that any danger tree, marked or unmarked, may be felled. Any felled marked danger tree shall be replaced with a suitable tree of similar size and species as approved by the Contract Administrator.

6. Cultural resource technician needs to be on site for installation and removal of crossing C1, (Station: 17+50).

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

H-190 Completion of Settings

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

H-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 6/5/2023 are hereby made a part of this contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on all roads listed in the road plan, authorized in Clause G-310, and not listed in Clause C-060. 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 D-2000, D-2300, D-2310, D-2313, D-3400, D-5000, D-5100, D-5102.7, D-5210, D-5216, and Loop Pit access road. 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-040 Noxious Weed Control

Purchaser shall notify the Contract Administrator in advance of moving equipment onto State lands. Purchaser shall thoroughly clean all off road equipment prior to entry onto State land to remove contaminated soils and noxious weed seed. If equipment is moved from one DNR project area to another, the Contract Administrator reserves the right to require the cleaning of equipment. Equipment shall be cleaned at a location approved by the Contract Administrator.

S-100 Stream Cleanout

Slash or debris which enters any typed 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-120 Stream Protection

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

S-130 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

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

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

b. Hazardous Materials Spill Prevention

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

c. Hazardous Materials Spill Containment, Control and Cleanup

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

d. Hazardous Material Release Reporting

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

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

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

S-131 Refuse Disposal

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

Section D: Damages

D-013 Liquidated Damages or Failure to Perform

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

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

D-041 Reserve Tree Excessive Damage

When Purchaser's operations exceed the damage limits set forth in clause H-013, Reserve Tree Damage Definition, and when the Contract Administrator determines that a suitable replacement for a damaged reserve tree is not possible, the damaged trees result in substantial injury to the State. The value of the damaged reserve trees at the time of the breach is not readily ascertainable. Therefore, the Purchaser agrees to pay the State as liquidated damages at the rate of \$1,000.00 per tree for all damaged reserve trees that are not replaced in Units 1-5, 7-9, 11, 12, and 14-16.

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

Jill DeCianne, Acting
Olympic Region Manager

Print Name

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
SLASH PILING SPECS

The areas shall be piled by creating circular piles of slash and brush conforming to the following specifications:

1. Piles shall be a minimum of 12 feet tall by 8 feet wide to a maximum of 30 feet tall and 16 feet wide. Piles shall be cone shaped and stable.
2. Piles shall be free of topsoil, large rotten logs and large stumps. No material larger than 8 inches in diameter shall be piled. Any burnable material shall be well scattered.
3. Piles shall not be placed on large stumps or logs.
4. Piles shall be stacked a minimum of 50 feet from all unit boundaries, Riparian Management Zones, leave tree areas and any standing timber; a minimum of 100 feet from any public roads and highways; and a minimum of 200 feet from any structures.
5. Piling shall be completed using an approved hydraulic shovel and grapples.
6. Slash and displaced soil shall be removed from swales and natural drainage channels concurrent with yarding.

Schedule B
GREEN TREE RETENTION PLAN

Leave the following as directed by the Contract Administrator:

1. All trees marked with a blue band of paint and all leave tree area clumps shall remain standing.

The perimeter of the leave tree clumps are designated by Leave Tree Area tags. The tags face outward from the leave tree clumps.

Unit #	# of Individually Marked Trees	# of Clumps	# of Trees Clumped	Total # of Leave Trees
1	32	0	0	32
2	0	1	16	16
3	80	2	176	256
4	0	0	0	0
5	20	3	92	112
6	0	0	0	0
7	17	4	303	320
8	16	0	0	16
9	8	0	0	8
10	0	0	0	0
11	64	2	88	152
12	5	2	75	80
13	0	0	0	0
14	51	3	173	224
15	36	2	108	144
16	0	1	24	24



WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES
FOREST EXCISE TAX ROAD SUMMARY SHEET

Region:

Timber Sale Name:

Application Number:

EXCISE TAX APPLICABLE ACTIVITIES

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

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

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

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

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

EXCISE TAX EXEMPT ACTIVITIES

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

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

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

(Revised 9/18)

Timber Sale Cruise Report Picture Mora

Sale Name: PICTURE MORA

Sale Type: LUMP SUM

Region: OLYMPIC

District: OZETTE

Lead Cruiser: Kevin Peterson

Other Cruisers:

Cruise Narrative:

Location:

This sale is located west of Forks on the D-5000 and D-3000 road system. Units 1, 2 and 3 are behind a locked gate.

Cruise Design:

I used a 54.44/40 BAF combo for most units. The 40 BAF was used to pick up RA and RC.

Merch height was determined at 40% of the diameter at 16'. All logs were cruised in 40' lengths.

Timber Quality:

This sale is a mixture of 50-60 year old WH and DF. Some of the units have a Spruce component on the lower slopes and Alder as well. Common defects were sweep and forked tops.

Logging and Stand Conditions:

This sale is 100% ground based harvest and is pretty easy to move through.

Timber Sale Notice Volume (MBF)

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	14.8	5.8		2,546	575	1,379	489	102
WH	14.4	6.0		2,258	277	1,510	452	20
SS	17.7			835	463	254	118	
RA	12.3			85			79	6
RC	14.8			31		26	5	
ALL	14.6	5.8		5,755	1,315	3,169	1,143	128

Timber Sale Notice Weight (tons)

Sp	Tons by Grade				
	All	2 Saw	3 Saw	4 Saw	Utility
DF	23,796	5,157	13,509	4,289	841
WH	22,992	2,907	15,501	4,414	171
SS	7,121	3,556	2,401	1,165	
RA	967			933	34
RC	257		222	35	

Tons by Grade					
Sp	All	2 Saw	3 Saw	4 Saw	Utility
ALL	55,132	11,619	31,632	10,835	1,045

Timber Sale Overall Cruise Statistics (Cut + Leave Trees)

BA (sq ft/acre)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR SE (%)	Net Vol (bf/acre)	Vol SE (%)
289.3	2.5	107.5	1.2	31,110	2.9

Timber Sale Unit Cruise Design

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
PICTURE MORA U1	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	4.0	3.9	3	2	0
PICTURE MORA U2	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	1.0	1.5	1	1	0
PICTURE MORA U3	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	32.0	34.2	15	7	0
PICTURE MORA U4	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	8.0	7.7	4	4	0
PICTURE MORA U5	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	14.0	15.2	8	4	0
PICTURE MORA U6 ROW	B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	2.0	4.4	2	2	0
PICTURE MORA U7	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	40.0	41.3	20	9	0
PICTURE MORA U8	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	2.0	1.7	1	1	0
PICTURE MORA U9	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	2.0	1.2	1	1	0
PICTURE MORA U10 ROW	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	1.0	1.0	1	1	0
PICTURE MORA U11	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	19.0	20.4	10	5	0

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
PICTURE MORA U12	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	10.0	11.1	6	5	0
PICTURE MORA U13 ROW	B1: VR, 1 BAF (40) Measure All, Sighting Ht = 4.5 ft	1.0	3.2	1	1	0
PICTURE MORA U14	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	28.0	30.5	15	7	0
PICTURE MORA U15	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	18.0	19.1	10	4	0
PICTURE MORA U16	B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	3.0	3.0	2	2	0
All		185.0	199.3	100	56	0

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	13.1	40	3,296	3,109	5.7	5,156.6	575.2
DF	LIVE	3 SAW	Domestic	8.6	40	7,852	7,456	5.0	13,509.4	1,379.3
DF	LIVE	4 SAW	Domestic	5.2	28	2,710	2,645	2.4	4,288.6	489.3
DF	LIVE	UTILITY	Pulp	5.9	30	552	552	0.0	841.0	102.2
RA	LIVE	4 SAW	Domestic	6.4	36	453	426	5.9	932.9	78.8
RA	LIVE	UTILITY	Pulp	5.1	22	32	32	0.0	33.6	5.9
RC	LIVE	3 SAW	Domestic	8.6	36	153	140	8.7	221.7	25.8
RC	LIVE	4 SAW	Domestic	5.2	16	29	29	0.0	34.9	5.3
SS	LIVE	2 SAW	Domestic	13.9	40	2,537	2,503	1.3	3,555.9	463.1
SS	LIVE	3 SAW	Domestic	8.5	39	1,423	1,375	3.4	2,400.5	254.3
SS	LIVE	4 SAW	Domestic	5.5	31	642	636	0.9	1,164.6	117.6
WH	LIVE	2 SAW	Domestic	13.1	40	1,577	1,495	5.2	2,906.8	276.6
WH	LIVE	3 SAW	Domestic	8.6	40	8,369	8,160	2.5	15,500.5	1,509.6
WH	LIVE	4 SAW	Domestic	5.2	28	2,479	2,443	1.5	4,413.9	452.0
WH	LIVE	UTILITY	Pulp	15.1	40	109	109	0.0	170.5	20.1

Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 8	LIVE	Pulp	5.7	29	448	0.0	664.6	82.9
DF	5 - 8	LIVE	Domestic	5.9	31	5,538	2.5	9,763.4	1,024.5

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	9 - 11	LIVE	Domestic	10.1	40	4,563	6.5	8,034.6	844.1
DF	9 - 11	LIVE	Pulp	10.5	40	104	0.0	176.4	19.3
DF	12 - 14	LIVE	Domestic	13.1	40	2,741	5.8	4,629.9	507.0
DF	15 - 19	LIVE	Domestic	15.2	40	369	4.4	526.8	68.2
RA	5 - 8	LIVE	Pulp	5.1	22	32	0.0	33.6	5.9
RA	5 - 8	LIVE	Domestic	6.1	35	367	5.2	817.4	67.8
RA	9 - 11	LIVE	Domestic	9.2	40	59	10.3	115.6	10.9
RC	5 - 8	LIVE	Domestic	6.4	25	133	9.1	209.0	24.5
RC	9 - 11	LIVE	Domestic	10.2	36	36	0.0	47.6	6.6
SS	5 - 8	LIVE	Domestic	6.1	33	1,226	0.5	2,329.8	226.7
SS	9 - 11	LIVE	Domestic	10.6	40	785	5.8	1,235.4	145.3
SS	12 - 14	LIVE	Domestic	13.6	40	1,967	0.0	2,822.6	363.9
SS	15 - 19	LIVE	Domestic	15.5	40	537	5.8	733.3	99.3
WH	5 - 8	LIVE	Domestic	5.9	31	5,695	2.0	11,061.2	1,053.6
WH	9 - 11	LIVE	Domestic	10.2	40	4,908	2.6	8,853.3	908.0
WH	12 - 14	LIVE	Domestic	13.0	40	1,327	5.8	2,638.1	245.6
WH	15 - 19	LIVE	Pulp	15.1	40	109	0.0	170.5	20.1
WH	15 - 19	LIVE	Domestic	15.4	40	168	0.0	268.7	31.1

Cruise Unit Report PICTURE MORA U1

Unit Sale Notice Volume (MBF): PICTURE MORA U1

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	14.1			91	17	47	16	11
WH	16.0			25		20	5	
ALL	14.4			116	17	67	21	11

Unit Cruise Design: PICTURE MORA U1

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	4.0	3.9	3	2	0

Unit Cruise Summary: PICTURE MORA U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	9	13	4.3	0
WH	2	3	1.0	0
ALL	11	16	5.3	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA 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 (%)
DF	235.9	35.3	20.4	96.5	16.8	5.6	22,767	39.1	21.1
WH	54.4	100.0	57.7	112.4	27.0	19.1	6,121	103.6	60.8
ALL	290.3	10.8	6.2	99.5	18.7	5.6	28,888	21.6	8.4

Unit Summary: PICTURE MORA U1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	9	ALL	14.1	63	79	24,253	22,767	6.1	217.6	235.9	62.8	91.1
WH	LIVE	CUT	2	ALL	16.0	72	90	6,492	6,121	5.7	39.0	54.4	13.6	24.5
ALL	LIVE	CUT	11	ALL	14.4	64	80	30,745	28,888	6.0	256.6	290.3	76.4	115.6
ALL	ALL	ALL	11	ALL	14.4	64	80	30,745	28,888	6.0	256.6	290.3	76.4	115.6

Cruise Unit Report PICTURE MORA U2

Unit Sale Notice Volume (MBF): PICTURE MORA U2

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
WH	13.8			17	14	2
SS	9.0			4		4
DF	10.0			3		3
ALL	11.4			23	14	9

Unit Cruise Design: PICTURE MORA U2

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	1.0	1.5	1	1	0

Unit Cruise Summary: PICTURE MORA U2

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
WH	3	3	3.0	0
SS	1	1	1.0	0
DF	1	1	1.0	0
ALL	5	5	5.0	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA 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 (%)
WH	163.3	0.0	0.0	101.3	24.6	14.2	16,549	24.6	14.2
SS	54.4	0.0	0.0	70.2	0.0	0.0	3,820	0.0	0.0
DF	54.4	0.0	0.0	53.2	0.0	0.0	2,895	0.0	0.0
ALL	272.2	0.0	0.0	85.5	33.5	15.0	23,264	33.5	15.0

Unit Summary: PICTURE MORA U2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	1	ALL	10.0	40	48	3,294	2,895	12.1	99.8	54.4	17.2	2.9
SS	LIVE	CUT	1	ALL	9.0	40	48	3,820	3,820	0.0	123.2	54.4	18.1	3.8
WH	LIVE	CUT	3	ALL	13.8	62	77	16,965	16,549	2.5	157.2	163.3	44.0	16.5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	LIVE	CUT	5	ALL	11.5	49	60	24,080	23,264	3.4	380.2	272.2	79.3	23.3
ALL	ALL	ALL	5	ALL	11.5	49	60	24,080	23,264	3.4	380.2	272.2	79.3	23.3

Cruise Unit Report PICTURE MORA U3

Unit Sale Notice Volume (MBF): PICTURE MORA U3

Sp	DBH	Rings/In	Age	MBF Volume by Grade				
				All	2 Saw	3 Saw	4 Saw	Utility
DF	15.4			524	201	223	70	30
WH	12.7			264		171	73	20
SS	15.8			195	118	42	35	
RA	10.8			16			10	6
ALL	14.1			999	319	436	188	56

Unit Cruise Design: PICTURE MORA U3

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	32.0	34.2	15	7	0

Unit Cruise Summary: PICTURE MORA U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	18	44	2.9	0
WH	15	23	1.5	0
SS	8	16	1.1	0
RA	3	3	0.2	0
ALL	44	86	5.7	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA 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 (%)
DF	159.7	67.5	17.4	102.5	19.2	4.5	16,364	70.2	18.0
WH	83.5	98.2	25.4	98.7	21.1	5.5	8,239	100.4	25.9
SS	58.1	168.0	43.4	105.2	20.6	7.3	6,107	169.2	44.0
RA	8.0	280.3	72.4	62.2	9.6	5.5	498	280.5	72.6
ALL	309.2	18.7	4.8	100.9	21.7	3.3	31,208	28.6	5.8

Unit Summary: PICTURE MORA U3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	18	ALL	15.4	64	80	17,196	16,364	4.8	123.5	159.7	40.7	523.7
RA	LIVE	CUT	3	ALL	10.8	41	49	543	498	8.3	12.6	8.0	2.4	15.9
SS	LIVE	CUT	8	ALL	15.8	58	71	6,169	6,107	1.0	42.6	58.1	14.6	195.4
WH	LIVE	CUT	15	ALL	12.7	60	73	8,519	8,239	3.3	94.9	83.5	23.4	263.6
ALL	LIVE	CUT	44	ALL	14.4	61	75	32,427	31,208	3.8	273.6	309.2	81.2	998.6
ALL	ALL	ALL	44	ALL	14.4	61	75	32,427	31,208	3.8	273.6	309.2	81.2	998.6

Cruise Unit Report PICTURE MORA U4

Unit Sale Notice Volume (MBF): PICTURE MORA U4

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	22.0			78	55	21	2
SS	16.6			48	34	8	6
WH	12.8			16	8	2	6
ALL	17.9			142	98	31	14

Unit Cruise Design: PICTURE MORA U4

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	8.0	7.7	4	4	0

Unit Cruise Summary: PICTURE MORA U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	8	8	2.0	0
SS	5	5	1.3	0
WH	2	2	0.5	0
ALL	15	15	3.8	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA 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 (%)
DF	80.0	40.8	20.4	121.6	7.8	2.7	9,726	41.6	20.6
SS	50.0	76.6	38.3	119.0	22.5	10.1	5,951	79.8	39.6
WH	20.0	115.5	57.7	101.3	33.9	24.0	2,026	120.3	62.5
ALL	150.0	13.3	6.7	118.0	16.6	4.3	17,702	21.3	7.9

Unit Summary: PICTURE MORA U4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	8	ALL	22.0	81	102	9,981	9,726	2.6	30.3	80.0	17.1	77.8
SS	LIVE	CUT	5	ALL	16.6	61	77	5,951	5,951	0.0	33.3	50.0	12.3	47.6
WH	LIVE	CUT	2	ALL	12.8	56	68	2,026	2,026	0.0	22.4	20.0	5.6	16.2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	LIVE	CUT	15	ALL	17.9	67	83	17,957	17,702	1.4	86.0	150.0	34.9	141.6
ALL	ALL	ALL	15	ALL	17.9	67	83	17,957	17,702	1.4	86.0	150.0	34.9	141.6

Cruise Unit Report PICTURE MORA U5

Unit Sale Notice Volume (MBF): PICTURE MORA U5

Sp	DBH	Rings/In	Age	MBF Volume by Grade				Utility
				All	2 Saw	3 Saw	4 Saw	
WH	15.0	6.0		250	19	185	45	
DF	14.2	5.5		235	52	125	51	8
SS	19.3			90	48	35	7	
ALL	15.0	5.7		575	119	344	103	8

Unit Cruise Design: PICTURE MORA U5

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	14.0	15.2	8	4	0

Unit Cruise Summary: PICTURE MORA U5

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
WH	11	20	2.5	1
DF	12	22	2.8	2
SS	3	7	0.9	0
ALL	26	49	6.1	3

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA 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 (%)
WH	136.1	77.1	27.3	131.1	5.1	1.5	17,839	77.3	27.3
DF	149.7	46.6	16.5	112.3	18.5	5.3	16,811	50.1	17.3
SS	47.6	113.3	40.0	134.1	1.3	0.8	6,390	113.3	40.1
ALL	333.4	26.8	9.5	123.1	14.2	2.8	41,040	30.4	9.9

Unit Summary: PICTURE MORA U5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	12	ALL	14.2	73	92	17,662	16,811	4.8	136.1	149.7	39.7	235.4
SS	LIVE	CUT	3	ALL	19.3	83	105	6,481	6,390	1.4	23.4	47.6	10.8	89.5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	11	ALL	15.0	79	99	18,405	17,839	3.1	110.9	136.1	35.1	249.7
ALL	LIVE	CUT	26	ALL	15.0	76	96	42,548	41,040	3.5	270.4	333.4	85.7	574.6
ALL	ALL	ALL	26	ALL	15.0	76	96	42,548	41,040	3.5	270.4	333.4	85.7	574.6

Cruise Unit Report PICTURE MORA U6 ROW

Unit Sale Notice Volume (MBF): PICTURE MORA U6 ROW

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	18.3			27	16	9	1
SS	21.3			16	13	3	
RA	12.5			7			7
WH	10.0			4			4
ALL	15.4			54	29	12	13

Unit Cruise Design: PICTURE MORA U6 ROW

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2: VR, 2 BAF (54.44, 40 for some species) Measure All, Sighting Ht = 4.5 ft	2.0	4.4	2	2	0

Unit Cruise Summary: PICTURE MORA U6 ROW

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	4	4	2.0	0
SS	2	2	1.0	0
RA	2	2	1.0	0
WH	1	1	0.5	0
ALL	9	9	4.5	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA U6 ROW

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	108.9	0.0	0.0	122.5	10.7	5.3	13,339	10.7	5.3
SS	54.4	0.0	0.0	142.5	4.1	2.9	7,758	4.1	2.9
RA	40.0	0.0	0.0	87.3	11.5	8.1	3,492	11.5	8.1
WH	27.2	141.4	100.0	78.8	0.0	0.0	2,146	141.4	100.0
ALL	230.5	16.7	11.8	116.0	22.0	7.3	26,736	27.7	13.9

Unit Summary: PICTURE MORA U6 ROW

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	4	ALL	18.3	79	99	13,339	13,339	0.0	59.6	108.9	25.5	26.7
RA	LIVE	CUT	2	ALL	12.5	58	71	3,492	3,492	0.0	46.9	40.0	11.3	7.0
SS	LIVE	CUT	2	ALL	21.3	80	102	7,758	7,758	0.0	22.0	54.4	11.8	15.5
WH	LIVE	CUT	1	ALL	10.0	63	78	2,146	2,146	0.0	49.9	27.2	8.6	4.3
ALL	LIVE	CUT	9	ALL	15.4	69	86	26,736	26,736	0.0	178.4	230.5	57.2	53.5
ALL	ALL	ALL	9	ALL	15.4	69	86	26,736	26,736	0.0	178.4	230.5	57.2	53.5

Cruise Unit Report PICTURE MORA U7

Unit Sale Notice Volume (MBF): PICTURE MORA U7

Sp	DBH	Rings/In	Age	MBF Volume by Grade				Utility
				All	2 Saw	3 Saw	4 Saw	
WH	15.7	6.0		754	113	515	125	
DF	13.5	5.5		481	101	227	100	54
SS	20.3			247	169	70	8	
ALL	15.1	5.7		1,482	384	811	233	54

Unit Cruise Design: PICTURE MORA U7

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	40.0	41.3	20	9	0

Unit Cruise Summary: PICTURE MORA U7

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
WH	21	53	2.7	1
DF	20	41	2.1	2
SS	7	17	0.9	0
ALL	48	111	5.6	3

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA 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 (%)
WH	144.3	73.7	16.5	130.6	7.1	1.5	18,843	74.1	16.6
DF	111.6	73.3	16.4	107.7	16.2	3.6	12,021	75.1	16.8
SS	46.3	109.8	24.6	133.5	4.6	1.8	6,177	109.9	24.6
ALL	302.1	28.3	6.3	122.6	14.2	2.1	37,041	31.7	6.7

Unit Summary: PICTURE MORA U7

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	20	ALL	13.5	70	87	12,765	12,021	5.8	112.3	111.6	30.4	480.8
SS	LIVE	CUT	7	ALL	20.3	82	105	6,368	6,177	3.0	20.6	46.3	10.3	247.1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	21	ALL	15.7	80	100	19,472	18,843	3.2	107.3	144.3	36.4	753.7
ALL	LIVE	CUT	48	ALL	15.2	75	94	38,606	37,041	4.1	240.2	302.1	77.1	1,481.6
ALL	ALL	ALL	48	ALL	15.2	75	94	38,606	37,041	4.1	240.2	302.1	77.1	1,481.6

Cruise Unit Report PICTURE MORA U8

Unit Sale Notice Volume (MBF): PICTURE MORA U8

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
DF	15.3			24	20	4
WH	14.5			24	19	4
RA	12.0			4		4
ALL	14.3			52	39	13

Unit Cruise Design: PICTURE MORA U8

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	2.0	1.7	1	1	0

Unit Cruise Summary: PICTURE MORA U8

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	2	2	2.0	0
WH	2	2	2.0	0
RA	1	1	1.0	0
ALL	5	5	5.0	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA 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	108.9	0.0	0.0	108.6	9.8	6.9	11,821	9.8	6.9
WH	108.9	0.0	0.0	108.4	9.6	6.8	11,800	9.6	6.8
RA	40.0	0.0	0.0	54.7	0.0	0.0	2,190	0.0	0.0
ALL	257.8	0.0	0.0	100.1	25.1	11.2	25,811	25.1	11.2

Unit Summary: PICTURE MORA U8

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	2	ALL	15.3	67	84	11,821	11,821	0.0	85.3	108.9	27.8	23.6
RA	LIVE	CUT	1	ALL	12.0	50	61	2,190	2,190	0.0	50.9	40.0	11.5	4.4
WH	LIVE	CUT	2	ALL	14.5	66	82	11,800	11,800	0.0	95.0	108.9	28.6	23.6

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	LIVE	CUT	5	ALL	14.3	63	78	25,811	25,811	0.0	231.2	257.8	68.0	51.6
ALL	ALL	ALL	5	ALL	14.3	63	78	25,811	25,811	0.0	231.2	257.8	68.0	51.6

Cruise Unit Report PICTURE MORA U9

Unit Sale Notice Volume (MBF): PICTURE MORA U9

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
DF	13.7			33	27	6
WH	12.9			23	19	4
SS	11.0			7		7
ALL	12.9			63	46	18

Unit Cruise Design: PICTURE MORA U9

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	2.0	1.2	1	1	0

Unit Cruise Summary: PICTURE MORA U9

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	3	3	3.0	0
WH	2	2	2.0	0
SS	1	1	1.0	0
ALL	6	6	6.0	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA 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	163.3	0.0	0.0	101.2	1.9	1.1	16,522	1.9	1.1
WH	108.9	0.0	0.0	107.0	6.7	4.7	11,652	6.7	4.7
SS	54.4	0.0	0.0	65.2	0.0	0.0	3,547	0.0	0.0
ALL	326.6	0.0	0.0	97.1	16.8	6.8	31,721	16.8	6.8

Unit Summary: PICTURE MORA U9

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	3	ALL	13.7	66	82	16,522	16,522	0.0	159.5	163.3	44.1	33.0
SS	LIVE	CUT	1	ALL	11.0	55	68	3,547	3,547	0.0	82.5	54.4	16.4	7.1
WH	LIVE	CUT	2	ALL	12.9	65	80	11,652	11,652	0.0	120.0	108.9	30.3	23.3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	LIVE	CUT	6	ALL	12.9	63	78	31,721	31,721	0.0	362.0	326.6	90.9	63.4
ALL	ALL	ALL	6	ALL	12.9	63	78	31,721	31,721	0.0	362.0	326.6	90.9	63.4

Cruise Unit Report PICTURE MORA U10 ROW

Unit Sale Notice Volume (MBF): PICTURE MORA U10 ROW

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	17.8			7	3	3	1
WH	18.0			5		4	1
SS	21.0			5	4		1
RA	12.0			3			3
ALL	16.4			20	7	7	6

Unit Cruise Design: PICTURE MORA U10 ROW

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	1.0	1.0	1	1	0

Unit Cruise Summary: PICTURE MORA U10 ROW

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	2	2	2.0	0
WH	1	1	1.0	0
SS	1	1	1.0	0
RA	1	1	1.0	0
ALL	5	5	5.0	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA U10 ROW

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	80.0	0.0	0.0	93.1	6.5	4.6	7,448	6.5	4.6
WH	40.0	0.0	0.0	119.4	0.0	0.0	4,777	0.0	0.0
SS	40.0	0.0	0.0	115.6	0.0	0.0	4,623	0.0	0.0
RA	40.0	0.0	0.0	80.2	0.0	0.0	3,209	0.0	0.0
ALL	200.0	0.0	0.0	100.3	16.8	7.5	20,057	16.8	7.5

Unit Summary: PICTURE MORA U10 ROW

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	2	ALL	17.8	67	84	7,448	7,448	0.0	46.3	80.0	19.0	7.4
RA	LIVE	CUT	1	ALL	12.0	52	63	3,209	3,209	0.0	50.9	40.0	11.5	3.2
SS	LIVE	CUT	1	ALL	21.0	71	90	4,623	4,623	0.0	16.6	40.0	8.7	4.6
WH	LIVE	CUT	1	ALL	18.0	71	88	4,777	4,777	0.0	22.6	40.0	9.4	4.8
ALL	LIVE	CUT	5	ALL	16.4	63	78	20,057	20,057	0.0	136.4	200.0	48.7	20.1
ALL	ALL	ALL	5	ALL	16.4	63	78	20,057	20,057	0.0	136.4	200.0	48.7	20.1

Cruise Unit Report PICTURE MORA U11

Unit Sale Notice Volume (MBF): PICTURE MORA U11

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	15.0	6.0		285	39	189	57
WH	13.2	6.0		217	37	135	45
SS	14.2			60		39	21
RC	17.0			8		7	1
RA	13.0			3			3
ALL	14.2	6.0		572	76	370	126

Unit Cruise Design: PICTURE MORA U11

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	19.0	20.4	10	5	0

Unit Cruise Summary: PICTURE MORA U11

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	14	28	2.8	1
WH	9	20	2.0	1
SS	3	6	0.6	0
RC	1	1	0.1	0
RA	1	1	0.1	0
ALL	28	56	5.6	2

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA 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	152.4	71.0	22.5	98.4	14.0	3.7	15,000	72.4	22.8
WH	108.9	81.6	25.8	104.8	17.3	5.8	11,405	83.5	26.5
SS	32.7	140.5	44.4	96.1	29.6	17.1	3,140	143.6	47.6
RC	4.0	316.2	100.0	102.8	0.0	0.0	411	316.2	100.0
RA	4.0	316.2	100.0	36.9	0.0	0.0	148	316.2	100.0
ALL	302.0	28.6	9.0	99.7	20.1	3.8	30,104	35.0	9.8

Unit Summary: PICTURE MORA U11

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	14	ALL	15.0	61	76	15,806	15,000	5.1	124.2	152.4	39.4	285.0
RA	LIVE	CUT	1	ALL	13.0	40	47	169	148	12.8	4.3	4.0	1.1	2.8
RC	LIVE	CUT	1	ALL	17.0	61	76	411	411	0.0	2.5	4.0	1.0	7.8
SS	LIVE	CUT	3	ALL	14.2	62	78	3,278	3,140	4.2	29.7	32.7	8.7	59.7
WH	LIVE	CUT	9	ALL	13.2	58	71	11,729	11,405	2.8	114.6	108.9	30.0	216.7
ALL	LIVE	CUT	28	ALL	14.2	60	74	31,394	30,104	4.1	275.3	302.0	80.1	572.0
ALL	ALL	ALL	28	ALL	14.2	60	74	31,394	30,104	4.1	275.3	302.0	80.1	572.0

Cruise Unit Report PICTURE MORA U12

Unit Sale Notice Volume (MBF): PICTURE MORA U12

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
WH	13.7			145	23	83	40
DF	14.3			93	17	47	28
SS	18.0			30	18	9	3
ALL	14.3			268	58	139	71

Unit Cruise Design: PICTURE MORA U12

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	10.0	11.1	6	5	0

Unit Cruise Summary: PICTURE MORA U12

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
WH	13	17	2.8	0
DF	10	11	1.8	0
SS	3	3	0.5	0
ALL	26	31	5.2	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA U12

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 (%)
WH	154.2	26.6	10.8	94.2	19.2	5.3	14,531	32.8	12.1
DF	99.8	41.1	16.8	92.7	16.1	5.1	9,256	44.1	17.5
SS	27.2	109.5	44.7	110.2	8.7	5.0	2,999	109.9	45.0
ALL	281.3	14.6	5.9	95.2	17.4	3.4	26,786	22.7	6.9

Unit Summary: PICTURE MORA U12

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	10	ALL	14.3	62	78	9,256	9,256	0.0	89.5	99.8	26.4	92.6
SS	LIVE	CUT	3	ALL	18.0	66	84	2,999	2,999	0.0	15.4	27.2	6.4	30.0

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	13	ALL	13.7	60	74	14,531	14,531	0.0	150.7	154.2	41.7	145.3
ALL	LIVE	CUT	26	ALL	14.2	61	76	26,786	26,786	0.0	255.6	281.3	74.5	267.9
ALL	ALL	ALL	26	ALL	14.2	61	76	26,786	26,786	0.0	255.6	281.3	74.5	267.9

Cruise Unit Report PICTURE MORA U13 ROW

Unit Sale Notice Volume (MBF): PICTURE MORA U13 ROW

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	12.0			11	3	4	4
WH	17.3			9	4	4	1
SS	23.0			5	4	1	
ALL	14.2			24	11	8	5

Unit Cruise Design: PICTURE MORA U13 ROW

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	1.0	3.2	1	1	0

Unit Cruise Summary: PICTURE MORA U13 ROW

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	3	3	3.0	0
WH	2	2	2.0	0
SS	1	1	1.0	0
ALL	6	6	6.0	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA U13 ROW

Sp	BA (sq ft/acre)	BA CV (%)	BA SE (%)	V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)	Vol CV (%)	Vol SE (%)
DF	120.0	0.0	0.0	91.9	16.7	9.7	11,031	16.7	9.7
WH	80.0	0.0	0.0	105.9	21.8	15.4	8,475	21.8	15.4
SS	40.0	0.0	0.0	114.7	0.0	0.0	4,588	0.0	0.0
ALL	240.0	0.0	0.0	100.4	17.2	7.0	24,093	17.2	7.0

Unit Summary: PICTURE MORA U13 ROW

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	3	ALL	12.0	48	59	11,031	11,031	0.0	152.8	120.0	34.6	11.0
SS	LIVE	CUT	1	ALL	23.0	70	89	4,588	4,588	0.0	13.9	40.0	8.3	4.6
WH	LIVE	CUT	2	ALL	17.3	68	84	8,475	8,475	0.0	49.0	80.0	19.2	8.5

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
ALL	LIVE	CUT	6	ALL	14.3	54	66	24,093	24,093	0.0	215.7	240.0	62.2	24.1
ALL	ALL	ALL	6	ALL	14.3	54	66	24,093	24,093	0.0	215.7	240.0	62.2	24.1

Cruise Unit Report PICTURE MORA U14

Unit Sale Notice Volume (MBF): PICTURE MORA U14

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	15.2	6.0		393	44	271	78
WH	13.2	6.0		256	44	159	53
SS	15.4			85	22	43	20
RA	12.9			32			32
RC	14.0			12		10	2
ALL	14.3	6.0		777	110	482	186

Unit Cruise Design: PICTURE MORA U14

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	28.0	30.5	15	7	0

Unit Cruise Summary: PICTURE MORA U14

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	17	39	2.6	1
WH	9	24	1.6	1
SS	4	8	0.5	0
RA	7	7	0.5	0
RC	1	2	0.1	0
ALL	38	80	5.3	2

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA U14

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	141.5	67.9	17.5	99.1	13.1	3.2	14,028	69.1	17.8
WH	87.1	93.9	24.2	104.8	17.3	5.8	9,124	95.5	24.9
SS	29.0	139.4	36.0	104.2	27.1	13.6	3,026	142.0	38.5
RA	18.7	241.2	62.3	61.6	24.8	9.4	1,149	242.4	63.0
RC	5.3	263.9	68.1	79.5	0.0	0.0	424	263.9	68.1
ALL	281.7	27.9	7.2	98.5	22.7	3.7	27,751	36.0	8.1

Unit Summary: PICTURE MORA U14

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	17	ALL	15.2	63	78	14,644	14,028	4.2	112.3	141.5	36.3	392.8
RA	LIVE	CUT	7	ALL	12.9	49	59	1,222	1,149	5.9	20.6	18.7	5.2	32.2
RC	LIVE	CUT	1	ALL	14.0	55	68	469	424	9.6	5.0	5.3	1.4	11.9
SS	LIVE	CUT	4	ALL	15.4	64	80	3,118	3,026	3.0	22.4	29.0	7.4	84.7
WH	LIVE	CUT	9	ALL	13.2	58	71	9,383	9,124	2.8	91.7	87.1	24.0	255.5
ALL	LIVE	CUT	38	ALL	14.3	60	74	28,836	27,751	3.8	252.0	281.7	74.3	777.0
ALL	ALL	ALL	38	ALL	14.3	60	74	28,836	27,751	3.8	252.0	281.7	74.3	777.0

Cruise Unit Report PICTURE MORA U15

Unit Sale Notice Volume (MBF): PICTURE MORA U15

Sp	DBH	Rings/In	Age	MBF Volume by Grade			
				All	2 Saw	3 Saw	4 Saw
DF	13.9	6.0		236	26	156	54
WH	14.5	6.0		207	29	147	31
SS	20.0			38	33		5
RA	12.4			19			19
RC	14.0			12		9	2
ALL	14.2	6.0		511	87	313	111

Unit Cruise Design: PICTURE MORA U15

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	18.0	19.1	10	4	0

Unit Cruise Summary: PICTURE MORA U15

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	9	24	2.4	1
WH	5	18	1.8	1
SS	1	3	0.3	0
RA	4	4	0.4	0
RC	1	2	0.2	0
ALL	20	51	5.1	2

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA U15

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	130.7	83.8	26.5	100.2	15.0	5.0	13,094	85.1	27.0
WH	98.0	97.3	30.8	117.2	9.0	4.0	11,488	97.7	31.0
SS	16.3	225.0	71.1	127.4	0.0	0.0	2,081	225.0	71.1
RA	16.0	316.2	100.0	66.5	22.2	11.1	1,064	317.0	100.6
RC	8.0	210.8	66.7	79.5	0.0	0.0	636	210.8	66.7
ALL	269.0	30.1	9.5	105.4	21.7	4.9	28,363	37.1	10.7

Unit Summary: PICTURE MORA U15

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	9	ALL	13.9	58	72	13,685	13,094	4.3	124.0	130.7	35.0	235.7
RA	LIVE	CUT	4	ALL	12.4	48	58	1,125	1,064	5.4	19.1	16.0	4.5	19.2
RC	LIVE	CUT	1	ALL	14.0	55	68	703	636	9.6	7.5	8.0	2.1	11.5
SS	LIVE	CUT	1	ALL	20.0	71	89	2,081	2,081	0.0	7.5	16.3	3.7	37.5
WH	LIVE	CUT	5	ALL	14.5	70	86	11,668	11,488	1.5	85.5	98.0	25.7	206.8
ALL	LIVE	CUT	20	ALL	14.2	62	76	29,262	28,363	3.1	243.6	269.0	71.1	510.5
ALL	ALL	ALL	20	ALL	14.2	62	76	29,262	28,363	3.1	243.6	269.0	71.1	510.5

Cruise Unit Report PICTURE MORA U16

Unit Sale Notice Volume (MBF): PICTURE MORA U16

Sp	DBH	Rings/In	Age	MBF Volume by Grade		
				All	3 Saw	4 Saw
WH	13.6			45	33	13
DF	12.1			27	12	14
SS	14.0			8	7	1
ALL	13.0			80	52	28

Unit Cruise Design: PICTURE MORA U16

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
B2C: VR, 2 BAF (54.44, 40 for some species) Measure/Count Plots, Sighting Ht = 4.5 ft	3.0	3.0	2	2	0

Unit Cruise Summary: PICTURE MORA U16

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
WH	6	6	3.0	0
DF	4	4	2.0	0
SS	1	1	0.5	0
ALL	11	11	5.5	0

Unit Cruise Statistics (Cut + Leave Trees): PICTURE MORA U16

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 (%)
WH	163.3	0.0	0.0	92.5	15.8	6.5	15,101	15.8	6.5
DF	108.9	0.0	0.0	81.1	18.7	9.3	8,835	18.7	9.3
SS	27.2	141.4	100.0	99.2	0.0	0.0	2,699	141.4	100.0
ALL	299.4	12.9	9.1	89.0	16.6	5.0	26,635	21.0	10.4

Unit Summary: PICTURE MORA U16

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	4	ALL	12.1	57	70	8,835	8,835	0.0	136.4	108.9	31.3	26.5
SS	LIVE	CUT	1	ALL	14.0	62	78	2,699	2,699	0.0	25.5	27.2	7.3	8.1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
WH	LIVE	CUT	6	ALL	13.6	61	76	15,101	15,101	0.0	161.9	163.3	44.3	45.3
ALL	LIVE	CUT	11	ALL	13.0	60	74	26,635	26,635	0.0	323.8	299.4	82.9	79.9
ALL	ALL	ALL	11	ALL	13.0	60	74	26,635	26,635	0.0	323.8	299.4	82.9	79.9



Forest Practices Application/Notification Notice of Decision

FPA/N No: 2617918

Effective Date: 6/3/2023

Expiration Date: 6/3/2026

Shut Down Zone: MULTIPLE

EARR Tax Credit: Eligible Non-eligible

Reference: DNR

Picture Mora

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

Issued By: Elliot Mann

Region: Olympic

Title: Forest Practices Forester

Date: 6/3/2023

Copies to: Landowner, Timber Owner and Operator

Issued in person: LO TO OP By: _____ Date: _____

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 Olympic Region
<u>Physical Address</u> 1111 Israel Road, SW Suite 301 Tumwater, WA 98501 <u>Mailing address</u> Post Office Box 40903 Olympia, WA 98504-0903	<u>Physical Address</u> 1125 Washington Street, SE Olympia, WA 98504 <u>Mailing Address</u> Post Office Box 40100 Olympia, WA 98504-0100	<u>Physical & Mailing Address</u> 411 Tillicum Lane Forks, WA 98331

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

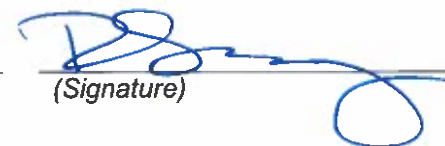
Failure by the seller to send the required notice to DNR at the time of sale will be prima facie evidence in an action by the buyer against the seller for costs related to the continuing forestland obligation prior to sale.

DNR Declaration of Mailing

I, Rosielly Sanchez, caused the Notice of Decision for FPA/N No. 2617918 to be placed in the United States mail at Forks, WA, postage paid. I declare under penalty of perjury of the laws of the State of Washington, that the foregoing is true and correct.

6/3/2023
(Date)

Forks, Washington
(City & State where signed)


(Signature)

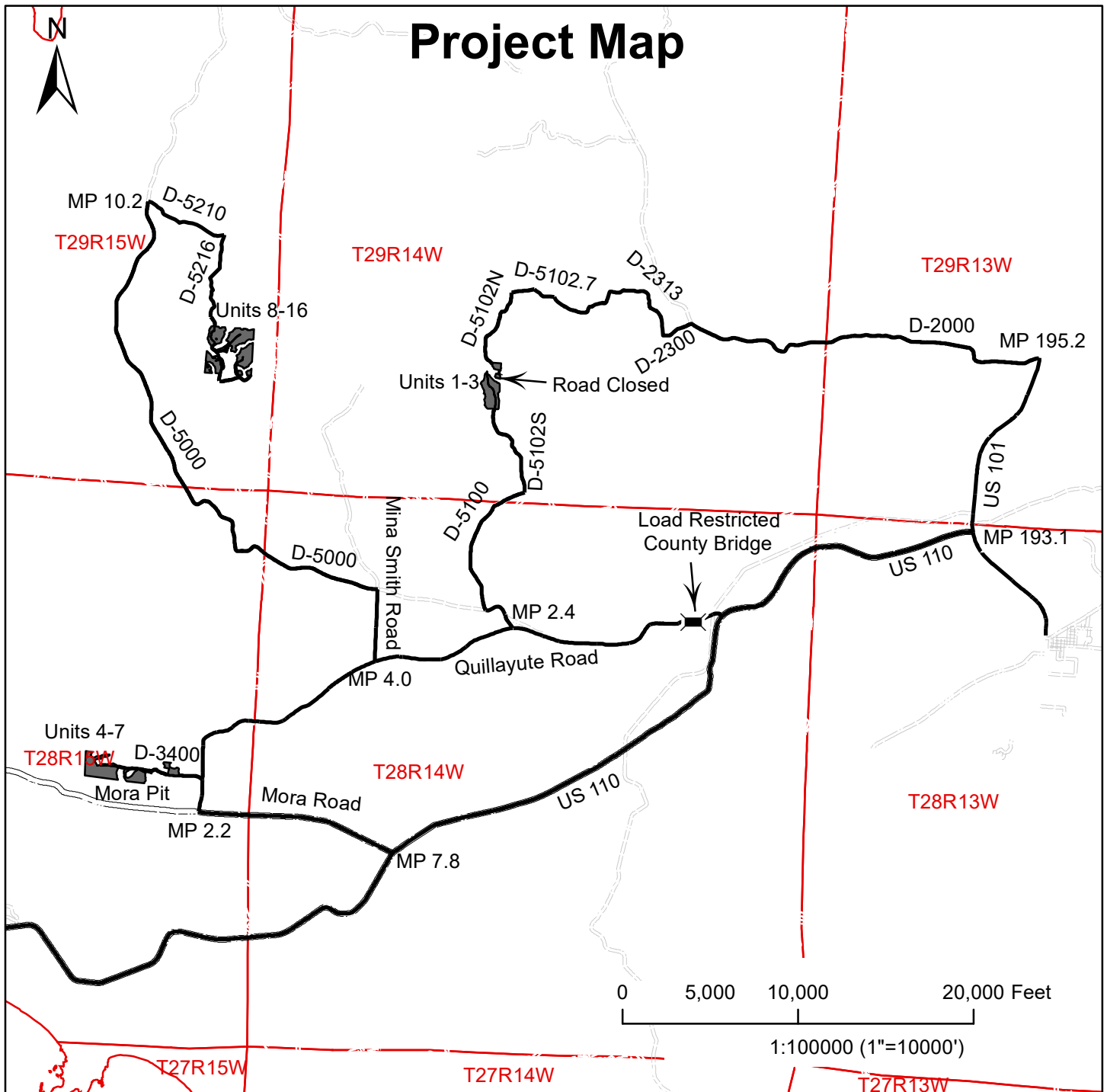
STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
PICTURE MORA TIMBER SALE ROAD PLAN
CLALLAM COUNTY
COAST DISTRICT

AGREEMENT NO. 30-103765

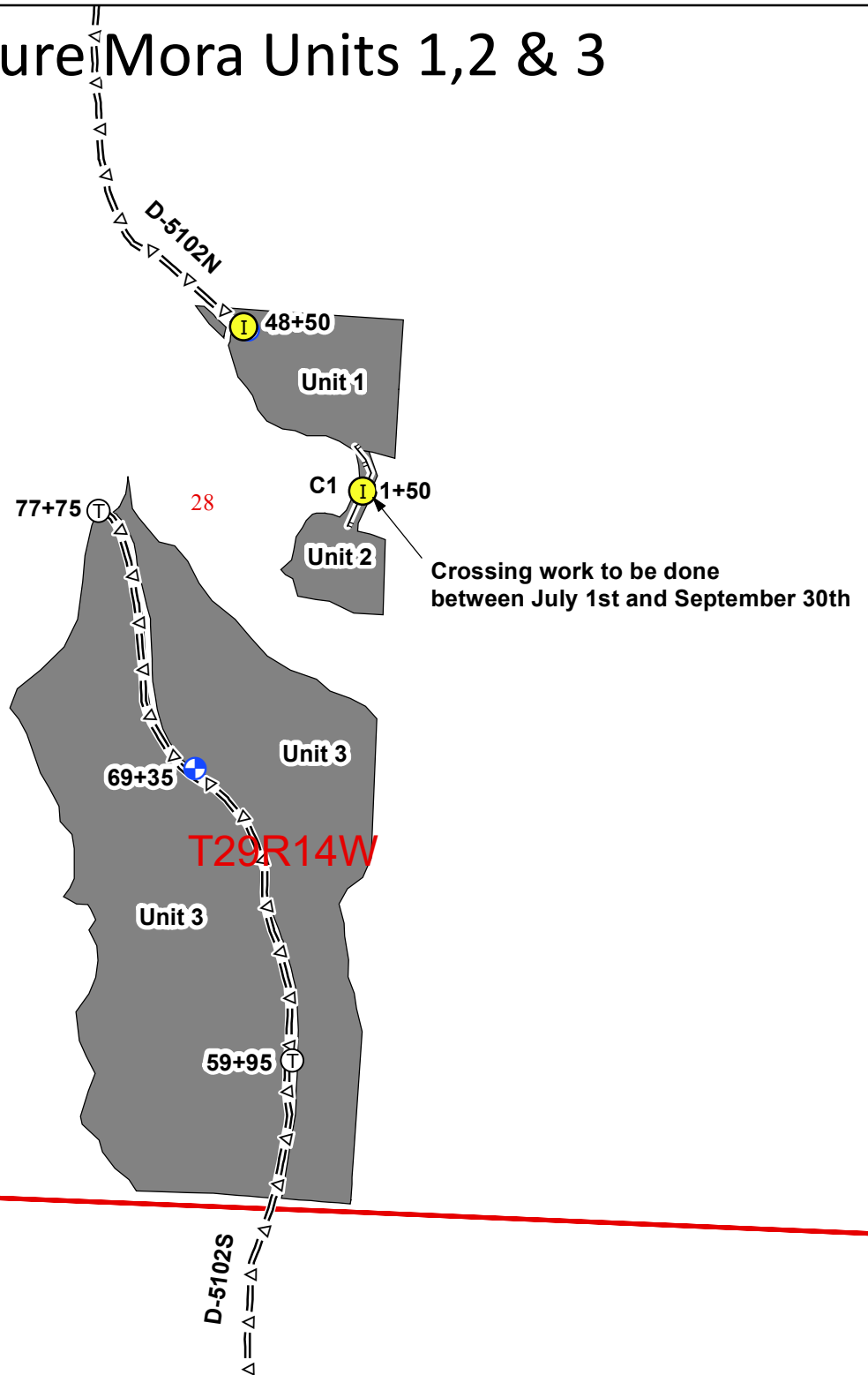
DISTRICT ENGINEER: BILL MEHL

DATE: 5 JUNE 2023

DRAWN AND COMPILED BY: KEVIN SILCOX

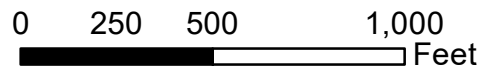


Picture Mora Units 1, 2 & 3



Legend

- Culvert Install Optional Pre-Haul Maintenance
- Landing Designated Skid Trail
- Turn Around Picture Mora Units



Picture Mora Unit 4



14

13

All Equipment shall be washed
before entering D-3400.1

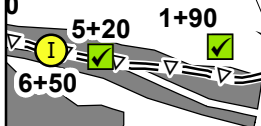
er 30th

T28R15W

30+00 = 0+00

Mora Pit

Unit 4



Stumps to be cut flush and rocked over in right of way
STA 1+90 to 5+20

17+35

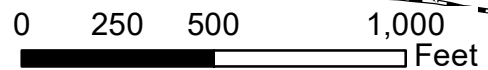
D-3400

23

24

Legend

- Culvert Install
- Rockpit
- Gate
- Silt Fence
- Landing
- Optional Pre-Haul Maintenance
- Picture Mora Units



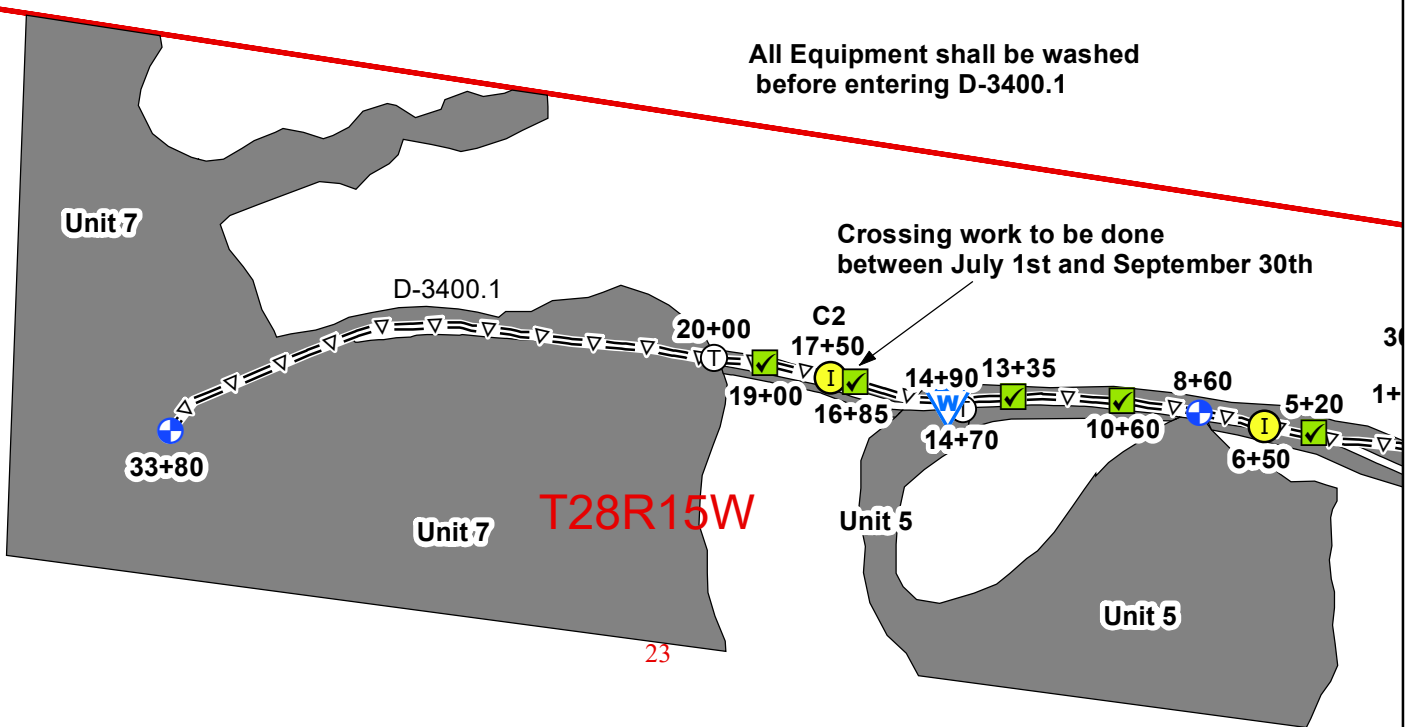
Picture Mora Units 5,6, & 7



14

All Equipment shall be washed
before entering D-3400.1

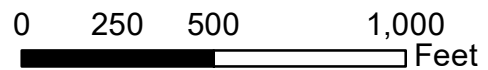
Crossing work to be done
between July 1st and September 30th



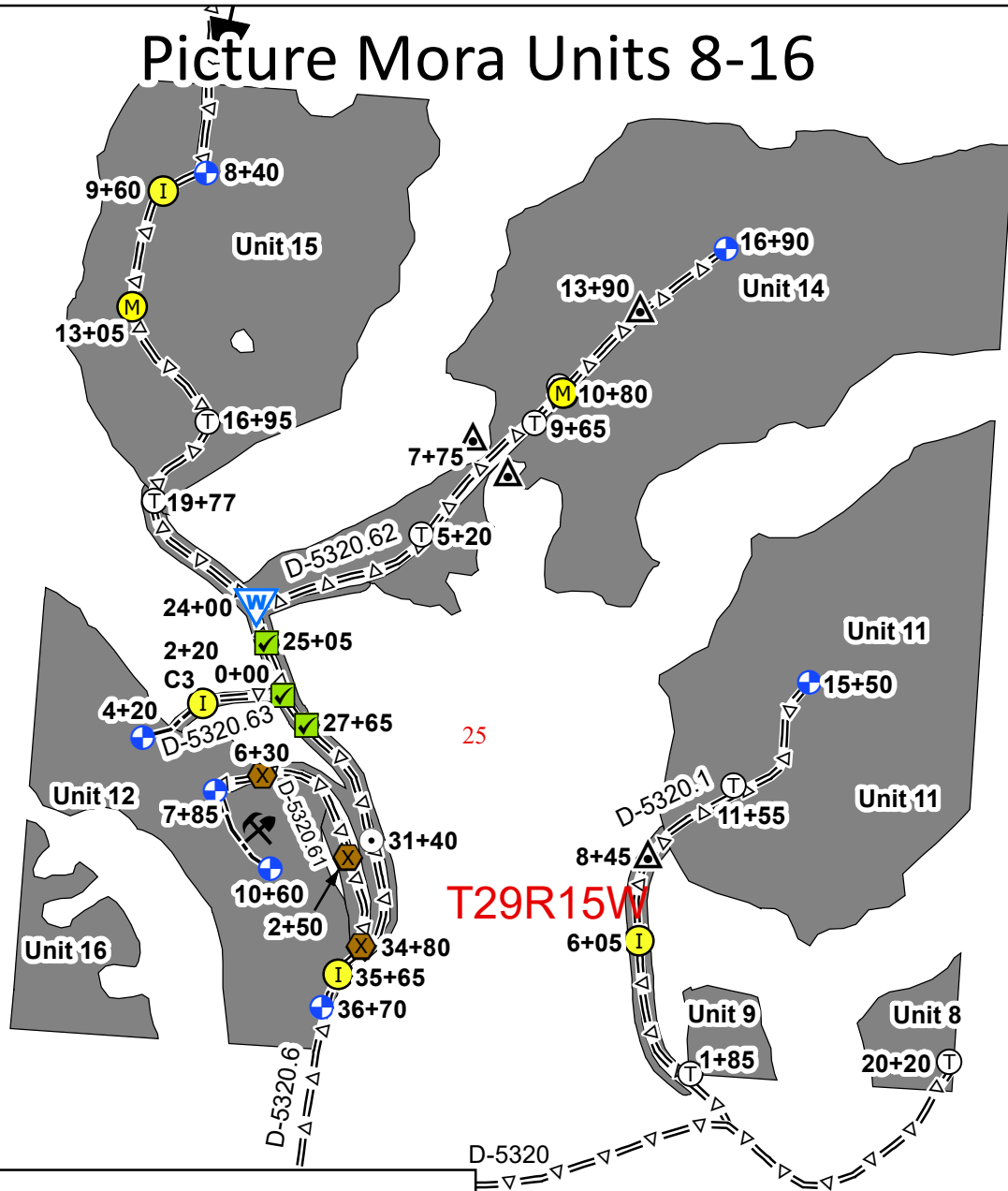
Stumps to be cut flush and rocked over in right of way
STA 1+90 to 5+20

Legend

- Culvert Install
- Silt Fence
- Landing
- Waste Area
- Turn Around
- Optional Pre-Haul Maintenance
- Picture Mora Units

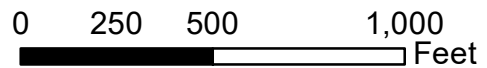


Picture Mora Units 8-16



Legend

- Culvert Install
- Culvert Clean
- Widening
- Ditch Out
- Landing
- Spot Patch
- Waste Area
- Turn Around
- Optional Pre-Haul Maintenance
- Optional Construction
- Silt Fence
- Picture Mora Units



Picture Mora Pre Haul Roads



MP 10.2

D-5210

MP 0.9

D-5000

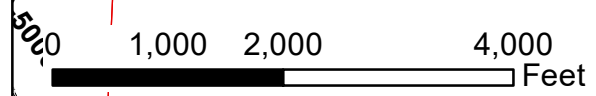
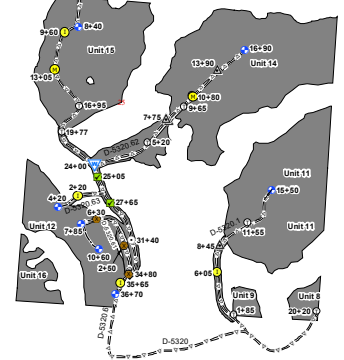
D-5216

T29R15W

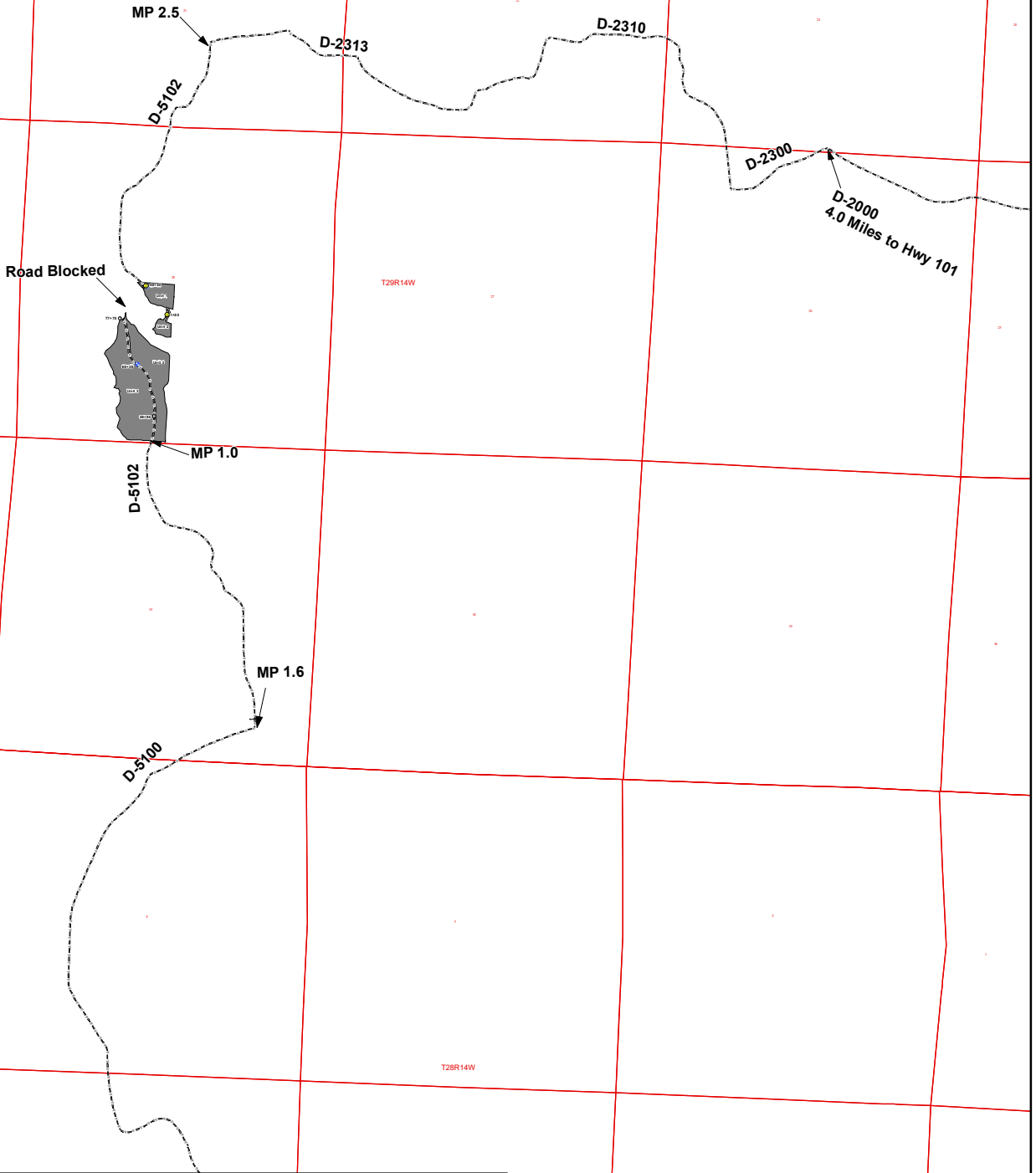
MP 1.0

Legend







- Gate
- Silt Fence
- Culvert Clean
- Widening
- Ditch Out
- Culvert Install
- Landing
- Spot Patch
- Waste Area
- Turn Around
- Optional Pre-Haul Maintenance
- Optional Construction
- Picture Mora Units

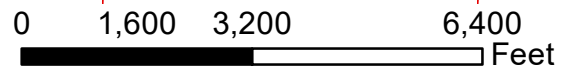


Picture Mora Pre Haul Roads



Legend

-  Culvert Install =  Optional Pre-Haul Maintenance
-  Landing  Designated Skid Trail
-  Turn Around  Picture Mora Units

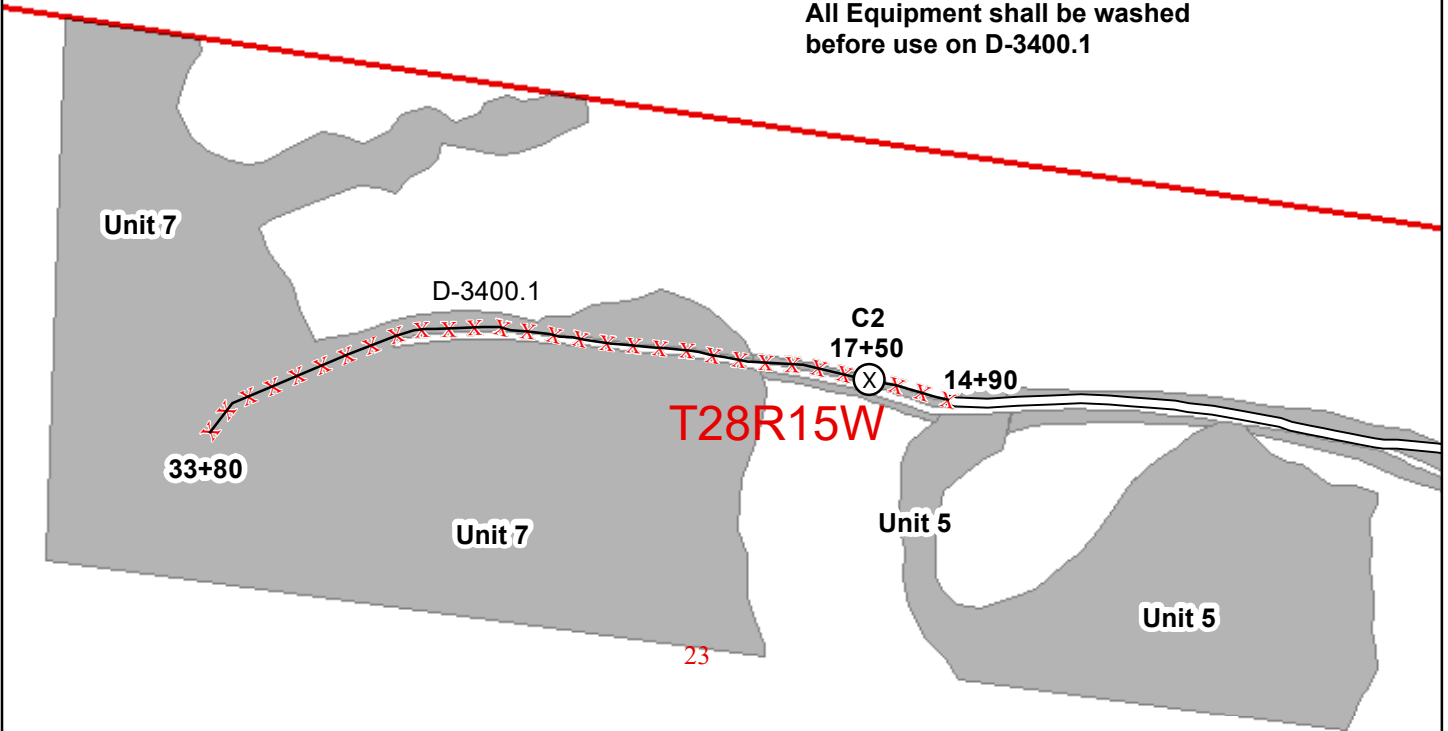


Picture Mora Decommissioning







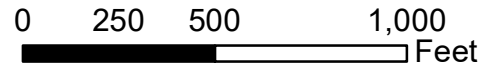
14

All Equipment shall be washed
before use on D-3400.1

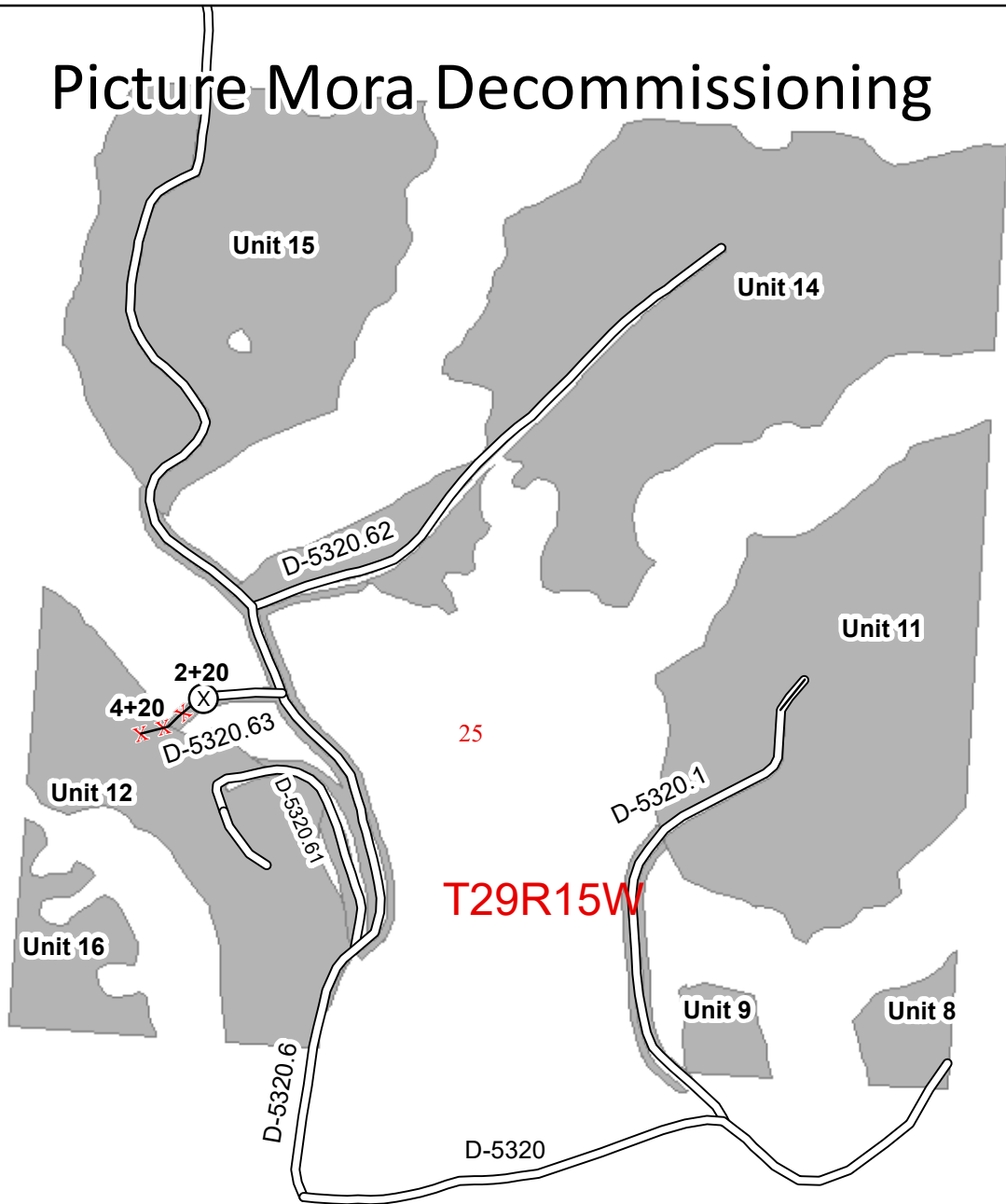


Legend





-  Culvert Removal-Post Haul
-  Required Decommission
-  Existing Roads
-  Picture Mora Units

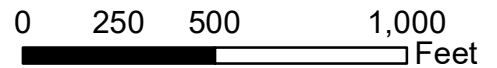


Picture Mora Decommissioning



Legend

-  Culvert Removal-Post Haul
-  Required Decommission
-  Existing Roads
-  Picture Mora Units



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.

0-3 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>
D-3400.1	0+00 to 33+80	Pre-Haul Maintenance
D-3400	0+00 to 30+00	Pre-Haul Maintenance
D-5000 East	0+00 to 22+99	Pre-Haul Maintenance
D-5000 West	0+00 to 323+04	Pre-Haul Maintenance
D-5100	0+00 to 84+16	Pre- Haul Maintenance
D-5102 South	0+00 to 77+75	Pre-Haul Maintenance
D-5102 North	0+00 to 48+50	Pre-Haul Maintenance
D-5102.7	0+00 to 13+15	Pre-Haul Maintenance
D-5102DET	0+00 to 2+65	Designated Equipment Trail
D-5210	0+00 to 49+90	Pre-Haul Maintenance
D-5216	0+00 to 51+75	Pre-Haul Maintenance
D-2000	0+00 to 213+17	Pre-Haul Maintenance
D-2300	0+00 to 17+91	Pre-Haul Maintenance
D-2310	0+00 to 49+49	Pre-Haul Maintenance
D-2313	0+00 to 41+90	Pre-Haul Maintenance
D-5320	0+00 to 20+20	Pre-Haul Maintenance
D-5320.1	0+00 to 15+50	Pre-Haul Maintenance
D-5320.61	0+00 to 7+85	Pre-Haul Maintenance
D-5320.61	7+85 to 10+60	Construction
D-5320.62	0+00 to 16+90	Pre- Haul Maintenance
D-5320.63	0+00 to 2+20	Pre- Haul Maintenance
D-5320.63	2+20 to 4+20	Construction
D-5320.6	0+00 to 42+25	Pre-Haul Maintenance

0-4 CONSTRUCTION

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
D-5320.63	2+20 to 4+20	See Below
D-5320.61	7+85 to 10+60	See Below
Total Stations	4.75 Stations	

Construction includes, but is not limited to: Clearing, grubbing, right-of-way debris disposal, excavation and/or embankment to subgrade, end hauling material for construction, compacting road surfaces, constructing ditchlines, constructing ditchouts, constructing turnouts and turnarounds, curve widening, acquisition and installation of drainage structures, application of rock, spreading grass seed and hay.

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>
D-3400	0+00 to 30+00	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.
D-3400.1	0+00 to 33+80	Grade and shape road in accordance with Clause 2-5. Construct ditches in accordance with Clause 2-7 and 4-38. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Install culverts in accordance with Culvert List. Construct catch basins with silt fence in accordance with Clause 8-1 and 3-23. Maintain erosion control structures in accordance with Clause 2-8, 3-23 and as directed by Contract Administrator. Install culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List
D-5000 East	0+00 to 22+99	Apply rock in accordance with Rock List.
D-5000 West	0+00 to 323+04	Apply rock in accordance with Rock List.
D-5100	0+00 to 84+16	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.
D-5102 South	0+00 to 77+75	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.

D-5102 North	0+00 to 48+50	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.
D-5210	0+00 to 49+90	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.
D-5216	0+00 to 51+75	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.
D-5102.7	0+00 to 13+15	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.
D-2000	0+00 to 213+17	Apply rock in accordance with Rock List.
D-2300	0+00 to 17+91	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.
D-2310	0+00 to 49+49	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.
D-2313	0+00 to 41+90	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.
D-5320	0+00 to 20+20	Grade and shape road in accordance with Clause 2-5. Apply rock in accordance with Rock List.
D-5320.1	0+00 to 15+50	Grade and shape road in accordance with Clause 2-5. Construct ditches in accordance with Clause 2-7 and 4-38. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Install culverts in accordance with Culvert List. Install culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List
D-5320.61	0+00 to 7+85	Grade and shape road in accordance with Clause 2-5. Construct ditches in accordance with Clause 2-7 and 4-38. Remove all vegetative material with a

		<p>minimum loss of rock in accordance with Clause 2-9 and 3-23.</p> <p>Embankment Widening in accordance with Clause 4-9. Apply rock in accordance with Rock List.</p> <p>Compact rock in accordance with Compaction List</p>
D-5320.62	0+00 to 16+90	<p>Grade and shape road in accordance with Clause 2-5. Clean Culverts in accordance with Clause 2-6.</p> <p>Construct ditches in accordance with Clause 2-7 and 4-38. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Install culverts in accordance with Culvert List. Construct ditch outs in accordance with Clause 4-29. Apply rock in accordance with Rock List.</p> <p>Compact rock in accordance with Compaction List</p>
D-5320.63	0+00 to 2+20	<p>Grade and shape road in accordance with Clause 2-5. Remove all vegetative material with a minimum loss of rock in accordance with Clause 2-9 and 3-23. Install culverts in accordance with Culvert List.</p> <p>Construct catch basins with silt fence in accordance with Clause 8-1 and 3-23. Armor stream culverts in accordance with clause 5-27. Install culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List</p>
D-5320.6	0+00 to 42+25	<p>Grade and shape road in accordance with Clause 2-5. Clean Culverts in accordance with Clause 2-6.</p> <p>Construct ditches in accordance with Clause 2-7 and 4-38. Brush is accordance with Clause 3-1. Install culverts in accordance with Culvert List. Construct catch basins with silt fence in accordance with Clause 8-1</p>

		and 3-23. Maintain erosion control structures in accordance with Clause 2-8, 3-23 and as directed by Contract Administrator. Brush road in accordance with Clause 3-1 and Brushing Detail. Armor stream culverts in accordance with clause 5-27. Install culverts in accordance with Culvert List. Apply rock in accordance with Rock List. Compact rock in accordance with Compaction List
Total Stations	1162.4 Stations	

Pre-haul maintenance includes, but is not limited to: Brushing right-of-way, right-of-way debris disposal, cleaning ditches, constructing ditches, installing additional culverts, widening road segments, constructing headwalls, cleaning culvert inlets and outlets, cross drain culvert replacements, installing erosion control materials and sediment removal structures, spot rocking, grading and shaping existing road surface and turnouts, constructing additional turnouts, compaction of road surface, application of rock, acquisition and application of grass seed and hay.

0-7 POST-HAUL MAINTENANCE

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

0-9 DECOMMISSIONING

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

0-10 DESIGNATED EQUIPMENT TRAIL

The D-5102DET is Designated Equipment Trail that may be used to access Unit 2. A temporary log fill culvert crossing shall be installed in accordance with attached plans and drawings. Closure period for activity is October 1st - June 30th.

Trail	Stations	Comment	Closure Period
D-5102DET	0+00 to 2+65	Temp Crossing Sta 1+50	October 1 st - June 30th

0-12 DEVELOP ROCK SOURCE

Purchaser may develop an existing rock source called Picture Pit. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

In the event that the rock pit(s) listed above cannot meet rock specifications in accordance to specifications listed in Section 6, subsection rock gradations and in the

opinion of the Contract Administrator, purchaser shall obtain rock meeting rock specification from a commercial source at their own expense.

0-13 STRUCTURES

Purchaser shall provide and install all structures. Requirements for these structures are listed in Section 7 STRUCTURES.

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).

1-5 DESIGN DATA

Culvert design data is available upon request at the Department of Natural Resources Olympic Region Office in Forks, WA.

1-6 ORDER OF PRECEDENCE

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

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

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

1-7 TEMPORARY ROAD CLOSURE

Purchaser shall notify the Contract Administrator a minimum of 5 calendar days before the closure of any road. Construction may not close any road for more than 3 consecutive days.

1-8 REPAIR OR REPLACEMENT OF DAMAGED MATERIALS

Purchaser shall repair or replace all materials, roadway infrastructure, and road components damaged during road work or operation activities. The Contract Administrator will direct repairs and replacements. Repairs to structural materials must be made in accordance with the manufacturer's recommendation, and may not begin without written approval from the Contract Administrator.

1-9 DAMAGED METALLIC COATING

Any cut ends, or damaged galvanized or aluminized coating on existing or new bridge components, culverts, downspouts, and flumes must be cleaned and treated with a minimum of two coats of zinc rich paint or cold galvanizing compound.

1-11 FPHP REQUIREMENTS

The following work is subject to requirements under a Forest Practice Hydraulics Project Approval issued by the State of Washington.

<u>Road</u>	<u>Stations</u>	<u>Work Type</u>
D-3400.1	17+50	Temporary Culvert
D-5102DET	1+50	Temporary Culvert
D5230.63	2+20	Temporary Culvert

1-12 SURVEY MONUMENTS

At no time during construction, reconstruction, or maintenance shall survey monuments, witness trees, or bearing trees be disturbed or damaged. If damaged or disturbed, Purchaser shall hire a licensed land surveyor to repair, replace, and/or reset them.

SUBSECTION ROAD MARKING

1-15 ROAD MARKING

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

- Orange ribbon and paint for construction centerlines.
- Construction stakes for everything else.

1-16 CONSTRUCTION STAKES SET BY STATE

Purchaser shall perform work on the following road(s) in accordance with the construction stakes and reference points set in the field for grade and alignment. Reconstruction of existing road grades must conform to the original location except where construction staked or designed.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
D-3400.1	17+50	Temporary Culvert
D-5320.1	6+05	Culvert Replacement
D-5320.6	35+65	Culvert Replacement
D-5320.6	9+60	Culvert Install
D-5320.63	2+20	Culvert Install
D-5102DET	1+50	Temporary Culvert

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 pre-haul, post haul, decommissioning road work by the specified date.

<u>Road</u>	<u>Stations</u>	<u>Comments /Date</u>
D-3400.1	0+00 to 33+80	September 30, 2024

1-21 HAUL APPROVAL

Purchaser shall not use roads under this road plan without written approval from the Contract Administrator.

1-22 WORK NOTIFICATIONS

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

1-23 ROAD WORK PHASE APPROVAL

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

- Subgrade construction
- Drainage installation
- Subgrade compaction
- Rock application

- Rock compaction

1-25 ACTIVITY TIMING RESTRICTION

On the following road(s), the following activities are not allowed during the listed closure period(s) unless authorized in writing by the Contract Administrator.

<u>Road</u>	<u>Stations</u>	<u>Activity</u>	<u>Closure Period</u>
D3400.1	All	All	November 1 st – April 30 th
D3400.1	17+50 to 33+80	Culvert Install and Removal, Decommissioning	October 1st- June 30th
D5230.6	All	All	November 1 st – April 30 th
D5230.61	All	All	November 1 st – April 30 th
D5230.62	All	All	November 1 st – April 30 th
D5230.1	All	All	November 1st – April 30th
D5102-DET	All	All	October 1st- June 30th

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause 1-25

ACTIVITY TIMING RESTRICTION or Contract Clause H-130 HAULING SCHEDULE, 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.

1-29 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:

- When, in the opinion of the Contract Administrator excessive road damage or rutting may occur.

Operations must stop unless authority to continue working or hauling is granted in writing by the Contract Administrator. In the event that surface or base stability problems persist, Purchaser shall cease operations, or perform corrective maintenance or repairs, subject to specifications within this road plan. Before and during any suspension, Purchaser shall protect the work from damage or deterioration.

1-32 BRIDGE SURFACE RESTRICTION

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

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

1-33 SNOW PLOWING RESTRICTION

On all roads, snowplowing will be allowed after the execution of a SNOW PLOWING AGREEMENT, which is available from the Contract Administrator upon request. Purchaser shall request a SNOW PLOWING AGREEMENT each time plowing occurs. If damage occurs while plowing, further permission to plow may be revoked by the Contract Administrator.

1-34 EQUIPMENT CLEANING RESTRICTION

All off-road equipment must be cleaned of dirt/mud, seeds, and other plant parts before it is moved onto D-3400.1 road. ‘Off-road equipment’ includes all machinery other than log trucks, chip vans, pickup trucks or vehicles used to transport personnel on a daily basis.

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.

The following county roads and state highways are affected by this sale:

<u>Road Name</u>
Quillayute Prairie Rd.
US 101
Mina Smith Road

1-41 REQUIREMENTS FOR PAVED ROAD APPROACHES

Requirements for the paved road approaches:

Purchaser shall build up approaches to allow a smooth grade transition between roads. The top of the road surfacing must be kept level with the surface of the paved road at all times.

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, and as listed below, as directed by the Contract Administrator. Purchaser shall maintain roads in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

<u>Road Name</u>
D-2000
D-2300
D-2310
D-2313
D-3400
D-5000
D-5100
D-5102.7
D-5210
D-5216
Loop Pit Access Road

2-4 PASSAGE OF LIGHT VEHICLES

Purchaser shall maintain the following road(s) in a condition that will allow the passage of light administrative vehicles.

<u>Road</u>	<u>Stations</u>
D-3400	0+00 to 30+00
D-5000 East	0+00 to 22+99

D-5000 West	0+00 to 323+04
D-5100	0+00 to 84+16
D-5102 South	0+00 to 77+75
D-5102 North	0+00 to 48+50
D-5210	0+00 to 49+90
D-5216	0+00 to 51+75
D-5102.7	0+00 to 13+15
D-2000	0+00 to 213+17
D-2300	0+00 to 17+91
D-2310	0+00 to 49+49
D-2313	0+00 to 41+90
D-5320	0+00 to 20+20
D-5320.6	0+00 to 42+25

2-5 MAINTENANCE GRADING – EXISTING ROAD

On the following road(s), Purchaser shall use a grader to shape the existing surface.

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
D-3400	0+00 to 30+00	Grade and shape and compact existing road surface.
D-3400.1	0+00 to 33+80	Grade and shape and compact existing road surface.
D-5000 East	0+00 to 22+99	Grade and shape and compact existing road surface.
D-5000 West	0+00 to 323+04	Grade and shape and compact existing road surface.
D-5100	0+00 to 84+16	Grade and shape and compact existing road surface.
D-5102 South	0+00 to 77+75	Grade and shape and compact existing road surface.
D-5102 North	0+00 to 48+50	Grade and shape and compact existing road surface.
D-5210	0+00 to 49+90	Grade and shape and compact existing road surface.
D-5216	0+00 to 51+75	Grade and shape and compact existing road surface.
D-5102.7	0+00 to 13+15	Grade and shape and compact existing road surface.
D-2000	0+00 to 213+17	Grade and shape and compact existing road surface.
D-2300	0+00 to 17+91	Grade and shape and compact existing road surface.
D-2310	0+00 to 49+49	Grade and shape and compact existing road surface.
D-2313	0+00 to 41+90	Grade and shape and compact existing road surface.
D-5320	0+00 to 20+20	Grade and shape and compact existing road surface.
D-5320.1	0+00 to 15+50	Grade and shape and compact existing road surface.
D-5320.61	0+00 to 8+60	Grade and shape and compact existing road surface.
D-5320.62	0+00 to 16+90	Grade and shape and compact existing road surface.
D-5320.63	0+00 to 2+10	Grade and shape and compact existing road surface.
D-5320.6	0+00 to 42+25	Grade and shape and compact existing road surface.

2-6 CLEANING CULVERTS

On the following road(s), Purchaser shall clean the inlets and outlets of all culverts and shall obtain written approval from the Contract Administrator before start of timber haul.

<u>Road</u>	<u>Stations</u>
D-5320.6	13+05
D-5320.62	10+80

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following road(s), Purchaser shall clean and/or construct ditches, headwalls, and catchbasins. Work must be completed before the start of timber haul and must be done in accordance with the Typical Section Sheet. Pulling ditch material across the road or mixing in with the road surface is not allowed. Ditchlines, headwalls, and catch basins shall not encroach into the existing road.

<u>Road</u>	<u>Stations</u>	<u>Left and/or Right</u>	<u>Comments</u>
D-5320.1	0+00 to 15+50	Left/Right	
D-5320.6	0+00 to 19+77	Left	
D-5320.61	0+00 to 8+60	Left	
D-5320.62	0+00 to 16+90	Left/Right	

2-8 MAINTAINING EROSION CONTROL STRUCTURES

On the following road(s), Purchaser shall clean and maintain all erosion control structures. Work must be completed before the start timber haul and must be done in accordance with the pertaining clauses contained in this Road Plan. Excavated material must disposed of as specified in Clauses 4-35 through 4-38.

<u>Road</u>	<u>Stations</u>	<u>Comments</u>
D-3400.1	1+90 to 5+20	Silt Fence Right
D-3400.1	10+60 to 13+35	Silt Fence Right
D-3400.1	16+85 to 19+00	Silt Fence Both Sides
D-5320.6	25+05 to 27+65	Silt Fence Both Sides

2-9 REMOVING VEGETATIVE MATERIAL

On the following road(s), Purchaser shall remove all vegetative material, dirt, mud and other debris on the existing road surface with a minimum loss of rock. Material must disposed of as specified in Clauses 4-35 through 4-38.

<u>Road</u>	<u>Stations</u>
D-3400.1	5+20 to 33+80

D-5320.1	0+00 to 15+50
D-5320.61	0+00 to 8+60
D-5320.62	0+00 to 16+90
D-5320.63	0+00 to 2+10

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

SUBSECTION BRUSHING

3-1 BRUSHING

On the following road(s), Purchaser shall cut vegetative material up to 5 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation may not be disturbed unless directed by the Contract Administrator. Purchaser shall remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets.

<u>Road</u>	<u>Stations</u>
D-5320.6	0+00 to 36+70

3-3 BRUSH REMOVAL

Remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets. Brush should be disposed of so that it will not fall back onto the road prism.

SUBSECTION CLEARING

3-5 CLEARING

Purchaser shall fall all vegetative material larger than 5 inches DBH or over 15 feet high between the marked right-of-way boundaries or if not marked in the field, between the clearing limits specified on the TYPICAL SECTION SHEET. Clearing must be completed before starting excavation and embankment.

3-7 RIGHT-OF-WAY DECKING

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

3-8 PROHIBITED DECKING AREAS

Purchaser shall not deck right-of-way timber in the following areas:

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

SUBSECTION GRUBBING

3-10 GRUBBING

Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET. Purchaser shall also remove stumps with undercut roots outside the grubbing limits. Purchaser shall remove stumps using a hydraulic mounted excavator unless authorized in writing by the Contract Administrator. 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 and on stable locations.

3-14 STUMPS WITHIN DESIGNATED RIGHT OF AWAY AREA

On the following roads(s), Purchaser shall flush cut stumps within right of way tags. Rock for road fill may be placed over flush stumps.

Road	Stations
D-3400.1	0+85 to 5+00

SUBSECTION ORGANIC DEBRIS

3-20 ORGANIC DEBRIS DEFINITION

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

3-21 DISPOSAL COMPLETION

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

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 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.

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 grubbing limits in accordance with Clause 3-23 unless otherwise detailed in this road plan and as directed by the Contract Administrator.

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.

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 16 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 5% in 100 feet.
- Maximum grade change for crest vertical curves is 4% in 100 feet.

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, unless construction staked or designed:

<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.

Curve widening is modified as follows:

<u>Road</u>	<u>Stations</u>	<u>Curve Widening (ft)</u>
D-5320.6	34+80	6

4-9 EMBANKMENT WIDENING

The minimum embankment widening is:

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

Purchaser shall apply embankment widening equally to both sides of the road to achieve the required width. Embankment widening is modified as follows:

<u>Road</u>	<u>Stations</u>	<u>Embankment Widening (ft)</u>	<u>Apply Widening to :</u>
D-5230.61	2+50 to 6+30	6	Left Side

SUBSECTION INTERSECTIONS, TURNOUTS AND TURNAROUNDS

4-21 TURNOUTS

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

4-22 TURNAROUNDS

Turnarounds must be no larger than 50 feet long and 30 feet wide. Locations are subject to written approval by the Contract Administrator.

SUBSECTION DITCH CONSTRUCTION

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

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

4-27 DITCH WORK – MATERIAL USE PROHIBITED

Purchaser shall not pull ditch material across the road or mix in with the road surface. Excavated material must be end hauled to the location specified in Clauses 4-36 through 4-38.

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-29 DITCHOUTS

Purchaser shall construct ditchouts as identified in the table below and as needed to fit as built conditions. 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. L or R denotes ditchout left or ditchout right.

<u>Road</u>	<u>Stations</u>	<u>L or R</u>
D-5320.1	8+45	L
D-5320.62	7+75	L and R
D-5320.62	13+90	L

SUBSECTION WASTE MATERIAL (DIRT)

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. The amount of material allowed in a waste area is at the discretion of the Contract Administrator.

Note: All amount values are estimated bank yards.

<u>Waste Area Location</u>	<u>Waste Generated From Road</u>	<u>Waste Generated at Stations</u>	<u>Estimated Volume</u>
D-5320.6 Sta 24+00	Road Widening D-5320.61	2+50 to 6+30	3000 yds ³
D-3400.1 Sta 14+90	Temp Culvert D-3400.1	14+90	100 yds ³

4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- Within a riparian management zone.
- On side slopes steeper than 45%.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Within the operational area for cable landings.
- Against standing timber.

4-39 WASTE AREA COMPACTION

Excavated material may be deposited adjacent to the road prism on side slopes up to 45% if the waste material is compacted and free of debris. On side slopes of 45% or more, all excavation shall be end hauled or pushed to designated waste areas. All waste material shall be compacted. The minimum acceptable compaction is achieved by placing embankments in 2 foot or shallower lifts and routing excavation equipment over the entire width of the lifts, with the exception of side hill embankments too narrow to

accommodate excavation equipment which may be placed by end-dumping or sidecasting until sufficiently wide to support the equipment.

SUBSECTION BORROW

4-45 SELECT BORROW

Select borrow consists of granular material, either naturally occurring or processed, and contains no more than 5% clay, organic debris, or trash by volume.

4-46 COMMON BORROW

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

4-47 NATIVE MATERIAL

Native material consists of naturally occurring material that is free of organic debris, trash, and rocks greater than 12 inches in any dimension.

4-48 BORROW MATERIAL

Borrow material may not contain more than 5% clay, organic debris, or trash by volume.

4-49 BORROW SOURCE

Purchaser shall obtain borrow material from the listed borrow source(s). Development of the borrow source must be in accordance with the attached BORROW SOURCE DETAIL.

<u>Source</u>	<u>Location</u>	<u>Yards</u>
Picture Pit	D-5320.61 Sta 7+85	200 yds ³

4-50 BORROW APPLICATION

Purchaser shall apply borrow in accordance with quantities shown below. Borrow must be spread, shaped, and compacted full width concurrent with hauling operations.

<u>Road</u>	<u>Stations</u>	<u>Cubic Yards</u>	<u>Comments</u>
D-5320.61	7+85 to 10+60	200 yds ³	

SUBSECTION SHAPING

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.

SUBSECTION COMPACTION

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 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 placement of rock.

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.

4-64 WASTE MATERIAL COMPACTION

All waste material shall be compacted by running equipment over it or bucket tamping.

4-65 CULVERT BACKFILL COMPACTION

Culvert backfills shall be accomplished by using a jumping jack compactor, performing at least 2 passes per lift, in lifts not to exceed 8 inches.

4-66 COMPACTION BY METHOD

Compaction shall consist of three complete passes over the entire width of each lift with a vibratory drum roller weighing a minimum of 6,000 pounds at a maximum operating speed of 3 mph. For embankment segments too narrow to accommodate a drum roller, a plate compactor shall be used.

SECTION 5 – DRAINAGE

5-4 PUNCHEON RESTRICTED

At no time shall puncheon be used in the subgrade, unless approved by the Contract Administrator.

SUBSECTION CULVERTS

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 10-23.

5-6 CULVERT TYPE

Purchaser shall install culverts made of plastic in accordance with Clauses 10-17 through 10-24.

5-7 USED CULVERT MATERIAL

On the following road(s), Purchaser may install used culverts. All other culverts must have new culverts installed. Purchaser shall obtain approval from the Contract Administrator for the quality of the used culverts before installation. Culverts must meet the specifications in Clauses 10-15 through 10-24.

<u>Road</u>	<u>Stations</u>
D-5320.63	2+20

5-8 TEMPORARY STREAM CULVERT INSTALLATION

Purchaser shall install temporary culverts as shown in the attached plans or TYPICAL TYPE NS NP DETAIL SHEET. Temporary stream culverts must be located in the natural channel of the stream. Temporary culverts must be removed upon completion of road use, as indicated in Clause 9-20 ROAD DECOMMISSIONING and as directed by the Contract Administrator. Geotextile fabric must meet the specifications in Clause 10-2 GEOTEXTILE FOR SEPARATION.

<u>Road</u>	<u>Stations</u>	<u>Closure Period</u>
D 3400.1	17+50	October 1 st - June 30th
D-5102DET	1+50	October 1 st - June 30th
D-5230.63	2+20	

5-12 UNUSED MATERIALS STATE PROPERTY

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

5-13 CONTINGENCY CULVERTS

The following culverts will be supplied by the Purchaser and are available for installation as directed by the Contract Administrator. In the event that culverts are not used, culverts shall be stockpiled at Mora Pit.

<u>Road</u>	<u>Size</u>
On any portion of road used for timber or rock haul.	18" x 30' culvert 18" culvert band

SUBSECTION CULVERT INSTALLATION

5-15 CULVERT INSTALLATION

Culvert installation must be in accordance with the TYPICAL CROSS DRAIN CULVERT INSTALLATION DETAIL SHEET, TYPICAL TYPE NS NP CULVERT INSTALLATION DETAIL SHEET, 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. Culverts over 15 inches diameter shall be banded using lengths of no less than 10 feet, and no more than one length less than 16 feet. Shorter section of banded culvert shall be installed at the inlet end.

5-16 APPROVAL FOR LARGER CULVERT INSTALLATION

Purchaser shall obtain written approval from the District Engineer or his/her designee for the installation of culverts 30 inches in diameter and over before backfilling.

5-17 CROSS DRAIN SKEW AND SLOPE

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

5-18 CULVERT DEPTH OF COVER

Cross drain culverts must be installed with a depth of cover of not less than 18 inches of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts must be installed with a depth of cover specified in the Engineer's design, TYPICAL TYPE NS NP DETAIL SHEET, or as recommended by the culvert manufacturer for the type and size of the pipe, whichever is greater.

SUBSECTION ENERGY DISSIPATERS

5-20 ENERGY DISSIPATERS

Purchaser shall install energy dissipaters at all culverts on the CULVERT AND ROCK LIST that specify the placement of rock. Energy dissipater installation is subject to approval by the Contract Administrator.

Rock used for energy dissipaters must weigh at least 10 pounds. Energy dissipaters must extend a minimum of 1 foot to each side of the culvert at the outlet and a minimum of 2 feet beyond the outlet. Placement must be with a zero-drop-height method only.

5-21 DOWNSPOUTS AND FLUMES

Downspouts and flumes longer than 10 feet must be staked on both sides at maximum intervals of 10 feet with 6-foot heavy-duty steel posts, and fastened securely to the posts with No. 10 galvanized smooth wire or 1/2-inch bolts in accordance with the TYPICAL CULVERT INSTALLATION DETAILS SHEET.

SUBSECTION CATCH BASINS, HEADWALLS, AND ARMORING

5-25 CATCH BASINS

Purchaser shall construct catch basins to resist erosion. Minimum dimensions of catch basins are 1-2 feet wide, 1-2 feet deep and 2-4 feet long.

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Purchaser shall construct headwalls in accordance with the TYPICAL CROSS DRAIN CULVERT INSTALLATION DETAIL at all cross drain culverts that specify the placement of rock. Rock used for headwalls must consist of oversize or quarry spall material. 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. No placement by end dumping or dropping of rock is allowed.

5-27 ARMORING FOR STREAM CROSSING CULVERTS

At the following culvert(s), Purchaser shall place rip rap immediately following construction of the embankment. Rock must be placed on shoulders, slopes, and around

culvert inlets and outlets as designated on the TYPICAL TYPE NS NP CULVERT INSTALLION DETAIL or 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 method only. No placement by end dumping or dropping of rock is allowed.

<u>Road</u>	<u>Stations</u>	<u>Rock Type</u>
D-5320.1	6+05	Rip Rap
D-5320.6	35+65	Rip Rap
D-5320.6	9+60	Rip Rap
D-5320.63	2+20	Rip Rap

SECTION 6 – ROCK AND SURFACING

SUBSECTION ROCK SOURCE

6-2 ROCK SOURCE ON STATE LAND

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following source(s) on state land at no charge to the Purchaser. Purchaser shall obtain written approval from the Contract Administrator for the use of material from any other source. If other operators are using, or desire to use the rock source(s), 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>	<u>Rock Type</u>
Mora Pit	T28N R15W Section 24	Pit Run
Loop Pit	T29N R13W Section 3	Pit Run, Crushed, Rip Rap
Picture Pit	T29N R15W Section 25	Ballast

6-3 ROCK SOURCE STATE LAND, EXISTING STOCKPILE

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following existing stockpile(s) on state land at no charge to the Purchaser. Purchaser shall not remove more than 780 cubic yards of crushed rock. Purchaser shall not remove additional yardage without prior written approval from the Contract Administrator. Other stockpiles may not be used without prior written approval from the Contract Administrator.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>	<u>Quantity</u>
Loop Pit	T29N R13W Section 3	Crushed	780 yd ³

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. Any commercial rock used for pre-haul maintenance on D-3400.1 shall be certified weed free.

SUBSECTION ROCK SOURCE DEVELOPMENT

6-12 ROCK SOURCE SPECIFICATIONS

Rock sources must be in accordance with the following specifications, unless otherwise specified in the ROCK SOURCE DEVELOPMENT PLAN:

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

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

- Pit walls must be maintained in a condition to minimize the possibility of the walls sliding or failing.
- The width of pit benches must be a minimum of 1.5 times the maximum length of the largest machine used.
- The surface of pit floors and benches must be uniform and free-draining at a minimum 2% outslope gradient.
- All operations must be carried out in compliance with all regulations of the Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration and Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.
- All vehicle access to the top of the pit faces must be blocked.

6-15 REQUIRED ROCK SOURCE WORK

The following rock source work is required. Work is to be done according to the approved Rock Source Development And Reclamation Plan and as directed by the Contract Administrator.

<u>Source</u>	<u>Requirements</u>
Mora Pit	4" shall be scalped off of stripped area before use on D-3400.1 road. Scalped material is to be stockpiled on pit floor away from overburden and may be used on other roads.

6-28 1 ¼-INCH MINUS CRUSHED ROCK

% Passing 1 ¼" square sieve	100%
% Passing 5/8" square sieve	50 - 80%
% Passing U.S. #4 sieve	30 - 50%
% Passing U.S. #40 sieve	3 - 18%
% Passing U.S. #200 sieve	5%

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

6-50 LIGHT LOOSE RIP RAP

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

<u>Quantity</u>	<u>Approximate Size Range</u>
20% to 90%	500 lbs. to 1 ton (18" - 28")
15% to 80%	50 lbs. to 500 lbs. (8" - 18")
10% to 20%	3 inch to 50 lbs. (3" - 8")

SUBSECTION ROCK MEASUREMENT

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

Measurement of specified rock depths, are defined as the compacted depth(s) using the compaction methods required in this road plan. Estimated quantities specified in the ROCK LIST are estimated truck 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.

SUBSECTION ROCK APPLICATION

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for subgrade drainage installation included grading and 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. The Contract Administrator will direct locations for rock that is to be applied as spot patching. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width and in lifts not to exceed 6 inches.

6-72 ROCK APPLICATION AFTER HAULING

On the following road(s), upon completion of all hauling operations, Purchaser shall apply 1 ¼” minus rock in accordance with the quantities shown on the ROCK LIST.

<u>Road</u>	<u>Stations</u>	<u>Rock Type</u>	<u>Amount</u>
D-3400	As Directed	Crushed	30 yd ³
D-5102 South	As Directed	Crushed	50 yd ³
D-5102 North	As Directed	Crushed	50 yd ³
D-5100	As Directed	Crushed	50 yd ³
D-2313	As Directed	Crushed	50 yd ³
D-2310	As Directed	Crushed	50 yd ³
D-5210	As Directed	Crushed	50 yd ³
D-5216	As Directed	Crushed	50 yd ³

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.

6-78 ROCK FOR SPOT PATCHING

Rock for spot patching shall be applied before any grading is done and before any rock lifts are applied. Once applied, spot patches shall be graded into the existing running surface.

SECTION 7 – STRUCTURES

SUBSECTION STREAM CROSSING STRUCTURES GENERAL

7-5 STRUCTURE DEBRIS

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

stockpiling or disposal. Purchaser shall retrieve all material carried downstream from the jobsite.

7-6 STREAM CROSSING INSTALLATION

Purchaser shall install stream crossing structures in accordance with the manufacturer's requirements, and as directed by the District Engineer or their designee.

7-7 BANK PROTECTION FOR STREAM CROSSING STRUCTURES

Purchaser shall design and construct bank protection to prevent the undermining of the structure.

SUBSECTION GATE CLOSURE

7-70 GATE CLOSURE

On the following road(s), Purchaser shall keep gates closed and locked except during periods of haul. All gates that remain open during haul must be locked or securely fastened in the open position. All gates must be closed at termination of use.

<u>Road</u>	<u>Station</u>
D-5102	0+10
D-5210	0+10
D-3400	0+10

SECTION 8 – EROSION CONTROL

8-1 SEDIMENT CONTROL STRUCTURES

On the following roads, Purchaser shall install sediment control structures as listed below.

<u>Road</u>	<u>Stations</u>	<u>Left and/or Right</u>	<u>Comments</u>
D-3400.1	1+90 to 5+20	Right	Silt Fence Along Road
D-3400.1	10+60 to 13+35	Right	Silt Fence Along Road
D-3400.1	16+85 to 19+00	Left and Right	Silt Fence Along Road
D-5320.6	27+65 to 25+05	Left and Right	Silt Fence Along Road
D-5320.63	0+00 to 0+50	Right	Silt Fence Along Road

8-2 PROTECTION FOR EXPOSED SOIL

Purchaser shall provide erosion control matting to all exposed soils at culvert removals within 25 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.

8-3 EROSION CONTROL MATTING

On the following road(s), Purchaser shall install biodegradable erosion control matting to provide full coverage of embankment slopes. Matting must be either natural fiber matting made of jute or coconut , or an erosion control blanket made of wood excelsior. Installation must be in accordance with the manufacturer’s recommendations.

<u>Road</u>	<u>Stations</u>
D-3400.1	17+50

SUBSECTION SLOPE STABILIZATION

8-11 STABILIZE SLOPES – MATERIAL REMOVAL

On the following road(s), Purchaser shall stabilize embankment slopes by removing approximately 3,000 yds³ of embankment and 200 yds³ of sidecast material. End haul all material to a waste area designated in Clause 4-37 WASTE AREA LOCATION or by the Contract Administrator. All work is subject to approval by the Contract Administrator.

<u>Road</u>	<u>Stations</u>
D-5230.61	2+50 to 6+30

SECTION 9 – POST-HAUL ROAD WORK

SUBSECTION STRUCTURES

9-2 CULVERT REMOVAL FROM LIVE STREAM

On the following road(s), Purchaser shall remove existing culverts and puncheons from live streams and leave the resulting channel open with excavation slope and excavated channel width as specified. End haul excavated material to a waste area designated in Clause 4-37 WASTE AREA LOCATION.

<u>Road</u>	<u>Stations</u>	<u>Excavated Channel Width</u>	<u>Slope Ratio</u>	<u>Comments/Timing</u>
D-3400.1	17+50	8’	2:1	Post Haul, Closure October 1 st - June 30th
D-5320.63	2+20	1.5’	2:1	Post Haul, 2024
D-5102DET	1+50	3’	2:1	Post Haul, Closure October 1 st - June 30th

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. If required by the Contract Administrator, designated culverts must be salvaged and delivered to Mora Pit.

SUBSECTION POST-HAUL MAINTENANCE

9-5 POST-HAUL MAINTENANCE

Purchaser shall perform post-haul maintenance in accordance with the FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS and as specified below.

<u>Road</u>	<u>Stations</u>	<u>Additional Requirements</u>
All	All	Clean culverts, clean ditches, grade road shape and compact as directed by the Contract Administrator.
D-3400	As Directed	Apply post haul rock per Clause 6-72.
D-5102 South	As Directed	Apply post haul rock per Clause 6-72.
D-5102 North	As Directed	Apply post haul rock per Clause 6-72.
D-5100	As Directed	Apply post haul rock per Clause 6-72.
D-2313	As Directed	Apply post haul rock per Clause 6-72.
D-2310	As Directed	Apply post haul rock per Clause 6-72.
D-5210	As Directed	Apply post haul rock per Clause 6-72.
D-5216	As Directed	Apply post haul rock per Clause 6-72.

SUBSECTION POST-HAUL LANDING MAINTENANCE

9-10 LANDING DRAINAGE

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

9-11 LANDING EMBANKMENT

Purchaser shall slope landing embankments to the original construction specifications.

SUBSECTION DECOMMISSIONING AND ABANDONMENT

9-20 ROAD DECOMMISSIONING

Purchaser shall decommission the following roads at the termination of use.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
D-5320.63	0+00 to 4+20	Light Decommissioning
D-3400.1	14+90 to 33+80	Light Decommissioning, completed before Sept. 30 th , 2024

9-22 LIGHT DECOMMISSIONING

1. Remove all culverts. Resulting back slopes shall be 1:1 or shallower for cross drains and 1.5:1, or as specified in approved drawings, for all live stream culvert removals. Material removed shall be placed on the roadbed and compacted, with slopes of 2:1 or shallower, or end-hauled to designated waste areas. Culverts removed shall become the property of the Purchaser and removed from State land.

2. Construct non-drivable water bars as directed by the Contract Administrator. On grades in excess of 3%, non-drivable water bars shall be skewed 30 degrees from the perpendicular of the road centerline.
3. Restore all ditchouts to drain water.
4. Repair or construct ditchlines.
5. Remove any berms, except as directed.
6. Restoration of natural stream channels across road prism, as directed by the Contract Administrator.

7. Removing all fill material as approved by the Contract Administrator.
8. All material from fill removals, culvert removals, and bridge removals shall be placed on roadbed and compacted, except that material listed in Clause 4-37.

9. Purchaser shall furnish and apply grass seed to all areas of exposed soil, including but not limited to: water bars, waste piles, and culvert removal sites. Grass seed shall be applied at a rate of 60 pounds per acre.

10. Block road to vehicular traffic using logs, slash, and stumps, as directed by the Contract Administrator.

SECTION 10 MATERIALS

SUBSECTION GEOTEXTILES

10-2 GEOTEXTILE FOR SEPARATION

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

	<u>ASTM Test</u>	<u>Requirements</u>
Type	--	Non-woven
Apparent opening size	D 4751	No. 30 max
Water permittivity	D 4491	0.02 sec ⁻¹

Grab tensile strength	D 4632	160 lb
Grab tensile elongation	D 4632	>= 50%
Puncture strength	D 6241	310 lb
Tear strength	D 4533	50 lb
Ultraviolet stability	D 4355	50% retained after 500 hours of exposure

10-6 GEOTEXTILE FOR TEMPORARY SILT FENCE

Geotextiles must meet the following minimum requirements for strength and property qualities, and must be designed by the manufacturer to be used for filtration. Woven slit-film geotextiles are not allowed. Material must be free of defects, cuts, and tears.

	<u>ASTM Test</u>	<u>Requirements</u>
Type	--	Unsupported between posts
Apparent opening size	D 4751	No. 30 max., No. 100 min.
Water permittivity	D 4491	0.02 sec ⁻¹
Grab tensile strength	D 4632	180 lb in machine direction, 100lb in cross-machine direction
Grab tensile elongation	D 4632	30% max. at 180 lb or more
Ultraviolet stability	D 4355	70% retained after 500 hours of exposure

SUBSECTION EROSION CONTROL AND REVEGETATION

10-10 JUTE EROSION CONTROL MATTING

Jute mesh must have a uniform open plain weave made from jute yarn that does not vary by more than half its nominal diameter. Erosion control matting must conform to the specifications listed below, and must be recommended by the manufacturer for use on embankments with a slope of 1½:1 (H:V) or steeper.

- Mesh size 1 inch max.
- Mesh mass, 0.9 lb/yd² ±5%

10-11 COCONUT EROSION CONTROL MATTING

Coconut mat must have a uniform open plain weave made from jute, coconut coir, synthetic polypropylene fibers, or other approved yarn. Erosion control matting must conform to the specifications listed below, and must be recommended by the manufacturer for use on embankments with a slope of 1½:1 (H:V) or steeper.

- Mesh size 0.5 to 1 inch.
- Mesh mass, 0.4 lb/yd² min.
- Netting must be photodegradable on one side.
- Moisture content may not exceed 20%.

10-12 WOOD EXCELSIOR EROSION CONTROL MATTING

Excelsior blanket must have a uniform thickness made of curled wood excelsior secured on the top side to a biodegradable, photodegradable extruded plastic mesh. Matting

must be smolder resistant without the use of additional chemical additives. Erosion control matting must conform to the specifications listed below, and must be recommended by the manufacturer for use on embankments with a slope of 1½:1 (H:V) or steeper.

- Mesh size 1 to 2 inch.
- Blanket mass, 1 lb/yd² ±10%
- Excelsior fibers 7.8 inch (200-mm) length 80% min.

SUBSECTION CULVERTS

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 C – corrugated single walled pipe. Culverts must be Type S – double walled with a corrugated exterior and smooth interior.

10-22 PLASTIC BAND

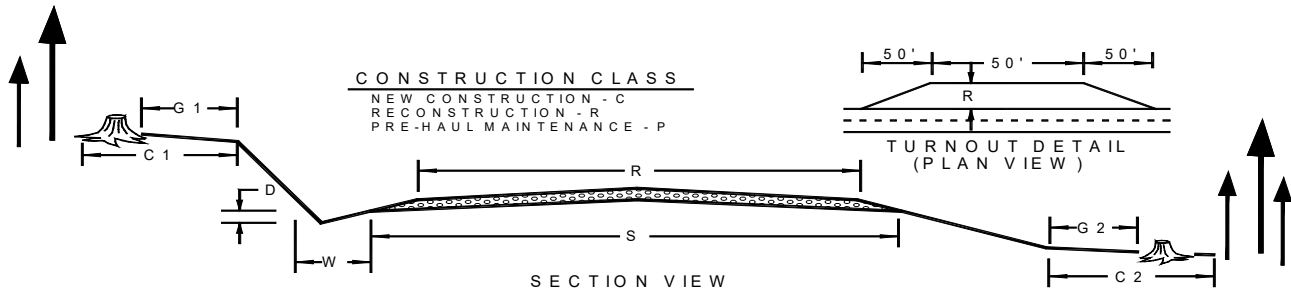
Plastic coupling and end bands must meet the AASHTO specification designated for the culvert. Only fittings supplied or recommended by the culvert manufacturer may be used. Couplings must be split coupling band. Split coupling bands must have a minimum of four corrugations, two on each side of the pipe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

10-24 GAUGE AND CORRUGATION

Unless otherwise stated in the culvert list, metal culverts must conform to the following specifications for gage and corrugation as a function of diameter.

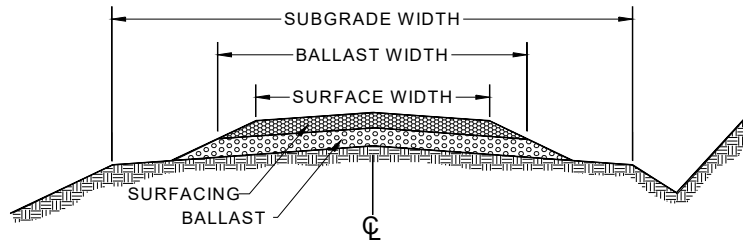
<u>Diameter</u>	<u>Gauge</u>	<u>Corrugation</u>
18"	16 (0.064")	2 2/3" X 1/2"
24" to 48"	14 (0.079")	2 2/3" X 1/2"
54" to 96"	12 (0.109")	5" X 1"

TYPICAL SECTION SHEET



ROAD NAME	START STATION	END STATION	CONSTRUCTION CLASS		TOLERANCE CLASS	SUBGRADE WIDTH (S)	ROAD WIDTH (R)	CROWN AT CL (in)	DITCH WIDTH (W)	DITCH DEPTH (D)	GRUBBING CUT BANK (G1)	GRUBBING FILL TOE (G2)	ROAD CUT CLEARING (C1)	ROAD FILL CLEARING (C2)
D-3400.1	0+00	33+80	P	C			12'	3"	1'					
D-3400	0+00	30+00	P	C			12'	3"	1'					
D-5000 East	0+00	22+99	P	C			20'	3"	1'					
D-5000 West	0+00	323+04	P	C			20'	3"	1'					
D-5100	0+00	84+16	P	C			16'	3"	1'					
D-5102 South	0+00	77+75	P	C			12'	3"	1'					
D-5102 North	0+00	48+50	P	C			12'	3"	1'					
D-5102.7	0+00	13+15	P	C			12'	3"	1'					
D-5210	0+00	49+90	P	C			12'	3"	1'					
D-5216	0+00	51+75	P	C			12'	3"	1'					
D-2000	0+00	213+17	P	C			16'	3"	1'					
D-2300	0+00	17+91	P	C			12'	3"	1'					
D-2310	0+00	49+49	P	C			12'	3"	1'					
D-2313	0+00	41+90	P	C			12'	3"	1'					
D-5320	0+00	20+20	P	C			12'	3"	1'					
D-5320.1	0+00	15+50	P	C			12'	3"	1'					
D-5320.61	0+00	8+60	P	C			12'	3"	1'					
D-5320.61	8+60	10+60	C	C	17'	12'	3"	1'		5'	5'	10'	10'	
D-5320.62	0+00	16+90	P	C			12'	3"	1'					
D-5320.63	0+00	2+10	P	C			12'	3"	1'					
D-5320.63	2+10	4+20	C	C	17'	12'	3"	1'		5'	5'	10'	10'	
D-5320.6	0+00	42+25	P	C			12'	3"	1'					

ROCK LIST SHEET

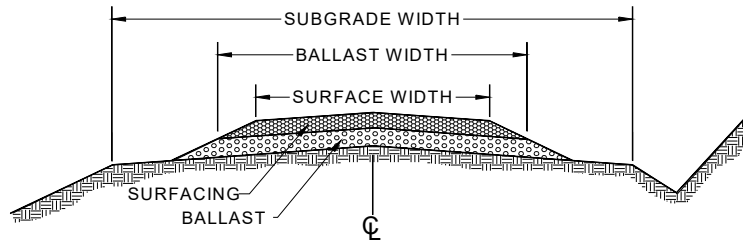


SECTION VIEW

1. Rock quantities, subtotals and totals are "truck measure" estimates. Rock shall be applied to at least the depths listed.
2. All depths are compacted depths.
3. Rock slopes shall be 1½ (H) : 1 (V).
4. All rock sources are subject to approval by the Contract Administrator.
5. Pitrun is defined as pitrun or ballast per Line 6. Crushed is defined as any crushed rock from ¼" minus to 4" minus per Line 6. Oversize is defined as oversize, quarry spalls, light loose rip rap, or heavy loose rip rap per Line 6.
6. Rock sources= 1: Mora Pit, 2: Loop Pit 1 ¼ Crushed, 3: Picture Pit Ballast

ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
D-5320															
Turn Around	20+20			1				50							
D-5320.1															
Lift	1+55	15+50		1	12	6	35	490							
Turn Around	1+85			1				50							
Culvert	6+05			1				20						2	2
Turn Around	11+55			1				50							
Landing	15+50			1				100							
D-5320.6															
Lift	3+72	8+40		1	12	12	70	330							
Lift	8+40	19+77		1	12	6	35	400	2	12	6	35	400		
Lift	19+77	37+90		1	12	12	70	1270							
Landing	8+40			1				100							
Culvert	9+60			1				20						2	2
Turn Around	16+95			1				50							
Turn Around	19+77			1				50							
Spot Patch	31+40			1				20							
Widening	34+80			1											
Culvert	35+65			1				20						2	2
Page Totals:								3020					400		6

ROCK LIST SHEET CONTINUED

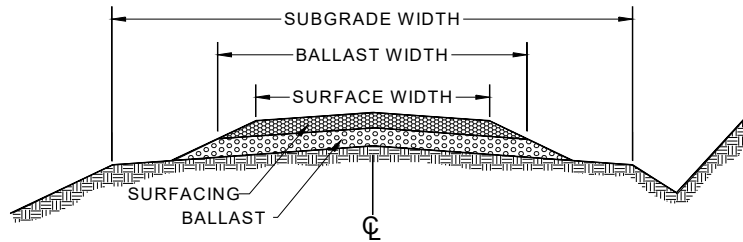


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ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
Landing	36+70			1				100							
D-5320.61															
Lift	0+00	8+60		1	12	12	70	600							
Lift	8+60	10+60		3	12	18	110	220							
Landing	7+85			1				100							
Landing	10+60			1				100							
D-5320.62															
Lift	0+00	16+90		1	12	12	70	1180							
Turn Around	5+20			1				50							
Turn Around	9+65			1				50							
Turn Arouds	10+80			1				100							
Landing	16+90			1				100							
D-5320.63															
Lift	0+00	2+10		1	12	12	70	150							
Lift	2+10	4+20		1	12	18	110	230							
Culvert	2+20			1				40						2	2
Landing	4+20			1				100							
Totals:								3120							2

ROCK LIST SHEET CONTINUED

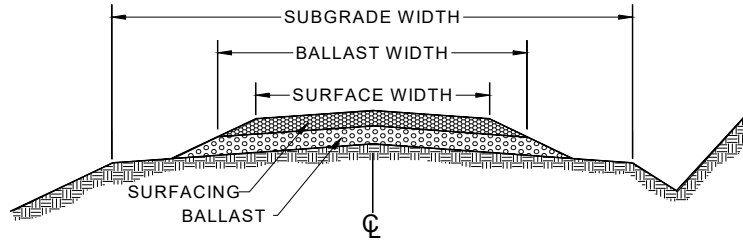


SECTION VIEW

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ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
D-3400.1															
Lift	0+00	0+85		1	12	6	35	30							
Lift	0+85	5+20		1	12	18	110	480							
Lift	5+20	10+60		1	12	12	70	380							
Lift	10+60	13+35		1	12	18	110	300							
Lift	13+35	16+85		1	12	12	70	250							
Lift	16+85	19+00		1	12	18	110	240							
Lift	19+00	33+80		1	12	12	70	105							
Spot Rock	1+50			1				30							
Culvert	6+50			1				20							
Landing	8+60							100							
Turn Around	14+70			1				50							
Temp Fish Culvert	17+50			1				20							
Turn Around	20+00			1				50							
Landing	33+80			1				100							
D-3400															
Landing	17+35			1				100							
Post Haul													30		
Totals:								2255					30		

ROCK LIST SHEET CONTINUED



SECTION VIEW

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ROAD NAME	START STATION	END STATION	SUBGRADE WIDTH (ft)	Pitrun SOURCE	Pitrun WIDTH (ft)	Pitrun DEPTH (in)	Pitrun Quantity(yd ³ /sta)	Pitrun SUBTOTAL(yd ³)	Crushed SOURCE	Crushed WIDTH (ft)	Crushed DEPTH (in)	Crushed Quantity(yd ³ /sta)	Crushed Subtotal(yd ³)	Oversize/ Rip rap Source	Oversize/Rip Rap Quantity(yd ³)
D-5102 South															
Lift	55+95	77+75		1	12	6	35	770							
Turn Around	59+95			1				50							
Landing	69+35			1				100							
Turn Around	77+75			1				50							
Post Haul				1					2				50		
D-5102 North															
Culvert	48+00			1				20							
Landing	48+50			1				100							
Post Haul				1					2				50		
D-5216															
Post Haul				1					2				50		
D-5210															
Post Haul				1					2				50		
D-2313															
Post Haul				1					2				50		
D-2310															
Post Haul				1					2				50		
D-5100															
Post Haul				1					2				50		
Totals:								1090					350		
Grand Totals								9485					780		8

CULVERT LIST

ROAD NAME	STATION	CULVERT DIAMETER (in)	CULVERT LENGTH (ft)	FLUME LENGTH (ft)	RIP RAP - INLET (cy)	RIP RAP - OUTLET (cy)	BACKFILL MATERIAL	NOTES
D-3400.1	6+50	18	26				Pit Run	New Install
D-3400.1*	17+50	24	30				Log	C2, Temp. Fish Culvert
D-5320.1	6+05	18	26			2	Pit Run	Replacement
D-5320.6	9+60	18	28			2	Pit Run	New Install
D-5320.6*	35+65	18	26			2	Pit Run	Replacement
D-5320.63*	2+20	24	30			2	Pit Run	C3, Temp. Install
D-5102 North	48+00	18	40				Pit Run	New Install
D-5102DET*	1+50	24	30				Log	C1, Temp. Equip Crossing
Contingency		18	30					As Directed by CA

**All rip rap shall be Oversize unless specified in the Rock List, or in the field.
 All backfill shall be native material (NT) unless specified otherwise. CR= 1 ¼"- crushed rock, PR= Pit Run
 Rock**

FISH STREAM WORK PROVISIONS

1. TIMING LIMITATIONS: The fish culvert project may begin July 1 and shall be completed by September 30.
2. Work shall conform to plans and specifications in the road plan.
3. Prior to the commencement of in-stream work, the Purchaser shall isolate the work area in a manner that fish cannot enter the work area, capture and safely move fish and other fish life from the work area. The Purchaser shall have fish capture and transportation equipment ready and on the job site. Captured fish shall be immediately and safely transferred to free-flowing water downstream of the work area.

TEMPORARY STREAM FLOW BYPASS

4. All in-stream work shall be conducted in the dry or in isolation from the stream flow by the installation of a bypass flume/pipe or by pumping the flow around the work area, back into the stream below the work area. Waste water pumped from within the work area shall terminate on the forest floor, sufficient distance from the stream to filter sediment prior to entering the stream.
5. The temporary bypass to divert flow around the work area shall be in place prior to initiation of other work in the wetted perimeter.
6. A sandbag revetment or similar device shall be installed at the bypass inlet to divert the entire flow through the bypass.
7. The bypass shall be of sufficient size to pass all flows and debris for the duration of the project.
8. If a pump is used for diverting water from the stream where fish are present, as per RCW 77.57.010 and 77.57.070, the pump intake shall be equipped with a fish guard to prevent passage of fish into the diversion pump. The pump intake shall be screened with 1/8 inch mesh to prevent fish from entering the pump. Velocity through the screened intake shall be less than 0.4 feet per second. Screens shall be maintained to prevent injury or entrapment of juvenile fish.

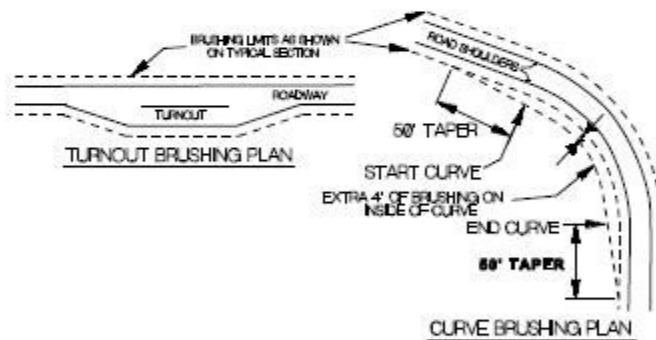
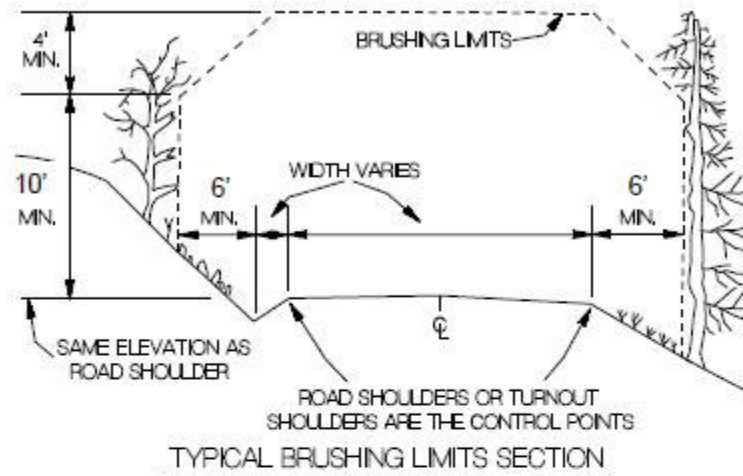
WATER QUALITY

9. Extreme care shall be taken to ensure that no petroleum products, hydraulic fluid, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the stream.

COMPACTION LIST

Road	Stations	Type	Max Depth Per Lift (inches)	Equipment Type	Minimum Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
Pre-haul	All	Culvert Backfill	8"	Jumping Jack		3	
Pre-haul	All	Rock Lifts	6"	Vibratory Smooth Drum	6,000	3	3
Pre-haul	All	Pre-haul Surface		Vibratory Smooth Drum	6,000	3	3
Construction	All	Subgrade (Except Puncheon)	6"	Vibratory Smooth Drum	6,000	2	3
Construction	All	Culvert Backfill	8"	Jumping Jack		3	
Construction	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3
Reconstruction	All	Subgrade (Except Puncheon)	6"	Vibratory Smooth Drum	6,000	2	3
Reconstruction	All	Culvert Backfill	8"	Jumping Jack		3	
Reconstruction	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3
Post-haul Maintenance	All	Rock Placement	6"	Vibratory Smooth Drum	6,000	2	3

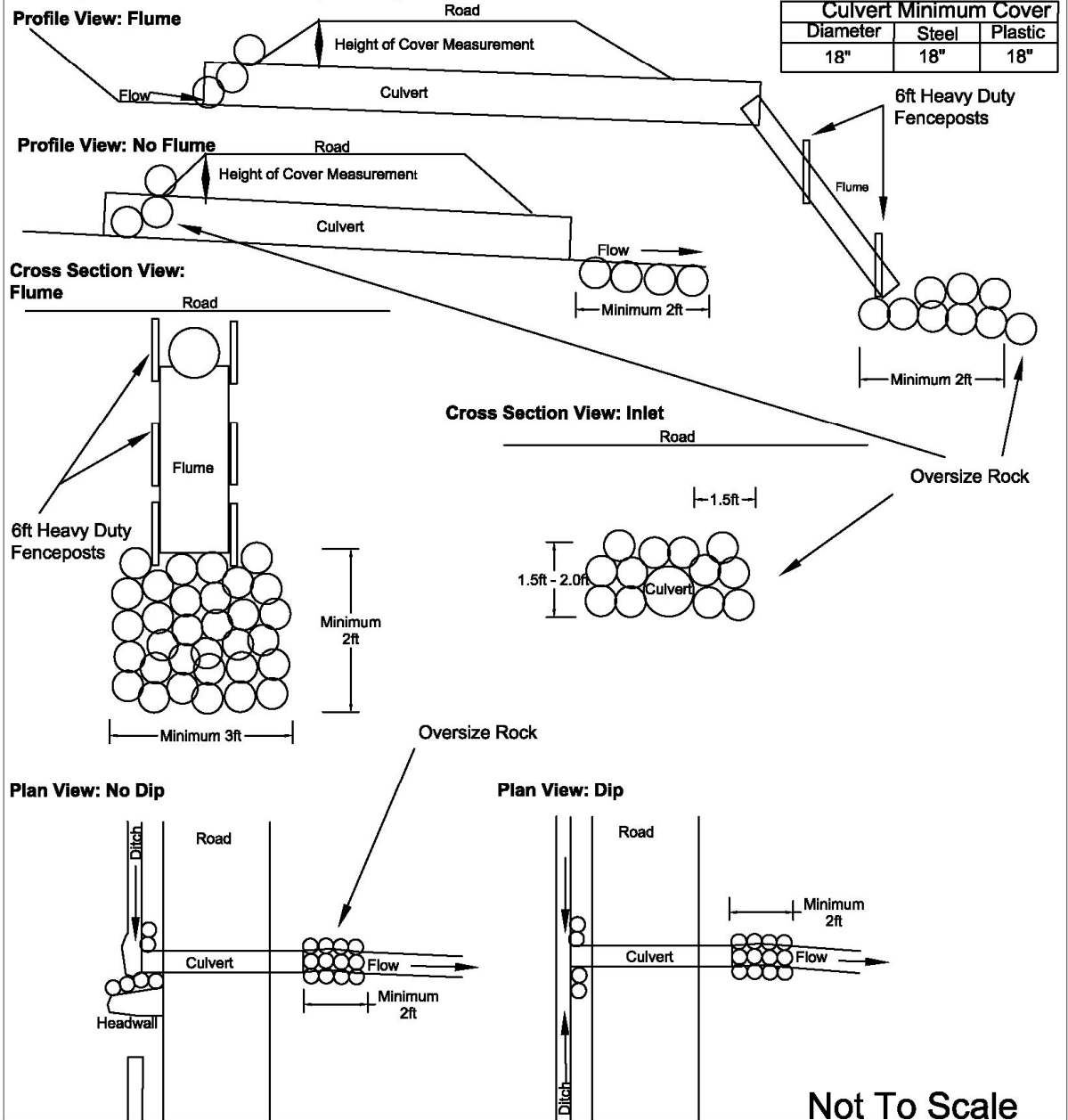
BRUSHING DETAIL



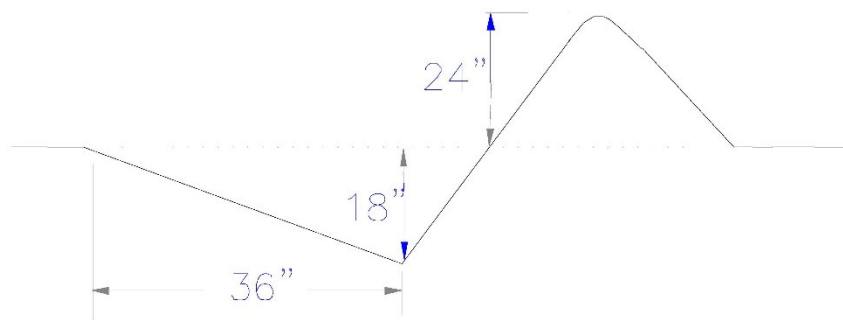
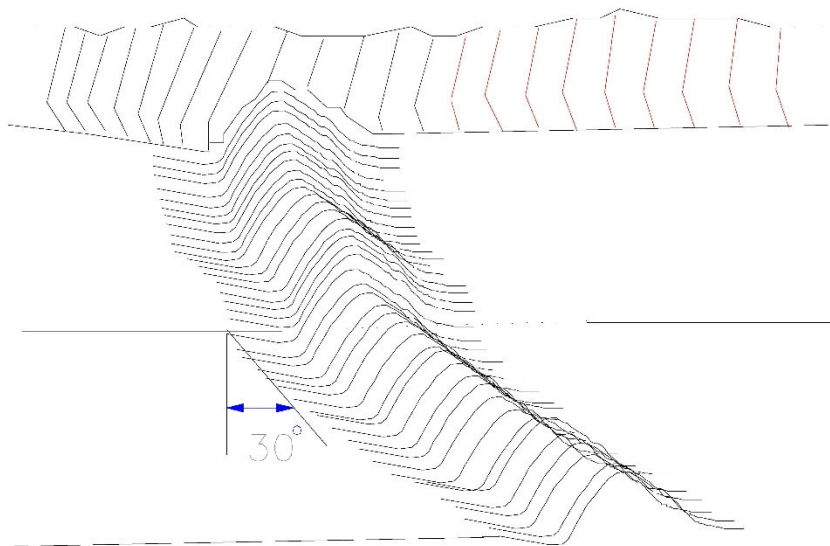
1. All vegetation within the brushing limits shall be cut to within 3 inches of the ground, unless otherwise directed by the Contract Administrator
2. All brush, trees, limbs, etc. shall be removed from the road surface, cut banks, culvert inlets/outlets, and ditch lines
3. All debris that may roll or move into the ditch line shall be removed and placed in a stable location

Typical Cross Drain Culvert Installation Detail Sheet

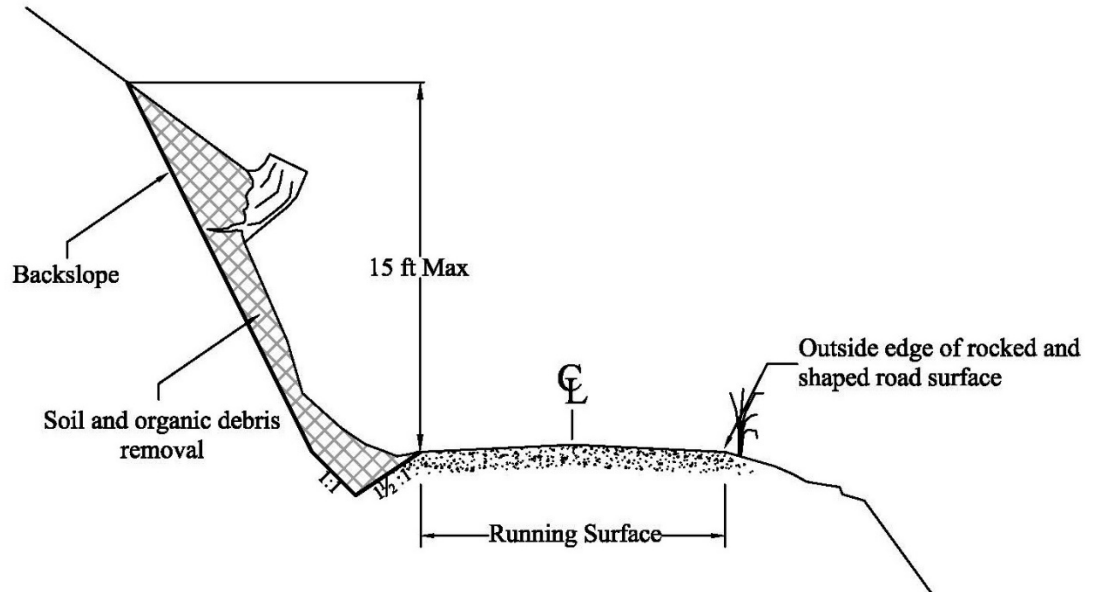
- Culvert lay shall not exceed 10%.
- Flumes longer than 10ft shall be staked on both sides at maximum intervals of 10ft with 6ft heavy duty steel fence posts, and fastened securely to the posts with No. 10 galvanized smooth wire or bolted to the fence posts.
- Oversize shall be placed using a "zero height drop method", and shall be set in conjunction with the culvert installation.
- Oversize shall be placed at headwalls, along the fill at the inlet, and at the end off flumes in accordance with this Detail. On culverts with no flume oversize shall be placed at the outlet as an energy dissipater as specified in this Detail. All oversize distance to be determined by the Contract Administrator.
- Backfill compaction for installations on existing roads shall be achieved using a jumping jack, or plate compactor on lifts not to exceed 8in. 3 complete passes per lift is required for compaction. Backfill shall be placed and compacted evenly on both sides of the culvert. Care shall be taken to ensure adequate compaction of backfill material under the haunches of the pipe. Excavation trench width shall be at least culvert diameter plus at least the width of the compactor footprint used.



NON-DRIVABLE WATER BAR DETAIL



Ditch Cleaning Detail



1. The backslope shall be no steeper than $\frac{1}{2}:1$, unless the material is hardpan or solid rock, in which case it may be $\frac{1}{4}:1$.
2. If there is sufficient width for the ditch without affecting the cut bank, than removing bank material is not required.
3. Bank material above the ditch shall be removed to a maximum height of 15 feet, if needed to meet the requirements of this detail.
4. If there is insufficient width to clean or construct a ditch without disturbing more than 15 vertical feet of bank, the Contract Administrator may authorize changes to this plan in order to still meet the intent of having a ditch, while staying within the excavation limits already set.
5. Ditch cleaning or construction shall not shrink the running surface of the road.

Typical Type Ns, Np Culvert Installation Detail Sheet.

-Water shall be diverted away from the work site before any "in stream" work begins, and shall continue until culvert installation is complete.

-Culvert lay shall match stream gradient up to 5%.

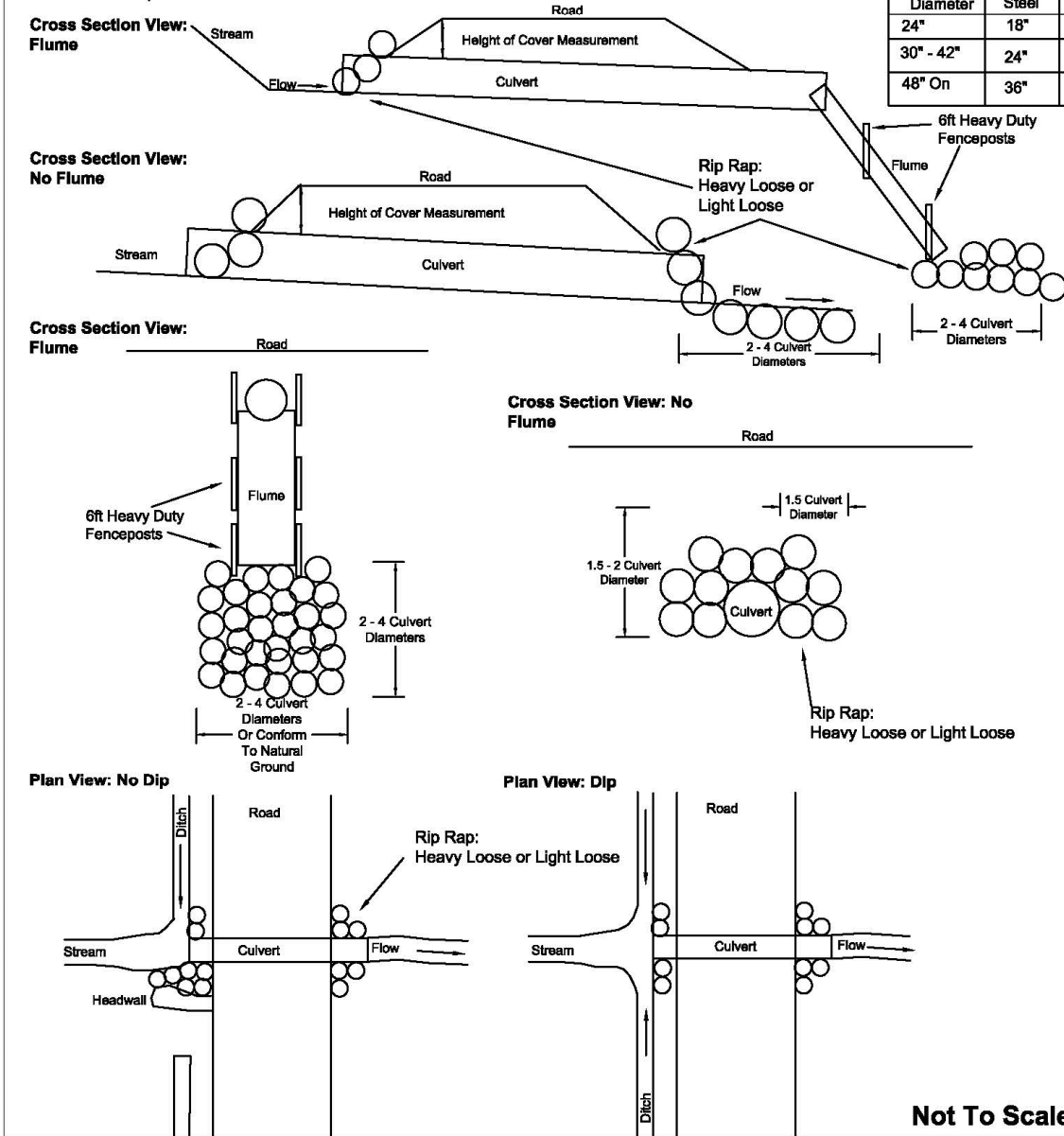
-Flumes longer than 10ft shall be staked on both sides at maximum intervals of 10ft with 6ft heavy duty steel fence posts, and fastened securely to the posts with No. 10 galvanized smooth wire or bolted to the fence posts.

-Rip rap shall be placed using a "zero height drop method", and shall be set in conjunction with the culvert installation.

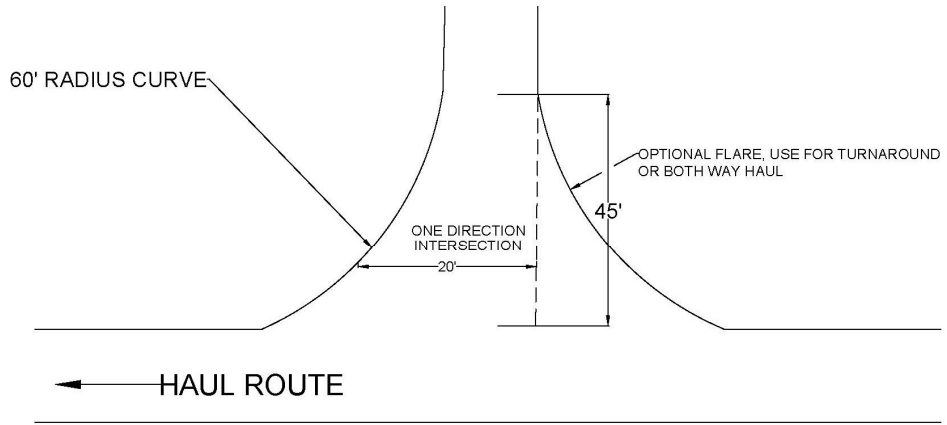
-Rip rap shall be placed at headwalls, along the fill at the inlet, and at the end off flumes in accordance with this Detail. On culverts with no flume rip rap shall be placed along the fill at the outlet, unless there is stream drop or it is called for in the Road Plan, at which point it will be installed as an energy dissipater at the end of the culvert as specified in this Detail. All rip rap distance to be determined by the Contract Administrator or the District Engineer.

-Backfill compaction shall be achieved using a jumping jack, walk behind vibratory roller, or plate compactor on lifts not to exceed 8in. 3 complete passes per lift is required for compaction. Backfill shall be placed and compacted evenly on both sides of the culvert. Care shall be taken to ensure adequate compaction of backfill material under the haunches of the pipe. Excavation trench width shall be at least culvert diameter plus 3 times the width of the compactor footprint used.

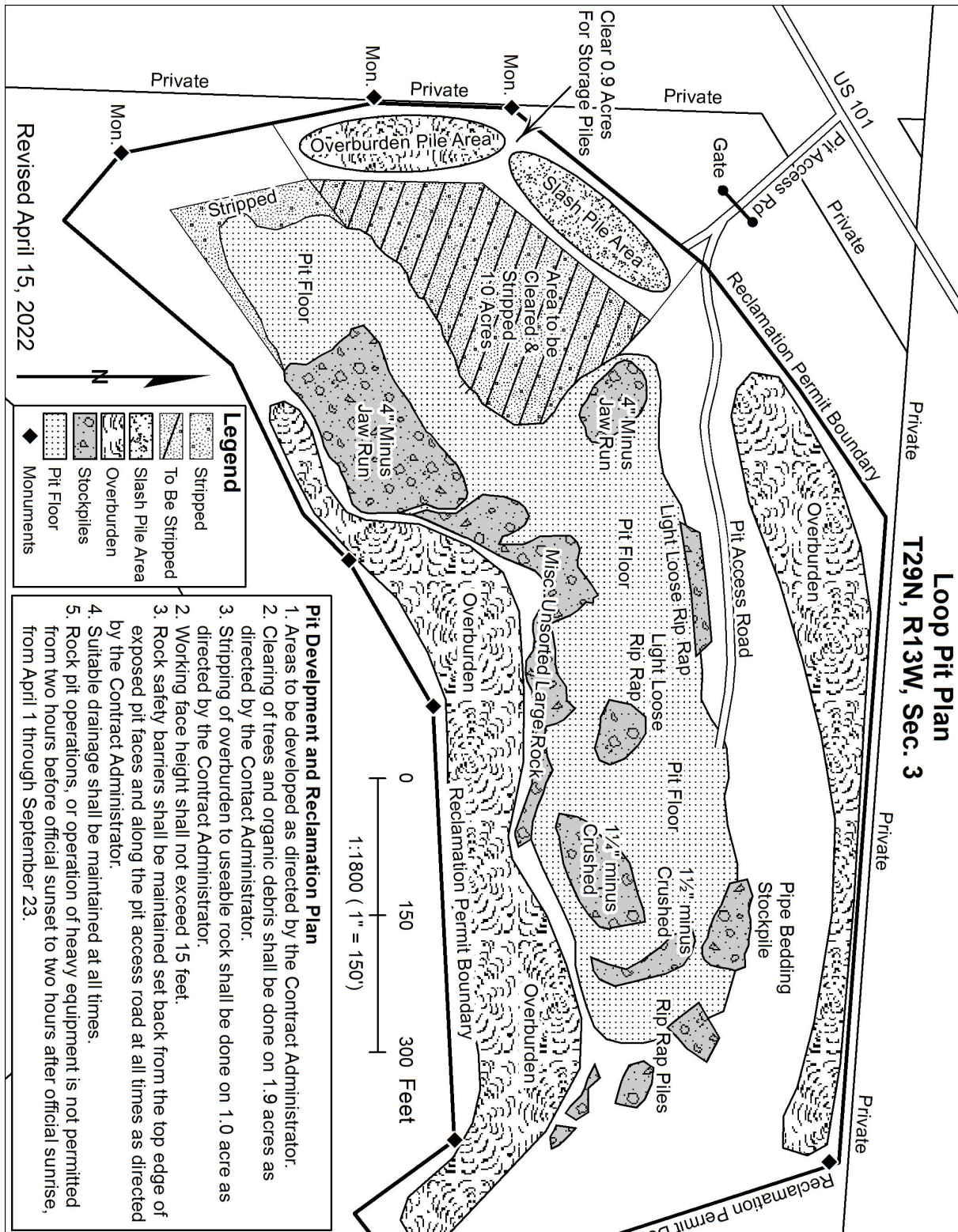
Culvert Minimum Cover		
Diameter	Steel	Plastic
24"	18"	24"
30" - 42"	24"	24"
48" On	36"	36"



TYPICAL INTERSECTION



NOT TO SCALE

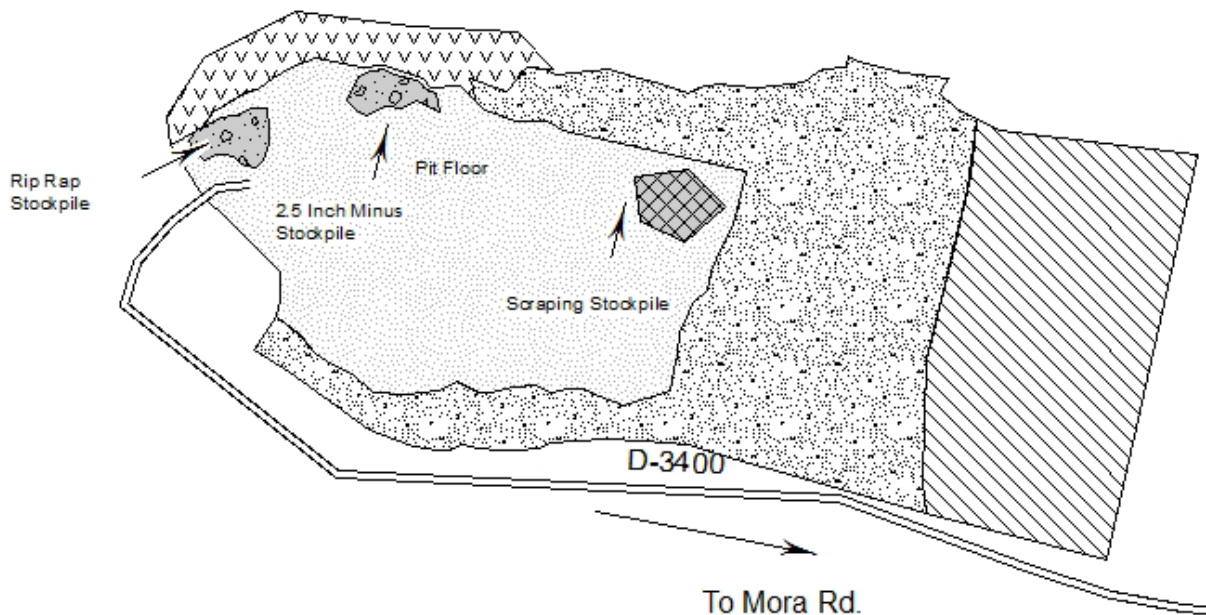


Mora Pit Plan

Sec. 23 & 24, T28N, R15W

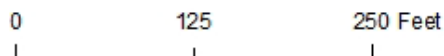


Legend	
	Approach Road
	Future Stripping Area
	Crushed Rock Stock
	New Scraping Stockpile
	Pit Floor
	Reclaimed Area
	Rip Rap Stockpile
	Stripped Area



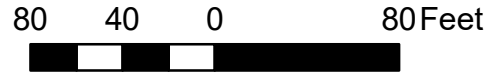
Pit Development Plan

1. Areas to be developed as directed by the Contract Administrator.
2. Working face height shall not exceed 15 feet.
3. Waste material and oversize material shall be placed as directed by the Contract Administrator. Segregate soil & wood.
4. Pit face shall not be mined to within 15' of any unstripped area.
5. 4" shall be scalped off of stripped area before use on D3400.1 road. Scalped material is to be stockpiled on pit floor away from overburden and may be used on other roads.



Kerschner, 6/23

Picture Pit
Pit Plan
Section 25, T29N, R15W



Pit Development

1. Areas to be developed as directed by Contract Administrator.
2. Working face height shall not exceed 15 feet.

Silcox 5/23

DEPARTMENT OF NATURAL RESOURCES

FORM 9-87(Rev. 01-08)

SUMMARY - Road Development Costs

SALE NAME: Picture Mora Timber Sale		CONTRACT#: 30-103765		REGION: Olympic		DISTRICT: Coast						TOTAL	
LEGAL DESCRIPTION: T29R15W, T29R14W, T28R15W													
ROAD NAME:	D-5320.63	D-5320.61	D-5102DET	D-3400.1	D-3400	D-5000E	D-5000W	D-5100	D-5102S	D-5102N	D-5102.7	TOTAL:	SHEET #2-4
ROAD TYPE:	Construction	Construction	Construction	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul		
NUMBER OF STATIONS:	2.00	2.75	2.65	34	30	23	323	84	78	49	13	640.79	537.77
SIDESLOPE:	10%	10%	10%									30%	0%
CLEARING AND GRUBBING:	\$253	\$348	\$335	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$936	\$0
ROAD BRUSHING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$661
EXCAVATION AND FILL:	\$339	\$466	\$449	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,254	\$3,276
ROAD GRADING:	\$0	\$0	\$0	\$220	\$195	\$0	\$0	\$547	\$505	\$315	\$85	\$1,868	\$2,044
DITCH CLEANING/CONSTRUCTION:	\$0	\$0	\$0	\$780	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$780	\$3,634
ROCK TOTALS (Cu. Yds.)/ROCK COSTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Ballast: 9485	\$10,804	\$2,915	\$0	\$2,155	\$100	\$0	\$0	\$0	\$970	\$120	\$0	\$17,063	\$5,360
				\$15,944	\$719				\$20,632	\$2,837			\$8,813
Surface: 780	0	0	0	0	0	0	0	0	0	0	0		\$780
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		26,219
Oversize: 8	0	0	0	0	0	0	0	0	0	0	0		\$8
													305
CULVERTS AND FLUMES:	\$1,092	\$0	\$1,092	\$1,893	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,078	\$3,388
STRUCTURES:	\$0	\$0	\$0	\$500								\$500	\$0
MISC. EXPENSES:	\$12	\$32	\$0	\$5,846								\$5,890	\$8,425
OVERHEAD:	\$1,125	\$338	\$169	\$2,015	\$73	\$0	\$0	\$44	\$1,691	\$351	\$7	\$5,812	\$11,965
TOTAL COSTS:	\$13,625	\$4,100	\$2,046	\$27,198	\$987	\$0	\$0	\$591	\$22,828	\$4,735	\$92	\$76,201	\$ 158,727
COST PER STATION:	\$6,812	\$1,491	\$772	\$805	\$33	\$0	\$0	\$7	\$294	\$98	\$7	\$119	\$ 295

MOBILIZATION: \$9,900
ROAD DEACTIVATION AND ABANDONMENT COSTS: \$6,330
Pit Work \$3,640

Road Standard	Const.	Reconst.	Prehaul	Posthaul	TOTAL (All Roads) =	\$255,126.06
Total Costs =	27,038	0	206,162	15,596	SALE VOLUME MBF =	5,755
Total Sta. =	7	0	1,163	1,163	TOTAL COST PER MBF =	\$44.33
Cost per Sta. =	3,654	0	177	13	TOTAL COST PER STATION=	\$216.47
Compiled by:	T. Kerschner				Date:	6/5/23

NOTE: This appraisal has no allowance for profit and risk.

Sheet 1 of 5

Plans to be furnished by:

	Summary	+ Mob	Sheet	Difference	\$/mbf
Construction	\$19,770	27,038	27,038	0	\$4.70
Reconstruction	\$0	0	0	0	\$0.00
Prehaul	\$202,862	206,162	206,162	0	\$35.82
Posthaul	\$12,296	15,596	15,596	0	\$2.71
Road Closure	2,130	4,200	6,330.24	0.00	

SUMMARY - Road Development Costs

SALE NAME: Picture Mora Timber Sale CONTRACT#: 30-103765 REGION: Olympic DISTRICT: Coast
 LEGAL DESCRIPTION: T29R15W, T29R14W, T28R15W

ROAD NAME:	D-5210	D-5216	D-2000	D-2300	D-2310	D-2313	D-5320	D-5320.1	D-5320.61	D-5320.62	D-5320.63	D-5320.6
ROAD TYPE:	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul	Prehaul
NUMBER OF STATIONS:	49.90	51.75	213.17	17.91	49.49	41.90	20.20	15.50	8.60	16.90	2.20	42.25
SIDESLOPE:	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CLEARING AND GRUBBING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROAD BRUSHING:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$661
EXCAVATION AND FILL:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,912	\$0	\$0	\$364
ROAD GRADING:	\$324	\$336	\$0	\$116	\$322	\$272	\$131	\$101	\$56	\$110	\$0	\$275
DITCH CLEANING/CONSTRUCTION:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,209	\$335	\$1,318	\$0	\$771
ROCK TOTALS (Cu. Yds.)/ROCK COSTS:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ballast:	0	0	0	0	0	0	50	710	600	1480	150	2371
Surface:	\$0	\$0	\$0	\$0	\$0	\$0	\$941	\$13,455	\$11,165	\$27,210	\$2,772	\$43,270
Oversize:	0	0	0	0	0	0	0	0	0	0	0	400
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,040
	0	0	0	0	0	0	0	2	0	0	2	4
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$76	\$0	\$0	\$76	\$152
CULVERTS AND FLUMES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$801	\$0	\$0	\$0	\$2,587
STRUCTURES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MISC. EXPENSES:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,529	\$837	\$1,709	\$214	\$4,136
OVERHEAD:	\$26	\$27	\$0	\$9	\$26	\$22	\$86	\$1,374	\$1,224	\$2,428	\$245	\$5,380
TOTAL COSTS:	\$350	\$363	\$0	\$126	\$347	\$294	\$1,158	\$18,543	\$16,530	\$32,775	\$3,307	\$72,637
COST PER STATION:	\$7	\$7	\$0	\$7	\$7	\$7	\$57	\$1,196	\$1,922	\$1,939	\$1,503	\$1,719

Total
 Costs \$146,431
 Stations 529.77
 Cost/station \$276.40

SUMMARY - Road Development Costs

SALE NAME: Picture Mora Timber Sale CONTRACT#: 30-103765 REGION: Olympic DISTRICT: Coast
 LEGAL DESCRIPTION: T29R15W, T29R14W, T28R15W

ROAD NAME:	D-3400	D-5102S	D-5102N	D-5100	D-2310	D-2313	D-5210	D-5216
ROAD TYPE:	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul	Posthaul
NUMBER OF STATIONS:	1	1	1	1	1	1	1	1
SIDESLOPE:	0	0	0	0	0	0	0	0
CLEARING AND GRUBBING:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ROAD BRUSHING:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EXCAVATION AND FILL:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ROAD GRADING:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
DITCHING:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ROCK TOTALS (Cu. Yds.)/ROCK COSTS:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ballast:	0	0	0	0	0	0	0	0
Surface:	30	50	50	50	50	50	50	50
Oversize:	0	0	0	0	0	0	0	0
CULVERTS AND FLUMES:	0	0	0	0	0	0	0	0
STRUCTURES:	0	0	0	0	0	0	0	0
MISC. EXPENSES:	0	0	0	0	0	0	0	0
OVERHEAD:	74	130	117	220	104	118	174	181
TOTAL COSTS:	\$ 816	\$ 1,433	\$ 1,286	\$ 2,415	\$ 1,144	\$ 1,298	\$ 1,914	\$ 1,991
COST PER STATION:	\$ 816	\$ 1,433	\$ 1,286	\$ 2,415	\$ 1,144	\$ 1,298	\$ 1,914	\$ 1,991

Total
 Costs \$12,296
 Stations 8.00
 Cost/station \$1,537.06

5/1/23

REGION - ROAD COST ESTIMATE - ROAD CLOSURE

SALE NAME: Picture Mora Timber Sale

CONTRACT NUMBER: 30-103765

Total stations Road Closure = 20.90

I. MISC. ROAD CLOSURE COSTS:

Road	Stations	Blocking \$80.00	Waterbarring \$20.00	Culvert Removal \$40.00	Ripping \$165.00	Guard Rail Install \$153.00	Sidecast Pullback \$75.00	Bridge Removal \$1,195.00	Grass Seeding \$116.00	Fill Removal \$230.00	Large Fill Removal \$256.25	Total
D-3400.1	18.90	\$80.00	\$200.00								\$1,000.00	\$1,280.00
D-5230.63	2.00	\$80.00	\$40.00	\$40.00					\$232.00	\$230.00		\$622.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	0.00											\$0.00
	20.90	\$160.00	\$240.00	\$40.00	\$0.00		\$0.00	\$0.00	\$232.00	\$230.00	\$1,000.00	\$1,902.00

Total: 1,902

Overhead & General Exp. Add 12% \$228

VI. GENERAL EXPENSES:

Description	\$ per Move	# of Moves	Sub-total
Excavator	\$800	4	\$3,200
Dozer	\$500	0	\$0
Grader	\$300	0	\$0
Dump	\$250	4	\$1,000

* These move in costs are separate since they will occur after logging is done

Total Mobilization = \$4,200

Road No. 0
Road Closure Standard: 20.90
Stations:

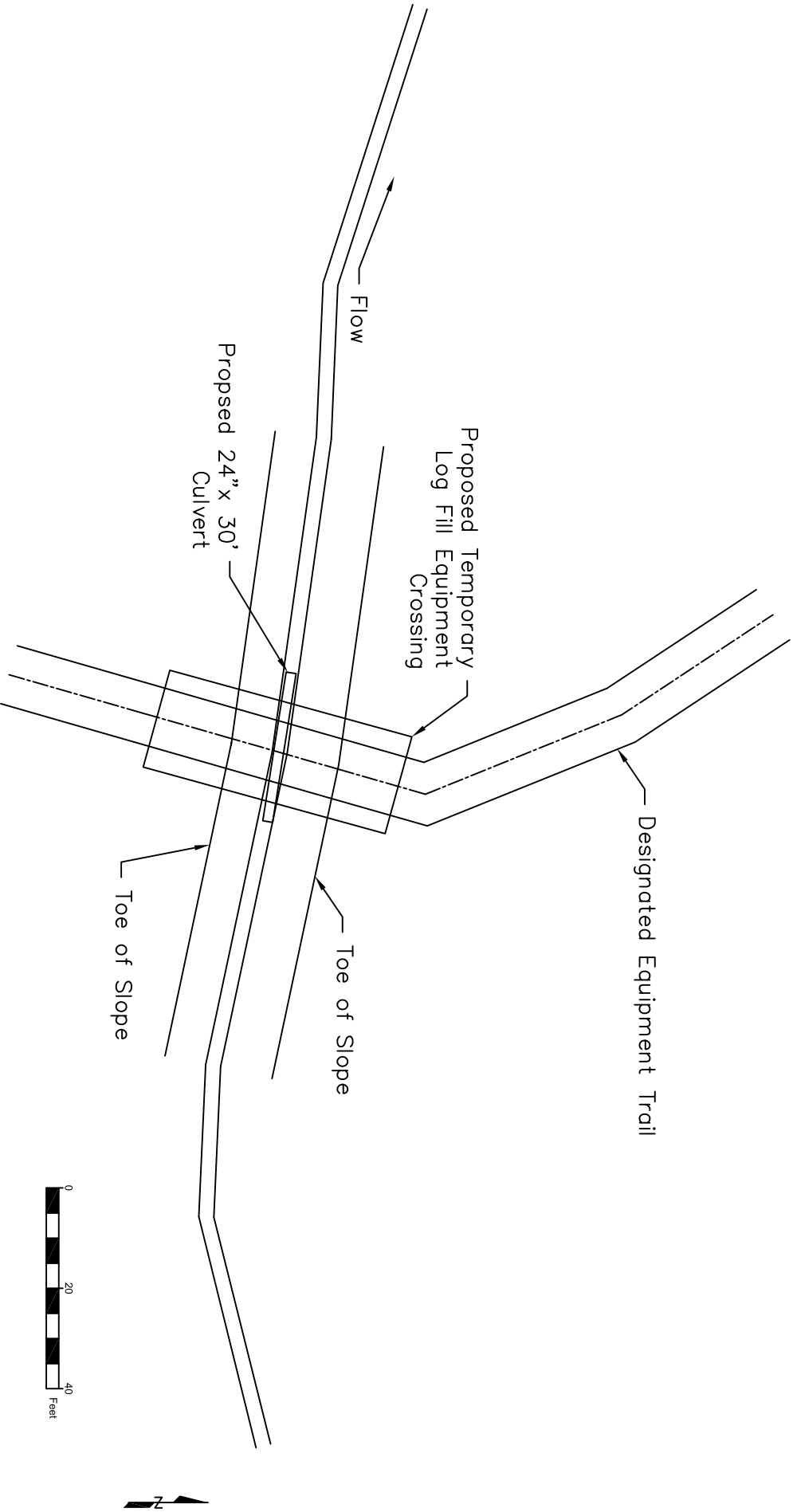
SHEET TOTAL = \$6,330

By: T. Kerschner

Sheet 5 of 5

Date: 5/1/23

Crossing C1
 Temporary Equipment Crossing
 D-5102DET



Installation may begin July 1st and shall be completed by September 30th.

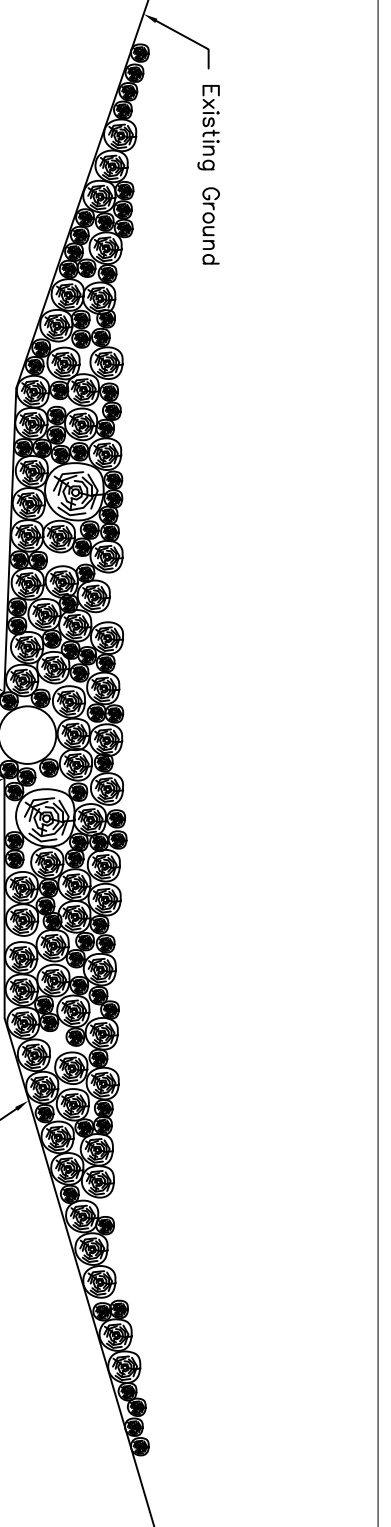
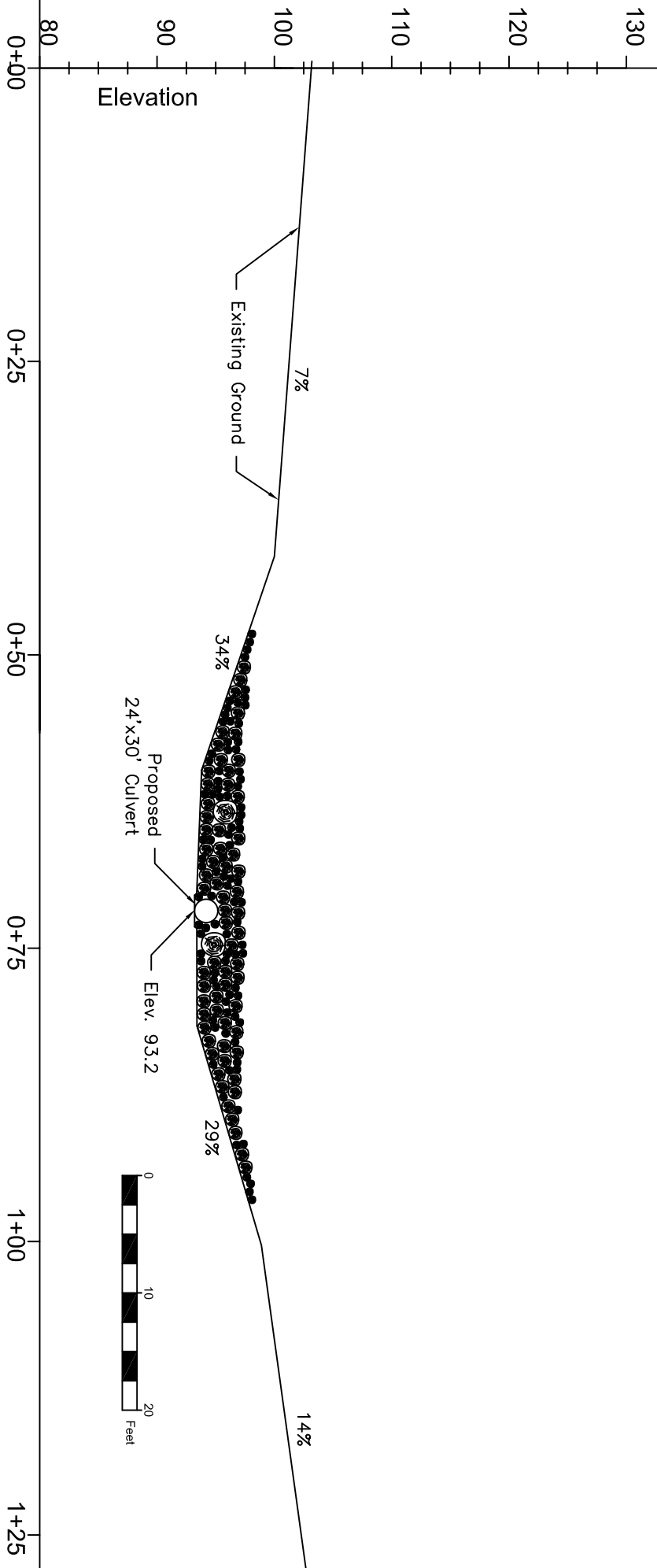
Section 28 T29R14W
 N 47.98858°
 W 124.51536°
 3' BFW



Crossing C1
 Plan View
 Drawn By: K. Silcox
 Date: 3/07/2023
 Sheet 1 of 3

Crossing C1
 Temporary Equipment Crossing
 D-5102DET

Installation may begin July 1st and shall be completed by September 30th, 2024.

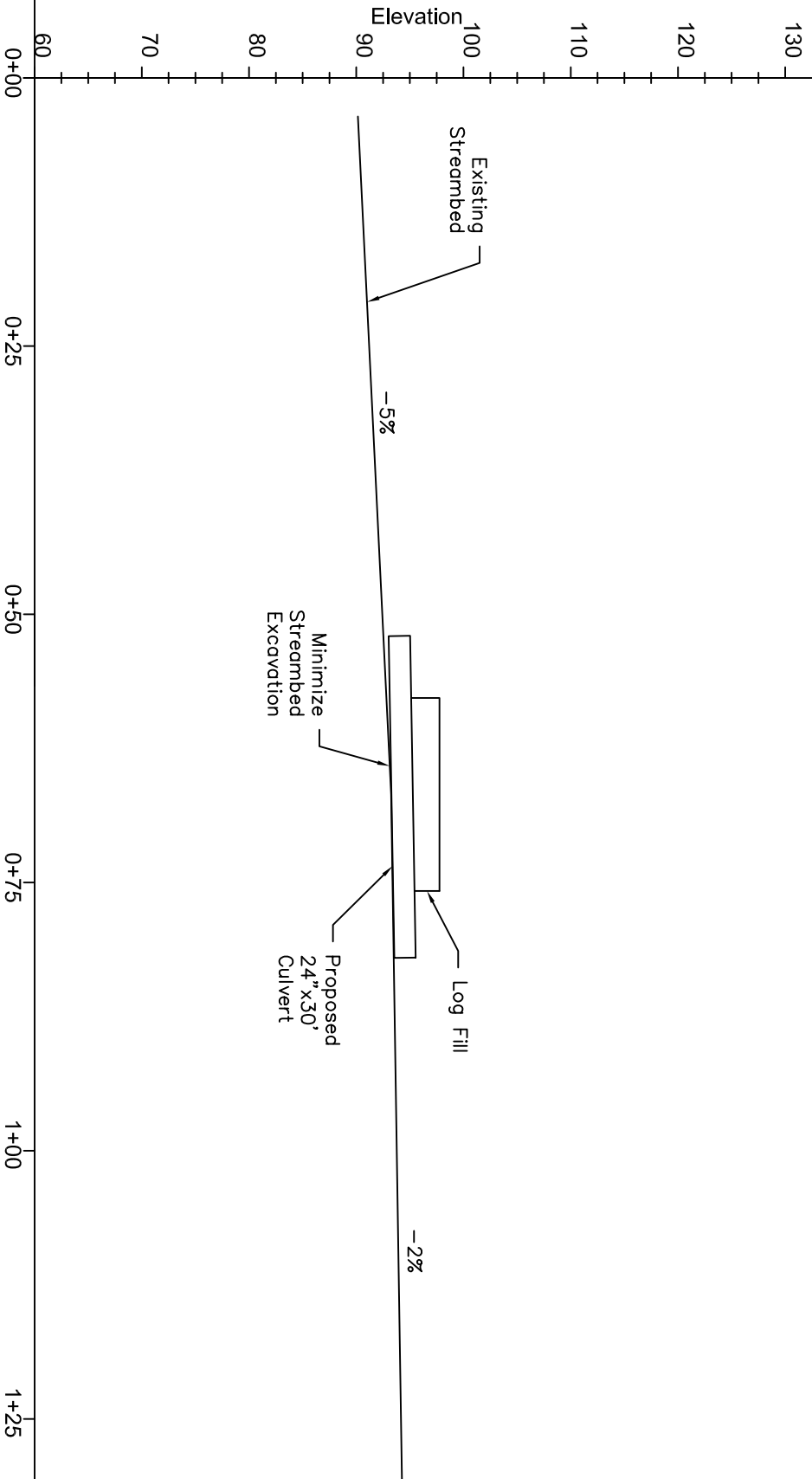


Section 28 T29R14W
 N 47.98858°
 W 124.51536°
 3' BFW



Crossing C1
 Crossing Profile
 Drawn By: K. Silcox
 Date: 3/07/2023
 Sheet 2 of 3

Crossing C1
Temporary Equipment Crossing



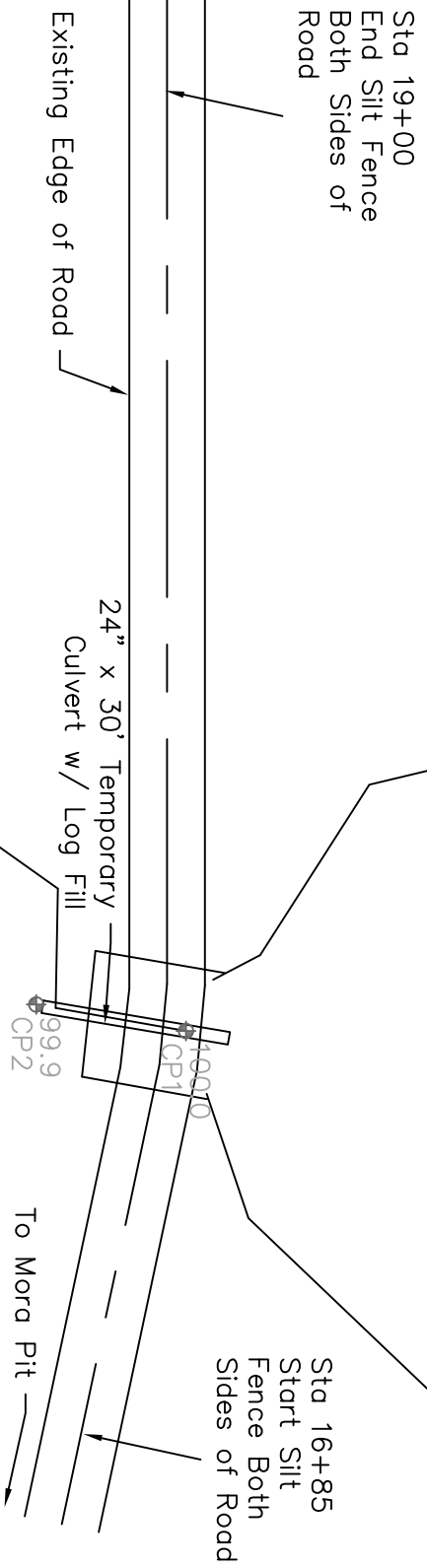
Installation may begin July 1st and shall be completed by September 30th.

Section 28 T29R14W
N 47.98858°
W 124.51536°
3' BFW



Crossing C1
Stream Profile
Drawn By: K. Silcox
Date: 3/07/2023
Sheet 3 of 3

Crossing C2
 D-3400.1 STA 17+50
 Temporary Log Fill Culvert



Sta 19+00
 End Silt Fence
 Both Sides of
 Road

Sta 16+85
 Start Silt
 Fence Both
 Sides of Road

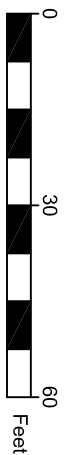
Wetland

100.0
 CP1
 99.9
 CP2

Flow

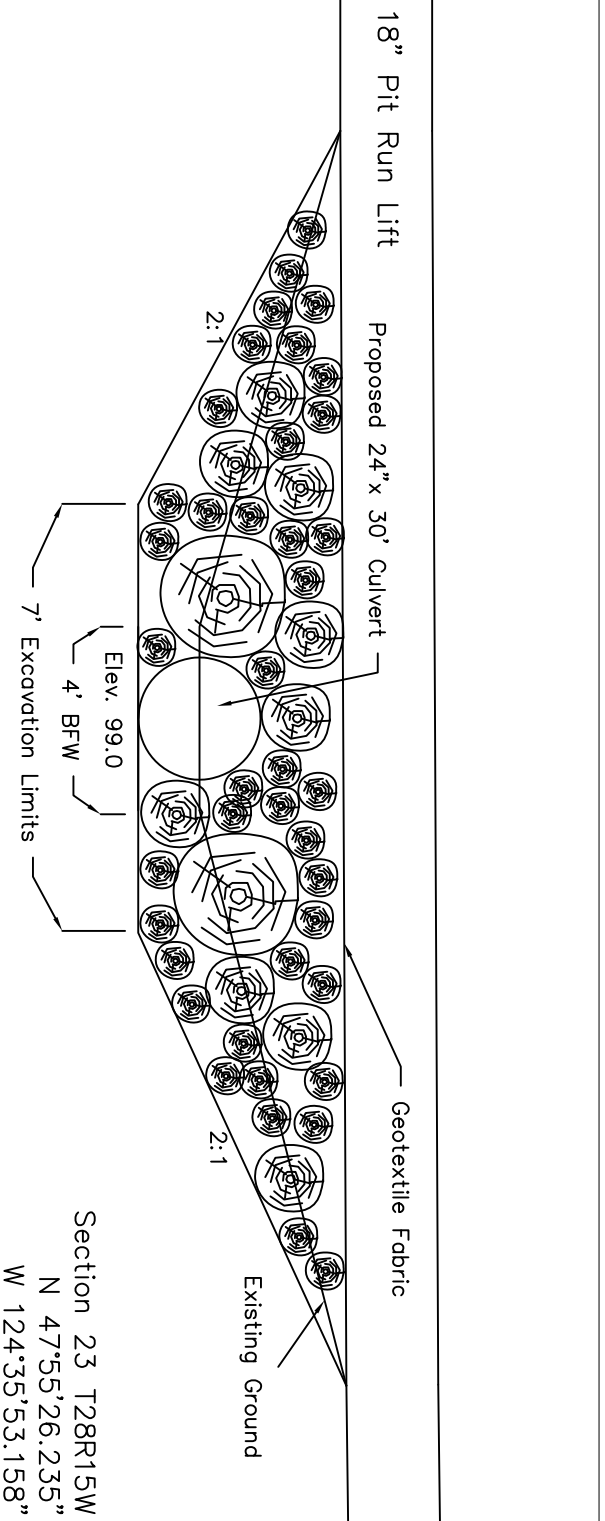
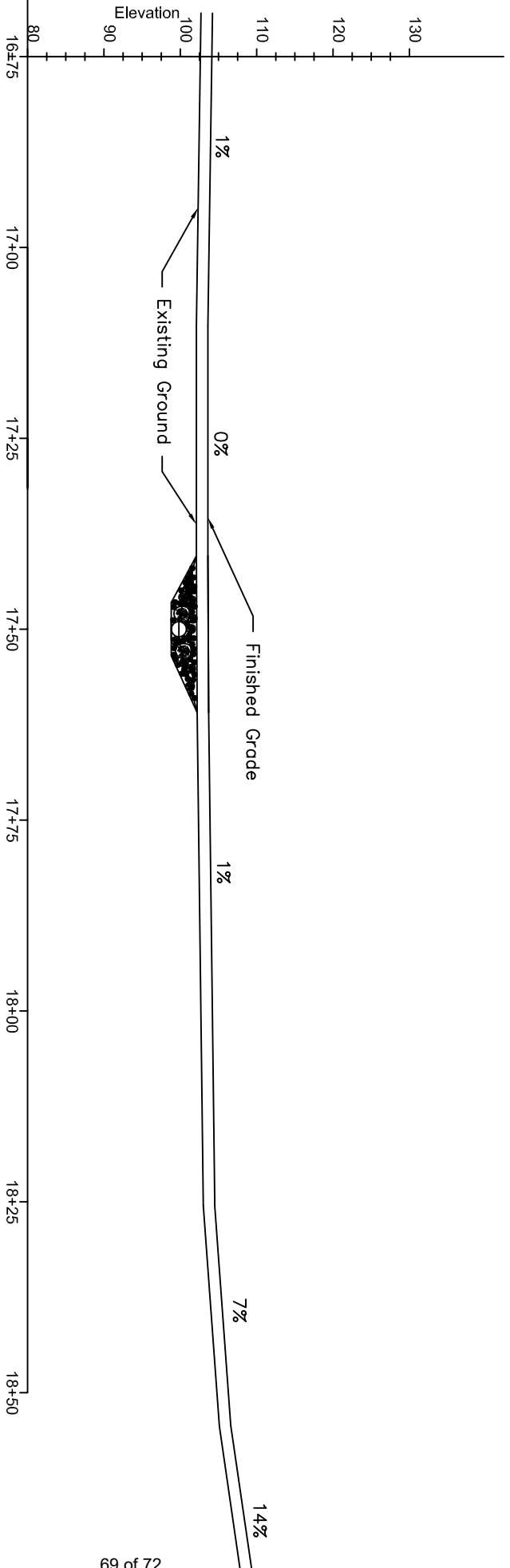
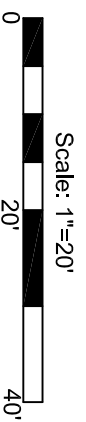
Installation may begin July
 1st and shall be completed
 by September 30th.

Section 23 T28R15W
 N 47°55'26.235"
 W 124°35'53.158"



	Crossing C2
	Plan View
	Drawn By: K. Silcox
	Date: 2/16/2023
	Sheet 1 of 3

Crossing C2
 D-3400.1 STA 17+50
 Temporary Log Fill Culvert



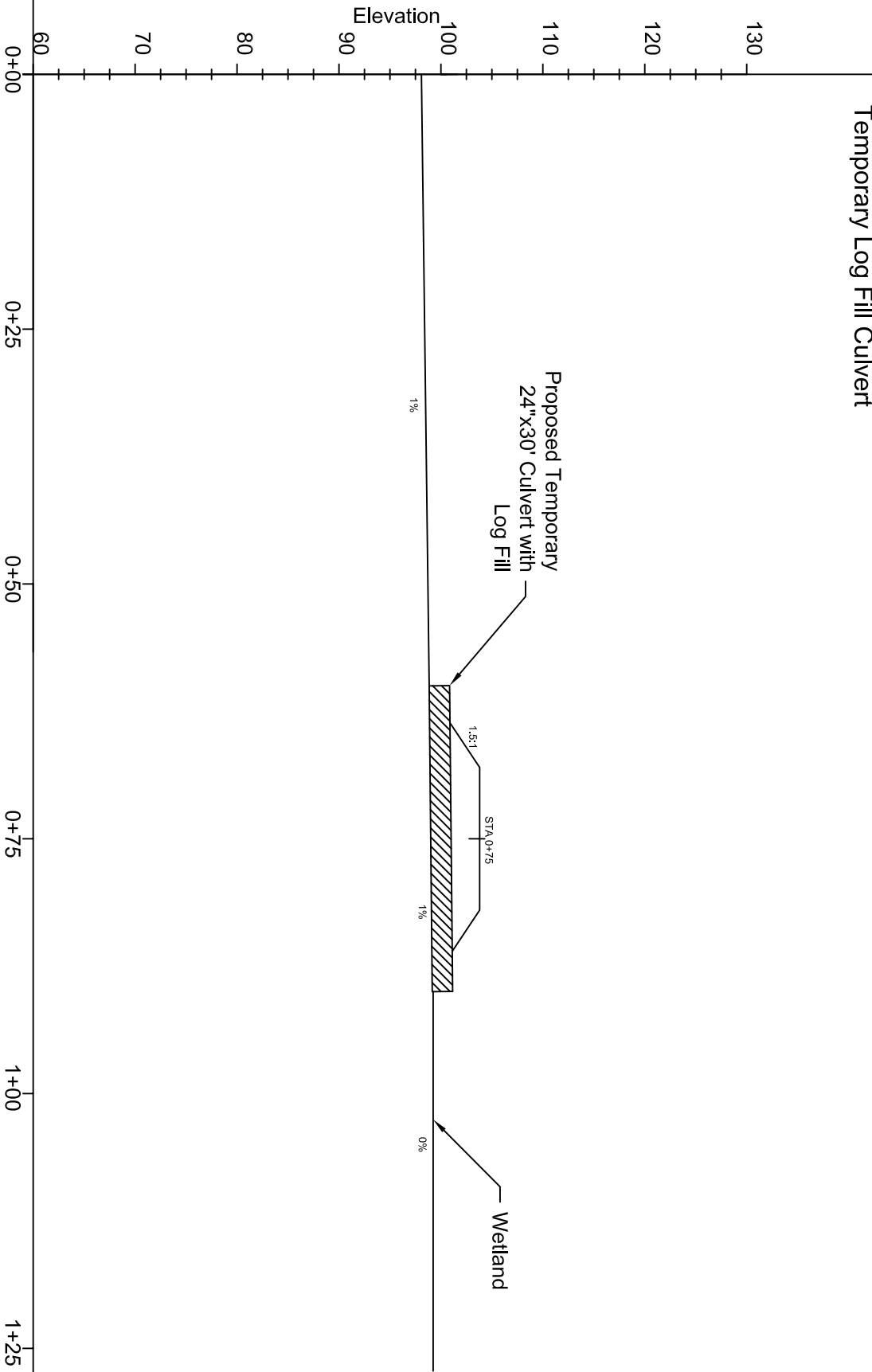
Section 23 T28R15W
 N 47°55'26.235"
 W 124°35'53.158"

Installation and removal may begin July 1st and shall be completed by September 30th.

Additional fill removal and decommissioning work to be completed by State after sale as agreed upon with Quillayute and WDFW biologists.

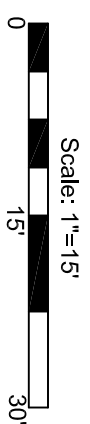
Road Profile
 Drawn By: K. Silcox
 Date: 2/16/2023
 Sheet 2 of 3

Crossing C2
 D-3400.1 STA 17+50
 Temporary Log Fill Culvert



Installation may begin July 1st and shall be completed by September 30th.

Section 23 T28R15W
 N 47°55'26.235"
 W 124°35'53.158"



Crossing C2
 Stream Profile
 Drawn By: K. Silcox
 Date: 2/16/2023
 Sheet 3 of 3

Forest Access Road Maintenance Specifications

Cuts and Fills

- Maintain slope lines to a stable gradient compatible with the cut slope/fill slope ratios. Remove slides up to 100 cubic yards in volume from ditches and the roadway. Repair fill 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, shape, compact the road surface, turnouts, and shoulders to the original shape on the TYPICAL SECTION SHEET. Inslope or outslope as directed, to provide a smooth, rut-free traveled surface and maintain surface water runoff in an even, unconcentrated manner.
- Blading shall not undercut the backslope or cut into geotextile fabric on the road.
- If required by the Contract Administrator, water shall be applied as necessary to control dust and retain fine surface rock.
- Surface material shall not be bladed off the roadway. Replace surface material when lost or worn away , or as directed by the Contract Administrator.
- Remove shoulder berms, created by grading, to facilitate drainage, except as marked or directed by the Contract Administrator.
- For roads with geotextile fabric: spread surface aggregate to fill in soft spots and wheel ruts (barrel spread) to prevent damage to the geotextile fabric.

Drainage

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

Forest Access Road Maintenance Specifications

Preventative Maintenance

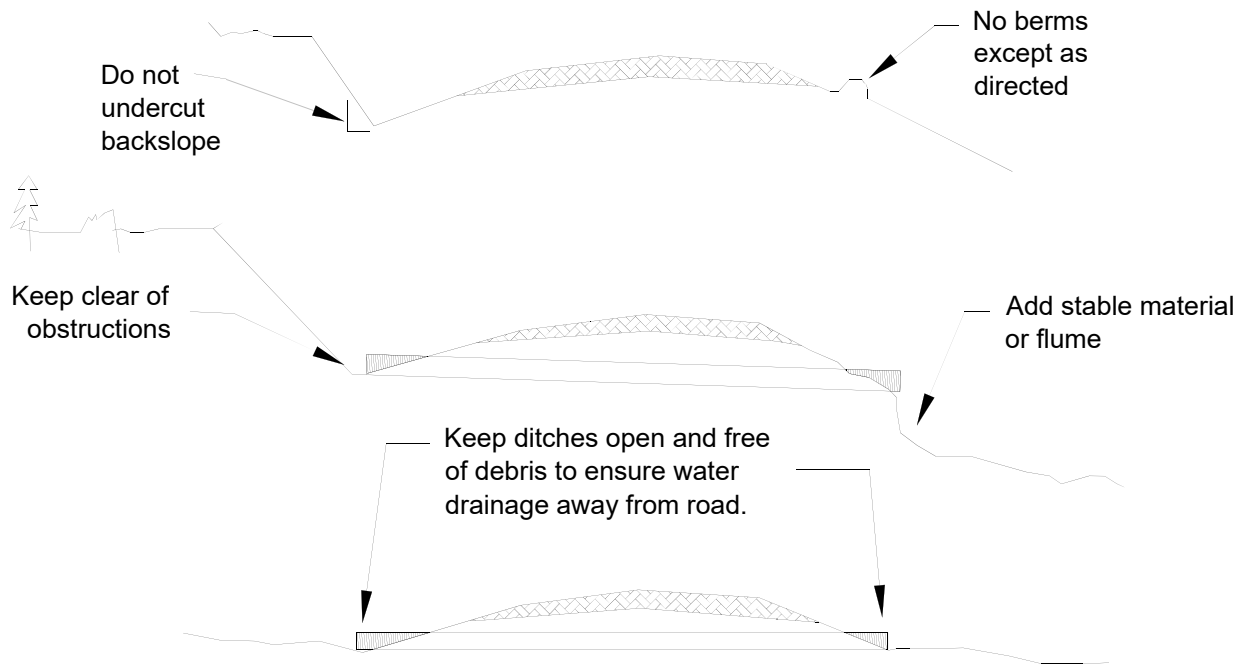
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

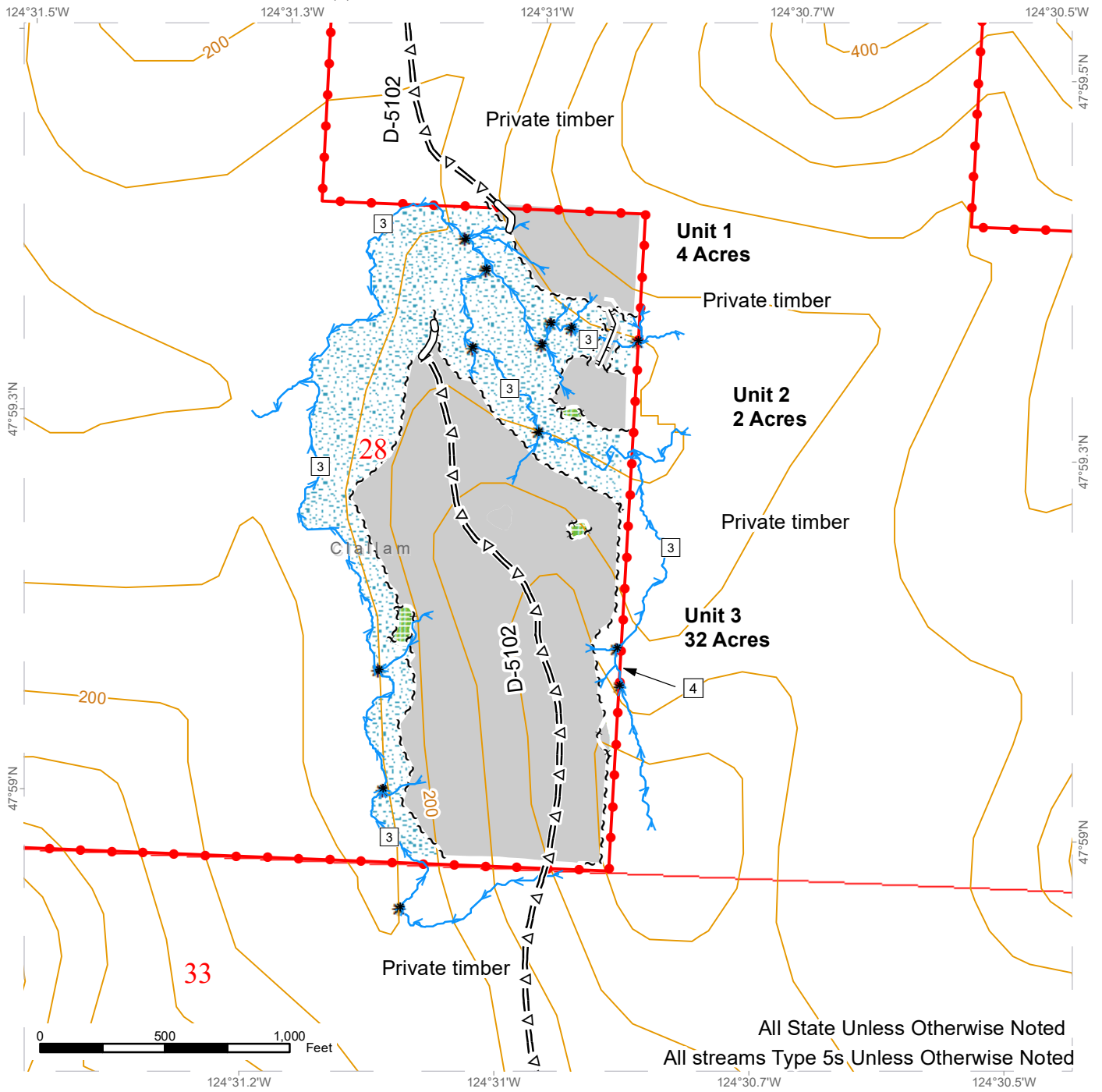
- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.



LOGGING PLAN MAP

SALE NAME: PICTURE MORA
AGREEMENT#: 30-103765
TOWNSHIP(S): T28R15W, T29R14W, T29R15W
TRUST(S): State Forest Transfer (1)

REGION: Olympic Region
COUNTY(S): Clallam
ELEVATION RGE: 20'-420'



All State Unless Otherwise Noted
 All streams Type 5s Unless Otherwise Noted

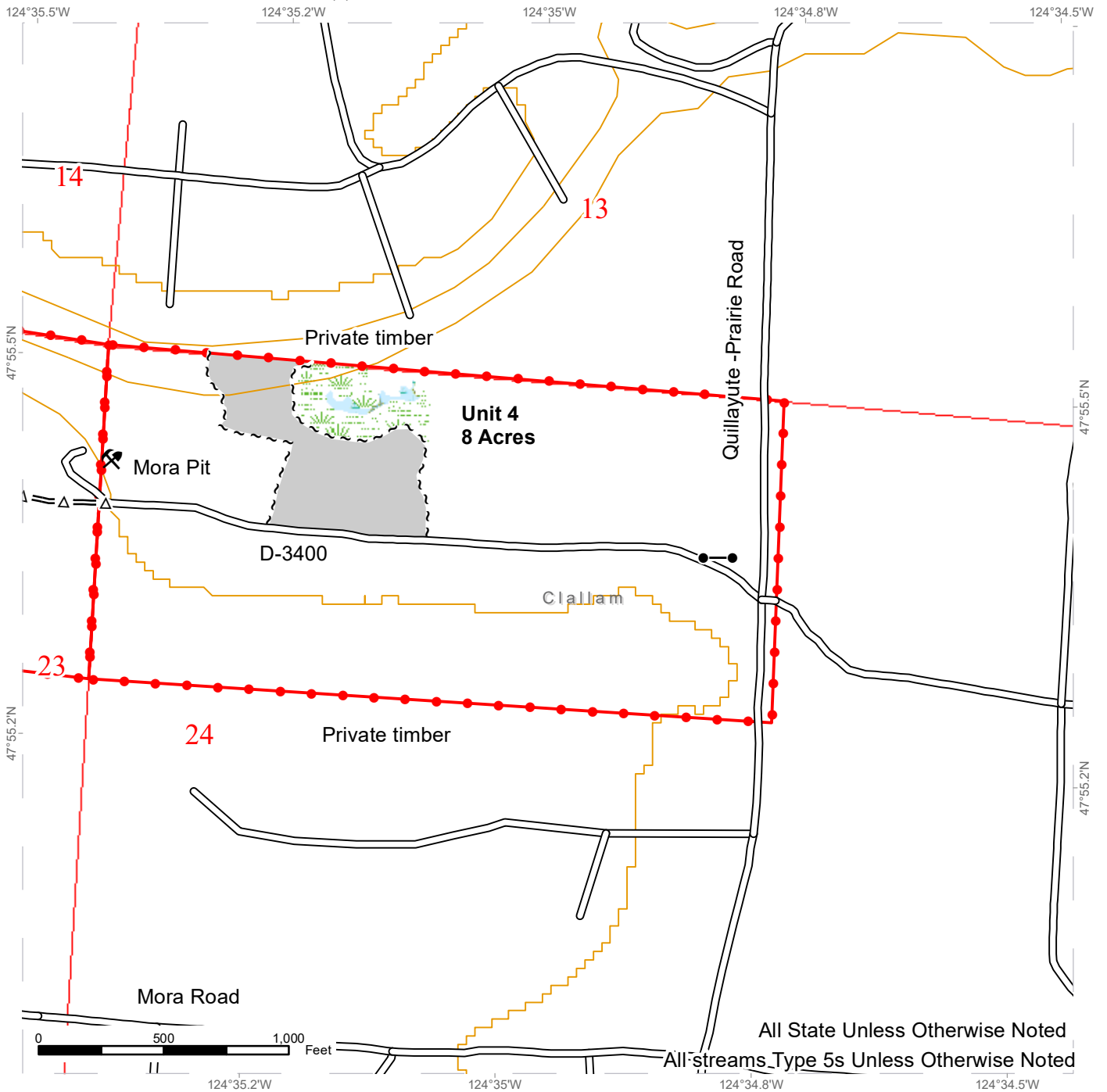
~ ~ ~ ~	Sale Boundary Tags	— — —	Designated Skid Trail	*	Stream Type Break
~ ~ ~ ~	Leave Tree Tags	—	Contours 40-foot	[Green Grid]	Leave Tree Area
~ ~ ~ ~	Right of Way Tags	■	Ground	[Blue Dotted]	Riparian Mgt Zone
—	Existing Roads	—	Streams	[Red Dotted]	DNR Managed Lands
=Δ=	Optional Pre-Haul Maintenance	□	Stream Type		



LOGGING PLAN MAP

SALE NAME: PICTURE MORA
AGREEMENT#: 30-103765
TOWNSHIP(S): T28R15W, T29R14W, T29R15W
TRUST(S): State Forest Transfer (1)

REGION: Olympic Region
COUNTY(S): Clallam
ELEVATION RGE: 20'-420'



All State Unless Otherwise Noted
 All streams_Type 5s Unless Otherwise Noted

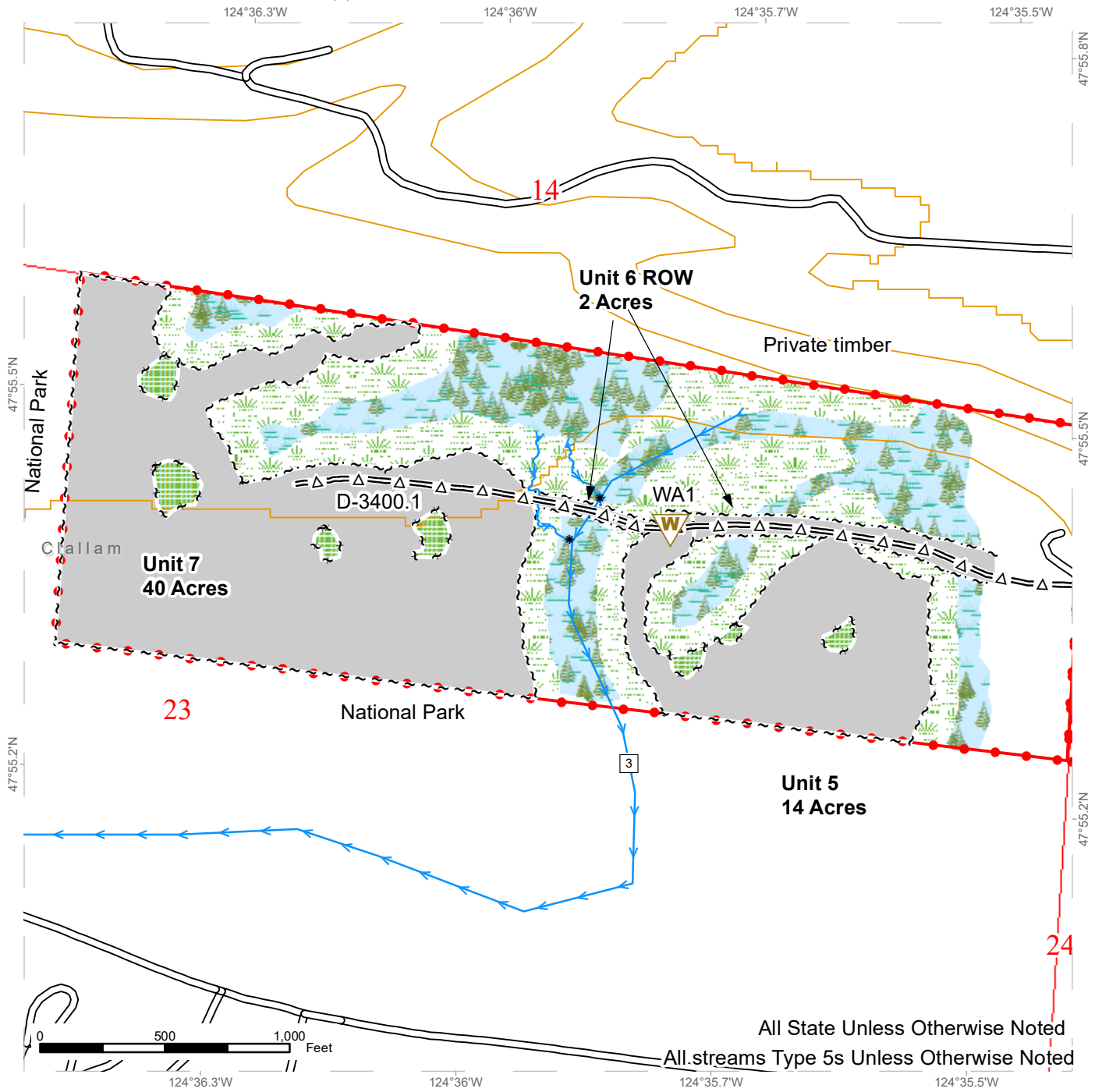
~ ~ ~ ~	Sale Boundary Tags	—	Contours 40-foot
—	Existing Roads	■	Ground
=Δ=	Optional Pre-Haul Maintenance	🌲	Forested Wetland
●—●	Gate (AA1)	🌿	Wetland Mgt Zone
⚡	Rock Pit	🔴	DNR Managed Lands



LOGGING PLAN MAP

SALE NAME: PICTURE MORA
 AGREEMENT#: 30-103765
 TOWNSHIP(S): T28R15W, T29R14W, T29R15W
 TRUST(S): State Forest Transfer (1)

REGION: Olympic Region
 COUNTY(S): Clallam
 ELEVATION RGE: 20'-420'



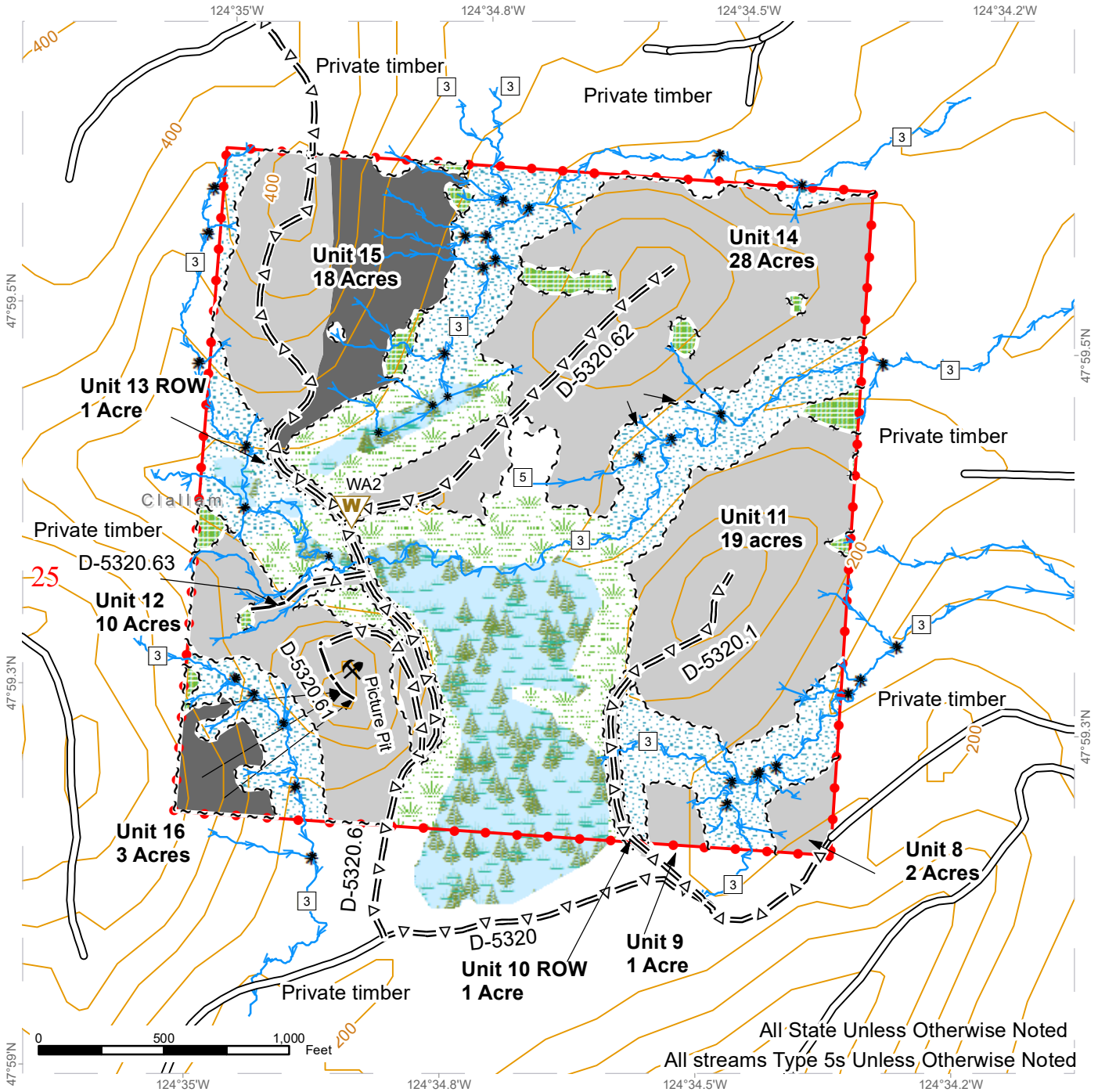
~ ~ ~ ~	Sale Boundary Tags		Waste Area	*	Stream Type Break
~ ~ ~ ~	Leave Tree Tags		Contours 40-foot		Leave Tree Area
~ ~ ~ ~	Right of Way Tags		Ground		Forested Wetland
	Existing Roads		Streams		Wetland Mgt Zone
=Δ=	Optional Pre-Haul Maintenance		Stream Type		DNR Managed Lands



LOGGING PLAN MAP

SALE NAME: PICTURE MORA
 AGREEMENT#: 30-103765
 TOWNSHIP(S): T28R15W, T29R14W, T29R15W
 TRUST(S): State Forest Transfer (1)

REGION: Olympic Region
 COUNTY(S): Clallam
 ELEVATION RGE: 20'-420'



All State Unless Otherwise Noted
 All streams Type 5s Unless Otherwise Noted

~ ~ ~ Sale Boundary Tags	--- Optional Construction	→ Streams	Wetland Mgt Zone
~ ~ ~ Leave Tree Tags	⚡ Rock Pit	□ Stream Type	DNR Managed Lands
~ ~ ~ Right of Way Tags	W Waste Area	* Stream Type Break	→ Cable Harvest
~ ~ ~ Right of Way Tags	Contours 40-foot	Leave Tree Area	
Existing Roads	Ground	Riparian Mgt Zone	
= Δ = Optional Pre-Haul Maintenance	Cable	Forested Wetland	



2019-1379216

Page 1 of 20

Easement

Wash State Of Dept Of Nat Resources

Clallam County Washington

05/22/2019 02:19:17 PM



When recorded return to:
Department of Natural Resources
Olympic Region
Attn: Albert Huggins
411 Tillicum lane
Forks, WA. 98331

CLALLAM COUNTY TREASURER
EXCISE TAX EXEMPT

DATE MAY 22 2019

BY: *Jung Su Park, DEPUTY*

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
HILARY S. FRANZ, Commissioner of Public Lands

EASEMENT EXCHANGE

Release of Easement: (Partial Release)

Grantor(s): Rayonier Operating Company, LLC

Grantee(s): Washington State, Department of Natural Resources

Legal Description: Portions of Section 28 and Section 29, Township 29 North, Range 14 West, W.M.

Assessor's Property Tax Parcel Number(s): 14292940-0000, 14292830-0000

Cross Reference: AFN 405013

DNR Easement No. 50-035670

Grant of Easement:

Grantor(s): Rayonier Operating Company, LLC

Grantee(s): Washington State, Department of Natural Resources

Legal Description: Portions of Sections 21, 22, 31, 32, 33, Township 29 North, Range 14 West, W.M.

Assessor's Property Tax Parcel Number(S): 14292140-0000, 14292220-0000, 14293120-0000,
14293210-0000, and 14293300-0000

Cross Reference:

DNR Easement No. 55-095574

Grant of Easement:

Grantor(s): State of Washington, Department of Natural Resources

Grantee(s): Rayonier Operating Company, LLC

Legal Description: Portions of Sections 21, 28, 29, 31, Township 29 North, Range 14 West, W.M.

Assessor's Property Tax Parcel Number(s): 14292144-0000, 14292830-0000, 14292931-0000,
14292940-0000 and 14293111-0000

Cross Reference:

DNR Easement No. 50-095573

This Easement Exchange is between Rayonier Operating Company, LLC, (Rayonier) a Delaware limited liability company, representing and acting on behalf of its affiliates and/or subsidiaries, and the STATE OF WASHINGTON (State), acting by and through the Department of Natural Resources (DNR), each also individually referred to as a "Party" and collectively as "Parties" and dated as of May 9th 2019 "Effective Date".

RECITALS

- A. State and ITT Rayonier Incorporated (Rayonier's predecessor in interest) entered into an "Easement and Agreement" on July 12, 1971, recorded in the records of Clallam County, Washington on July 23, 1971, in Volume 360 of Deeds, pages 454-464 under Auditor's File No. 405013 and filed with DNR under file No. 50-035670. The "Easement and Agreement" granted Rayonier a number of road easements over State property in Clallam County, Washington.
- B. An "Easement Supplement" to the "Easement and Agreement" was entered into between Rayonier Timberlands Operating Company, L.P. (successor in interest to ITT Rayonier Incorporated), and State on August 25, 1986. The 1986 Easement Supplement, filed with DNR under file No. 50-035670, granted Rayonier additional road easements over State property in Clallam County. This included easements in Sections 28 and 29 of T.29N., R.14W., W.M.
- C. An injunction issued in *U.S. v. State of Washington*, 20 F. Supp. 3d 986 (W.D. Wash. 2013) required specified state agencies, including DNR, to identify any state-owned "barrier culverts" (i.e., culverts that inhibit or prevent fish passage) on lands managed by the agency. Pursuant to the injunction, DNR identified a culvert located on a section of the road in the NW1/4 NW1/4, of Section 28 as a "barrier culvert" requiring correction. State and Rayonier mutually agreed that it would be more cost effective for DNR to remove the culvert but instead of replacing it with one suitable for fish passage, instead provide Rayonier with an alternate route of travel to its property over other State owned roads. Therefore, Rayonier agreed to release easements previously granted in the 1986 Easement Supplement in Sections 28 and 29 in exchange for the State's grant to Rayonier of new road easements providing for an alternate route of travel to its property. In addition, Rayonier and the State agreed to grant each other additional new easements made necessary by the aforementioned release and exchange. The specific easements released by Rayonier, and the new easements granted by the Parties, are as set forth in this Easement Exchange.
- D. The grants of new easements between the Parties requires approximately 1,300 feet of new road construction in an area identified within Section 21 and 22 (herein referred to as the "Tie Road"), and within Sections 28, 29, and 33, Township 29 North, Range 14 West, W.M., as shown in Exhibit B. Rayonier has constructed the Tie Road in Section 21 and 22. The remaining new construction will be completed as provided in the Agreement with the cost to be shared as set forth herein.

AGREEMENT

State and Rayonier agree to the following Easement Exchange, with the final easements being mutually agreeable. Rayonier agrees to release that portion of easements previously granted by State as shown in Exhibit B and described herein. In exchange for this partial release of easements, State agrees to grant Rayonier the easements over State property as shown on Exhibit B and described herein. Rayonier agrees to grant State the road easements as shown in Exhibit B and described herein.

Consideration. In exchange for the mutual promises and covenants herein contained, and other good and valuable consideration, the mutual receipt and sufficiency of which is hereby acknowledged, the parties agree to the following terms and conditions.

State agrees to pay for all Culvert removal costs. The new construction of roads as shown on Exhibit B, except for the Tie Road which has already been completed, shall be as provided under the heading "New Construction" in this Agreement. State and Rayonier, or the successor in interest to either Party, shall share proportionately in the cost of all new road construction designated in Exhibit B based on tributary acreage.

In addition to the conveyance of easements, Rayonier shall pay THREE HUNDRED EIGHTEEN DOLLARS AND 00/100 DOLLARS (\$318.00) in U.S. currency to State prior to or concurrent with executing this Agreement.

Conveyances.

- A. Partial Release of Easements.** From Rayonier to State. Rayonier hereby releases and quit claims its rights and interests in that portion of the easements granted by State in the "Easement Supplement" dated August 25, 1986, and filed with the State of Washington in Olympia, Washington, under file number 50-035670 that is located in the SW 1/4 of Section 28 and the E 1/2 SE 1/4 of Section 29, both in Township 29 North, Range 14 West, W.M. in Clallam County, Washington and shown approximately as shown on Exhibit B.
- B. Grant of Easements.** From State to Rayonier. State for and in consideration of the Rayonier release set forth above and monetary consideration, the sufficiency of which is hereby acknowledged, and the commitment by Rayonier to build the Tie Road on Rayonier and State land between the FR-D-2313 and D-5102 identified in Exhibit B, hereby grants and conveys to Rayonier, its successors, and assigns, non-exclusive easements over parcels of land in Clallam County, said easements to be sixty (60) feet in width lying thirty (30) feet on each side of the centerline of existing roads and new construction of roads located approximately as shown in Exhibit B (over State parcels) and legally described as follows:

SE 1/4 SE 1/4 of Section 21
SE 1/4 SW 1/4, NE1/4 SW 1/4 of Section 28
SE 1/4 SW 1/4, SE 1/4 of Section 29
NE 1/4 NE 1/4 of Section 31
All in Township 29 North, Range 14 West, W.M. in Clallam County, Washington
hereafter "Rayonier Easement Area".

C. Grant of Easement. From Rayonier to State. Rayonier for and in consideration set forth and monetary consideration, the sufficiency of which is hereby acknowledged, and the commitment by State to burden the costs of Culvert removal hereby grants and conveys to State, its successors, and assigns, non-exclusive easements over parcels of land in Clallam County, said easements to be sixty (60) feet in width lying thirty (30) feet on each side of the centerline of existing roads and new construction of roads located approximately as shown in Exhibit B (over Rayonier parcels) and legally described as follows:

N 1/2 SE 1/4 of Section 21
S 1/2 SW 1/4, SW 1/4 SE 1/4 of Section 22
SE 1/4 NE 1/4 of Section 31
E 1/2 NE 1/4, N 1/2 NW 1/4, SW 1/4 NW 1/4 of Section 32
NW 1/4 NW 1/4 of Section 33,
All in Township 29 North Range 14 West, W.M. in Clallam County, Washington
hereafter "State Easement Area".

All Easement grants shall be collectively referred to as "Easements," the existing roads as "Roads" and roads to be constructed as the "Tie Road" or "New Construction" as applicable.

Purpose. The easements are conveyed to provide ingress and egress to and from lands owned or hereafter acquired by each party for resource management and administrative activities, including, but not limited to:

- Hauling timber products, valuable materials such as sand, gravel, stone and minerals, special forest products such as tree boughs and brush,
- Performing management activities associated with forestlands, such as reforestation, routine ongoing inventory and stocking control,
- Leasing and managing communication, grazing and agricultural sites, and
- Leasing for resource activities consistent with county zoning and other terms and conditions included in this easement.

Authorized use shall include the right to travel, maintain, repair, construct or reconstruct each respective Easement Area subject to the restrictions set forth hereafter. No rights of public access are granted by either party under this Agreement.

Nature of Estate. These easements shall be deemed appurtenant to real property located in Clallam County legally described as set forth in Exhibits C (hereafter Benefited Parcels); *Provided*, however, that either party may add after acquired property as a Benefited Parcel, subject to agreement between the parties pertaining to re-allocation of easement costs pertaining to such after acquired property.

Reservations. Each fee owner reserves all rights incident to fee ownership of the Easement Area on their respective lands 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 Easement Area on its land; the right at all times to cross and re-cross the Easement Area at any place on grade or otherwise; and the right to use, maintain, patrol, reconstruct or repair the Easement Area so long as it does not unreasonably interfere with the rights granted herein. Each fee owner may grant to third parties any and all rights reserved on its land.

Timber or other profits of the land may be removed by the easement holder where reasonably necessary to use the easement area, but the fee owner shall be entitled to the market value of the material removed.

Export Restrictions. Any export-restricted timber originating from state land under this Agreement shall not be exported until processed. Rayonier shall comply with all applicable requirements of WAC 240-15-015 (relating to the prohibitions on export and substitution), WAC 240-15-025 (relating to reporting requirements), and WAC 240-15-030 (relating to enforcement). All export restricted timber from state lands shall be painted and branded in compliance with WAC 240-15-030(2). If Rayonier knowingly violates any of the prohibitions in WAC 240-15-015, Rayonier shall be barred from bidding on or purchasing export restricted timber as provided. Rayonier shall comply with the Export Administration Act of 1979 (50 U.S.C. App. Subsection 2406(i)) which prohibits the export of unprocessed western cedar logs harvested from state lands.

Compliance with Laws. For all activities conducted pursuant to this Agreement, each party shall, at its own expense, comply with all applicable laws.

Permittees. Each easement holder may permit its respective employees, agents, contractors, subcontractors, 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 easement holder herein. Acts or omissions of the Permittees operating under this Agreement shall be deemed an act of the easement holder. Restrictions or requirements placed on the easement holder herein shall apply equally to the Permittees.

Maintenance. For the purposes of this agreement, 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 practices standards set forth in Chapter 222-24 WAC as now written or hereafter amended. Maintenance shall not include replacement, which is the act of replacing or reconditioning road components that are destroyed, damaged, worn out or that have become unsafe from age, wear, or the elements.

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:

- (1) The appointment of a maintainer, which may be one of the parties or any third party, to perform all recurrent maintenance;
- (2) The extent of resurfacing necessary to keep the Road to the standard originally constructed or thereafter improved, and to reduce environmental impacts; and
- (3) A method of payment by which each party using the Road or a portion thereof shall pay its pro rata share of the cost of maintenance and resurfacing.

Repairs. Each party shall repair, or cause to be repaired at its sole cost, that damage to the Road arising out of the easement holder'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 easement holder if the easement holder is the sole user of the road, the fee owner if the fee owner is the sole user of the road and shared jointly if there is joint use of the road.

Improvements. For the purpose of this agreement, improvements are the act of reconditioning or replacing road components so that they are of a standard higher than that existing at the time use commenced.

The easement holder will not make improvements to the Easement Area without prior written consent of the fee owner, which shall not be unreasonably withheld. Unless the parties agree in writing to share the cost of improvements, improvements shall be at the sole expense of the improver. Any improvements to the Easement Area shall become the property of the fee owner unless otherwise agreed in writing.

New Construction. The new construction of those designated sections of road located within the Easement Area shown on Exhibit B in Sections 28, 29, and 33 is not intended to be completed until needed by a Party for its use of a road. Therefore, the obligation for the new construction in these sections shall occur as set forth below:

- (1) The fee owner of the property, over which a segment of road is designated for new construction as shown on Exhibit B, shall construct the road segment when determined necessary by the owner for its use of the road. The easement holder shall contribute a proportionate share of the cost of the new construction based on tributary acreage.
- (2) The easement holder of the property, over which a segment of road is designated for new

construction as shown on Exhibit B, shall construct the road segment when determined necessary by the easement holder for its use of the road. The fee owner of the property shall contribute a proportionate share of the cost of the new construction based on tributary acreage.

Compliance with Habitat Conservation Plan. The Easement Area is located within an area that is subject to state's Habitat Conservation Plan adopted in connection with Incidental Take Permit No. PRT-812521 as supplemented by Permit No. 1168 (collectively "ITP"). As long as the Habitat Conservation Plan remains in effect, Rayonier and all Permittees acting under Rayonier shall comply with the terms and conditions set forth in Exhibit D while operating on the Easement Area located on state owned land.

Prior Right. The easements granted by this Agreement are subject to all matters of public record.

Operational Restrictions. Site-specific operational requirements are listed in Exhibit E. Non-compliance with these requirements shall constitute a breach of the easement and may result in the fee owner requiring the easement holder to suspend operations until the breach is remedied.

Construction/Reconstruction Operation Plan(s). Thirty (30) days prior to any construction or reconstruction of a Road by an easement holder on lands of the fee owner, the easement holder will submit a written plan of construction to the fee owner outlining the construction or activity for approval, which shall not be unreasonably withheld. All construction and reconstruction shall comply with applicable state and local laws. In the event of an emergency that requires immediate action to protect person or property, an easement holder may take reasonable corrective action without prior notice to the fee owner, but in such case will notify fee owner within 24 hours.

Notice of Operation. When an easement holder or one of its Permittees plans to use any portion of the Road for the purpose of hauling timber or other profits, such party shall notify the fee owner thereof at least five (5) days prior to the commencement of such use, advising of the portion of Road to be used, the approximate dates when such use will begin and end, and of the approximate volumes of timber, forest products, or other profits to be hauled and promptly upon the completion of such use notify the other party thereof.

Gates. Rayonier and State may install and maintain locked gates at reasonable intervals within their respective Roads to restrict access. In the event, each party shall provide a lock combination or a lock key or shall allow the other party to install their own lock jointly with the other party and other easement holders.

Waste. An easement holder shall not cause nor permit any filling activity to occur in or on the Easement Areas, except by prior written approval of the fee owner. An easement holder 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 Easement Areas 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 Resource Conservation and Recovery

Act (42 USC § 6901 *et seq.*), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA 42 USC § 9601 *et seq.*), or the Washington Model Toxic Control Act (RCW 70.105D). An easement holder shall immediately notify the fee owner if the easement holder becomes aware of any release or threatened release of hazardous substance on the Easement Area or adjoining property. If a release of hazardous substance occurs in, on, under, or above the Easement Area arising out of any action of the easement holder or its Permittees, the easement holder 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. An easement holder shall not destroy any land survey corner monuments and reference points (including but not limited to corner markers, witness objects, or line markers) without prior written approval from the landowner, which shall not be unreasonably withheld. Monuments or reference points that must necessarily be disturbed or destroyed during road construction or maintenance activities must be adequately referenced and replaced, at the easement holder's cost, under the direction of a State of Washington Professional Land Surveyor, 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 and reference points.

Insurance. 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 State.

Before using any of said rights granted herein and at its own expense, Rayonier shall obtain and keep in force during the term of this agreement and require its contractors and purchasers of timber and other forest products to obtain while operating on the Easement area, the following liability insurance policies, insuring Rayonier against liability arising out of its operations, including use of vehicles. In addition State shall require its Permittees to comply with the same insurance requirements. The limits of insurance, which may be increased by mutual agreement of both parties, as deemed necessary, shall not be less than as follows:

- (a) Commercial General Liability (CGL) insurance with a limit of not less than \$1,000,000 per each occurrence. 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.
- (b) Employer's liability ("Stop Gap") insurance, and if necessary, 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.
- (c) Business Auto Policy (BAP) insurance, with a limit of not less than \$1,000,000 per accident, with such insurance covering liability arising out of "Any Auto".
- (d) Rayonier shall comply with all State of Washington workers' compensation statutes and regulations. Except as prohibited by law, Rayonier waives all rights

of subrogation against State for recovery of damages to the extent they are covered by workers compensation, employers' liability or commercial general liability insurance. All contractors, subcontractors, or other permittees of Rayonier and 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 Rayonier's obligation to provide and maintain insurance (including its contractors, purchasers of timber and other forest products) shall be reviewed and approved in advance by the Risk Manager for the Department of Natural Resources. Any exception to State's obligation to provide and maintain insurance (including its Permittees) shall be reviewed and approved by Rayonier. 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, its elected and appointed officials, agents and employees shall be named as an additional insured by Rayonier on all general liability, insurance policies required by this Agreement.

Before using any said rights granted herein, Rayonier shall furnish State 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 State's easement number. State shall furnish, upon request, a certificate of insurance showing compliance with the insurance requirements specified above.

State shall be provided written notice before cancellation or non-renewal of any insurance referred to herein, as prescribed in statute (RCW48.18 or RCW 48.15).

Rayonier shall include all Permittees as insureds under all required insurance policies or require separate certificates of insurance and endorsements for each. Rayonier shall require its contractors or purchasers of timber or other forest products to provide certificates of insurance to Rayonier. Failure of Permittees to comply with Rayonier's insurance requirements does not limit Rayonier's liability or responsibility.

State shall require its contractors or purchasers of timber or other forest products to provide certificates of insurance to State. Failure of Permittees to comply with State's insurance requirements does not limit State's liability or responsibility.

State and Rayonier shall furnish upon request certificates of insurance and endorsements in accordance with this paragraph.

All insurance provided by Rayonier in compliance with this agreement shall be primary. Rayonier waives all rights against State for recovery of damages to the extent these damages are covered by general liability insurance maintained pursuant to this agreement.

Each Party will make a reasonable effort to assist with recovery in the event there are damages from one of its Permittees or Permittee's sub-contractors. If a Party is unable to resolve a claim with its Permittees or its Permittee's sub-contractors, the other party has the right to pursue recovery of damages from those Permittees and Permittee's sub-contractors.

By requiring insurance herein, the parties do not represent that coverage and limits will be adequate to protect the other party, and such coverage and limits shall not limit the parties' respective liability and obligations under the indemnities and reimbursements granted in this agreement.

Indemnity by state. State shall defend, indemnify and hold harmless Rayonier from all claims that arise out of the negligence of State or its Permittees in their use of the easement. 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, State's obligation to defend, indemnify, and hold harmless Rayonier from any judgment, decree or arbitration award shall extend only to the percentage of negligence of State and its Permittees 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 Rayonier and its Permittees. This indemnification shall survive the expiration or termination of the easement.

Indemnity by Rayonier. Rayonier shall defend, indemnify and hold harmless State from all claims that arise out of the negligence of Rayonier or its Permittees in their use of the easement. 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, Rayonier's obligation to defend, indemnify, and hold harmless State from any judgment, decree or arbitration award shall extend only to the percentage of negligence of Rayonier and its Permittees in contribution to such claim. Rayonier waives its immunity under Title 51 RCW only to the extent it is required to indemnify, defend and hold harmless State and its Permittees. This indemnification shall survive the expiration or termination of the easement.

Notice. Unless otherwise specified herein, any notices required or permitted under this Agreement may be (i) delivered personally, (ii) delivered by a recognized national overnight delivery service, or (iii) mailed by certified United States mail, postage prepaid and return receipt requested. Notices to any party shall be directed to the address set forth below in this section, or to such other additional address as any party may specify by notice to the other party. Any notice delivered in accordance with this section shall be deemed given (a) in the case of personal delivery, on the day of delivery, (b) in the case of any notice delivered by a recognized national overnight delivery service, on the day of delivery to this service, or (c) in the case of any notice mailed by certified U.S. mail, upon receipt of the return receipt.

To State:
DEPARTMENT OF NATURAL RESOURCES
411 Tillicum lane
Forks, WA. 98331

To:
RAYONIER OPERATING COMPANY LLC
3033 Ingram Street
Hoquiam, WA.98550

Integrated agreement; modifications. This Agreement constitutes the entire agreement and understanding of the parties with respect to the subject matter of the Agreement and supersedes all prior negotiations and representations. This Agreement shall not be modified except by written approval of both parties. The parties agree to execute any additional documents reasonably necessary to effectuate the provisions and purposes of this Agreement.

Severability. If any provision of this Agreement is held to be invalid or unenforceable, it shall not affect the validity of any other provision herein, and to this end the provisions of this Agreement 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 Agreement.

Waiver. Failure of either party to insist upon the strict performance of any of the terms and conditions of this Agreement, or failure to exercise any rights or remedies provided in this Agreement 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 Agreement, nor shall any purported oral modification or rescission of this Agreement 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 Agreement shall constitute waiver of any subsequent breach, default, or violation of the same or other term, warranty, representation, agreement, covenant, right, condition, or provision.

Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the parties, their successors and assigns.

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

Exhibits. All exhibits referenced in this Agreement are incorporated as part of the Agreement

Headings. The headings in this Agreement 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 Agreement nor the meaning of any of its provisions.

Counterparts. This Agreement 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 Agreement at different times and places by the parties shall not affect its validity so long as all the parties execute a counterpart of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this instrument, in duplicate to become effective as of the day and year first above written.

RAYONIER OPERATING COMPANY LLC

Dated: 4/4/, 2019.



JONATHAN P. SIMPSON
Its: Director, Accounting Operations



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Dated: May 19, 2019.
AWB



ANGUS W. BRODIE
Deputy Supervisor of State Uplands
P.O. Box 7000
1111 Washington Street SE
Olympia, WA. 98504-7000
360.902.1600

Affix Seal of Commissioner
of Public Lands

Approved as to Form
June 29, 2018
by Colleen Warren
Assistant Attorney General
for the State of Washington

REPRESENTATIVE ACKNOWLEDGEMENT

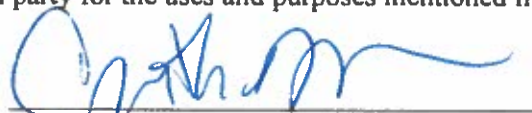
State of Florida

County of Nassau _____

I certify that I know or have satisfactory evidence that JONATHAN P. SIMPSON is the person who appeared before me, and said person acknowledged that (he/she) signed this instrument, on oath stated that (he/she) was authorized to execute the instrument and acknowledged it as the Director, Accounting Operations (type of authority) of RAYONIER OPERATING COMPANY LLC to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: 4/15/19

(Seal or stamp)



(Signature)

Cynthia L. Jones

(Print Name)



Notary Public in and for the State of Florida,
residing at Fernandina Beach, FL 32034

My appointment expires 10/10/19

STATE ACKNOWLEDGEMENT

State of Washington

County of Thurston

I certify that I know or have satisfactory evidence that ANGUS W. BRODIE is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Deputy Supervisor of State Uplands of the Department of Natural Resources of the State of Washington to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: 5/9/19

(Seal or stamp)



Tami K. Kellogg
(Signature)

Tami K. Kellogg
(Print Name)

Notary Public in and for the State of Washington,
residing at McCleary

My appointment expires 11/28/2020

EXHIBIT A
Burdened Parcels

State:

SE 1/4 SE 1/4 of Section 21

E1/2 SW 1/4 of Section 28

SE 1/4 SW 1/4, SE 1/4 of Section 29

NE 1/4 NE 1/4 of Section 31

All located in Township 29 North, Range 14 West, W.M. in Clallam County, Washington

Rayonier:

N 1/2 SE 1/4 of Section 21

S 1/2 SW 1/4, SW 1/4 SE 1/4 of Section 22

SE 1/4 NE 1/4 of Section 31

E 1/2 NE 1/4, N 1/2 NW 1/4, SW 1/4 NW 1/4 of Section 32

NW 1/4 NW 1/4 of Section 33,

All located in Township 29 North, Range 14 West, W.M. in Clallam County, Washington

EXHIBIT B
Easement Area, Page 1 of 2

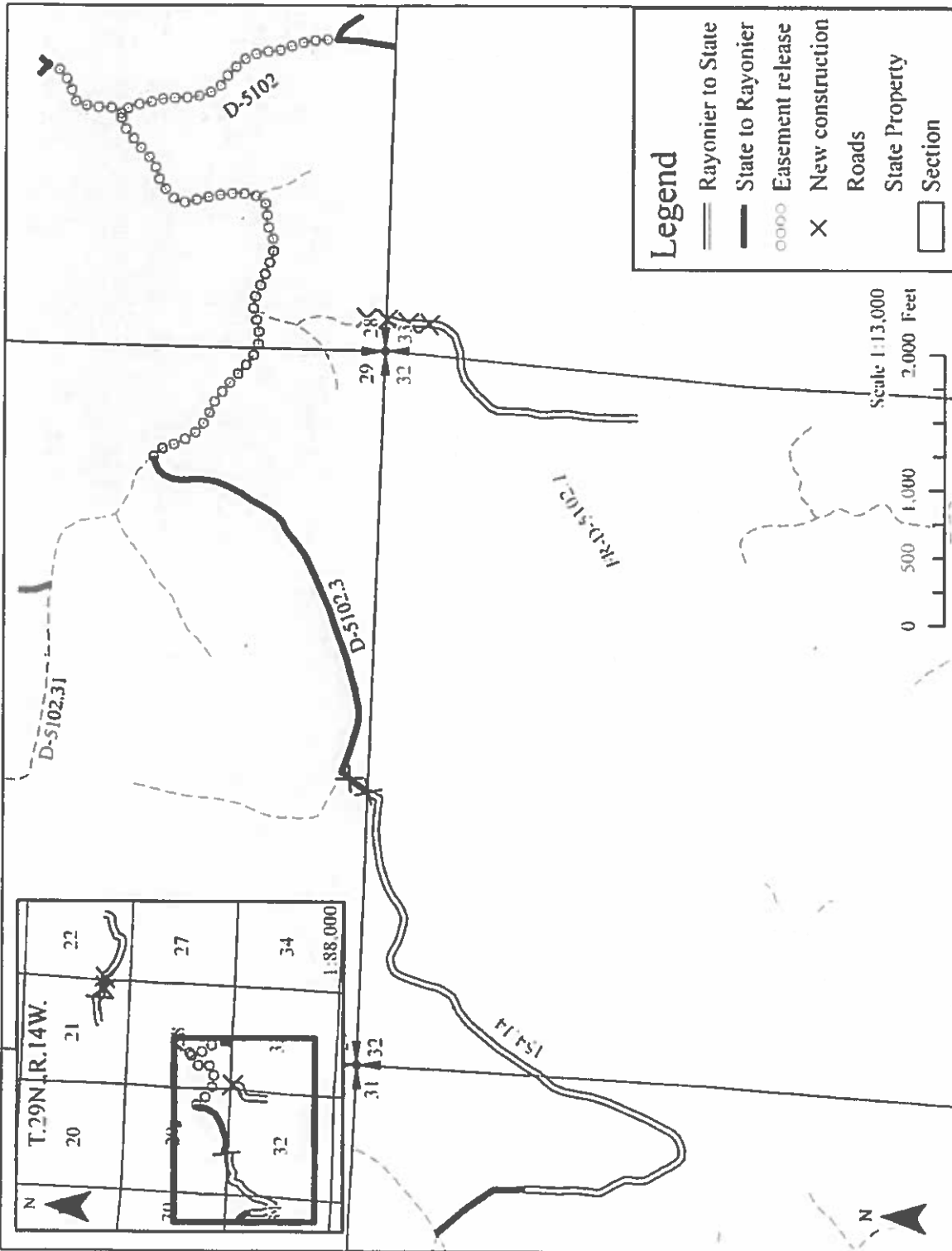


EXHIBIT B
Easement Area, Page 2 of 2

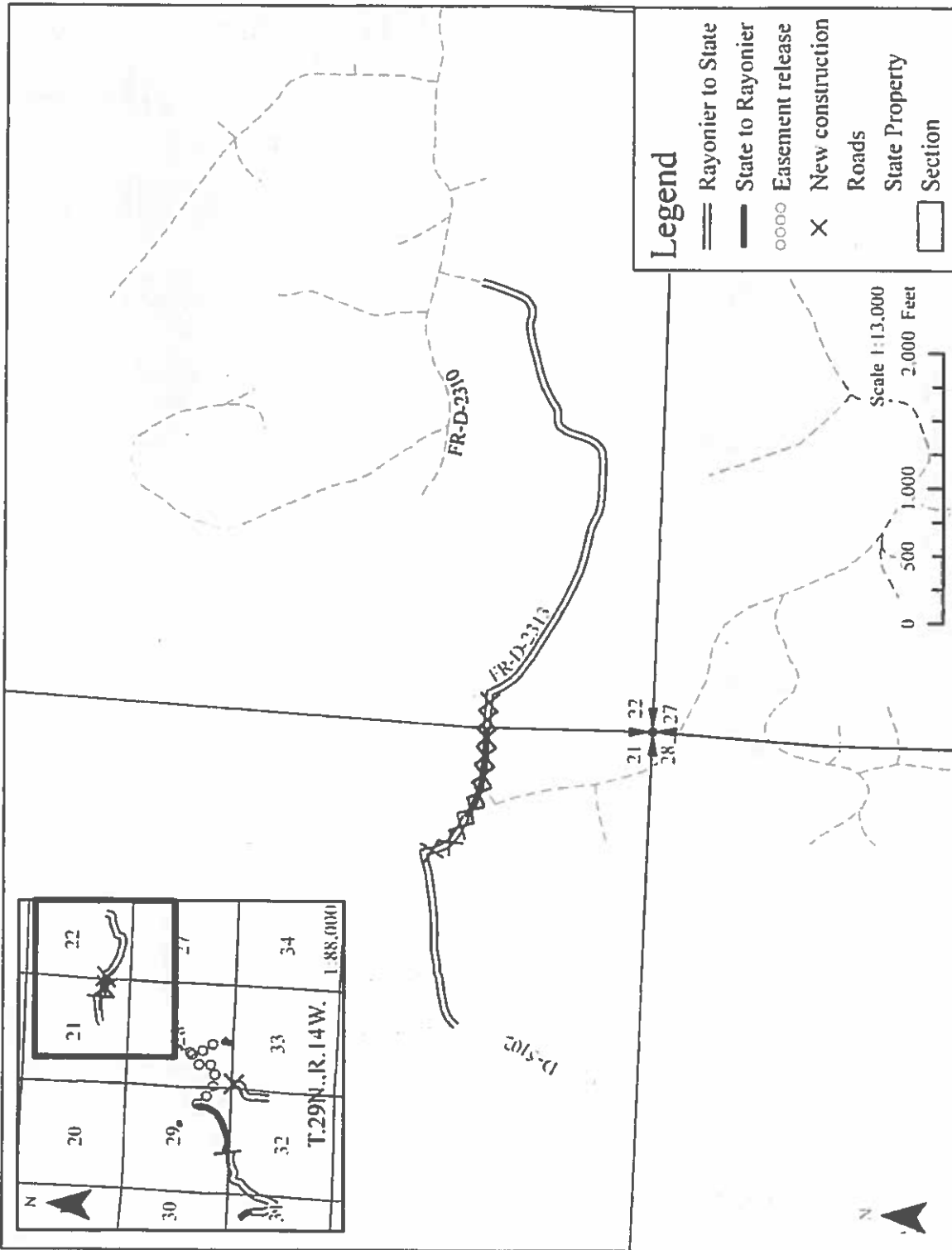


EXHIBIT C
Benefited Parcels

Rayonier:

S 1/2 NE 1/4, S 1/2 NW 1/4, E 1/2 SW 1/4, NE 1/4 SE 1/4, W 1/2 SE 1/4	Section 21
SW 1/4 NW 1/4, NW 1/4 SW 1/4, S 1/2 SW 1/4, SW 1/4 SE 1/4	Section 22
E 1/2 NW 1/4, W 1/2 NE 1/4, NW 1/4 SE 1/4	Section 28
S 1/2 NE 1/4, N 1/2 NE 1/4, SW 1/4 NW 1/4	Section 29
SE 1/4 NE 1/4	Section 31
N 1/2 NW 1/4	Section 32

All within Township 29 North, Range 14 West, W.M. in Clallam County, Washington.

State:

SE 1/4 SE 1/4	Section 21
NE 1/4 NE 1/4, SW 1/4, W 1/2 NW 1/4	Section 28
SE 1/4 NW 1/4, E 1/2 SE 1/4, SE 1/4	Section 29

All within Township 29 North, Range 14 West, W.M. in Clallam County, Washington.

Rayonier Easement Release - SW 1/4 of Section 28 and the E 1/2 SE 1/4 of Section 29, both in Township 29 North, Range 14 West, W.M. in Clallam County, Washington.

EXHIBIT D
HCP Requirements

- 1) Rayonier shall immediately notify State of the following:
 - a) That Rayonier has discovered locations of any species listed by the U.S. Fish and Wildlife Service as threatened or endangered species (listed species) under the Endangered Species Act as such list may be updated from time to time; and
 - b) That Rayonier has located any live, dead, injured, or sick specimens of any listed species.
- 2) Notification required in subsection 1) must in all circumstances occur as soon as practicable but in any event within 24 hours.
- 3) Rayonier may be required to take certain actions to help State safeguard the well-being of any live, injured or sick specimen of any listed species until the proper disposition of such specimen can be determined by State.
- 4) Any application for a Forest Practices Permit submitted by Rayonier for activities on the State Easement Area must identify that the State Easement Area is covered by the HCP.

EXHIBIT E
OPERATIONAL REQUIREMENTS

- Roads may not be used when continued use will result in excessive damage due to weather or other conditions as determined by the State.
- No snow removal without permission from the landowner.
- Gates must be kept closed when not hauling.
- All methods of chemical weed control on State Land shall be approved in writing by State prior to beginning such activities. No aerial spraying is permitted on State land without prior approval by State.

When recorded return to:
Department of Natural Resources
Olympic Region
Attn: Albert Huggins
411 Tillicum lane
Forks, WA. 98331



WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES
HILARY S. FRANZ | COMMISSIONER OF PUBLIC LANDS

EASEMENT EXCHANGE

Grantor(s): STATE OF WASHINGTON, DEPARTMENT OF NATURAL RESOURCES, POPE RESOURCES, & RAYONIER FOREST RESOURCES, LP

Grantee(s): STATE OF WASHINGTON, DEPARTMENT OF NATURAL RESOURCES & RAYONIER FOREST RESOURCES, LP

Legal Description: See **Exhibits A1 (RFR Burdened Property), A2 (Pope Burdened Property), A3 (State Burdened Property), B1 (State Easement Grant to RFR), B2 (RFR Easement Grant to State), B3 (Pope Easement Grant to State), C1 (RFR Benefitted Property), and C2 (State Benefitted Property)**

Assessor's Property Tax Parcel Numbers: See **Exhibits A1, A2, and A3**
DNR Easement No. 55-101887 & 50-101886

This Easement Agreement is between POPE RESOURCES, A DELAWARE LIMITED PARTNERSHIP COMPANY ("Pope"), RAYONIER FOREST RESOURCES, LP, A DELAWARE LIMITED PARTNERSHIP COMPANY ("RFR") (Pope and RFR collectively referred to as "Rayonier"), and the STATE OF WASHINGTON ("State"), acting by and through the Department of Natural Resources (DNR), each also individually referred to as a "Party" and collectively as "Parties" and dated as of OCTOBER 3, 2022 ("Effective Date").

AGREEMENT

State and Rayonier agree to the following grant of reciprocal easements, with the final easements being mutually agreeable. State agrees to grant RFR the road easements over State property as shown on **Exhibit B1** and described herein, subject to the terms of this Agreement. RFR agrees to grant State the road easements as shown in **Exhibit B2** and described herein, subject to the terms of this Agreement. Pope agrees to grant State the road easements as shown in **Exhibit B3** and described herein, subject to the terms of this Agreement.

Consideration. In exchange for the mutual promises and covenants herein contained, and other good and valuable consideration, the mutual receipt and sufficiency of which is hereby acknowledged, the Parties agree to the following terms and conditions.

Conveyances.

1. To State:

- a. RFR hereby grants and conveys to State, its successors and assigns, a permanent, non-exclusive easement (the “State Easement”) over certain portions of parcels of land in Clallam and Jefferson Counties legally described as set forth in **Exhibit A1**, said easements to be sixty (60) feet in width running thirty (30) feet on each side of the centerline of roads located and/or to be constructed approximately as shown on **Exhibit B2** (hereafter individually and collectively referred to as “State Easement Area”).
- b. Pope hereby grants and conveys to State, its successors and assigns, a permanent, non-exclusive easement (the “State Easement”) over certain portions of parcels of land in Jefferson County legally described as set forth in **Exhibit A2**, said easements to be sixty (60) feet in width, running thirty (30) feet on each side of the centerline of roads located and/or to be constructed approximately as shown on **Exhibit B3** (hereafter individually and collectively referred to as “State Easement Area”).

2. To RFR:

State hereby grants and conveys to RFR, its successors and assigns, a permanent, non-exclusive easement (the “RFR Easement”) over certain portions of parcels of land in Clallam, Jefferson and Grays Harbor Counties legally described as set forth in **Exhibit A2**, said easement to be sixty (60) feet in width running thirty (30) feet on each side of the centerline of a road located and/or to be constructed approximately as shown on **Exhibit B1** (hereafter individually and collectively referred to as “Rayonier Easement Area”).

Purpose. The easements described above are conveyed to provide ingress and egress to and from lands owned or hereafter acquired by each grantee for resource management and administrative activities, including, but not limited to:

- Hauling timber products, valuable materials such as sand, gravel, stone and minerals, special forest products such as tree boughs and brush,
- Performing management activities associated with forestlands, such as reforestation, routine ongoing inventory and stocking control,
- Leasing, and managing communication, grazing and agricultural sites, and
- Leasing for other natural resource activities consistent with county zoning and other terms and conditions included in this Agreement.

Authorized use of easement shall include the right to travel, maintain, repair, construct or reconstruct roads on each respective easement area subject to the restrictions set forth hereafter.

No rights of public access are granted by either Party under this Agreement.

Nature of Estate. These easements shall be deemed appurtenant to real property located in Clallam, Jefferson and Grays Harbor Counties and legally described as set forth on **Exhibits C-1 and C-2** (hereafter Benefitted Parcels); *provided*, however, that either Party may add after acquired property as a benefitted parcel, subject to agreement between the Parties pertaining to re-allocation of easement maintenance costs, if any, pertaining to such after acquired property.

Reservations. Each fee owner reserves all rights incident to fee ownership of the Easement Area on their respective lands 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 Easement Area on its land; the right at all times to cross and re-cross the Easement Area at any place on grade or otherwise; and the right to use, maintain, patrol, reconstruct or repair the Easement Area, so long as, in each case, the exercise of any such rights does not unreasonably interfere with the rights granted herein. Each fee owner may grant to third parties any and all rights reserved on its land.

Timber Removal. Timber or other profits of the land comprising an Easement Area may be removed by the easement holder where reasonably necessary to use the easement area, but the fee owner shall be entitled to the market value of the material removed. The easement holder shall not cut or remove merchantable timber within the Easement Area located within the other Party's fee-owned property without the advance written consent of the fee owner, which shall not be unreasonably withheld. It is expressly understood and agreed that all merchantable timber within any Easement Area shall be the sole property of the fee owner and any permitted cutting or removal shall be for the sole benefit of the fee owner.

Where merchantable timber from the Easement Area must be removed to accommodate the easement holder's operations, the easement holder shall provide written notice to the fee owner at least sixty (60) days prior to commencement of timber harvest operations to allow the fee owner adequate time to remove timber or make arrangements for timber removal by the easement holder or other entity. If the fee owner arranges for timber removal by the easement holder, the fee owner shall provide the easement holder the merchantable timber value within thirty (30) days of receiving the easement holder's written notice.

The easement holder may cut and remove any non-merchantable timber within the Easement Area located within the fee owner's Burdened Property, provided that: (i) the easement holder has given the fee owner thirty (30) days prior written notice of the easement holder's intent to cut and remove such non-merchantable timber, except for such cutting and removal of non-merchantable timber as is necessary to perform maintenance as defined herein; (ii) the fee owner and the easement holder have adequately identified that portion of the Easement Area where non-merchantable timber will be removed through industry standard geolocation methods and staking (to the extent reasonably requested by the fee owner); (iii) the easement holder has compensated the fee owner for the loss of such non-merchantable timber based on the fee owner's formal or informal cruise of such non-merchantable timber and in accordance with the fee owner's customary method for valuing non-merchantable timber, which is based on the estimated value at maturity discounted to present value; and (iv) the easement holder has obtained, with the cooperation of the fee owner,

all required governmental approvals and permits for the cutting and removal of non-merchantable timber from that portion of the Easement Area where timber will be removed. The fee owner shall provide the easement holder the value of the non-merchantable timber within thirty (30) days of receiving the easement holder's written notice.

The easement holder shall cut and remove timber only as permitted hereunder and in accordance with any required governmental approvals and permits and as allowed under all applicable laws, regulations, and ordinances. Non-merchantable timber, slash, and debris shall be disposed of in accordance with governmental approvals and permits or, if not specified, as directed by the fee owner. Burnable slash and debris shall be piled and burned by the easement holder in accordance with the terms of any required governmental approvals and permits.

Export Restrictions. Any export-restricted timber originating from state land under this Agreement shall not be exported until processed. Rayonier shall comply with all applicable requirements of WAC 240-15-015 (relating to the prohibitions on export and substitution), WAC 240-15-025 (relating to reporting requirements), and WAC 240-15-030 (relating to enforcement). All export restricted timber from state lands shall be painted and branded in compliance with WAC 240-15-030(2). If Rayonier knowingly violates any of the prohibitions in WAC 240-15-015, Rayonier shall be barred from bidding on or purchasing export restricted timber as provided under WAC 240-15-030. Rayonier shall comply with the Export Administration Act of 1979 (50 U.S.C. App. Subsection 2406(i)) which prohibits the export of unprocessed western cedar logs harvested from state lands.

Compliance with Laws. For all activities conducted pursuant to this Agreement, each Party shall, at its own expense, comply with all applicable laws.

Permittees. Each easement holder may permit its respective employees, agents, contractors, subcontractors, 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 easement holder herein. Acts or omissions of the Permittees operating under this Agreement shall be deemed an act of the easement holder. Restrictions or requirements placed on the easement holder herein shall apply equally to the Permittees.

Maintenance. For the purposes of this agreement, 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 practices standards set forth in Chapter 222-24 WAC as now written or hereafter amended. Maintenance shall not include replacement, which is the act of replacing or reconditioning road components that are destroyed, damaged, worn out or that have become unsafe from age, wear, or the elements.

When a road is being used solely by one Party that Party shall be solely responsible for maintaining that portion of the road(s) 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 Parties shall meet at times to be set by mutual agreement and establish necessary maintenance provisions in writing. Such provisions shall include, but not be limited to the following:

- (1) The appointment of a maintainer, which may be one of the Parties or any third party, to perform all recurrent maintenance;
- (2) The extent of resurfacing necessary to keep the road(s) to the standard originally constructed or thereafter improved, and to reduce environmental impacts; and
- (3) A method of payment by which each Party using the road(s) or a portion thereof shall pay its pro rata share of the cost of maintenance and resurfacing.

Repairs. Each Party shall repair, or cause to be repaired at its sole cost, that damage to the road(s) arising out of the easement holder'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 easement holder if the easement holder is the sole user of the Road, the fee owner if the fee owner is the sole user of the road, and shared jointly if there is joint use of the Road.

Improvements. For the purpose of this Agreement, improvements are the act of reconditioning or replacing road components so that they are of a standard higher than that existing at the time use commenced.

The easement holder will not make improvements to the easement area without prior written consent of the fee owner, which shall not be unreasonably withheld. Unless the Parties agree in writing to share the cost of improvements, improvements shall be at the sole expense of the improver. Any improvements to the easement area shall become the property of the fee owner unless otherwise agreed in writing.

Compliance with Habitat Conservation Plan. The easement areas on the State land are located within an area that is subject to state's Habitat Conservation Plan adopted in connection with Incidental Take Permit No. TE812521-1 as supplemented by Permit No. 1168 (collectively "ITP"). As long as the Habitat Conservation Plan remains in effect, Rayonier and all Permittees acting under Rayonier shall comply with the terms and conditions set forth in **Exhibit D** while operating on the Easement Area located on state owned land.

Prior Right. The easements granted by this agreement are subject to all matters of public record.

Operational Restrictions. Site-specific operational requirements are listed in **Exhibit E**. Non-compliance with these requirements shall constitute a breach of the easement and may result in the fee owner requiring the easement holder to suspend operations in the affected easement area until the breach is remedied.

Construction/Reconstruction Operation Plan(s). Thirty (30) days prior to any construction or reconstruction of a road by an easement holder on lands of the fee owner, the easement holder will submit a written plan of construction to the fee owner outlining the construction or activity for approval, which shall not be unreasonably withheld. All construction and reconstruction shall comply with applicable state and local laws. In the event of an emergency that requires immediate action to protect person or property, an easement holder may take reasonable corrective action without prior notice to the fee owner, but in such case will notify fee owner within 24 hours.

Notice of Operation. When an easement holder or one of its Permittees plans to use any portion of the road for the purpose of hauling timber or other profits, such Party shall notify the fee owner thereof at least five (5) days prior to the commencement of such use, advising of the portion of road to be used, the approximate dates when such use will begin and end, and of the approximate volumes of timber, forest products, or other profits to be hauled and promptly upon the completion of such use notify the other Party thereof.

Gates. Each of RFR, Pope and State may install and maintain locked gates at reasonable intervals within their respective roads to restrict access. In the event, each Party shall provide a lock combination or a lock key or shall allow the other Party to place their own lock jointly with the other Party and other easement holders.

Waste. An easement holder shall not cause nor permit any filling activity to occur in or on the easement areas, except by prior written approval of the fee owner. An easement holder 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 Easement Areas within the fee owner's fee property 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 Resource Conservation and Recovery Act (42 USC § 6901 *et seq.*), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA 42 USC § 9601 *et seq.*), or the Washington Model Toxic Control Act (RCW 70.105D). An easement holder shall immediately notify the fee owner if the easement holder becomes aware of any release or threatened release of hazardous substance on the easement area or adjoining property. If a release of hazardous substance occurs in, on, under, or above the easement area arising out of any action of the easement holder or its Permittees, the easement holder 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. An easement holder shall not destroy any land survey corner monuments and reference points (including but not limited to corner markers, witness objects, or line markers) without prior written approval from the fee owner, which shall not be unreasonably withheld. Monuments or reference points that must necessarily be disturbed or destroyed during road construction or maintenance activities must be adequately referenced and replaced, at the easement holder's cost, under the direction of a State of Washington Professional Land Surveyor, 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 and reference points.

Insurance. 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 to the negligence of State.

Before using any of said rights granted herein and at its own expense, Rayonier shall obtain and keep in force during the term of this agreement and require its Permittees to obtain while operating on the easement area, the following liability insurance policies, insuring Rayonier against liability arising out of its operations, including use of vehicles. In addition State shall require its Permittees to comply with the same insurance requirements. The limits of insurance, which may be increased by mutual agreement of both Parties, as deemed necessary, shall not be less than as follows:

- (a) 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.
- (b) 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.
- (c) 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".
- (d) Rayonier shall comply with all State of Washington workers' compensation statutes and regulations. Except as prohibited by law, Rayonier waives all rights of subrogation against State for recovery of damages to the extent they are covered by workers compensation, employers' liability, commercial general liability or commercial umbrella liability insurance. All contractors, subcontractors, or other permittees of Rayonier and 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 Rayonier's obligation to provide and maintain insurance (including its Permittees) shall be reviewed and approved in advance by the Risk Manager for the Department of Natural Resources. Any exception to State's obligation to provide and maintain insurance (including its Permittees) shall be reviewed and approved by Rayonier. 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, its elected and appointed officials, agents and employees shall be named as an additional insured by Rayonier on all general liability, excess, and umbrella insurance policies required by this Agreement.

Before using any said rights granted herein, Rayonier shall furnish State 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 State's easement number. State shall furnish, upon request, a certificate of insurance showing compliance with the insurance requirements specified above.

State shall be provided written notice before cancellation or non-renewal of any insurance referred to herein, as prescribed in statute (RCW48.18 or RCW 48.15).

Rayonier shall include all Permittees as insureds under all required insurance policies or require separate certificates of insurance and endorsements for each. Rayonier shall require its Permittees, to provide certificates of insurance to Rayonier. Failure of Permittees to comply with Rayonier's insurance requirements does not limit Rayonier's liability or responsibility.

State shall require its Permittees to provide certificates of insurance to State and shall require Permittee's sub-contractors to be insured under the Permittee's or have in its possession separate certificates of insurance and endorsements for each. Failure of Permittees to comply with State's insurance requirements does not limit State's liability or responsibility.

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

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

If Rayonier is self-insured, Rayonier certifies that it is self-insured for all the liability exposures, its self-insurance plan satisfies all State requirements, and its self-insurance plan provides coverage equal to that required in the Agreement. Rayonier shall provide to State evidence of its status as a self-insured entity. Upon request by State, Rayonier shall provide a written description of its financial condition and/or the self-insured funding mechanism. Rayonier shall provide State with at least thirty (30) days written notice prior to any material changes to Rayonier's self-insured funding mechanism.

By requiring insurance herein, the Parties do not represent that coverage and limits will be adequate to protect the other Party, and such coverage and limits shall not limit the Parties' respective liability and obligations under the indemnities and reimbursements granted in this agreement

Indemnity by State. State shall defend, indemnify and hold harmless Rayonier from all claims that arise out of the negligence of State or its Permittees in their use of the easement. 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, State’s obligation to defend, indemnify, and hold harmless Rayonier from any judgment, decree or arbitration award shall extend only to the percentage of negligence of State and its Permittees 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 Rayonier and its Permittees. This indemnification shall survive the expiration or termination of the easement.

Indemnity by Rayonier. Rayonier shall defend, indemnify and hold harmless State from all claims that arise out of the negligence Rayonier or its Permittees or in their use of the easement. 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, Rayonier’s obligation to defend, indemnify, and hold harmless State from any judgment, decree or arbitration award shall extend only to the percentage of negligence of Rayonier and its Permittees in contribution to such claim. Rayonier waives its immunity under Title 51 RCW only to the extent it is required to indemnify, defend and hold harmless State and its Permittees. This indemnification shall survive the expiration or termination of the easement.

Notice. Unless otherwise specified herein, any notices required or permitted under this Agreement may be (i) delivered personally, (ii) delivered by a recognized national overnight delivery service, or (iii) mailed by certified United States mail, postage prepaid and return receipt requested. Notices to any Party shall be directed to the address set forth below in this section, or to such other additional address as any Party may specify by notice to the other Party. Any notice delivered in accordance with this section shall be deemed given (a) in the case of personal delivery, on the day of delivery, (b) in the case of any notice delivered by a recognized national overnight delivery service, on the day of delivery to this service, or (c) in the case of any notice mailed by certified U.S. mail, upon receipt of the return receipt.

To State:
DEPARTMENT OF NATURAL RESOURCES
Olympic Region
411 Tillicum lane
Forks, WA. 98331
Phone: 360-374-2800

To RFR and/or Pope:
RAYONIER FOREST RESOURCES, LP
3033 Ingram Street
Hoquiam, WA 98550
Phone: 360-538-7000

With a copy to:
POPE RESOURCES, LP
3033 Ingram Street
Hoquiam, WA 98550

And to:
Rayonier Forest Resources, LP
1 Rayonier Way
Wildlight, FL 32097
Attn: Legal Department

Integrated agreement; modifications. This Agreement constitutes the entire agreement and understanding of the Parties with respect to the subject matter of the Agreement and supersedes all prior negotiations and representations. This Agreement shall not be modified except by written approval of both parties. The Parties agree to execute any additional documents reasonably necessary to effectuate the provisions and purposes of this Agreement.

Severability. If any provision of this Agreement is held to be invalid or unenforceable, it shall not affect the validity of any other provision herein, and to this end the provisions of this Agreement 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 Agreement.

Waiver. Failure of either Party to insist upon the strict performance of any of the terms and conditions of this Agreement, or failure to exercise any rights or remedies provided in this Agreement 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 Agreement, nor shall any purported oral modification or rescission of this Agreement 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 Agreement shall constitute waiver of any subsequent breach, default, or violation of the same or other term, warranty, representation, agreement, covenant, right, condition, or provision.

Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the Parties, their successors and assigns.

Recording. This Agreement shall be recorded by State in the official records of Counties of Jefferson, Grays Harbor, and Clallam, State of Washington.

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

Exhibits. All exhibits referenced in this Agreement are incorporated as part of the Agreement.

Headings. The headings in this Agreement 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 Agreement nor the meaning of any of its provisions.

Counterparts. This Agreement 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

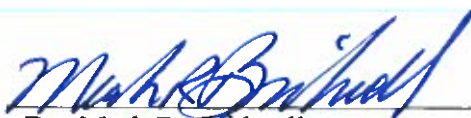
which may be sufficiently evidenced by one counterpart. Execution of this Agreement at different times and places by the Parties shall not affect its validity so long as all the Parties execute a counterpart of this Agreement.

[Signature pages follow]

IN WITNESS WHEREOF, the Parties hereto have executed this instrument, in duplicate to become effective as of the day and year first above written.

POPE RESOURCES
A Delaware limited partnership

Dated: September 6, 2022.



By: Mark R. Bridwell
Its: Vice President and Corporate Secretary
3033 Ingram Street
Hoquiam, WA. 98550
360.538.7000

RAYONIER FOREST RESOURCES, L.P.
A Delaware limited partnership

By: Rayonier Timberlands Management LLC
Its Managing General Partner

Dated: September 6, 2022.



By: Mark R. Bridwell
Its: Vice President and Corporate Secretary
3033 Ingram Street
Hoquiam, WA. 98550
360.538.7000

Attest: 
By: Kyle Sawicki
Its: Assistant Secretary

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Dated: October 3, 2022.



DUANE EMMONS
Acting Deputy Supervisor for State Uplands
P.O. Box 7000
1111 Washington Street SE
Olympia, WA. 98504-7000
360.902.1600



Approved as to Form
June 29, 2018
by Colleen Warren
Assistant Attorney General
for the State of Washington

RFR ACKNOWLEDGEMENT

STATE OF FLORIDA)
) ss
COUNTY OF NASSAU _____)

I, Anna Michelle Van Deren, a Notary Public in and for said County and State, hereby certify that Mark R. Bridwell, whose name as Vice President and Corporate Secretary and Kyle Sawicki, Assistant Secretary, respectively, Rayonier Timberlands Management, LLC, a Delaware limited liability company, in its capacity as manager of RAYONIER FOREST RESOURCES, L.P., a Delaware limited partnership is signed to the foregoing instrument and who are personally known to me, acknowledged before me on this day that, being informed of the contents of the instrument, he, as such officer and with fully authority, executed the same voluntarily for and as the act of said limited liability company in its capacity and with full authority as manager of said limited partnership.

GIVEN UNDER MY HAND AND OFFICIAL SEAL on September 6, 2022.

Anna Michelle Van Deren
(Signature)

(Seal or stamp)



ANNA MICHELLE VANDEREN
Commission # HH 233430
Expires April 3, 2026

Anna Michelle Van Deren

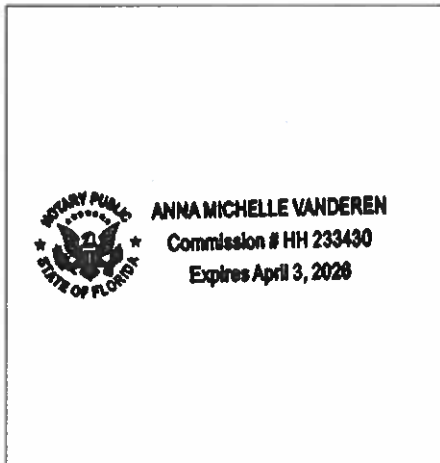
Notary Public in and for the State of Washington,
residing at 1 Rayonier Way, Wildlight, FL 32097.

My appointment expires April 3, 2026.

POPE ACKNOWLEDGEMENT

STATE OF FLORIDA }
 }
 } SS.
COUNTY OF NASSAU }

This record was acknowledged before me on 6th day of September, 2022 by Mark R. Bridwell as Vice President and Corporate Secretary of Pope Resources, a Delaware limited partnership..



(Stamp)

(Signature of notary public) Anna Michelle Van Deren

Notary Public, State of Florida

(Title of office)

Residing at: 1 Rayonier Way, Wildlight, FL 32097.

My Commission Expires: April 3, 2026.

(Date)

STATE ACKNOWLEDGEMENT

State of Washington

County of Thurston

I certify that I know or have satisfactory evidence that DUANE EMMONS is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Acting Deputy Supervisor for State Uplands of the Department of Natural Resources of the State of Washington to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: 10/3/2022

(Seal or stamp)



Tami K. Kellogg
(Signature)

Tami K. Kellogg
(Print Name)

Notary Public in and for the State of Washington,

residing at McCleary.

My appointment expires 11/28/2024

EXHIBIT A1

Legal Description of RFR Burdened Property

RFR Property:

Section	Legal Description	Tax Parcel Number
Township 29 North, Range 14 West, W.M., Clallam County		
2	SE1/4SE1/4	142902400000
11	N1/2NE1/4	142911200000
13	NE1/4SE1/4, S1/2SE1/4	142913100000
Township 29 North, Range 15 West, W.M., Clallam County		
14	SW1/4SE1/4	152914000000
23	NE1/4NE1/4, NW1/4NE1/4	152923000000
24	NW1/4NW1/4, SW1/4NW1/4, SE1/4NW1/4, E1/2SW1/4	152924000000
25	NE1/4NW1/4	152925110000
Township 27 North, Range 14 West, W.M., Jefferson County		
2	Lots 2, 3, 4, 5, 6 and 7	714021000
3	Lots 1, 2, 7 and 8	714031000
Township 25 North, Range 13 West, W.M., Jefferson County		
4	Lot 2	513041001

EXHIBIT A2

Legal Description of Pope Burdened Property

Pope Property:

Section	Legal Description	Tax Parcel Number
Township 25 North, Range 2 West, W.M., Jefferson County		
4	NW1/4NW1/4, SW1/4NW1/4, SE1/4NW1/4 NE1/4SW1/4 NW1/4SE1/4 SW1/4SW1/4	502041000 502043001 502041000 502043001
5	Lot 1 & Lot 5 Lot 4 & S1/2SW1/4, SW1/4SE1/4	502051000 502052000
Township 26 North, Range 2 West, W.M., Jefferson County		
33	SW1/4SW1/4	602332001

EXHIBIT A3

Legal Description of State Burdened Property

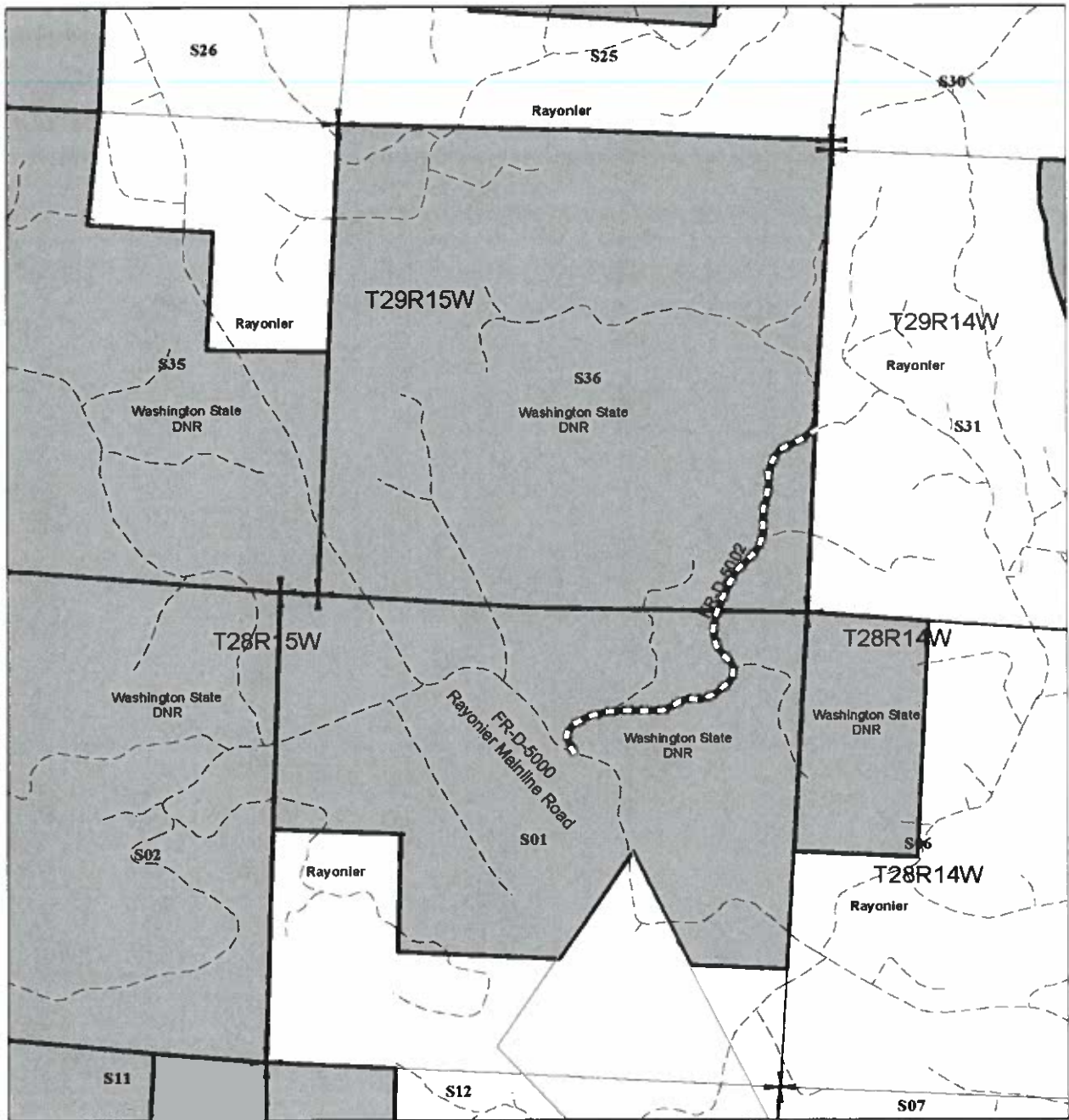
Section	Legal Description	Tax Parcel Number
Township 28 North, Range 15 West, W.M., Clallam County		
1	Lots 1 & 2, SW1/4NE1/4	152801110000
Township 29 North, Range 13 West, W.M., Clallam County		
18	NE1/4NW1/4	132918210000
	Lot 2 & SE1/4NW1/4	132918230000
	Lot 3	132918300000
Township 29 North, Range 14 West, W.M., Clallam County		
11	SE1/4NE1/4	142911140000
24	NW1/4NE1/4	142924100000
35	E1/2NE1/4	142935100000
	NE1/4SE1/4	142935400000
36	NW1/4NW1/4	142936220000
Township 29 North, Range 15 West, W.M., Clallam County		
36	Lot 1 & NE1/4SE1/4	152936000000
Township 25 North, Range 13 West, W.M., Jefferson County		
4	E1/2 SW1/4	513042000
9	NE1/4NW1/4	513091002
Township 21 North, Range 9 West, W.M., Grays Harbor County		
36	NE1/4, E1/2SW1/4, SE1/4	210936000000

EXHIBITS B1 – B3

Easement Grants: (B1) State to RFR; (B2) RFR to State; and (B3) Pope to State.

[See attached]

EXHIBIT B1
STATE Easement Grant to RFR



LEGEND



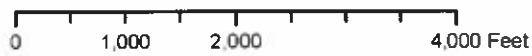
STATE LAND



EXISTING ROADS

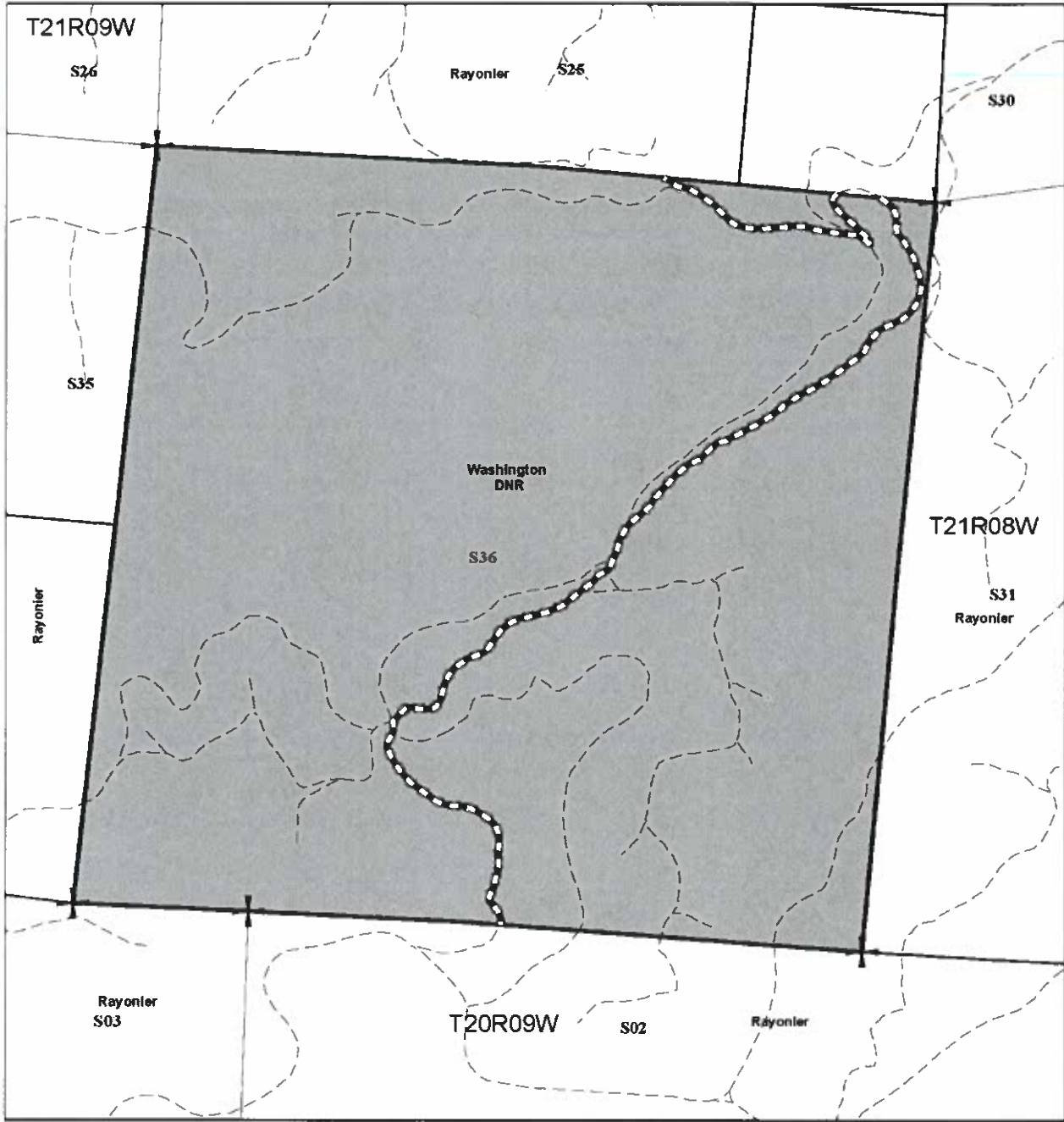


RAYONIER EASEMENT AREA
 LENGTH 5,420 ft, WIDTH 60 ft, AREA 7.7 acres



Map Prepared 4/12/2022

EXHIBIT B1
STATE Easement Grant to RFR



LEGEND



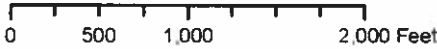
STATE LAND



RAYONIER EASEMENT AREA
 LENGTH 10,100 ft, WIDTH 60 ft, AREA 13.9 acres

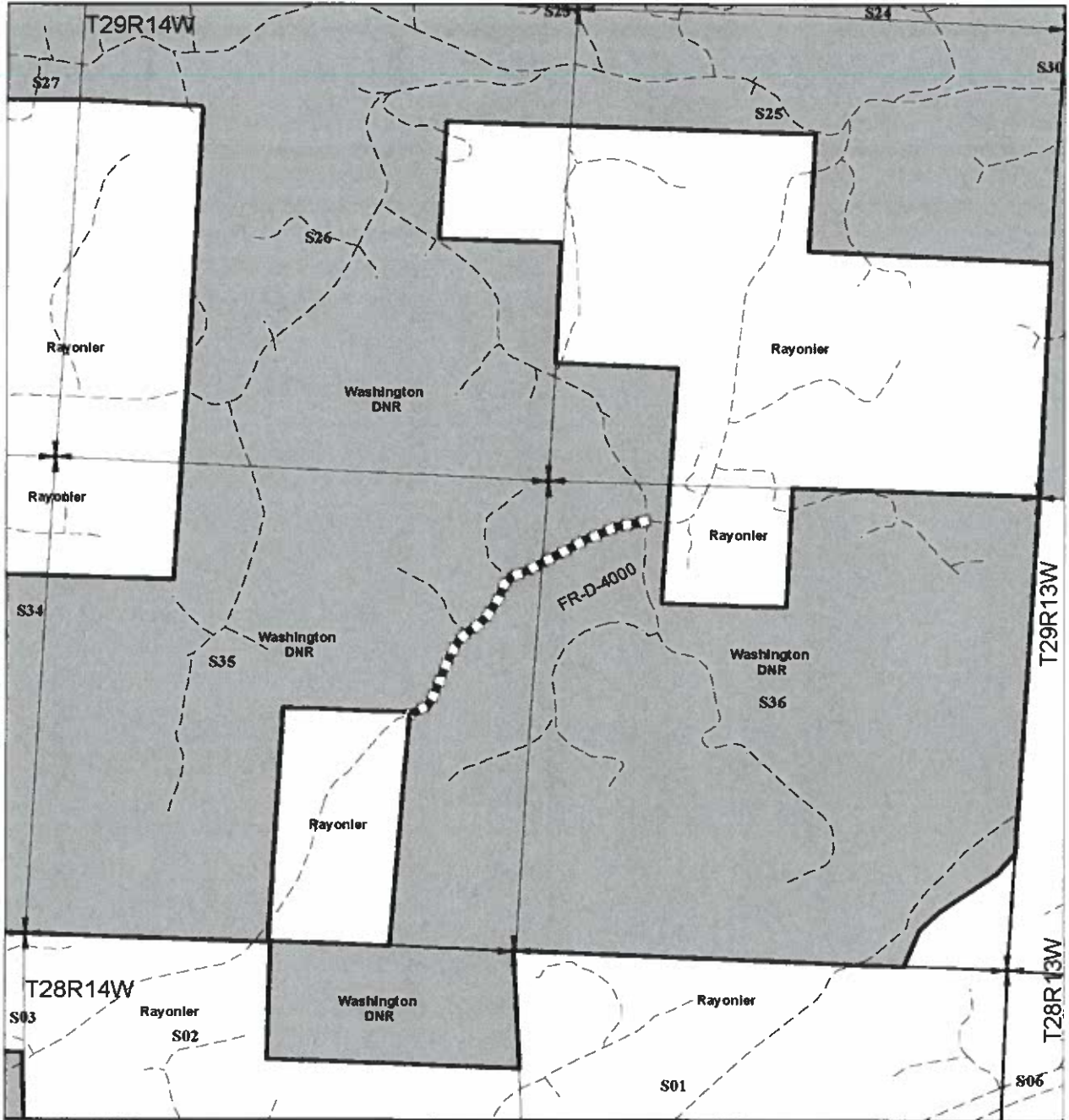


EXISTING ROADS



Map Prepared 4/12/2022

EXHIBIT B1
STATE Easement Grant to RFR



LEGEND



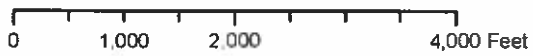
STATE LAND



RAYONIER EASEMENT AREA
 LENGTH 3,580 ft, WIDTH 60 ft, AREA 4.9 acres

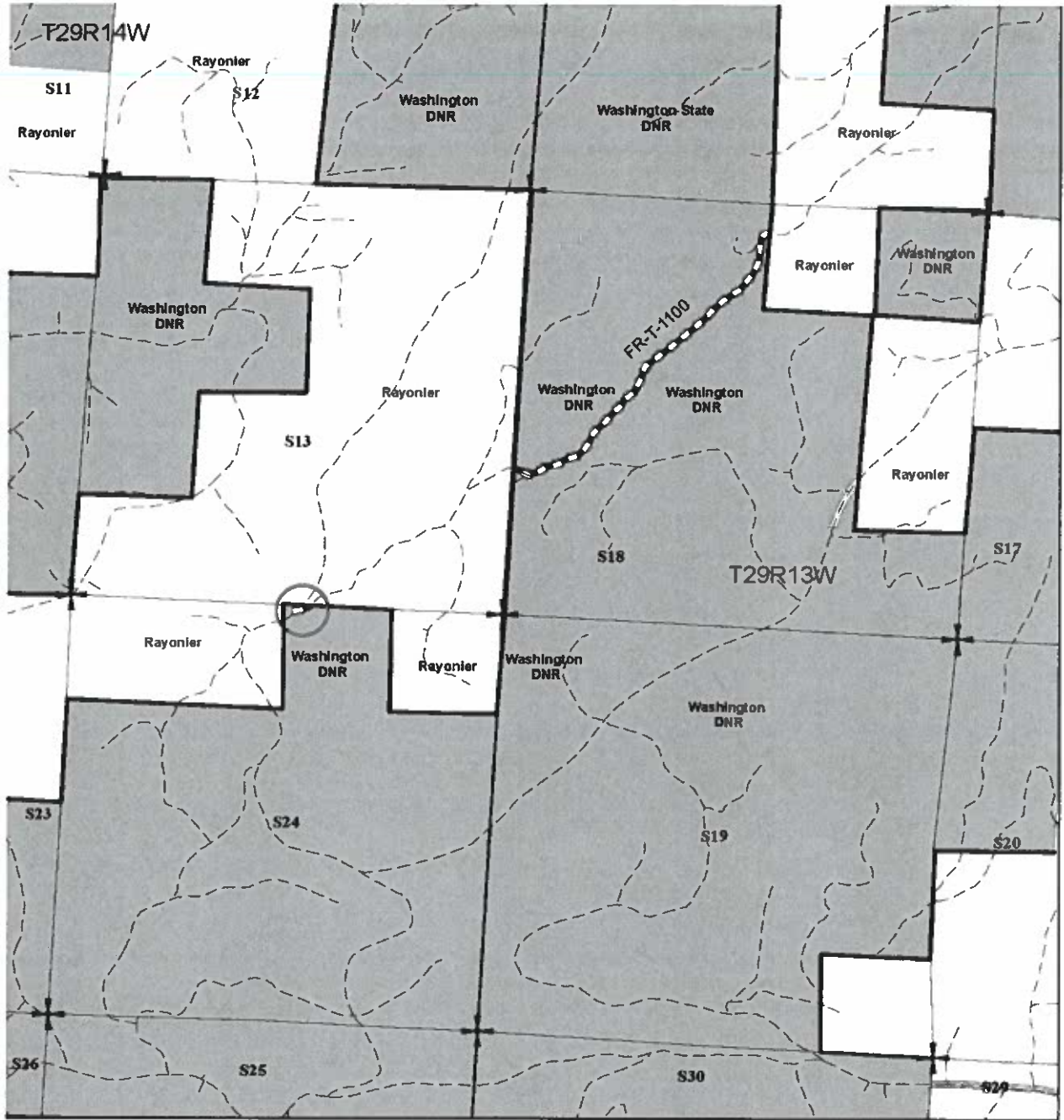


EXISTING ROADS



Map Prepared 4/12/2022

EXHIBIT B1
STATE Easement Grant to RFR



LEGEND



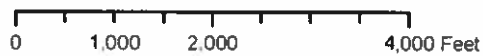
STATE LAND



EXISTING ROADS

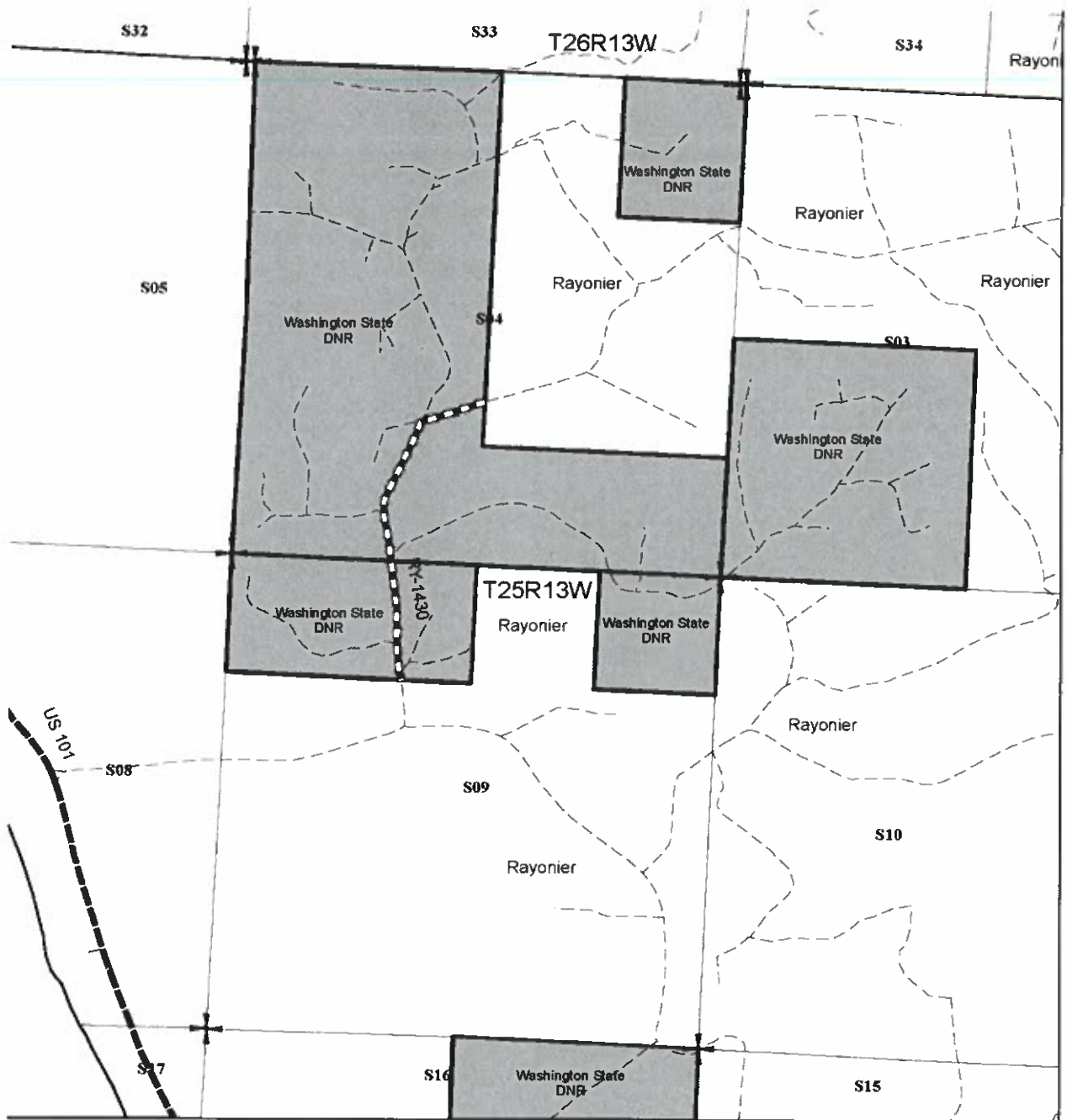


RAYONIER EASEMENT AREA
 LENGTH 4,830 ft, WIDTH 60 ft, AREA 6.7 acres



Map Prepared 4/12/2022

**EXHIBIT B1
STATE Easement Grant to RFR**

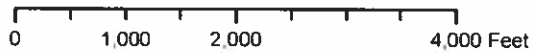


LEGEND

-  STATE LAND
-  EXISTING ROADS

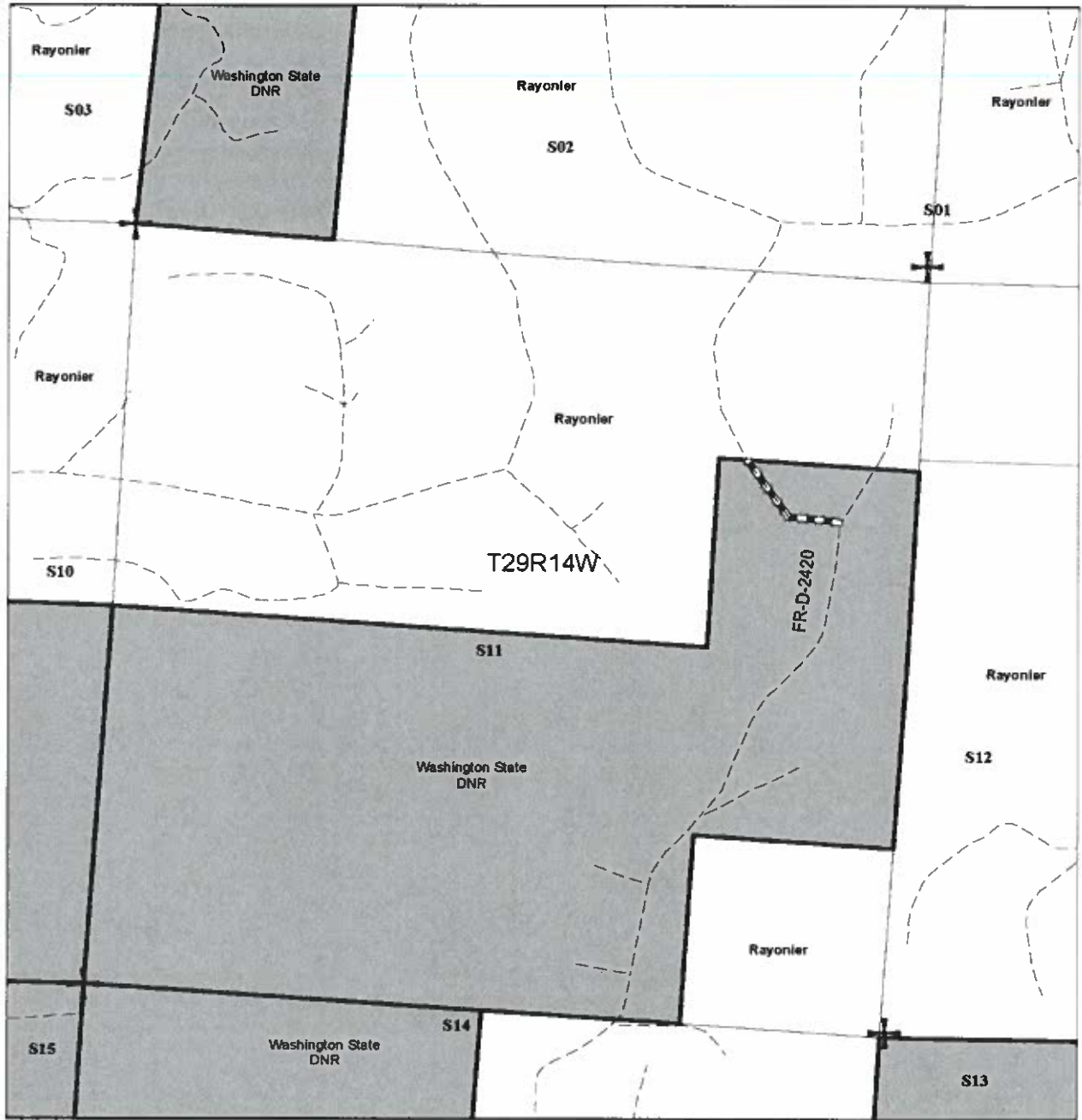


RAYONIER EASEMENT AREA
LENGTH 3,702 ft, WIDTH 60 ft, AREA 5 acres



Map Prepared 4/12/2022

**EXHIBIT B1
STATE Easement Grant to RFR**



LEGEND



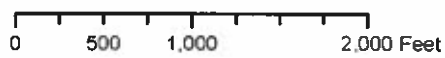
STATE LAND



RAYONIER EASEMENT AREA
LENGTH 700 ft, WIDTH 60 ft, AREA .97 acres

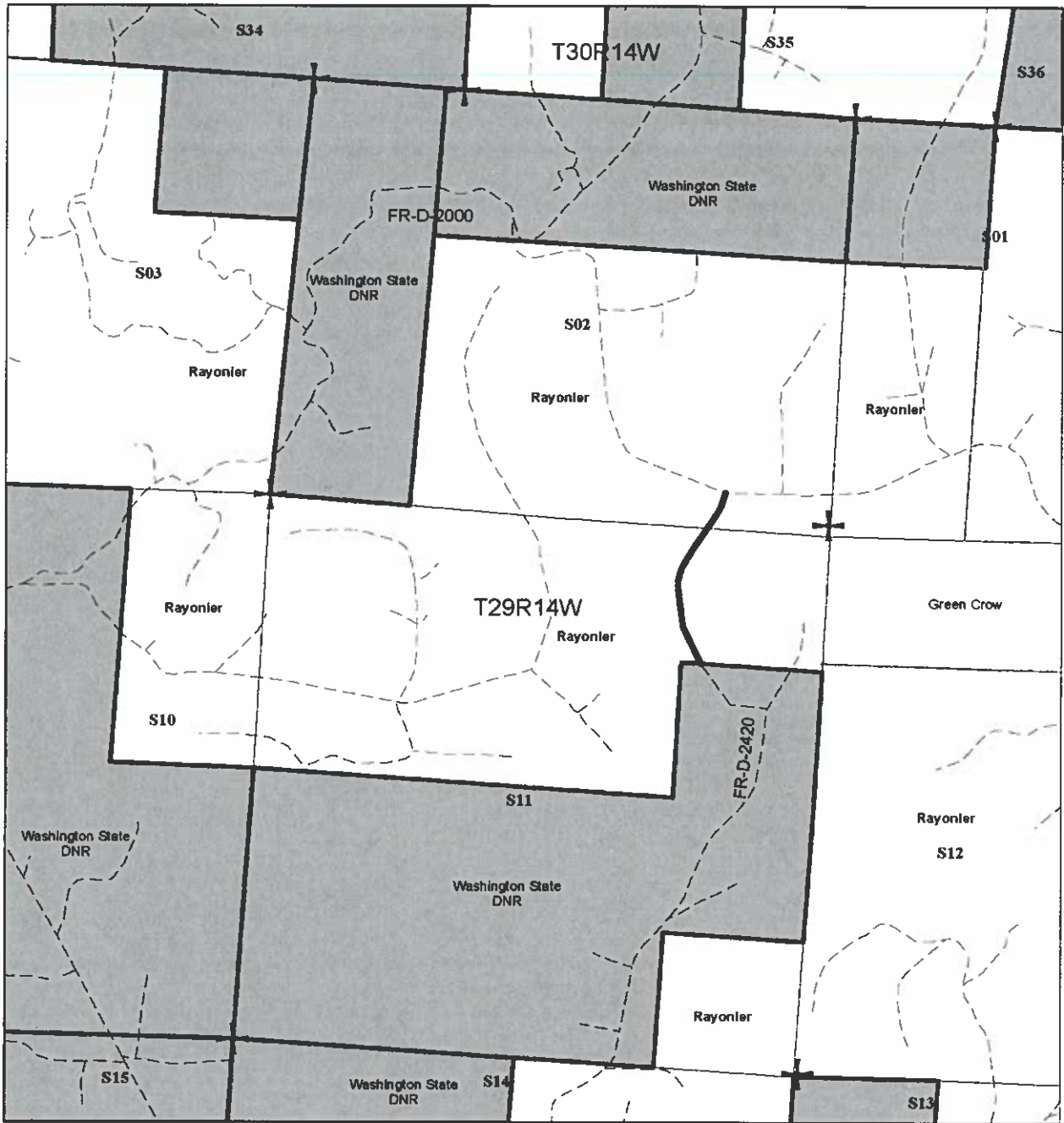


EXISTING ROADS



Map Prepared 4/12/2022

EXHIBIT B2
RFR Easement Grant to STATE



LEGEND



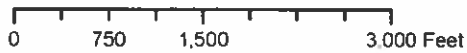
STATE LAND



STATE EASEMENT AREA
 LENGTH 2,090 ft, WIDTH 60 ft, AREA 2.9 acres

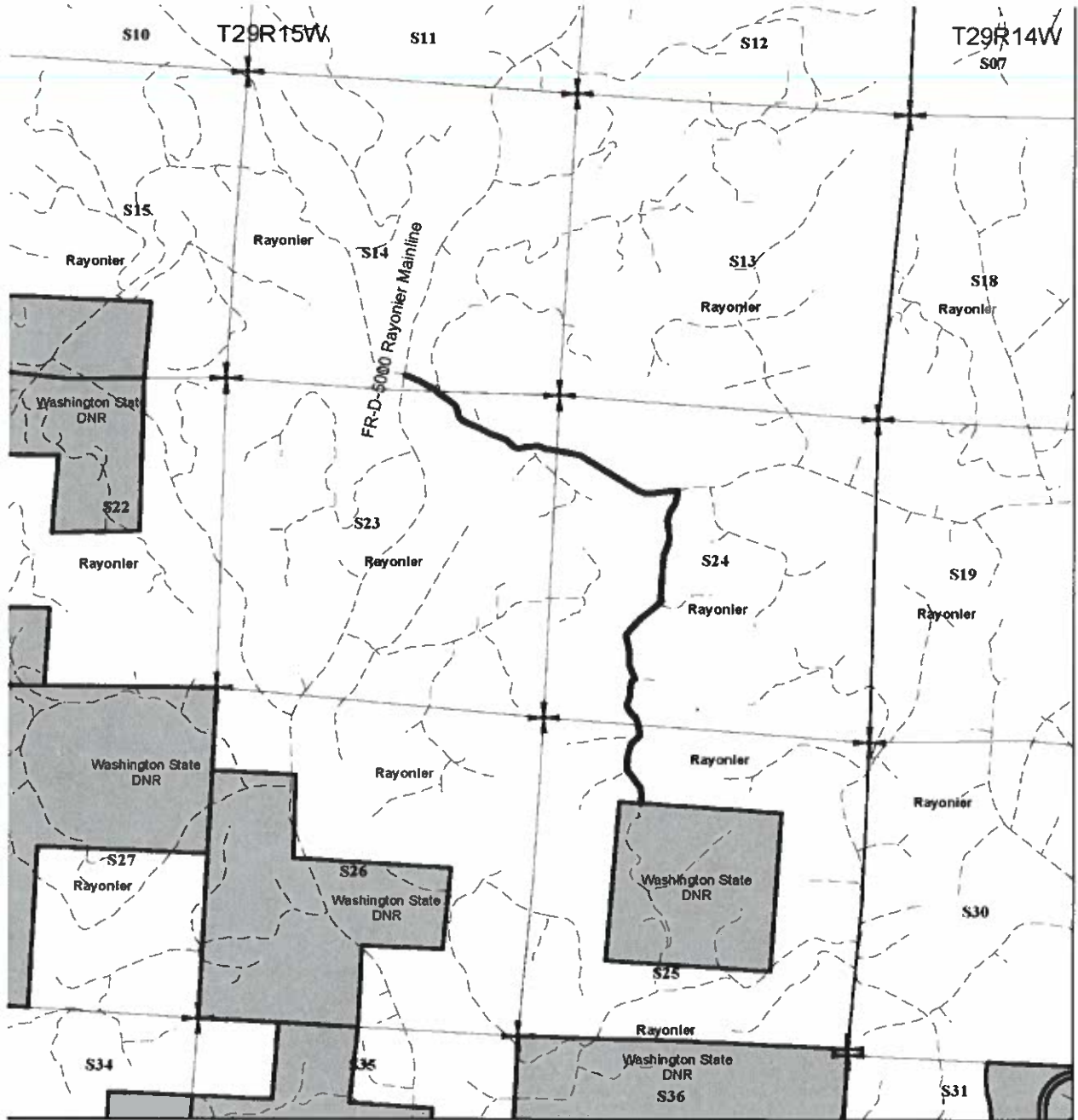


EXISTING ROADS



Map Prepared 4/12/2022

EXHIBIT B2
RFR Easement Grant to STATE



LEGEND



STATE LAND



EXISTING ROADS

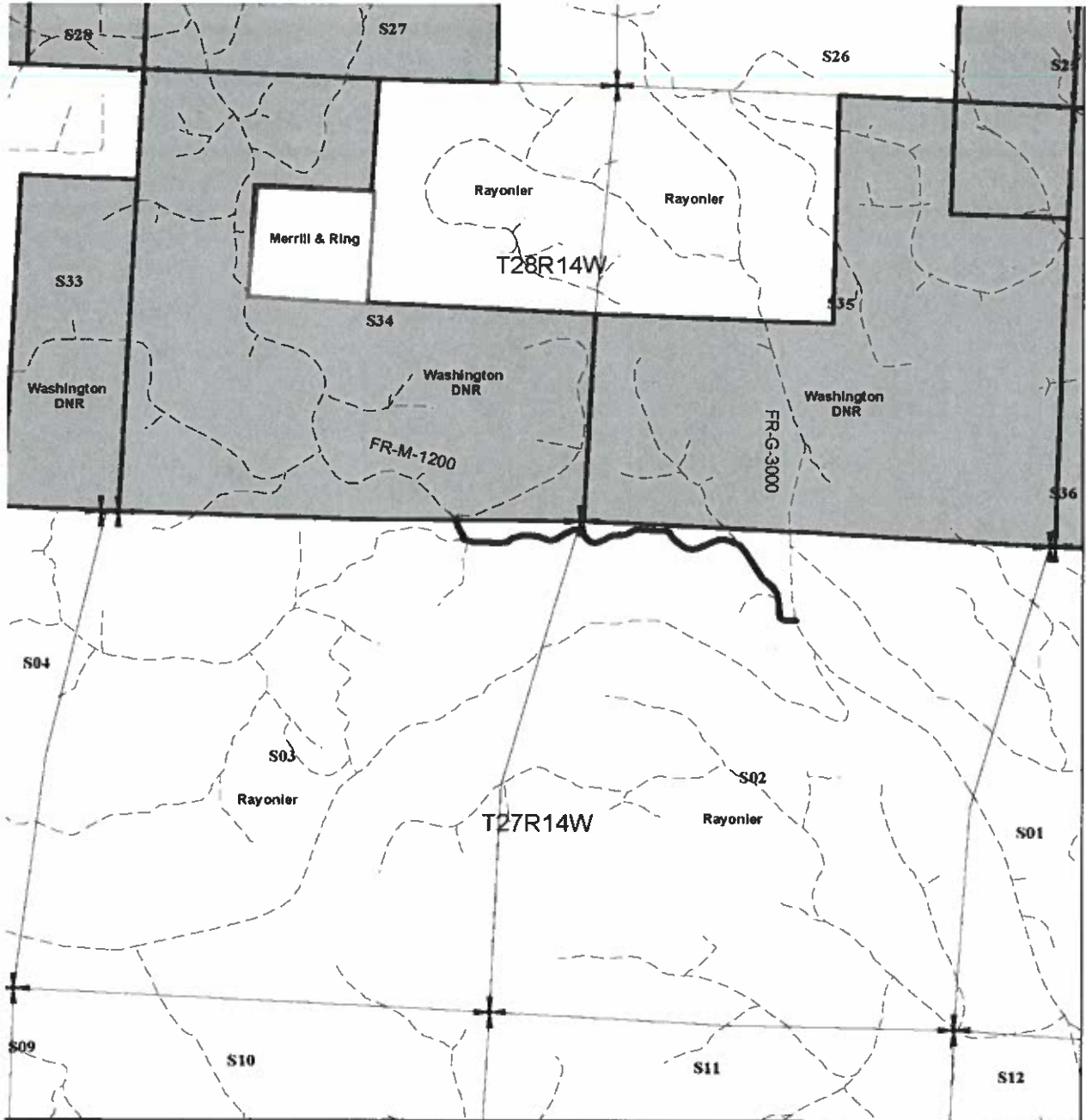


STATE EASEMENT AREA
 LENGTH 10,760 ft, WIDTH 60 ft, AREA 14.8 acres



Map Prepared 4/12/2022

**EXHIBIT B2
RFR Easement Grant to STATE**



LEGEND



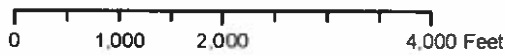
STATE LAND



EXISTING ROADS

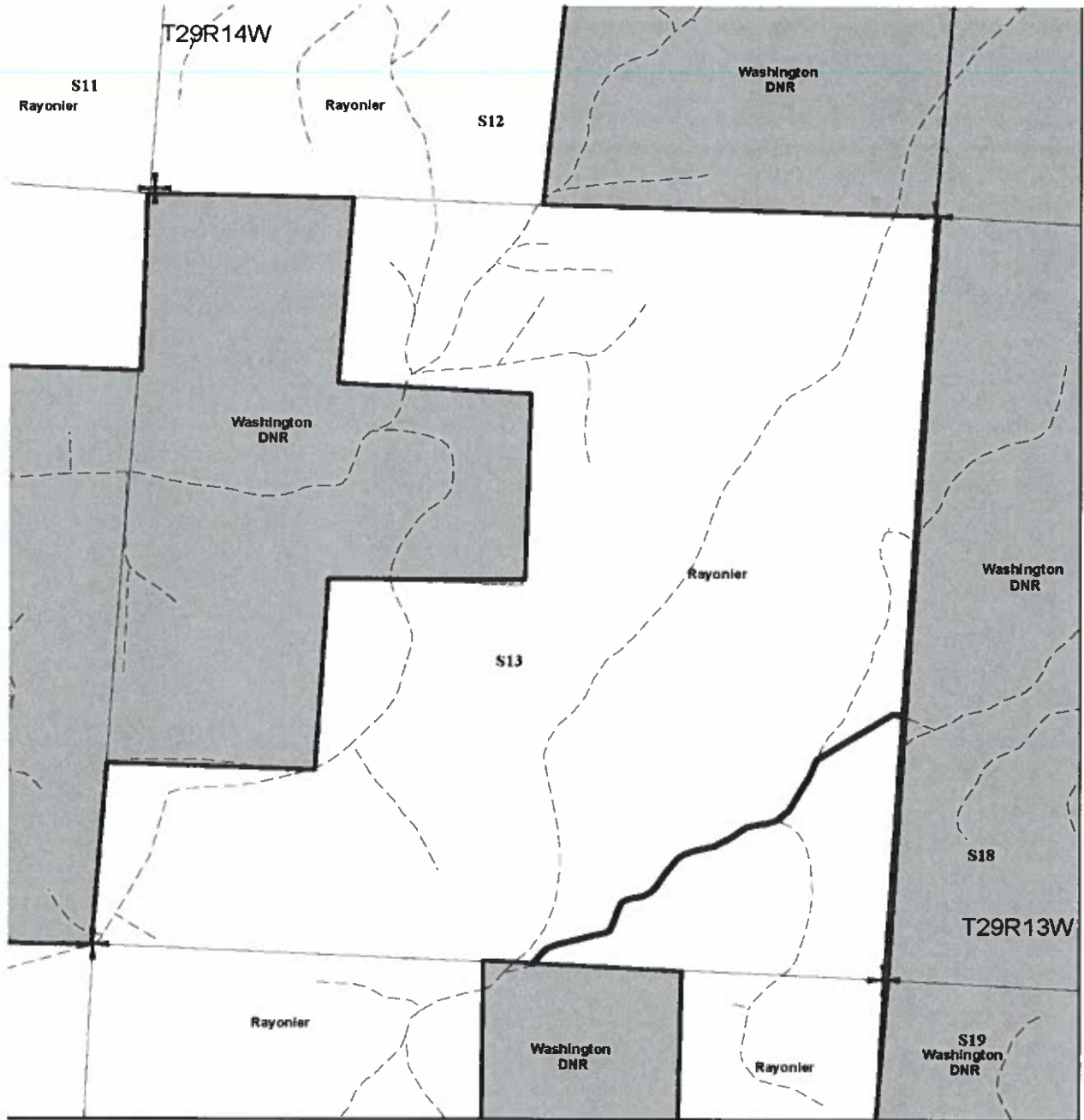


**STATE EASEMENT AREA
LENGTH 4,830 ft, WIDTH 60 ft, AREA 6.6 acres**



Map Prepared 4/12/2022

EXHIBIT B2
RFR Easement Grant to STATE



LEGEND



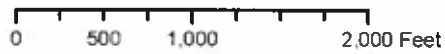
STATE LAND



EXISTING ROADS

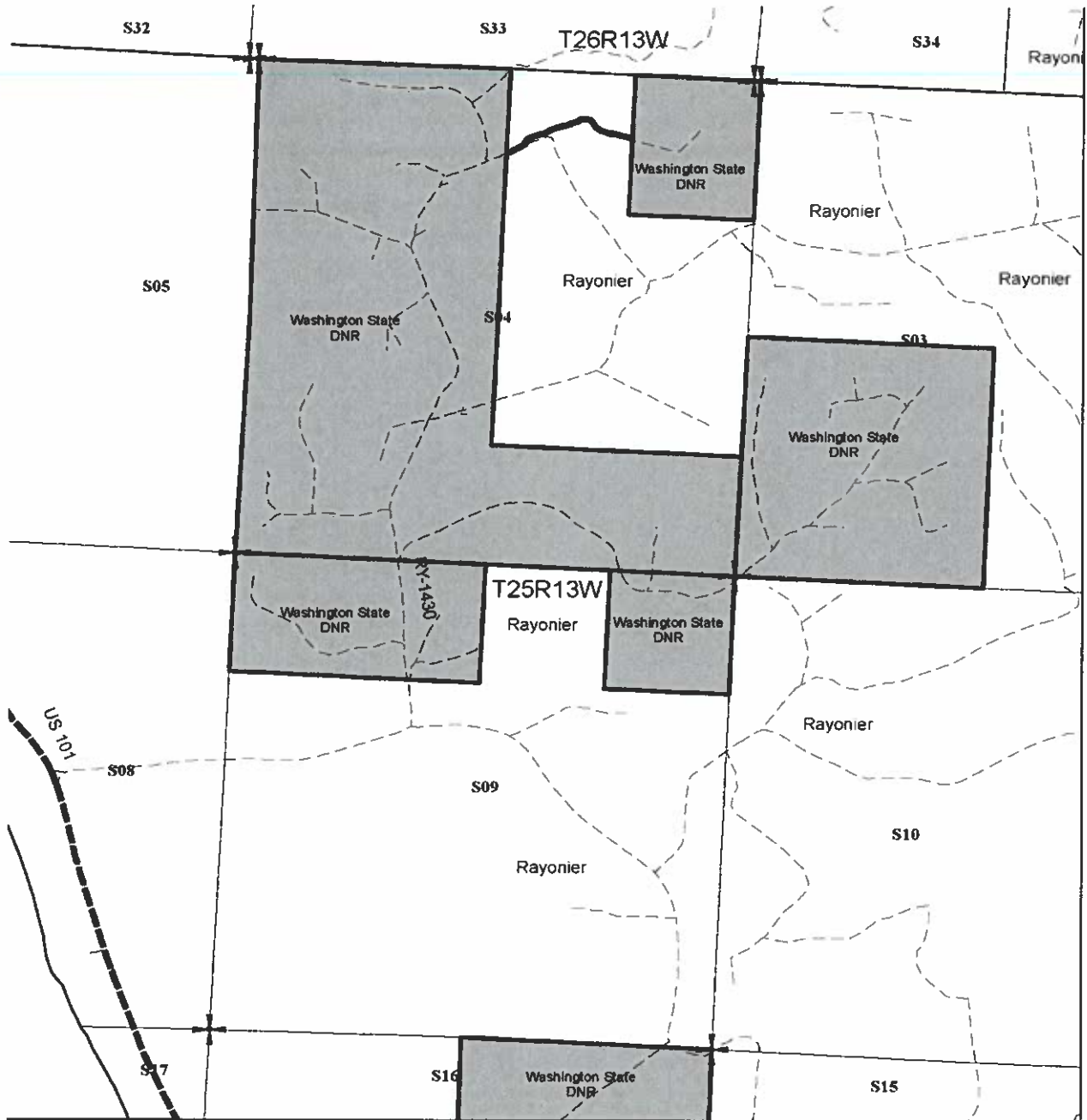


STATE EASEMENT AREA
LENGTH 3,170 ft, WIDTH 60 ft, AREA 4.4 acres



Map Prepared 4/12/2022

EXHIBIT B2
RFR Easement Grant to STATE



LEGEND



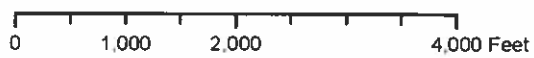
STATE LAND



STATE EASEMENT AREA
 LENGTH 1,519 ft, WIDTH 60 ft, AREA 2 acres

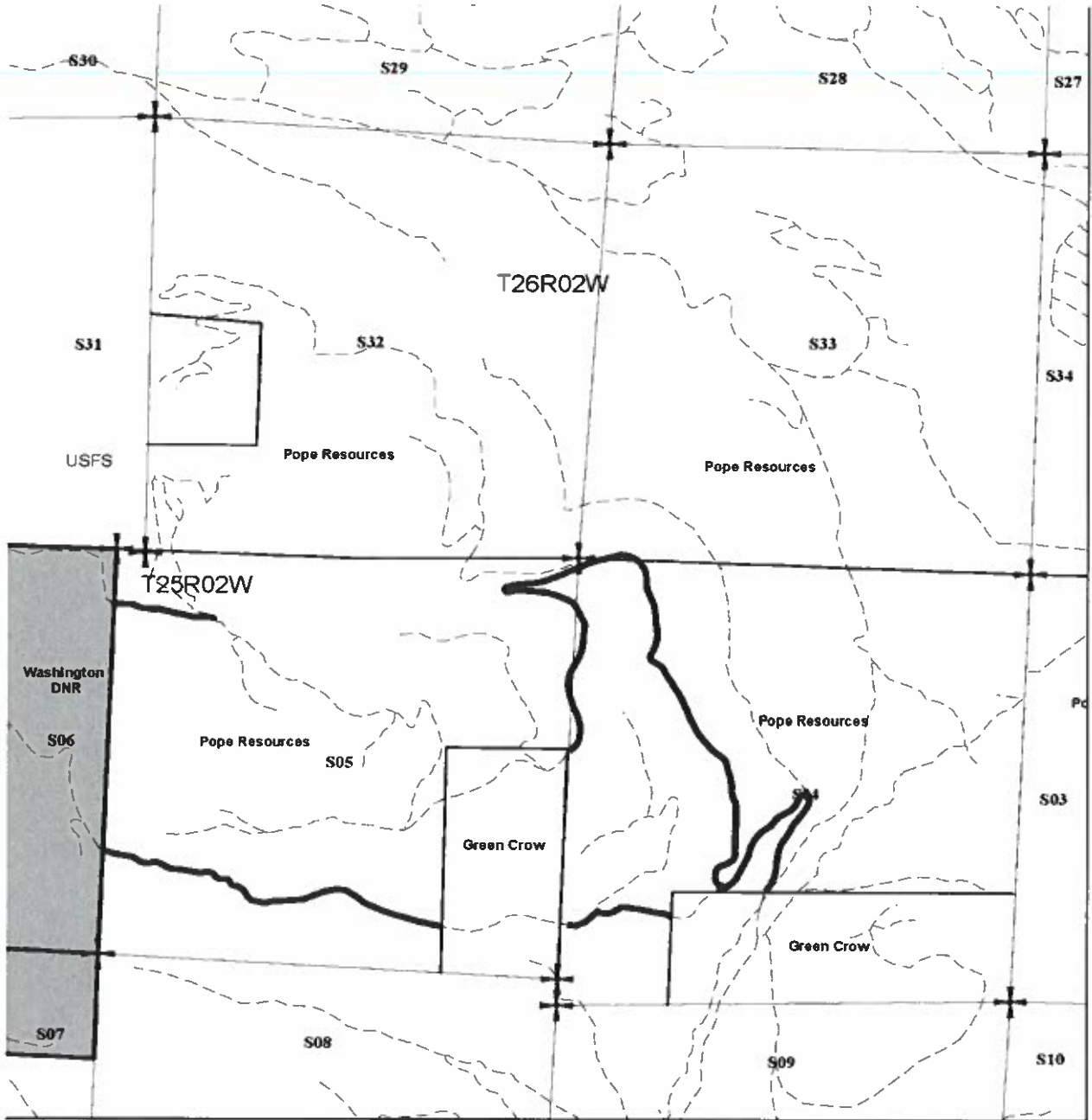


EXISTING ROADS



Map Prepared 4/12/2022

**EXHIBIT B3
POPE Easement Grant to STATE**



LEGEND



STATE LAND



STATE EASEMENT AREA
LENGTH 19,260 ft, WIDTH 60 ft, AREA 26.5 acres



EXISTING ROADS



Map Prepared 8/31/2022

EXHIBIT C1

RFR Benefitted Property

Township 29 North, Range 14 West, W.M., Clallam County, Washington

Section 11; NE1/4NE1/4, SE1/4SE1/4

Section 12; S1/2 NW1/4, all of SW1/4

Section 13; all of NE1/4, NE1/4NW1/4, NE1/4SW1/4, S1/2SW1/4, all of SE1/4

Section 23; Portion of E1/2 NE1/4, SW1/4NE1/4 lying North of E. Fork Dickey River

Section 24; NE1/4NE1/4, N1/2NW1/4

Section 30; Lots 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Section 31; Portion of Lots 2, 3, 4, 5, 9, 10, 11, 12, E1/2SW1/4 lying West of Dickey River

Section 35; W1/2SE1/4

Township 29 North, Range 15 West, W.M., Clallam County, Washington

Section 25; SE1/4NE1/4, SW1/4SW1/4, NW1/4SW1/4, SE1/4SW1/4, SW1/4SE1/4, E1/2SE1/4

Section 26; Portion of S1/2 NE1/4, SE1/4NW1/4, SW1/4SE1/4, E1/2SE1/4 lying East of Coal Creek

Section 35; Portion of E1/2NE1/4 lying East of Coal Creek

Township 21 North, Range 08 West, W.M., Grays Harbor County, Washington

All of Section 19

Section 20; W1/2 NW1/4, Lots 6, 7 and 10

Section 30; W1/2NE1/4, Lots 1, 2, 3, 4, E1/2 NW1/4, E1/2SW1/4, W1/2 SE1/4

Section 31; E1/2NW1/4, Lots 1, 2, 3

EXHIBIT C1

RFR Benefitted Property

Township 25 North, Range 13 West, W.M., Jefferson County, Washington

Section 2; S1/2 NW1/4

Section 3; All of NE1/4, NW1/4, & SE1/4

Section 4; NW1/4NE1/4, S1/2 NE1/4, N1/2 SE1/4

Section 9; NW1/4NE1/4

Township 21 North, Range 09 West, W.M., Grays Harbor County, Washington

Section 23; Portion of NE1/4SE1/4, S1/2SE1/4 lying East of E. Fork Humptulips River

Section 24; Portion of NE1/4, SE1/4NW1/4, SE1/4, SW1/4 lying East of E. Fork Humptulips River

Section 25; NE1/4, NW1/4, SW1/4, N1/2 SE1/4, SW1/4SE1/4

Section 26; Portion of NE1/4NE1/4 lying East of E. Fork Humptulips River

Section 35; N1/2SE1/4

EXHIBIT C2

State Benefitted Property

Township 25 North, Range 2 West, W.M., Jefferson County, Washington,

Section 6; Lots 1, 2, 3, 4, 5, 6, 7, 11, 12, SW1/4NE1/4, SE1/4NW1/4, NW1/4SE1/4

Section 7; NE1/4NE1/4

Township 25 North, Range 13 West, W.M., Jefferson County, Washington,

Section 4; Lot 1

Township 29 North, Range 13 West, W.M., Clallam County, Washington

Section 7; Portion of NW1/4NW1/4, SW1/4NW1/4 lying West of E. Fork Dickey River

Township 29 North, Range 14 West, W.M., Clallam County, Washington

Section 11; Portion of SE1/4NE1/4, NE1/4SE1/4, E1/4SW1/4 lying East of Thunder Creek

Section 12; N1/2NW1/4, portions of NE1/4 & SE1/4 lying West of E. Fork Dickey River

Section 13; NW1/4NW1/4, S1/2NW1/4, NW1/4SW1/4

Section 14; Portion of S1/2NE1/4, E1/2 NW1/4, NE1/4SW1/4 & SE1/4 lying East of Thunder Creek

Section 23; Portion of NW1/4NE1/4 & NE1/4NW1/4 East of Thunder Creek & West of E. Fork Dickey River

Section 24; NW1/4NE1/4, S1/2NW1/4, N1/2 SW1/4, S1/2 SW1/4, NW1/4SE1/4, SW1/4SE1/4

Section 25; SW1/4NE1/4, NE1/4NW1/4, SW1/4SW1/4, NW1/4NW1/4

Section 26; Portion of NE1/4SW1/4, NW1/4SE1/4 lying East of Coal Creek

Section 36; Portion of N1/2NE1/4, N1/2 NW1/4, SW1/4NW1/4 lying North of Tributary of East Fork Dickey

Township 29 North, Range 15 West, W.M., Clallam County, Washington

Section 25; SW1/4NE1/4, SE1/4NW1/4, NE1/4SW1/4, NW1/4SE1/4

Section 26; Portion of NW1/4SE1/4, NE1/4SW1/4 lying East of Coal Creek

Section 36; Portion of N1/2 NE1/4, N1/2NW1/4, SW1/4NW1/4 lying North of Tributaries to Coal Creek & West Fork Dickey River

EXHIBIT C2

State Benefitted Property

Township 28 North, Range 14 West, W.M., Clallam County, Washington

Section 27; Portion of SW1/4NW1/4, NW1/4SW1/4, S1/2 SW1/4, SW1/4SE1/4 lying South of Maxfield Creek

Section 28; Portion of SE1/4NE1/4, SW1/4, SE1/4 lying South of Maxfield Creek

Section 32; E1/2NE1/4

Section 33; SE1/4NE1/4, W1/2NW1/4, E1/2SE1/4

Section 34; N1/2 NW1/4, SW1/4NW1/4, SW1/4, SE1/4

Section 35; SW1/4

EXHIBIT D

HCP Requirements

- 1) Rayonier shall promptly notify State of the following:
 - a) That Rayonier has discovered within the Rayonier Easement Area any species listed by the U.S. Fish and Wildlife Service as threatened or endangered species (listed species) under the Endangered Species Act as such list may be updated from time to time; and
 - b) That Rayonier has discovered within the Rayonier Easement Area any live, dead, injured, or sick specimens of any listed species.
- 2) Notification required in subsection 1) must in all circumstances occur as soon as practicable but in any event within 24 hours.
- 3) Rayonier may be required to take certain actions to help State safeguard the well-being of any live, injured or sick specimen of any listed species until the proper disposition of such specimen can be determined by State.
- 4) Any application for a Forest Practices Permit submitted by Rayonier for activities on the Rayonier Easement Area must identify that the Rayonier Easement Area is covered by the HCP.

EXHIBIT E

Operational Requirements

- Roads may not be used when continued use will result in excessive damage due to weather or other conditions as determined by the fee owner.
- No snow removal without permission from the fee owner, which shall not be unreasonably withheld.
- Gates must be kept closed and locked when not hauling. Caution signage must be used when there are safety concerns to ingress and egress. CB Channel(s) must be clearly posted with visible mileage markers along active haul route(s).
- All methods of chemical weed control shall be approved in writing by the fee owner prior to beginning such activities. No aerial spraying is permitted without prior approval by the fee owner.