# Washington DNR Timber Sales Program

# The documents for SHIFT THE PARADIGM Timber Sale have been changed as follows:

## **Documents amended:**

<b>Brief Description</b>	DATE	Initials
Information has been added to the Notice of Sale and Draft Contract regarding the following:	12/06/24	kw
The Legacy Forest Defense Coalition has appealed the Board of Natural Resources approval of the Shift the Paradigm Timber Sale (Agreement No. 30-107760) to Pacific County Superior Court. To ensure this information reaches perspective bidders, we will allow a 2-minute opportunity to remove any submitted bids for Shift the Paradigm Timber Sale before opening the envelopes.		

#### **DEPARTMENT OF NATURAL RESOURCES**



**PRODUCT SALES & LEASING DIVISION** 1111 WASHINGTON STREET SE, MS 47014

(360) 902-1600 WWW.DNR.WA.GOV

To: Prospective Purchasers of Shift the Paradigm Timber Sale

From: Michael Kearney, Product Sale & Leasing, Division Manager

**Subject: Notice of Legal Appeal** 

Date: December 6, 2024

This letter is to ensure you are aware that the **Legacy Forest Defense Coalition** filed a legal appeal on the **Shift the Paradigm** Timber Sale (**Agreement No. 30-107760**) and associated environmental review and complaint seeking declaratory judgment. Language about the lawsuit has been added to the Notice of Sale.

#### The appeal requests:

- An order invalidating the decision to approve the **Shift the Paradigm** project for auction,
- An order invalidating the SEPA Determination of Non-Significance as violating SEPA,
- A declaration that the **Shift the Paradigm** project could have probable, significant adverse impacts to the environment, necessitating preparation of an Environmental Impact Statement,
- An order requiring DNR to stop all harvest on the Shift the Paradigm project,
- An order requiring DNR to mitigate for any and all impacts of the Shift the Paradigm timber sale
  if forest practices are carried out prior to requested relief before this Court or on review in the
  court of appeals,
- An order granting Appellant its costs and attorneys' fees,
- Any other relief that the Court deems just and proper

The lawsuit was filed with Pacific County Superior Court as Cause No. 24-2-00279-25.

Please consult an attorney before bidding on this sale if you have questions about the risk associated with the lawsuit.

Notice of the appeal will be shared again verbally prior to auction of the sale on **December 19, 2024**.

#### Please be aware:

- Appellants may request a temporary restraining order or preliminary injunction from the court.
- Your bid on the Shift the Paradigm timber sale, and your operations under the contract, will be conducted with the acknowledgment that the court could order DNR to shut down your operations.
- The State is not responsible for legal actions filed by third-parties that may affect the operability of timber sales.
- The purchaser assumes the risk of loss for any costs, damages, or business expectations related to this resulting from such legal action.
- The standard 10-day confirmation period applies as with all DNR timber sales.

DNR values our customers and wanted to ensure you are informed of the situation prior to auction.



#### TIMBER NOTICE OF SALE

**SALE NAME**: SHIFT THE PARADIGM

**AUCTION:** December 19, 2024 starting at 10:00 a.m.,

**COUNTY:** Pacific

**AGREEMENT NO**: 30-107760

Pacific Cascade Region Office, Castle Rock, WA

**SALE LOCATION:** Sale located approximately 20 miles east of Raymond, WA

PRODUCTS SOLD

AND SALE AREA: All timber, except leave trees bound by yellow "Leave Tree Area" tags, leave trees

marked with red paint, and all down timber existing 10 years prior to the day of sale, all

timber 60 inches DBH and larger, and snags bound by the following;

Unit 1, white "Timber Sale Boundary" tags and pink flagging;

Unit 2, white "Timber Sale Boundary" tags and pink flagging and the HM 2010 rd;

Unit 3, white "Timber Sale Boundary" tags and pink flagging and the HM 2000 rd;

Unit 4 (ROW), orange "Right of Way" tags and orange flagging;

All forest products above located on part(s) of Sections 29, 32 and 33 all in Township 13

North, Range 6 West, W.M., containing 114 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:

	Avg I	Ring	Total			$\mathbf{N}$	IBF by	Grad	e			
Species	DBH C	ount	MBF	1P	2P	3P	SM	1S	2S	3S	4S	UT
Douglas fir	27	8	7,359			439	596		5,648	572	84	20
Hemlock	16.4		425						270	115	36	4
Red alder	14.5		376						134	74	166	2
Redcedar	19.2		228							196	31	1
Spruce	45		14						14			
Maple	17.6		11						2	3	6	
Sale Total			8,413									

MINIMUM BID: \$2,800,000.00 BID METHOD: Sealed Bids

PERFORMANCE

SECURITY: \$100,000.00 SALE TYPE: Lump Sum

**EXPIRATION DATE:** October 31, 2026 **ALLOCATION:** Export Restricted

**BID DEPOSIT:** \$280,000.00 or Bid Bond. Said deposit shall constitute an opening bid at the appraised

price.

HARVEST METHOD: Cable, Cable-Assist, Shovel, and Track skidder. This sale is estimated to be 40 percent

ground based harvest and 60 percent cable harvest.

Page 1 of 2 12/6/2024



#### TIMBER NOTICE OF SALE

**ROADS:** 

13.70 stations of required construction. 66.03 stations of optional construction. 427.50 stations of required prehaul maintenance.

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the P&E Extension Quarry located in Section 29, T13N, R6W, W.M. on state land at no charge to the Purchaser.

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the P&E Quarry stockpile in Section 29, T13N, R6W, W.M. on state land at no charge to the Purchaser.

Rock used in accordance with the quantities on the ROCK LIST may be obtained from any commercial source at the Purchaser's expense.

Purchaser shall conduct rock source development and use at the P&E Extension Quarry located in Section 29, T13N, R6W, W.M., in accordance with the written ROCK SOURCE DEVELOPMENT PLAN prepared by the state and included in this road plan. The hauling of forest products will not be permitted from November 1 to April 30 unless authorized in writing by the Contract Administrator.

#### ACREAGE DETERMINATION

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

cruise method.

FEES: \$143,000.00 is due on day of sale. \$9.00 per MBF is due upon removal. These are in

addition to the bid price.

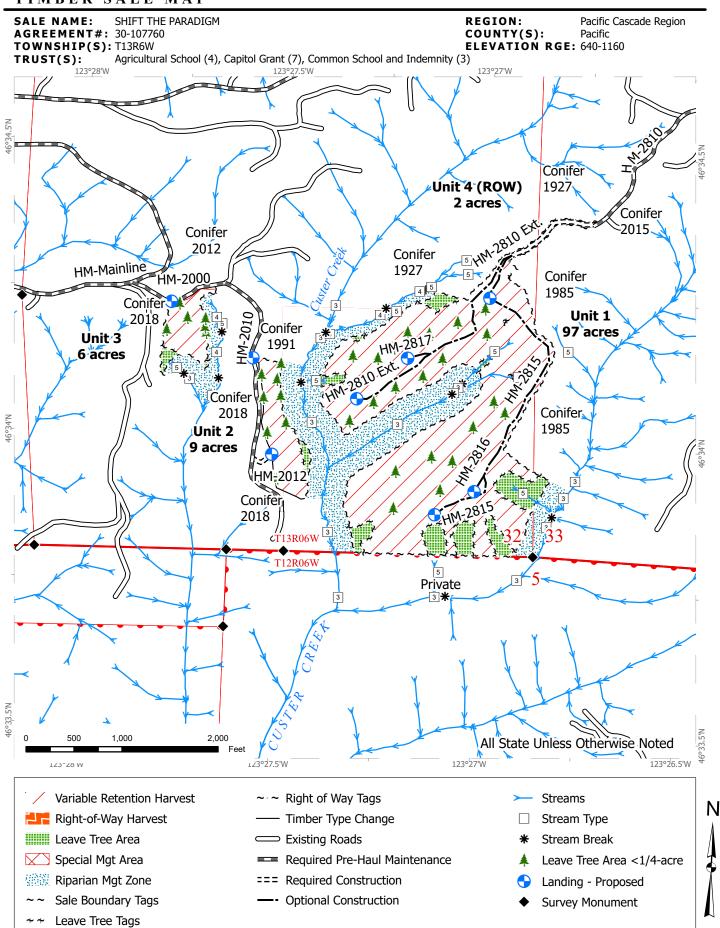
SPECIAL REMARKS: Estimated 439 MBF of Peeler Grade DF, 596 MBF SM DF, 102 MBF of DF Poles, 322

MBF HQ 2 Saw DF, 61 MBF HQ 3 Saw DF. See cruise for further details.

12+62 Stations total of full bench end haul. See road plan for further details.

The Legacy Forest Defense Coalition has appealed the Board of Natural Resources approval of the Shift the Paradigm Timber Sale (Agreement No. 30-107760) to Pacific County Superior Court. To ensure this information reaches perspective bidders, we will allow a 2-minute opportunity to remove any submitted bids for Shift the Paradigm Timber Sale before opening the envelopes.

Page 2 of 2 12/6/2024

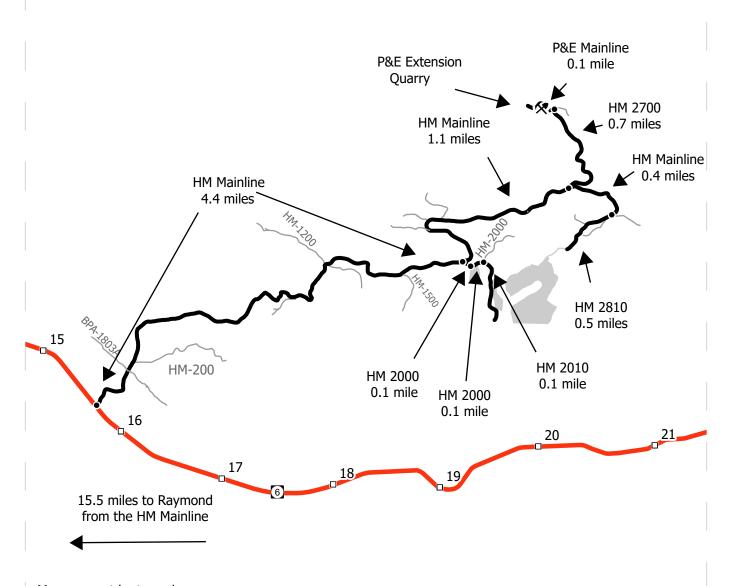


Prepared By: rfra490 Modification Date: rfra490 8/27/2024

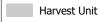
SHIFT THE PARADIGM Pacific Cascade Region SALE NAME: **REGION:** 

**AGREEMENT#:** 30-107760 COUNTY(S): **Pacific ELEVATION RGE: 640-1160** TOWNSHIP(S): T13R6W

Agricultural School (4), Capitol Grant (7), Common School and Indemnity (3) TRUST(S):



Map may not be to scale



Highway

Haul Route

Other Route

Milepost Marker

Distance Indicator

R Rock Pit

#### **DRIVING DIRECTIONS:**

Units: Between Mile Marker 15 and 16 on State Route 6, turn onto the HM-ML. Continue on the HM ML 4.4 miles to the HM 2000. Take the HM 2000 0.1 miles to Unit 3, continue another 0.1 miles to the HM 2010. Take the HM 2010 0.1 miles to Unit 2. To Unit 4 ROW and Unit 1, continue 1.1 miles on the HM ML from the HM ML and HM 2000 intersection to the HM 2700. Continue on the HM ML for 0.4 miles to the HM 2810. Continue on the HM 2810 for 0.5 miles to Unit 4 ROW which will lead you to Unit 1.

Rock Quarries: From the intersection of the HM ML and the HM 2700. Take the HM 2700 for 0.7 miles to the P and E ML. Take the P and E ML for 0.1 miles to the P and E Extension Quarry.

Ν

Prepared By: rfra490 Modification Date: rfra490 8/27/2024

## STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

# BILL OF SALE AND CONTRACT FOR FOREST PRODUCTS

**Export Restricted Lump Sum AGREEMENT NO. 30-0107760** 

SALE NAME: SHIFT THE PARADIGM

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.

12/6/2024 1 of 26 Agreement No. 30-0107760

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 December 19, 2024 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, except leave trees bound by yellow "Leave Tree Area" tags, leave trees marked with red paint, and all down timber existing 10 years prior to the day of sale, all timber 60 inches DBH and larger, and snags bound by the following;

Unit 1, white "Timber Sale Boundary" tags and pink flagging;

Unit 2, white "Timber Sale Boundary" tags and pink flagging and the HM 2010 rd;

Unit 3, white "Timber Sale Boundary" tags and pink flagging and the HM 2000 rd;

Unit 4 (ROW), orange "Right of Way" tags and orange flagging;

All forest products described above located on approximately 114 acres on part(s) of Sections 29, 32, and 33 all in Township 13 North, Range 6 West W.M. in Pacific 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

12/6/2024 2 of 26 Agreement No. 30-0107760

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

#### G-031 Contract Term

Purchaser shall complete all work required by this contract prior to October 31, 2026.

## 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.

12/6/2024 3 of 26 Agreement No. 30-0107760

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 \$1,250.00 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

12/6/2024 4 of 26 Agreement No. 30-0107760

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.

The Legacy Forest Defense Coalition has appealed the Board of Natural Resources approval of the Shift the Paradigm Timber Sale (Agreement No. 30-107760) to Pacific County Superior Court. To ensure this information reaches perspective bidders, we will allow a 2-minute opportunity to remove any submitted bids for Shift the Paradigm Timber Sale before opening the envelopes.

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

12/6/2024 5 of 26 Agreement No. 30-0107760

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.

12/6/2024 6 of 26 Agreement No. 30-0107760

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

12/6/2024 7 of 26 Agreement No. 30-0107760

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.

12/6/2024 8 of 26 Agreement No. 30-0107760

## G-106 Adding Naturally Damaged Forest Products

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

#### G-111 Title and Risk of Loss

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

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

Forest products purchased under this contract are certified as being in conformance with the Sustainable Forestry Initiative 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:

12/6/2024 9 of 26 Agreement No. 30-0107760

- 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.

12/6/2024 10 of 26 Agreement No. 30-0107760

#### 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

12/6/2024 11 of 26 Agreement No. 30-0107760

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

12/6/2024 12 of 26 Agreement No. 30-0107760

shall indemnify State. Indemnity shall include all fines, payment of benefits to Purchaser or subcontractor employees, or their heirs or legal representatives, and the cost of effecting coverage on behalf of such employees.

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

### G-160 Agents

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

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

## G-170 Assignment and Delegation

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

#### G-180 Modifications

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

## G-190 Contract Complete

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

12/6/2024 13 of 26 Agreement No. 30-0107760

#### 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.

12/6/2024 14 of 26 Agreement No. 30-0107760

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.

12/6/2024 15 of 26 Agreement No. 30-0107760

#### 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; HM Mainline, HM-2000, HM-2010, HM-2012, HM-2700, HM-2800, HM-2810, HM-2810 EXT., HM-2815, HM-2816, HM-2817 and the P&E Mainline. 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, reestablish 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

12/6/2024 16 of 26 Agreement No. 30-0107760

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 HM Mainline, HM-2700 and P&E Mainline roads, unless authority is granted in writing by the Contract Administrator.

## G-380 Road Easement and Road Use Permit Requirements

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

Easement #55-00453 between State and Melvin C and Betty June Wilson dated October 8, 1966, indefinite.

## G-430 Open Fires

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

#### G-450 Encumbrances

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

Easement, including the terms and provisions thereof,

For: Road

In Favor of: Weyerhaeuser Company Disclosed by Application No.: 50-038600

Granted: December 22, 1975

Expires: Indefinite

Lease, including the terms and provisions thereof,

For: Minor Forest Products

In Favor of: DNR – Pacific Cascade Region Disclosed by Application No.: 35-CP0002

Granted: January 1, 1993

Expires: Indefinite

Lease, including the terms and provisions thereof,

For: Minor Forest Products

In Favor of: DNR – Pacific Cascade Region Disclosed by Application No.: 35-RP0010

Granted: July 1, 2024

12/6/2024 17 of 26 Agreement No. 30-0107760

Expires: Indefinite

Section P: Payments and Securities

## P-011 Initial Deposit

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

## P-020 Payment for Forest Products

Purchaser agrees to pay the total, lump sum contract price of \$218,717.00. The total contract price consists of a \$0.00 contract bid price plus \$218,717.00 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.

12/6/2024 18 of 26 Agreement No. 30-0107760

#### 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.

12/6/2024 19 of 26 Agreement No. 30-0107760

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-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-120 Harvesting Equipment

Forest products sold under this contract shall be harvested and removed using Cable, cable-assist, shovel or tracked skidder or 6 wheeled skidder similar to Eco Tracks<sup>TM</sup>. Shovel yarding will not be permitted on sustained slopes of 45 percent or greater, self-leveling shovels will not be permitted on sustained slopes of 55 percent or greater, 6 wheeled skidders with tracks similar to Eco Tracks<sup>TM</sup> will not be allowed on sustained slopes of 40 percent or greater, cable-assist will not be permitted on slopes 75 percent or greater. Authority to use other equipment or to operate outside the equipment specifications detailed above must be approved in writing by the State.

#### H-125 Log Suspension Requirements

Lead-end suspension is required for all yarding activities.

#### H-127 Tailholds on Private Land

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

#### H-130 Hauling Schedule

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

12/6/2024 20 of 26 Agreement No. 30-0107760

#### H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

- A. Active Haul Routes will be posted with CB channels by Purchaser.
- B. Shovels must be large enough to pick up one end of the largest log 35 feet from machine.
- C. All trees 60 inches Diameter at Breast Height (DBH) and greater shall not be felled unless for safety reasons. If trees 60 inches DBH or greater need to be felled for safety reasons, Contract Administrator approval will be required and trees will be left where felled.
- D. Long butts remaining on the sale must be dispersed as directed by the Contract Administrator.
- E. All skid trails used by the 6 wheel drive skidder shall be identified by the purchaser and approved by the Contract Administrator in writing.
- F. Cable-assist will only be allowed in areas where a written harvest plan has been provided to the CA and the CA has provided written approval for cable-assist logging to occur.
- G. Within shovel logging areas, the shovel operator shall break up concentrations of logging debris greater than 10 feet by 10 feet to allow exposure of natural soils to ensure proper reforestation.

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-240 Lop and Scatter

The tops of all felled trees shall be lopped and slash scattered away from leave trees.

H-250 Additional Falling Requirements

Within all units, all non-merchantable hardwood stems 2 inches DBH or 10 feet tall, shall be felled concurrently with felling operations. Areas of young or immature timber may be excluded from this requirement by the Contract Administrator.

12/6/2024 21 of 26 Agreement No. 30-0107760

### Section C: Construction and Maintenance

## C-040 Road Plan

Road construction and associated work provisions of the Road Plan for this sale, dated 7/25/2024 are hereby made a part of this contract.

## C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform work at their own expense on HM-2000, HM-2010, HM-2012, HM-2700, HM-2800, HM-2810, HM-2810 Ext., HM-2815, HM-2816 and HM-2817 roads. All work shall be completed to the specifications detailed in the Road Plan.

## C-060 Designated Road Maintainer

If required by the State, Purchaser shall perform maintenance and replacement work as directed by the Contract Administrator on all roads not listed in Clause C-050. Purchaser shall furnish a statement in a form satisfactory to the State showing the costs incurred while performing this work. Costs shall be based on the rates set forth in the equipment rate schedule on file at the Region office or Engineering Division in Olympia. The State shall reimburse Purchaser for said costs within 30 days of receipt and approval of the statement.

## 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.

12/6/2024 22 of 26 Agreement No. 30-0107760

S-030 Landing Debris Clean Up

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

S-035 Logging Debris Clean Up

Slash and debris created from harvest activities shall be treated in a manner approved in writing by the Contract Administrator.

S-050 Cessation of Operations for Low Humidity

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

S-060 Pump Truck or Pump Trailer

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

S-070 Water Supply

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

S-100 Stream Cleanout

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

#### S-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

12/6/2024 23 of 26 Agreement No. 30-0107760

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

12/6/2024 24 of 26 Agreement No. 30-0107760

obtaining an adequate remedy. These liquidated damages provisions provide greater certainty for the Purchaser by allowing the Purchaser to better assess its responsibilities under the contract.

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

## D-041 Reserve Tree Excessive Damage

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

#### **SIGNATURES**

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

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

	STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES
Purchaser	Scott Sargent Pacific Cascade Region Manager
Print Name	Facilic Cascade Region Manager
Date:	Date:

12/6/2024 25 of 26 Agreement No. 30-0107760

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

STATE OF		)				
COUNTY OF						
On this	day of		, 20	_, before	me persor	nally
			to m		to be te corpora	
free and voluntar	within and foregoing instry y act and deed of the corpo I that (he/she was) (they we	oration, for the	uses and pu	rposes there	ein mentio	
IN WITNESS WI year first above w	HEREOF, I have hereunto ritten.	set my hand an	d affixed m	y official se	eal the day	and
		Notary	Public in ar	nd for the St	tate of	
		My apı	pointment ex	xpires		

12/6/2024 26 of 26 Agreement No. 30-0107760

# **PRE-CRUISE NARRATIVE**

Sale Name: Shift The Paradigm	Region: Pacific Cascade
Agreement #: 30-0107760	District: Lewis
Contact Forester:Roy Franklin	County(s): Pacific, Choose a county
Phone / Location: 360-520-1971	
Alternate Contact:Click here to enter text.	Other information:
Phone / Location: Click here to enter text.	Click here to enter text.

Type of Sale: Lump Sum	
Harvest System: Ground based Click here to enter text.	40
Harvest System: Uphill Cable Click here to enter text.	60
Harvest System: Select harvest system Click here to enter text.	Click here to enter percent sale acres.

## UNIT ACREAGES AND METHOD OF DETERMINATION:

Unit #	Legal		sal	Dedu		rom Grovest acr	ss Acres es)	Acres	Acreage Determinatio
Harve st R/W or RMZ WMZ	Description (Enter only one legal for each unit) Sec/Twp/Rng	Grant or Trust	Gross Proposal Acres	RMZ/ WMZ Acres	Leave Tree Acres	Existing Road Acres	Other Acres (describe)	Net Harvest Ac	(List method and error of closure if applicable)
1	Sec 32,33 / T13N / R06W	03,04 ,07	142	33	12	0	N/A	97	GPS (Trimble)
2	Sec 32 / T13N / R06W	04,07	16	7	<1	0	N/A	9	GPS (Trimble)
3	Sec 32 / T13N / R06W	04	12	5	1	0	N/A	6	GPS (Trimble)
4 ROW	Sec 32,33 / T13N / R06W		2	0	0	0	N/A	2	GPS (Trimble)
TOTAL ACRES			172	45	13	0	N/A	114	

## HARVEST PLAN AND SPECIAL CONDITIONS:

Unit #	Harvest Prescription: (Leave, take, paint color, tags, flagging etc.)	Special Management areas:	Other conditions (# leave trees, etc.)
1	Variable retention harvest; Boundaries are marked with white "Timber Sale	N/A	Eight Trees per acre

	Boundary" tags and pink flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags, pink flagging, and red paint. Individual trees are marked with red paint.		
2	Variable retention harvest; Boundaries are marked with white "Timber Sale Boundary" tags and pink flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags, pink flagging, and red paint. Individual trees are marked with red paint.	N/A	Eight Trees Per Acre
3	Variable retention harvest; Boundaries are marked with white "Timber Sale Boundary" tags and pink flagging. Clumped leave trees are marked with yellow "Leave Tree Area" tags, pink flagging, and red paint. Individual trees are marked with red paint.	N/A	Eight Trees Per Acre
4	Orange ROW Tags and Orange	·	<b>5</b>
ROW	Flagging	N/A	N/A

## OTHER PRE-CRUISE INFORMATION:

Unit#	Primary,secondary Species / Estimated Volume (MBF)	Access information (Gates, locks, etc.)	Photos, traverse maps required
1	5100	See Driving Map	Maps on TSDC
2	500	See Driving Map	Maps on TSDC
3	300	See Driving Map	Maps on TSDC
4 ROW	100	See Driving Map	Maps on TSDC
TOTAL MBF	6000		

REMARKS:		

Prepared I	By: Roy Franklin	Title: Forester	CC:
Date:	7/16/2024		

# Timber Sale Cruise Report Shift The Paradigm

Sale Name: SHIFT THE PARADIGM

Sale Type: LUMP SUM Region: PACIFIC CASC

**District: LEWIS** 

Lead Cruiser: Dillon Adair

Other Cruisers: Dylan Buchanan, Blake Warnstadt

#### **Cruise Narrative:**

Location: Shift the Paradigm is located approximately 2 miles northeast of Frances. It can be accessed from the HM mainline located between mile marker 15 and 16 on highway 6 east of Raymond. Continue on the HM mainline about 4 and a half miles to the HM 2000. Unit 3 is located about 0.1 miles down the HM 2000. Continue past Unit 3 another 0.1 miles down to the HM 2010. Take the HM 2010 another 0.1 miles to reach unit 2. Continue past the HM 2000 on the HM mainline about 1 and a half miles to the HM 2810. Continue down the 2810 another half mile and you will reach unit 4 ROW that will take you to unit 1.

Cruise Design: Units 1, 2, and 3 were cruised using variable radius plots with a 62.5 BAF, while unit 4 ROW was cruised using a fixed 1/20th acre plot radius. Sight height is 4.5 feet for all units. Unit 1 was cruised using a 2:1 count to measure plot ratio, while units 2, 3, and 4 had all plots measured. Trees were measured with a 40' preferred log length for conifers and 30' for hardwoods. Boles heights were measured using a 40% break point of the diameter at 16'.

Timber Quality: Shift the Paradigm is DF dominated with a good amount of high quality A and B mixed with the domestic logs. There are minimal DF poles available. Big trees, high quality lower logs with some oversized branching and small epicormic branching in middle logs. Conks on a few live DF stems were observed in the sale. A secondary component of WH, RC and RA, with a trace amount of MA and SS. Average DBHs for this sale acre: DF 27", WH 16.4", RA 14.5", RC 19.2", SS 45", and MA 17.6".

General Remarks: Unit 1 has a 2-3-acre area in the northeast part of the stand that consists of younger age timber. The southeast part of the stand around the leave tree areas consists heavily of RC and RA.

Unit 2 RC has heavy branching but low defect. Heavy blowdown around the end of the HM-2815 RD near plots 4, 5, and 6. There is a trace amount of WH and SS but it is not represented in unit 2 data.

Unit 4 ROW is similar in age and structure to the rest of the sale but has about 1/4 acre of younger timber included at the north end.

Logging and Stand Conditions: Consists of moderately steep sloped ground with some lightly steep areas. Estimated to be logged using 40% ground-based logging and 60% uphill cable.

# **Timber Sale Notice Volume (MBF)**

				MBF Volume by Grade						
Sp	DBH	Rings/In	Age	All	Peeler	Spec Mill	2 Saw	3 Saw	4 Saw	Utility
DF	27.0	8.5		7,359	439	596	5,648	572	84	20
WH	16.4			424			270	115	36	4
RA	14.5			376			134	74	166	2
RC	19.2			228				196	31	1
SS	45.0			14			14			
MA	17.6			11			2	3	6	
ALL	21.3	8.5		8,412	439	596	6,067	960	323	27

# **Timber Sale Notice Weight (tons)**

	Tons by Grade							
Sp	All	Peeler	Spec Mill	2 Saw	3 Saw	4 Saw	Utility	
DF	43,893	2,307	3,344	32,423	4,890	781	149	
WH	3,545			1,927	1,193	393	32	
RA	3,146			948	613	1,574	12	
RC	2,081				1,726	343	12	
MA	179			49	54	76		
SS	97			97				
ALL	52,942	2,307	3,344	35,443	8,477	3,167	204	

## **Timber Sale Overall Cruise Statistics**

BA (sq ft/acre)	_		V-BAR SE (%)	Net Vol (bf/acre)	
343.5	3.9	214.6	2.8	73,788	4.7

# **Timber Sale Unit Cruise Design**

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
SHIFT THE PARADIGM U1	B1C: VR, 1 BAF (62.5) Measure/ Count Plots, Sighting Ht = 4.5 ft	97.0	106.0	96	38	1
SHIFT THE PARADIGM U2	B1: VR, 1 BAF (62.5) Measure All, Sighting Ht = 4.5 ft	9.0	9.4	9	9	0
SHIFT THE PARADIGM U3	B1: VR, 1 BAF (62.5) Measure All, Sighting Ht = 4.5 ft	6.0	6.7	5	5	0
SHIFT THE PARADIGM U4	FX: FR plots (20 tree / acre expansion)	2.0	1.4	3	3	0

Unit	Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
All		114.0	123.5	113	55	1

## 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	18.7	40	47,623	45,843	3.7	29,892.4	5,226.1
DF	LIVE	2 SAW	HQ-A	19.2	40	847	828	2.1	576.8	94.4
DF	LIVE	2 SAW	HQ-B	18.5	40	2,046	1,993	2.6	1,299.5	227.3
DF	LIVE	2 SAW	Pole	16.4	40	919	879	4.4	654.3	100.2
DF	LIVE	3 PEELER	Domestic	26.8	40	3,851	3,851	0.0	2,306.6	439.0
DF	LIVE	3 SAW	Domestic	9.8	36	4,625	4,468	3.4	4,382.6	509.3
DF	LIVE	3 SAW	HQ-B	9.8	40	545	536	1.7	487.9	61.1
DF	LIVE	3 SAW	Pole	7.0	40	15	14	6.9	19.6	1.6
DF	LIVE	4 SAW	Domestic	5.9	30	793	741	6.5	780.6	84.5
DF	LIVE	CULL	Cull	10.3	7	369	0	100.0	0.0	0.0
DF	LIVE	SPECIAL MILL	HQ-A	20.6	40	5,307	5,225	1.5	3,344.0	595.7
DF	LIVE	UTILITY	Pulp	7.7	13	189	175	7.2	148.8	20.0
MA	LIVE	2 SAW	Domestic	16.2	30	43	15	65.0	48.5	1.7
MA	LIVE	3 SAW	Domestic	10.6	40	33	28	15.0	54.3	3.2
MA	LIVE	4 SAW	Domestic	5.0	29	55	51	8.5	76.2	5.8
MA	LIVE	CULL	Cull	8.0	3	1	0	100.0	0.0	0.0
RA	LIVE	2 SAW	Domestic	13.5	30	1,251	1,173	6.2	947.6	133.7
RA	LIVE	3 SAW	Domestic	10.8	31	807	650	19.4	613.2	74.1
RA	LIVE	4 SAW	Domestic	6.1	28	1,528	1,458	4.6	1,573.7	166.2
RA	LIVE	CULL	Cull	10.0	4	47	0	100.0	0.0	0.0
RA	LIVE	UTILITY	Pulp	5.0	13	18	18	0.0	12.0	2.0
RC	LIVE	3 SAW	Domestic	11.0	39	1,805	1,719	4.8	1,725.7	196.0
RC	LIVE	4 SAW	Domestic	5.2	30	279	269	3.5	343.2	30.7
RC	LIVE	CULL	Cull	6.5	4	21	0	100.0	0.0	0.0
RC	LIVE	UTILITY	Pulp	6.8	14	11	11	0.0	11.6	1.2
SS	LIVE	2 SAW	Domestic	24.5	40	168	120	28.1	97.4	13.7
SS	LIVE	CULL	Cull	14.5	1	0	0	100.0	0.0	0.0
WH	LIVE	2 SAW	Domestic	16.3	40	2,424	2,364	2.5	1,926.8	269.5
WH	LIVE	3 SAW	Domestic	8.9	39	1,073	1,007	6.2	1,193.2	114.8
WH	LIVE	4 SAW	Domestic	5.3	27	316	314	0.7	393.2	35.7
WH	LIVE	CULL	Cull	6.3	7	33	0	100.0	0.0	0.0
WH	LIVE	UTILITY	Pulp	5.9	12	45	37	17.2	32.1	4.3

## Timber Sale Log Sort x Diameter Bin Summary

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
DF	5 - 7	LIVE	Domestic	5.7	33	864	5.1	922.8	98.5
DF	5 - 7	LIVE	Pulp	5.7	13	62	2.0	53.4	7.0
DF	5 - 7	LIVE	Cull	6.6	6	0	100.0	0.0	0.0
DF	5 - 7	LIVE	Pole	7.0	40	14	6.9	19.6	1.6
DF	8 - 11	LIVE	Pulp	9.4	14	80	11.5	69.8	9.2
DF	8 - 11	LIVE	Domestic	9.9	35	4,219	3.5	4,146.6	481.0
DF	8 - 11	LIVE	Cull	10.1	6	0	100.0	0.0	0.0
DF	8 - 11	LIVE	HQ-B	10.3	40	536	1.7	487.9	61.1
DF	12 - 15	LIVE	Cull	12.9	6	0	100.0	0.0	0.0
DF	12 - 15	LIVE	Pulp	12.9	14	33	5.3	25.6	3.8
DF	12 - 15	LIVE	HQ-A	13.7	40	264	0.0	209.8	30.1
DF	12 - 15	LIVE	Domestic	13.8	39	7,289	2.7	5,886.7	831.0
DF	12 - 15	LIVE	Pole	14.2	40	421	8.7	348.9	48.0
DF	12 - 15	LIVE	HQ-B	15.0	40	377	0.0	257.3	43.0
DF	16 - 19	LIVE	HQ-B	16.9	40	484	3.1	327.9	55.2
DF	16 - 19	LIVE	Domestic	17.9	40	9,594	3.9	6,251.9	1,093.7
DF	16 - 19	LIVE	HQ-A	18.1	40	1,525	1.4	1,038.7	173.9
DF	16 - 19	LIVE	Pole	19.0	40	458	0.0	305.5	52.3
DF	20+	LIVE	Cull	22.4	20	0	100.0	0.0	0.0
DF	20+	LIVE	HQ-A	22.8	40	4,265	1.8	2,672.3	486.2
DF	20+	LIVE	HQ-B	23.7	40	1,132	3.2	714.3	129.1
DF	20+	LIVE	Domestic	24.2	40	32,937	3.5	20,154.2	3,754.9
MA	5 - 7	LIVE	Domestic	5.2	28	51	8.5	76.2	5.8
MA	8 - 11	LIVE	Cull	8.0	3	0	100.0	0.0	0.0
MA	8 - 11	LIVE	Domestic	10.6	40	28	15.0	54.3	3.2
MA	16 - 19	LIVE	Domestic	16.2	30	15	65.0	48.5	1.7
RA	5 - 7	LIVE	Pulp	5.0	13	18	0.0	12.0	2.0
RA	5 - 7	LIVE	Cull	5.2	3	0	100.0	0.0	0.0
RA	5 - 7	LIVE	Domestic	5.5	28	1,007	4.3	1,098.0	114.8
RA	8 - 11	LIVE	Cull	9.0	5	0	100.0	0.0	0.0
RA	8 - 11	LIVE	Domestic	9.9	31	1,101	14.1	1,088.9	125.5
RA	12 - 15	LIVE	Domestic	13.3	30	984	4.0	799.3	112.2
RA	16 - 19	LIVE	Domestic	18.1	30	77	0.0	49.6	8.8
RA	20+	LIVE	Cull	20.3	5	0	100.0	0.0	0.0
RA	20+	LIVE	Domestic	22.6	34	112	25.1	98.7	12.7
RC	5 - 7	LIVE	Domestic	5.5	32	408	3.6	568.9	46.5
RC	5 - 7	LIVE	Cull	5.6	4	0	100.0	0.0	0.0

Sp	Bin	Status	Sort	Dia	Len	BF Net	Defect %	Tons	MBF Net
RC	5 - 7	LIVE	Pulp	6.8	14	11	0.0	11.6	1.2
RC	8 - 11	LIVE	Domestic	9.4	39	397	1.6	508.6	45.2
RC	8 - 11	LIVE	Cull	9.6	4	0	100.0	0.0	0.0
RC	12 - 15	LIVE	Domestic	13.7	40	402	5.8	409.8	45.9
RC	16 - 19	LIVE	Domestic	18.5	40	337	2.0	232.0	38.4
RC	20+	LIVE	Domestic	23.7	40	444	8.8	349.6	50.6
SS	12 - 15	LIVE	Cull	14.5	1	0	100.0	0.0	0.0
SS	12 - 15	LIVE	Domestic	15.1	40	12	34.9	14.3	1.3
SS	20+	LIVE	Domestic	29.3	40	109	27.3	83.1	12.4
WH	5 - 7	LIVE	Pulp	5.0	13	28	6.5	24.4	3.2
WH	5 - 7	LIVE	Domestic	5.6	30	463	2.4	615.5	52.8
WH	5 - 7	LIVE	Cull	6.1	6	0	100.0	0.0	0.0
WH	8 - 11	LIVE	Pulp	8.6	12	0	100.0	0.0	0.0
WH	8 - 11	LIVE	Domestic	9.3	39	857	6.2	970.8	97.7
WH	8 - 11	LIVE	Cull	11.8	9	0	100.0	0.0	0.0
WH	12 - 15	LIVE	Pulp	12.2	13	10	0.0	7.7	1.1
WH	12 - 15	LIVE	Domestic	13.8	40	864	3.4	819.6	98.5
WH	16 - 19	LIVE	Domestic	17.5	40	658	3.5	543.6	75.0
WH	20+	LIVE	Domestic	24.7	40	843	0.6	563.5	96.1

## Cruise Unit Report SHIFT THE PARADIGM U1

## Unit Sale Notice Volume (MBF): SHIFT THE PARADIGM U1

				MBF Volume by Grade								
Sp	DBH	Rings/In	Age	All	Peeler	Spec Mill	2 Saw	3 Saw	4 Saw	Utility		
DF	26.9	8.5		6,195	326	521	4,803	454	77	15		
WH	16.4			421			270	113	34	4		
RA	13.6			316			95	65	154	2		
RC	20.7			147				137	10			
SS	45.0			14			14					
MA	14.8			9				3	5			
ALL	21.0	8.5		7,102	326	521	5,181	773	280	21		

## Unit Cruise Design: SHIFT THE PARADIGM U1

Design	Cruise	FMA	N	N Cruise	N Void
	Acres	Acres	Plots	Plots	Plots
B1C: VR, 1 BAF (62.5) Measure/Count Plots, Sighting Ht = 4.5 ft	97.0	106.0	96	38	1

## Unit Cruise Summary: SHIFT THE PARADIGM U1

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	136	381	4.0	2
WH	21	45	0.5	0
RA	26	55	0.6	0
RC	18	31	0.3	0
SS	1	1	0.0	0
MA	3	4	0.0	0
ALL	205	517	5.4	2

## Unit Cruise Statistics: SHIFT THE PARADIGM 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	248.0	68.3	7.0	257.5	25.6	2.2	63,870	73.0	7.3
WH	29.3	195.7	20.0	148.2	54.0	11.8	4,342	203.0	23.2
RA	35.8	205.3	21.0	90.9	34.6	6.8	3,254	208.3	22.0
RC	20.2	248.1	25.3	75.3	67.8	16.0	1,519	257.2	29.9
SS	0.7	979.8	100.0	217.5	0.0	0.0	142	979.8	100.0

Sp	BA (sq ft/acre)			V-BAR (bf/sq ft)	V-BAR CV (%)	V-BAR SE (%)	Net Vol (bf/acre)		Vol SE (%)
MA	2.6	482.1	49.2	34.0	15.5	8.9	88	482.3	50.0
ALL	336.6	40.7	4.2	217.5	45.0	3.1	73,215	60.7	5.2

## Unit Summary: SHIFT THE PARADIGM U1

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	ВА	RD	MBF Net
DF	LIVE	CUT	136	ALL	26.9	101	133	66,480	63,870	3.9	62.9	248.0	47.8	6,195.4
MA	LIVE	CUT	3	ALL	14.8	31	38	99	88	10.6	2.2	2.6	0.7	8.6
RA	LIVE	CUT	26	ALL	13.6	49	61	3,649	3,254	10.8	35.5	35.8	9.7	315.6
RC	LIVE	CUT	18	ALL	20.7	48	59	1,610	1,519	5.7	8.6	20.2	4.4	147.3
SS	LIVE	CUT	1	ALL	45.0	125	162	197	142	28.3	0.1	0.7	0.1	13.7
WH	LIVE	CUT	21	ALL	16.4	57	74	4,540	4,342	4.4	20.0	29.3	7.2	421.2
ALL	LIVE	CUT	205	ALL	21.9	75	98	76,576	73,215	4.4	129.3	336.6	70.0	7,101.9
ALL	ALL	CUT	205	ALL	21.9	75	98	76,576	73,215	4.4	129.3	336.6	70.0	7,101.9

## Cruise Unit Report SHIFT THE PARADIGM U2

## Unit Sale Notice Volume (MBF): SHIFT THE PARADIGM U2

				MBF Volume by Grade							
Sp	DBH	Rings/In	Age	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility		
DF	26.7			499	38	399	55	5	2		
RA	18.7			35		25	3	6			
RC	14.5			32			18	13	1		
ALL	21.4			566	38	424	76	25	3		

## Unit Cruise Design: SHIFT THE PARADIGM U2

Design	Cruise	FMA	N	N Cruise	N Void
	Acres	Acres	Plots	Plots	Plots
B1: VR, 1 BAF (62.5) Measure All, Sighting Ht = 4.5 ft	9.0	9.4	9	9	0

## Unit Cruise Summary: SHIFT THE PARADIGM U2

Sp	<b>Cruised Trees</b>	All Trees	Trees/Plot	Ring-Count Trees
DF	31	36	4.0	0
RA	4	4	0.4	0
RC	10	10	1.1	0
ALL	45	50	5.6	0

#### Unit Cruise Statistics: SHIFT THE PARADIGM 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 (%)
DF	250.0	83.9	28.0	221.6	29.5	5.3	55,411	88.9	28.4
RA	27.8	163.5	54.5	138.4	17.3	8.6	3,843	164.4	55.2
RC	69.4	105.0	35.0	51.7	37.3	11.8	3,589	111.4	36.9
ALL	347.2	54.1	18.0	181.0	50.3	7.5	62,844	73.9	19.5

## Unit Summary: SHIFT THE PARADIGM U2

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	ВА	RD	MBF Net
DF	LIVE	CUT	31	ALL	26.7	96	122	57,948	55,411	4.4	64.3	250.0	48.4	498.7
RA	LIVE	CUT	4	ALL	18.7	69	83	3,911	3,843	1.7	14.6	27.8	6.4	34.6

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	ВА	RD	MBF Net
RC	LIVE	CUT	10	ALL	14.5	39	51	3,681	3,589	2.5	60.6	69.4	18.2	32.3
ALL	LIVE	CUT	45	ALL	21.4	68	87	65,540	62,844	4.1	139.5	347.2	73.0	565.6
ALL	ALL	CUT	45	ALL	21.4	68	87	65,540	62,844	4.1	139.5	347.2	73.0	565.6

## Cruise Unit Report SHIFT THE PARADIGM U3

## Unit Sale Notice Volume (MBF): SHIFT THE PARADIGM U3

				MBF Volume by Grade							
Sp	DBH	Rings/In	Age	All	Peeler	Spec Mill	2 Saw	3 Saw	4 Saw	Utility	
DF	28.6			566	113	24	384	40	1	4	
RC	17.7			48				41	7		
RA	20.5			23			13	6	4		
MA	29.0			2			2		0		
ALL	24.8			639	113	24	399	87	12	4	

## Unit Cruise Design: SHIFT THE PARADIGM U3

Design	Cruise	FMA	N	N Cruise	N Void
	Acres	Acres	Plots	Plots	Plots
B1: VR, 1 BAF (62.5) Measure All, Sighting Ht = 4.5 ft	6.0	6.7	5	5	0

## Unit Cruise Summary: SHIFT THE PARADIGM U3

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	28	28	5.6	0
RC	6	6	1.2	0
RA	3	3	0.6	0
MA	1	1	0.2	0
ALL	38	38	7.6	0

#### Unit Cruise Statistics: SHIFT THE PARADIGM 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	350.0	53.0	23.7	269.4	26.5	5.0	94,303	59.2	24.2
RC	75.0	108.7	48.6	107.1	41.9	17.1	8,031	116.5	51.5
RA	37.5	223.6	100.0	102.2	33.9	19.6	3,834	226.2	101.9
MA	12.5	223.6	100.0	28.1	0.0	0.0	352	223.6	100.0
ALL	475.0	23.9	10.7	224.3	44.8	7.3	106,520	50.7	12.9

## Unit Summary: SHIFT THE PARADIGM U3

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	BA	RD	MBF Net
DF	LIVE	CUT	28	ALL	28.6	111	143	95,741	94,303	1.5	78.5	350.0	65.4	565.8
MA	LIVE	CUT	1	ALL	29.0	55	67	919	352	61.7	2.7	12.5	2.3	2.1
RA	LIVE	CUT	3	ALL	20.5	59	71	3,964	3,834	3.3	16.4	37.5	8.3	23.0
RC	LIVE	CUT	6	ALL	17.7	47	62	8,627	8,031	6.9	43.9	75.0	17.8	48.2
ALL	LIVE	CUT	38	ALL	24.8	84	108	109,251	106,520	2.5	141.5	475.0	93.9	639.1
ALL	ALL	CUT	38	ALL	24.8	84	108	109,251	106,520	2.5	141.5	475.0	93.9	639.1

## Cruise Unit Report SHIFT THE PARADIGM U4

## Unit Sale Notice Volume (MBF): SHIFT THE PARADIGM U4

				MBF Volume by Grade							
Sp	DBH	Rings/In	Age	All	Spec Mill	2 Saw	3 Saw	4 Saw	Utility		
DF	27.5	10.0		99	12	62	23	2			
WH	13.4			3			2	1	0		
RA	12.0			3				3			
ALL	21.5	10.0		105	12	62	25	6	0		

## Unit Cruise Design: SHIFT THE PARADIGM U4

Design	Cruise Acres	FMA Acres	N Plots	N Cruise Plots	N Void Plots
FX: FR plots (20 tree / acre expansion)	2.0	1.4	3	3	0

## Unit Cruise Summary: SHIFT THE PARADIGM U4

Sp	Cruised Trees	All Trees	Trees/Plot	Ring-Count Trees
DF	8	8	2.7	1
WH	4	4	1.3	0
RA	4	4	1.3	0
ALL	16	16	5.3	1

#### Unit Cruise Statistics: SHIFT THE PARADIGM 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	220.8	103.2	59.6	224.9	30.3	10.7	49,653	107.6	60.6
WH	26.0	91.1	52.6	60.0	40.5	20.3	1,560	99.7	56.4
RA	21.0	114.7	66.2	67.6	19.5	9.8	1,420	116.4	67.0
ALL	267.8	85.2	49.2	196.5	40.2	10.1	52,633	94.2	50.2

## Unit Summary: SHIFT THE PARADIGM U4

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	ВА	RD	MBF Net
DF	LIVE	CUT	8	ALL	27.5	97	125	53,993	49,653	8.0	53.5	220.8	42.1	99.3
RA	LIVE	CUT	4	ALL	12.0	46	59	1,540	1,420	7.8	26.8	21.0	6.1	2.8
WH	LIVE	CUT	4	ALL	13.4	40	50	1,600	1,560	2.5	26.5	26.0	7.1	3.1
ALL	LIVE	CUT	16	ALL	21.4	70	90	57,133	52,633	7.9	106.8	267.8	55.3	105.3

12 of 13

Sp	Status	Rx	N	D	DBH	BL	THT	BF Gross	BF Net	Defect %	TPA	ВА	RD	MBF Net
ALL	ALL	CUT	16	ALL	21.4	70	90	57,133	52,633	7.9	106.8	267.8	55.3	105.3



346		FPA/N NO:	2942707
	Aug 8	Effective Date:	9/20/2024
POTMA	TURALE	Expiration Date:	9/20/2027
Forest Practices Ap	plication/Notification	Shut Down Zone:	651N
Notice of	f Decision	EARR Tax Credit:	■ Eligible □ Non-eligible
		Reference:	Shift the Paradigm
			30-107760
Decision			
☐ Notification Accepted	Operations shall not begin be	fore the effective date.	
■ Approved	This Forest Practices Applica	tion is subject to the cond	ditions listed below.
☐ Disapproved	This Forest Practices Applica	tion is disapproved for th	e reasons listed below.
□ Withdrawn	Applicant has withdrawn the I	Forest Practices Applicati	ion/Notification (FPA/N).
☐ Closed	All forest practices obligations	s are met.	
FPA/N Classification		Number of Yea	ars Granted on Multi-Year Requi
☐ Class II ■ Class III	☐ Class IVG ☐ Class IVS	S □ 4 years	□ 5 years
Conditions on Approval/R	leasons for Disapproval		
No additional conditions.			
NOTE:			
	ied and/or overhead utilities in t s before you disturb the ground		
A state or county road appro	oach permit may be needed prid	or to road construction al	ong a public road.
Refer to WAC 222-30-080 f	or roadside and landing clean u	p and stabilization.	
ssued By: Eric Weinke		Region: Pacific	c Cascade Region
Forest Practices Fo	prester	Date: 9/20/2024	*
Copies to:	downer, Timber Owner, and Op	perator	
anned in annexas	TO - OD D   1/1/1	Cochs	te: 9120/2024
ssued in person:	ITO ■ OP By	Dai Dai	181100100 67

**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 <u>RCW 76.09.205</u>. The appeal period starts when the applicant receives this decision, which usually happens electronically on the date indicated below.

#### You must file your appeal at all three addresses below:

Pollution Control Hearings Board	Office of the Attorney General Natural Resources Division	Department Of Natural Resources Pacific Cascade Region
Physical Address 1111 Israel Road, SW Suite 301 Tumwater, WA 98501	Physical Address 1125 Washington Street, SE Olympia, WA 98504	Physical Address 601 Bond Rd Castle Rock WA 98611
Mailing address Post Office Box 40903 Olympia, WA 98504-0903	Mailing Address Post Office Box 40100 Olympia, WA 98504-0100	Mailing Address Post Office Box 280 Castle Rock, WA 98611-0280

Information regarding the Pollution Control Hearings Board can be found at: https://eluho.wa.gov

#### Other Applicable Laws

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

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

Use the "Notice of Transfer of Approved Forest Practices Application/Notification" form. This form is available at region offices and on the Forest Practices website <a href="https://www.dnr.wa.gov/programs-and-services/forest-practices/review-applications-fpars/forest-practices-forms-and">https://www.dnr.wa.gov/programs-and-services/forest-practices/review-applications-fpars/forest-practices-forms-and</a>. 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.

1		ation of Mailing						
caused the Notice of Decision for FPA/N No to be placed in the United States mail at Castle Rock, WA postage paid. I declare under penalty of perjury of the laws of the State of Washington, that the oregoing is true and correct.								
(Date)	Castle Rock, WA (City & State where signed)	(Signature)						

SALE NAME: SHIFT THE PARADIGM **REGION:** Pacific Cascade Region COUNTY(S): Pacific ELEVATION RGE: 640-1160 **AGREEMENT#:** 30-107760 TOWNSHIP(S): T13R6W TRUST(S): Agricultural School (4), Capitol Grant (7), Common School and Indemnity (3) 123°3<sub>0.5</sub>'W HM MO 29+30 HM-103 0+00 of **HM-Mailine** 1,000 2,000 123°31'W 123°30.5'W 125~21.5 VV Ν County Road Existing Roads Required Pre-Haul Maintenance

Prepared By: accc490 Modification Date: accc490 9/11/2024

SALE NAME: SHIFT THE PARADIGM **REGION:** Pacific Cascade Region COUNTY(S): Pacific ELEVATION RGE: 640-1160 **AGREEMENT#:** 30-107760 TOWNSHIP(S): T13R6W TRUST(S): Agricultural School (4), Capitol Grant (7), Common School and Indemnity (3) 123°29'W 46°34.5'N HM Mainline HM-1400 HM-1300 HM-1300 **HM-Mainline** HM-1000 138+90 HM-1530 HM-1500 HM-1530 46°33.5'N 500 1,000 2,000 Feet 123°2'9.5'W 123°29'W 177,20 AA Ν Existing Roads **Crossdrain Culvert** Streams Required Pre-Haul Maintenance

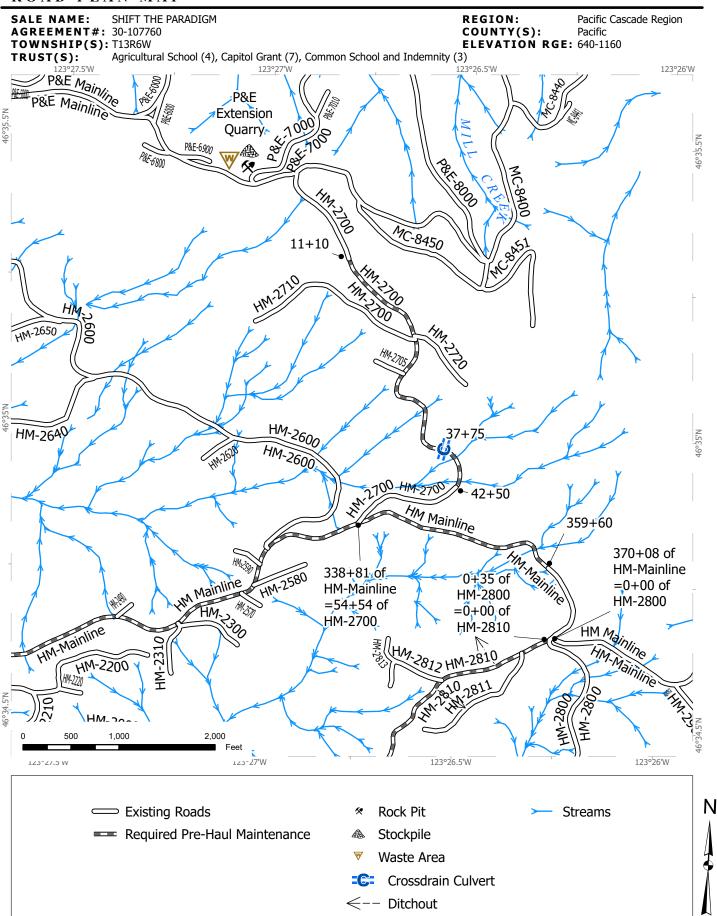
Prepared By: accc490 Modification Date: accc490 9/11/2024

SALE NAME: SHIFT THE PARADIGM **REGION:** Pacific Cascade Region COUNTY(S): Pacific ELEVATION RGE: 640-1160 **AGREEMENT#:** 30-107760 TOWNSHIP(S): T13R6W Agricultural School (4), Capitol Grant (7), Common School and Indemnity (3) TRUST(S): 123°28'W 123°27.5'W HM-2011 10+65 of 232+57 of HM-2011 HM-2000 **HM-Mainline** =0+00 of =0+00 of HM-2000 HM-2010 HM Mainline HM-2000 HM-Mainline 230+54 of **HM-Mainline** HM-1900 =0+00 of HM-1900 UNIT 3 UNIT 2 20+48 of HM-2010 2+20=0+00 of HM-2012 27 + 65500 1,000 123°27.5'W 172,5 AA N Existing Roads Landing - Proposed Harvest Unit Required Pre-Haul Maintenance Streams Required Construction

Prepared By: accc490 Modification Date: accc490 9/11/2024

Pacific Cascade Region SALE NAME: SHIFT THE PARADIGM **REGION:** COUNTY(S): Pacific ELEVATION RGE: 640-1160 **AGREEMENT#:** 30-107760 TOWNSHIP(S): T13R6W TRUST(S): Agricultural School (4), Capitol Grant (7), Common School and Indemnity (3) 123°28'W 288+90 HM-5/8 HM Mainline HM-Mainline HM-2200 500 1,000 ☐ Feet 123°28'W N Existing Roads **Crossdrain Culvert** Streams Required Pre-Haul Maintenance

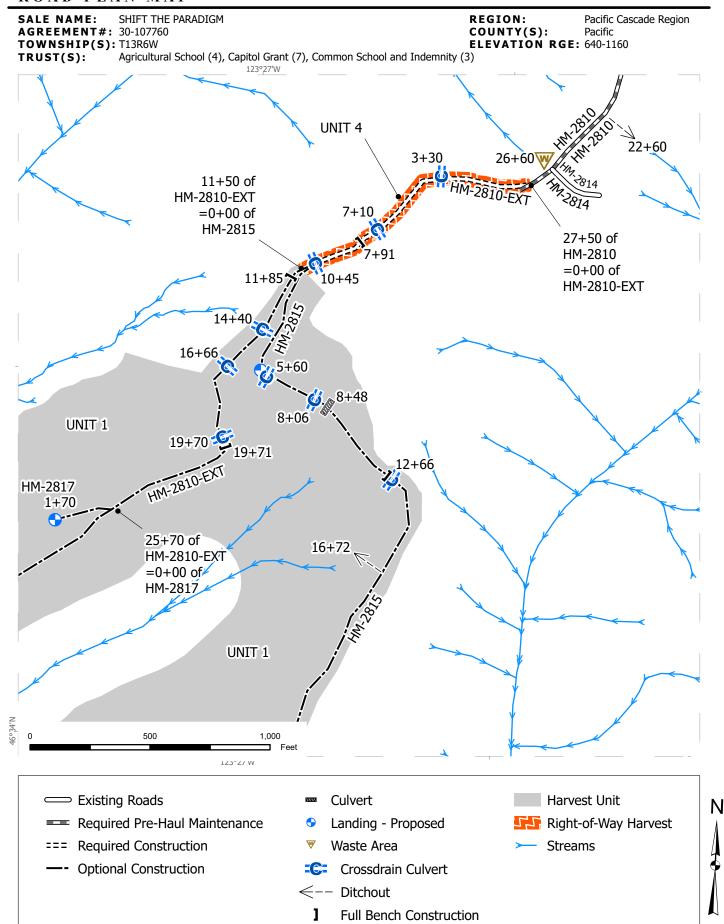
Prepared By: accc490 Modification Date: accc490 9/11/2024



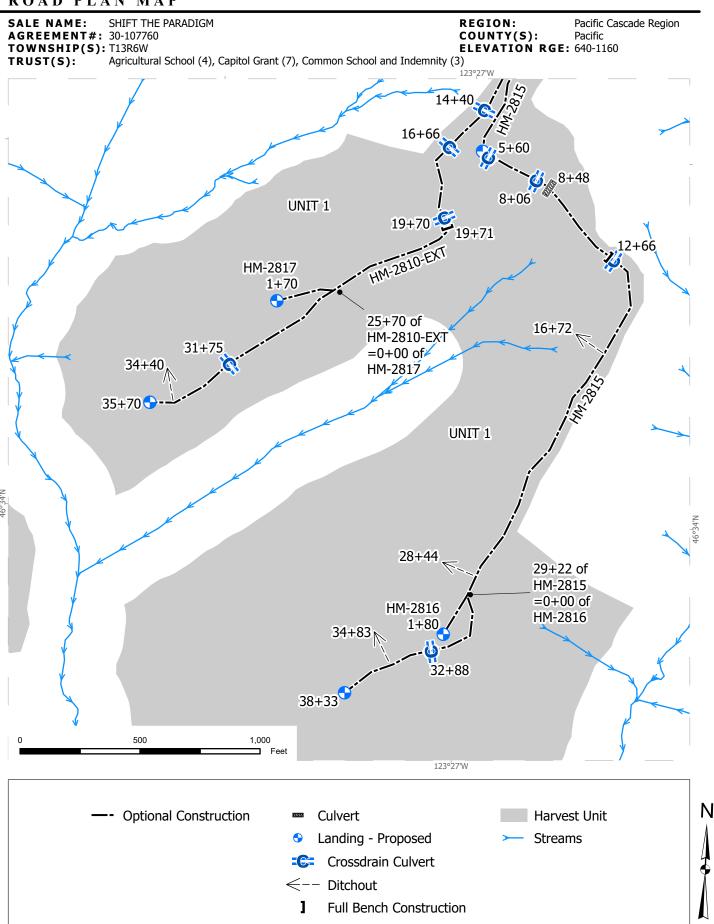
SALE NAME: SHIFT THE PARADIGM **REGION:** Pacific Cascade Region COUNTY(S): Pacific ELEVATION RGE: 640-1160 **AGREEMENT#:** 30-107760 TOWNSHIP(S): T13R6W TRUST(S): Agricultural School (4), Capitol Grant (7), Common School and Indemnity (3) 123°26.5'W 0+35 of HM-2800 =0+00 of HM-2810 **HM-Mainline** 6+00 HM-2810 22+60 26+60W HM-2810-EXT 27+50 of HM-2810 =0+00 of HM-2810-EXT 1,000 123°2'6.5'W N Right-of-Way Harvest Existing Roads Waste Area Required Pre-Haul Maintenance **Crossdrain Culvert** Streams === Required Construction <-- Ditchout

Prepared By: accc490 Modification Date: accc490 9/11/2024

Prepared By: accc490



Modification Date: accc490 9/11/2024



Prepared By: accc490 Modification Date: accc490 9/11/2024

# STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES

# SHIFT THE PARADIGM TIMBER SALE ROAD PLAN PACIFIC COUNTY LEWIS DISTRICT PACIFIC CASCADE REGION

AGREEMENT NO.: 30-107760 STAFF ENGINEER: GRANT GERRITSEN

DRAWN & COMPILED BY: ALICIA COMPTON

#### SECTION 0 - SCOPE OF PROJECT

#### 0-1 ROAD PLAN SCOPE

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

#### 0-2 REQUIRED ROADS

The specified work on the following roads is required.

Road	<u>Stations</u>	<u>Type</u>
HM-Mainline	29+30 to 359+60	Pre-Haul Maintenance
HM-2000	0+00 to 10+65	Pre-Haul Maintenance
HM-2010	0+00 to 27+65	Pre-Haul Maintenance
HM-2012	0+00 to 2+20	Construction
HM-2700	11+10 to 42+50	Pre-Haul Maintenance
HM-2810	0+00 to 27+50	Pre-Haul Maintenance
HM-2810-EXT	0+00 to 11+50	Construction

#### 0-3 OPTIONAL ROADS

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

<u>Road</u>	<u>Stations</u>	<u>Type</u>
HM-2810-EXT	11+50 to 35+70	Construction
HM-2815	0+00 to 38+33	Construction
HM-2816	0+00 to 1+80	Construction
HM-2817	0+00 to 1+70	Construction

#### 0-4 CONSTRUCTION

Construction includes, but is not limited to: clearing; grubbing; right-of-way debris disposal; excavation and/or embankment to and compaction of subgrade; construction and compaction of waste areas; end haul and compaction of waste; landing construction; acquisition and installation of drainage structures; manufacture, application and compaction of rock.

#### 0-6 PRE-HAUL MAINTENANCE

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

Road	<u>Stations</u>	<u>Requirements</u>
HM-Mainline	29+30 to 359+60	Maintenance grading, clean culverts, install culverts, clean ditches, brushing, apply and compact rock
HM-2000	0+00 to 10+65	Maintenance grading, construct and reconstruct turnouts
HM-2010	0+00 to 27+65	Maintenance grading, clean culverts, apply and compact rock, construct ditchouts
HM-2700	11+10 to 42+50	Clean ditches, apply and compact rock
HM-2810	0+00 to 27+50	Maintenance grading, clean culverts, clean ditches, reconstruct turnarounds

#### 0-7 POST-HAUL MAINTENANCE

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

#### 0-12 DEVELOP ROCK SOURCE

Purchaser may develop an existing rock source. Rock source development will involve clearing, stripping, end haul and compaction of waste, drilling, shooting and manufacture of rock. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING and is subject to the requirements of the ROCK SOURCE DEVELOPMENT PLAN.

#### 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).

SHIFT THE PARADIGM 30-107760

#### 1-4 ROAD TOLERANCES

Purchaser shall perform road work within the tolerances listed below. The tolerance class for each road is listed on the TYPICAL SECTION SHEET.

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

#### 1-6 ORDER OF PRECEDENCE

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

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

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

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

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

#### 1-9 DAMAGED METALLIC COATING

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

#### 1-15 ROAD MARKING

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

- Road centerline marked with construction stakes, orange flagging, orange paint and RPs for new construction.
- Road centerline marked with orange flagging, orange paint and RPs for reconstruction.
- Pre-haul maintenance marked with wooden stakes and/or painted trees, orange flagging and orange paint.

GM 30-107760 FINALIZED DATE

#### 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.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
HM-2810-EXT	9+70 to 22+46	Slope Stakes and/or
HM-2815	0+00 to 12+66	RP's

#### 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.

#### 1-21 HAUL APPROVAL

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

#### 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 and subgrade compaction;
- Rock application and compaction.

#### 1-25 ACTIVITY TIMING RESTRICTION

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

<u>Roads</u>	<u>Stations</u>	<u>Activity</u>	Closure Period
All Roads	All Stations	Pre-Haul Maintenance, Construction	October 1 <sup>st</sup> through April 30 <sup>th</sup>

#### 1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTION, Purchaser shall comply with a maintenance plan to include further protection of state resources. Purchaser shall put preventative measures in place before operating during the closure period. Purchaser is required to maintain all haul roads at their own expense. If other operators are using, or desire to use these 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:

- Wheel track rutting exceeds 6 inches on jaw run, pit run or native surface roads.
- Wheel track rutting exceeds 2 inches on crushed rock roads.
- Surface or base stability problems persist.
- When, in the opinion of the Contract Administrator excessive road damage or rutting may occur.

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

#### 1-32 BRIDGE SURFACE RESTRICTION

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

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

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

#### 1-33 SNOW PLOWING RESTRICTION

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

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

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.

Page 5 of 49

SHIFT THE PARADIGM 30-107760 FINALIZED DATE: SEPTEMBER 11, 2024

#### 2-1 GENERAL ROAD MAINTENANCE

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

#### 2-2 ROAD MAINTENANCE – PURCHASER MAINTENANCE

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

#### 2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER

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

#### 2-4 PASSAGE OF LIGHT VEHICLES

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

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

On the following road(s), Purchaser shall use a grader to shape the existing surface before timber haul. Purchaser shall accomplish all grading using a motor grader with a minimum of 175 horsepower.

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>	
	29+30 to 30+30		
	50+40 to 64+70		
HM-Mainline	75+00 to 77+00		
HIVI-IVIAIIIIIIIE	90+40 to 92+40	Grade and shape prior	
	214+45 to 216+45		
	357+60 to 359+60	to rock application	
HM-2000	6+20 to 8+20		
HM-2010	12+00 to 14+00		
LIN 4 2010	2+60 to 4+60		
HM-2810	16+40 to 27+50		

#### 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 timber haul.

<u>Road</u>	<u>Stations</u>
HM-Mainline	97+20, 127+25, 238+50
HM-2010	0+00 to 27+65
HM-2700	11+10 to 42+50
HM-2810	3+55, 18+80

#### 2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following road(s), Purchaser shall clean ditches, headwalls, and catchbasins. Work must be completed before timber haul and must be done in accordance with the TYPICAL SECTION SHEET and CULVERT AND DRAINAGE SPECIFICATION DETAIL. Pulling ditch material across the road or mixing in with the road surface is not allowed.

<u>Road</u>	<u>Stations</u>
	96+15 to 106+85
	113+40 to 116+75
	120+90 to 127+30
	131+35 to 135+65
	140+30 to 144+30
HM-Mainline	155+55 to 157+50
	164+90 to 167+15
	176+80 to 191+65
	216+95 to 221+35
	238+55 to 242+60
	246+05 to 253+50
HM-2000	0+00 to 10+65
LINA 2700	11+10 to 14+40
HM-2700	27+40 to 42+50
HM-2810	3+10 to 27+50

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

#### 3-1 BRUSHING

On the following road(s), Purchaser shall cut vegetative material up to 4 inches in diameter, including limbs, as shown on the ROADSIDE 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>
LINA Mainline	238+55 to 253+50
HM-Mainline	273+80 to 306+70

#### 3-2 BRUSHING RESTRICTION

Pulling, digging, pushing over, and other non-cutting methods used for vegetation removal may not be used for brushing.

#### 3-5 CLEARING

Purchaser shall fall all vegetative material larger than 2 inches DBH or over 4 feet high between the marked right-of-way boundaries and within waste and debris areas, or if not marked in the field, between the clearing limits specified on the TYPICAL SECTION SHEET. Clearing must be completed before starting excavation and embankment.

#### 3-8 PROHIBITED DECKING AREAS

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

- Within the grubbing limits.
- Within 50 feet of any stream.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- On slopes greater than 45%.
- Against standing trees, unless approved by the contract administrator.

#### 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. Grubbing must be completed before starting excavation and embankment.

#### 3-12 STUMP PLACEMENT

Purchaser shall place grubbed stumps adjacent to the road shoulder and in compliance with all other clauses in this road plan.

#### 3-14 STUMPS WITHIN DESIGNATED WASTE AREAS

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

#### 3-20 ORGANIC DEBRIS DEFINITION

Organic debris is defined as all 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, and stumps that are larger than one cubic foot in volume within the grubbing and brushing area limits as shown on the TYPICAL SECTION SHEET and ROADSIDE BRUSHING DETAIL.

#### 3-21 DISPOSAL COMPLETION

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

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

Waste areas for organic debris are located within the cleared right-of-way or in natural openings as designated or at areas approved in writing by the Contract Administrator.

SHIFT THE PARADIGM 30-107760

#### 3-23 PROHIBITED DISPOSAL AREAS

Purchaser shall not place organic debris in the following areas:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream, or wetland.
- On road subgrades, or excavation and embankment slopes.
- On slopes greater than 45%.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush can fall into the ditch or onto the road surface.
- Against standing timber.

#### 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 and in natural openings unless otherwise detailed in this road plan. Where natural openings are unavailable or restrictive, alternate debris disposal methods are subject to the written approval of the Contract Administrator.

#### SECTION 4 - EXCAVATION

#### 4-1 EXCAVATOR CONSTRUCTION

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

<u>Road</u>	<u>Stations</u>
HM-2810-EXT	11+85 to 19+71
HM-2815	0+74 to 12+66

#### 4-2 PIONEERING

Pioneering may not extend past construction that will be completed during the current construction season. In addition, the following actions must be taken as pioneering progresses:

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

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

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

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 15 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.

SHIFT THE PARADIGM 30-107760 FINALIZED DATE: SEPTEMBER 11, 2024

#### 4-5 CUT SLOPE RATIO

Purchaser shall construct excavation slopes no steeper than shown on the following table, unless construction staked or designed:

	<b>Excavation</b>	<b>Excavation Slope</b>
Material Type	Slope Ratio	<u>Percent</u>
Common Earth (on side slopes up to 70%)	1:1	100
Common Earth (on slopes over 70%)	³ <b>4</b> :1	133
Fractured or loose rock	½:1	200
Hardpan or solid rock	<b>½:1</b>	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>Embankment</u>	<u>Embankment</u>
Material Type	Slope Ratio	Slope Percent
Sandy Soils	2:1	50
Common Earth and Rounded Gravel	1½:1	67
Angular Rock	1¼:1	80

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

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

#### 4-8 CURVE WIDENING

The minimum widening placed on the inside of curves is:

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

#### 4-9 EMBANKMENT WIDENING

The minimum embankment widening is:

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

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

#### 4-12 FULL BENCH CONSTRUCTION

On the following road(s), and where side slopes exceed 45%, Purchaser shall use full bench construction for the entire subgrade width. Purchaser shall dispose of waste material as specified in Clause 4-36 DISPOSAL OF WASTE MATERIAL.

<u>Road</u>	<b>Full Bench Location</b>	<u>Comments</u>
HM-2810-EXT	11+85 to 19+71	6750cy
HM-2815	0+74 to 12+66	8800cy

#### 4-21 TURNOUTS

Purchaser shall construct turnouts as designated on the ROCK LIST. Location changes are subject to written approval by the Contract Administrator. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

#### 4-22 TURNAROUNDS

Purchaser shall construct turnarounds as designated on the ROCK LIST. Turnarounds must be no larger than 30 feet long and 30 feet wide. Location changes are subject to written approval by the Contract Administrator.

#### 4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

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

#### 4-27 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 disposed of as specified in Clause 4-36 DISPOSAL OF WASTE MATERIAL.

#### 4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

#### 4-29 DITCHOUTS

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

#### 4-35 WASTE MATERIAL DEFINITION

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

#### 4-36 DISPOSAL OF WASTE MATERIAL

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

#### 4-37 WASTE AREA LOCATION

Purchaser shall deposit waste material in the listed designated areas. Additional waste areas may also be identified or approved by the Contract Administrator. The amount of material allowed in a waste area is at the discretion of the Contract Administrator.

Waste Area Location	<u>Station</u>	<u>Comments</u>	<u>Volume*</u>
HM-2810	26+60	Northwest side of road outside of clearing limits	15,550cy
P&E Extension Quarry		See ROCK SOURCE DEVELOPMENT PLAN for location	200су

<sup>\*</sup>Quantities are estimates only. Actual quantities may vary and allowable volumes are at the discretion of the Contract Administrator.

#### 4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas:

- Within 25 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- Within a riparian management zone.
- Within a wetland management zone.
- On side slopes steeper than 45%.
- In locations that interfere with the construction of the road prism.
- In locations that impede drainage.
- Within the operational area for cable landings.
- Against standing timber.

#### 4-48 NATIVE MATERIAL

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

#### 4-55 ROAD SHAPING

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

#### 4-56 DRY WEATHER SHAPING

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

#### 4-60 FILL COMPACTION

Purchaser shall compact all embankment and waste material in accordance with the COMPACTION LIST by routing equipment over the entire width of each lift. Waste material may be placed by end-dumping or sidecasting until sufficiently wide enough to support the equipment.

#### 4-61 SUBGRADE COMPACTION

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

#### 4-62 DRY WEATHER COMPACTION

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

#### 4-63 EXISTING SURFACE COMPACTION

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

#### **SECTION 5 – DRAINAGE**

#### 5-5 CULVERTS

Purchaser shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the CULVERT LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts must be new material and meet the specifications in Clauses 10-17 through 10-22.

#### 5-6 CULVERT TYPE

Purchaser shall install culverts made of plastic in accordance with Clauses 10-17 through 10-22.

#### 5-10 CULVERT MARKER INSTALLATION

At all new culverts, Purchaser shall provide and install culvert markers at the inlet in accordance with the CULVERT MARKER INSTALLATION DETAIL.

#### 5-12 UNUSED MATERIALS STATE PROPERTY

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

#### 5-15 CULVERT INSTALLATION

Culvert installation must be in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL 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 shall be banded using lengths of no less than 10 feet, and no more than one length less than 20 feet. Shorter section of banded culvert shall be installed at the inlet end.

#### 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%.

SHIFT THE PARADIGM 30-107760 FINALIZED DATE: SEPTEMBER 11, 2024 Page 13 of 49

#### 5-18 CULVERT DEPTH OF COVER

Cross drain culverts must be installed with a depth of cover of not less than 1 foot of compacted subgrade over the top of the culvert at the shallowest point.

#### 5-20 ENERGY DISSIPATERS

Purchaser shall install energy dissipaters in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL.

The type of energy dissipater and the amount of material must be consistent with the specifications listed on the CULVERT LIST. No placement by end dumping or dropping of rock is allowed. Energy dissipater installation is subject to approval by the Contract Administrator.

#### 5-25 CATCH BASINS

Purchaser shall construct catch basins in accordance with CULVERT AND DRAINAGE SPECIFICATION DETAIL. Minimum dimensions of catch basins are 3 feet wide and 4 feet long.

#### 5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Purchaser shall construct headwalls in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all culverts on the CULVERT LIST that specify the placement of rock. 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.

#### 5-33 NATIVE SURFACE ROADS

If overwintered, native surface roads must be waterbarred by November 1. Purchaser shall construct waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical distance of no more than 10 feet between waterbars or between natural drainage paths, and with a maximum spacing of 150 feet.

#### SECTION 6 - ROCK AND SURFACING

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

Rock used in accordance with the quantities on the ROCK LIST may be obtained from the following source(s) on state land at no charge to the Purchaser. Purchaser shall obtain written approval from the Contract Administrator for the use of material from any other source. 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>	Rock Type
P&E Extension	T12D06W/Soction 20	Select Pit Run, Quarry
Quarry	T13R06W Section 29	Spalls

SHIFT THE PARADIGM

30-107760

FINALIZED DATE: SEPTEMBER 11, 2024

#### 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 additional yardage without prior written approval from the Contract Administrator. Other stockpiles may not be used.

<u>Source</u>	<u>Location</u>	Rock Type	<u>Quantity</u>
P&E Extension	T13R06W Section 19	2 ½-Inch Minus	384cy
Quarry	TISINOOVV SECTION IS	2 /2 IIICII IVIIIIUS	30+Cy

#### 6-5 ROCK FROM COMMERCIAL SOURCE

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

#### 6-10 ROCK SOURCE DEVELOPMENT PLAN BY STATE

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

<u>Source</u>	Rock Type
P&E Extension Quarry	Select Pit Run, Quarry
	Spalls

#### 6-22 FRACTURE REQUIREMENT FOR ROCK

A minimum of 50% by visual inspection of coarse aggregate must have at least one fractured face. Coarse aggregate is the material greater than 1/4-inch in size.

#### 6-23 ROCK GRADATION TYPES

Purchaser shall provide or manufacture rock in accordance with the types and amounts listed in the ROCK LIST. Rock must meet the following specifications for gradation and uniform quality when placed in hauling vehicles. Purchaser shall provide a sieve analysis upon request from the Contract Administrator.

#### 6-41 SELECT PIT RUN ROCK

No more than 50 percent of the rock may be larger than 6 inches in any dimension and no rock may be larger than 12 inches in any dimension. Select Pit Run rock may not contain more than 5 percent by weight of organic debris, dirt, and trash. Rock may require processing to meet this specification.

#### 6-43 QUARRY SPALLS

% Passing 8" square sieve 100%

% Passing 3" square sieve 40% maximum % Passing 3/4" square sieve 10% maximum

Rock may not contain more than 5 percent vegetative debris or trash. All percentages are by weight.

SHIFT THE PARADIGM

30-107760

FINALIZED DATE: SEPTEMBER 11, 2024

#### 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 loose yards. Purchaser shall apply adequate amounts of rock to meet the specified rock depths. Specified rock depths are minimum requirements and are not subject to reduction. Unless otherwise stated in Clause 6-75 OPTIONAL ROCK EXCEPTION.

#### 6-56 ROCK MEASURMENT BY TRUCK VOLUME

Measurement of spot rock, energy dissipaters, culvert backfill, and landing rock is on a cubic yard truck measure basis. Purchaser shall measure each truck box before rock hauling. An average of such volumes for each truck will be used to tally the volume hauled. The Contract Administrator may periodically require that a load be flattened off and its volume calculated. Purchaser shall maintain load tally sheets for each truck and shall give them to the Contract Administrator on a weekly basis during rocking operations.

#### 6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for subgrade compaction and drainage installation before rock application.

#### 6-71 ROCK APPLICATION

Purchaser shall apply rock in accordance with the specifications and quantities shown on the ROCK LIST. Rock must be spread, shaped, and compacted full width concurrent with rock hauling operations. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width.

#### 6-73 ROCK FOR WIDENED PORTIONS

Purchaser shall apply rock to turnarounds, turnouts, and areas with curve widening to the same depth and specifications as the traveled way, unless otherwise specified in the ROCK LIST.

#### 6-75 OPTIONAL ROCK EXCEPTION

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

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

<u>Road</u>	<u>Stations</u>	<u>Options</u>
HM-2810-EXT	15+86 to 18+32	2 1/2-Inch Minus
HM-2816	0+00 to 1+80	Select Pit Run
HM-2817	0+00 to 1+70	Select Pit Run

SHIFT THE PARADIGM 30-107760 FINALIZED DATE: SEPTEMBER 11, 2024

Page 16 of 49

#### 8-1 SEDIMENT CONTROL STRUCTURES

Sediment control shall be accomplished using sediment traps, silt fences, settling ponds, check dams or other methods as approved in writing by the Contract Administrator.

<u>Road</u>	<u>Stations</u>	<u>Comments</u>
HM-2700	27+50 to 37+75	Install 10 check dams,
ПIVI-2700	27+30 (0 37+73	evenly spaced

#### 8-2 PROTECTION FOR EXPOSED SOIL

Purchaser shall provide and evenly spread a 4-inch layer of straw to all exposed soils within 50 feet of a stream or wetland. Soils must be covered before the first anticipated storm event. Soils may not sit exposed during any rain event.

#### 8-15 REVEGETATION

On the following road(s) and waste areas, Purchaser shall spread seed on all exposed soils resulting from road work activities using manual dispersion. Other methods of covering must be approved in writing by the Contract Administrator. Required seed not spread by the termination of this contract will become the property of the state.

<u>Location</u>	<u>Stations</u>	Qty (lbs)*	<u>Type</u>
HM-2012	0+00 to 2+20	5.6	
HM-2810-EXT	0+00 to 35+70	91.6	
HM-2815	0+00 to 38+33	98.4	Grass Seed
HM-2816	0+00 to 1+80	4.8	Grass seed
HM-2817	0+00 to 1+70	4.4	
Waste Areas		50	

<sup>\*</sup>Quantities are estimates only. Actual quantities may vary and are the responsibility of the Purchaser.

#### 8-16 REVEGETATION SUPPLY

The Purchaser shall provide the grass seed.

#### 8-17 REVEGETATION TIMING

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

#### 8-19 ASSURANCE FOR SEEDED AREA

Purchaser shall ensure the growth of a uniform and dense crop (at least 50% coverage) of 2-inch tall grass. Purchaser shall reapply the grass seed in areas that have failed to germinate or have been damaged through any cause, restore eroded or disturbed areas, clean up and properly dispose of eroded materials, and reapply the grass seed at no additional cost to the state.

#### 8-25 GRASS SEED

Purchaser shall evenly spread the seed mixture listed below on all exposed soil at a rate of 50 pounds per acre of exposed soil. Grass seed must meet the following specifications:

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

Kind and Variety of Seed	% by Weight
<u>in Mixture</u>	
Perennial Rye	35-45
Red Fescue	30-40
Highland Bent	5-15
White Clover	10-20
Inert and Other Crop	0.5

SECTION 9 - POST-HAUL ROAD WORK

#### 9-3 CULVERT MATERIAL REMOVED FROM STATE LAND

Culverts removed from roads become the property of the Purchaser and must be removed from state land.

#### 9-5 POST-HAUL MAINTENANCE

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

#### 9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface.

#### **SECTION 10 MATERIALS**

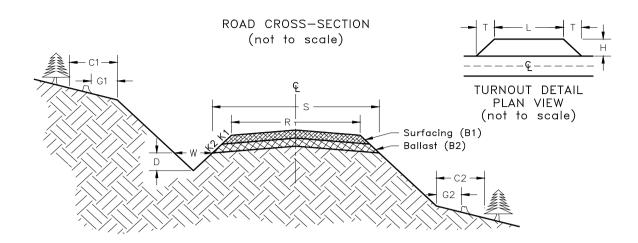
#### 10-17 CORRUGATED PLASTIC CULVERT

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

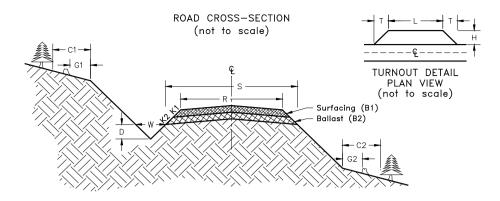
#### 10-22 PLASTIC BAND

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.

# **TYPICAL SECTION SHEET**



	From		Tolerance	Subgrade	Road	Ditch	Ditch	Crown	Grub	bing		
Road Number	Station	To Station	Class	Width	Width	Width	Depth	@ CL	Lin	nits	Clearin	g Limits
				ft	ft	ft	ft	in	f	t	f	t
				S	R	W	D		G1	G2	C1	C2
HM-Mainline	29+30	359+60	Α	-	-	3	1	4	-	-	-	-
HM-2000	0+00	10+65	В	-	-	3	1	4	-	-	-	-
HM-2010	0+00	27+65	В	-	-	3	1	4	-	-	-	-
HM-2012	0+00	2+20	С	17	12	3	1	4	5	5	10	10
HM-2700	11+10	42+50	В	-	-	3	1	4	-	-	-	-
HM-2810	0+00	27+50	В	-	-	3	1	4	-	-	-	-
HM-2810-EXT	0+00	35+70	В	17	12	3	1	4	5	5	10	10
HM-2815	0+00	38+33	В	17	12	3	1	4	5	5	10	10
HM-2816	0+00	1+80	С	17	12	3	1	4	5	5	10	10
HM-2817	0+00	1+70	С	17	12	3	1	4	5	5	10	10

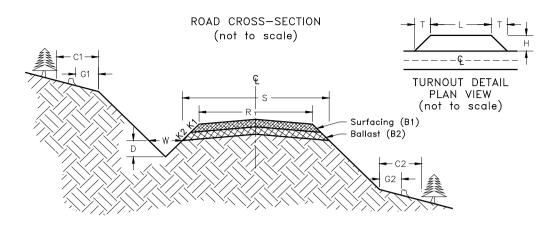


#### **SELECT PIT RUN**

					Compacted		# of				Turnout	i
Donal November		From	Ta Chatian	Rock	Rock Depth		Stations or	C.Y. Subtotal	Rock Source		\ A /: -  +  -	T
Road Number		Station	To Station	Slope	(in)	Unit	Units	Subtotal		Length	wiath	Taper
									P&E Extension Quarry			
				K2	B2				or Commercial Source	L	Н	Т
HM-2000		Land				68	1	68				
HM-2010		Land	lings			68	1	68				
HM-2012		0+00	2+20			81	2.20	178				
		Turnarounds Junctions		1 1/2:1	15	43	1	43				
						15	1	15				
		Land	lings			68	1	68				
HM-2810-EXT		0+00	35+70			90	35.70	3213				
		Turnar				43	3	130				
		Turn	outs			38	3	114		40	10	25
		10+45, 22+	-46, 30+36	1 1/2·1	15	30	3	114		-0	10	23
		Curve W	/idening	1 1/2.1	13							
		17+03	17+86			31	1.88	58				
		20+29	21+34									
		Junct	tions			15	1	15				
HM-2815		0+00	38+33			81	38.33	3105				
		Turnar	ounds			43.5	2	87				
		Turn	outs			38	3	114		40	10	25
		14+96, 21+	-66, 33+01	1 1/2·1	15	30	,	114		70	10	23
		Curve W	/idening	1 1/2.1	13							
		4+53	5+50			28	1.57	44				
		8+19	8+79									
		Junct	tions			15	1	15				
		Land	lings			67.3333	3	202				
HM-2816	*	0+00	1+80	1 1/2:1	15	81	1.80	146				
	*	Junct	Junctions		15	15	1	15				
	*	Land	lings			68	1	68				
HM-2817	*	0+00	1+70	1 1/2:1	15	81	1.70	138				
	*	Junct	tions	1/2.1	. 15	15	1	15				
	*	Land	lings			68	1	68				

<sup>\*</sup>Optional Rock in accordance with 6-75

REQUIRED SELECT PIT RUN: 7537 CY
OPTIONAL SELECT PIT RUN: 450 CY

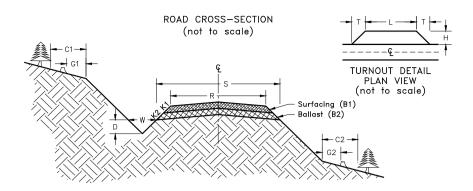


#### 2 1/2 INCH MINUS CRUSHED ROCK

Road Number		From Station	To Station	Rock Slope K1	Compacted Rock Depth (in)	C.Y. per Station or Unit	# of Stations or Units	C.Y. Subtotal	Rock Source P&E Extension Quarry Stockpile or Commercial Source
HM-Mainline		29+30 Culv	Rock 359+60 ert Bedding			20	2	170 40	
HM-2000		Spot 6+00	Rock 8+50					20	
HM-2010		Spot 12+00	Rock 14+00					30	
HM-2700		Culv Backfill/	vert Bedding			20	1	20	
HM-2810		Spot 2+50	Rock 4+50					20	
HM-2810-EXT	*	15+86	18+32			30	2.46	74	
	*	Curve W 17+03	idening/ 17+86	1 1/2:1	6	12	0.83	10	

<sup>\*</sup>Optional Rock in accordance with 6-75

REQUIRED 2 1/2 INCH MINUSCRUSHED ROCK: 300 CY
OPTIONAL 2 1/2 INCH MINUS CRUSHED ROCK: 84 CY



#### **QUARRY SPALLS**

					AININ SIA						
				Compacted	C.Y. per	# of				Turnout	
	From		Rock	Rock Depth	Station or	Stations or	C.Y.				
Road Number	Station	To Station	Slope	(in)	Unit	Units	Subtotal	Rock Source	Length	Width	Taper
								P&E Extension Quarry or			
			K2	B2				Commercial Source	L	Н	T
HM-Mainline	Inlet	Armoring			0.5	2	1				
	Energy	Dissipaters			0.5	2	1				
HM-2700	Inlet	Armoring			0.5	1	0.5				
	Energy	Dissipaters			0.5	1	0.5				
	Che	ck Dams			0.15	10	1.5				
HM-2810-EXT	Inlet	Armoring			7	0.5	3.5				
	Energy	Dissipaters			7	0.5	3.5				
HM-2815	Inlet	Armoring			6	0.5	3				
	Energy	Dissipaters			6	0.5	3				

<sup>\*</sup>Optional Rock in accordance with 6-75

REQUIRED QUARRY SPALLS: 17.5 CY

## **CULVERT LIST**

Road Number	Location		Culvert		Arm	oring (0	C.Y.)	<u>Backfill</u>	<u>Bedding</u>	<u>Inlet</u>	<u>Remarks</u>
Road Number	Location	Dia (In)	Length	Type	<u>Inlet</u>	<u>Outlet</u>	Type	<u>Material</u>	<u>Material</u>	<u>Marker</u>	<u>Kemarks</u>
HM-Mainline	138+90	18	30	PD	0.5	0.5	QS	CR	CR	Υ	
HM-Mainline	288+90	18	30	PD	0.5	0.5	QS	CR	CR	Υ	
HM-2700	37+75	18	30	PD	0.5	0.5	QS	CR	CR	Υ	
HM-2810	6+00			DO							Ditchout Right (Northwest)
HM-2810	13+25			DO							Maintain Ditchout Left (Southeast)
HM-2810	22+60			DO							Ditchout Left (Southeast), Trench Out
HM-2810-EXT	3+30	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2810-EXT	7+10	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2810-EXT	10+45	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2810-EXT	14+40	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2810-EXT	16+66	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2810-EXT	19+70	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2810-EXT	31+75	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2810-EXT	34+40			DO							Ditchout Right (Northwest)
HM-2815	5+60	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2815	8+06	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2815	8+48	24	40	PD	0.5	0.5	QS	NT	NT	Υ	Upsized Crossdrain, No Live Water
HM-2815	12+66	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2815	16+72			DO							Ditchout Right (West)
HM-2815	28+44			DO							Ditchout Right (West)
HM-2815	32+88	18	30	PD	0.5	0.5	QS	NT	NT	Υ	
HM-2815	34+83			DO							Ditchout Right (North)

## Key:

QS - Quarry Spalls

NT - Native Material

CR - 2 1/2 Inch Minus Crushed Rock PD - Polyethylene Pipe Double Wall

DO - Ditchout

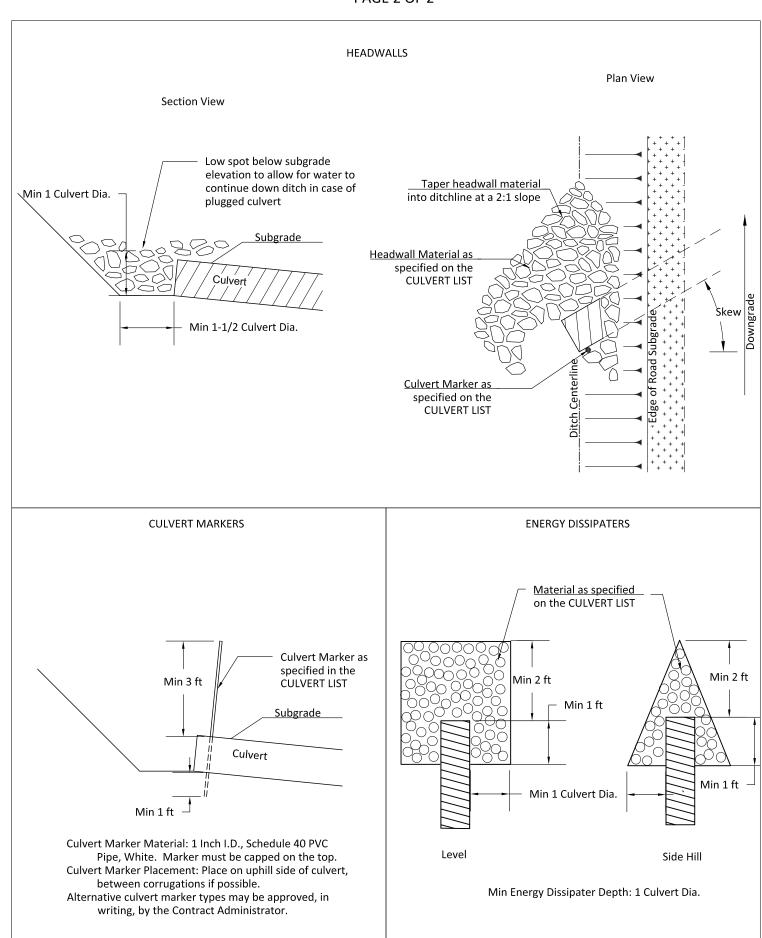
## **COMPACTION LIST**

				Max		Minimum			Maximum
				Depth		Equipment	Minimum	Maximum	Amount of
	From			Per Lift		Weight	Number of	Operating	Deflection
Road	Station	To Station	Type	(inches)	Equipment Type	(lbs)	Passes	Speed (mph)	(inches)
					Vibratory				
All Roads			Subgrade	12	Smooth Drum	14,000	4	3	2
					Vibratory				
All Roads			Fill	12	Smooth Drum	14,000	4	3	2
All Roads			Waste Area	24	Excavation	28,000	-	-	4
			Pre-haul		Vibratory				
All Roads			Surface	6	Smooth Drum	14,000	5	3	1
					Vibratory				
All Roads			Rock	12	Smooth Drum	14,000	3	3	1

# CULVERT AND DRAINAGE SPECIFICATION DETAIL PAGE 1 OF 2

#### INSTALLATION REQUIREMENTS: **CROSS SECTION** 1. Proper preparation of foundation and placement of any required bedding material shall precede the installation of all culverts. This includes necessary leveling of the native trench bottom and compaction of Backfill Material required bedding material to form a uniform, dense, unyielding base. as specified on The pipe must be uniformly supported along the barrel. the CULVERT LIST Backfill material shall be compacted under the culvert haunches, around the sides, and above the culvert in accordance with the COMPACTION LIST. **Bedding Material** as specified on ALL DRAWINGS ARE NOT TO SCALE Min 6 in the CULVERT LIST **CULVERT PROFILE (TYPICAL)** Normal Backslope Minimum height of cover as specified in the Road Plan Backfill Material as specified Additional backslope Subgrade on the CULVERT LIST cut to allow for catch basin **Energy Dissipater** as specified on the Lower ditchline to **ROCK LIST** Catch Basin accommodate diameter of Min 1.5 Culvert Dia. Stable Ground culvert Bedding Material as specified on the CULVERT LIST **CULVERT WITH DOWNSPOUT OPTION 1** Min 5 ft Double walled Single walled polyethylene culvert Coupling polyethylene (Buried) downspout **CULVERT WITH DOWNSPOUT OPTION 2 Turner Elbow** (See Detail) **SUPPORT STAKES TURNER ELBOW** Max 10 ft **Culvert Diameter** Min 1 culvert dia Culvert Min 1 ft **Support Stakes** (See Detail) Downspour Stake Material: T-post with rust protection coating. Bolted with $\frac{5}{8}$ " galvanized Connections: Bolt support stakes to the culvert bolts and washers (both with $\frac{5}{8}$ " u-bolts, with washers on both sides) the inside and outside of the culvert. Alternative staking methods may be approved, Downspout must be 6 inches larger in in writing, by the Contract Administrator. diameter than the culvert.

# CULVERT AND DRAINAGE SPECIFICATION DETAIL PAGE 2 OF 2



# FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS Page 1 of 2

#### **Cuts and Fills**

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

#### Surface

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

#### **Drainage**

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

30-107760 FINALIZED DATE: SEPTEMBER 11, 2024 Page 28 of 49

# FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS Page 2 of 2

#### **Preventative Maintenance**

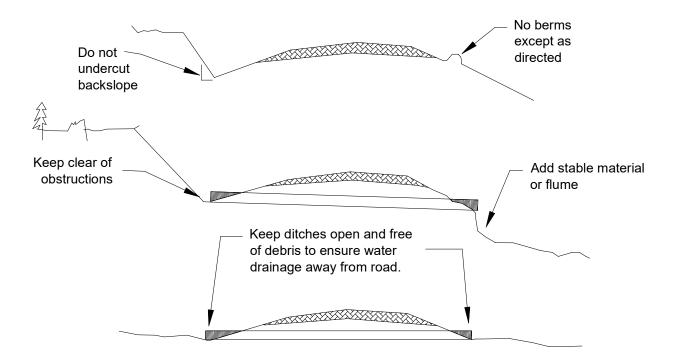
• Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

#### **Termination of Use or End of Season**

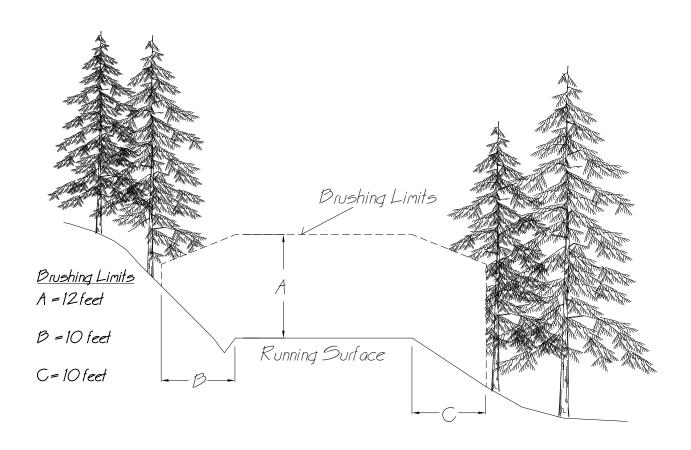
 At the conclusion of logging operations, ensure all conditions of these specifications have been met.

#### Debris

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



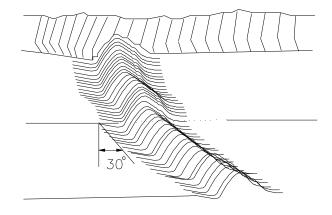
# **ROADSIDE BRUSHING DETAIL**

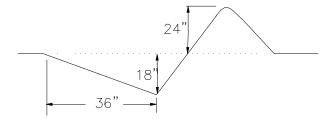


### **GENERAL NOTES**

- 1) Vegetative material, including limbs, up to 4 inches in diameter shall be cut within the brushing limits shown on the drawing above. This includes vegetative material growing on the running surface.
- 2) Vegetative material shall be cut as near flush with the ground as possible, but shall not extend more than 6 inches above the ground.
- 3) Brushing Limit C may be increased on the inside of curves to improve sight distance if approved by the Contract Administrator

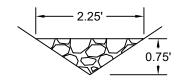
## NON-DRIVABLE WATER BAR DETAIL





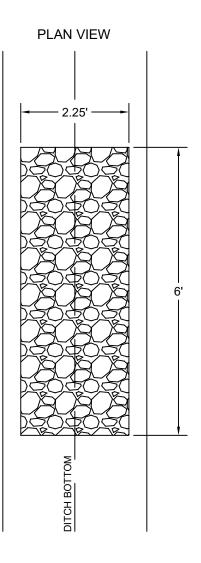
## **CHECK DAM DETAIL**

**DITCH CROSS SECTION VIEW** 

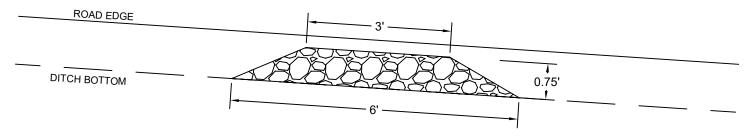




CHECK DAM SHALL BE CONSTRUCTED FROM QUARRY SPALLS. NO PLACEMENT BY END DUMPING OR DROPPING OF ROCK IS ALLOWED.



#### DITCH PROFILE VIEW



DATE: 6/27/2024

DRAWN BY: G. GERRITSEN
SHIFT THE PARADIGM

30-107760

FINALIZED DATE: SEPTEMBER 11, 2024

Page 32 of 49

# STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES PACIFIC CASCADE REGION

#### **P&E EXTENSION QUARRY DEVELOPMENT PLAN**

Section 29, Township 13 North, Range 06 West, W.M.
Page 1 of 3

- 1. Development shall occur in Area A. Development in any other area must be approved in writing by the Contract Administrator.
- 2. Trees shall be cleared to a minimum of ¾ of the height of the tallest tree adjacent to the working face. All vegetation including stumps shall be cleared a minimum of 20 feet beyond the top of all working faces.
- 3. Overburden in excess of 3ft deep shall be end hauled to a waste area as designated by the Contract Administrator and compacted. Minimal acceptable compaction is achieved as detailed in the COMPACTION LIST.
- 4. Root wads and organic debris larger than one cubic foot in volume shall be separated from overburden material and cleared a minimum of 20ft beyond the top of all working faces.
- 5. Pit faces shall not exceed 25 feet in height; solid rock faces shall be sloped no steeper than ½:1, diggable rock faces shall be sloped no steeper than ½:1.
- 6. Working bench width shall be a minimum of 20 feet.
- 7. The pit floor shall have continuity of slope, providing drainage to the Northeast at a minimum of 2 percent, unless otherwise approved in writing by Contract Administrator.
- 8. The location and amount of material to be placed in a stockpile are subject to approval of the Contract Administrator.
- 9. Oversize material remaining in the rock source at the conclusion of use shall not exceed 5 percent of the total volume mined during that operation. Oversize material is defined as rock fragments larger than two feet in any direction. At the conclusion of operations, oversize material shall be placed in the designated Oversize Storage Area.
- 10. All operations shall be carried out in compliance with all regulations of:
  - a. Regulations and Standards Applicable to Metal and Nonmetal Mining and Milling Operations (30 CFR) U.S. Department of Labor, Mine Safety and Health Administration.
  - b. Safety Standards for Construction Work (296-155 WAC), Washington Department of Labor and Industries.

SHIFT THE PARADIGM 30-107760 FINALIZED DATE: SEPTEMBER 11, 2024 Page 33 of 49

# STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES PACIFIC CASCADE REGION

#### **P&E RIDGE QUARRY DEVELOPMENT PLAN**

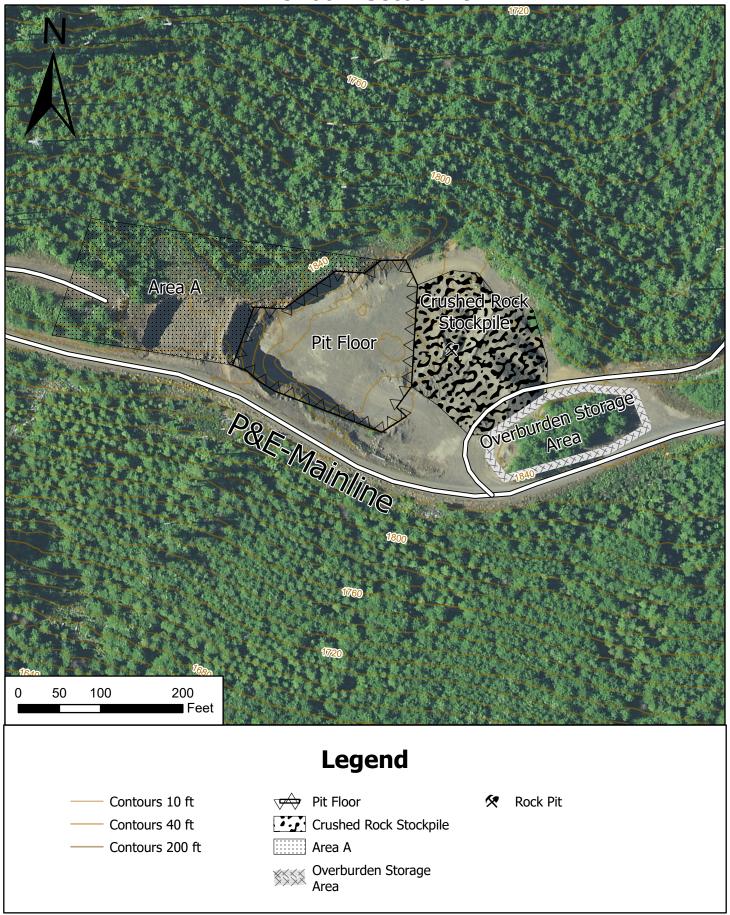
Section 24, Township 13 North, Range 07 West, W.M. Page 2 of 3

#### 11. Upon completion of pit operations:

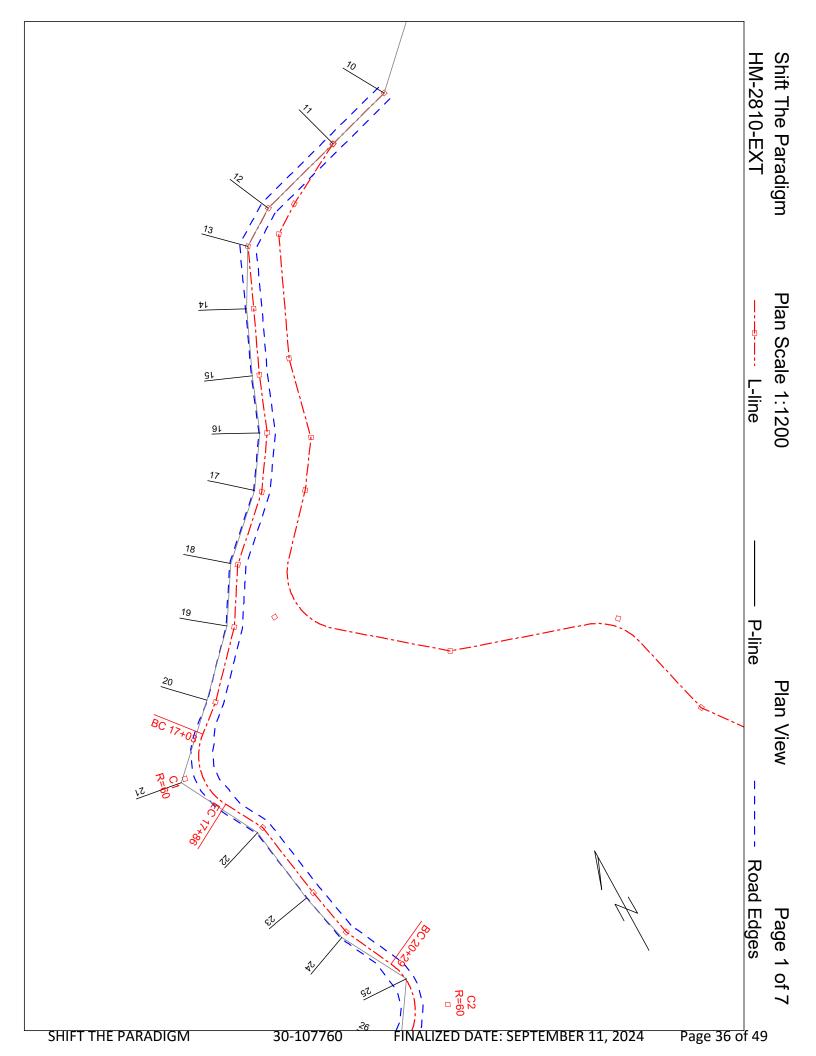
- a. The pit floor shall be left in a smooth and neat condition. The surface of pit floors and benches must be uniform and free-draining at a minimum 2% outslope gradient.
- b. All exposed soil in the waste area shall be grass seeded in accordance with Road Plan Clauses 8-15 REVEGETATION and 8-25 GRASS SEED.
- c. Pit faces and walls shall be scaled and cleared of loose and overhanging material.
- d. Benches and faces shall have safety berms constructed or access blocked to highway vehicles.
- e. The area will be left in a condition that will not endanger public safety, damage property, or be hazardous to animal or human life. The site shall be cleared of all temporary structures, equipment and rubbish, and shall be left in a neat and presentable condition.
- f. Prior to termination of the contract, quarry condition and compliance with all terms of the contract shall be approved in writing by the Contract Administrator.
- 12. Reclamation will not be required following use.

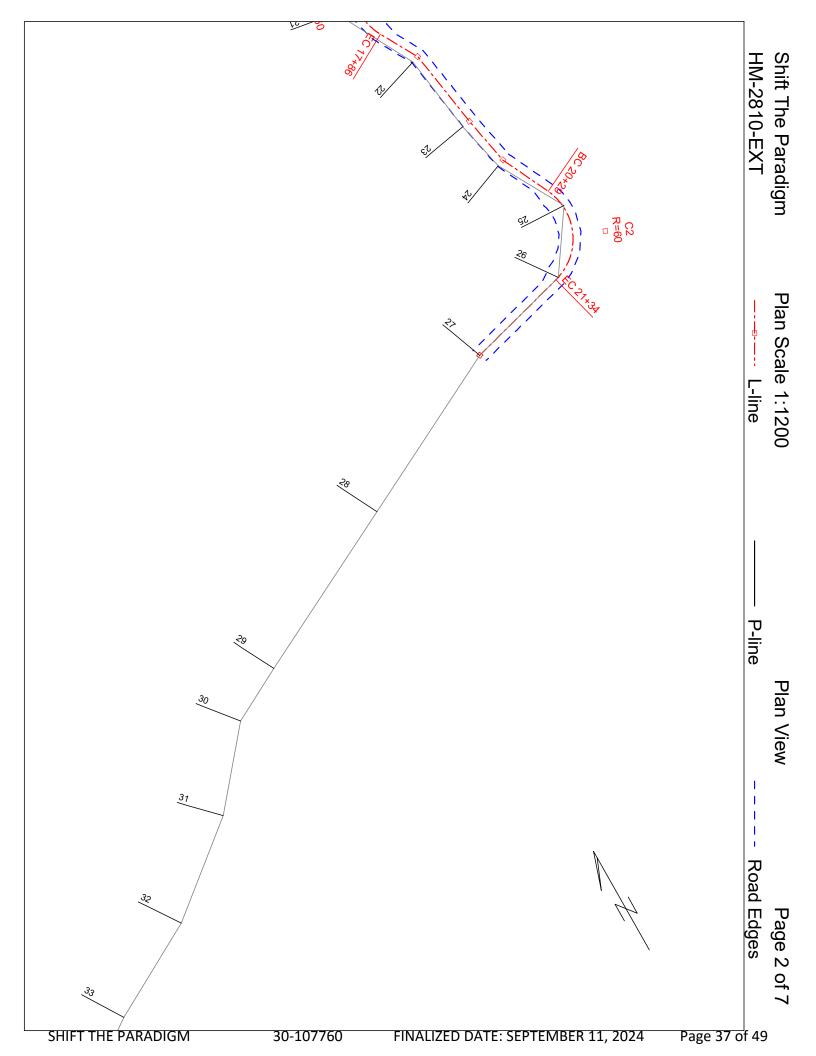
# P&E Ext. Quarry Development Plan Pg. 3 of 3

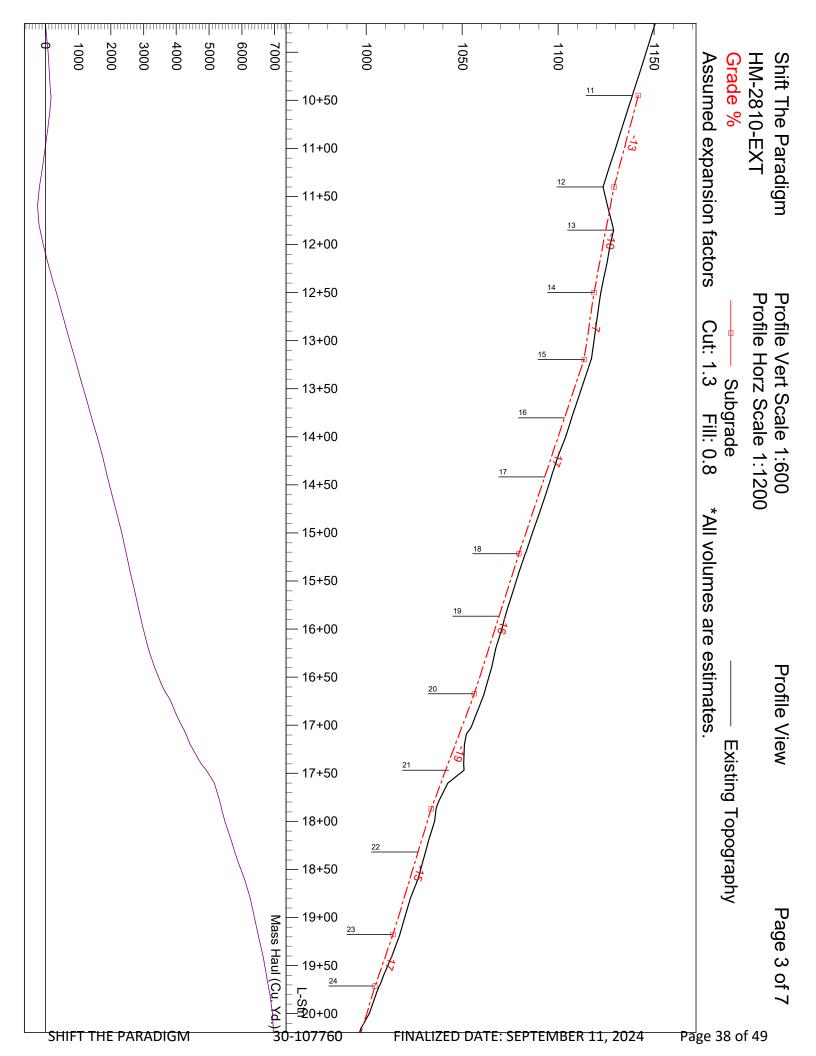
T13R06W Section 29

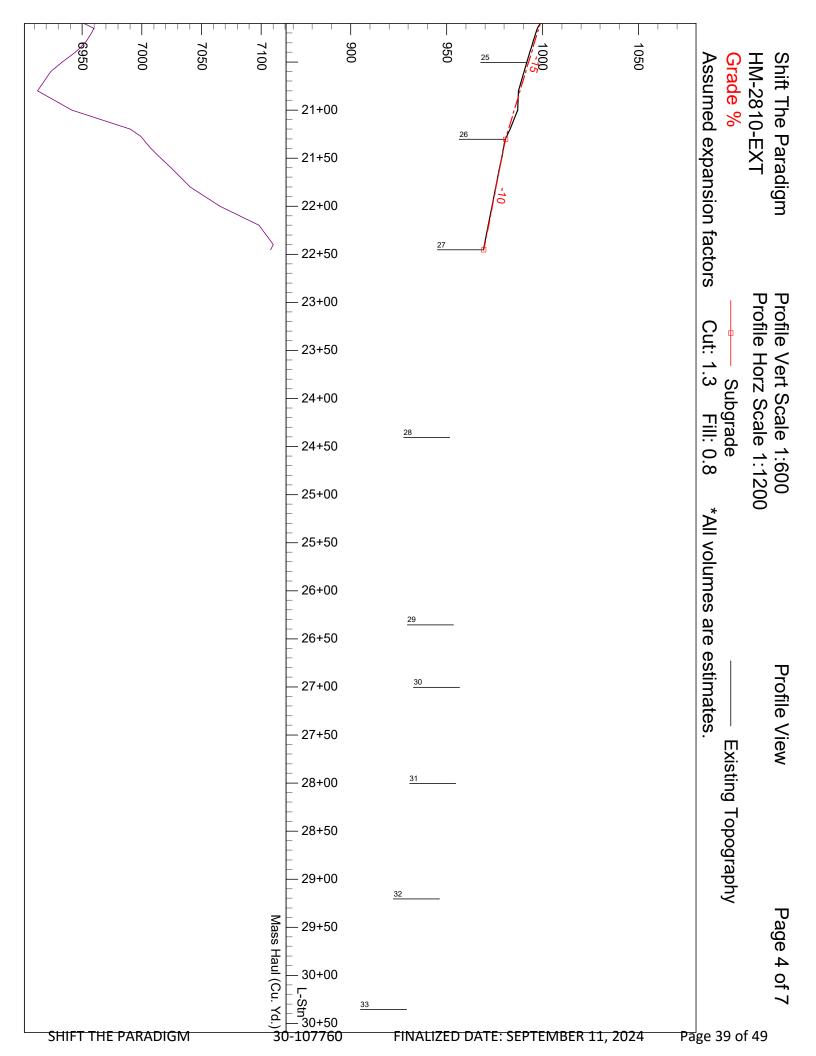


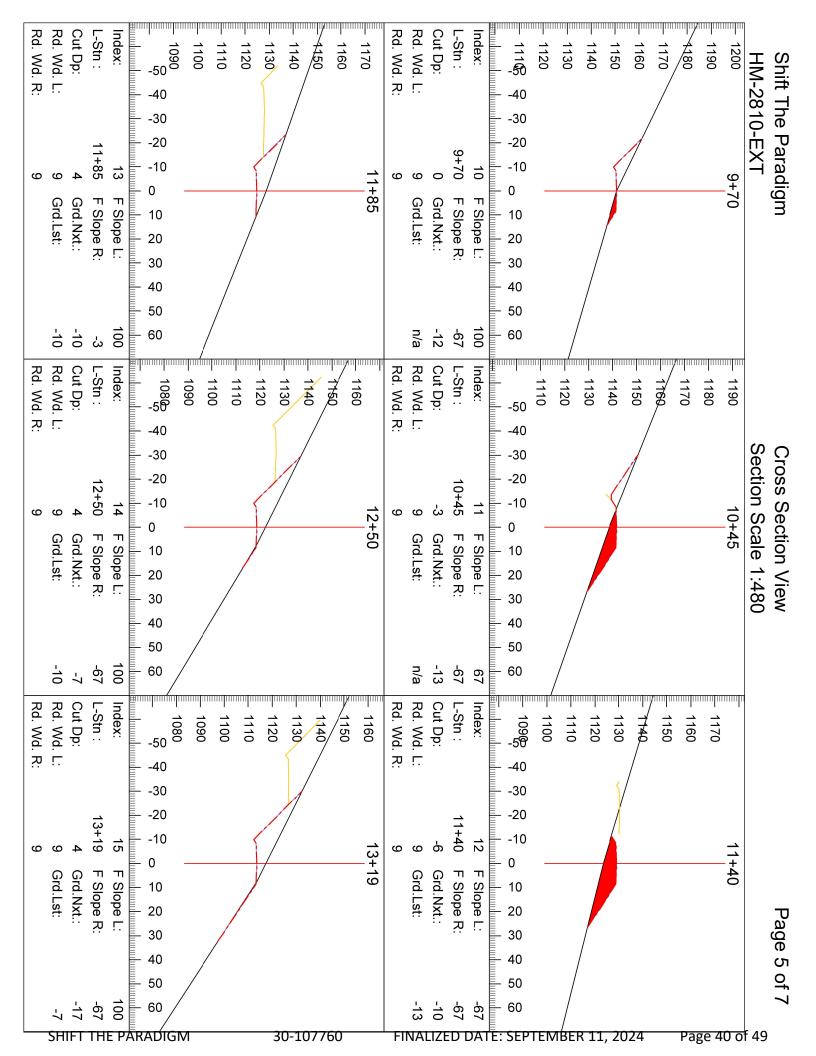
Created By: G. Gerritsen

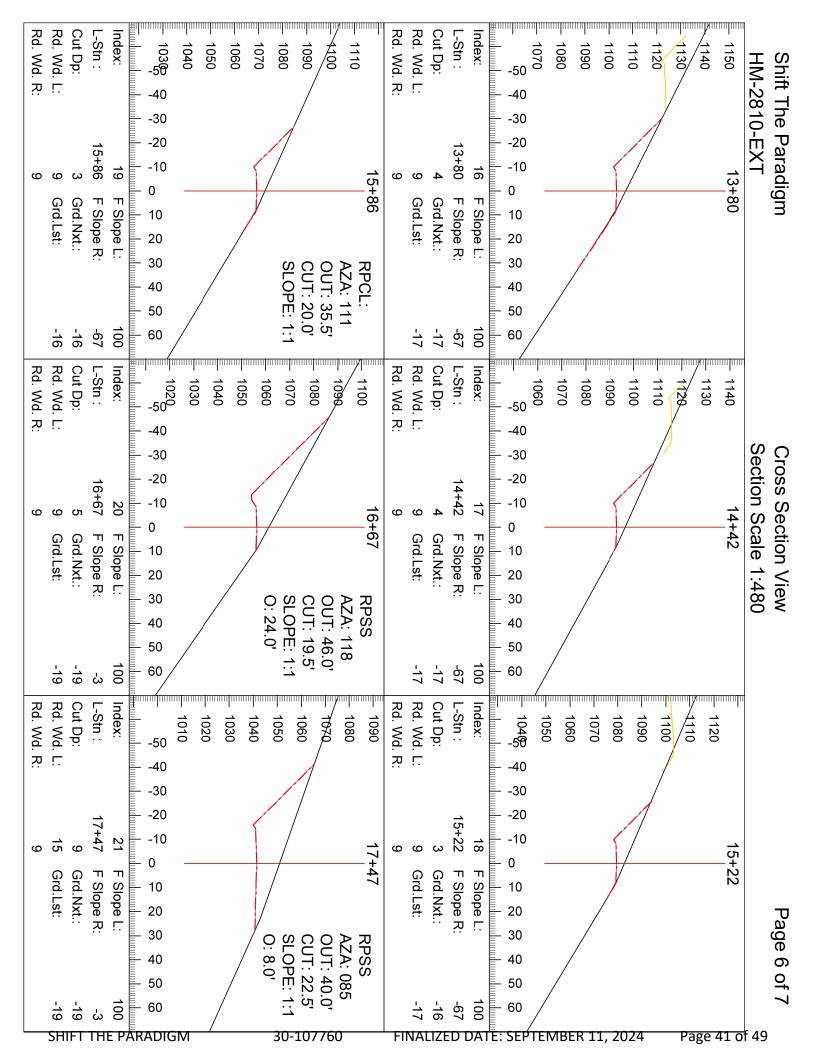


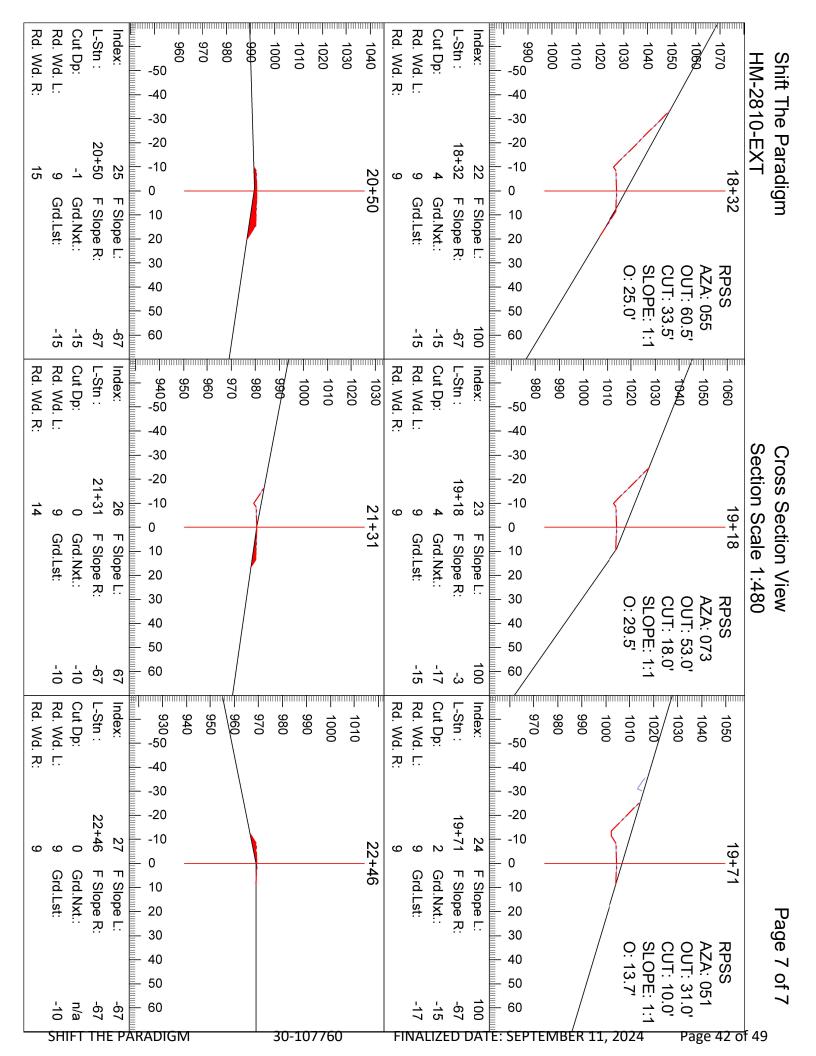


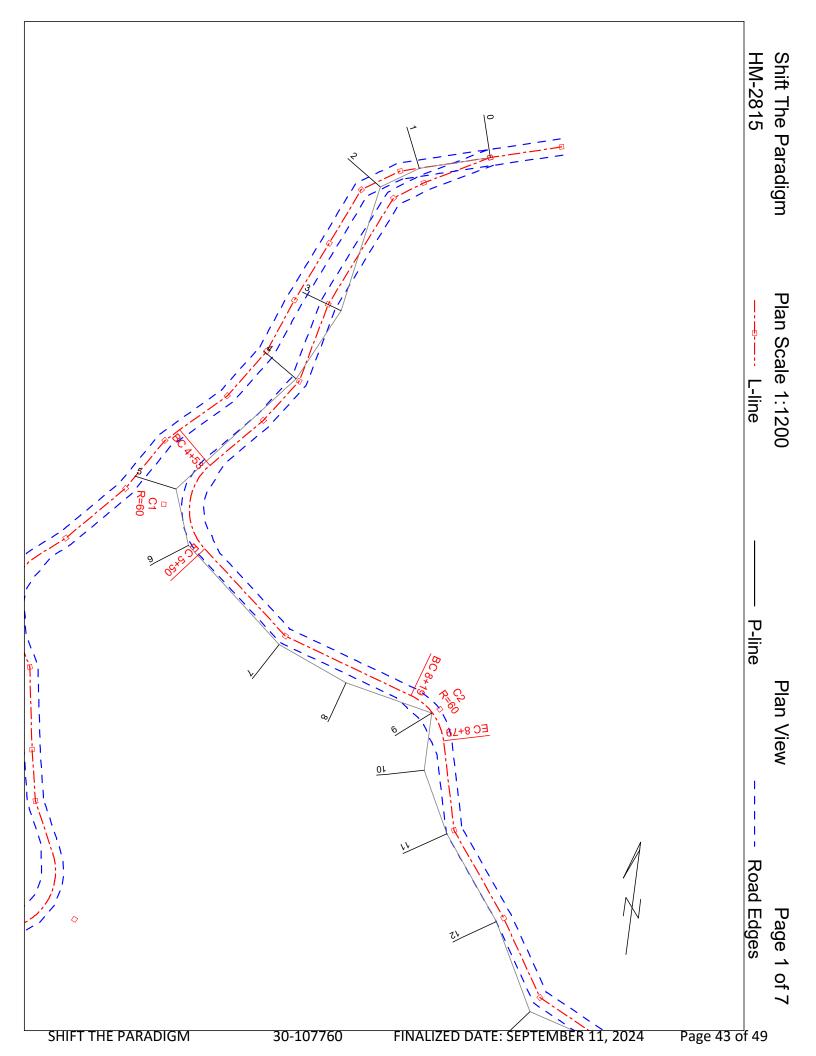


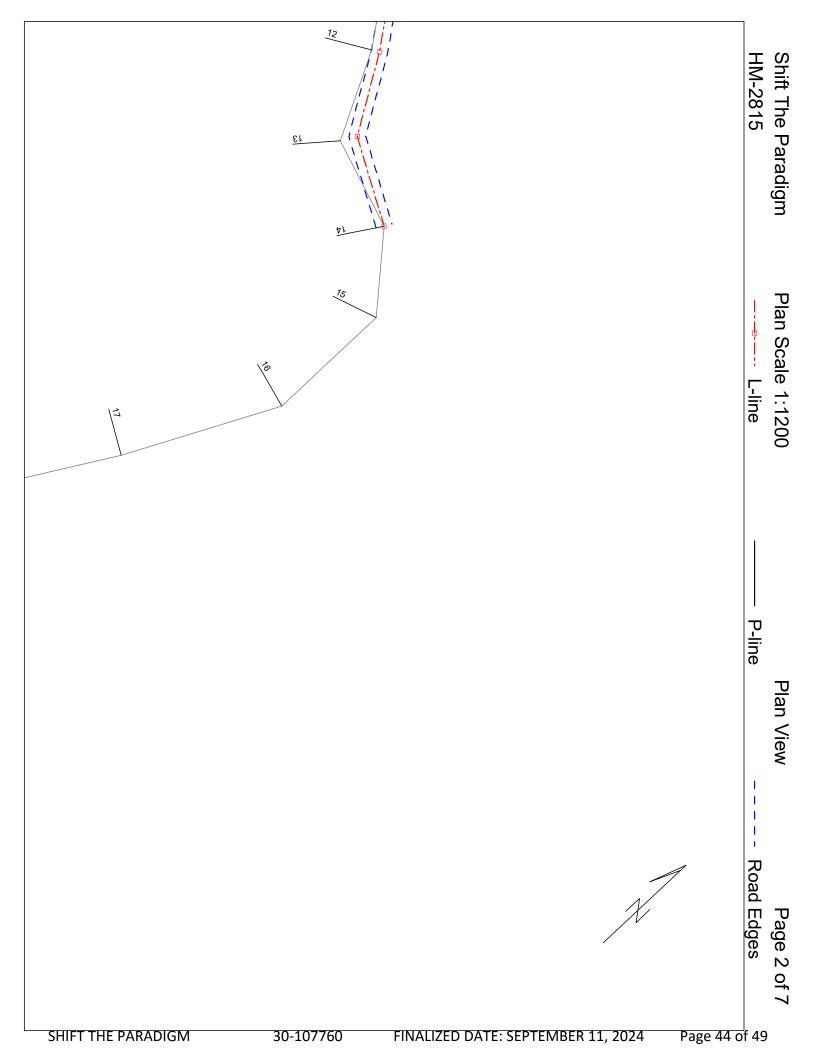


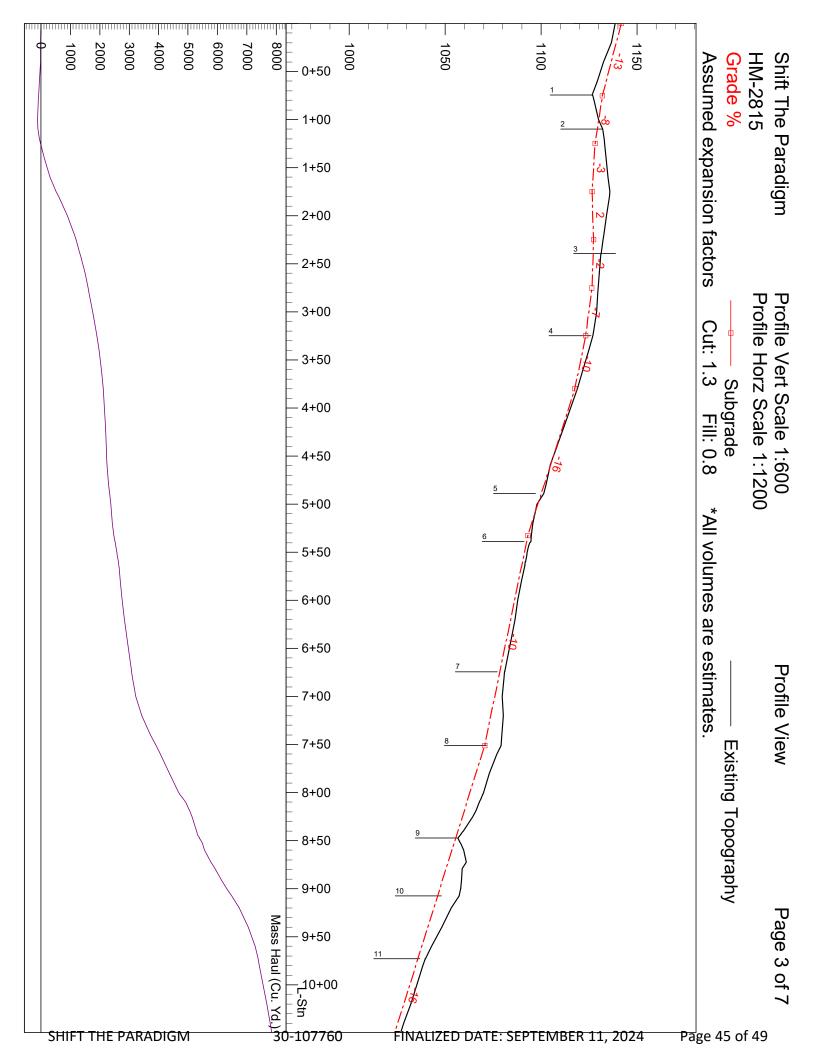


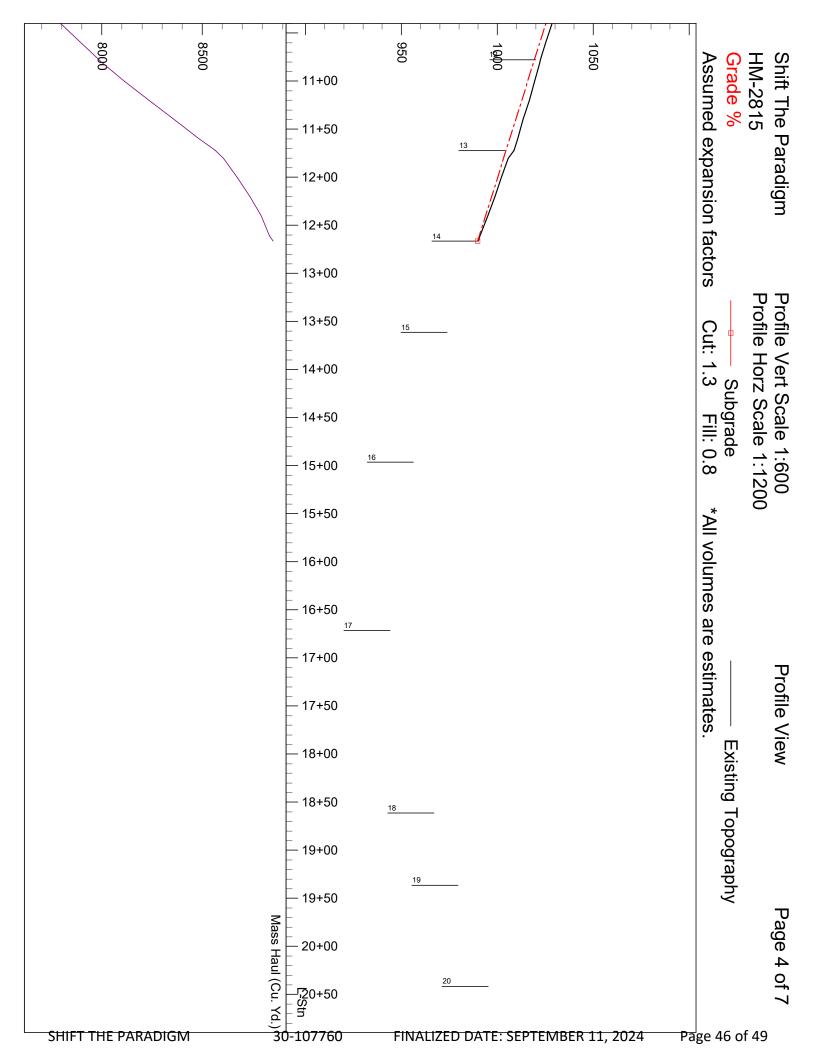


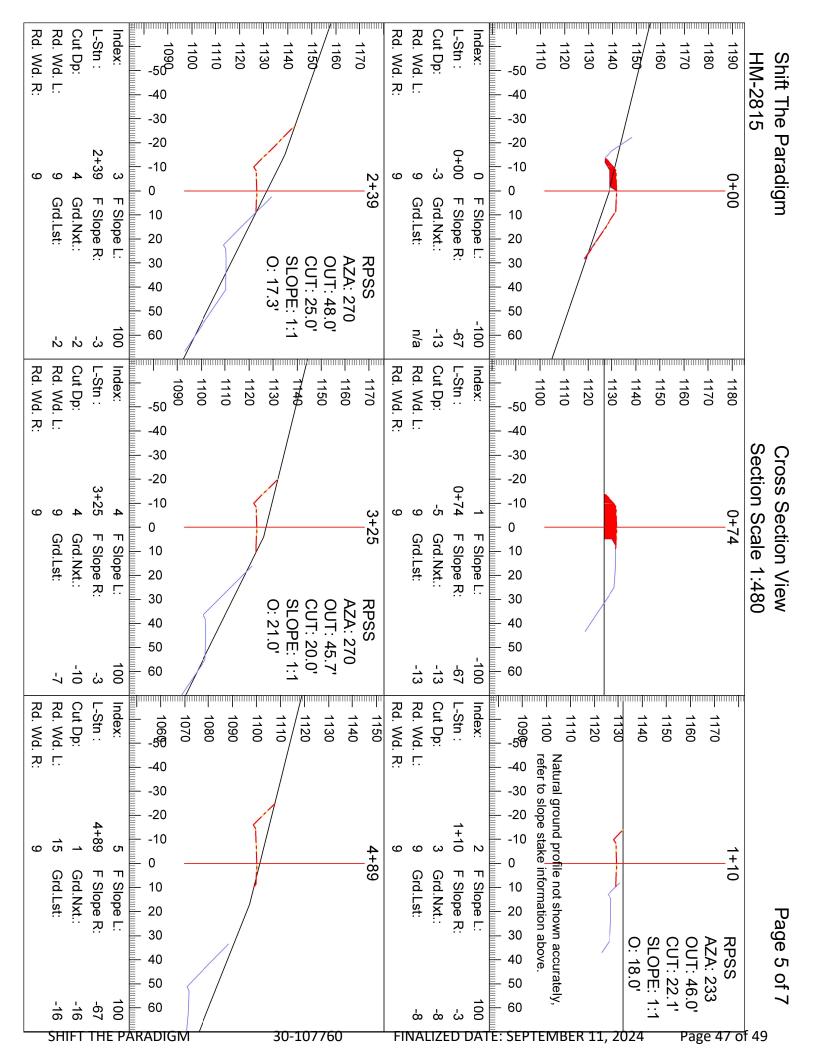


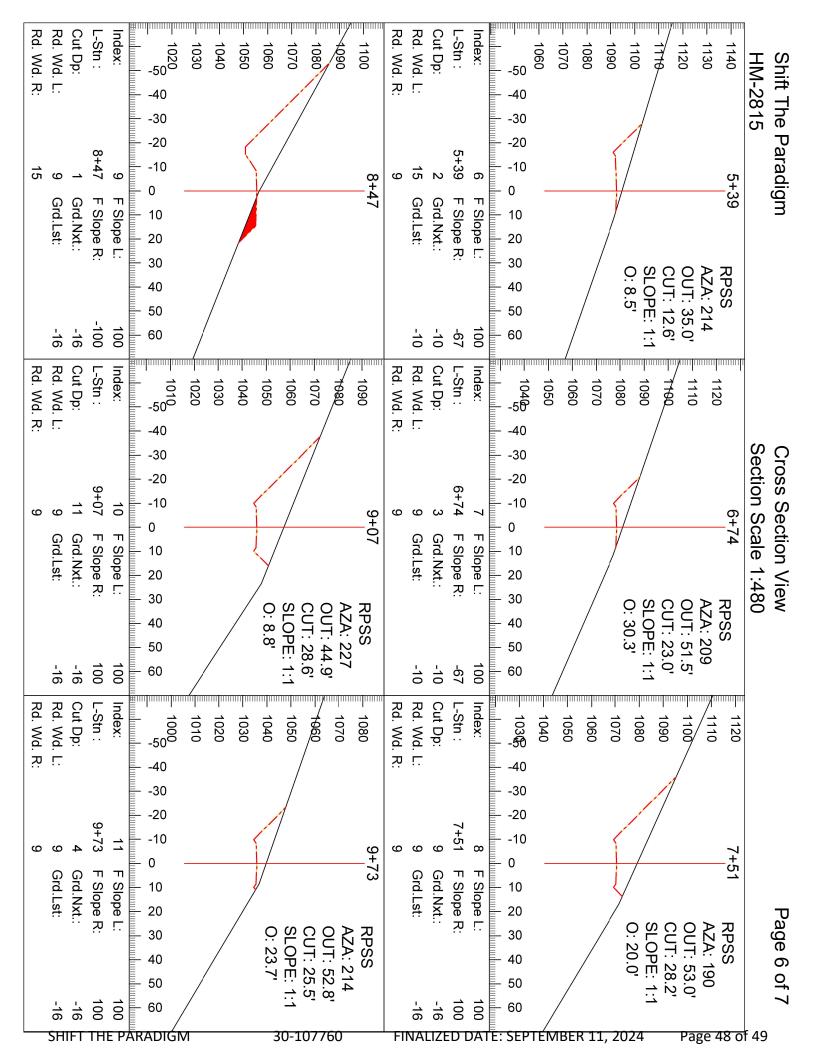


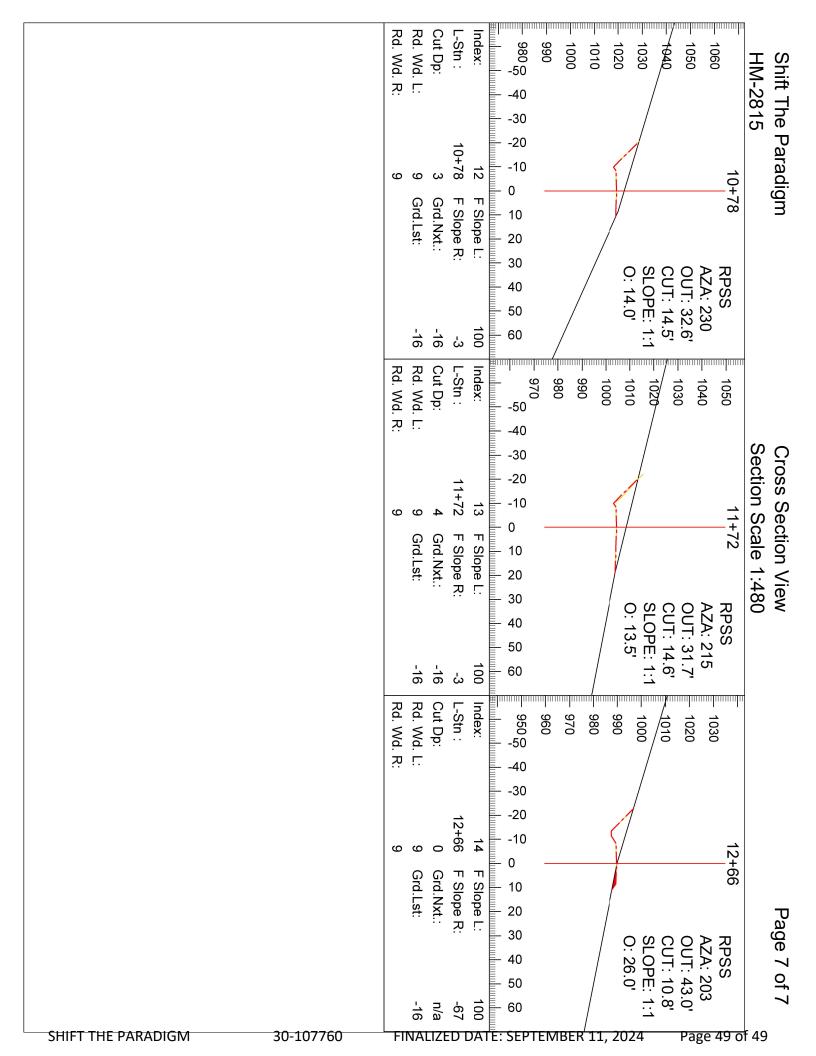












# **SUMMARY - Road Development Costs**

REGION: Pacific Cascade

**DISTRICT**: Lewis

SALE/PROJECT NAME: Shift The Paradigm AGREEMENT #: 30-107760

ROAD NUMBERS: Optional: HM-2012, HM-2810-EXT, HM-2815, HM-2816, HM-2817

Required: HM-Mainline, HM-2000, HM-2010, HM-2700, HM-2810

ROAD STANDARD:		Construction	Reconstruction	Maintenance
NUMBER OF STATIONS:		79.73	0.00	427.50
CLEARING & GRUBBING, EXCAVATION AND FILL, MISC.:		\$136,713.20	\$0.00	\$17,805.10
ROAD ROCK:				
	Optional:	\$13,936.37	\$0.00	\$0.00
	Required:	\$116,664.01	\$0.00	\$6,784.83
	Total:	\$130,600.38	\$0.00	\$6,784.83
STOCKPILE:		-	-	\$0.00
CULVERTS AND FLUMES:		\$10,258.80	\$0.00	\$2,412.80
STRUCTURES:		-	-	-
MOBILIZATION:		\$7,574.34	\$0.00	\$986.46
TOTAL COSTS:		\$285,146.72	\$0.00	\$27,989.19
COST PER STATION:		\$3,576.40	\$0.00	\$65.47
ROAD DEACTIVATION & ABANDONMENT COSTS:		\$0.00	\$0.00	\$0.00
	TOTAL (All R TOTAL (Minu SALE VOLUM TOTAL \$/MB	us Optional Rock) = ME MBF =	:	\$31,313.59 \$344,449.50 \$330,513.13 8,412 \$40.95 \$39.29

Profit and Risk costs are accounted on an individual basis.

### **SUMMARY OF ROAD**

Sale:	Shift The Par	adigm		<u> </u>		Road:	HM-Mainlin	e	
Required Pre-Haul Maintenance-	330+30 6.26	stations miles	Required Reconstruction		stations miles	Required Construction -	0.00	stations miles	
Required Abandonment-	0.00	stations miles	Optional Reconstruction	-	stations miles	Optional Construction -	0+00 0.00	stations miles	
PRE-HAUL MAIN	TENANCE								
<b>CLEARING</b> Roadside Brushing				0.91	miles @	\$1,170.00	per mile =	\$1,064.70	
<b>EXCAVATION</b> Construct sediment traps at s Reconstruct ditch- Clean ditch -	tation 108+50-			4.00 37.55 26.15	@ stations @ stations @	\$53.75 \$215.00 \$39.81	each per station per station	\$215.00 \$8,073.25 \$1,041.03	
MISC. Spot grade and shape existing Roll shaped road surface w/ v Clean culvert inlet and outlet	ibratory roller pr	ior to rocking -		23.30 23.30 3.00	stations @ stations @ @	\$10.95 \$9.70 \$45.00	per station per station each	\$255.14 \$226.01 \$135.00	
					TOTAL CLEA	RING, GRUBBING	, EXCAVATIO	N, FILL, and MISC.	\$11,010.13
CULVERTS - MAT	<b>ERIALS &amp;</b>	INSTALL Culverts	ATION						
		60	LF of 1	8" <u>\$1,603.20</u> \$1,603.20		0	LF of 24"	\$0.00 \$0.00	
		Culvert Stakes 2	markers	\$16.00				TOTAL CULVERTS	\$1,603.20
ROCK									
Culvert Backfill	0+00	40	cy. of	2 1/2 Inch Minus Crushed Rock	@	\$13.87	per c.y.=	\$554.80	
Spot Rock	0+00	170	cy. of	2 1/2 Inch Minus Crushed Rock	@	\$13.87	per c.y.=	\$2,357.90	
Inlet Headwall Energy Dissipator	0+00 0+00	1 1	cy. of cy. of	Quarry Spalls Quarry Spalls	@ @	\$25.29 \$25.29	per c.y.= per c.y.=	\$25.29 \$25.29	
								TOTAL ROCK	\$2,963.28
								SUBTOTAL	\$15,576.61
MOBILIZATION								SUBTOTAL	\$610.00
OVERHEAD & GEI	NERAL EX	PENSES	109	%				SUBTOTAL	\$1,618.66
		=						TOTAL	\$17,805.27
Optional Rock?	NO	1					СО	ST PER STATION	\$53.91

Sale:	Shift The Parac	digm		_		Road:	HM-2000		
Required Pre-Haul Maintenance Required Abandonmen	0.20 n	niles	Required Reconstruction - Optional Reconstruction -	0.00	stations miles stations miles	Required Construction - Optional Construction -	0.00 r	stations miles stations miles	
PRE-HAUL MAI	NTENANCE								
MISC. Spot grade and shape exis Roll shaped road surface v		r to rocking	<b>)</b> -	2.00 2.00	stations @ stations @ TOTAL CLEAR	\$18.25 \$9.70 RING, GRUBBING	per station per station , EXCAVATION,	\$36.50 \$19.40 FILL, and MISC.	\$55.90
ROCK									
Spot Rock	0+00	20	cy. of	2 1/2 Inch Minus Crushed Rock	@	\$13.21	per c.y.=	\$264.20	
0+00 to	10+65	68	cy. of	Select Pit Run	@	\$19.49	per c.y.=	\$1,325.32 TOTAL ROCK	\$1,589.52
								SUBTOTAL	\$1,645.42
MOBILIZATION	N							SUBTOTAL	\$3.10
OVERHEAD & G	SENERAL EXP	ENSES	}	10%				SUBTOTAL	\$164.85
								TOTAL	\$1,813.37
Optional Rock?	NO						COST	PER STATION	\$170.27

Sale:	Shift The Paradi	gm		-		Road:	HM-2010		
Required Pre-Haul Maintenance- Required Abandonment-	0.52 mi	les ations	Required Reconstruction - Optional Reconstruction -	0.00	stations miles stations miles	Required Construction - Optional Construction -	0.00 0+00 0.00	stations miles stations miles	
PRE-HAUL MAIN	TENANCE								
MISC. Spot grade and shape existin Roll shaped road surface w/ Grade turnarounds -		to rockin	g -	2.00 2.00 2.00	stations @ stations @ @ TOTAL CLEAR	\$9.70 \$9.13	each	\$36.50 \$19.40 \$18.26 N, FILL, and MISC.	\$74.16
ROCK Spot Rock 0+00 to	0+00 27+65	30 68	cy. of cy. of	2 1/2 Inch Minus Crushed Rock Select Pit Run	@ @	\$13.55 \$20.41	. ,	\$406.50 \$1,387.88 TOTAL ROCK	\$1,794.38
								SUBTOTAL	\$1,868.54
MOBILIZATION								SUBTOTAL	\$4.11
OVERHEAD & GE	NERAL EXPE	NSES	;	10%				SUBTOTAL	\$187.27
Ontional Pock?	NO							TOTAL	\$2,059.92

COST PER STATION

\$74.50

Sale:	Shift The Pa	radigm		_		Road:	HM-2012		
Required Pre-Haul Maintenance- Required Abandonment-	0+00 0.00 0.00	stations miles stations miles	Required Reconstruction Optional Reconstruction	0.00	stations miles stations miles	Required Construction - Optional Construction -	2+20 0.04 0+00 0.00	stations miles stations miles	
CONSTRUCTION									
CLEARING/GRUBBING Cattering Organic Debris				2.20	sta @	\$280.00	per sta	\$616.00	
EXCAVATION Road Construction Earthwork Grade and shape subgrade -				2.20 2.20	sta. @ stations @	\$152.17 \$14.60	per sta. = per station	\$334.77 \$32.12	
MISC. Roll subgrade w/ vibratory rol Construct turnaround @ sta. Construct landing - Grass seed and fertilize -		ing -		2.20 1.00 1.00 5.60	stations @ @ @ Ibs @	\$12.12 \$134.62 \$538.46 \$15.00	per station each each per lbs	\$26.66 \$134.62 \$538.46 \$84.00	
					TOTAL CLEA	RING, GRUBBING	, EXCAVATIC	N, FILL, and MISC.	\$1,766.63
ROCK 0+00 to	2+20	304	cy. of	Select Pit Run	@	\$21.54	per c.y.=	\$6,548.16 TOTAL ROCK	\$6,548.16
								SUBTOTAL	\$8,314.79
MOBILIZATION								SUBTOTAL	\$97.88
OVERHEAD & GEI	NERAL EX	PENSES	6	10%				SUBTOTAL	\$841.27
Optional Rock?	YES							TOTAL	\$9,253.94

COST PER STATION

\$4,206.34

Sale:	Shift The Par	radigm				Road:	HM-2700		
Required Pre-Haul Maintenance- Required Abandonment-	31+40 0.59 0.00	stations miles stations miles	Required Reconstruction - Optional Reconstruction -	0+00	stations miles stations miles	Required Construction - Optional Construction -	0+00 0.00	stations miles stations miles	
PRE-HAUL MAIN	TENANCE	=				-			
<b>EXCAVATION</b> Pull and clean ditch-				18.40	stations @	\$67.19	per station	\$1,236.30	
MISC. Install rock check dams -				10.00	@ TOTAL CLEAR	\$53.75 RING, GRUBBING,	each EXCAVATIOI	\$537.50 N, FILL, and MISC.	\$1,773.80
CULVERTS - MAT	TERIALS &	Culverts 30 Culvert Sta	LF of 18" kes & Markers markers	\$801.60 \$801.60 \$8.00 \$8.00		0	LF of 24"	\$0.00 \$0.00 TOTAL CULVERTS	\$809.60
ROCK									
Culvert Backfill Inlet Headwall Energy Dissipator Check Dams	0+00 0+00 0+00 0+00	20 0.5 0.5 1.5	cy. of cy. of cy. of cy. of	2 1/2 Inch Minus Crushed Rock Quarry Spalls Quarry Spalls Quarry Spalls	@ @ @	\$13.66 \$25.54 \$25.54 \$25.54	per c.y.= per c.y.= per c.y.= per c.y.=	\$273.20 \$12.77 \$12.77 \$38.31 TOTAL ROCK	\$337.05
								SUBTOTAL	\$2,920.45
MOBILIZATION								SUBTOTAL	\$0.00
OVERHEAD & GE	NERAL EX	PENSES		10%				SUBTOTAL	\$292.05
Optional Rock?	NO	7						TOTAL	\$3,212.50
		-					COS	ST PER STATION	\$102.31

Sale:	Shift The Para	adigm		_		Road:	HM-2810		
Required Pre-Haul Maintenance- Required Abandonment-	27+50 0.52 0.00	stations miles stations miles	Required Reconstruction - Optional Reconstruction -	0.00	stations miles stations miles	Required Construction - Optional Construction -	0.00 0+00 0.00	stations miles stations miles	
PRE-HAUL MAINT	ENANCE								
<b>EXCAVATION</b> Reconstruct ditch - Pull and clean ditch-				16.65 7.75	stations @ stations @	\$215.00 \$67.19		\$3,579.75 \$520.72	
MISC. Grade and shape existing road Spot grade and shape existing Roll shaped road surface w/ v Clean culvert inlet and outlet	road surface - ibratory roller pr	ior to rockin	g -	11.10 1.00 1.00 2.00	stations @ stations @ stations @ @	\$18.25 \$18.25 \$9.70 \$45.00	per station per station per station each	\$202.58 \$18.25 \$9.70 \$90.00	
<b>ENDHAUL</b> Slump cleanup at Sta. 18+80	-			50	cy. @ TOTAL CLEA	\$2.28 RING, GRUBBING	per c.y.	\$114.00 N, FILL, and MISC.	\$4,535.00
ROCK									
Spot Rock	0+00	20	cy. of	2 1/2 Inch Minus Crushed Rock	@	\$5.03	per c.y.=	\$100.60 TOTAL ROCK	\$100.60
								SUBTOTAL	\$4,635.60
MOBILIZATON								SUBTOTAL	\$251.25
OVERHEAD & GEN	IERAL EXF	PENSES		10%				SUBTOTAL	\$488.69
Ontional Pock?	I NO	1						TOTAL	\$5,375.54

COST PER STATION

\$195.47

Color	Chia The Deve			1 01 110/12		D d.	2010 5		
Sale:	Shift The Para	idigm		_		Road:	HM-2810-E	KI	
Required Pre-Haul Maintenance-	0+00 0.00	stations miles	Required Reconstruction -		stations miles	Required Construction -	11+50 0.22	stations miles	
Required Abandonment-		stations miles	Optional Reconstruction -	· [	stations miles	Optional Construction -	24+20 0.46	stations miles	
CONSTRUCTION									
<b>CLEARING/GRUBBING</b> Scattering Organic Debris Remove large stumps - Construct waste areas -				35.70 3.00 5.00	sta @ @ hours @	\$280.00 \$350.00 \$180.00	per sta each per hour	\$9,996.00 \$1,050.00 \$900.00	
<b>EXCAVATION</b> Road Construction Earthwork Construct ditchouts - Grade and shape subgrade - Full Bench				35.70 1.00 35.70 6750	sta. @ @ stations @ cy. @	\$269.23 \$71.67 \$14.60 \$3.00	per sta. = each per station per c.y.=	\$9,611.51 \$71.67 \$521.22 \$20,250.00	
MISC. Roll subgrade w/ vibratory rol Construct turnouts @ sta Construct turnaround @ sta. Construct landing - Grass seed and fertilize -		g -		35.70 4.00 3.00 3.00 91.60	stations @ @ @ @ Ibs @	\$12.12 \$134.62 \$134.62 \$538.46 \$15.00	per station each each each per lbs	\$432.68 \$538.48 \$403.86 \$1,615.38 \$1,374.00	
<b>ENDHAUL</b> Full Bench				6750	cy. @ TOTAL CLEA	\$2.37 ARING, GRUBBING,	per c.y.= EXCAVATIO	\$15,997.50 N, FILL, and MISC.	\$62,762.30
CULVERTS - MAT	ERIALS &		LLATION						
		Culverts 210	LF of 18			0	LF of 24"		
		Culvert Sta	kes & Markers	\$5,611.20				\$0.00	
		7	markers	\$56.00 \$56.00				TOTAL CULVERTS	\$5,667.20
ROCK									
15+86 to Culvert Backfill In-Stream Structure Fill Armor Spot Rock Inlet Headwall Energy Dissipator 0+00 to 0+00 to Ditch/Embankment Fill Check Dams Backfill Bedding/Backfill	18+32 0+00 0+00 0+00 0+00 0+00 0+00 35+70 35+70 0+00 0+00 0+00	84 0 0 0 3.5 3.5 3,530 0 0 0	cy. of	2 1/2 Inch Minus 2 1/2 Inch Minus Riprap Riprap 2 1/2 Inch Minus Quarry Spalls Quarry Spalls Select Pit Run ROAD ROCK N/A Pit-Run Pit-Run 2 1/2 Inch Minus 2 1/2 Inch Minus	0000000000000			\$870.24 \$0.00 \$0.00 \$0.00 \$0.00 \$75.53 \$75.53 \$56,762.40 \$0.00 \$0.00 \$0.00 \$0.00 TOTAL ROCK	\$57,783.70
								SUBTOTAL	\$126,213.20
MOBILIZATION								SUBTOTAL	\$3,477.23
OVERHEAD & GEN	NERAL EXP	PENSES	3	10%				SUBTOTAL	\$12,969.04
Ontional Books	NO	İ						TOTAL	\$142,659.47
Optional Rock?	NO	ı					cos	ST PER STATION	\$3,996.06

Sale:	Shift The Parad	ligm		_		Road:	HM-2815		
Required Pre-Haul Maintenance-		tations niles	Required Reconstruction -		stations miles	Required Construction -	0.00	stations miles	
Required Abandonment-		tations niles	Optional Reconstruction -	-	stations miles	Optional Construction -	38+33 0.73	stations miles	
CONSTRUCTION									
<b>CLEARING/GRUBBING</b> Scattering Organic Debris				38.33	sta @	\$280.00	per sta	\$10,732.40	
EXCAVATION Road Construction Earthwork Construct ditchouts - Grade and shape subgrade - Full Bench				38.33 3.00 38.33 8800	sta. @ @ stations @ cy. @	\$152.17 \$71.67 \$14.60 \$3.00	per sta. = each per station per c.y.=	\$5,832.68 \$215.01 \$559.62 \$26,400.00	
MISC. Roll subgrade w/ vibratory ro Construct turnouts @ sta Construct turnaround @ sta. Construct landing - Grass seed and fertilize -	_	-		38.33 5.00 2.00 3.00 98.40	stations @ @ @ @ Ibs @	\$12.12 \$134.62 \$134.62 \$538.46 \$15.00	per station each each each per lbs	\$464.56 \$673.10 \$269.24 \$1,615.38 \$1,476.00	
<b>ENDHAUL</b> Full Bench				8800	cy. @ TOTAL CLEA	\$2.37 RING, GRUBBING,	per c.y.= EXCAVATION	\$20,856.00 N, FILL, and MISC.	\$69,093.99
CULVERTS - MAT		_	LLATION						
		ulverts 120	LF of 18	\$3,206.40 \$3,206.40		40	LF of 24"	\$1,345.20 \$1,345.20	
	<u>c</u>		markers	\$40.00 \$40.00				TOTAL CULVERTS	\$4,591.60
ROCK Inlet Headwall Energy Dissipator 0+00 to	0+00 0+00 38+33	3 3 3,567	cy. of cy. of cy. of	Quarry Spalls Quarry Spalls Select Pit Run	@ @ @	\$21.97 \$21.97 \$16.47	per c.y.= per c.y.= per c.y.=	\$65.91 \$65.91 \$58,748.49 TOTAL ROCK	\$58,880.31
								SUBTOTAL	\$132,565.90
MOBILIZATION								SUBTOTAL	\$3,828.02
OVERHEAD & GEI	NERAL EXPE	ENSES		10%				SUBTOTAL	\$13,639.39
Optional Rock?	NO							TOTAL	\$150,033.31
							cos	T PER STATION	\$3,914.25

Sale:	Shift The Par	radigm		_		Road:	HM-2816		
Required Pre-Haul Maintenance-	0.00	stations miles	Required Reconstruction		stations miles	Required Construction -	0.00	stations miles	
Required Abandonment-	0.00	stations miles	Optional Reconstruction	-	stations miles	Optional Construction -	1+80 0.03	stations miles	
CONSTRUCTION									
<b>CLEARING/GRUBBING</b> Scattering Organic Debris				1.80	sta @	\$280.00	per sta	\$504.00	
<b>EXCAVATION</b> Road Construction Earthwork Grade and shape subgrade -				1.80 1.80	sta. @ stations @	\$152.17 \$14.60	per sta. = per station	\$273.91 \$26.28	
MISC. Roll subgrade w/ vibratory ro Construct turnaround @ sta. Construct landing - Grass seed and fertilize -		ng -		1.80 1.00 1.00 4.80	stations @ @ @ Ibs @ TOTAL CLEA	\$134.62 \$538.46 \$15.00	per station each each per lbs , EXCAVATION	\$21.82 \$134.62 \$538.46 \$72.00 N, FILL, and MISC.	\$1,571.09
<b>ROCK</b> 0+00 to	1+80	229	cy. of	Select Pit Run	@	\$17.15	per c.y.=	\$3,927.35 TOTAL ROCK	\$3,927.35
								SUBTOTAL	\$5,498.44
MOBILIZATION								SUBTOTAL	\$87.04
OVERHEAD & GEI	NERAL EX	PENSES	5	10%				SUBTOTAL	\$558.55
Optional Rock?	YES	]					COS	TOTAL ST PER STATION	\$6,144.03 \$3,413.35

\$3,413.35

COST PER STATION

Sale:	Shift The Paradig	gm		_		Road:	HM-2817		
Required Pre-Haul Maintenance-	stat 0.00 mile		Required Reconstruction -		stations miles	Required Construction -	0.00	stations miles	
Required Abandonment-	stat 0.00 mile	tions es	Optional Reconstruction -	-	stations miles	Optional Construction -	1+70 0.03	stations miles	
CONSTRUCTION						-			
<b>CLEARING/GRUBBING</b> Scattering Organic Debris				1.70	sta @	\$280.00	per sta	\$476.00	
<b>EXCAVATION</b> Road Construction Earthwork Grade and shape subgrade -				1.70 1.70	sta. @ stations @	\$152.17 \$14.60	per sta. = per station	\$258.69 \$24.82	
MISC. Roll subgrade w/ vibratory ro Construct turnaround @ sta. Construct landing - Grass seed and fertilize -				1.70 1.00 1.00 4.40	stations @ @ @ Ibs @ TOTAL CLEA	\$12.12 \$134.62 \$538.46 \$15.00 RING, GRUBBING	each each per lbs	\$20.60 \$134.62 \$538.46 \$66.00 N, FILL, and MISC.	\$1,519.19
ROCK									
0+00 to	1+70	221	cy. of	Select Pit Run	@	\$15.66	per c.y.=	\$3,460.86 TOTAL ROCK	\$3,460.86
								SUBTOTAL	\$4,980.05
<b>MOBILIZATION</b>								SUBTOTAL	\$84.17
OVERHEAD & GEI	NERAL EXPE	NSES	;	10%				SUBTOTAL	\$506.42
Optional Rock?	YES							TOTAL	\$5,570.64

COST PER STATION

\$3,276.85

# **ROCK DEVELOPMENT COST SUMMARY**

	Pit:	P&E Ridge Extension Quar	ry	Location:	T13R07W			
		Shift The Paradigm	•		Road:		8006 c.y.	
	Swell:	1.40		_	Stockpile:	•	c.y.	
	Shrinkage	1.16		_	Total Truck	Loads:	8006 c.y.	
	Drill Pct.:	0%		_	In Place Tot	al:	5719 c.y.	
	Pit Develonme	ent & Cleanup including Cle	earing and gr	ubbing of				
		adjacent to pit, place ove		abbing of				
		, spread and compact.		/cu.yd x	4444	cu.yds.	\$24,708.64	
	Drill & Shoot:	, spread and compact		/cu.yd x		cu.yds.	\$0.00	
	Rip Rock:			/cu.yd x		cu.yds.	\$14,297.50	
	Push Rock:			/cu.yd x		cu.yds.	\$5,364.02	
	Load Dump Ti	ruck:		/cu.yd x		cu.yds.	\$12,009.00	
	·		<del></del>	<b>-</b> ′ ′ .		Subtotal		
	Move in Loade	ar	1	@	\$491.67	=	\$491.67	
	Move in Excav		1	@	\$637.59	=	\$637.59	
	Move in Truck		5	@	\$0.00	=	\$0.00	
	Move in Wate		0	@	\$0.00	=	\$0.00	
	Tiore in trace	Track	· ·	G	φοισσ	Subtotal	\$1,129.26	
		t= 40	D 6 1/1		PRODUCTION	ON COSTS	\$57,508.42	
	Base Cost=	\$7.18	Per Cu.Yd.	•				
							One-Way	
Road	Haul Cost	Application Cost	Base Cst.	Cost	Number	Speed	Dist	ROCK
Segment	/cu.yd.	/cu.yd.	/cu.yd.	/cu.yd.	Cu. Yds	(Mi/hr.)	(ft)	COST
HM-Mainline Inlet Headwall	\$12.11	\$6.00	\$7.18	\$25.29	1	15	28000	\$25.29
HM-Mainline Energy Dissipator	\$12.11	\$6.00	\$7.18	\$25.29	1	15	28000	\$25.29
HM-2000	\$11.31	\$1.00	\$7.18	\$19.49	68	15	25900	\$1,325.32
HM-2010	\$12.23	\$1.00	\$7.18	\$20.41	68	15	27000	\$1,387.88
HM-2012	\$13.36	\$1.00	\$7.18	\$21.54	304	15	30000	\$6,548.16
HM-2700 Energy Dissipator	\$12.36	\$6.00	\$7.18	\$25.54	11	15	27350	\$25.54
HM-2700 Check Dams	\$12.36	\$6.00	\$7.18	\$25.54	1.5	15	27350	\$38.31
HM-2810-EXT Inlet Headwall	\$8.40	\$6.00	\$7.18	\$21.58	4	15	16900	\$86.32
HM-2810-EXT Energy Dissipator	\$8.40	\$6.00	\$7.18	\$21.58	4	15	16900	\$86.32
HM-2810-EXT	\$7.90	\$1.00	\$7.18	\$16.08	3530	15	16900	\$56,762.40
HM-2815 Inlet Headwall	\$8.79	\$6.00	\$7.18	\$21.97	3	15	17935	\$65.91
HM-2815 Energy Dissipator	\$8.79	\$6.00	\$7.18	\$21.97	3	15	17935	\$65.91
HM-2815 HM-2816	\$8.29 \$8.97	\$1.00 \$1.00	\$7.18 \$7.18	\$16.47 \$17.15	3567 229	15 15	17935 18400	\$58,748.49 \$3,927.35
			•					
HM-2817	\$7.48	\$1.00	\$7.18	\$15.66 Total C.Y.	221 8006	15	14475	\$3,460.86
				rolar C.Y.	OUUO		Sub Total	\$132,579.35

TOTAL ROCKING COSTS \$132,579.35

# **ROCK DEVELOPMENT COST SUMMARY**

Sale: Shift The Paradigm  Swell: 1.40  Shrinkage 1.16  Drill Pct.: 0%  Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$0.00 /cu.yd x 0 cu.yds. = \$0.00 /cu.yd x 0 cu.yds	
Shrinkage 1.16 Drill Pct.: 0%  Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$0.00 /cu.yd x 0 cu.yds. = \$0.00 /cu.yds. = \$0.00 /cu.	
Drill Pct.: 0% In Place Total: 275 c.y.  Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$0.00 /cu.yd x 0 cu.yds. = \$0.00 /cu.yds.	
Pit Development & Cleanup including Clearing and grubbing of Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. \$0.00 /cu.yd x 0 cu.yds. = \$0.00 Drill & Shoot: \$0.00 /cu.yd x 0 cu.yds. = \$0.00	
Waste Area @ adjacent to pit, place overburden in Waste Area, spread and compact. $$0.00$ /cu.yd x 0 cu.yds. = $0.00 Drill & Shoot: $0.00$ /cu.yd x 0 cu.yds. = $0.00$	
Push Rock:       \$0.00 /cu.yd x       385 cu.yds.       \$0.00 cu.yds.	
Move in Loader 1 @ \$491.67 = \$491.67  Move in Excavator 0 @ \$637.59 = \$0.00  Subtotal \$491.67	
Base Cost= \$2.03 Per Cu.Yd.  TOTAL PRODUCTION COSTS \$780.42	
One-way	DOCK
Road Haul Cost Application Cost Base Cst. Cost Number Speed Dist Segment /cu.yd. /cu.yd. /cu.yd. /cu.yd. Cu. Yds (Mi/hr.) (ft)	ROCK COST
	554.80
	357.90
	264.20
	406.50
	273.20
	\$18.66
HM-2810 Spot Rock \$2.00 \$1.00 \$2.03 \$5.03 20 18 \$	100.60
	870.24
Total C.Y. 385 Sub Total \$4,	846.10

TOTAL ROCKING COSTS \$4,846.10



#### WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

#### FOREST EXCISE TAX ROAD SUMMARY SHEET

Timber Sale Name:	
Application Number:	
EXCISE TAX APPLICABLE ACTIVITIES	
Construction:	linear feet
Road to be constructed (optional and required) but not aban	ndoned
Reconstruction:	linear feet
Road to be reconstructed (optional and required) but not about	andoned
<b>Abandonment:</b>	linear feet
Abandonment of existing roads not reconstructed under the	contract
<b>Decommission:</b>	linear feet
Road to be made undriveable but not officially abandoned.	
Pre-Haul Maintenance:	linear feet
Existing road to receive maintenance work (optional and re-	quired) prior to haul

**EXCISE TAX EXEMPT ACTIVITIES** 

linear feet **Temporary Construction:** 

Roads to be constructed (optional and required) and

then abandoned

**Region:** 

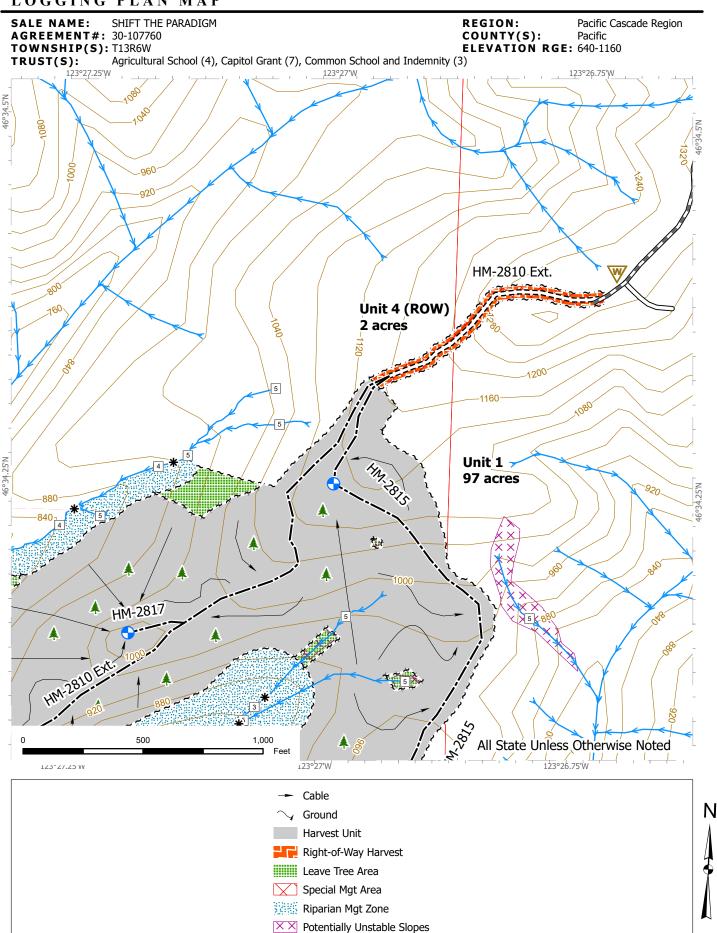
linear feet

**Temporary Reconstruction:** 

Roads to be reconstructed (optional and required) and then abandoned

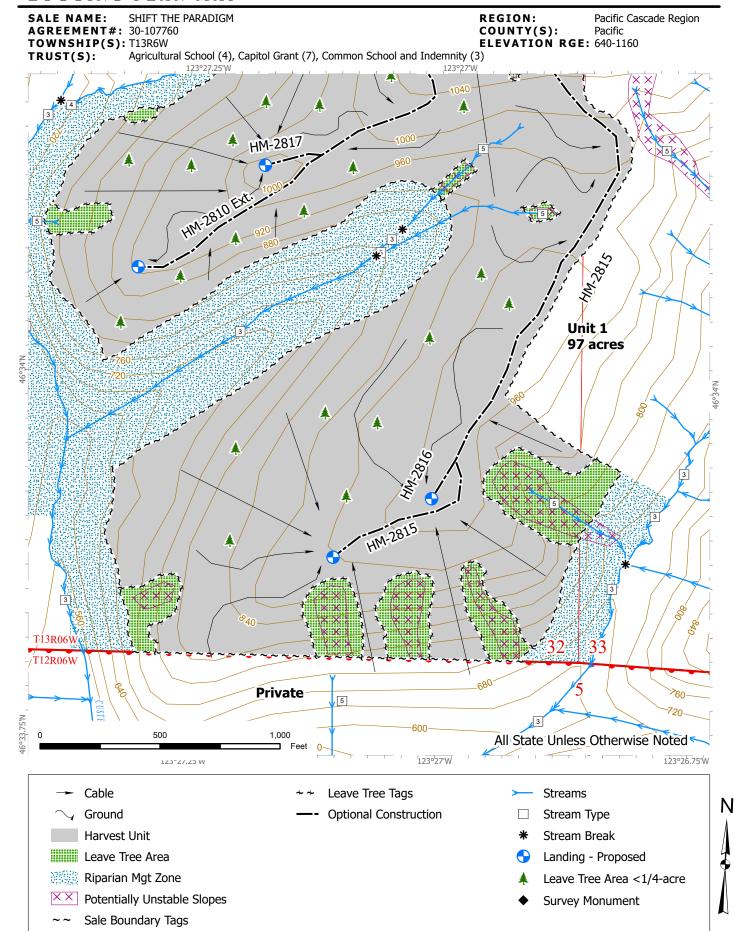
All parties must make their own assessment of the taxable or non-taxable status of any work performed under the timber sale contact. The Department of Revenue bears responsibility for determining forest road excise taxes. The Department of Natural Resources developed this form to help estimate the impact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

(Revised 9/18)

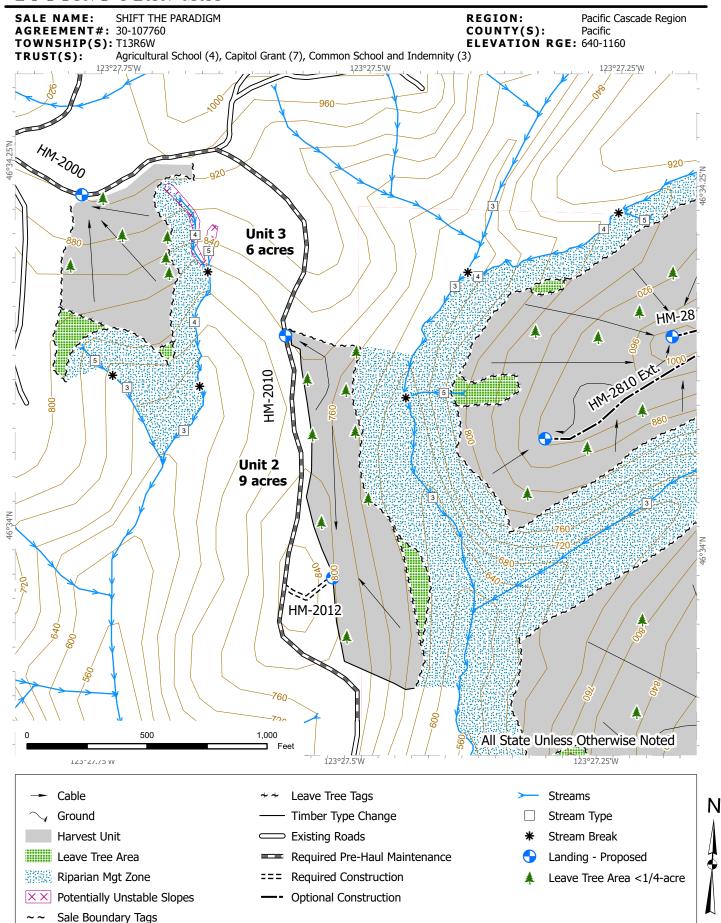


Prepared By: rfra490 Modification Date: rfra490 8/27/2024

Prepared By: rfra490



Modification Date: rfra490 8/27/2024



Prepared By: rfra490 Modification Date: rfra490 8/27/2024