

Washington DNR Timber Sales Program

Updated information is being provided for **HardTak Sorts** timber sale documents as follows:

Documents amended and added :

Brief Description	DATE	Initials
<p>RFQ: Page 6 of 10, 2.06 Contract Harvesting Services Quote Format</p> <ul style="list-style-type: none"> • OBT harvesting rate per MBF. (not MBF/Ton) • OBT harvesting rate per MBF for Poles was added <p>Page 3 of 10</p> <ul style="list-style-type: none"> • Sort 1 broken out and OBT Utility Rate \$20.00 added <p>Project Schedule: Harvesting bid Opening changed to January 11, 2017 Appeal Date changed to January 16,2017</p> <p>Harvesting Services Contract: P-030.1 Sort 1 broken out and OBT Utility Rate \$20.00</p>	<p>1/4/2017</p>	<p>kp</p>



WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

REQUEST FOR QUOTE
RFQ NO. 30-093651

PROJECT TITLE: HARDTAK SORTS

QUOTE DUE DATE: January 11, 2017 4:30 PM

EXPECTED TIME PERIOD FOR CONTRACT: April 1, 2017 to October 31, 2017

CONTRACTOR ELIGIBILITY: This procurement is open to those contractors who have been pre-qualified and are listed in the Department of Natural Resources Contract Harvesting Services Eligible Bidder Pool.

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SECTION 1 INTRODUCTION

1.01 Project Summary

The Washington State Department of Natural Resources, (DNR) solicits Quotes from firms interested in participating on a project described below:

Defined in the Harvesting Services Contract. The selected harvester will be expected to access, cut, yard, load and haul logs from the HARDTAK SORTS CH Timber Sale to specified delivery points.

1.02 Purpose and Background

This Request for Quotes seeks responses from harvesters, logging firms, operators of logging equipment or any firms, businesses or individuals who have been pre-qualified for DNR's harvester bidding pool and are interested in contract harvesting approximately 5249 MBF of timber in 7 unit(s) for the Department of Natural Resources in the Olympic Region Office.

1.03 Minimum Qualifications

Candidate Harvesters must be licensed to do business in the State of Washington and must demonstrate that they are capable of performing the work and meet the requirements outlined in the attached Harvesting Services Contract and Road Plan.

Candidate Harvesters must participate in a two-part process to bid on the work defined by the Harvesting Contract (Exhibit B) and Road Plan (Exhibit C). First, a Statement of Qualifications (SOQ) must be submitted to DNR for evaluation. The Candidate Harvester must achieve 'eligible-for-bidding' status placing them in the DNR's eligible bidder pool. Second, Eligible Bidders will be requested to submit a bid for the Harvesting Services Contract along with a 'Statement of Available Resources and Work Plan' and any other materials listed as 'required' in section 2.06 of this RFQ. The State will award the contract to the eligible bidder who submits the lowest bid and has provided a 'Statement of Available Resources and Work Plan' that demonstrates to the State that the Candidate Harvester has the ability to complete the project as required.

Proposals from Candidate Harvesters who do not meet these minimum qualifications shall be rejected.

1.04 Contract Term

The period of performance of the Harvesting Service Contract resulting from this Request for Quotes (RFQ) and subsequent bidding process is tentatively scheduled for April 1, 2017 to October 31, 2017. Any amendments extending the period of performance shall be at DNR's sole discretion.

1.05 Payment for Work

The State shall make payments to the Contractor for services required and approved including log hauling and road work calculated according to the terms in the harvesting services contract. The Contractor is responsible for independently negotiating, procuring and paying for all services provided.

Depending on the project bid structure defined in section 2.06 ‘Contract Harvesting Services Quote Format’ of this RFQ, payment will be calculated using:

- The Contractor’s On Board Truck (OBT) bid rate per mbf for logs harvested and delivered for sort(s) 2, 3, 4, 5, 6, 7, 8 and 9.
- And an OBT rate of \$10.00 per Ton for sorts 10 and 11 harvested and delivered.
- The Contractor’s OBT bid rate per mbf for harvested and delivered for sort(s) 1.
- Utility volume scaled in mbf sorts will be determined on an adjusted gross scale basis and paid for at an OBT rate of \$20.00 per mbf.
- Payments to the Contractor for hauling services shall be based upon the tons delivered multiplied by: a base rate, ‘A’ and ‘C mile rates’, a fuel index factor and the Contractor’s hauling bid factor using the following formula:

$$\begin{aligned} &\text{Hauling Services Payment Rate per Ton} \\ &= (\text{Base Rate} + \text{Mileage Rate}) \times (\text{Contractor's hauling bid factor}) \end{aligned}$$

Base Rate = \$2.35
 (based on multiple truck operation fixed cost/ton within ‘Report to the Washington State Legislature, The Washington Log Trucking Industry: Costs and Safety Analysis, August 2008’)

$$\text{Mileage Rate} = ((\$0.16 \times \text{C miles}) + (\$0.11 \times \text{A miles})) \times (\text{Fuel Index Factor})$$

The Fuel Index Factor will be adjusted quarterly by the State based upon the U.S. Energy Information Administration’s Weekly Retail On-Highway Diesel prices for the West Coast region posted at <http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp> using the following formula;

$$\text{Fuel Index Factor} = 1 + \frac{Q_{(x)} - Q_{(base)}}{Q_{(base)}}$$

Where; $Q_{(base)}$ = Average fuel price for quarter preceding harvesting services contract bid opening.
 $Q_{(x)}$ = Average fuel price for quarter preceding log deliveries.

The fuel index factor will be calculated each;
 January and apply to loads delivered between January 1 and March 31,
 April and apply to loads delivered between April 1 and June 30,
 July and apply to loads delivered between July 1 and September 30,
 October and apply to loads delivered between October 1 and December 31.

Hauling Rate Example:
Base Rate = \$2.35

$$\begin{aligned}
C \text{ miles} &= 10 \\
A \text{ miles} &= 100 \\
\text{Fuel Index Factor} &= 1.000 \\
\text{Mileage Rate} &= ((\$0.16 \times 10) + (\$0.11 \times 100)) \times (1.000) = \$12.60 \\
\text{Contractor's hauling bid factor} &= 1.100
\end{aligned}$$

$$\begin{aligned}
\text{Hauling Services Payment Rate per Ton} \\
&= (\text{Base Rate} + \text{Mileage Rate}) \times (\text{Contractor's hauling bid factor}) \\
&= (\$2.35 + \$12.60) \times 1.100 \\
&= \$16.45
\end{aligned}$$

For sorts bid on an mbf basis tonnage will be calculated using the State's conversion rate unless actual tonnage is available and approved for use. For tonnage based sorts, actual tonnage shall apply.

- With prior approval by the State and toll/ferry receipt provided, reimbursement of toll/ferry costs incurred for transporting logs.
- Payment amounts for fixed-rate road construction elements are based upon the rates established by the State and listed in the Harvesting Services Contract. When applicable, payment amounts for biddable road construction elements will be in accordance with the rates listed in Contractor's road cost proposal provided as an attachment to the official bid form.

1.06 RFQ Definitions

Definitions of terms used in this Request for Statement of Qualifications.

Contractor - Individual or company selected to harvest and haul logs for the State. Contractor may also be required to perform roadwork or other services as required in the Harvesting Services Contract and Road Plan.

DNR - The State of Washington, Department of Natural Resources.

Eligible Bidder - Candidate Harvester who's Statement of Qualifications has scored a pre-determined minimum point total (as determined by the DNR). Only eligible bidders are requested to submit a bid for the work outlined in the Harvesting Services Contract.

Harvesting Services Contract - the agreement between the State and a Contractor that defines the work to be done by the Contractor. The Contractor and the State sign this contract after the timber sale auction where the Purchaser's of the log sorts has been determined.

Purchaser - Person or Company that has purchased logs to be delivered by the Contractor of a Contract Harvesting Sale. A Contract Harvesting sale usually has numerous Purchasers.

Quote – Official bid form submitted by Eligible Bidders. A complete Quote consists of the

bid rate for delivered logs, the bid rates for hauling services, and a completed ‘Statement of Available Resources and Work Plan’.

Request for Quotes (RFQ) - A formal procurement process used to solicit bids from pre-qualified firms for the right to perform the work defined in the RFQ.

Request for Statement of Qualifications (RFSOQ) - A formal procurement process used to pre-qualify firms for inclusion in the DNR’s Contract Harvesting Services Eligible Bidder Pool.

Request for Quotes Coordinator - DNR employee who oversees the Contractor Selection Process and serves as the main point of contact between the DNR and Candidate Harvesters. The Coordinator may delegate some of the duties, but is responsible for ensuring the process is properly followed and documented.

Statement of Qualifications (SOQ) – Document to be filled out by Candidate Harvesters and submitted to the DNR. Lists the Candidate Harvesters experience, qualifications, background information and references. Used by an evaluation team to determine which Candidate Harvesters are qualified to bid for the right to perform the harvesting project.

Subcontractor - Individual or company employed by the Contractor to perform a portion or all of the services required by the Harvesting Services Contract. The Contractor is responsible for independently negotiating, procuring and paying for all subcontracted services rendered.

SECTION 2 GENERAL INFORMATION FOR HARVESTERS

2.01 RFQ Coordinator

The RFQ Coordinator is the sole point of contact in the DNR for this eligible bidder selection process. All communication between the Candidate Harvester and the DNR shall be with the RFQ Coordinator.

RFQ Coordinator	Kathy Potter
Address	411 Tillicum Lane
City, State, Zip Code	Forks, WA 98331
Phone Number	(360)374-2819
Fax Number	(360)374-2887
E-Mail Address	kathy.potter@dnr.wa.gov

2.02 Estimated Project Schedule

As defined in the Project Schedule (**See Exhibit A**)

The DNR reserves the right to revise this schedule.

2.04 Submitting a Quote

Candidate Harvesters must submit ONE copy of the official Harvesting Services Contract Sealed Bid Form including a ‘Statement of Available Resources and Work Plan’ with original signatures. The Quote, whether mailed, hand delivered, or faxed must arrive at the DNR no later than 4:30 PM, local time, on January 11, 2017.

The Quote is to be sent to the RFQ Coordinator at the address listed in Item 2.01 above. The envelope should be clearly marked “Attention RFQ Coordinator, Contract Harvesting Services Quote Enclosed, Do Not Open Until January 11, 2017.”

Candidate Harvesters who mail Quotes should allow for normal mail delivery time to ensure timely delivery of their Quotes to the RFQ Coordinator. Candidate Harvesters assume the risk for the method of delivery they choose. The DNR assumes no responsibility for delays caused by a delivery service. Quotes may not be transmitted by email.

Late Quotes will not be accepted and will be automatically disqualified from further consideration. All Quotes and any accompanying documentation become the property of the DNR and will not be returned.

2.05 Proprietary Information/Public Disclosure.

Proposals are considered public records as defined in chapter 42.56 RCW. In the event a firm desires to claim portions of its proposal proprietary and exempt from public disclosure, it must clearly identify those portions. Each page of the proposal claimed to be exempt must be clearly identified as “proprietary information.” If a public records request is made for the information that the consultant has marked as “proprietary information,” the firm may seek to obtain a court order from a court of competent jurisdiction enjoining disclosure pursuant to chapter 42.56 RCW, or other state or federal law that provides for nondisclosure. The successful contractor’s proposal generally becomes part of the contract that is subject to public disclosure.

DNR will charge for copying and shipping, as permitted by RCW 42.56.120. No fee shall be charged for inspection of contract files. Twenty-four (24) hours notice to the RFQ Coordinator is required. All requests for information should be directed to the Coordinator.

2.06 Contract Harvesting Services Quote Format

For a responsive bid, the following bid elements are required to be submitted on or attached to an official DNR Harvesting Services bid form;

OBT harvesting rate per MBF	Required
OBT harvesting rate per MBF for Poles	Required
Hauling services bid factor (formatted to 3 decimals i.e. #.###)	Required
Road construction cost proposal	Required
Statement of Available Resources and Work Plan	Required
All attachments incorporated by reference	Required

2.07 Revisions to the RFQ

The DNR reserves the right to revise the RFQ and/or to issue addenda to the RFQ. The published questions and answers from the Pre-proposal meeting/questions shall be an addendum to the RFQ.

The DNR also reserves the right to cancel or to reissue the RFQ in whole or in part, prior to execution of a Harvesting Services contract. If DNR finds it necessary to revise any part of the RFQ, addenda will be provided to all those who received the RFQ.

2.08 Most Favorable Terms

The State reserves the right to determine the Successful Bidder without further discussion of the Quote submitted. Therefore, the Quote should be submitted initially on the most favorable terms, which the Candidate Harvester can propose. There will be no best and final offer procedure. The State reserves the right to contact a Candidate Harvester for clarification of a Quote.

2.09 Costs to Propose

The DNR will not be liable for any costs that the Candidate Harvester incurs in preparing a Quote related to this RFQ or any other activities related to responding to this RFQ.

SECTION 3 PROJECT SCOPE OF WORK

3.01 Project Scope of Work.

As defined in the Harvesting Services Contract, Road Plan and Timber Sale Map (See Exhibits B, C and D).

3.02 SPECIAL REQUIREMENTS

There are locked gates on the PT-M-1000, PT-M-2200, PT B-2000 and Jimmycomelately roads. Contact Olympic Region Dispatch Center at 360-374-2800 to check out a AA-1 key.

15.35 stations of required construction. 48.76 stations of optional construction. 3.28 stations of optional reconstruction. 356.79 stations of required Maintenance.

There will be no road operations, including rock haul, from November 1 through March 31. In addition road operations will not be allowed on weekends or state recognized holidays.

This project will require the harvest and delivery of a large amount of timber in a relatively short operating window. It is imperative that the successful harvester has the ability and resources available to complete this project within the anticipated work schedule as described in section 1.04 of this RFQ.

This project requires the manufacturing and delivery of poles. Candidate harvesters are required to address their pole harvesting experience and their pole harvesting methodology for this project in the work plan. This project will require the harvest and delivery of a large amount of timber in a relatively short operating window. It is imperative that the successful harvester has the ability and resources available to complete this project within the anticipated work schedule as described in section 1.04 of this RFQ.

This project requires the manufacturing and delivery of poles. Candidate harvesters are required to address their pole harvesting experience and their pole harvesting methodology for this project in the work plan.

SECTION 4 QUOTE EVALUATION

4.01 Evaluation Team.

DNR will designate an evaluation team to evaluate Quotes. The evaluation team will evaluate quotes according to the requirements outlined in this RFQ and any addenda, which are issued.

4.02 Administrative Requirements.

The RFQ Coordinator will review all Quotes to determine compliance with administrative requirements and instructions specified in the RFQ. Only Quotes meeting the minimum requirements will be forwarded to the evaluation team for further review.

4.03 Responsibleness.

When evaluating Quotes, the evaluation team will consider candidate Harvester's responsibleness. A Candidate Harvester is responsible if it:

- Has adequate financial resources to perform the contract, or the ability to obtain them;
- Is able to comply with the required delivery or performance schedule, taking into consideration all existing commercial and governmental business commitments;
- Has a satisfactory performance record. A Candidate Harvester shall not be determined responsible or non-responsible solely on the basis of a lack of relevant performance history, unless the DNR determines special standards are appropriate. A Candidate Harvester that is or recently has been seriously deficient in contract performance shall be presumed to be non-responsible, unless the DNR determines that the circumstances were properly beyond the Candidate Harvester's control, or that the Candidate Harvester has taken appropriate corrective action. Past failure to apply sufficient tenacity and perseverance to perform acceptably is strong evidence of non-responsibility. Failure to meet the quality requirements of the contract is a significant factor to consider in determining satisfactory performance. The DNR shall consider the number of contracts involved and the extent of deficient performance in each contract when making this determination.
- Any special standards will be properly identified in this solicitation and will apply to all Candidate Harvesters and their subcontractors.

4.04 Information Used for Evaluation.

Evaluators will use the information in the Candidate Harvester's Quote or bid form, their references, their previous Washington DNR performance evaluations, ability to meet special standards, and their Quote or 'Harvesting Services Contract Sealed Bid Form' including their 'Statement of Available Resources and Work Plan'.

4.05 Signatures

Quotes must be signed and dated by a person authorized to bind the Candidate Harvester to a contractual arrangement, e.g., the President or Executive Director if a corporation, the managing partner if a partnership, or the proprietor if a sole proprietorship.

4.06 Failure to Comply

If the Candidate Harvester fails to comply with any requirement of the RFQ, DNR will reject the Quote.

4.07 Rejecting Quotes

The DNR reserves the right at its sole discretion to reject any and all Quotes received without penalty and not to issue a contract from this RFQ. The DNR also reserves the right at its sole discretion to waive minor administrative irregularities contained in any Quote.

4.08 Lowest Responsible Bidder

Award of this Contract shall be to the lowest responsible bidder as determined by the DNR. In determining the lowest responsible bidder, in addition to price, the following may be considered:

- a. the ability, capacity, and skill of the bidder to perform the contract;
- b. the character, integrity, reputation, judgment, experience, and efficiency of the bidder;
- c. whether the bidder can perform the contract within the time specified;
- d. the quality of performance of previous contracts; and
- e. the previous and existing compliance by the bidder with laws relating to the contract or services. The DNR's determination that a bidder is not qualified shall result in rejection of the bid submitted.

4.09 Challenges to the Apparent Successful Bidder

- a. An unsuccessful bidder may appeal the bid award if they believe the process used to award the contract was not conducted properly. Please include the reasons why you believe the contract should not be awarded to the successful bidder.
- b. The DNR Region Manager must receive the appeal; in writing no later than 5 days from the date the letter was sent by fax or mail to the bidder notifying them that they were unsuccessful.

The Region Manager shall issue a written decision within 10 days of receipt of the appeal and cite the reasons for approving or disapproving the appeal.

- c. If the appellate is not satisfied with the decision of the Region Manager, the appellant may further appeal to the Deputy Supervisor-Uplands within 5 business days from the issuance of the Region Manger's written decision. The Deputy Supervisor-Uplands shall consider all information provided and issue a final decision in writing, citing reasons to approve or disapprove the appellant's appeal.

SECTION 5 RFQ EXHIBITS

- Exhibit A Estimated Harvest Project Schedule
- Exhibit B Draft Harvesting Services Contract
- Exhibit C Road Plan
- Exhibit D Timber Sale Map
- Exhibit E Harvesting Services Contract Sealed Bid Form
- Exhibit F Road Proposal Cost Form

Estimated Harvest Project Schedule

Hardtak Sorts

30-093651

Process Timeline	Mail packets to Harvesters	11/07/2016
	BNR Approval	12/6/2016
	Harvester Bids Due	01/11/2017 @ 1630
	Harvester Bid Opening Selection & Notification-Harvester Selection Appeal Period Begins	01/11/2017
	Harvester Selection Appeal Period Ends	01/16/2017
	Log Sort Auction Date	01/25/2017
	Announce Log destination information to Harvester	02/13/2017
	Confirmation of Log Sort Auction and Harvester Contract Signing Purchaser Contracts are sent out for signature	2/8/2017

Project Operations	Operations Begin (subject to harvester contract signing)	04/01/2017
	Log Deliveries Begin (subject to purchaser contract signing)	5/1/2017
	Log Deliveries End	9/30/2017
	Purchaser Contracts Expire	10/15/2017
	Operations End, Road Work Completed, & Harvester Contract Expires	10/31/2017

**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

HARVESTING SERVICES CONTRACT

AGREEMENT NO. 30-093651

SALE NAME: HARDTAK SORTS

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

Section G: General Terms

G-001.1 Definitions

The following definitions apply throughout this contract;

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

Contractor: State-selected harvester responsible to perform all duties as required by the Harvesting Services Contract, including but not limited to timber harvesting, road construction, debris removal and piling, hauling and delivery of forest products for weighing and/or scaling, to the Purchasers of the timber sales Sorts.

Delivery: Occurs when logs or forest products meeting the sorting specifications arrive at the Purchaser's destination, as described in the contract.

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

Harvesting: A general term, referring to the Contractor's various obligations under the Harvesting Services Contract.

Harvesting Services Contract: Contract between the Contractor and the State, which sets forth the procedures and obligations of the Contractor for completing the harvesting of timber, and the delivery of various log sorts to the State's purchasers, and the payment obligations of the State, The Harvesting Services Contract will include a Road Plan for any road construction or reconstruction, where applicable.

Log Sale and Purchase Contract: Purchase Agreement between the State and Purchaser(s) of particular log sorts from the timber sale.

Purchaser: The company or individual that has entered a Log Sale Contract with the State for individual log sorts from the timber sale area. The Contractor must deliver the designated log sorts to this company or individual. Contractor will likely be delivering different log sorts to different purchasers under the Harvesting Services Contract.

Road Construction Services: 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 logs 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 Contractor to perform a portion or all of the services required by the Harvesting Services Contract. The Contractor is responsible for independently negotiating, procuring and paying for all subcontracted services rendered.

G-015.1 Harvest Area and Location

Contractor shall harvest and deliver, Contractor shall harvest and deliver, all timber, except trees banded with blue paint or bounded out by yellow Leave Tree Area Tags, bounded by the following: Timber Sale Boundary Tags, State Reprod, and Thompson Road in Unit 1; Timber Sale Boundary Tags, Special Management Unit Boundary Tags, logged areas, and Thompson Road in Unit 2; Timber Sale Boundary Tags, Special Management Unit Boundary Tags, the PT-B-2400, and the PT-B-1040 in Unit 3; and Timber Sale Boundary Tags, Special Management Unit Boundary Tags, and the PT-B-1040 In Unit 4.

All timber marked with orange paint, bounded by the following: Timber Sale Boundary Tags, Special Management Unit Boundary Tags, and the PT-B-1040 in Units 5 and 6; and Timber Sale Boundary Tags and Special Management Unit Boundary Tags in Unit 7.

All timber bounded by Right-of-Way Boundary Tags on the PT-M-1100, and bounded by Right-of-Way Boundary Tags on the PT-M-2400 if built.

In no instance shall downed red cedar be removed.

All timber that had been on the ground for five years or more shall be left undisturbed and not yarded. Five years is defined by more than 1.5 inches of sap rot. Located on approximately 160 acres on part(s) of Sections 20, 28, and 29 all in Township 29 North, Range 2 West, Section 31 in Township 30 North, Range 2 West W.M. of Clallam, and Jefferson County as shown on the attached timber sale map.

G-020.1 Inspection by Contractor

Contractor hereby warrants to the State that they have had an opportunity to fully inspect the sale area and the forest products to be harvested. Contractor further warrants to the State that they enter this contract based solely upon their own judgment of the harvest and road work, and condition of the forest products, formed after their own examination and inspection of both the timber sale area and the forest products to be harvested. Contractor 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.

G-022.1 Sorting Specifications

Contractor is responsible for sorting logs to the specifications listed below and hauling to the appropriate designated locations. Contractor is responsible for determining the highest value of each tree felled and the highest value destination of each log manufactured. The Contract Administrator will provide direction and guidance to Contractor with respect to highest value.

Logs produced under this contract will be manufactured by Contractor meeting the individual sort specifications and Purchaser's preferred log lengths, with a minimum length of 12 feet, unless otherwise directed by the Contract Administrator.

Contractor shall deliver log sorts to the Purchaser(s) location that meet the following specifications:

Agreement No.	Sort #	Species Diameter	Scaling Rule	Preferred Log Lengths	Destination	A Miles	C Miles
94714	1	DF POLES 40'+	WS				
94715	2	DF High Quality 12'+ SED	WS				
94716	3	DF SAWLOG 5" TO 11" SED	WS				
94717	4	DF SAWLOG 12" TO 15" SED	WS				

94718	5	DF SAWLOG 16" + SED	WS				
94719	6	RC 5" + SED	WS				
94720	7	WHITEWOOD SAWLOG 5" TO 11" SED	WS				
94721	8	WHITEWOOD SAWLOG 12" + SED	WS				
94722	9	BIGLEAF MAPLE 8" + SED	WS				
94723	10	HARDWOOD UTILITY 2" + SED	WS				
94724	11	CONIFER UTILITY 2" + SED	WS				

Unless otherwise specified, no blue stain is allowed in Ponderosa pine.

“WS” indicates that west side scaling rules apply. Minimum trim is 8 inches per scaling segment for west side scaling rules. “ES” indicates that east side scaling rules apply. Minimum trim is 6 inches per scaling segment for east side scaling rules.

Logs delivered by Contractor that do not meet the receiving Purchaser’s log sort requirements as described above that have been pre-approved for delivery by the Contract Administrator shall not be considered mis-sorts.

G-024.1 Manufacturing Standards

For sorts designated as non-utility, Contractor will manufacture and deliver logs with the following minimum specifications:

- a. Sweep will be limited to within the bole of the log as measured using a tape stretched between the centers of each end of the log.
- b. Limbs and knots shall be cut flush, with no more than 15 percent of a log having limbs or knots over 2 inches in diameter extending more than 2 inches above the surface of the log.
- c. Logs in peeler sorts shall be chuckable with no more than a 2 inch diameter area of rot within a 5 inch diameter circle located at the center of either end of the log.
- d. If poles are to be produced under this contract, they shall meet the specifications outlined in Schedule P, Pole Specifications.
- e. Surface characteristics for a high quality (HQ) "A" log sort will have sound tight knots and not to exceed 1 ½ inch in diameter, numbering not more than

an average of one per foot of log length. May include logs with not more than two larger knots. Knots ½ inch and smaller in diameter shall not be a determining factor. Logs will have a growth ring count of 6 or more rings per inch in the outer third top end of the log.

G-025 Schedules

The following attached schedules are hereby incorporated by reference:

Schedule	Title
A	Specifications for Landing Slash Piling
B	Green Tree Retention Plan
M	Additional Road Maintenance Payment Rates
P	Pole Specifications

G-027.1 Log Delivery Schedule and Conditions

- a. Contractor shall deliver logs to Purchaser's designated delivery location per G-022.1 clause. If a log delivery location is changed during this contract, the Contract Administrator shall notify the Contractor. Once notified, the Contractor shall deliver logs to the new location.
- b. The Contractor may deliver logs to the Purchaser's delivery location during the Purchaser's working hours, or at least between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, except, scheduled closures and legal holidays for the contract term as described in clause G-030.1, unless permission to do otherwise is agreed upon by the State.
- c. The Contractor agrees to deliver said logs on conventional or self-loading logging trucks, properly and legally loaded, bound, branded, and ticketed. Logs in loads shall not be double-ended unless approved in writing by the Contract Administrator. It is understood and agreed that the Purchaser incurs no obligation to accept improperly or illegally loaded trucks in its facility. Any truck so loaded may be directed to vacate the yard and shall remain the responsibility of the Contractor to make the load conform to legal requirements for hauling.
- d. If a receiving Purchaser plans a scheduled closure, the Contract Administrator shall notify the Contractor at least 48 hours before the scheduled closure. Depending on the length of the scheduled closure or delays in log delivery, the Contract Administrator will decide in the best interest of the State on the disposition of the affected log sort(s) or any alternate delivery schedule or location.
- e. Contractor's daily log delivery to a Purchaser's location may be limited according to the table below, provided the Contract Administrator notifies the Contractor at least 48 hours prior to the time this truck delivery limit is established.

Sort(s)	Maximum No. Loads/day
1,2,3,4,5,6,7,8,9,10,11	10

- f. A truck delivery is all the wood hauled including sorts on super trucks, mule trains and pups brought to the delivery point by a single truck. Contractor shall notify the State's Contract Administrator if for any reason a Purchaser refuses truck deliveries.

G-030.1 Contract Term and Expiration Dates

To ensure the timely completion of activities under this contract, the State shall determine the project starting date. The State shall notify the Contractor no later than fourteen (14) days prior to the anticipated starting date.

All activities required under this contract are to be completed between the starting date of April 1, 2017 and the expiration date of October 31, 2017. All forest product deliveries are to be completed prior to September 30, 2017.

Contractor shall not have any right to enter the sale area to perform harvesting services after contract expiration.

G-033.1 Curtailment of Operations

Contractor shall provide the State with five days advance written notice to the Contract Administrator of its intent to commence or cease any and all operations under this contract. The commencement or cessation of operations must be approved by the Contract Administrator. Failure to comply will be considered a breach.

G-040.1 Contract Term Adjustment

A Contract Term Adjustment may be considered based on actual time lost through unforeseeable causes beyond the control and without fault or negligence of the Contractor, including, but not restricted to, acts of the State, closures by government regulatory agencies, mill closures, fires, vandals, and unusually severe weather conditions, provided that the Contractor shall, within seven (7) calendar days of the initiation of such delay, notify the State, in writing, of the cause of delay, upon which notification the State shall ascertain the facts and extent of the delay and notify the Contractor in writing of its decision regarding contract adjustment.

G-050.1 Contract Term Extension

An extension of operating authority time may be granted at the discretion of the State upon written request thirty (30) days prior to the termination date and upon the terms and conditions as specified by the State. Contract extensions may not exceed thirty (30) days unless otherwise agreed to by State and Contractor. Extension requests within the last thirty (30) days of the contract may be considered if the extension would be in the best interest of the State. The extension, if granted, will be contingent upon the

payment of an extension fee to the State, by the Contractor, in the amount of \$100.00 per day of extension.

G-054.1 Early Contract Termination

The State may terminate this contract prior to the expiration date listed in G-030.1 in whole or in part by giving fifteen (15) days written notice to the Contractor when it is in the best interests of the State. If this contract is so terminated, the State shall be liable to make payments to the Contractor for the sum of the estimated expenditures for road construction, felling, bucking, yarding and decking of products processed but not removed from the sale area due to termination action. Contractor may not seek any other damages from the State for early termination of this harvesting agreement.

G-060.1 Exclusion of Warranties

The following specific matters ARE NOT WARRANTED, and are EXCLUDED from this transaction:

- a. The CONDITION of the site or forest products. Any descriptions of the site or forest products in the notice of sale, other pre-contractual documents, or the Harvesting Services Contract are provided solely for administrative and identification purposes.
- b. The ACREAGE contained within any sale area. Any acreage descriptions appearing in the notice of sale, other pre-contractual documents, or the Harvesting Services Contract are estimates only, provided solely for administrative and identification purposes.
- c. The VOLUME, WEIGHT, QUALITY, or GRADE of the forest products to be harvested. The descriptions of the forest products to be harvested are estimates only, made solely for administrative and identification purposes.
- d. The CORRECTNESS OF ANY SOIL OR SURFACE CONDITIONS, PRE-SALE CONSTRUCTION APPRAISALS, INVESTIGATIONS, AND ALL OTHER PRE-BID DOCUMENTS PREPARED BY OR FOR THE STATE. These documents have been prepared for informational purposes, but the information contained therein is not warranted. Contractors must make their own assessments of the site.
- e. 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.
- f. 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.

- g. Items contained in any other documents prepared for or by the State.

G-062.1 Habitat Conservation Plan

The Department 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 Department's HCP area and are subject to the terms and conditions of the HCP and the Services' Incidental Take Permit PRT- 812521 and ITP 1168 (collectively referred to as ITP), or as amended hereafter by the Services. The ITP authorizes the incidental take of certain federally listed threatened and endangered species, as specified in the ITP conditions. All HCP materials, including the ITP, are available for review at the Department's Region Offices and the administrative headquarters in Olympia, Washington.

By signing this contract, Contractor agrees to comply with the terms and conditions of the ITP and the HCP, which shall become terms of this contract. The Department agrees to authorize the lawful activities of the Contractor carried out pursuant to this contract, PROVIDED the Contractor 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 the Contractor to liability for violation of the Endangered Species Act.

Any modifications to the contract shall be proposed in writing by the Contractor, 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-063.1 Incidental Take Permit Notification Requirements

- a. Contractor shall immediately notify the Contract Administrator of new locations of permit species covered by the Incidental Take Permits (ITPs) 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. Contractor 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 ITPs, Contractor shall immediately notify the Contract Administrator. Contractor shall notify the Contract Administrator, if there is any doubt as to the identification of a discovered permit species. Contractor 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 Contract Administrator can determine the proper disposition of such specimens. The Contract Administrator will explain any such requirements to Contractor during the Pre-Work Conference. In all circumstances, notification must occur within a 24 hour time period.
- c. Contractor shall refer to a specific ITP number, PRT-812521 or ITP 1168 (copies which are located in the region office) in all correspondence and reports concerning permit activities.
- d. Provisions and requirements of the ITPs shall be clearly presented and explained to Contractor by Contract Administrator during the Pre-Work Conference as per contract clause G-330.1. All applicable provisions of the ITPs and this schedule must be presented and clearly explained by Contractor to all authorized officers, employees, contractors, or agents of Purchaser conducting authorized activities in the timber sale area. Any questions Contractor may have about the ITPs should be directed to the Contract Administrator.

G-064.1 Permits

Contractor is responsible for obtaining any permits not already obtained by the State that relate to Contractor's operation. Forest Practice Application / Hydraulic Project Approval permits obtained by the State shall be transferred to Contractor. Contractor 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-066.1 Governmental Regulatory Actions

- a. Regulatory Risk

Except as provided in this clause, Contractor assumes all risks associated with governmental regulatory actions, including actions taken pursuant to the Forest Practices Act, Ch. 76.09 RCW, the Endangered Species Act, 16 U.S.C 1531-1544 and any Habitat Conservation Plan between the Department of Natural Resources and the U.S. Fish and Wildlife Service or any other agency now in place and as may be amended, or hereafter created, that may affect the operability of the timber sale.

- b. Increased Costs

Contractor 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 Contractor's failure to comply with this contract or from Contractor's acts or omissions, Contractor shall remain responsible for fulfilling contract obligations notwithstanding the impracticability or frustration.

G-070.1 Limitation on Damage

In the event of a breach of any provision of this contract by the State, the exclusive remedy available to the Contractor will be limited to a return of the Performance Security, and payment for improvements and other services rendered by the Contractor, which were required by the Harvesting Services Contract. The State shall not be liable for any damages, whether direct, incidental, or consequential.

G-092.1 Harvest Area Boundary Adjustment

The State may make adjustments in the harvest area boundaries, or may mark timber outside such boundaries. The cumulative changes to the sale area during the term of the contract shall not exceed more than five (5) percent of the original sale area. Such adjustments or marking will be accomplished by the Contract Administrator. The Contractor must remove and deliver all material so designated, prior to the expiration date of the contract. All contract services within such boundary adjustments or so marked shall be paid for at contract rates.

G-112.1 Title

All rights, title, and interest in and to any timber shall belong to the State until delivered, at which time the appropriate Purchaser assumes title.

G-116.1 Sustainable Forestry Initiative® (SFI) Certification

Forest products harvested and delivered under this contract are certified as being in conformance with the Sustainable Forestry Initiative program Standard under certificate number BV-SFIS-US09000572.

Contractor shall have at least one person regularly on-site during active operations that have completed training according to the requirements outlined within the SFI® program Standard. Contractor 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-120.1 Responsibility for Work

All work, equipment, personnel, and materials necessary to perform the Harvesting Services Contract shall be the responsibility of the Contractor.

G-121.1 Exceptions

Exceptions to Contractor's responsibility in clause G-120.1 shall be limited exclusively to the circumstances described in this clause. These exceptions shall not apply where damages occur due to Contractor's failure to take reasonable precautions or to exercise sound forest engineering and construction practices.

The State shall bear the cost to repair any existing roadway or section of required road completed to the point that an authorization to haul has been issued where such damage was not caused by Contractor, its employees, agents, or invitees, including independent contractors. Contractor shall accomplish repairs promptly as required by the State at the rates set forth in the equipment rate schedule on file at the Region office or Engineering Division in Olympia. The State may elect to accomplish repairs by means of State provided resources.

Nothing contained in clauses G-120.1 (Responsibility for Work) and G-121.1(Exceptions) shall be construed as relieving Contractor of responsibility for, or damage resulting from, Contractor's operations or negligence, nor shall Contractor be relieved from full responsibility for making good any defective work or materials.

G-123.1 Operating Authority

The State has arranged for the Contractor to have full and free license and authority to enter upon said lands with his agents and employees and do all things necessary, within the limitations herein set forth, in harvesting said timber as described in this contract.

G-124.1 Contractor Not an Employee of State

Contractor and his or her employees or agents performing under this contract are not employees of the State. The Contractor will not hold itself out as nor claim to be an officer or employee of the State by reason hereof, nor will the Contractor make any claim or right, privilege or benefits which would accrue to an employee under chapter 41.06 RCW or Chapter 28B.16 RCW.

G-125.1 Use of Subcontractors

Contractor's use of subcontracted services shall be subject to approval in writing by the Contract Administrator. Approval of subcontracted services may be revoked in accordance with the G-220.1 'State Suspends Operations' clause when the Contract Administrator determines that the Subcontractor's work has been performed in a manner that does not meet contractual requirements, optimize value or otherwise causes damage to the state.

Contractor shall arrange with the Contract Administrator to meet on site at least once a week during active operations to review and inspect subcontractor performance. Contractor shall provide a written plan of operations detailing planned operations for the following week.

G-126.1 Disputes with Subcontractors or Material Providers

Should Contractor and its subcontractors or materials providers develop disputes affecting the completion of obligations under this contract, Contractor shall resolve any

such disputes in a timely and efficient manner that does not involve or adversely affect either the State or its Purchasers.

G-130.1 Prevention of Damage and Consequences of Contractor-Caused Damage

The Contractor agrees to exercise due care and caution at all times to avoid damage to all special resources including environmentally sensitive areas, research, demonstration, and cultural objects or areas. Additionally, the Contractor agrees to protect all improvements on State property affected by the work of this contract including, but not limited to, roads, culverts, bridges, ditches, fences, utility lines, and buildings.

If damages occur due to the Contractor's operations, the Contractor shall be responsible for damage or restoration costs, or other compensation measures as described in this contract. State may deduct damage or restoration costs from payments to the Contractor. This clause shall not relieve the Contractor from other applicable civil or criminal remedies provided by law.

G-140.1 Indemnity

To the fullest extent permitted by law, Contractor 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. Contractors' obligations to indemnify, defend, and hold harmless includes any claim by Contractors' agents, employees, representatives, or any subcontractor or its employees. Contractor expressly agrees to indemnify, defend, and hold harmless State for any claim arising out of or incident to Contractors' or any subcontractors' performance or failure to perform the contract. Contractors' 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. Contractor 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.

In addition to any other remedy authorized by law, the State may retain as much of the performance security, or any money or credits due Contractor necessary to assure indemnification.

G-150.1 Insurance

Contractor 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 also suspend Contractor operations until required insurance has been secured.

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 should

issue all insurance and surety bonds. Any exception shall be reviewed and approved by the department's risk manager before the insurance coverage is accepted. 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 Olympic region office 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, Contractor shall furnish State with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements specified in the contract. The Contractor shall obtain insurance coverage prior to operations commencing and continually maintain it in full force until all contract obligations have been satisfied or an operating release has been signed by the State.

Contractor 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 Contractor'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 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. Contractor 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 Contractor and such coverage and limits shall not limit Contractor'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, shall not be less than as follows:

Commercial General Liability (CGL) Insurance. Contractor 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. Contractor 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. Contractor shall comply with all State of Washington workers' compensation statutes and regulations. Workers' compensation coverage shall be provided for all employees of Contractor 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, Contractor 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 Contractor, 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, Contractor shall indemnify State. Indemnity shall include all fines, payment of benefits to Contractor or subcontractor employees, or their heirs or legal representatives, and the cost of effecting coverage on behalf of such employees.

Business Auto Policy (BAP). Contractor 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. Contractor 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-160.1 Agents

The State's rights and duties will be exercised by the Region Manager. The Region Manager will notify Contractor 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-180.1. 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 harvested beyond the terms of this contract.

Contractor is required to have a person on site during all operations who is authorized to receive instructions and notices from the State. Contractor 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-170.1 Assignment and Delegation

Contractor shall assign no rights or interest in this contract 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. Contractor may perform any duty through a delegate, but Contractor 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 Contractor.

G-180.1 Modifications

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

G-181.1 Contract Modification for Protection of Resources and Improvements

The Harvesting Services contract may be unilaterally terminated or modified by the State upon determination that the Contractor's operations would cause serious damage to resources or improvements, or would be significantly inconsistent with State land management plans.

In the event of contract modification under this section and through no fault of Contractor operations, the Contractor shall be reimbursed for any additional operations required, provided that any work or extra protection shall be subject to prior approval of the State.

G-190 Contract Complete

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

G-200.1 Notice

Notices required to be given by the State under the following clauses shall be in writing and shall be delivered to the Contractor's authorized agent or sent by certified mail to the Contractor's post office address, so that their receipt may be acknowledged by Contractor.

G-030.1 Commencement Date

G-092.1 Harvest Area Boundary Adjustment

G-181.1 Contract Modification for Protection of Resources and Improvements

G-210.1 Violation of Contract

G-220.1 State Suspends Operation

D-015.1 Delivered Mis-sorted Logs and Penalties

D-016.1 Damages for Delivered Mis-manufactured Logs

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. Contractor agrees to notify the State of any change of address.

G-210.1 Violation of Contract

- a. If Contractor 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, the Contractor has fifteen (15) days after receipt of suspension notice to remedy the violation. If the violation cannot be remedied or Contractor fails to remedy the violation within fifteen (15) days after receipt of a suspension notice, the State may terminate the rights of the Contractor and collect liquidated damages under this contract associated with the breach. In the event of such a contract termination, the State may demand all or part of the Contractor's surety in order to satisfy the State's damages.
- b. The State has the right to remedy a breach if Contractor is unable, as determined by the State, to remedy the breach, or if the Contractor has not remedied the breach within 15 days of a suspension notice. Any expense incurred by the State in remedying Contractor's breach may be charged to Contractor, or State may deduct such expenses from payments to the Contractor.
- c. If the contract expires without the Contractor having performed all their duties under this contract, Contractor's rights and obligations to harvest, deliver forest products, and perform any additional contract-related requirements are

terminated. Thus, Contractor cannot remedy any breach once this contract expires. This provision shall not relieve Contractor of any financial obligations and unresolved contractual agreements, including payment to sub-contractors for work performed under this contract.

G-220.1 State Suspends Operations

The Contract Administrator may suspend any operation of Contractor under this contract when the State is suffering, or there is reasonable expectation the State will suffer environmental, monetary or other damage if the operation is allowed to continue.

Contractor shall be in breach of this contract if the operation continues after the suspension notice or if the operation resumes prior to approval and notice from the Contract Administrator.

Contractor may request a modification of suspension within seven (7) calendar days of the start of suspension through the dispute resolution process. If this process results in a finding that the suspension exceeded the time reasonably necessary to stop or prevent damage to the State, Contractor may request a contract term adjustment based on the number of excess days of suspension.

G-230.1 Unauthorized Activity

Any cutting, removal, or damage of forest products by Contractor, 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 Contractor 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-240.1 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, Contractor 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 Contractor's request within five business days.
- c. Within five business days of receipt of the Region Manager's decision, the contractor may make a written request for resolution to the Deputy Supervisor - Uplands of the Department of Natural Resources.
- d. Unless otherwise agreed, the Deputy Supervisor - Uplands will hold a conference within 15 calendar days of the receipt of Contractor's request for review of the Region Manager's written decision. Contractor 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-250.1 Compliance with All Laws

Contractor 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. Contractor shall provide documentation from Washington State Departments of Labor and Industries and Revenue that all obligations concerning worker compensation and safety will be met. Failure to comply may result in forfeiture of this contract.

G-260 Venue

This contract shall be governed by the laws of the State of Washington. In the event of a lawsuit involving this contract, venue shall be proper only in Thurston County Superior Court.

G-270.1 Equipment Left on State Land

All equipment owned or in the possession of Contractor, 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 30 days after the expiration of the contract period is subject to disposition as provided by law. Contractor 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-280.1 Operating Release

An operating release is a written document, signed by the State and the Contractor, indicating that the Contractor has been relieved of certain rights or responsibilities with regard to the entire or a portion of the timber sales contract. Contractor 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, Contractor's right to cut and remove forest products on the released area will terminate.

G-310.1 Road Use Authorization

The Contractor is authorized to use the following State roads, and roads for which the State has acquired easements and road use permits; Contractor is authorized to use the following State roads and roads for which the State has acquired easements and road use permits: PT-M-1000, PT-M-1100.1, PT-M-2200, PT-M-2205, PT-M-2400, FS-2850, PT-B-1000, PT-B-1020, PT-B-1040, PT-B-1043.1, PT-B 1044, PT-B-2000, PT-B-2400, PT-B-2420, PT-B-2421, 1+00 spur. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

G-330.1 Pre-work Conference

Contractor 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 Contractor 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 Contractor's plan of operations shall not be construed as any statement or warranty that the plan of operations is adequate for Contractor's purposes or complies with applicable laws.

Contractor shall arrange with the Contract Administrator to review this contract and work requirements with any and all subcontractors prior to receiving authorization for any subcontractor to begin operations.

G-340.1 Preservation of Markers

Any legal land subdivision survey corners and witness objects are to be preserved. If such are destroyed or disturbed, the Contractor shall, at the Contractor's own expense, re-establish them through a licensed land surveyor in accordance with U.S. General Land Office standards. Corners and/or witness objects that must be disturbed or destroyed in the process of road construction or logging shall be adequately referenced and/or replaced in accordance with RCW 58.24.040(8). Such references must be approved by the Contract Administrator prior to removal of said corners and/or witness objects.

G-370.1 Blocking Roads

Contractor shall not block the FS 2850 (Woods Rd), PT-M-1000, or PT-B-1000, unless authority is granted in writing by the Contract Administrator.

G-390.1 Road Approach Permit Requirements

Contractor agrees to comply with the attached terms and conditions of the road approach permit entered into between the State and Clallam County (RDP95-00592) dated June 22, 2016.

G-430.1 Open Fires

The Contractor its employees or its subcontractors shall not set or allow to be set any open fire at any time of the year without first obtaining permission in writing from the Contract Administrator.

G-450.1 Encumbrances

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

DATA MISSING

Section P: Payments and Securities

P-030.1 Payment for Harvesting and Hauling Services

The State shall pay Contractor for harvesting and hauling services at the following rates:

Payment for Harvesting Stump to Truck ('On Board Truck' or OBT): The State's payment to the Contractor for harvesting services will be in accordance with the following table;

Sort Number(s)	Unit of Measure	OBT Rate	OBT Utility Rate
2,3,4,5,6,7,8,9	MBF	\$0.00	\$20.00
1	MBF	\$0.00	\$20.00
10,11	Ton	\$10.00	N/A

Utility volume for mbf sorts determined on an adjusted gross scale basis.

Payment for Hauling: The State's payment to the Contractor for hauling services upon the tons delivered multiplied by: a base rate, 'A' and 'C' mile rates, the 'haul miles' listed in clause G-022.1, a fuel index factor and the Contractor's hauling bid factor using the following formula:

Hauling Services Payment Rate per Ton
 = (Base Rate + Mileage Rate) x (hauling bid factor)

Base Rate = \$2.35

(based on the multiple truck operation fixed cost/ton within 'Report to the Washington State Legislature, The Washington Log Trucking Industry: Costs and Safety Analysis, August 2008'.)

Mileage Rate = (($\$0.16 \times C$ miles) + ($\$0.11 \times A$ miles)) x Fuel Index Factor

The Fuel Index Factor will be adjusted quarterly by the State based upon the U.S. Energy Information Administration's Weekly Retail On-Highway Diesel prices for the West Coast region posted at <http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp> using the following formula;

Fuel Index Factor = $1 + ((Q(x) - Q(\text{base})) / Q(\text{base}))$

Where;

Q(base) = Average fuel price for quarter preceding harvesting services contract bid opening.

Q(x) = Average fuel price for quarter preceding log deliveries.

The fuel index factor will be calculated each;

January and apply to loads delivered between January 1 and March 31,

April and apply to loads delivered between April 1 and June 30,

July and apply to loads delivered between July 1 and September 30,

October and apply to loads delivered between October 1 and December 31.

Travel distances to each log sort destination will be determined by the State and represents the one-way travel distance from the sale area to the purchaser's delivery point.

The state must approve all haul routes and will determine travel distances prior to contractor delivery of logs to each specified destination. The State may determine alternate haul routes and delivery destinations during the course of this contract. Upon notification by the State, the Contractor is required to deliver logs: using the alternative route, or to State approved alternative delivery locations. Payment rates for approved alternate routes and delivery destinations shall be set forth by amending this clause in accordance with clause G-180.1.

For sorts bid on an mbf basis tonnage will be calculated using the State's conversion rates in the table below unless actual tonnage is available and approved for use. For tonnage sorts, actual tonnage shall apply.

MBF Sort(s)	MBF/Tons Conversion Factor
1	6.2
2	4.9
3	7.5
4	6
5	5.5
6	6.1
7	6.9
8	5.9
9	7

Contractor is responsible for billing the State for harvesting and hauling services performed using load data collected by State approved third party scaling organizations and reported by the State designated Log and Load Reporting Service. The billing statement shall include itemized accounts and summaries of harvesting tonnage and hauling mileage charges in a format approved by the State.

The billing schedule shall be the 1st and the 16th of each month with payment due by State within fourteen (14) days. Reporting periods end on the 15th and the end of each month.

No certificate given or payment made shall be evidence of the satisfactory performance of the Contract, either wholly or in part, against the claim of the State to the contrary, and no payment shall be construed to be an acceptance of any defective work, which may before or afterwards appear.

P-031.1 Payment for Hauling Across Ferries and Other Miscellaneous Tolls

Prior authorization is required for payment of any additional transportation charges incurred by Contractor, including: ferries, toll bridges, and other miscellaneous tolls.

For payment including ferries, toll bridges, or other miscellaneous tolls, the Contractor's billing statement must include an itemized list of loads by trucker name and truck number, DNR load ticket number and date of crossing(s):

- a. Reimbursement for authorized ferry tolls will be at a fixed rate of \$131.30 for each crossing with a loaded truck and \$74.75 for each empty return. A 'Wave2Go' statement or equivalent documentation shall be included with the itemized list.
- b. 'Good to Go' regulated bridge tolls will be reimbursed at a fixed rate of \$15.00 per authorized toll crossing. A "Good To Go" statement or equivalent documentation shall be included with the itemized list. This reimbursement is based upon one-way tolling, if a two-way toll is charged, payment receipts must be provided for reimbursement.
- c. Miscellaneous tolls controlled by the Washington State Transportation Commission (WSTC), or other government agencies, will be reimbursed at their posted rates or the actual cost; receipts must be provided.

Requests for payment of ferry and toll charges must be received by the State prior to contract termination. Contractor shall only be reimbursed for the amount of toll approved for payment by the Contract Administrator.

Payment for ferries or tolls incurred for backhauling loaded trucks, in either direction, shall be the responsibility of the Contractor and will not be reimbursed by the State.

Convenience tolling, fines, and/or extra charges will not be reimbursed.

P-032.1 Payment for Road Construction

The Contractor is responsible for independently negotiating, procuring and paying for road construction services provided.

The State shall pay Contractor for roadwork completed at the following rates:

Roads	Type	Stations or Quantities	Work Type Completion	Contractor Proposed Stations	Price per Station	Total
PT-M-1100.1	Construction	15.35	Required		per Station	
PT-B-1043.1	Construction	2.88	Optional		per Station	
PT-B-1044	Construction	11.68	Optional		per Station	
PT-B-2000	Prehaul Maint.	39.00	Required		per Station	
PT-B-2420	Construction	23.35	Optional		per Station	
PT-B-2421	Construction	1.58	Optional		per Station	
PT-M-2205	Construction	3.58	Optional		per Station	
PT-M-2400 (0+00 to 3+28)	Reconstruction	3.28	Optional		per Station	

PT-M-2400(3+28 to 7+97)	Construction	4.69	Optional			per Station	
1+00 SPUR	Construction	1.00	Optional			per Station	
PT-B-1000	Prehaul Maint.	42.50	Required			per Station	
PT-B-1020	Prehaul Maint.	4.09	Required			per Station	
PT-B-1040	Prehaul Maint.	40.00	Required			per Station	
PT-B-2400	Prehaul Maint.	36.00	Required			per Station	
PT-M-2200	Prehaul Maint.	8.60	Required			per Station	
PT-M-1000	Prehaul Maint.	15.75	Required			per Station	
FS-2850	Prehaul Maint.	170.85	Required			per Station	
ALL ROADS	Post Haul Maint.	420.90	Required			per Station	
PT-M-2400	Abandonment	7.97	Required			per Station	
Initial Move In		1	Required			Lump Sum	
Rock Development		1	Required			Lump Sum	
Post Haul Move In		1	Required			Lump Sum	

Total Road Cost Proposal \$

One station of road construction is 100 feet. All materials, equipment time, labor, and equipment mobilization costs are included in the total price.

Upon completion of road construction, the Contractor shall submit a report identifying the road(s), and the number of stations that have been completed to the Contract Administrator. Once the Contract Administrator has approved the roadwork in writing, the Contractor is responsible for billing the State for road construction services performed. The billing statement shall include an itemized account of the road(s), the number of stations and which stations have been completed. The Contract Administrator will verify that road construction described on the billing statement is complete prior to State making payment to Contractor.

The billing schedule shall be the 1st and the 15th of each month with payment due by State within fourteen (14) days. Reporting periods end on the 14th and the end of each month.

No certificate given or payment made shall be evidence of the satisfactory performance of the Contract, either wholly or in part, against the claim of the State to the contrary, and no payment shall be construed to be an acceptance of any defective work, which may before or afterwards appear.

P-033.1 Payment for Additional Road Maintenance Work

The Contractor is responsible for independently negotiating, procuring and paying for additional road maintenance services provided.

During the course of operations, the State may identify and require additional road maintenance work to be completed by the Contractor. The amount of payment for this additional road maintenance work deemed necessary by the State will be calculated and

paid for using the equipment rates in Schedule M 'Additional Road Maintenance Payment Rates'.

Upon completion of any additional road maintenance work, the Contractor shall submit a report identifying the road(s), and the number of stations that have been completed to the Contract Administrator. Once the Contract Administrator has approved the additional road maintenance work in writing, the Contractor is responsible for billing the State for additional road maintenance services performed. The billing statement shall include an itemized account of the road(s), the number of stations and which stations have been completed. The Contractor Administrator will verify that road maintenance described on the billing statement is complete prior to State making payment to Contractor. The billing schedule shall be the 1st and the 15th of each month with payment due by State within fourteen (14) days. Reporting periods end on the 14th and the end of each month.

No certificate given or payment made shall be evidence of the satisfactory performance of the Contract, either wholly or in part, against the claim of the State to the contrary, and no payment shall be construed to be an acceptance of any defective work, which may before or afterwards appear.

P-034.1 Payment for Additional Miscellaneous Work

During the course of operations, the State may identify and require additional miscellaneous work to be completed by the Contractor.

A plan for the additional work deemed necessary by the State shall be provided by the Contractor and must be approved in writing by the State prior to commencement of work by the Contractor. After the Contract Administrator has inspected and approved the work in writing, the Contractor is responsible for billing the State for work performed. The billing statement shall include an itemized account of the equipment, labor and materials necessary for the additional work that has been completed and approved.

The State shall reimburse the Contractor for approved costs within thirty (30) days of State's approval of the statement.

No certificate given or payment made shall be evidence of the satisfactory performance of the Contract, either wholly or in part, against the claim of the State to the contrary, and no payment shall be construed to be an acceptance of any defective work, which may before or afterwards appear.

P-090.1 Performance Security

Prior to start of any operations Contractor agrees to provide one or more of the following State approved performance securities; cash, savings account assignment, certificate of deposit assignment, irrevocable standby letter of credit, or a Miller Act bond, for the amount of \$100,000.00. At least 50% must be in a form other than a bond, unless otherwise agreed to by the State.

Security provided shall guarantee performance of all provisions of this contract and payment of any damages caused by Contractor's operations, failure to perform, or noncompliance with any rule or law. In addition, said security may be used by the State to satisfy any claims or liens made by Contractor's subcontractors, material providers, or other individuals against the State or its Purchasers, which arise from this Harvesting Services Contract.

If at any time the State decides that this security has become unsatisfactory, the Contractor agrees to suspend operations and, within fifteen (15) days of notification, replace the security with one acceptable to the State. The State may also require increases to the existing performance security at any time.

Unapplied performance security will be returned to Contractor after the State issues an operating release and completes the financial closeout.

P-100.1 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 Contractor. Prior to any reduction of the performance security amount, the Contractor must submit a written reduction request. No reduction will be allowed by the State unless such reduction can be made while fully protecting the State's interests.

P-120.1 Contractor Responsibility for Subcontractor Services

Contractor is responsible for negotiating, procuring, and paying for all services rendered by any subcontractor. Subcontractor services may include, but are not limited to, harvesting logs, hauling logs, and building roads.

Section L: Log Definitions and Accountability

L-010.1 Forest Products Conveyed

Forest products conveyed are logs or parts of logs delivered meeting the sorting criteria defined by clauses G-022.1 and G-024.1 of this contract.

L-013.1 Log Sorts Delivered to Incorrect Destination

Purchasers have agreed to purchase the log sort (s) as described in the G-022.1 clause. In the event a load of logs from an incorrect sort is delivered to a Purchaser, the Purchaser may reject the load. If Purchaser receives an incorrectly delivered load, Contractor shall notify the State within 24 hours. The Contractor will maintain responsibility for proper disposition and delivery of incorrectly delivered loads.

L-060.1 Load Tickets

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

Contractor shall account for all load tickets issued by the Contract Administrator. The State may treat load tickets not accounted for as lost forest products. All costs associated with computing the billings for lost loads shall be borne by Contractor.

L-080 Scaling Rules

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

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

L-110 State Approval of Log Scaling and Weighing Locations

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

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

L-114.1 State Approval of Haul Route

Contractor shall file with the Contract Administrator and Contract Administrator shall approve a map showing the haul route, which unscaled and unweighed logs will travel from the harvest area to the weighing/scaling location and approved destinations. The Contractor must notify Contract Administrator within 24 hours of any deviation from the haul route. The route of haul may be changed by prior agreement of the State and the Contractor. The Contract administrator must be notified by the Contractor of any overnight stays of an unscaled or unweighed load of logs.

L-130.1 Conversion Factors

Forest products harvested and delivered from the sale area that are not measured in units specified in the P-030.1 'Payment for Harvesting and Hauling Services' clause of this contract shall be converted to the contract specified payment units using Department of Natural Resources conversion factors unless a plan to do otherwise has been pre-approved by the State.

Section H: Harvesting Operations**H-010.1 Cutting and Yarding Schedule**

Falling and Yarding will not be permitted from November 1 to June 30 for rubber tired skidders; from November 1 to March 31 for tracked skidders; and no operations will be allowed in Units 2 and 7 on weekends and state recognized holidays or from 8:00pm to 6:00am unless authorized in writing by the Contract Administrator.

H-013.1 Reserve Tree Damage Definition

Reserve trees are trees required and designated for retention within the sale boundary. Contractor 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 Contractor'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's 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 Contractor shall provide a replacement reserve tree of like condition, size, and species within the sale area, as approved by the Contract Administrator. Contractor may be required to pay liquidated damages for Excessive Reserve Tree Damage as detailed in clause D-041.1.

Removal of designated reserve trees from the sale area is unauthorized, and may invoke the use of the G-230.1 'Trespass and Unauthorized Activity' clause. Contractor 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-030.1 Timber Falling

Trees shall be felled and logs shall be bucked to obtain the greatest practicable utilization and value of forest products.

H-035 Fall Trees Into Sale Area

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

H-052.1 Branding and Painting

The State shall provide a State of Washington registered log brand. Contractor must brand and paint all logs removed from the harvest area in a manner that meets the requirements of WAC 240-15-030(2)(a)(i). All logs removed from the harvest area 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, Contractor shall brand at least 3 logs with legible brands at one end. Also, 10 logs shall be painted at one end with durable red paint.

H-080 Snags Not to be Felled

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

H-125 Log Suspension Requirements

Lead-end suspension is required for all yarding activities.

H-140.1 Special Harvest Requirements

Contractor shall accomplish the following during the harvest operations:

1. Contractor must have utility lines located before beginning operations and/or construction/reconstruction. Contractor is responsible for the cost of repairing any damage to utilities due to road or harvest operations. The following roads have potential for buried utilities: PT-M-2200 and PT-M-2400.
2. Contractor shall immediately repair all gate damage resulting from operations to an equal or better condition that existed at the time of sale.
3. While felling timber, 2 warning signs must be posted on the Thompson Rd, PT-B-1040 and the PT-B-2400 roads.
4. Yarding equipment shall not cross live streams without an HPA.
5. As directed by the contract administrator, contractor will perform approximately 400 feet of skid trail abandonment in Unit 1, 600 feet in Unit 2, and 1200 feet of skid trail abandonment in Unit 3.
6. Slash generated during felling and yarding within 100 feet of county roads and 200 feet of structures must be pulled back to reduce the residual volume to less than 9 tons per acre of material 3 inches and less in diameter in accordance with WAC 332-24-650, extreme fire hazard requiring abatement, and approved by the contract administrator.

7. Landing and processing slash shall be stacked in dirt free piles in accordance with the attached schedule of specifications for slash piling.
8. The contractor shall notify all employees and subcontractors working on this sale that any danger tree, marked or unmarked, may be felled. Any felled marked danger tree shall be replaced with a suitable tree of similar size and species as approved by the Contract Administrator.

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

H-150.1 Required Removal of Forest Products

Contractor shall remove from the sale area, present for scaling and deliver to the designated purchaser locations specified in the G-022.1 clause all forest products conveyed that meet the following minimum dimensions unless directed otherwise by the Contract Administrator:

<u>Species</u>	<u>Net Bd Ft</u>	<u>Log Length (ft)</u>	<u>Log dib</u>
All	10	12	5"

The State may treat failure to remove forest products left in the sale area that meet the above specifications as a breach of this contract. The Contractor shall be responsible for forest products not removed. At the State's option, the State or a third party scaling organization may scale forest products, for volume, that meet the above specifications and are left in the sale area. State may deduct the value of forest products not removed from payments to the Contractor for harvesting services rendered. All costs associated with scaling and computing the billing for forest products left in the sale area will be borne by Contractor.

If Contractor's failure to remove all the forest products specified under the contract is due to circumstances beyond the control and without fault or negligence of the Contractor including, but not restricted to, acts of the State, closures by government regulatory agencies, mill closures, fires, vandals, and unusually severe weather conditions, the State may elect to modify the required removal requirements. Contractor is required to request contract removal requirement modifications in writing. The State shall consider such requests and may grant them in part or entirety only when Contractor has demonstrated that they have been endeavoring to complete the project and are otherwise performing with due diligence.

H-161.1 Excessive Timber Breakage

The Contractor shall be responsible for felling and yarding timber in a manner that shall minimize breakage and maintain stump heights within contract specifications, unless permission to do otherwise is agreed to by the Contract Administrator.

The State may treat excessive timber breakage, as determined by the Contract Administrator as a breach of this contract. At the State's option, the State or a third party scaling organization may scale forest products, for volume. State may deduct the

value of forest products damaged through excessive breakage from payments to the Contractor for harvesting services rendered. All costs associated with scaling and computing the billing for forest products damaged through excessive breakage will be borne by Contractor.

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-230.1 Tops and Limbs Outside the Sale Boundary

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

Section C: Construction and Maintenance

C-040.1 Road Plan

Road construction and associated work provisions of the Road Plan for this project, dated June 26, 2016 are hereby made a part of this contract.

The State may make modifications to the Road Plan made necessary by unforeseen conditions. Any modifications that create additional work for the Contractor shall be paid in accordance with the payment terms set forth in this contract.

C-050.1 Contractor Road Maintenance and Repair

Contractor shall perform work at their own expense on PT-B-2000, PT-M-1000, PT-M-1100.1, PT-M-2200, PT-M-2205, PT-M-2400, PT-B-1020, PT-B-1040, PT-B-1043.1, PT-B-1044, PT-B-2400, PT-B-2420, PT-B-2421, 1+00 spur roads. All work shall be completed to the specifications detailed in the Road Plan.

C-060.1 Designated Road Maintainer

If required by the State, the Contractor shall perform maintenance and replacement work as directed by the State on PT-B-1000, PT-B-1020 and the FS2850/Woods road and all other roads not listed in clause C-050.1. The Contractor 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 the Contractor for said costs within thirty (30) days of receipt and approval of the statement.

C-140.1 Water Bars

Contractor shall, as directed by the Contract Administrator, construct water bars across haul roads, skid trails and fire trails as necessary to control soil erosion and water pollution.

Section S: Site Preparation and Protection**S-001 Emergency Response Plan**

An Emergency Response Plan (ERP) shall be provided to the Contract Administrator containing but not limited to, valid contact numbers and procedures for medical emergencies, fire, hazardous spills, forest practice violations and any unauthorized or unlawful activity on or in the vicinity of the sale area. The Contract Administrator and the State shall be promptly notified whenever an incident occurs requiring an emergency response.

The ERP must be presented for inspection at the prework meeting and kept readily available to all personnel, including subcontractors, on site during active operations.

S-010.1 Fire Hazardous Conditions

Contractor acknowledges that operations under this Contract may increase the risk of fire. Contractor 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, Contractor agrees to provide equipment and personnel working at the site to safely and effectively engage in first response fire suppression activity.

Contractor's failure to effectively engage in fire-safe operations is considered a breach and may result in suspension of operations.

S-020.1 Extreme Hazard Abatement

Contractor shall provide a written Extreme Hazard Abatement plan that meets the requirements of WAC 332-24 prior to the beginning of logging operations. The plan must be acceptable to the Contract Administrator. The plan will identify how Contractor will accomplish abatement. Contractor shall also provide, and keep current, a written timetable for completion of all specified work in the plan. The Contract Administrator's acceptance and approval of Contractor's hazard abatement plan shall not be construed as any statement or warranty that the hazard abatement plan is adequate for Contractor's purposes or complies with applicable laws.

S-050 Cessation of Operations for Low Humidity

During the "closed season", 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-060.1 Pump Truck or Pump Trailer

Contractor 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-110 Resource Protection

No equipment may operate within the wetlands unless authority is granted in writing by the Contract Administrator.

S-130.1 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

Contractor 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. Contractor shall be responsible for restoring the site in the event of a spill.

b. Hazardous Materials Spill Prevention

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

c. Hazardous Material Spill Containment, Control and Cleanup

If safe to do so, Contractor shall take immediate action to contain and control all hazardous material spills. Contractor shall ensure that enough quick response spill kits capable of absorbing 4 to 6 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, Contractor 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 Contractor 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, the Contractor is responsible for notifying the following:

Appropriate Department of Ecology regional office (contact information below).

DNR Contract Administrator

ECY - Northwest Region:

1-425-649-7000
(Island, King, Kitsap, San Juan, Skagit, Snohomish, and Whatcom counties)

ECY - Southwest Region:
1-360-407-6300
(Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, and Wahkiakum counties)

ECY - Central Region:
1-509-575-2490
(Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, and Yakima counties)

ECY - Eastern Region:
1-509-329-3400
(Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman counties)

S-131.1 Refuse Disposal

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

S-140.1 Fence Repair

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

Section D: Damages

D-010.1 Liquidated Damages

The clauses in the DAMAGES section of this contract provide for the State's payments to the Contractor to be reduced for certain breaches of the terms of this contract. These offsets are agreed to as liquidated damages for the Contractor's breach, and are not penalties. They are reasonable estimates of anticipated harm to the State caused by the Contractor's breach. The State and Contractor agree to these liquidated damages provisions with the understanding of the difficulty of proving loss and the inconvenience or infeasibility of obtaining an adequate remedy. These liquidated damages provisions provide greater certainty for the Contractor by allowing the Contractor to better assess its responsibilities under the contract.

D-015.1 Damages for Delivered Mis-sorted Logs

Logs delivered by Contractor that do not meet the receiving Purchaser's log sort specifications as described in clause G-022.1, where species are mixed, or are over 1" out of tolerance of scaling diameter, and logs not meeting the minimum length

requirements as designated for this contract, and unless otherwise indicated, logs containing blue stain are considered mis-sorts.

Mis-sorted log volume will be considered on a per load basis. When mis-sorts amount to more than 5% of a load's total volume, as determined by a third party scaling organization, the State is harmed and an adjustment to the Contractor's harvesting payment may be made. For the improper delivery of mis-sorted logs, the State may reduce the harvesting payment by \$100.00 for each load delivered which contained mis-sorted volume in excess of 5%, as documented by third party scaling ticket.

D-016.1 Damages for Delivered Mis-manufactured Logs or Poles

Logs or Poles delivered by Contractor that do not meet the receiving Purchaser's preferred log length specifications as described in clause G-022.1, and logs not meeting minimum log quality specifications for sweep, peeler sorts, untrimmed limbs and knots as described in the G-024.1 clause are considered mis-manufactured logs or poles.

Mis-manufactured log or pole volume will be considered on a per load basis. When mis-manufactured logs or poles amount to more than 5% of a load's total volume, as determined by a third party scaling organization, the State is harmed and an adjustment to the harvesting payment may be made. For the delivery of mis-manufactured logs or poles, the State may reduce the harvesting payment due to the Contractor by an amount of \$100.00 for each load of logs or \$300 for each load of poles delivered which has been determined to contain mis-manufactured volume in excess of 5% as documented by third party scaling ticket.

D-023.1 Damages for Failure to Remove Forest Products

Contractor's failure to remove all of the forest products specified prior to the expiration of the contract operating authority results in substantial injury to the State. The value of the forest products sold at the time of breach is not readily ascertainable. The Contractor's failure to perform disrupts the State's management plans in the project area, the actual cost of which is difficult to assess. A re-offering of the contract involves additional time and expense and is not an adequate remedy. Therefore, the Contractor agrees to accept a reduction of the amount due for harvesting services from the State in the amount calculated according to the following guidelines:

- a. Full stumpage value will be assessed for felled trees, individual or scattered standing trees, or clumps of standing trees less than three acres in size, plus all costs associated with scaling and computing the stumpage value of the forest products left.
- b. 35% of full stumpage value will be assessed for clumps of standing trees greater than three acres in size, plus all costs associated with scaling and computing the stumpage value of the forest products left.

The stumpage value of forest products left shall be determined by the State or a third party scaling organization utilizing whatever method(s) best suited for accurate volume and acreage measurement as determined by the State.

D-024.1 Damages for Excessive Timber Breakage

Excessive breakage of timber results in substantial injury to the State. The value of the forest products sold at the time of breach is not readily ascertainable. Therefore, the Contractor agrees to accept a reduction of the amount due for harvesting services from the State at an amount calculated according to the following:

The value for excessive timber breakage will be determined at a rate, which reflects the log sort price that the Purchasers would have paid for unbroken logs minus the cost of delivery, plus all costs associated with scaling and computing the stumpage value of the forest products excessively broken.

The stumpage value of forest products excessively broken shall be determined by the State or a third party scaling organization utilizing whatever method(s) best suited for accurate volume measurement as determined by the State.

D-030.1 Inadequate Log Accountability

Removal of forest products from the sale area without adequate branding and/or valid load tickets attached to the load, weighing or scaling forest products in a location other than the facilities authorized for use for this sale, and failing to deliver load ticket to the weighing/scaling official all result in substantial injury to the State. The potential loss from not having proper branding, ticketing, weighing locations and accountability is not readily ascertainable. These contractual breaches result in a loss of load and weighing/scaling data the potential for the removal of forest products for which the State receives no payment, and cause increases in the State's administration costs associated with this contract. The actual costs of these breaches are difficult to assess.

For these reasons, Contractor's payments for harvesting under this contract will be reduced in the following amounts, as liquidated damages, to compensate the State for these breaches: a sum of \$100.00 each time a load of logs does not have branding as required in the contract, \$250.00 each time a load of logs does not have a load ticket as required by the contract, \$250.00 each time a load ticket has not been filled out as required by the plan of operations, \$250.00 each time a load is weighed or scaled at a facility not approved as required by the contract, and \$250.00 each time load and weight scale data is not presented to the weighing/scaling official.

D-041.1 Reserve Tree Excessive Damage

When Contractor's operations exceed the damage limits set forth in clause H-013.1, 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 Contractor agrees to pay the State as liquidated damages at the rate of \$500.00 per tree for all damaged reserve trees that are not replaced in the sale area.

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

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Purchaser

Mona Griswold
Olympic Region Manager

Date: _____
Address: _____

Date: _____

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

STATE OF _____)

COUNTY OF _____)

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

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

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

Notary Public in and for the State of

My appointment expires _____

Schedule A
Specifications for Landing Slash Piling

All landing slash, concentrations of processor slash, and hazard abatement debris shall be piled by creating circular piles of slash and brush conforming to the following specifications:

- A. Piles shall be a minimum of 12 feet tall by 8 feet wide to a maximum of 30 feet tall and 30 feet wide. Piles shall be cone shaped and stable.
- B. Piles shall be free of topsoil, large rotten logs, and large stumps. Any unburnable material shall be well scattered.
- C. Piles shall not be placed on large stumps, logs, or against standing snags.
- D. Piles shall be stacked a minimum of 50 feet from all unit boundaries, Riparian Management Zones, leave trees, culverts, and any standing timber; a minimum of 100 feet from any public roads and highways; and a minimum of 200 feet from any structures.
- E. Piling shall be completed using an approved hydraulic shovel and grapples.
- F. Slash and displaced soil shall be removed from swales and natural drainage channels concurrent with yarding.

Schedule B
Green Tree Retention Plan

Leave the following:

1. All trees banded with blue paint and all leave tree area clumps shall remain standing. The perimeter of the leave tree clumps are designated by Leave Tree Area Tags. The tags face outward from the leave tree clumps.

Unit #	# of Individually Marked Trees	# of Clumps	# of Trees Clumped	Total # of Leave Trees
1	69	3	121	190
2	67	4	195	262
3	246	10	547	793
4	16	0	0	16

Permission to substitute leave trees must be granted by the Contract Administrator.

Schedule M
Additional Road Maintenance Payment Rates

ADDITIONAL ROAD MAINTENANCE PAYMENT RATES
(Hourly Rate Including Operator)

Motor Grader

To 140 HP (Cat 120H, 120M) \$138.00
 To 175 HP (John Deere 670D, 670G, 672D, G; Cat 12M; CAT 140G; CAT143H; Volvo G930; Komatsu GD-655-3) \$150.00
 To 200 HP (John Deere 772; Cat 140M; Volvo G940; Komatsu GD675-3) \$165.00
 Over 200 HP (Cat 160M, 14M, 16H; Komatsu GD-825A-2) \$209.00

Ripper/Scarifier Use

To 140 HP \$4.00
 To 175 HP \$6.00
 Over 175 HP \$10.00

Front End Loaders & Loader/Backhoe

To 75 HP (Cat 416D, Cat 416E; Komatsu WB142-2) \$96.00
 To 110 HP (Cat 420E; Case 580, 590; Cat 908H, 914G; John Deere 344J) \$106.00
 To 160 HP (Cat 450E, Cat 924H, 930H; Hyundai HL 730-9; John Deere 524K) \$122.00
 Over 160 HP (John Deere 624K; Case 621E; Cat 938H, 950H, 966K) \$142.00
 Addition for special attachment use: compactor, clam, extendaboom, etc. add \$6.50

Gravel Trucks

On-Highway Rear Dump \$97.00
 On-Highway Rear Dump Transfer Trailer (2 axles, 10 CY) \$13.00
 On-Highway Bottom Dump Trailer (3 axles, 12 CY) \$11.00

Dozers

To 75 HP (Case 650K; Cat D3K XL) \$101.00
 To 105 HP (Cat D4K, D5K; Case 750K, 850K; John Deere 450J, 550J, 650J; Komatsu D37EX-22) \$111.00
 To 135 HP (Cat D6K; Case 1150K, John Deere 700J; Komatsu D51EX-22) \$130.00
 To 185 HP (John Deere 750J; Case 1650, 1850; Cat D6N; Komatsu D61EX-15) \$150.00
 To 240 HP (Cat D6T, D7E; John Deere 850J; Komatsu D65EX-15) \$184.00
 Over 240 HP (Cat D8T; John Deere 950J) \$252.00

Ripper Use

To 180 HP add \$8.00

To 235 HP add \$13.00
Over 235 HP add \$20.00

Excavators

To 60 HP (Kubota U45, U55; John Deere 50D; Hitachi 50U; Cat 307D) \$92.00
To 95 HP (Cat 312D, 314D; Doosan 140LCV; Hitachi 120-3, 135US-3; Link-Belt 135; Komatsu PC120-6, PC130-8; John Deere 120D, 135D) \$133.00
To 120 HP (Cat 315D; John Deere 160LC; Doosan 175LCV; Komatsu PC160LC-8; Link-Belt 160 LX; Volvo EC160C L) \$146.00
To 140 HP (Cat 319D L, 320C; Hitachi 160LC-3; Link-Belt 210LX) \$161.00
To 170 HP (Cat 320D; Hitachi 200LC-3, 225LCV; Link-Belt 240 LX; Komatsu PC200-8, PC220LC-8; John Deere 225D LC; Volvo EC240C) \$172.00
To 230 HP (Cat 324D, 324E, 328D, 329D; John Deere 240D, 270D, 290G; Hitachi 240LC-3, 270LC-3; Link-Belt 290 LX RB; Volvo EC290C; Komatsu PC270LC-8) \$200.00
Over 230 HP (Cat 330D, 336D; Volvo EC330C; John Deere 330C, 330D; Komatsu PC300LC-8, C350LC-8; Link-Belt 330LX, 350 X2; Hitachi 330LC, 350LC-3) \$230.00
Add Attachment Rate to Excavator \$30.00

Self-Propelled Vibratory Compactors

To 80 HP (Bomag BW145DH-40, BW177D-40; Dynapac CA150D; Sakai 201D; Ing. Rand SD45F TF) \$100.00
To 125 HP (Bomag BW177PDBH-40; Cat CP-433E; Sakai SV400D-II; Dynapac CA152D) \$110.00
Over 125 HP (Bomag BW211PD-40; Dynapac CA262D; Ing. Rand SD105DA TF; Sakai SV505D-1) \$120.00

Tractor Brush Cutters

To 67 PTO HP \$65.00
To 80 PTO HP \$80.00
Over 80 PTO HP (JD 6200, 6300, 6400) \$95.00

Track Mounted Rock Drills (with one operator)

To 4.5" Diameter Hole \$210.00
Over 4.5" Diameter Hole \$246.75

Heavy Equipment Hauling

On-Highway Rear Dump \$97.00
Tilt Deck Utility Trailer (2 axle, up to 40,000 lbs.) \$9.00
Tilt Deck Utility Trailer (3 axle, up to 50,000 lbs.) \$12.00

On-Highway Truck Tractor (GVW up to 50,000 lbs.) \$104.00

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Lowbed Trailer (2-axle, up to 50,000 lbs.) \$15.00
Lowbed Trailer (3-axle, up to 80,000 lbs.) \$21.00

Water Trucks

To 3,000 gallons \$92.00
To 4,000 gallons \$114.00
Over 4,000 gallons \$135.00

Power Saws and Pumps \$10.00

Laborer- Journey Level \$40.00
Laborer- Apprentice Level \$32.00

INSTRUCTIONS

HP taken at the Flywheel unless stated otherwise.

WA Sales Tax - Add sales tax only if an activity is not directly tied to a state timber sale. Sales tax on purchased material will be reimbursed.

Hourly rates include operator, owning and operating costs, profit, and overhead, and includes costs for all service and support vehicles.

Specification data, such as weight and flywheel HP can be determined upon request by providing equipment make and model information.

Rates on equipment not included in this schedule can be determined upon request.

Rev. 7/1/2016

Schedule P
Pole Specifications

Poles produced under this contract shall meet the following specifications:

MINIMUM SAPWOOD: Required both butt and top; 1-inch on Douglas-fir and none on western red cedar.

BUTTS: Shall be cut above the swell and hook.

SWEEP: Poles shall be line straight. That is, a straight line from the center of the butt to the center of the top will not pass outside the body of the pole.

KNOTS: Maximum diameter of a single knot shall not exceed 3 inches. The sum of the diameters of all knots (1/2 inch and larger) in any 1-foot section shall not exceed 8 inches on 45-foot and shorter and 10 inches on 50-foot and longer poles.

TRIM: Poles shall have a minimum of 12 inches of trim.

MAXIMUM DIAMETER AT GROUND LINE: Shall not be more than 7 inches or 20% larger than the specified minimum, whichever is greater.

CLASSIFICATION: The diameter (D.O.B.) at ground line (6 feet up from the butt) will determine the true class of the pole, provided that its top is large enough. Otherwise, the diameter (D.I.B.) at the top will determine the true class.

PROHIBITED DEFECTS: Poles shall be free of sucker knots, knot clusters, rotten knots, short crooks, splits, shake, scars or catfaces, deadwood streaks, snowbreak, cross break, decay, and worm or insect damage.

REFERENCE: American National
STANDARDS INSTITUTE: A.N.S.I. 05.1-2008 or later

STATE OF WASHINGTON
 DEPARTMENT OF NATURAL RESOURCES
 HARDTAK SORTS TIMBER SALE ROAD PLAN
 CLALLAM COUNTY, OLYMPIC REGION, STRAITS DISTRICT

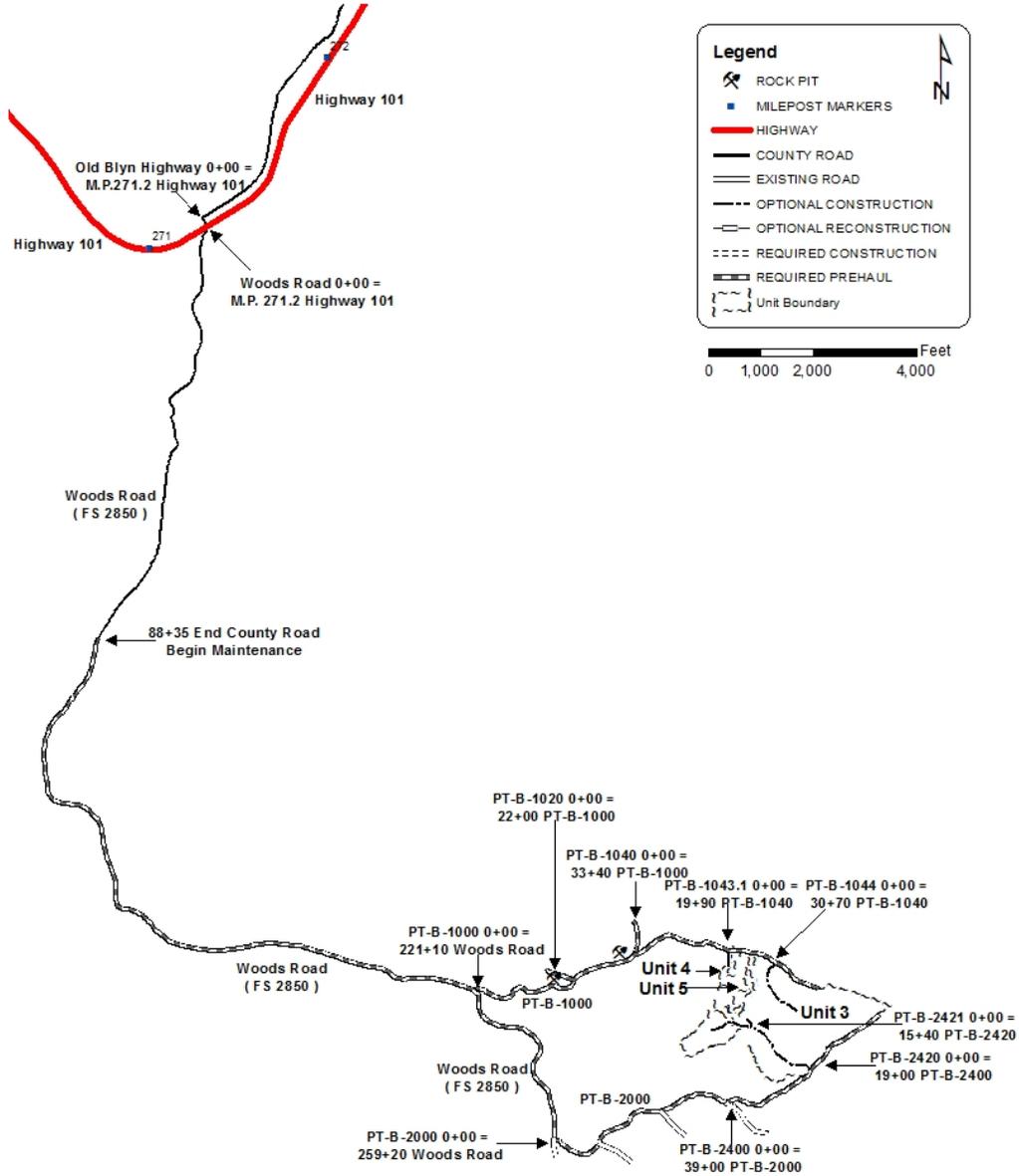
AGREEMENT NO.: 30-093651

STAFF ENGINEER: TOM BARNES

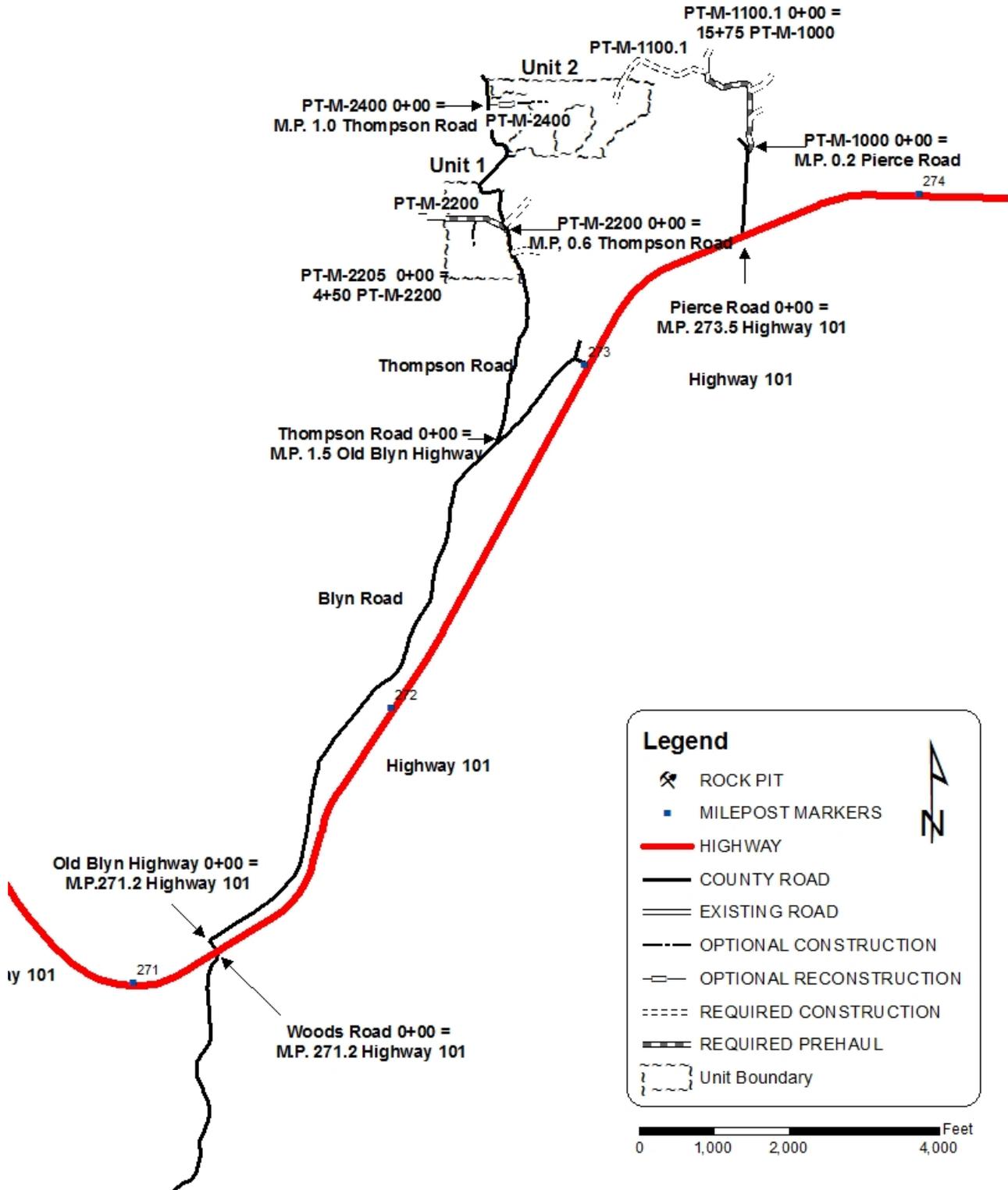
DATE: 06/23/2016

DRAWN & COMPILED BY: TOM BARNES

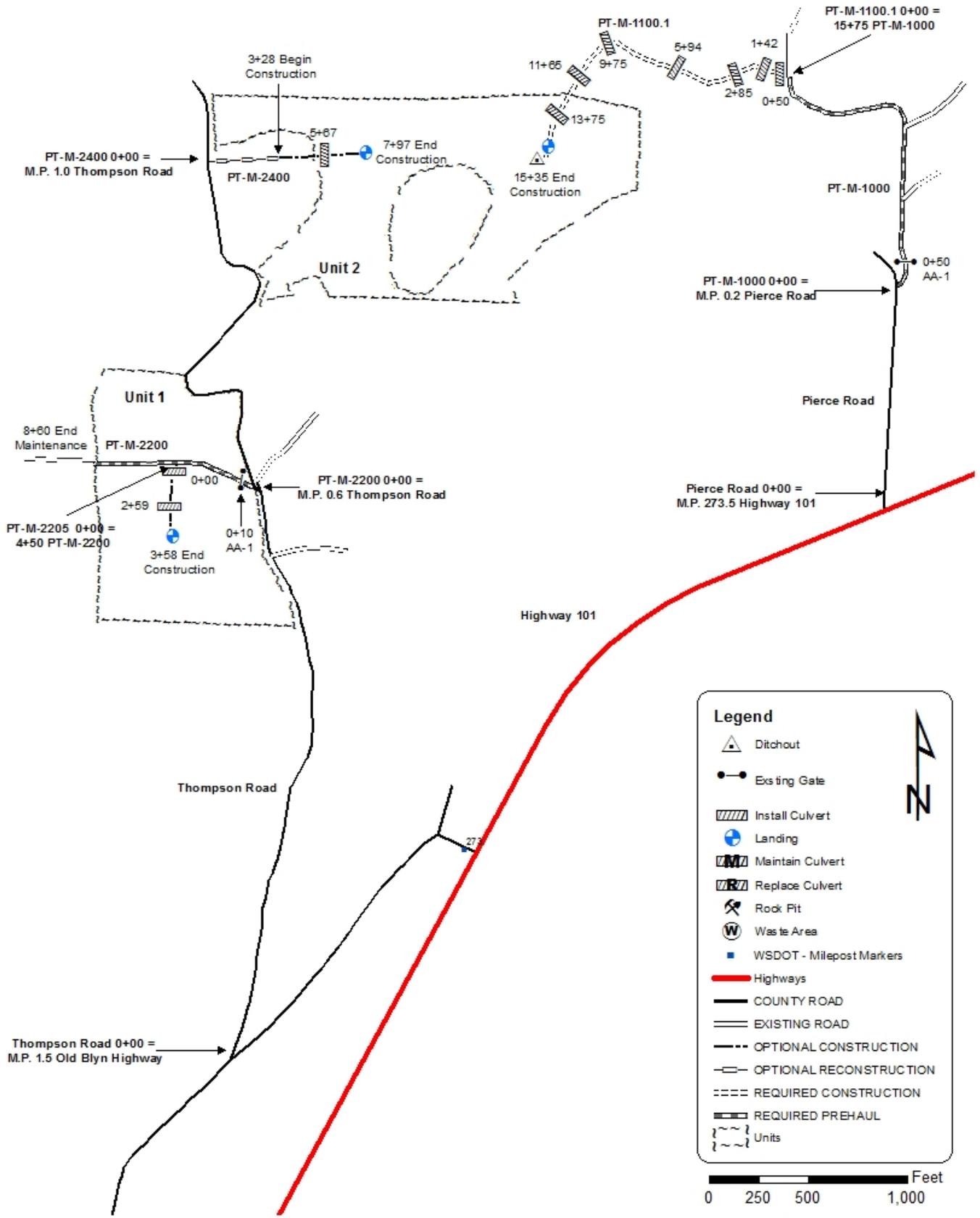
**MAP 1 OF 6
 HARDTAK SORTS VICINITY MAP
 SEC 31 T.30N., R.03W,W.M.**



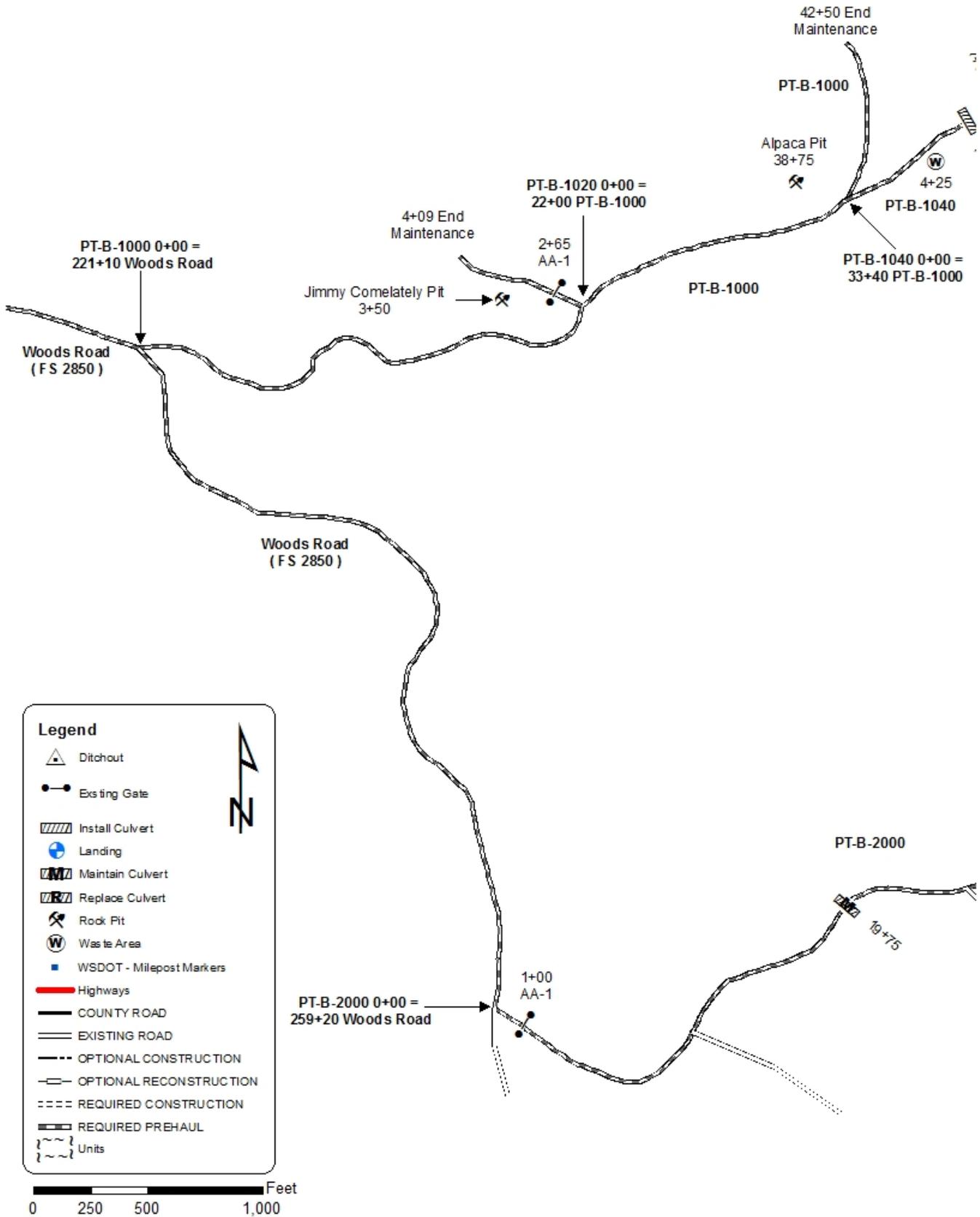
**MAP 2 OF 6
HARDTAK SORTS VICINITY MAP
SEC. 28, 29 T.29N., R.02W,W.M.**



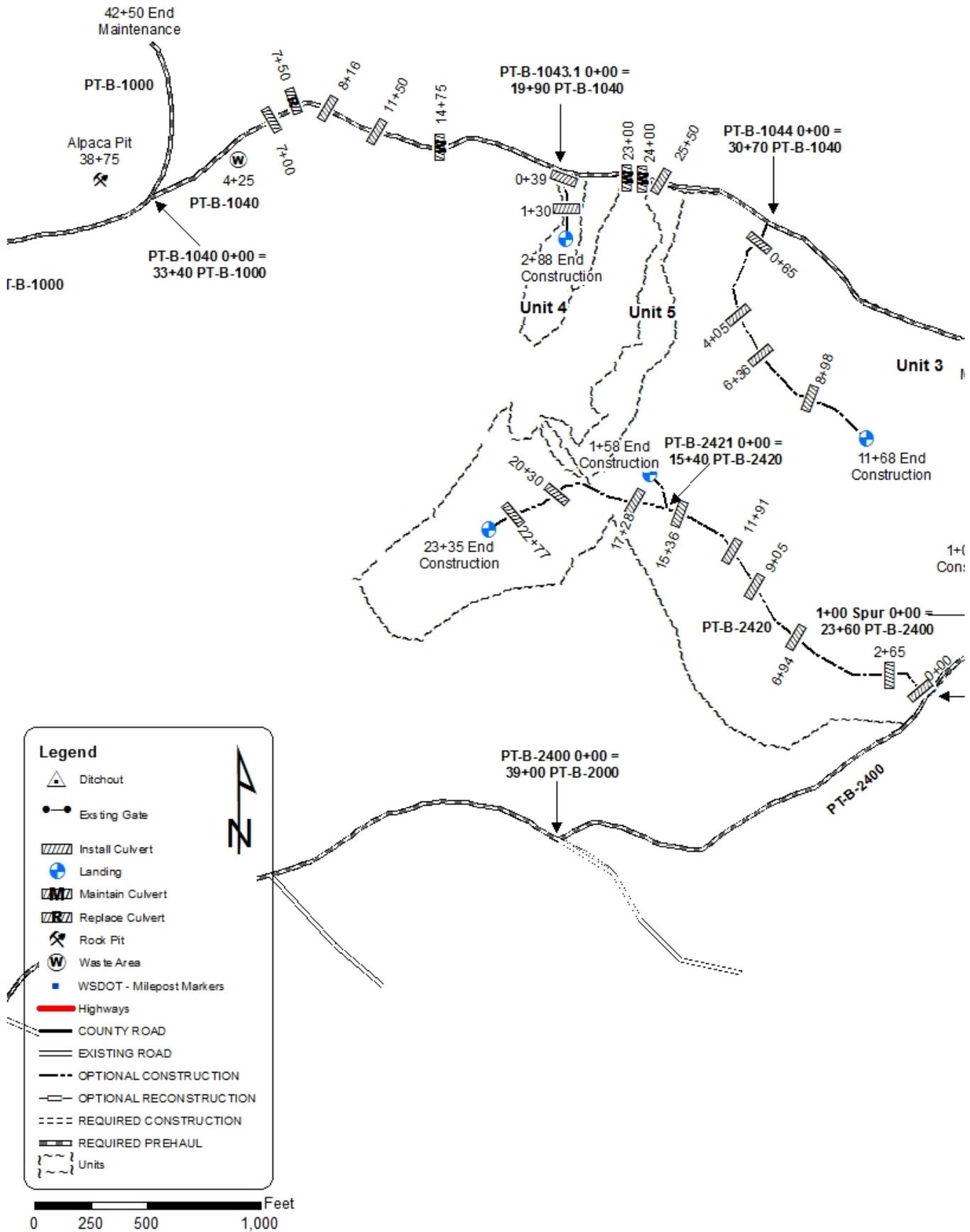
MAP 3 OF 6



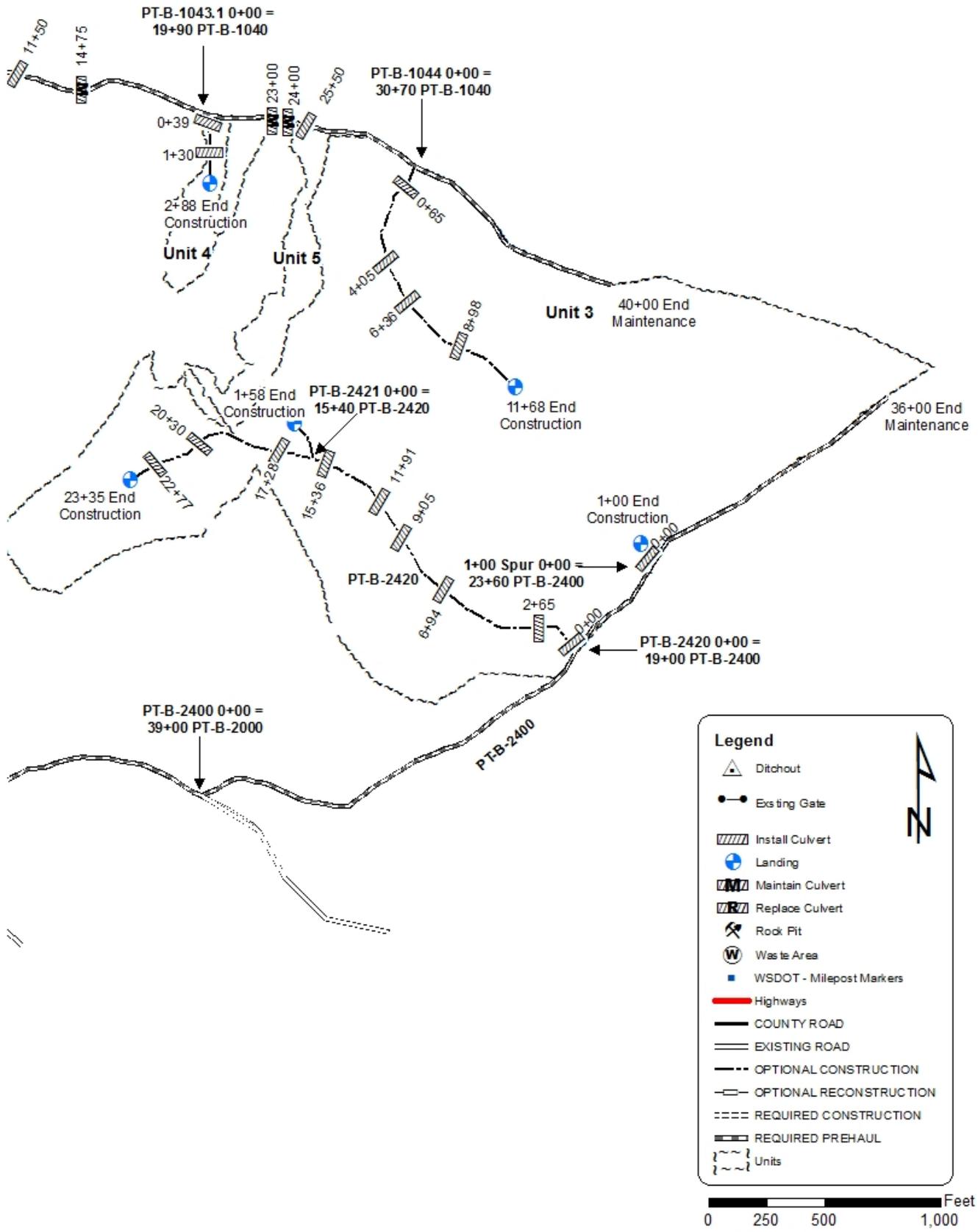
MAP 4 OF 6



MAP 5 OF 6



MAP 6 OF 6



SECTION 0 – SCOPE OF PROJECT

0-1 ROAD PLAN SCOPE

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

0-2 REQUIRED ROADS

The specified work on the following roads is required.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
PT-M-1100.1	0+00 to 15+35	Construction
PT-B-1000	0+00 to 42+50	Prehaul Maintenance
PT-B-1020	0+00 to 4+09	Prehaul Maintenance
PT-B-1040	0+00 to 40+00	Prehaul Maintenance
PT-B-2000	0+00 to 39+00	Prehaul Maintenance
PT-B-2400	0+00 to 36+00	Prehaul Maintenance
PT-M-2200	0+00 to 8+60	Prehaul Maintenance
PT-M-1000	0+00 to 15+75	Prehaul Maintenance
FS-2850 (Woods Road)	88+35 to 259+20	Prehaul Maintenance

0-3 OPTIONAL ROADS

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

<u>Road</u>	<u>Stations</u>	<u>Type</u>
PT-B-1043.1	0+00 to 2+88	Construction
PT-B-1044	0+00 to 11+68	Construction
PT-B-2420	0+00 to 23+35	Construction
PT-B-2421	0+00 to 1+58	Construction
1+00 Spur	0+00 to 1+00	Construction
PT-M-2205	0+00 to 3+58	Construction
PT-M-2400	0+00 to 3+28	Reconstruction
PT-M-2400	3+28 to 7+97	Construction

0-4 CONSTRUCTION

Construction includes, but is not limited to clearing, grubbing, right-of-way debris disposal, excavation and embankment to sub-grade, landing, and turnout construction, culvert installation, fish passage culvert repair, application and manufacture of rock, rock pit development and, erosion control.

0-5 RECONSTRUCTION

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
PT-B-2000	19+75	Building three rip rap structures, streambed material placement, and large woody debris placement in a Type 3 Stream in accordance with the B-2000 CULVERT DETAIL.
PT-M-2400	0+00 to 3+28	Brushing, ripping, shaping, and grading the roadbed, ditch construction, and rock application.

0-6 PRE-HAUL MAINTENANCE

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
PT-B-1000	0+00 to 42+50	Grading and compacting, ditch cleaning, culvert cleaning, and spot rock application.
PT-B-1020	0+00 to 4+09	Grading and compacting, ditch cleaning, and culvert cleaning.
PT-B-1040	0+00 to 40+00	Brushing, grading and compacting, ditch cleaning, culvert cleaning and installation, and spot rock application. Installation of a 48" x 55' culvert at 7+50.
PT-B-2000	0+00 to 39+00	Brushing, grading and compacting, ditch cleaning, culvert cleaning, and spot rock application
PT-B-2400	0+00 to 36+00	Brushing, grading and compacting, ditch cleaning, culvert cleaning, spot rock application, and gate maintenance.
PT-M-2200	0+00 to 8+60	Grading and compacting, ditch cleaning, culvert cleaning, and spot rock application, gate maintenance.
PT-M-1000	0+00 to 15+75	Grading and compacting, ditch cleaning, culvert cleaning, and spot rock application, gate maintenance.
FS-2850	88+35 to 259+20	Grading and compacting, ditch cleaning, culvert cleaning, and spot rock application.

0-7 POST-HAUL MAINTENANCE

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

0-10 ABANDONMENT

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

0-12 DEVELOP ROCK SOURCE

Purchaser may develop an existing rock source. Rock source development will involve work described in the Alpaca Pit Development Plan. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

If the Contractor 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, Contractor shall obtain approval from the State for the submitted plan.

1-2 NON-COMPLIANCE WITH STATE ROAD PLAN

Quantities established in this road plan are minimum acceptable values. Additional quantities required by the state due to non-compliance or the Contractor's choice of construction techniques will be at the Contractor's expense.

1-3 ROAD DIMENSIONS

Contractor 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 design data (plan, profile, and cross-sections).

1-4 ROAD TOLERANCES

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

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

1-6 ORDER OF PRECEDENCE

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

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

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

Contractor 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 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.

1-10 WSDOT STANDARD SPECIFICATION REFERENCE

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

1-15 ROAD MARKING

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

- Orange paint and flagging for prehaul maintenance, reconstruction, and construction work.

1-18 REFERENCE POINT DAMAGE

Contractor 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 Contractor resets all moved or damaged RPs.

1-20 COMPLETE BY DATE

Contractor shall complete pre-haul road work before the start of timber haul.

1-21 HAUL APPROVAL

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

1-22 WORK NOTIFICATIONS

Contractor shall notify the Contract Administrator a minimum of 7 calendar days before work begins.

1-23 ROAD WORK PHASE APPROVAL

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

- Subgrade compaction including drainage installation
- 6" Jaw Run Rock application
- 2" Minus Crushed Rock application

1-25 ACTIVITY TIMING RESTRICTION

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

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

<u>Road</u>	<u>Stations</u>	<u>Activity</u>	<u>Closure Period</u>
All	All	All	November 1 st to March 31 st

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTION, Contractor shall provide a maintenance plan to include further protection of state resources. Contractor shall obtain written approval from the Contract Administrator for the maintenance plan, and shall put preventative measures in place before operating during the closure period. Contractor is required to maintain all haul roads at their own expense including those listed in Contract Clause C-060.1 DESIGNATED ROAD MAINTAINER and P-032.1 PAYMENT FOR ROAD CONSTRUCTION. If

other operators are using, or desire to use these designated maintainer roads, a joint operating plan must be developed. All parties shall follow this plan.

1-29 SEDIMENT RESTRICTION

Contractor shall not allow silt-bearing runoff to enter any streams.

1-30 CLOSURE TO PREVENT DAMAGE

In accordance with Contract Clause G-220.1 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 roads.
- Wheel track rutting exceeds 4 inches on crushed rock roads.
- Surface or base stability problems persist.
- Weather is such that satisfactory results cannot be obtained in an area of operations.

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, Contractor shall cease operations, or perform corrective maintenance or repairs, subject to specifications within this road plan. Before and during any suspension, Contractor shall protect the work from damage or deterioration.

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

Contractor 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 Contractor's expense, as directed by the Contract Administrator when authorized by the county or WSDOT.

1-43 ROAD WORK AROUND UTILITIES

Road work is in close proximity to a utility. Known utilities are listed, but it is the Contractor's responsibility to identify any utilities not listed. Contractor shall work in accordance with all applicable laws or rules concerning utilities. Contractor is responsible for all notification, including "call before you dig", and liabilities associated with the utilities and their rights-of-way.

<u>Road</u>	<u>Station</u>	<u>Utility</u>
PT-M-2200	0+00	Buried and Overhead
PT-M-2400	0+00	Buried and Overhead

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

Contractor 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 – CONTRACTOR MAINTENANCE

Contractor shall perform maintenance on roads listed in Contract Clause C-050.1 CONTRACTOR ROAD MAINTENANCE AND REPAIR in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-3 ROAD MAINTENANCE – DESIGNATED MAINTAINER

Contractor may be required to perform maintenance on roads listed in Contract Clause C-060.1 DESIGNATED ROAD MAINTAINER as directed by the Contract Administrator. Contractor shall maintain roads in accordance with FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS.

2-4 PASSAGE OF LIGHT VEHICLES

Contractor shall maintain roads in a condition that will allow the passage of light administrative vehicles.

2-5 MAINTENANCE GRADING – EXISTING ROAD

On the following road(s), Contractor shall use a grader to shape the existing surface before timber haul.

<u>Road</u>	<u>Stations</u>
PT-B-1000	0+00 to 42+50
PT-B-1040	0+00 to 40+00
PT-B-2400	0+00 to 36+00
PT-B-2000	0+00 to 39+00
PT-M-2200	0+00 to 8+60
PT-M-1000	0+00 to 15+75
FS-2850	88+35 to 221+10

2-6 CLEANING CULVERTS

On the following road(s), Contractor shall clean the inlets and outlets of all culverts and shall obtain written approval from the Contract Administrator before before spot rock application.

<u>Road</u>	<u>Stations</u>
PT-B-1000	0+00 to 42+50
PT-B-1020	0+00 to 4+09
PT-B-1040	0+00 to 40+00
PT-B-2000	0+00 to 39+00
PT-B-2400	0+00 to 36+00
PT-M-2200	0+00 to 8+60
PT-M-1000	0+00 to 15+75
FS-2850	0+00 to 259+20

2-7 CLEANING DITCHES, HEADWALLS, AND CATCH BASINS

On the following road(s), Contractor shall clean ditches, headwalls, and catchbasins. Work must be completed before rock application and must be done in accordance with the 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>
PT-B-1000	0+00 to 42+50
PT-B-1020	0+00 to 4+09
PT-B-1040	0+00 to 40+00
PT-B-2000	0+00 to 39+00
PT-B-2400	0+00 to 36+00
PT-M-2200	0+00 to 8+60
PT-M-1000	0+00 to 15+75
FS-2850	88+35 to 259+20

2-8 MAINTAINING EROSION CONTROL STRUCTURES

Contractor shall clean and maintain all erosion control structures. Work must be completed before timber haul and must be done in accordance with the SEDIMENT TRAP DETAIL. Excavated material must be scattered outside the grubbing limits.

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

3-1 BRUSHING

On the following road(s), Contractor shall cut vegetative material up to 1 inches in diameter, including limbs, as shown on the BRUSHING DETAIL. Brushing must be achieved by manual or mechanical cutting of brush, trees, and branches. Root systems and stumps of cut vegetation may not be disturbed unless directed by the Contract

Administrator. Contractor shall remove brushing debris from the road surface, ditchlines, and culvert inlets and outlets.

<u>Road</u>	<u>Stations</u>
PT-B-1040	0+00 to 40+00
PT-B-2400	0+00 to 36+00

3-2 BRUSHING RESTRICTION

Pulling, digging, pushing over, and other non-cutting methods used for vegetation removal may not be used for brushing. Excavator buckets, log loaders and similar equipment may not be used for brushing unless otherwise approved in writing by the Contract Administrator.

3-5 CLEARING

Contractor shall fall all vegetative material larger than 1 inch DBH or over 3 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.

3-6 CLEARING WITHIN RIPARIAN AREA AT TYPE 1-3 STREAM CROSSING

Contractor shall place a 12 foot log, in the stream in accordance with the B-2000 CULVERT REPAIR DETAIL.

3-7 RIGHT-OF-WAY DECKING

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

3-8 PROHIBITED DECKING AREAS

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

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

3-10 GRUBBING

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

3-12 STUMP PLACEMENT

Contractor shall place grubbed stumps outside of the clearing limits and in compliance with all other clauses in this road plan. Stumps must be positioned upright, with root wads in contact with the forest floor on stable locations.

3-14 STUMPS WITHIN DESIGNATED WASTE AREAS

Contractor 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 clearing limits as shown on the TYPICAL SECTION SHEET.

3-23 PROHIBITED DISPOSAL AREAS

Contractor shall not place organic debris in the following areas:

- Within 50 feet of a cross drain culvert.
- On road subgrades, or excavation and embankment slopes.
- On slopes greater than 40%.
- Within the operational area for cable landings where debris may shift or roll.
- On locations where brush can fall into the ditch or onto the road surface.
- Against standing timber.

3-24 BURYING ORGANIC DEBRIS RESTRICTED

Contractor shall not bury organic debris unless otherwise stated in this plan.

3-25 SCATTERING ORGANIC DEBRIS

Contractor shall scatter organic debris outside of the clearing limits in natural openings on the side of the road. Where natural openings are unavailable or restrictive, alternate debris disposal methods are subject to the written approval of the Contract Administrator.

3-30 EXCLUSION OF DOZER BLADES

Contractor shall not use dozer blades for the piling of organic debris.

3-31 PILING

Contractor shall pile organic debris no closer than 20 feet from standing timber and no higher than 10 feet in areas specified in Clause 3-22 DESIGNATED WASTE AREA FOR ORGANIC DEBRIS. Piles must be free of rock and soil.

SECTION 4 – EXCAVATION

4-1 EXCAVATOR CONSTRUCTION

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

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

Contractor shall follow these standards for road grade and alignment:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 12 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 5% in 100 feet.
- Maximum grade change for crest vertical curves is 4% in 100 feet.

4-4 SWITCHBACK STANDARDS

A switchback is defined as a curved segment of road between a beginning and end of the same curve, where the change of traffic travel direction is greater than 90 degrees.

Contractor shall follow these standards for switchbacks:

- Maximum adverse grades for switchbacks is 10% of the curve radius.
- Maximum favorable grades for switchbacks is 12%.
- Maximum transition grades entering and leaving switchbacks is a 5% grade change.
- Transition grades required to meet switchback grade limitations must be constructed on the tangents preceding and departing from the switchbacks.

4-5 CUT SLOPE RATIO

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

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

4-6 EMBANKMENT SLOPE RATIO

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

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

4-7 SHAPING CUT AND FILL SLOPE

Contractor 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.

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

4-21 TURNOUTS

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

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

Contractor shall construct 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

Contractor shall not pull ditch material across the road or mix in with the road surface. Excavated material must be scattered outside the clearing limits.

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts or ditchouts.

4-29 DITCHOUTS

Contractor shall construct ditchouts at locations shown on the CULVERT LIST and as needed. Ditchouts must be constructed in a manner that diverts ditch water onto the forest floor and must have excavation backslopes no steeper than a 1:1 ratio. L or R denotes ditchout left or ditchout right.

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

Contractor 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

Contractor shall deposit waste material in the listed designated areas. The amount of material allowed in a waste area is as listed.

<u>Road</u>	<u>Waste Area Location</u>	<u>Volume (c.y.)</u>	<u>Comments</u>
PT-B-1040	4+25	1000	Waste on downhill side of road

4-38 PROHIBITED WASTE DISPOSAL AREAS

Contractor shall not deposit waste material in the following areas, except as otherwise specified in this plan:

- Within 50 feet of a cross drain culvert.
- Within 100 feet of a live stream or wetland.
- Within a riparian management zone.
- 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.

4-46 COMMON BORROW

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

4-47 NATIVE MATERIAL

Native material consists of naturally occurring material that is free of organic debris, trash, and rocks greater than 6 inches in any dimension.

4-55 ROAD SHAPING

Contractor 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

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

4-60 FILL COMPACTION

Contractor shall compact all embankment and waste material in accordance with the COMPACTION LIST by routing equipment over the entire width of each lift. A plate compactor must be used for segments too narrow to accommodate equipment. Waste material may be placed by end-dumping or sidecasting until sufficiently wide enough to support the equipment.

4-61 SUBGRADE COMPACTION

Contractor shall compact constructed subgrades deeper than 5 feet at the road shoulder in accordance with the COMPACTION LIST by routing equipment over the entire width except ditch. Contractor shall obtain written approval from the Contract Administrator for subgrade compaction before rock application.

4-62 DRY WEATHER COMPACTION

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

4-63 EXISTING SURFACE COMPACTION

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

SECTION 5 – DRAINAGE

5-1 REMOVAL OF SHOULDER BERMS

Contractor shall remove berms from road shoulders.

5-5 CULVERTS

Contractor shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the CULVERT LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts must be new material and meet the specifications in Clauses 10-15 through 10-23.

5-11 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. Contractor shall stockpile materials the Port Angeles Work Center.

5-15 CULVERT INSTALLATION

Culvert installation must be in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL and the National Corrugated Metal Pipe Association's "Installation Manual for Corrugated Steel Drainage Structures and the Corrugated Polyethylene Pipe Association's "Recommended Installation Practices for Corrugated Polyethylene Pipe and Fittings".

5-16 APPROVAL FOR LARGER CULVERT INSTALLATION

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

5-17 CROSS DRAIN SKEW AND SLOPE

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

5-18 CULVERT DEPTH OF COVER

Cross drain culverts must be installed with a depth of cover of not less than 1 foot of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts must be installed with a depth of cover specified in the Engineer's design.

5-20 ENERGY DISSIPATERS

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

The type of energy dissipater and the amount of material must be consistent with the specifications listed on the CULVERT LIST. Energy dissipaters must extend a minimum of 1 foot to each side of the culvert at the outlet and a minimum of 2 feet beyond the outlet. Rock must be set in place by machine. Placement must be by zero-drop-height method only. No placement by end dumping or dropping of rock is allowed. LIGHT LOOSE RIP RAP shall meet the specifications in Clause 6-50 LIGHT LOOSE RIP RAP.

5-21 DOWNSPOUTS AND FLUMES

Downspouts and flumes longer than 10 feet must be staked on both sides at maximum intervals of 10 feet with 6-foot heavy-duty steel posts, and fastened securely to the posts with 1/4-inch bolts in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL.

5-25 CATCH BASINS

Contractor shall construct catch basins in accordance with CULVERT AND DRAINAGE SPECIFICATION DETAIL. Minimum dimensions of catch basins are 2 feet wide and 4 feet long.

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Contractor 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 used for headwalls must be LIGHT LOOSE RIP RAP. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets. Minimum specifications require that rock be placed at a width of one culvert diameter on each side of the culvert opening, and to a height of one culvert diameter above the top of the culvert. Rock may not restrict the flow of water into culvert inlets or catch basins. Rock must be set in place by machine. Placement must be by zero-drop-height method only. No placement by end dumping or dropping of rock is allowed. LIGHT LOOSE RIP RAP shall meet the specifications in Clause 6-50 LIGHT LOOSE RIP RAP.

5-27 ARMORING FOR STREAM CROSSING CULVERTS

At the following culvert(s), Contractor shall place LIGHT LOOSE RIP RAP in conjunction with construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets as designated on the CULVERT LIST. Rock may not restrict the flow of water into culvert inlets or catch basins. Rock must be set in place by machine. No placement by end dumping or dropping of rock is allowed. LIGHT LOOSE RIP RAP must meet the specifications in Clause 6-50 LIGHT LOOSE RIP RAP.

<u>Road</u>	<u>Stations</u>	<u>Rock Type</u>
PT-B-2000	19+75	Light Loose Rip Rip

SECTION 6 – ROCK AND SURFACING

6-2 ROCK SOURCE ON STATE LAND

Rock used in accordance with the quantities on the B-2000 CULVERT REPAIR DETAIL, ROCK LIST, and CULVERT LIST may be obtained from the following source(s) on state land at no charge to the Contractor. Contractor 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. Contractor shall notify the Contract Administrator a minimum of 7 calendar days before starting any operations in the listed locations.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
Alpaca Pit	42+50 of the PT-B-1000	Light Loose Rip Rap Shot Rock 6" Jaw Run

6-3 ROCK SOURCE STATE LAND, EXISTING STOCKPILE

Rock used in accordance with the quantities on the ROCK LIST and CULVERT LIST may be obtained from the following existing stockpile(s) on state land at no charge to the Contractor. Contractor shall not remove additional yardage without prior written approval from the Contract Administrator. Other stockpiles may not be used without prior written approval from the Contract Administrator.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>	<u>Quantity</u>
Jimmycomelately Stockpile	4+00 of the PT-B-1020	2" – CRUSHED ROCK	3,200 c.y.

6-5 ROCK FROM COMMERCIAL SOURCE

Rock used in accordance with the quantities on B-2000 CULVERT REPAIR DETAIL, ROCK LIST, or CULVERT LIST may be obtained from any commercial source at the Contractor's expense. Rock sources are subject to written approval by the Contract Administrator before their use. Contractor shall submit laboratory Los Angeles Rattler test(s) for the rock to be used to the Contract Administrator.

6-25 FINES

% Passing U.S. #40 sieve	100%
% Passing U.S. #200 sieve	0%

The portion of aggregate retained on the No. 200 sieve may not contain more than 0.2 percent organic debris and trash. All percentages are by weight.

6-30 2-INCH MINUS CRUSHED ROCK

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

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

6-39 6-INCH JAW RUN ROCK

% Passing 6" in one dimension	100%
% Passing 3" square sieve	45 - 65%

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

6-42 SHOT ROCK

No more than 10 percent of the rock by weight may exceed 8 inches in any dimension and no rock may be larger than 12 inches in any dimension. Shot Rock rock may not contain more than 5 percent by weight of organic debris, dirt, and trash.

6-50 LIGHT LOOSE RIP RAP

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

<u>At Least/Not More Than</u>	<u>Size Range</u>
20% / 90%	20" - 36"
80% / --	12" - 30"
10% / 20%	3" - 8"

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

Measurement of specified rock depths, are defined as the compacted depth(s) using the compaction methods required in this road plan. Estimated quantities specified in the ROCK LIST are loose yards. Contractor shall apply adequate amounts of rock to meet the specified rock depths. Specified rock depths are minimum requirements and are not subject to reduction.

6-56 ROCK MEASUREMENT BY TRUCK VOLUME

Measurement of landing, turnout, pipe bedding rock, light loose rip rap, spot rock and shot rock is on a cubic yard truck measure basis. Contractor 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. Contractor shall maintain load tally sheets for each truck as shown in ROCK ACCOUNTABILITY DETAIL and shall give them to the Contract Administrator on a weekly basis during rocking operations.

6-71 ROCK APPLICATION

Contractor shall apply rock in accordance with the specifications and quantities shown on the ROCK LIST. Rock must be spread, shaped, and compacted full width concurrent with rock hauling operations. The Contract Administrator will direct locations for rock that is to be applied as spot patching. Road surfaces must be compacted in accordance with the COMPACTION LIST by routing equipment over the entire width.

6-72 ROCK APPLICATION AFTER HAULING

On the following road(s), upon completion of all hauling operations, Contractor shall apply 2" MINUS CRUSHED ROCK in accordance with the quantities shown on the ROCK LIST.

<u>Road</u>	<u>Stations</u>
PT-B-2420	0+00 to 23+35
PT-B-1000	0+00 to 42+50
PT-B-2000	0+00 to 39+00
FS-2850	88+35 to 259+20

6-73 ROCK FOR WIDENED PORTIONS

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

SECTION 7 – STRUCTURES

7-5 STRUCTURE DEBRIS

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

7-6 STREAM CROSSING INSTALLATION

Contractor shall install stream crossing structures in accordance with the manufacturer's requirements, FPHP, and TYPICAL LIVE STREAM CULVERT DETAIL.

7-7 BANK PROTECTION FOR STREAM CROSSING STRUCTURES

Bank protection must be designed and constructed to prevent the undermining of the structure.

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

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

7-57 CULVERT SHAPE CONTROL

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

7-70 GATE CLOSURE

Contractor shall keep gates closed and locked except during periods of haul. All gates must be closed at termination of use.

7-75 GATE MAINTENANCE

Contractor shall conduct gate maintenance as listed. Contractor shall remove all old gate material from state land before the termination of the contract.

<u>Road</u>	<u>Station</u>	<u>Requirements</u>
PT-M-2200	0+10	Sand and paint with 2 coats of safety yellow. Lubricate hinges.
PT-M-1000	0+50	Sand and paint with 2 coats of safety yellow. Lubricate hinges.
PT-B-1020	2+65	Sand and paint with 2 coats of safety yellow. Lubricate hinges.
PT-B-2000	1+00	Sand and paint with 2 coats of safety yellow. Lubricate hinges.

SECTION 8 – EROSION CONTROL**8-2 PROTECTION FOR EXPOSED SOIL**

Contractor shall provide and evenly spread a 4-inch layer of straw to all exposed soils within 100 feet of a stream or wetland. Soils may not sit exposed during any rain event.

8-15 REVEGETATION

On the following road(s), Contractor shall spread GRASS SEED on all exposed soils within the grubbing limits resulting from road work activities. Cover all exposed soils 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>Road</u>	<u>Location</u>	<u>Qty (lbs)*</u>	<u>Type</u>
PT-M-1100.1	0+00 to 15+35	78	GRASS SEED
PT-B-1040	7+50	4	GRASS SEED
PT-B-1043.1	0+00 to 2+88	15	GRASS SEED
PT-B-1044	0+00 to 11+68	59	GRASS SEED
PT-B-2000	19+75	2	GRASS SEED
PT-B-2420	0+00 to 23+35	118	GRASS SEED
PT-B-2421	0+00 to 1+58	8	GRASS SEED
PT-M-2400	0+00 to 7+97	35	GRASS SEED
1+00 Spur	0+00 1+00	5	GRASS SEED

*Quantities are estimates only.

8-16 REVEGETATION SUPPLY

The Contractor shall provide the GRASS SEED.

8-17 REVEGETATION TIMING

Contractor shall revegetate during the first available opportunity after road work is completed.

8-18 PROTECTION FOR SEED

Contractor shall provide a protective cover for seed on all exposed soils within 100 feet of streams or wetlands. The protective cover may consist of straw. Seed must be covered before the first anticipated storm event. The protective cover requirement may be waived in writing by the Contract Administrator if Contractor is able to demonstrate a revegetation plan that will result in the establishment of a uniform dense crop (at least 50% coverage) of 3-inch tall grass by October 31.

8-19 ASSURANCE FOR SEEDED AREA

Contractor shall ensure the growth of a uniform and dense crop (at least 50% coverage) of 3-inch tall grass. Contractor 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 addition cost to the state.

8-25 GRASS SEED

Contractor 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.

<u>Kind and Variety of Seed in Mixture</u>	<u>% by Weight</u>	<u>Minimum % germination</u>
Perennial Rye	40	90
Red Fescue	40	90
Highland Bent	10	85
White Clover	10	90

SECTION 9 – POST-HAUL ROAD WORK

9-1 EARTHEN BARRICADES

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

<u>Road</u>	<u>Station</u>
PT-M-2400	0+10

9-3 CULVERT MATERIAL REMOVED FROM STATE LAND

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

9-5 POST-HAUL MAINTENANCE

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

<u>Road</u>	<u>Stations</u>	<u>Additional Requirements</u>
PT-M-1100.1	0+00 to 15+35	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.
PT-B-1000	0+00 to 42+50	Grade, shape, & compact. Clean cut slopes, ditches, and culverts. Apply Spot Rock as called for in ROCK LIST.
PT-B-1020	0+00 to 4+09	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.
PT-B-1040	0+00 to 40+00	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.
PT-B-2000	0+00 to 39+00	Grade, shape, & compact. Clean cut slopes, ditches, and culverts. Apply Spot Rock as called for in ROCK LIST.
PT-B-2400	0+00 to 36+00	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.
PT-M-2200	0+00 to 8+60	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.
PT-M-1000	0+00 to 15+75	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.
FS-2850	88+35 to 221+10	Grade, shape, & compact. Clean cut slopes, ditches, and culverts. Apply Spot Rock as called for in ROCK LIST.
PT-B-1043.1	0+00 to 2+88	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.
PT-B-1044	0+00 to 11+68	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.
PT-B-2420	0+00 to 23+35	Grade, shape, & compact. Clean cut slopes, ditches, and culverts. Apply Spot Rock as called for in ROCK LIST.
PT-B-2421	0+00 to 1+58	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.
1+00 Spur	0+00 to 1+00	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.
PT-M-2205	0+00 to 3+58	Grade, shape, & compact. Clean cut slopes, ditches, and culverts.

9-10 LANDING DRAINAGE

Contractor shall provide for drainage of the landing surface.

9-21 ROAD ABANDONMENT

Contractor shall abandon the following roads before the termination of this contract. Work must be in accordance with the ROAD ABANDONMENT CROSS SECTIONS DETAIL.

<u>Road</u>	<u>Stations</u>
PT-M-2400	0+00 to 7+97

9-22 ABANDONMENT

- Remove road shoulder berms except as directed.
- Construct non-drivable waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical drop of no more than 10 feet between waterbars or between natural drainage paths and with a maximum spacing of 100 feet, and directly above every culvert.
- Skew waterbars at least 30 degrees from perpendicular to the road centerline on roads in excess of 3 percent grade.
- Key waterbars into the cut-slope to intercept the ditch. Waterbars must be outsloped to provide positive drainage. Outlets must be on stable locations.
- Slope all trench walls and approach embankments no steeper than 1.5:1.
- Apply grass seed concurrently with abandonment and in accordance with Section 8 EROSION CONTROL.
- Cover, concurrently with abandonment, all exposed soils within 100 feet of any live stream, with a 4-inch deep layer of straw.
- Block roads with earthen barricades in accordance with the attached EARTHEN BARRICADE DETAIL.

10-15 CORRUGATED STEEL CULVERT

Metallic coated steel culverts must meet AASHTO M-36 (ASTM A-760) specifications. Culverts must be galvanized (zinc coated meeting AASHTO M-218) except culverts over 24 inches must be aluminized (aluminum type 2 coated meeting AASHTO M-274).

10-17 CORRUGATED PLASTIC CULVERT

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

10-20 FLUME AND DOWNSPOUT

Downspouts and flumes must meet the AASHTO specification designated for the culvert. Plastic downspouts and flumes must be Type C – corrugated single walled pipe.

10-21 METAL BAND

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

10-22 PLASTIC BAND

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

10-23 RUBBER CULVERT GASKETS

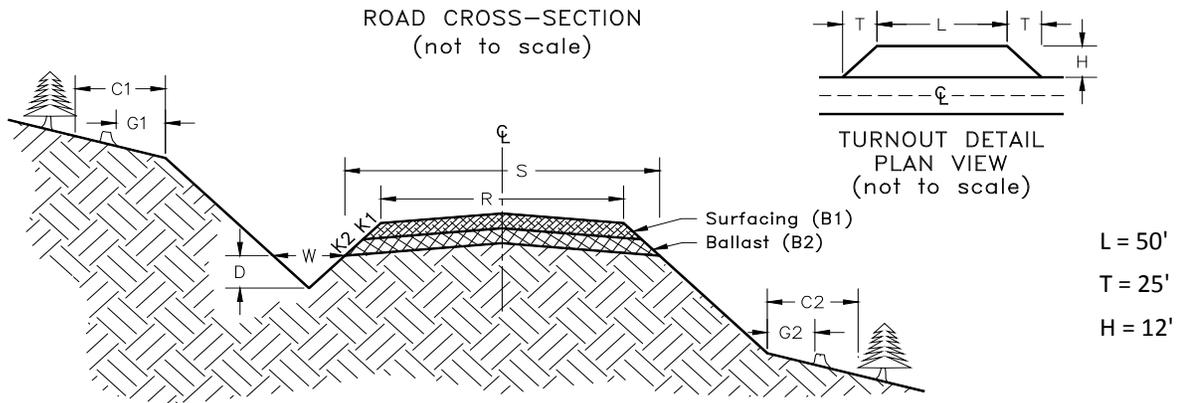
Rubber gaskets must be continuous closed cell, synthetic expanded rubber gaskets conforming to the requirements of ASTM D 1056. Rubber gaskets must be used with all corrugated metal pipe coupling bands.

10-24 GAGE AND CORRUGATION

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

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

TYPICAL SECTION SHEET



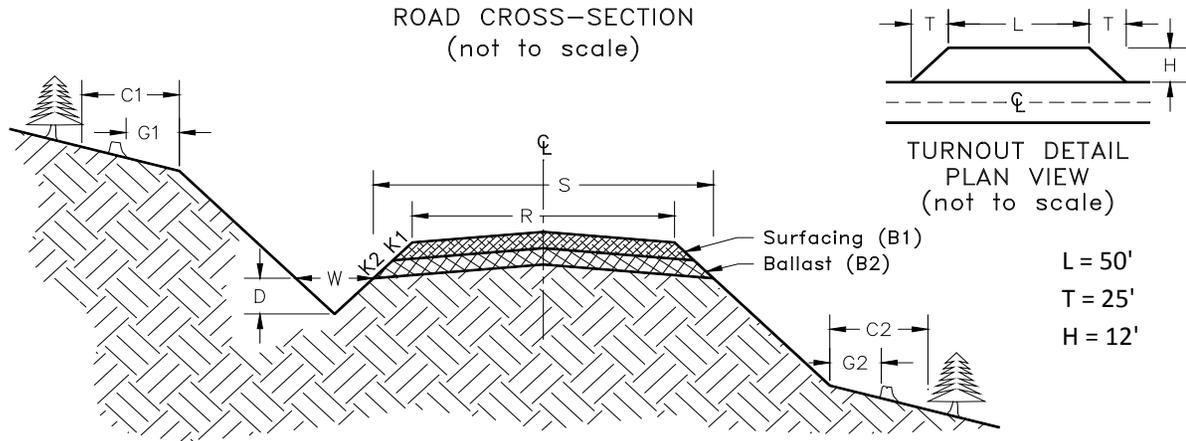
Road Name	Stations		Tolerance Class	Subgrade Width	Road Width	Ditch		Crown @ CL (in)	Grubbing Limits		Clearing Limits	
	From	To				Width	Depth		G1	G2	C1	C2
PT-M-1100.1	0+00	15+35	C	18	12	3	1	3	3	3	5	5
PT-B-1043.1	0+00	2+88	C	16	12	3	1	3	3	3	5	5
PT-B-1044	0+00	11+68	C	16	12	3	1	3	3	3	5	5
PT-B-2000	0+00	39+00	C	16	12	3	1	3	3	3	5	5
PT-B-2420	0+00	3+93	C	20	12	3	1	3	3	3	5	5
PT-B-2420	3+93	9+05	C	24	12	3	1	3	3	3	5	5
PT-B-2420	9+05	23+35	C	20	12	3	1	3	3	3	5	5
PT-B-2421	0+00	1+58	C	16	12	3	1	3	3	3	5	5
PT-M-2205	0+00	3+58	C	16	12	3	1	3	3	3	5	5
PT-M-2400	0+00	3+28	C	16	12	3	1	3	3	3	5	5
PT-M-2400	3+28	7+97	C	16	12	3	1	3	3	3	5	5
1+00 SPUR	0+00	1+00	C	16	12	3	1	3	3	3	5	5
PT-B-1000	0+00	42+50	A	16	12	3	1	3	3	3	5	5
PT-B-1020	0+00	4+09	A	16	12	3	1	3	3	3	5	5
PT-B-1040	0+00	40+00	A	16	12	3	1	3	3	3	5	5
PT-B-2400	0+00	36+00	A	16	12	3	1	3	3	3	5	5
PT-M-2200	0+00	8+60	A	16	12	3	1	3	3	3	5	5
PT-M-1000	0+00	15+75	A	Varies	Varies	3	1	3	3	3	5	5
FS-2850	88+35	259+20	A	Varies	Varies	3	1	3	-	-	-	-

ROCK LIST

SHOT ROCK

Page 1 of 3

A = Jimmycomelately S.P., B = Alpaca Pit, C = Commercial Source



Road Name	Stations		Ballast Slope K1	Compacted Ballast Depth (in) B1	C. Y./ Sta	Number of Stations	Shot Rock Road Total	Rock Source
	From	To						
PT-B-2420	3+93	9+05	1.5 : 1	12	100	5.12	512	B or C
	17+28		Fill Over Culvert		100	1.00	100	B or C
PT-B-2000	19+75		Culvert Repair		-	-	20	B or C

SHOT ROCK

632 CUBIC YARDS

LIGHT LOOSE RIP RAP

A = Jimmycomelately S.P., B = Alpaca Pit, C = Commercial Source

Road Name	Stations		Rock Slope K1	Compacted Depth (in) B1	C. Y./ Sta	Number of Stations	LLRR Road Total	Rock Source
	From	To						
PT-M-1100.1	0+00	15+35	-	-	-	15.35	7	B or C
PT-B-1043.1	0+00	2+88	-	-	-	2.88	2	B or C
PT-B-1040	0+00	40+00	-	-	-	40.00	24	B or C
PT-B-1044	0+00	11+68	-	-	-	11.68	4	B or C
PT-B-2000	19+75		-	-	-	-	30	B or C
PT-B-2420	0+00	23+35	-	-	-	23.35	32	B or C
PT-M-2205	0+00	3+58	-	-	-	3.58	2	B or C
PT-M-2400	0+00	7+97	-	-	-	7.97	2	B or C
1+00 SPUR	0+00	1+00	-	-	-	1.00	1	B or C

LLRR

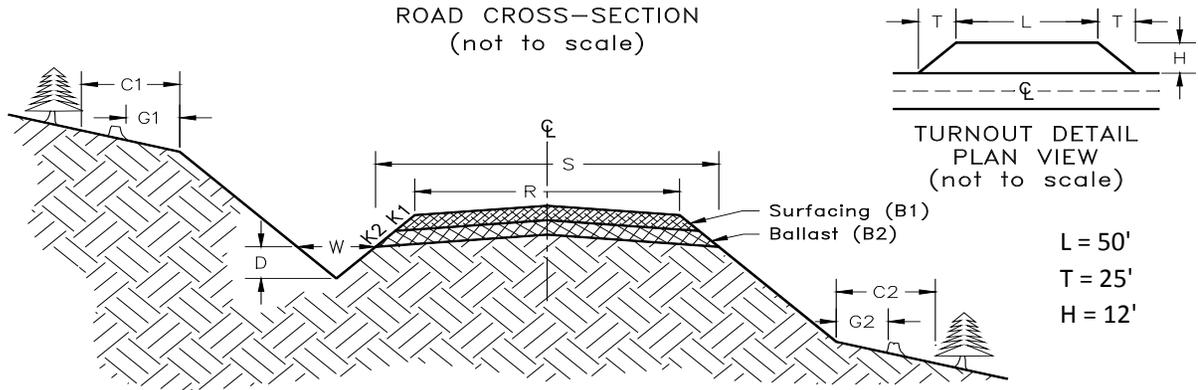
104 CUBIC YARDS

ROCK LIST

6" JAW RUN

Page 2 of 3

A = Jimmycomelately S.P., B = Alpaca Pit, C = Commercial Source



Road Name	Stations		Ballast Slope	Compacted Jaw Depth (in)		C. Y./ Sta	Number of Stations	6" JAW	Rock Source
	From	To		K1	B1				
PT-M-1100.1	0+00	15+35	1.5 : 1	12	70	15.35	1075	B or C	
PT-M-1100.1	TURNOUT		1.5 : 1	12	45	1	45	B or C	
PT-M-1100.1	LANDING		Varies	Varies	50	1	50	B or C	
PT-B-1040	7+50		1.5 : 1	Varies	70	1	25	B or C	
PT-B-1043.1	0+00	2+88	1.5 : 1	12	70	2.88	202	B or C	
PT-B-1043.1	LANDING		Varies	Varies	50	1	50	B or C	
PT-B-1044	0+00	11+68	1.5 : 1	12	70	11.68	818	B or C	
PT-B-1044	TURNOUT		1.5 : 1	12	45	1	45	B or C	
PT-B-1044	LANDING		Varies	Varies	50	1	50	B or C	
PT-B-2420	0+00	23+35	1.5 : 1	12	70	23.35	1635	B or C	
PT-B-2420	TURNOUT		1.5 : 1	12	45	2	90	B or C	
PT-B-2420	LANDING		Varies	Varies	50	1	50	B or C	
PT-B-2421	0+00	1+58	1.5 : 1	12	70	1.58	111	B or C	
PT-B-2421	LANDING		Varies	Varies	50	1	50	B or C	
PT-M-2205	0+00	3+58	1.5 : 1	12	70	3.58	251	B or C	
PT-M-2205	LANDING		Varies	Varies	50	1	50	B or C	
PT-M-2400	3+28	7+97	1.5 : 1	12	70	4.69	328	B or C	
PT-M-2400	LANDING		Varies	Varies	50	1	50	B or C	
1+00 SPUR	0+00	1+00	1.5 : 1	12	70	1.00	70	B or C	
1+00 SPUR	LANDING		Varies	Varies	50	1	50	B or C	

6" JAW RUN

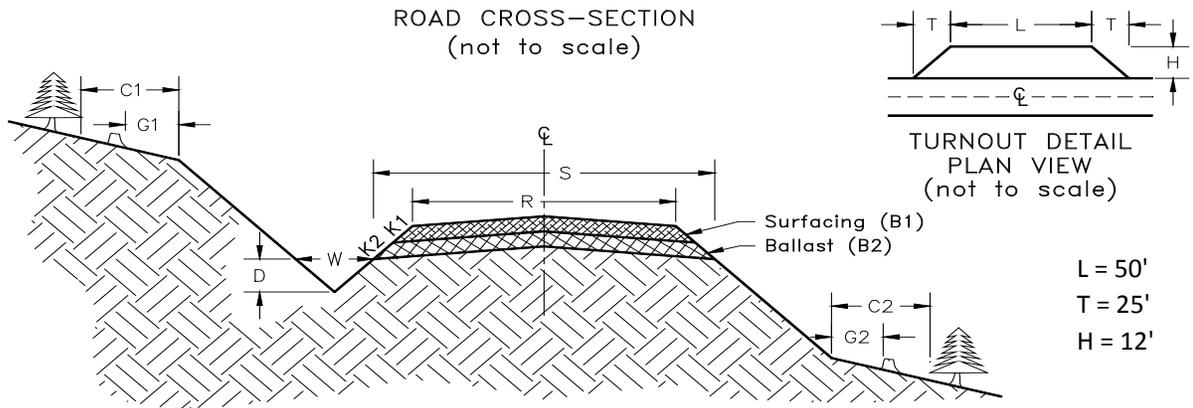
5093 CUBIC YARDS

ROCK LIST

2" MINUS CRUSHED ROCK

Page 3 of 3

A = Jimmycomelately S.P., B = Alpaca Pit, C = Commercial Source

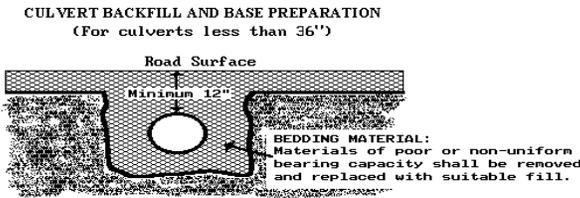


Road Name	Stations		Surface Slope K1	Compacted Surface Depth (in)		C. Y./ Sta	Number of Stations	2" MINUS Yards Total	Rock Source
	From	To		B1					
PT-M-1100.1	0+00	15+35	1.5 : 1	4	22	15.35	338	A or C	
PT-B-1043.1	0+00	2+88	1.5 : 1	Varies	PREHAUL Spot Rock	-	30	A or C	
PT-B-1044	0+00	11+68	1.5 : 1	Varies	PREHAUL Spot Rock	-	50	A or C	
PT-B-2420	0+00	23+35	1.5 : 1	4	22	23.35	514	A or C	
PT-M-2400	0+00	3+28	1.5 : 1	4	22	3.28	72	A or C	
PT-B-1000	0+00	42+50	1.5 : 1	Varies	PREHAUL Spot Rock	-	100	A or C	
PT-B-1000	0+00	42+50	1.5 : 1	Varies	POST HAUL Spot Rock	-	300	A or C	
PT-B-1040	0+00	40+00	1.5 : 1	4	22	40.00	880	A or C	
PT-B-2000	0+00	39+00	1.5 : 1	Varies	POST HAUL Spot Rock	-	200	A or C	
PT-B-2400	0+00	36+00	1.5 : 1	Varies	PREHAUL Spot Rock	-	200	A or C	
PT-M-1000	0+00	15+75	1.5 : 1	Varies	PREHAUL Spot Rock	-	200	A or C	
FS-2850	88+35	259+20	1.5 : 1	Varies	PREHAUL Spot Rock	-	100	A or C	
FS-2850	88+35	259+20	1.5 : 1	Varies	POST HAUL Spot Rock	-	200	A or C	

2" MINUS CRUSHED ROCK	3184 CUBIC YARDS
Culvert Bedding *(See CULVERT LIST for exact locations)	560 CUBIC YARDS
TOTAL 2" MINUS CRUSHED ROCK REQUIRED	3744 CUBIC YARDS

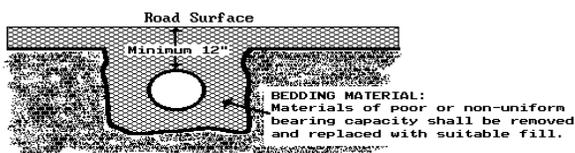
CULVERT LIST													
A = Jimmycomelately Stock Pile, C = Commercial Source													
Road	Location	Culvert		Length (feet)		Energy Dissapater (CY)				Backfill Material			D O
		Diameter (in.)	Gauge	Culvert	Flume	Inlet	Outlet	Type	Source	Type	Volume (CY)	Source	
PT-M-1100.1	0+50	18	16	50	-	0.50	0.50	LLRR	B or C	2" Minus	20	A or C	
	1+42	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	2+85	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	5+94	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	9+75	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	11+65	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	13+75	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	15+35	-	-	-	-	-	-	-	-	-	-	-	R
PT-B-1040	7+00	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	7+50	48	14	55	-	10.00	10.00	LLRR	B or C	2" Minus	160	A or C	
	8+16	18	16	40	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	11+50	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	25+50	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
PT-B-1043.1	0+39	18	16	40	-	0.50	0.50	LLRR	B or C	2" Minus	20	A or C	
	1+30	18	16	40	-	0.50	0.50	LLRR	B or C	2" Minus	20	A or C	
			16										
PT-B-1044	0+65	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	4+05	18	16	40	-	0.50	0.50	LLRR	B or C	2" Minus	20	A or C	
	6+36	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	8+98	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
PT-B-2420	0+00	18	16	50	-	0.50	0.50	LLRR	B or C	2" Minus	20	A or C	
	2+65	18	16	30	-	0.50	4.00	LLRR	B or C	2" Minus	20	A or C	
	6+94	18	16	40	-	0.50	10.00	LLRR	B or C	2" Minus	10	A or C	
	9+05	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	11+91	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	15+36	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	17+28	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	
	20+30	18	16	30	-	0.50	10.00	LLRR	B or C	2" Minus	10	A or C	
	22+77	18	16	30	-	0.50	0.50	LLRR	B or C	2" Minus	10	A or C	

Key:
SR - Shot Rock
NT - Native (bank run)
SL - Select Fill
HLRR - Heavy Loose Rip Rap
LLRR - Light Loose Rip Rap
Flume - Half round pipe
Downspout - Full round pipe



CULVERT LIST													
A = Jimmycomelately Stock Pile, C = Commercial Source													
Road	Location	Culvert		Length (feet)		Energy Dissapater (CY)				Backfill Material			D O
		Diameter (in.)	Gauge	Culvert	Flume	Inlet	Outlet	Type	Source	Type	Volume (CY)	Source	
PT-M-2205	0+00	18	16	50	-	0.50	0.50	LLRR	A or C	2" Minus	20	A or C	
	2+59	18	16	30	-	0.50	0.50	LLRR	A or C	2" Minus	10	A or C	
PT-M-2400	5+67	18	16	40	-	0.50	0.50	LLRR	A or C	2" Minus	10	A or C	
1+00 SPUR	0+00	18	16	50	-	0.50	0.50	LLRR	A or C	2" Minus	10	A or C	
B-2000	19+75	72	See B-2000 CULVERT DETAIL			30.00	LLRR	A or C	-	-	-	-	

CULVERT BACKFILL AND BASE PREPARATION
(For culverts less than 36")



Key:

- SR - Shot Rock
- NT - Native (bank run)
- SL - Select Fill
- HL - Heavy Loose Rip Rap
- LL - Light Loose Rip Rap
- Flume - Half round pipe
- Downspout - Full round pipe

COMPACTION LIST

Road	From Station	To Station	Type	Max Depth Per Lift (inches)	Equipment Type	Equipment Weight (lbs)	Minimum Number of Passes	Maximum Operating Speed (mph)
PT-M-1100.1	0+00	15+35	Subgrade	12	Vibratory Smooth Drum	20,000	3	3
PT-M-1100.1	0+00	15+35	6" Jaw	12	Vibratory Smooth Drum	20,000	3	3
PT-M-1100.1	0+00	15+35	2" Minus	6	Vibratory Smooth Drum	20,000	3	3
PT-B-1043.1	0+00	2+88	Subgrade	12	Vibratory Smooth Drum	20,000	3	3
PT-B-1043.1	0+00	2+88	6" Jaw	12	Vibratory Smooth Drum	20,000	3	3
PT-B-1044	0+00	11+68	Subgrade	12	Vibratory Smooth Drum	20,000	3	3
PT-B-1044	0+00	11+68	6" Jaw	12	Vibratory Smooth Drum	20,000	3	3
PT-B-2420	0+00	23+35	Subgrade	12	Vibratory Smooth Drum	20,000	3	3
PT-B-2420	0+00	23+35	6" Jaw	12	Vibratory Smooth Drum	20,000	3	3
PT-B-2421	0+00	1+58	Subgrade	12	Vibratory Smooth Drum	20,000	3	3
PT-B-2421	0+00	1+58	6" Jaw	12	Vibratory Smooth Drum	20,000	3	3
PT-M-2205	0+00	3+58	Subgrade	12	Vibratory Smooth Drum	20,000	3	3
PT-M-2205	0+00	3+58	6" Jaw	12	Vibratory Smooth Drum	20,000	3	3
PT-M-2400	0+00	7+97	Subgrade	12	Vibratory Smooth Drum	20,000	3	3
PT-M-2400	0+00	7+97	6" Jaw	12	Vibratory Smooth Drum	20,000	3	3
1+00 Spur	0+00	1+00	Subgrade	12	Vibratory Smooth Drum	20,000	3	3
1+00 Spur	0+00	1+00	6" Jaw	12	Vibratory Smooth Drum	20,000	3	3

PT-B-1000	0+00	42+50	Ex. Surface, Spot Rock	Varies	Vibratory Smooth Drum	20,000	1	3
PT-B-1020	0+00	4+09	Ex. Surface, Spot Rock	Varies	Vibratory Smooth Drum	20,000	1	3
PT-B-1040	0+00	40+00	Ex. Surface, Spot Rock	Varies	Vibratory Smooth Drum	20,000	1	3
PT-B-2400	0+00	36+00	Ex. Surface, Spot Rock	Varies	Vibratory Smooth Drum	20,000	1	3
PT-M-2200	0+00	8+60	Ex. Surface, Spot Rock	Varies	Vibratory Smooth Drum	20,000	1	3
PT-M-1000	0+00	15+75	Ex. Surface, Spot Rock	Varies	Vibratory Smooth Drum	20,000	1	3
FS-2850	88+35	259+20	Ex. Surface, Spot Rock	Varies	Vibratory Smooth Drum	20,000	1	3
All Post Haul Roads	0+00	END	Ex. Surface, Spot Rock	Varies	Vibratory Smooth Drum	20,000	1	3
All Roads	0+00	END	Culvert Bedding	12	Vibratory Plate, Jumping Jack	Varies	1	-
Waste Areas	ALL		Waste	24	Excavation Equipment	Varies	2	-

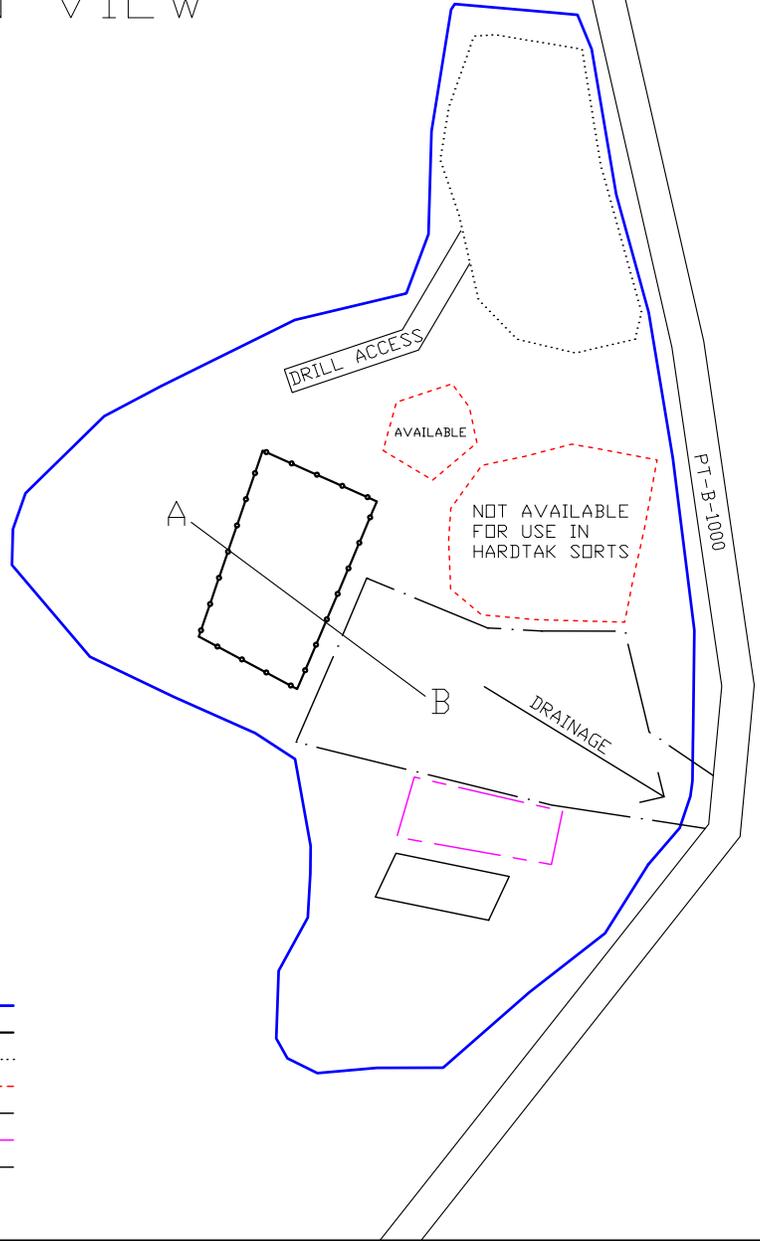
ROCK SOURCE DEVELOPMENT PLAN

Alpaca Pit

Page 1 of 2

1. Pit development shall take place in the area indicated in the plan view.
2. Pit faces shall not exceed 30 feet in height and must be sloped less than or equal to H1/4:V1.
3. Working bench width shall be a minimum of 20 feet.
4. The pit floor shall have continuity of slope and be left in a smooth and neat condition, providing drainage at a minimum of 2 percent. All knobs, bumps, or extrusions shall be removed to the designated floor level by excavation or drill and shoot techniques.
5. 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, all remaining oversize material shall be placed as shown in the PLAN VIEW.
6. Upon completion of operations in the pit, the area will be left in a condition that will not endanger public safety, damage property or be hazardous to animal or human life; pit faces and walls shall be scaled and cleared of loose and overhanging material.
7. All operations shall be carried out in compliance with the following regulations:
 - 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.
8. Upon completion of operations, the site shall be cleared of all temporary structures, equipment and rubbish and left in a condition that future operations may proceed in an orderly manner.
9. Upon completion of operations the access road off the PT-B-1000 and Drill Access Trail shall be blocked with over size material.
10. Contractor shall obtain written approval of final rock source condition and compliance with the terms of this plan before completion of operations.

PLAN VIEW



LEGEND

PIT BOUNDARY	
DEVELOPMENT AREA	
STOCKPILE AREA	
6" JAW RUN	
PIT FLOOR	
SHOT ROCK AVAILABLE	
OVERSIZE AREA	

PROFILE VIEW



OLYMPIC REGION
ALPACA PIT
Drawn By: Tom Barnes



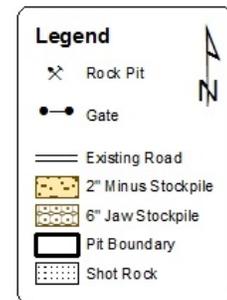
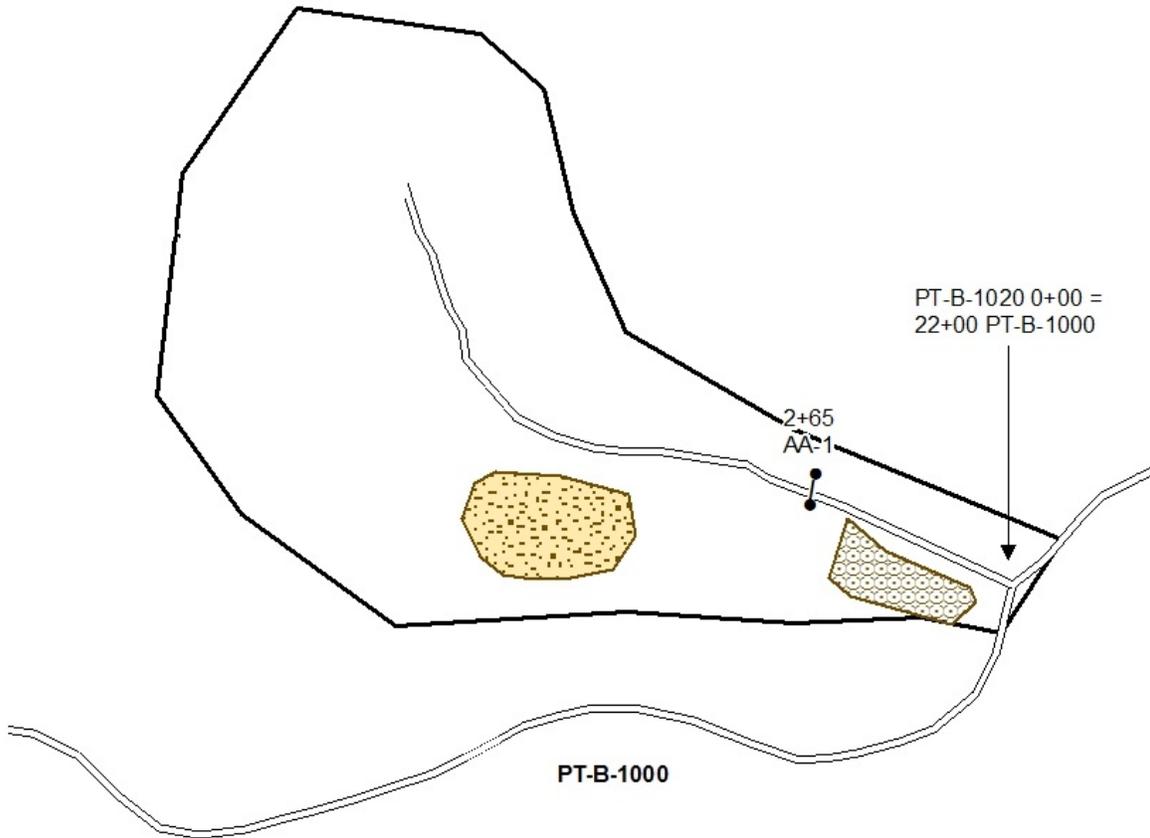
WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

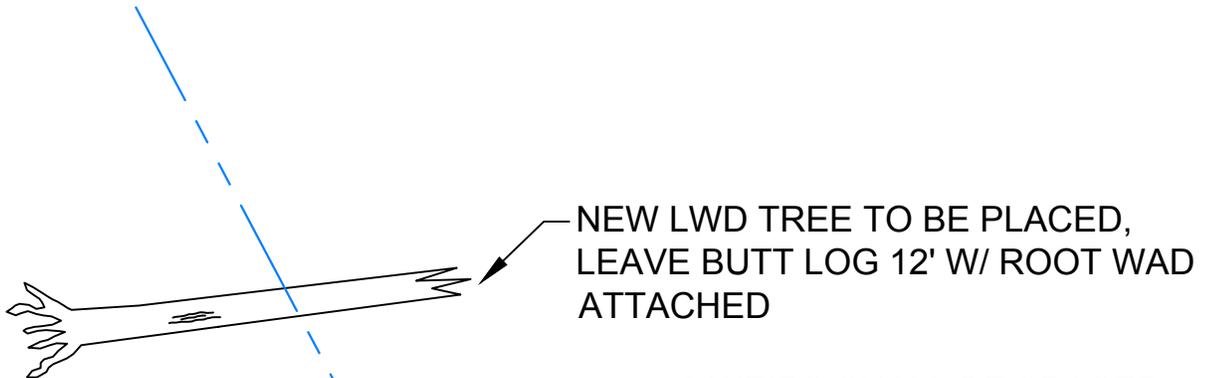
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Page 2 of 2
Not to Scale

Jimmycomelately Stockpile

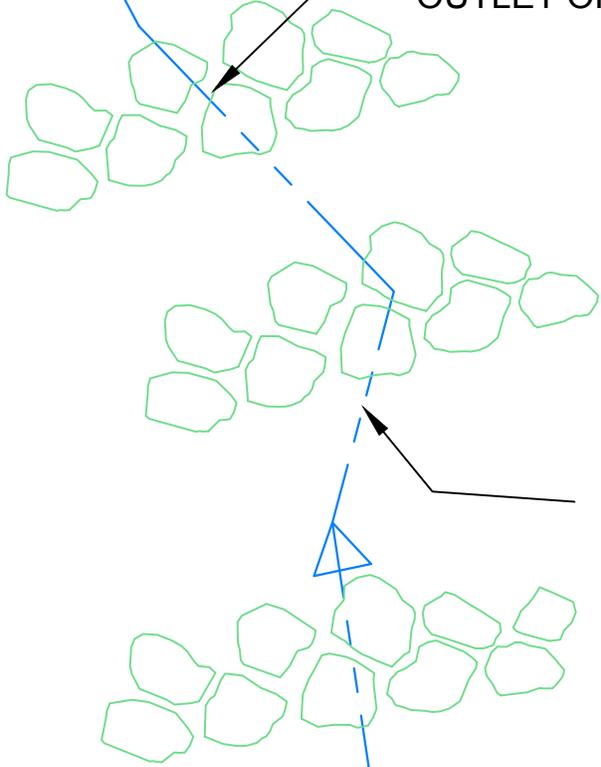
Page 1 of 1

Not to Scale

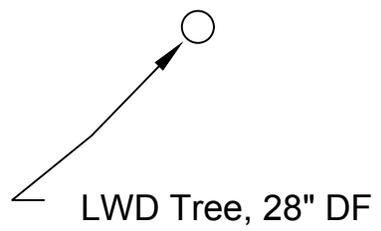


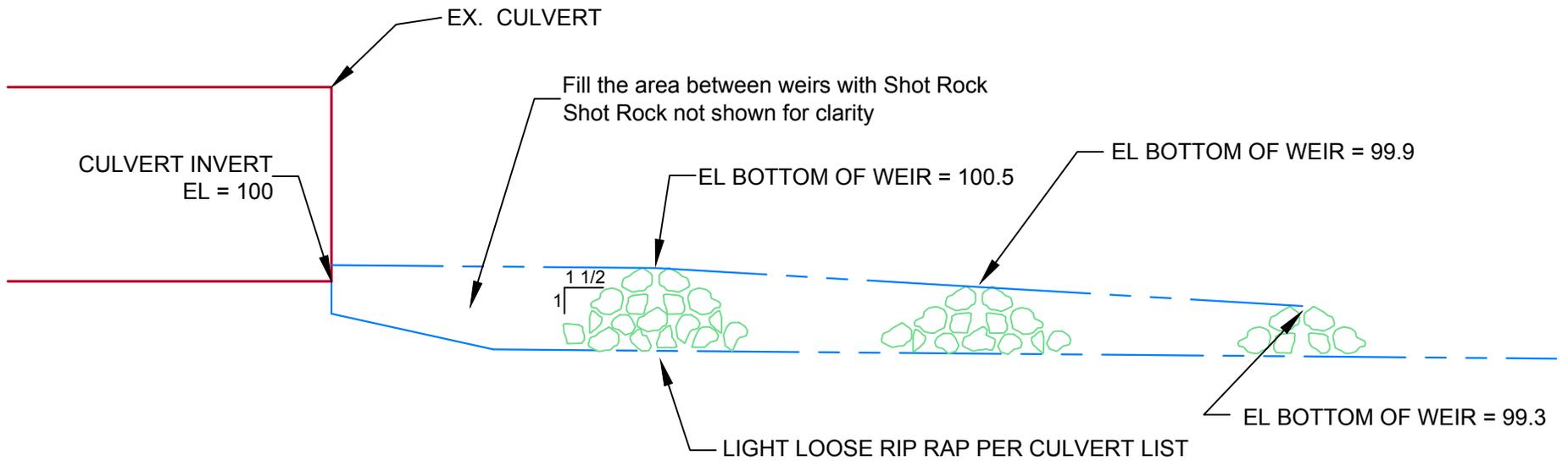


3 WEIRS SHALL BE SPACED
APPROX. 10' APART FROM
OUTLET OF CULVERT



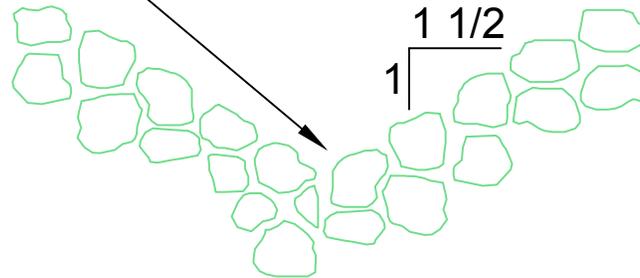
CL of STREAM





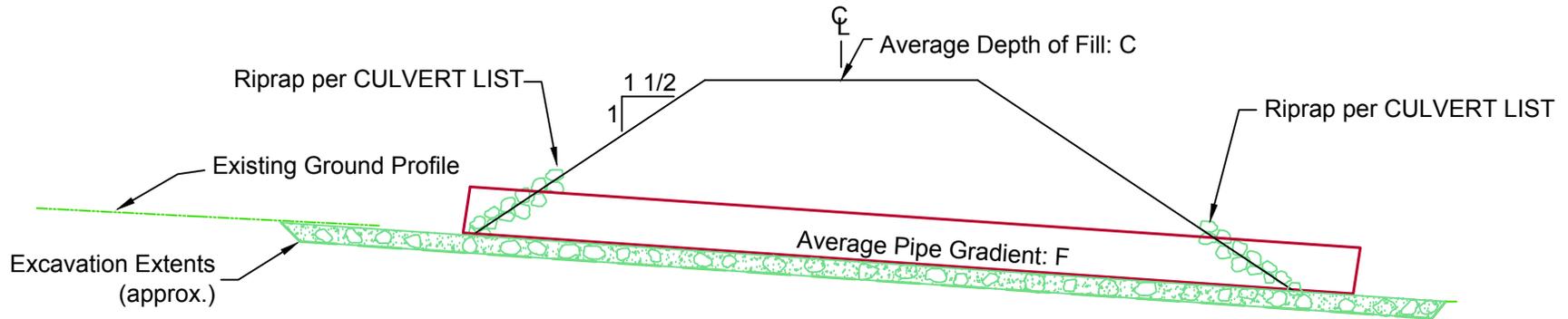
CROSS SECTION OF WEIR

EL MEASURED AT BOTTOM OF WEIR



WEIRS SHALL BE 2 to 3 FEET DEEP & 10 to 15 FEET WIDE

B-1040 ROAD PROFILE - CENTERLINE OF CULVERT



- <A> 2" Inch Minus Crushed Rock applied to compacted a depth of 6 inches over excavation extents.
- 6" Jaw Run applied to a compacted depth of 1 foot over excavation extents.
- <C> Common Borrow Backfill Material.
- <D> 2" Inch Minus Crushed Rock bedding material.

Note:

1) Crown at centerline not shown

RP Table

	HD	VD	AZ
Inlet to RP	18.3	4.9	280
Outlet to RP	16.2	4.6	152

Declination = 0°

A	B	C	D	E	F	G
Road Name	Station	Avg. Fill Depth (ft)	Size of Pipe (in)	Length of Pipe (ft)	Avg. Pipe Gradient (%)	Stream Type
PT-B-1040	7+50	11	48	55	10	4

**OLYMPIC REGION
TYPICAL LIVE STREAM CULVERT DETAIL**

Drawn By: Thomas Barnes
Designed By: Tom Barnes

HARDTAK SORTS

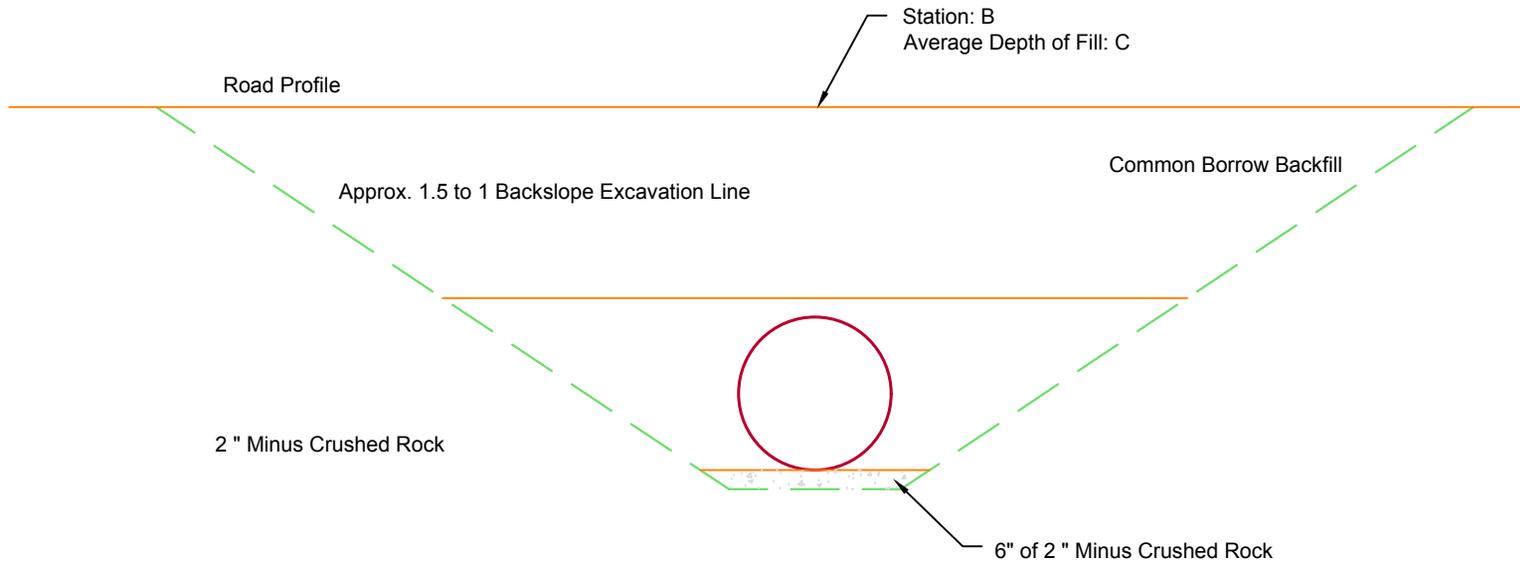
Contract No. 30-093651



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

B-1040 ROAD

PROFILE - CENTERLINE OF ROAD LOOKING UPSTREAM



A	B	C	D	E	F	G
Road Name	Station	Avg. Fill Depth (ft)	Size of Pipe (in)	Length of Pipe (ft)	Avg. Pipe Gradient (%)	Stream Type
PT-B-1040	7+50	11	48	55	10	4

OLYMPIC REGION
TYPICAL LIVE STREAM CULVERT DETAIL

Drawn By: Thomas Barnes
Designed By: Tom Barnes

HARDTAK SORTS

Contract No. 30-093651



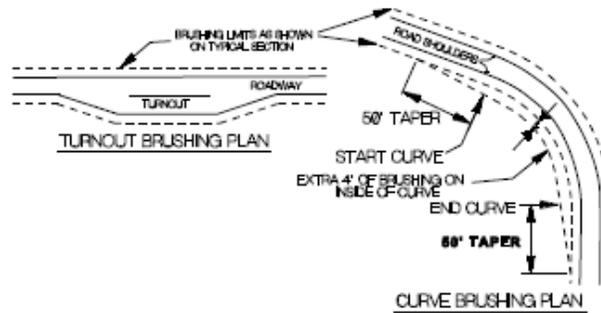
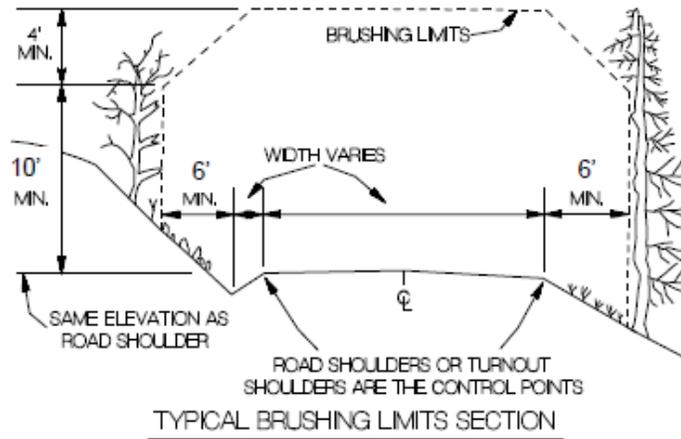
WASHINGTON STATE DEPARTMENT OF
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Page 2 of 2
Not to Scale

Revised 11/22/2016

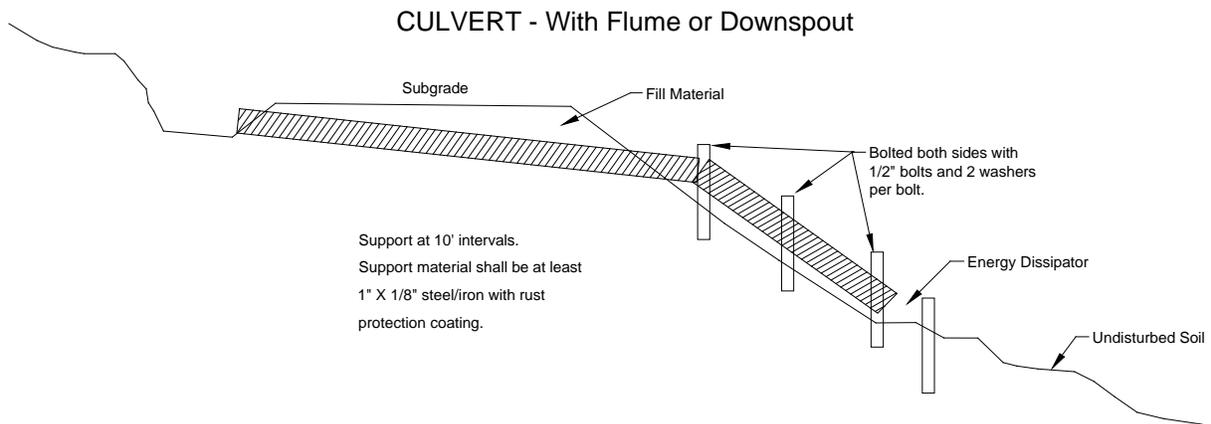
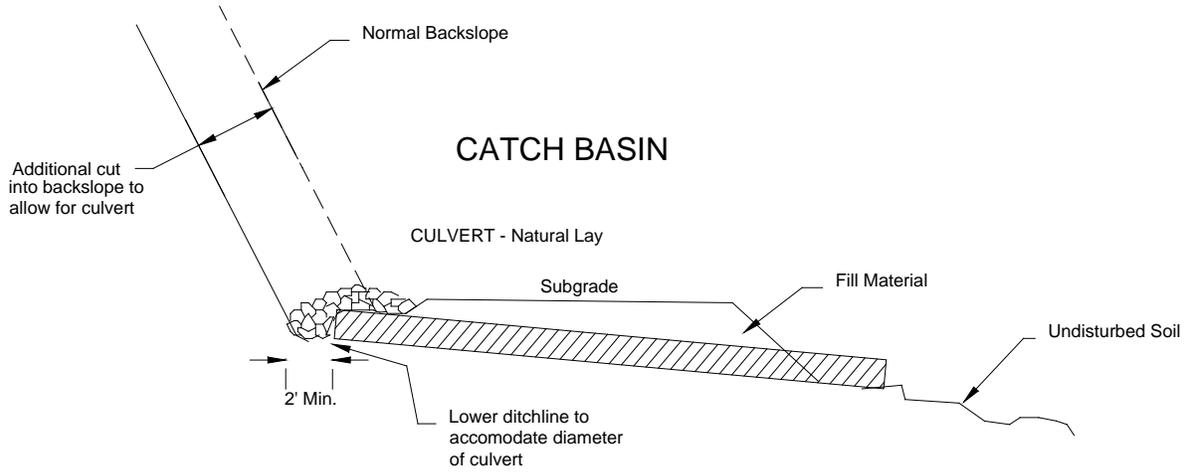
BRUSHING DETAIL



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

CULVERT AND DRAINAGE SPECIFICATION DETAIL

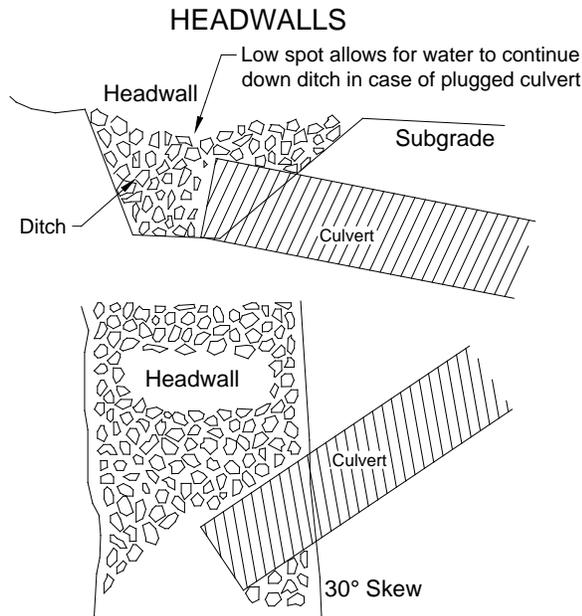
(Page 1 of 3)



CULVERT AND DRAINAGE SPECIFICATION DETAIL

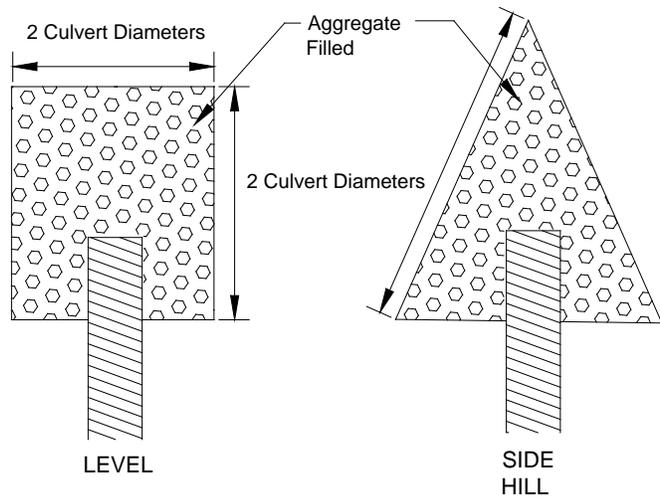
(Page 2 of 3)

Proper preparation of foundation and placement of bedding material shall precede the installation of all culvert pipe. This includes necessary leveling of the native trench bottom and compaction of required bedding material to form a uniform dense unyielding base. The backfill material shall be placed so that the pipe is uniformly supported along the barrel.



Headwalls to be constructed of material that will resist erosion.

ENERGY DISSIPATORS



Dissipator Specifications:
Depth: 1 culvert diameter
Aggregate: as specified in the CULVERT LIST.

CULVERT AND DRAINAGE SPECIFICATION DETAIL

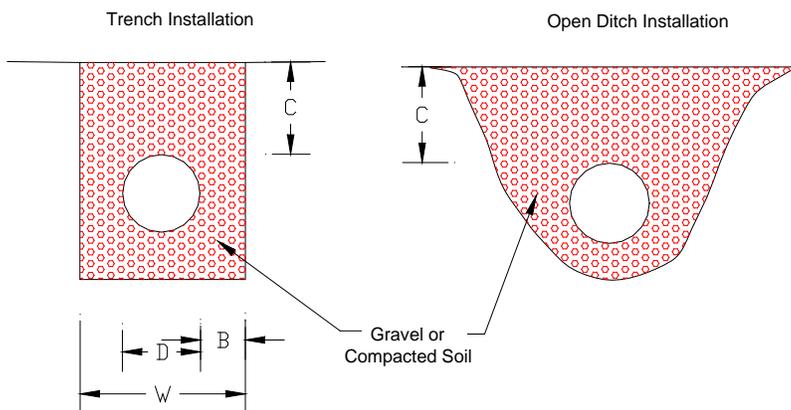
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POLYETHYLENE PIPE INSTALLATION

INSTALLATION REQUIREMENTS:

1. Crushed stone, gravel, or compacted soil backfill material shall be used as the bedding and envelope material around the culvert. The aggregate size shall not exceed 1/6 pipe diameter or 4" diameter, whichever is smaller.
2. The corrugated pipe shall be laid on grade, on a layer of bedding material as shown for the two types of installations. If native soil is used as the bedding and backfill material, it shall be well compacted in six inch layers under the haunches, around the sides and above the pipe to the recommended minimum height of cover.
3. Either crushed aggregate or flexible (asphalt) pavement may be laid as part of the minimum cover requirements.
4. Site conditions and availability of bedding materials often dictate the type of installation method used.
5. The load bearing capability of flexible conduits is dependent on the type of backfill material used and the degree of compaction achieved. Crushed stone and gravel backfill materials typically reach a compaction level of 90-95% AASHTO standard density without compaction. When native soils are used as backfill material, a compaction level of 85% is required. This minimum compaction can be achieved by either hand or mechanical tamping.

MINIMUM DIMENSIONS Trench or Open Ditch Installation



Nominal Diameter	Minimum Thickness	Minimum Cover	Min. Trench Width
D	B	C	W
18"	6"	12"	36"
24"	6"	12"	42"
30"	6"	12"	48"
36"	6"	12"	54"

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Page 1 of 2

Cuts and Fills

- Maintain slope lines as constructed. 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 as directed, to provide a smooth, rut-free traveled surface and maintain surface water runoff in an even, unconcentrated manner.
- Blading shall not undercut the backslope or cut into geotextile fabric on the road.
- If required by the Contract Administrator, water shall be applied as necessary to control dust and retain fine surface rock.
- Surface material shall not be bladed off the roadway. Replace surface material when lost or worn away, or as directed by the Contract Administrator.
- Remove shoulder berms 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 drivable 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 dissipators at culvert outlets with non-erodible material or rock.
- Keep ditches and culverts clear of obstructions and functioning as intended.
- Inspect and clean culverts at least monthly, with additional inspections during storms and periods of high runoff. This shall be done even during periods of inactivity.

Structures

- Repair culverts, bridges, gates, fences, cattle guards, signs, and other road structures as required because of purchaser use.

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Page 2 of 2

Preventative Maintenance

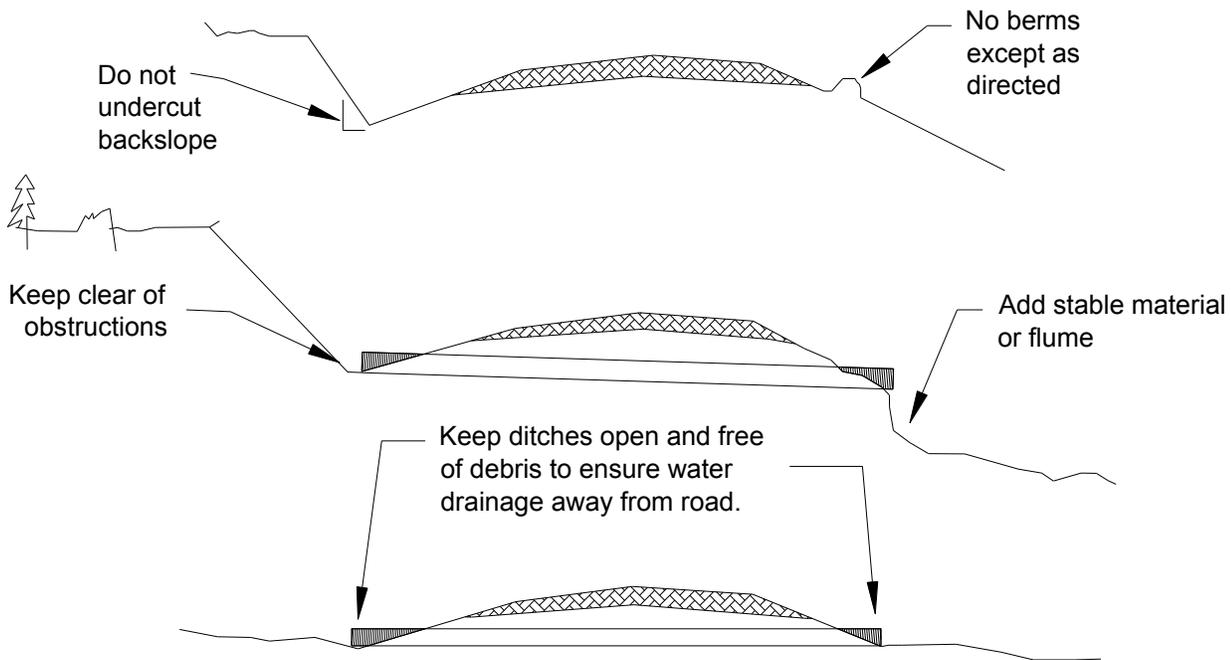
- Perform preventative maintenance work to safeguard against storm damage, such as blading to ensure correct runoff, ditch and culvert cleaning, and waterbar maintenance.

Termination of Use or End of Season

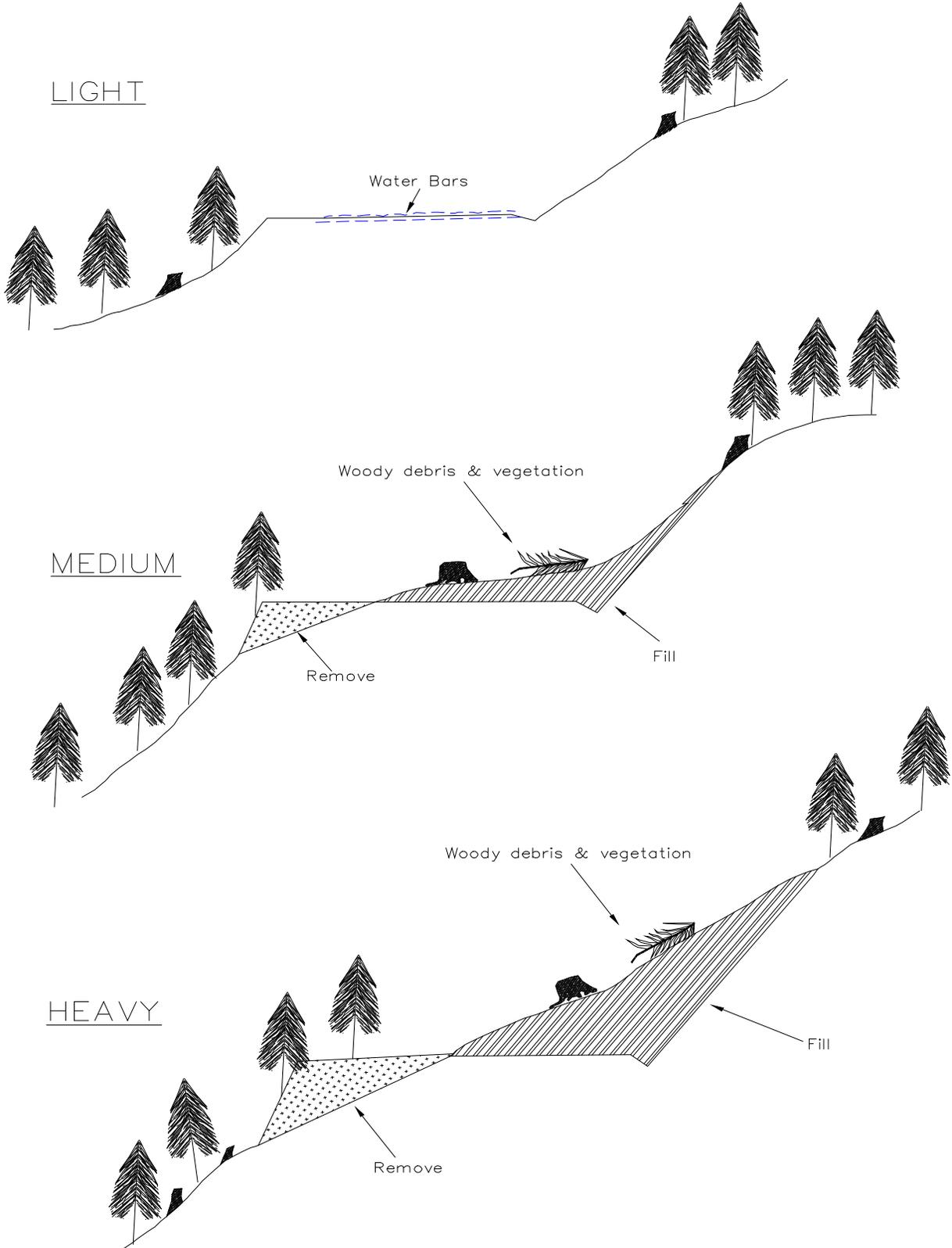
- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

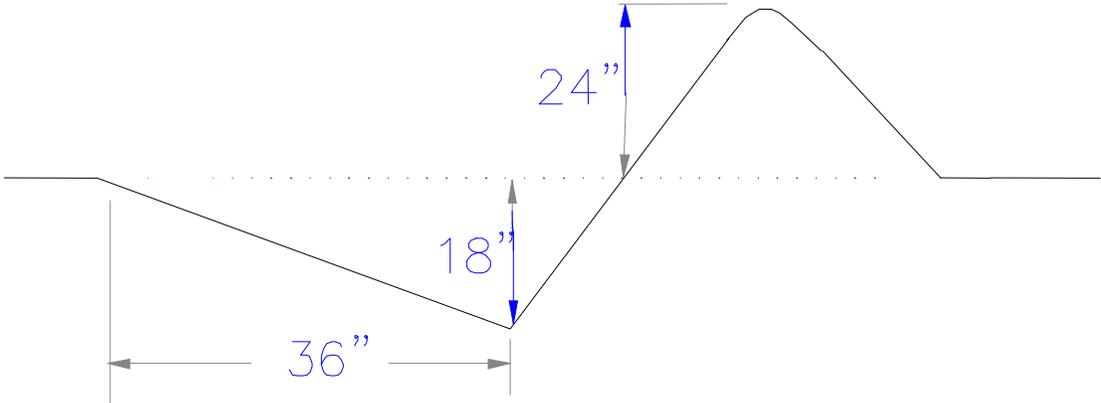
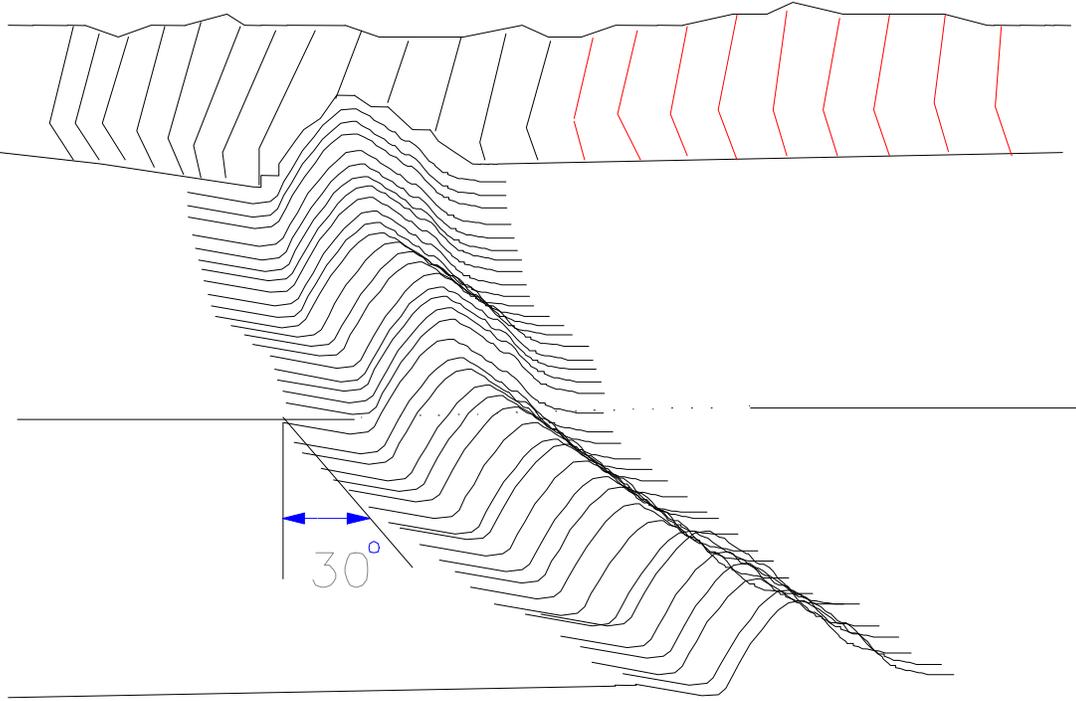
- Remove fallen timber, limbs, and stumps from the slopes, roadway, ditchlines, and culvert inlets.



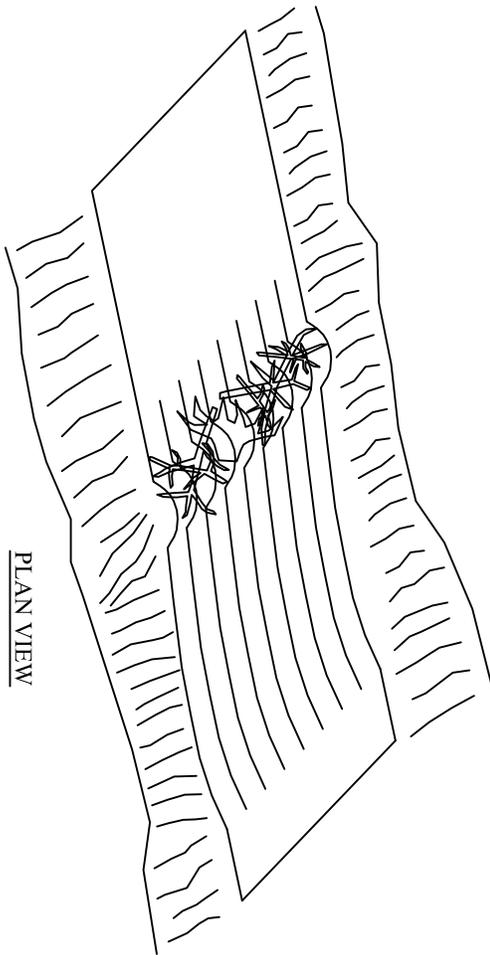
ROAD ABANDONMENT CROSS SECTIONS



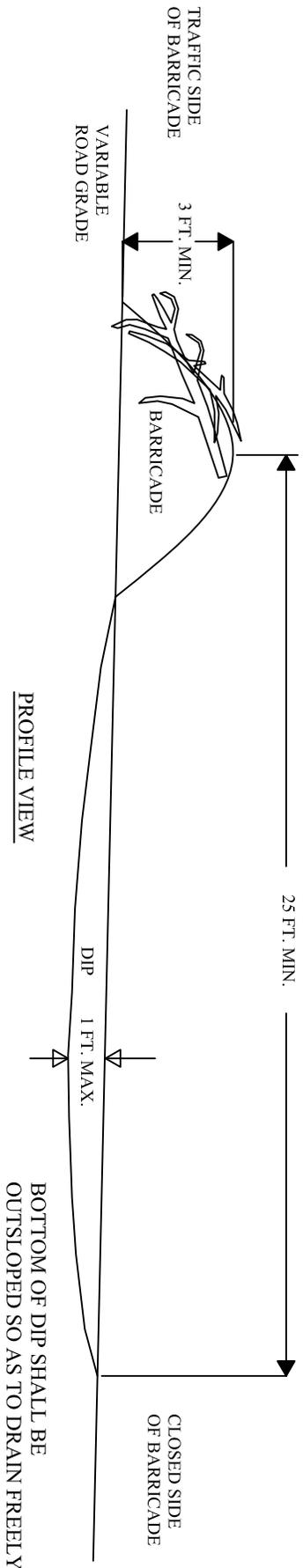
NON-DRIVABLE WATER BAR DETAIL



EARTHEN BARRICADE DETAIL



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



SUMMARY - Road Development Costs

REGION: Olympic
DISTRICT: Straits

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBERS:	M-1100.1, B-1043.1, B-1044, B-2420, B-2421,1+00 Spur, M-2205, M-2400	M-2400	B-1000, B-1020, B-1040, B-2000, B-2400, M-2200, M-1000, FS-2850
ROAD STANDARD:	Construction	Reconstruction	Maintenance
NUMBER OF STATIONS:	64+11	3+28	356+79
CLEARING & GRUBBING:	\$ 15,145.99	\$ 774.90	-
EXCAVATION AND FILL:	\$ 41,943.16	\$ 521.16	-
MISC. MAINTENANCE:	\$ 1,060.61	\$ 49.70	\$ 9,003.05
ROAD & LANDING ROCK:	\$ 128,014.46	\$ 693.15	\$ 13,860.73
CULVERTS AND FLUMES:	\$ 20,242.80	\$ -	\$ 11,438.90
MANAGEMENT & OVERHEAD	\$ 22,324.73	\$ 203.89	\$ 3,430.27
ROAD BUILDING & ROCK PIT MOBILIZATION:	\$ 3,333.33	\$ 3,333.33	\$ 3,333.33
TOTAL COSTS:	\$ 232,065.09	\$ 5,576.14	\$ 41,066.28
COST PER STATION:	\$ 3,619.80	\$ 1,700.04	\$ 1.15
POST HAUL MAINTENANCE:	\$ 11,899.51		
ABANDONMENT:	\$ 1,273.25		
POST HAUL MOBILIZATION:	\$ 3,750.00		

TOTAL (All Roads): \$295,630.27
SALE VOLUME MBF: 5249
TOTAL \$/MBF: \$56.32

Compiled by: Tom Barnes

Date: 9/26/2016

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-M-1100.1
 Total road length (feet): 1535
 Distance to JCL Pit (feet) 40000
 Average Haul Speed (mph) 35
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

CONSTRUCTION

CLEARING & GRUBBING

Scatter	15.35 stations @	\$ 236.25 per station	\$ 3,626.44
			C & G Total \$ 3,626.44

EXCAVATION AND FILL

Construction (balanced, medium)	15.35 stations @	\$ 527.97 per station	\$ 8,104.30
Landing (medium)	1 each @	\$ 245.77 each	\$ 245.77
Turnaround	2 each @	\$ 170.60 each	\$ 341.21
			Excavation Total \$ 8,691.28

ROCK

Stripping overburden	1170 CY @	\$ 0.35 per CY	\$ 409.33
Drill & shoot	1170 CY @	\$ 4.50 per CY	\$ 5,262.75
Load crusher	1170 CY @	\$ 1.30 per CY	\$ 1,520.35
Crushing (6-INCH JAW RUN ROCK)	1170 CY @	\$ 6.50 per CY	\$ 7,601.75
Load dump truck	1587 CY @	\$ 0.83 per CY	\$ 1,322.67
Rock haul	Round Trip (feet) 83070	103 Hours @	\$ 105.00 per Hour \$ 10,824.52
Process/Compacting Ballast (12" Lift)	1587 CY @	\$ 1.23 per CY	\$ 1,953.47
Process/Compacting Surfacing (6" Lift)	338 CY @	\$ 1.86 per CY	\$ 626.86
Light Loose Rip Rap	7.0 CY @	\$ 15.00 per CY	\$ 105.00
Rock haul	Round Trip (feet) 83070	0.45 Hours @	\$ 105.00 per CY \$ 47.74
			Rock Total \$ 29,674.43

CULVERTS & FLUMES

18" Polyethylene, double wall	230 feet @	\$22.23 per foot	\$5,112.90
Ditchout	1 each @	\$13.50 each	\$13.50
			Culvert & Flume Total \$5,126.40

MISC. MAINTENANCE

Grass seed (spread by hand)	78 pounds @	\$ 3.00 per pound	\$ 232.58
			Misc Maintenance Total \$ 232.58

Management and Overhead \$ 5,208.62

Construction Total \$ 52,559.74

MOBILIZATION

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD BUILDING EQUIPMENT

Grader	2 @	\$ 750	each	\$	1,500
Dozer (large)	2 @	\$ 400	each	\$	800
Excavator (large)	2 @	\$ 750	each	\$	1,500
Roller	2 @	\$ 400	each	\$	800
End Dump	4 @	\$ 150	each	\$	600
Tractor Brusher	2 @	\$ 400	each	\$	800
					<u>6,000</u>
ROAD BUILDING EQUIPMENT SUBTOTAL:				\$	6,000

ROCK SOURCE EQUIPMENT

Excavator (large)	1 @	\$ 750	each	\$	750
Loader	1 @	\$ 750	each	\$	750
Rock drill	1 @	\$ 750		\$	750
Jaw (mobile, includes set up)	1 @	\$ 1,750		\$	<u>1,750</u>
ROCK SOURCE EQUIPMENT SUBTOTAL:				\$	4,000

INITIAL MOBILIZATION TOTAL: \$ 10,000

POST HAUL EQUIPMENT

Grader	2 @	750	each	\$	1,500
Loader	1 @	750	each	\$	750
Dozer (small)	@	400	each	\$	-
Dozer (large)	@	400	each	\$	-
Excavator (small)	2 @	400	each	\$	800
Excavator (large)	@	750	each	\$	-
Roller	1 @	400	each	\$	400
End Dump	2 @	150	each	\$	300
POST HAUL & ABANDONMENT				\$	<u>3,750</u>

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-B-1043.1
 Total road length (feet): 288
 Distance to JCL Pit (feet) 3100
 Average Haul Speed (mph) 15
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

CONSTRUCTION

CLEARING & GRUBBING

Scatter	2.88 stations @	\$ 236.25	per station	\$ 680.40
				C & G Total \$ 680.40

EXCAVATION AND FILL

Construction (balanced, medium)	2.88 stations @	\$ 527.97	per station	\$ 1,520.55
Landing (medium)	1.00 each @	\$ 245.77	each	\$ 245.77
				Excavation Total \$ 1,766.32

ROCK

Stripping overburden	252 CY @	\$ 0.35	per CY	\$ 88.06
Drill & shoot	252 CY @	\$ 4.50	per CY	\$ 1,132.20
Push rock	252 CY @	\$ 0.68	per CY	\$ 171.09
Load crusher	252 CY @	\$ 1.30	per CY	\$ 327.08
Crushing (6-INCH JAW RUN ROCK)	252 CY @	\$ 6.50	per CY	\$ 1,635.40
Load dump truck	322 CY @	\$ 0.83	per CY	\$ 268.00
Rock haul	Round Trip (feet) 6776	9 Hours @	\$ 105.00 per Hour	\$ 964.26
Process/Compacting Ballast (12" Lift)	322 CY @	\$ 1.23	per CY	\$ 395.81
Light Loose Rip Rap	2.00 CY @	\$ 15.00	per CY	\$ 30.00
Rock haul	Round Trip (feet) 6776	0.06 Hours @	\$ 105.00 per CY	\$ 6.00
				Rock Total \$ 5,017.90

CULVERTS & FLUMES

18" Polyethylene, double wall	80 feet @	\$22.23	per foot	\$1,778.40
				Culvert & Flume Total \$1,778.40

MISC. MAINTENANCE

Grass seed (spread by hand)	15 pounds @	\$ 3.00	per pound	\$ 43.64
Straw mulching (spread by hand)	0.05 acres @	\$ 595.00	per acre	\$ 29.75
				Misc Maintenance Total \$ 73.39

Management and Overhead \$ 1,024.80

Construction Total \$ 10,341.21

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-B-1044
 Total road length (feet): 1168
 Distance to JCL Pit (feet) 5200
 Average Haul Speed (mph) 15
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

CONSTRUCTION

CLEARING & GRUBBING

Scatter	11.68 stations @	\$ 236.25	per station	\$ 2,759.40
			C & G Total	\$ 2,759.40

EXCAVATION AND FILL

Construction (balanced, heavy)	11.68 stations @	\$ 690.15	per station	\$ 8,060.92
Landing (medium)	1.00 each @	\$ 245.77	each	\$ 245.77
Turnaround	2.00 each @	\$ 170.60	each	\$ 341.21
			Excavation Total	\$ 8,647.90

ROCK

Stripping overburden	913 CY @	\$ 0.35	per CY	\$ 319.41
Drill & shoot	913 CY @	\$ 4.50		\$ 4,106.70
Push rock	913 CY @	\$ 1.30		\$ 1,186.38
Load crusher	913 CY @	\$ 1.30		\$ 1,186.38
Crushing (6-INCH JAW RUN ROCK)	913 CY @	\$ 6.50		\$ 5,931.90
Load dump truck	1013 CY @	\$ 0.83	per CY	\$ 843.83
Rock haul	Round Trip (feet) 12736	37 Hours @	\$ 105.00 per Hour	\$ 3,836.22
Process/Compacting Ballast (12" Lift)	913 CY @	\$ 1.23	per CY	\$ 1,123.19
Process/Compacting Surfacing (6" Lift)	50 CY @	\$ 1.86	per CY	\$ 92.81
Light Loose Rip Rap	4.0 CY @	\$ 15.00	per CY	\$ 60.00
Rock haul	Round Trip (feet) 12736	0.1 Hours @	\$ 105.00 per CY	\$ 15.15
			Rock Total	\$ 18,701.98

CULVERTS & FLUMES

18" Polyethylene, double wall	130 feet @	\$22.23	per foot	\$2,889.90
			Culvert & Flume Total	\$2,889.90

MISC. MAINTENANCE

Grass seed (spread by hand)	59 pounds @	\$ 3.00	per pound	\$ 176.97
			Misc Maintenance Total	\$ 176.97

Management and Overhead \$ 3,317.62

Construction Total \$ 36,493.77

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-B-2000

Total road length (feet): 3900
Distance to JCL Pit (feet) 7810
Average Haul Speed (mph) 15
Truck Load/Unload Time (minutes) 12
Volume per Truck (CY) 10

PREHAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets		39.00 stations @	\$4.05 per station	\$ 157.95
Maintenance grading & compacting		39.00 stations @	\$8.75 per station	\$ 341.37
Grass seed (spread by hand)		2.00 pounds @	\$3.00 per pound	\$ 6.00
Straw mulching (spread by hand)		0.10 acres	\$595.00 per acre	\$ 59.50
Gate Maintenance		1 each @	\$200.00 per each	\$ 200.00
			Misc. Maintenance Total	\$ 764.82

ROCK

Load dump truck		20 CY @	\$ 0.83 per CY	\$ 16.67
Rock haul	Round Trip (feet)	23420 1.0 Hours @	\$ 105.00 per hour	\$ 104.10
Light Loose Rip Rap		30 CY @	\$ 15.00 per CY	\$ 450.00
Rock haul	Round Trip (feet)	23420 1.86 Hours @	\$ 105.00 per hour	\$ 195.18
			Rock Total	\$ 765.95

CULVERT REPAIR

B-2000 Culvert Repair		1 @	\$ 3,500.00 per each	\$ 3,500.00
			Culvert Repair Total	\$ 3,500.00

Management & Overhead \$ 503.08

PREHAUL MAINTENANCE TOTAL \$ 5,533.85

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-B-2420
 Total road length (feet): 2335
 Distance to JCL Pit (feet) 13809
 Average Haul Speed (mph) 15
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

CONSTRUCTION

CLEARING & GRUBBING

Scatter	23.35 stations @	\$ 236.25	per station	\$ 5,516.44
				C & G Total \$ 5,516.44

EXCAVATION AND FILL

Construction (balanced, heavy)	23.35 stations @	\$ 690.15	per station	\$ 16,114.94
Landing (medium)	1.00 each @	\$ 245.77	each	\$ 245.77
Turnaround	2.00 each @	\$ 170.60	each	\$ 341.21
				Excavation Total \$ 16,701.92

ROCK

Stripping overburden	2387 CY @	\$ 0.35	per CY	\$ 835.28
Drill & shoot	2387 CY @	\$ 4.50	per CY	\$ 10,739.25
Push rock	2387 CY @	\$ 0.68	per CY	\$ 1,622.82
Load crusher	2387 CY @	\$ 1.30	per CY	\$ 3,102.45
Crushing (6-INCH JAW RUN ROCK)	2387 CY @	\$ 6.50	per CY	\$ 15,512.25
Load dump truck	3010 CY @	\$ 0.83	per CY	\$ 2,508.50
Rock haul	Round Trip (feet) 32288	183 Hours @	\$ 105.00 per Hour	\$ 19,206.90
Process/Compacting Ballast (12" Lift)	2387 CY @	\$ 1.23	per CY	\$ 2,937.21
Process/Compacting Surfacing (6" Lift)	514 CY @	\$ 1.86	per CY	\$ 953.56
Light Loose Rip Rap	31.5 CY @	\$ 15.00	per CY	\$ 472.50
Rock haul	Round Trip (feet) 32288	1.9 Hours @	\$ 105.00 per Hour	\$ 200.99
				Rock Total \$ 58,091.70

CULVERTS & FLUMES

18" Polyethylene, double wall	300 feet @	\$22.23	per foot	\$6,669.00
				Culvert & Flume Total \$6,669.00

MISC. MAINTENANCE

Grass seed (spread by hand)	118 pounds @	\$ 3.00	per pound	\$ 353.79
Straw mulching (spread by hand)	0.10 acres @	\$ 595.00	per acre	\$ 59.50
				Misc Maintenance Total \$ 413.29

Management and Overhead \$ 9,613.16

Construction Total \$ 97,005.51

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-B-2421
 Total road length (feet): 158
 Distance to JCL Pit (feet) 13909
 Average Haul Speed (mph) 15
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

CONSTRUCTION

CLEARING & GRUBBING

Scatter	1.58 stations @	\$ 236.25	per station	\$ 373.28
			C & G Total	\$ 373.28

EXCAVATION AND FILL

Construction (balanced, light)	1.58 stations @	\$ 383.32	per station	\$ 605.64
Landing (medium)	1.00 each @	\$ 245.77	each	\$ 245.77
Turnaround	1.00 each @	\$ 170.60	each	\$ 170.60
			Excavation Total	\$ 1,022.02

ROCK

Stripping overburden	161 CY @	\$ 0.35	per CY	\$ 56.21
Drill & shoot	161 CY @	\$ 4.50	per CY	\$ 722.70
Push rock	161 CY @	\$ 0.68	per CY	\$ 109.21
Load crusher	161 CY @	\$ 1.30	per CY	\$ 208.78
Crushing (6-INCH JAW RUN ROCK)	161 CY @	\$ 6.50	per CY	\$ 1,043.90
Load dump truck	161 CY @	\$ 0.83	per CY	\$ 133.83
Rock haul	Round Trip (feet) 28134	9 Hours @	\$ 105.00 per Hour	\$ 936.28
Process/Compacting Ballast (12" Lift)	161 CY @	\$ 1.23	per CY	\$ 197.66
			Rock Total	\$ 3,408.57

MISC. MAINTENANCE

Grass seed (spread by hand)	8 pounds @	\$ 3.00	per pound	\$ 23.94
			Misc Maintenance Total	\$ 23.94

Management and Overhead \$ 482.78

Construction Total \$ 5,310.58

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-M-2205
 Total road length (feet): 358
 Distance to Place Pit (feet) 37000
 Average Haul Speed (mph) 30
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

CONSTRUCTION

CLEARING & GRUBBING

Scatter	3.58 stations @	\$ 236.25	per station	\$ 845.78
			C & G Total	\$ 845.78

EXCAVATION AND FILL

Construction (balanced, light)	3.58 stations @	\$ 383.32	per station	\$ 1,372.28
Landing (medium)	1.00 each @	\$ 245.77	each	\$ 245.77
			Excavation Total	\$ 1,618.05

ROCK

Stripping overburden	301 CY @	\$ 0.35	per CY	\$ 105.21
Drill & shoot	301 CY @	\$ 4.50	per CY	\$ 1,352.70
Push rock	301 CY @	\$ 0.68	per CY	\$ 204.41
Load crusher	301 CY @	\$ 1.30	per CY	\$ 390.78
Crushing (6-INCH JAW RUN ROCK)	301 CY @	\$ 6.50	per CY	\$ 1,953.90
Load dump truck	331 CY @	\$ 0.83	per CY	\$ 275.50
Rock haul	Round Trip (feet) 74716	22 Hours @	\$ 105.00 per Hour	\$ 2,331.64
Process/Compacting Ballast (12" Lift)	331 CY @	\$ 1.23	per CY	\$ 406.89
Light Loose Rip Rap	2.0 CY @	\$ 15.00	per CY	\$ 30.00
			Rock Total	\$ 7,051.03

CULVERTS & FLUMES

18" Polyethylene, double wall	80 feet @	\$22.23	per foot	\$1,778.40
			Culvert & Flume Total	\$1,778.40

MISC. MAINTENANCE

Grass seed (spread by hand)	18 pounds @	\$ 3.00	per pound	\$ 54.24
			Misc Maintenance Total	\$ 54.24

Management and Overhead \$ 1,248.22

Construction Total \$ 12,595.72

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-M-2400
 Total road length (feet): 328
 Distance to Place Pit (feet) 36000
 Average Haul Speed (mph) 30
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

RECONSTRUCTION

CLEARING & GRUBBING

Scatter	3.28 stations @	\$ 236.25 per station	\$ 774.90
		C & G Total	\$ 774.90

EXCAVATION AND FILL

Reconstruction (light)	3.28 stations @	\$ 139.57 per station	\$ 457.78
Rip, Grade, shape, compact subgrade	3.28 per station	\$ 19.32 per station	\$ 63.38
		Excavation Total	\$ 521.16

ROCK

Load dump truck	72 CY @	\$ 0.83 per CY	\$ 60.13
Rock haul	Round Trip (feet) 72656	5 Hours @	\$ 105.00 per Hour
Process/Compacting Surfacing (6" Lift)	72 CY @	\$ 1.86 per CY	\$ 133.95
		Rock Total	\$ 693.15

MISC. MAINTENANCE

Grass seed (spread by hand)	17 pounds @	\$ 3.00 per pound	\$ 49.70
		Misc Maintenance Total	\$ 49.70

Management & Overhead \$ 203.89

Reconstruction Total \$ 2,242.80

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: 1+00 SPUR

Total road length (feet): 100

Distance to JCL Pit (feet) 15000

Average Haul Speed (mph) 20

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

CONSTRUCTION

CLEARING & GRUBBING

Scatter	1.00 stations @	\$ 236.25	per station	\$ 236.25
			C & G Total	\$ 236.25

EXCAVATION AND FILL

Construction (balanced, medium)	1.00 stations @	\$ 527.97	per station	\$ 527.97
Landing (medium)	1.00 each @	\$ 245.77	each	\$ 245.77
			Excavation Total	\$ 773.74

ROCK

Stripping overburden	120 CY @	\$ 0.35	per CY	\$ 42.00
Drill & shoot	120 CY @	\$ 4.50	per CY	\$ 540.00
Push rock	120 CY @	\$ 0.68	per CY	\$ 81.60
Load crusher	120 CY @	\$ 1.30	per CY	\$ 156.00
Crushing (6-INCH JAW RUN ROCK)	120 CY @	\$ 6.50	per CY	\$ 780.00
Load dump truck	130 CY @	\$ 0.83	per CY	\$ 108.33
Rock haul	Round Trip (feet) 30200	6 Hours @	\$ 105.00 per Hour	\$ 663.37
Process/Compacting Ballast (12" Lift)	120 CY @	\$ 1.23	per CY	\$ 147.69
Light Loose Rip Rap	1.0 CY @	\$ 15.00	per CY	\$ 15.00
Rock haul	Round Trip (feet) 30200	0.05 Hours @	\$ 105.00 per Hour	\$ 5.10
			Rock Total	\$ 2,539.10

CULVERTS & FLUMES

18" Polyethylene, double wall	50 feet @	\$22.23	per foot	\$1,111.50
			Culvert & Flume Total	\$1,111.50

MISC. MAINTENANCE

Grass seed (spread by hand)	5 pounds @	\$ 3.00	per pound	\$ 15.15
			Misc Maintenance Total	\$ 15.15

Management and Overhead \$ 514.33

Construction Total \$ 5,190.07

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-M-2400
 Total road length (feet): 469
 Distance to Place Pit (feet) 36500
 Average Haul Speed (mph) 30
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

CONSTRUCTION

CLEARING & GRUBBING

Scatter	4.69 stations @	\$ 236.25	per station	<u>\$ 1,108.01</u>
			C & G Total	<u>\$ 1,108.01</u>

EXCAVATION AND FILL

Construction (balanced, medium)	4.69 stations @	\$ 527.97	per station	\$ 2,476.17
Landing (medium)	1.00 each @	\$ 245.77	each	<u>\$ 245.77</u>
			Excavation Total	<u>\$ 2,721.94</u>

ROCK

Load dump truck	388 CY @	\$ 0.83	per CY	\$ 323.58
Rock haul	Round Trip (feet) 73938	26 Hours @	\$ 105.00 per Hour	\$ 2,718.56
Process/Compacting Ballast (12" Lift)	378 CY @	\$ 1.23	per CY	\$ 465.60
Light Loose Rip Rap	1.0 CY @	\$ 15.00	per CY	\$ 15.00
Rock haul	Round Trip (feet) 73938	0.1 Hours @	\$ 105.00 per CY	<u>\$ 7.00</u>
			Rock Total	<u>\$ 3,529.75</u>

CULVERTS & FLUMES

18" Polyethylene, double wall	40 feet @	\$22.23	per foot	<u>\$889.20</u>
			Culvert & Flume Total	<u>\$889.20</u>

MISC. MAINTENANCE

Grass seed (spread by hand)	24 pounds @	\$ 3.00	per pound	<u>\$ 71.06</u>
			Misc Maintenance Total	<u>\$ 71.06</u>

Management and Overhead \$ 915.20

Construction Total \$ 9,235.15

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-B-1000

Total road length (feet): 4250
 Distance to JCL Pit (feet) 5000
 Average Haul Speed (mph) 20
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

PREHAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	42.50 stations @	\$4.05 per station	\$	172.13
Maintenance grading & compacting	42.50 stations @	\$8.75 per station	\$	<u>372.01</u>
		Misc. Maintenance Total	\$	544.14

ROCK

Load dump truck		100 CY @	\$ 0.83 per CY	\$	83.33
Rock haul	Round Trip (feet) 18500	4 Hours @	\$ 105.00 per hour	\$	393.95
Process/Compacting Surfacing (6" Lift)		100 CY @	\$ 1.86 per CY	\$	<u>185.63</u>
		Rock Total		\$	662.91
		Management & Overhead		\$	<u>120.70</u>
		Prehaul Maintenance Total	\$		1,327.75

SALE/PROJECT NAME: Hardtak Sorts
CONTRACT #: 30-093651
ROAD NUMBER: PT-B-1020

Total road length (feet): 409
Distance to JCL Pit (: 500
Average Haul Speed (mph) 20
Truck Load/Unload Time (minutes) 12
Volume per Truck (CY) 10

PREHAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	4.09 stations @	\$4.05 per station	\$ 16.56
Maintenance grading & compacting	4.09 stations @	\$8.75 per station	\$ 35.80
Gate Maintenance	1 each @	\$200.00 per each	\$ 200.00
		Misc. Maintenance Total	\$ 252.37
		Management & Overhead	\$ 25.24
		Prehaul Maintenance Total	\$ 277.60

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-B-1040

Total road length (feet): 4000

Distance to JCL Pit (feet) 3000

Average Haul Speed (mph) 20

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

PREHAUL MAINTENANCE

MISC. MAINTENANCE

Brushing (medium)		40.00 stations @	\$57.75 per station	\$ 2,310.00
Cleaning Inlets & Outlets		40.00 stations @	\$4.05 per station	\$ 162.00
Maintenance grading & compacting		40.00 stations @	\$8.75 per station	\$ 350.13
Grass seed (spread by hand)		4.00 pounds @	\$3.00 per pound	\$ 12.00
Straw mulching (spread by hand)		0.10 acres @	\$595.00 per acre	\$ 59.50
			Misc. Maintenance Total	\$ 2,893.63

ROCK

Load dump truck		1104 CY @	\$ 0.83 per CY	\$ 920.00
Rock haul	Round Trip (feet) 14000	37 Hours @	\$ 105.00 per hour	\$ 3,855.22
Process/Compacting Surfacing (6" Lift)		880 CY @	\$ 1.86 per CY	\$ 1,633.50
Light Loose Rip Rap		24 CY @	\$ 15.00 per CY	\$ 360.00
Rock haul	Round Trip (feet) 14000	1 CY @	\$ 105.00 per hour	\$ 139.68
			Rock Total	\$ 6,908.40

CULVERTS & FLUMES

18" Polyethylene, double wall		130 feet @	\$ 22.23 per foot	\$ 2,889.90
48" Polyethylene, double wall		55 feet @	\$ 91.80 per foot	\$ 5,049.00
			Culvert & Flume Total	\$ 7,938.90

Management & Overhead \$ 1,774.09

Prehaul Maintenance Total \$ 19,515.02

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-B-2400

Total road length (feet): 3600
 Distance to JCL Pit (feet) 38900
 Average Haul Speed (mph) 20
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

PREHAUL MAINTENANCE

MISC. MAINTENANCE

Brushing (light)	36.00 stations @	\$33.00 per station	\$	1,188.00
Cleaning Inlets & Outlets	36.00 stations @	\$4.05 per station	\$	145.80
Maintenance grading & compacting	36.00 stations @	\$8.75 per station	\$	315.12
		Misc. Maintenance Total	\$	<u>1,648.92</u>

ROCK

Load dump truck	200 CY @	\$ 0.83 per CY	\$	166.67
Rock haul	Round Trip (feet 85000)	20 Hours @	\$ 105.00 per hour	\$ 2,110.34
Process/Compacting Surfacing (6" Lift)	200 CY @	\$ 1.86 per CY	\$	<u>371.25</u>
		Rock Total	\$	2,648.26

Management & Overhead \$ 429.72

Prehaul Maintenance Total \$ 4,726.89

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-M-2200

Total road length (feet): 860
 Distance to JCL Pit (feet) 35000
 Distance to Place Road (feet) 44000
 Average Haul Speed (mph) 30
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

PREHAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	8.60 stations @	\$4.05 per station	\$	34.83
Maintenance grading & compacting	8.60 stations @	\$8.75 per station	\$	75.28
Gate Maintenance	1 each @	\$200.00 per each	\$	200.00
		Misc. Maintenance Total	\$	<u>310.11</u>
		Management & Overhead	\$	<u>31.01</u>
		Prehaul Maintenance Total	\$	341.12

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-M-1000

Total road length (feet): 1575
 Distance to JCL Pit (feet) 36000
 Average Haul Speed (mph) 35
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

PREHAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	15.75 stations @	\$4.05 per station	\$	63.79
Maintenance grading & compacting	15.75 stations @	\$8.75 per station	\$	137.86
Gate Maintenance	1.00 each @	\$200.00 per each	\$	200.00
		Misc. Maintenance Total	\$	401.65

ROCK

Load dump truck		200 CY @	\$ 0.83 per CY	\$	166.67
Rock haul	Round Trip (feet) 75150	12 Hours @	\$ 105.00 per hour	\$	1,273.98
Process/Compacting Surfacing (6" Lift)		200 CY @	\$ 1.86 per CY	\$	371.25
		Rock Total	\$	1,811.89	

Management & Overhead \$ 221.35

Prehaul Maintenance Total \$ 2,434.90

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: FS-2850

Total road length (feet): 17085
 Distance to JCL Pit (feet) 12300
 Average Haul Speed (mph) 20
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

PREHAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	170.85 stations @	\$4.05 per station	\$	691.94
Maintenance grading & compacting	170.85 stations @	\$8.75 per station	\$	1,495.48
		Misc. Maintenance Total	\$	<u>2,187.43</u>

ROCK

Load dump truck		100 CY @	\$ 0.83 per CY	\$	83.33
Rock haul	Round Trip (feet) 58770	8 Hours @	\$ 105.00 per hour	\$	794.36
Process/Compacting Surfacing (6" Lift)		100 CY @	\$ 1.86 per CY	\$	<u>185.63</u>
		Rock Total		\$	1,063.32

Management & Overhead \$ 325.07

Prehaul Maintenance Total \$ 3,575.82

SALE/PROJECT NAME: Hardtak Sorts
CONTRACT #: 30-093651
ROAD NUMBER: PT-M-1100.1

Total road length (feet): 1535
Distance to JCL Pit (feet) 40000
Average Haul Speed (mph) 35
Truck Load/Unload Time (minutes) 12
Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	15.35 stations @	\$4.05 per station	\$	62.17
Maintenance grading & compacting	15.35 stations @	\$8.75 per station	\$	134.36
		Misc. Maintenance Total	\$	<u>196.53</u>
		Management & Overhead	\$	<u>19.65</u>
		Post Haul Maintenance Total	\$	216.18

SALE/PROJECT NAME: Hardtak Sorts
CONTRACT #: 30-093651
ROAD NUMBER: PT-B-1043.1

Total road length (feet): 288
Distance to JCL Pit (feet) 3100
Average Haul Speed (mph) 15
Truck Load/Unload Time (minutes) 12
Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	2.88 stations @	\$4.05 per station	\$	11.66
Maintenance grading & compacting	2.88 stations @	\$8.75 per station	\$	25.21
		Misc. Maintenance Total	\$	<u>36.87</u>
		Management & Overhead	\$	<u>3.69</u>
		Post Haul Maintenance Total	\$	40.56

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-B-1044

Total road length (feet): 1168

Distance to JCL Pit (feet) 5200

Average Haul Speed (mph) 15

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	11.68 stations @	\$4.05 per station	\$	47.30
Maintenance grading & compacting	11.68 stations @	\$8.75 per station	\$	102.24
		Misc. Maintenance Total	\$	<u>149.54</u>
		Management & Overhead	\$	<u>14.95</u>
		Post Haul Maintenance Total	\$	164.50

SALE/PROJECT NAME: Hardtak Sorts
 CONTRACT #: 30-093651
 ROAD NUMBER: PT-B-2000

Total road length (feet): 3900
 Distance to JCL Pit (feet) 7810
 Average Haul Speed (mph) 15
 Truck Load/Unload Time (minutes) 12
 Volume per Truck (CY) 10

PROST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	39.00 stations @	\$4.05 per station	\$	157.95
Maintenance grading & compacting	39.00 stations @	\$8.75 per station	\$	341.37
		Misc. Maintenance Total	\$	499.32

ROCK

Load dump truck		200 CY @	\$ 0.83 per CY	\$	166.67
Rock haul	Round Trip (feet) 23420	10 Hours @	\$ 105.00 per hour	\$	1,040.98
Process/Compacting Surfacing (6" Lift)		200 CY @	\$ 1.86 per CY	\$	371.25
		Rock Total	\$	1,578.90	

Management & Overhead \$ 207.82

Post Haul Maintenance Total \$ 2,286.05

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-B-2420

Total road length (feet): 2335

Distance to JCL Pit (feet) 13809

Average Haul Speed (mph) 15

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	23.35 stations @	\$4.05 per station	\$ 94.57
Maintenance grading & compacting	23.35 stations @	\$8.75 per station	<u>\$ 204.39</u>
		Misc. Maintenance Total	\$ 298.95

Management & Overhead \$ 29.90

Post Haul Maintenance Total \$ 328.85

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-B-2421

Total road length (feet): 158

Distance to JCL Pit (feet) 13909

Average Haul Speed (mph) 15

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	1.58 stations @	\$4.05 per station	\$ 6.40
Maintenance grading & compacting	1.58 stations @	\$8.75 per station	<u>\$ 13.83</u>
		Misc. Maintenance Total	<u>\$ 20.23</u>

Management & Overhead \$ 2.02

Post Haul Maintenance Total \$ 22.25

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-M-2205

Total road length (feet): 358

Distance to JCL Pit (feet) 37000

Average Haul Speed (mph) 30

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	3.58 stations @	\$4.05 per station	\$	14.50
Maintenance grading & compacting	3.58 stations @	\$8.75 per station	\$	31.34
		Misc. Maintenance Total	\$	<u>45.84</u>
		Management & Overhead	\$	<u>4.58</u>
		Post Haul Maintenance Total	\$	50.42

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: 1+00 SPUR

Total road length (feet): 100

Distance to JCL Pit (feet) 35000

Average Haul Speed (mph) 30

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	1.00 stations @	\$4.05 per station	\$	4.05
Maintenance grading & compacting	1.00 stations @	\$8.75 per station	\$	8.75
		Misc. Maintenance Total	\$	<u>12.80</u>
		Management & Overhead	\$	<u>1.28</u>
		Post Haul Maintenance Total	\$	14.08

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-B-1000

Total road length (feet): 4250

Distance to JCL Pit (feet) 32000

Average Haul Speed (mph) 30

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	42.50 stations @	\$4.05 per station	\$ 172.13
Maintenance grading & compacting	42.50 stations @	\$8.75 per station	\$ 372.01
		Misc. Maintenance Total	<u>\$ 544.14</u>

ROCK

Load dump truck		300 CY @	\$ 0.83 per CY	\$ 250.00
Rock haul	Round Trip (feet) 72500	20 Hours @	\$ 105.00 per hour	\$ 2,071.76
Process/Compacting Surfacing (6" Lift)		300 CY @	\$ 1.86 per CY	\$ 556.88
		Rock Total		<u>\$ 2,878.64</u>

Management & Overhead \$ 342.28

Post Haul Maintenance Total \$ 3,765.05

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-B-1020

Total road length (feet): 409

Distance to JCL Pit (feet): 10000

Average Haul Speed (mph) 30

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	4.09 stations @	\$4.05 per station	\$ 16.56
Maintenance grading & compacting	4.09 stations @	\$8.75 per station	<u>\$ 35.80</u>
		Misc. Maintenance Total	<u>\$ 52.37</u>

Management & Overhead \$ 5.24

Post Haul Maintenance Total \$ 57.60

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-B-1040

Total road length (feet): 4000

Distance to JCL Pit (feet) 10000

Average Haul Speed (mph) 30

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	40.00 stations @	\$4.05 per station	\$ 162.00
Maintenance grading & compacting	40.00 stations @	\$8.75 per station	<u>\$ 350.13</u>
		Misc. Maintenance Total	\$ 512.13

Management & Overhead \$ 51.21

Post Haul Maintenance Total \$ 563.34

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-B-2400

Total road length (feet): 3600

Distance to JCL Pit (feet) 10000

Average Haul Speed (mph) 30

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	36.00 stations @	\$4.05 per station	\$ 145.80
Maintenance grading & compacting	36.00 stations @	\$8.75 per station	\$ 315.12
		Misc. Maintenance Total	\$ 460.92
		Management & Overhead	\$ 46.09

POST HAUL MAINTENANCE TOTAL \$ 507.01

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-M-2200

Total road length (feet): 860

Distance to JCL Pit (feet) 10000

Average Haul Speed (mph) 30

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

PREHAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	8.60 stations @	\$4.05 per station	\$ 34.83
Maintenance grading & compacting	8.60 stations @	\$8.75 per station	\$ 75.28
		Misc. Maintenance Total	\$ 110.11

Management & Overhead \$ 11.01

Post Haul Maintenance Total \$ 121.12

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: PT-M-1000

Total road length (feet): 1575

Distance to JCL Pit (feet) 10000

Average Haul Speed (mph) 30

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	15.75 stations @	\$4.05 per station	\$ 63.79
Maintenance grading & compacting	15.75 stations @	\$8.75 per station	\$ 137.86
		Misc. Maintenance Total	\$ 201.65

Management & Overhead \$ 20.17

Post Haul Maintenance Total \$ 221.82

SALE/PROJECT NAME: Hardtak Sorts

CONTRACT #: 30-093651

ROAD NUMBER: FS-2850

Total road length (feet): 17085

Distance to JCL Pit (feet) 5000

Average Haul Speed (mph) 30

Truck Load/Unload Time (minutes) 12

Volume per Truck (CY) 10

POST HAUL MAINTENANCE

MISC. MAINTENANCE

Cleaning Inlets & Outlets	170.85 stations @	\$4.05 per station	\$ 691.94
Maintenance grading & compacting	170.85 stations @	\$8.75 per station	\$ 1,495.48
		Misc. Maintenance Total	<u>\$ 2,187.43</u>

ROCK

Load dump truck	200 CY @	\$ 0.83 per CY	\$ 166.67	
Rock haul	Round Trip (fee: 44170)	10 Hours @	\$ 105.00 per hour	\$ 1,005.59
Process/Compacting Surfacing (6" Lift)	200 CY @	\$ 1.86 per CY	\$ 371.25	
		Rock Total	<u>\$ 1,543.50</u>	

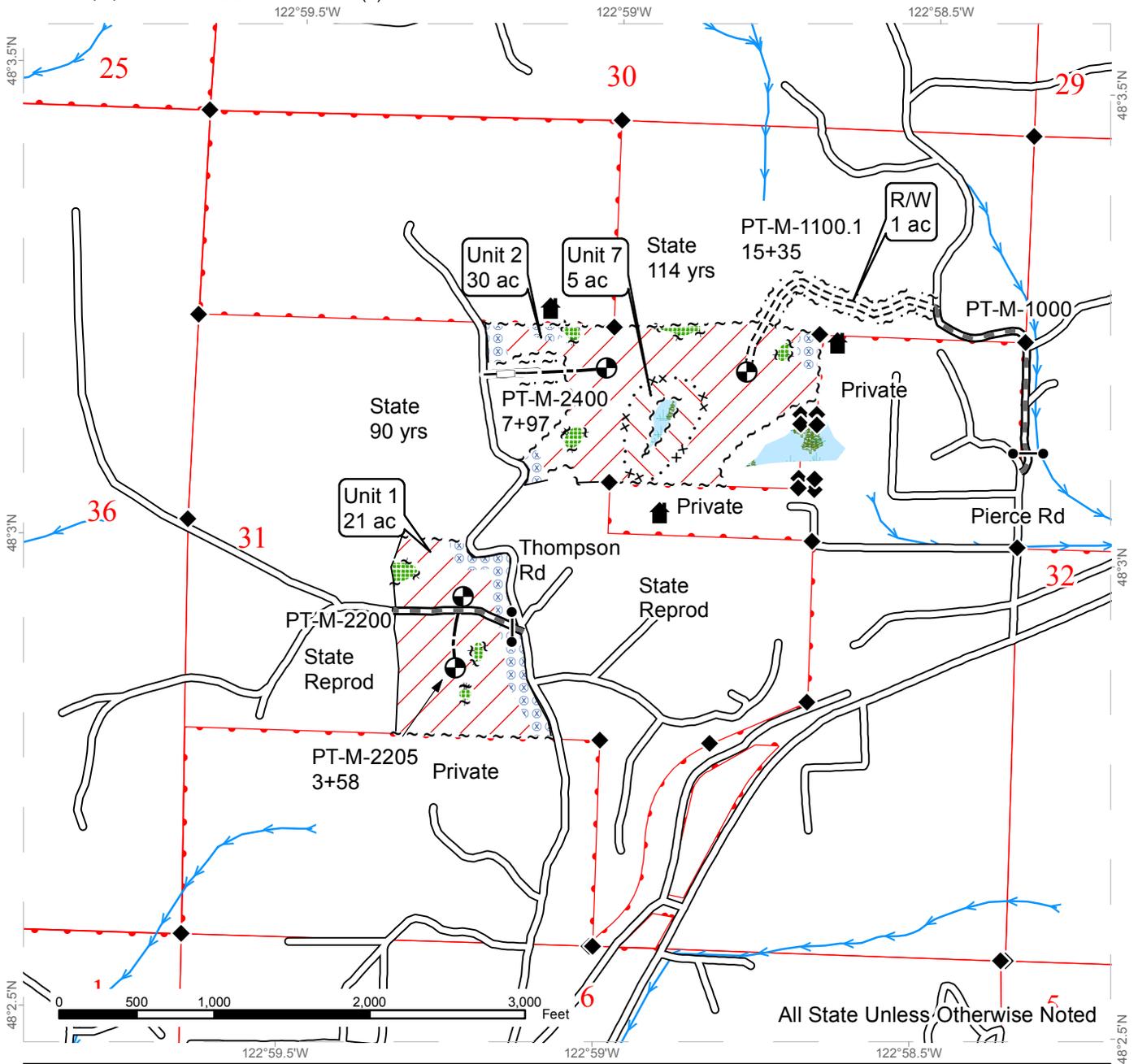
Management & Overhead \$ 373.09

Post Haul Maintenance Total \$ 4,104.02

TIMBER SALE MAP

SALE NAME: HARDTAK SORTS
AGREEMENT #: 93651
TOWNSHIP(S): T30R02W
TRUST(S): State Forest Transfer(1)

REGION: Olympic Region
COUNTY(S): CLALLAM
ELEVATION RGE: 180-1220'



All State Unless Otherwise Noted

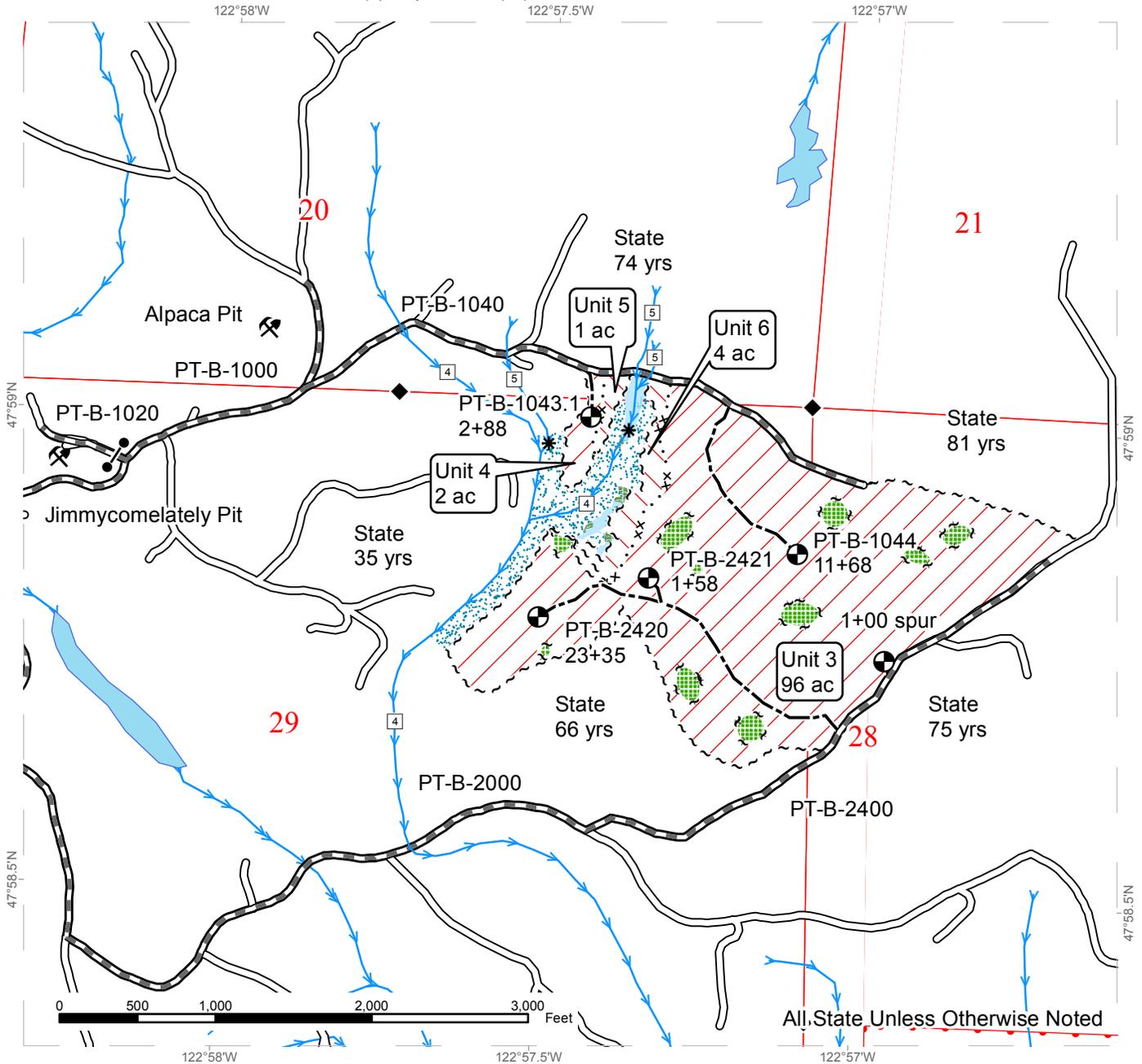
Ground Based	Timber Sale Boundary Tags	Existing Roads
Monumented Corners	Special Mgmt Unit Boundary Tags	Required Pre-Haul Maintenance
Streams	Leave Tree Area Tags	Required Construction
Leave Tree Area	Right of Way Boundary Tags	Optional Construction
Riparian Mgmt Zone	Timber Edge	Optional Reconstruction
Forested Wetland	Property Line	Structure
WMZ Thinning	Stream Type	Proposed Landing
Hazard Abatement	Stream Type Break	Gate (AA-1)
		Existing Rock Pit



TIMBER SALE MAP

SALE NAME: HARDTAK SORTS
AGREEMENT #: 93651
TOWNSHIP(S): T29R02W
TRUST(S): State Forest Transfer(1), Capitol Grant (07)

REGION: Olympic Region
COUNTY(S): CLALLAM
ELEVATION RGE: 180-1220'



All, State Unless Otherwise Noted

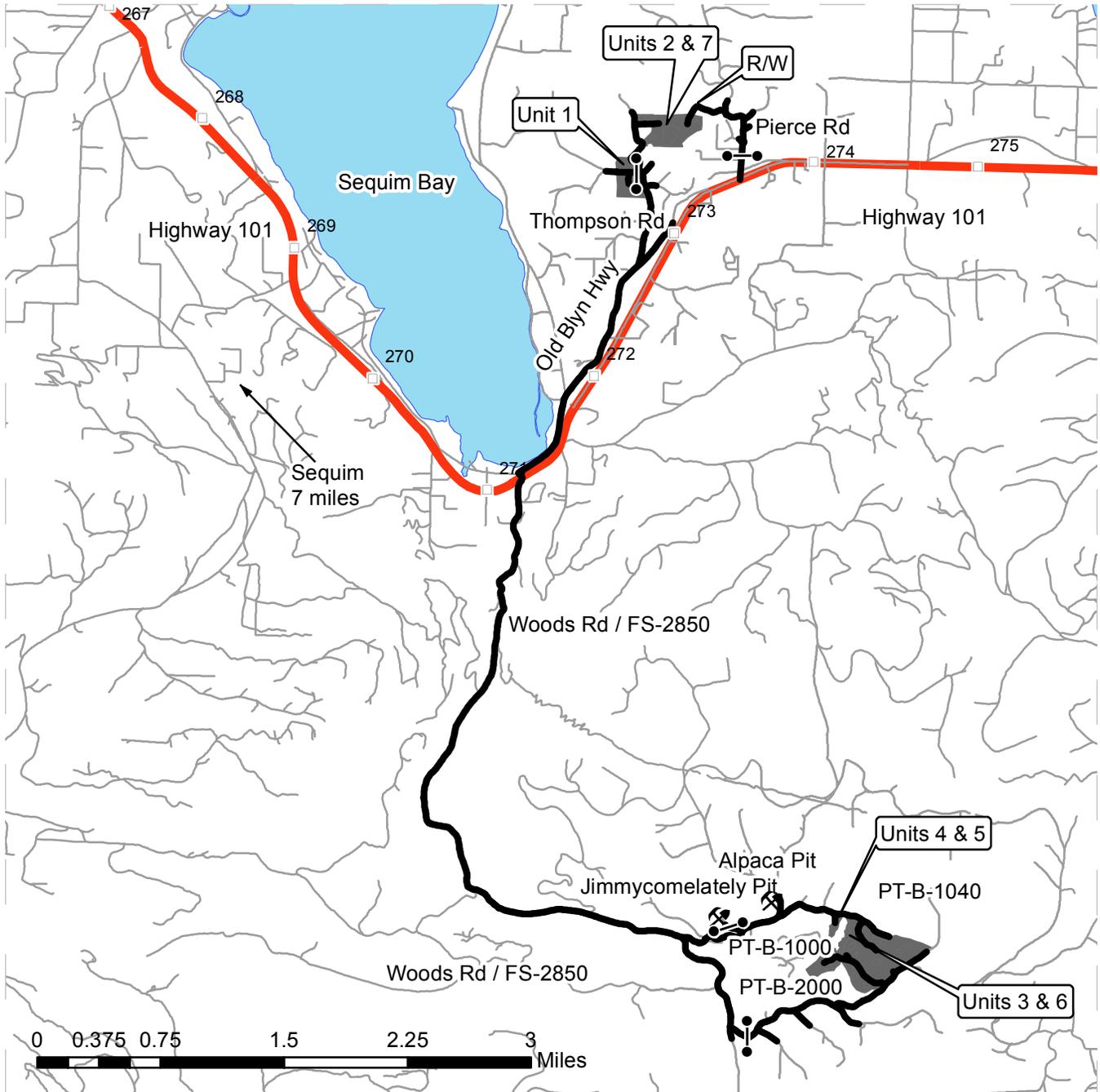
Ground Logging	Timber Sale Boundary Tags	Existing Roads
Monumented Corners	Special Mgmt Unit Boundary Tags	Required Pre-Haul Maintenance
Streams	Leave Tree Area Tags	Required Construction
Leave Tree Area	Right of Way Boundary Tags	Optional Construction
Riparian Mgt Zone	Timber Edge	Optional Reconstruction
Forested Wetland	Property Line	Structure
WMZ Thinning	Stream Type	Proposed Landing
Hazard Abatement	Stream Type Break	Gate (AA-1)
		Existing Rock Pit



DRIVING MAP

SALE NAME: HARDTAK SORTS
AGREEMENT#: 30-093651
TOWNSHIP(S): T29R02W, T30R02W
TRUST(S): State Forest Transfer(1), Capitol Grant (07)

REGION: Olympic Region
COUNTY(S): CLALLAM
ELEVATION RGE: 180-1220'



LEGEND

- Highway
- Haul Route
- Other Roads
- Mile Post
- Timber Sale Unit
- ⚡ Rock Pit
- Gate (AA-1)

Driving Directions:

Near m.p. 273 of Highway 101, turn west onto Old Blyn Highway for 0.25 mile. Turn north on Thompson Rd. Unit 1 is located 0.5 mile on the left. Unit 2 and 7 are located another 0.4 mile on the right.

Near m.p. 271 of Highway 101, turn south onto Woods Rd / FS-2850. Travel 4 miles and turn east onto PT-B-1000. Travel 0.4 mile and turn west onto PT-B-1040. Unit 3, 4, 5, and 6 are 0.5 mile on right.



STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
PETER GOLDMARK
COMMISSIONER OF PUBLIC LANDS

**HARVESTING SERVICES CONTRACT
SEALED BID FORM**

(Print Project Name)

(Agreement No.)

(Print Company Name)

(Street Address)

(Business Telephone Number)

(City, State and Zip Code)

(email address)

To meet Harvesting obligations, I bid the following On Board Truck (OBT) rate:

(check box for appropriate project payment method. RFQ section 2.06)

\$/Ton of timber harvested and delivered.

\$/mbf of timber harvested and delivered.

And to meet pole sort Harvesting obligations, I bid the following OBT rate:

(check box for appropriate project payment method. RFQ section 2.06)

\$/Ton of poles harvested and delivered.

\$/mbf of poles harvested and delivered.

“Does Not Apply” to projects with no pole sorts identified. Refer to RFQ section 2.06.

To meet Hauling obligations, I bid:

Hauling Bid Factor

(format to 3 decimal places ie 0.000)

Hauling Services Payment calculation explained in RFQ section 1.05.

Actual “live-load” weights used to determine payment for hauling sorts designated as “tonnage”. Sorts designated as “MBF” will use calculated tonnage based on the DNR’s advertised “tons/mbf conversion factor specific for each sort unless actual tonnage is available and approved for use.

If awarded this contract, I am responsible for independently negotiating, procuring and paying for any and all subcontracted services provided.

Attached is my completed 'Statement of Available Resources and Work Plan' which I understand will be evaluated by the Department of Natural Resources in conjunction with my bid to determine my ability to complete the project.

BY SUBMISSION OF THIS BID THE BIDDER WARRANTS AND AGREES TO THE FOLLOWING:

1. The bid price has been determined independently, without consultation, communication, or agreement with others for the purpose of restricting competition.
2. The bid is a firm offer for a period of 90 days from the bid submission deadline, and it may be accepted by the State without further negotiation at any time within the 90-day period.
3. In preparing this proposal or bid, the Bidder was not assisted by any current or former employee of the DNR whose duties relate (or did relate) to this prospective contract and who was assisting in other than his or her official, public capacity. Neither does such a person or any member of his or her immediate family have any financial interest in the outcome of this proposal.
4. Acceptance of the Harvesting Services Contract general terms and conditions.
5. Acceptance of the Harvesting Services Contract estimated road payment values as shown fixed by terms in contract clause P-032.1.
6. The Bidder has had an opportunity to fully inspect the sale area and the timber to be harvested.
7. The Bidder enters this bid based solely upon their own judgment of the costs associated with harvesting, hauling, and any additional required work formed after their own examination and inspection of both the timber sale area and the forest products to be harvested.
8. The Bidder enters this bid without any reliance upon the volume estimates, acreage estimates, appraisals, pre-bid documentation, or any other representation by the State Department of Natural Resources.
9. The Bidder, if successful, will furnish the necessary labor, equipment, and services needed to complete the work as specified by the harvesting contract including commencing and completing the operations in the times specified.

10. The Bidder agrees to execute the harvesting contract for the said project and agrees to furnish surety and insurance as required in the specifications.
11. The Bidder assumes the risk of liabilities related to any regulatory actions by any government agency that may affect the operability of these harvesting contracts. Such regulatory actions include, but are not limited to, actions taken pursuant to the Forest Practices Act, chapter 76.09 RCW, and the Endangered Species Act, 16 U.S.C. §§ 1531-1544. Please see the Harvesting Services Contract for further information.
12. The DNR cannot verify the presence or absence of northern spotted owls, marbled murrelets or any other threatened or endangered species that may affect the operability of the timber sale. The Bidder relies solely on his/her own assessments.
13. Acreage estimates and volume estimates contained within the harvesting services contract are made only for administrative and identification purposes. Except as expressly provided by the harvesting contract, the Apparent Successful Contractor shall be responsible to harvest the sale, even if the actual acreage or timber volume varies from the estimated quantity or volume shown.
14. The DNR will not reimburse the Bidder for any costs incurred in the preparation of this proposal. All proposals become the property of the DNR and I/we claim no proprietary rights to the ideas or writings contained in them.
15. The Bidder will be required to comply with the Department's Nondiscrimination Plan and federal and state laws on which it is based. If requested by the DNR, the Bidder/Harvester will submit additional information about the nondiscrimination and affirmative action policies and plans of their organization in advance of or after the contract award.

By signing and submitting this bid the Bidder agrees to all of the preceding requirements. The Bidder further warrants to the State that they enter this bid based upon their own judgments of the value of the harvesting services to be provided through the Harvesting Services Contract, formed after their own examination and inspection of both the timber sale area and the forest products to be harvested.

 (Signature of authorized representative submitting this bid)

 (Date)

 (Print name and title of authorized representative signing bid)

Road Proposal Cost Form

Roads	Type	Stations or Quantities	Work Type Completion	Contractor Proposed Stations	Price per Station		Total
PT-M-1100.1	Construction	15.35	Required			per Station	
PT-B-1043.1	Construction	2.88	Optional			per Station	
PT-B-1044	Construction	11.68	Optional			per Station	
PT-B-2000	Prehaul Maint.	39.00	Required			per Station	
PT-B-2420	Construction	23.35	Optional			per Station	
PT-B-2421	Construction	1.58	Optional			per Station	
PT-M-2205	Construction	3.58	Optional			per Station	
PT-M-2400 (0+00 to 3+28)	Reconstruction	3.28	Optional			per Station	
PT-M-2400(3+28 to 7+97)	Construction	4.69	Optional			per Station	
1+00 SPUR	Construction	1.00	Optional			per Station	
PT-B-1000	Prehaul Maint.	42.50	Required			per Station	
PT-B-1020	Prehaul Maint.	4.09	Required			per Station	
PT-B-1040	Prehaul Maint.	40.00	Required			per Station	
PT-B-2400	Prehaul Maint.	36.00	Required			per Station	
PT-M-2200	Prehaul Maint.	8.60	Required			per Station	
PT-M-1000	Prehaul Maint.	15.75	Required			per Station	
FS-2850	Prehaul Maint.	170.85	Required			per Station	
ALL ROADS	Post Haul Maint.	420.90	Required			per Station	
PT-M-2400	Abandonment	7.97	Required			per Station	
Initial Move In		1	Required			Lump Sum	
Rock Development		1	Required			Lump Sum	
Post Haul Move In		1	Required			Lump Sum	

Total Road Cost Proposal \$

*** Note: A Price per Station and Total must be entered for all roads. Each Total is calculated by multiplying the Stations or Quantities by the Price Per Station. All totals must be summed and entered as the Total Road Cost Proposal.**