



GOOD NEIGHBOR AUTHORITY TIMBER NOTICE OF SALE

SALE NAME: West Trout Lake

AGREEMENT NO: 36-099675

AUCTION: January 28, 2020 starting at 10:00 a.m., Northeast Region Office, Colville, WA

COUNTY: Ferry

SALE LOCATION: Sale located approximately 14 miles West of Kettle Falls, WA.

PRODUCTS SOLD AND SALE AREA:

All green conifer species less than 21 inches in Diameter at Breast Height (DBH) not banded with orange paint in Units 6 and 7 bounded by white timber sale boundary tags outside of established Riparian Habitat Conservation Areas (RHCA); and all green conifer species less than 21 inches in DBH not described as leave trees in Schedule A within Units 5 and 8 bounded by white timber sale boundary tags outside of established RHCAs; and all green conifers banded by blue paint in RHCA 9A, 9B, 9C, 9D, 9E, 9F, 9G, and 9H within identified RHCAs (collectively referenced as harvest area 9) located behind blue special management tags and within units 5 and 6 bound by white timber sale boundary tags. Units are within part(s) of Sections 13, 14, 15, 22, 23, 24, 25, 26, and 27 all in Township 36 North, Range 36 East, W.M., containing approximately 1,530 net harvest acres.

ESTIMATED SALE VOLUMES AND QUALITY:

Table with columns: Species/Product, Average DBH, Total MBF, Total Tons, Price \$/Ton, and MBF by Grade (SM, 1S, 2S, 3S, 4S, 5S, 6S, UT). Rows include Douglas-fir, Larch, Ponderosa pine, Grand fir, Alpine fir, Spruce, Lodge pole pine, Red cedar, and a SALES TOTAL row.

MINIMUM BID: \$25.45 /ton (est. value \$1,877,000.00) BID METHOD: Sealed Bids

PERFORMANCE SECURITY: \$100,000.00 SALE TYPE: Tonnage Scale

EXPIRATION DATE: October 31, 2022 ALLOCATION: Export Restricted

BIDDABLE SPECIES: Douglas-fir, Western larch, Ponderosa pine, Grand fir, Alpine fir, Lodgepole, and Engelmann spruce combined (Red cedar fixed at \$95/ton).

BID DEPOSIT: \$100,000.00. Cashier's check is required. Said deposit shall constitute an opening bid at the appraised price.

HARVEST METHOD: Ground based harvest system. Hand felling may be required in isolated areas. Falling and yarding in all units will not be permitted from February 15 to May 31 unless authorized in writing by the Contract Administrator. Reason for restriction – Spring break-up.



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Additionally, falling and yarding will not be permitted in designated deer and elk winter range and other areas as shown on Exhibit A map from December 1 through March 31.

ROADS: 3.91 stations of required temporary new construction, 272.80 stations required temporary reconstruction, 75.96 stations optional temporary reconstruction and 322.39 stations required pre-haul maintenance. Temporary road construction will not be permitted from October 30 to June 15 unless authorized in writing by the Contract Administrator. Reason for restriction – winter conditions and spring break-up. All hauling of forest products will not be permitted from February 15 to May 31 unless authorized in writing by the Contract Administrator; reason for restriction – spring break-up.

ACREAGE DETERMINATION

CRUISE METHOD: Acreage determined using GPS methods. Acreage shown above is net harvest acres in harvest units. Ponderosa pine and red cedar: 8.0-17.5 inches DBH has a minimum top of 5.6 inch DIB. All other species: 7.0-17.5 inch DBH has a minimum top of 4.6 DIB. All species 17.6 inches and greater DBH have a minimum to DIB of 40% of DOB at 16 feet or a 6 inch top, whichever is greater.

FEES: None.

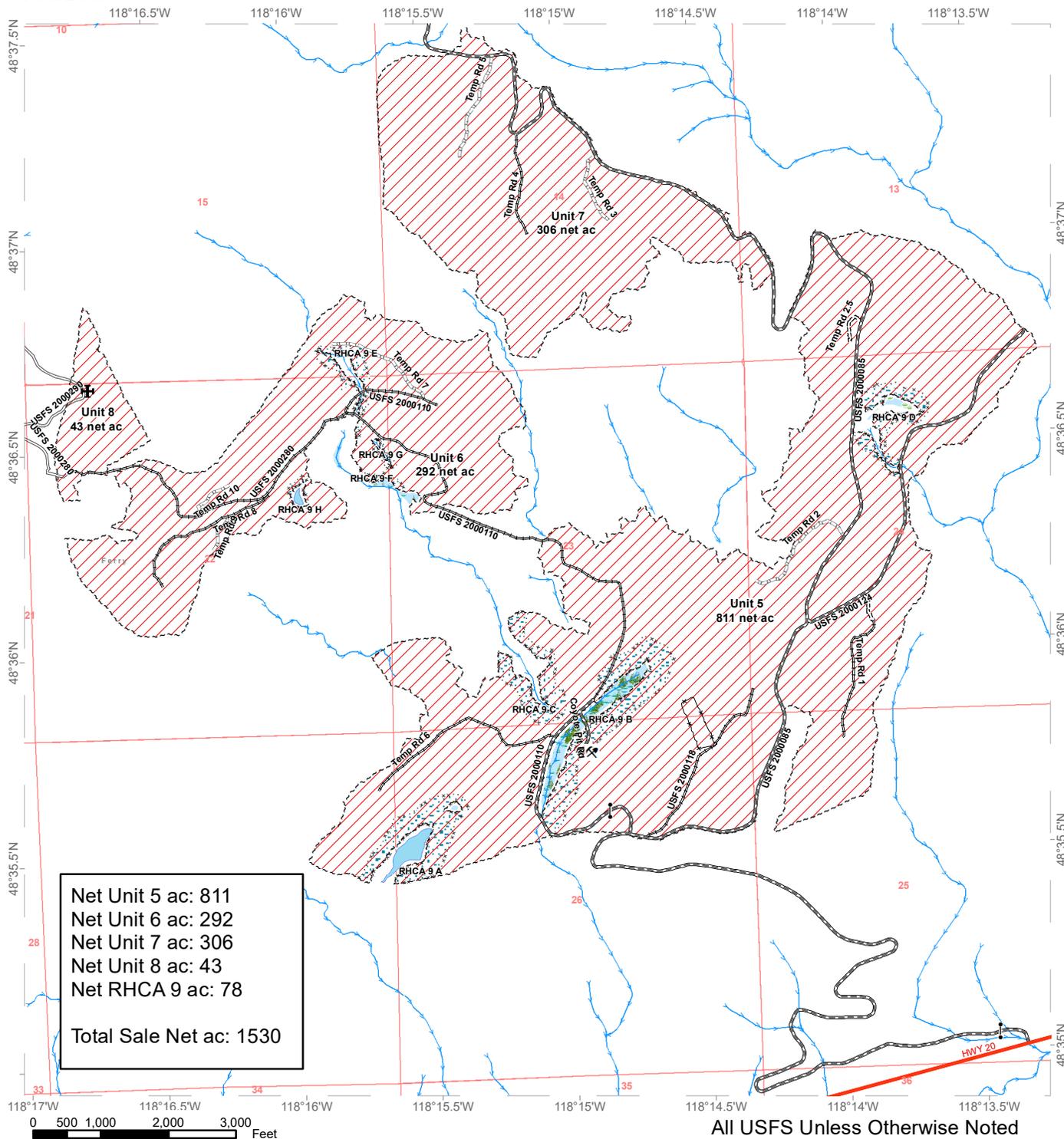
SPECIAL REMARKS: Locked gates will restrict access starting December 1st. Contact the Northeast Region office for a key/combo for access at (509)684-7474. Units 6 and 8 are behind closed/bermed roads.

GOOD NEIGHBOR AUTHORITY TIMBER SALE MAP

Map 2

SALE NAME: West Trout Lake
AGREEMENT #: 36-099675
TOWNSHIP(S): T36R36E
FOREST: Colville N.F.

REGION: Northeast Region
COUNTY(S): Ferry
ELEVATION RGE: 2800-4760



Net Unit 5 ac: 811
 Net Unit 6 ac: 292
 Net Unit 7 ac: 306
 Net Unit 8 ac: 43
 Net RHCA 9 ac: 78

 Total Sale Net ac: 1530

All USFS Unless Otherwise Noted

Harvest Area	Optional Reconstruction	Gates
RHCA Harvest	Streams	Weather Station
Required Pre-Haul Maintenance	Waterbodies	Fenced Enclosure
Existing Roads	Wetlands - Non-forested	Public Land Survey Townships
Required Construction	Forested Wetland	Public Land Survey Sections
Required Reconstruction	Rock Pit	

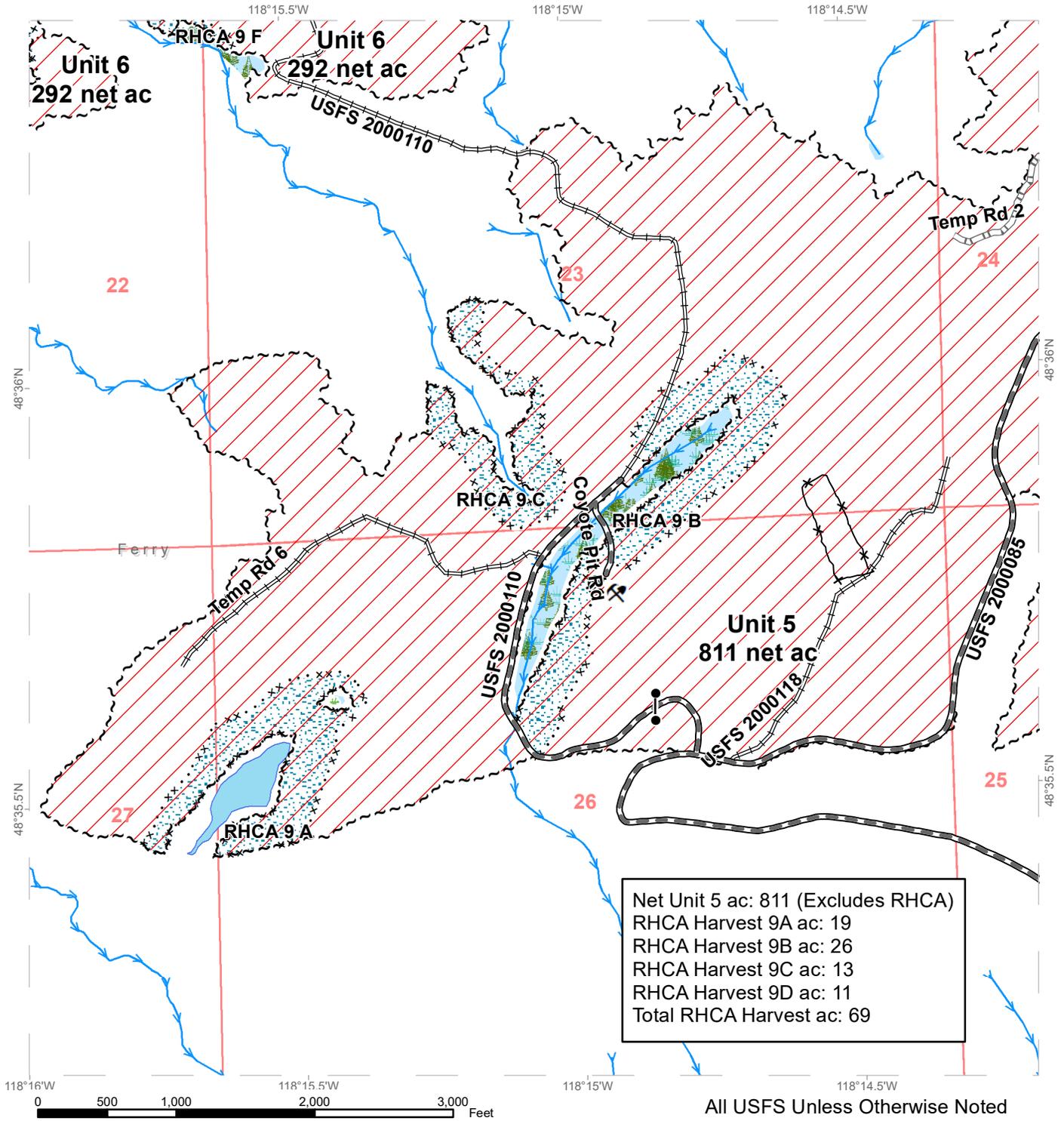


GOOD NEIGHBOR AUTHORITY TIMBER SALE MAP

Map 3

SALE NAME: West Trout Lake
 AGREEMENT #: 36-099675
 TOWNSHIP(S): T36R36E
 FOREST: Colville N.F.

REGION: Northeast Region
 COUNTY(S): Ferry
 ELEVATION RGE: 2800-4760



Net Unit 5 ac: 811 (Excludes RHCA)
 RHCA Harvest 9A ac: 19
 RHCA Harvest 9B ac: 26
 RHCA Harvest 9C ac: 13
 RHCA Harvest 9D ac: 11
 Total RHCA Harvest ac: 69

All USFS Unless Otherwise Noted

Harvest Area	Optional Reconstruction	Gates
RHCA Harvest	Streams	Weather Station
Required Pre-Haul Maintenance	Waterbodies	Fenced Enclosure
Existing Roads	Wetlands - Non-forested	Public Land Survey Townships
Required Construction	Forested Wetland	Public Land Survey Sections
Required Reconstruction	Rock Pit	

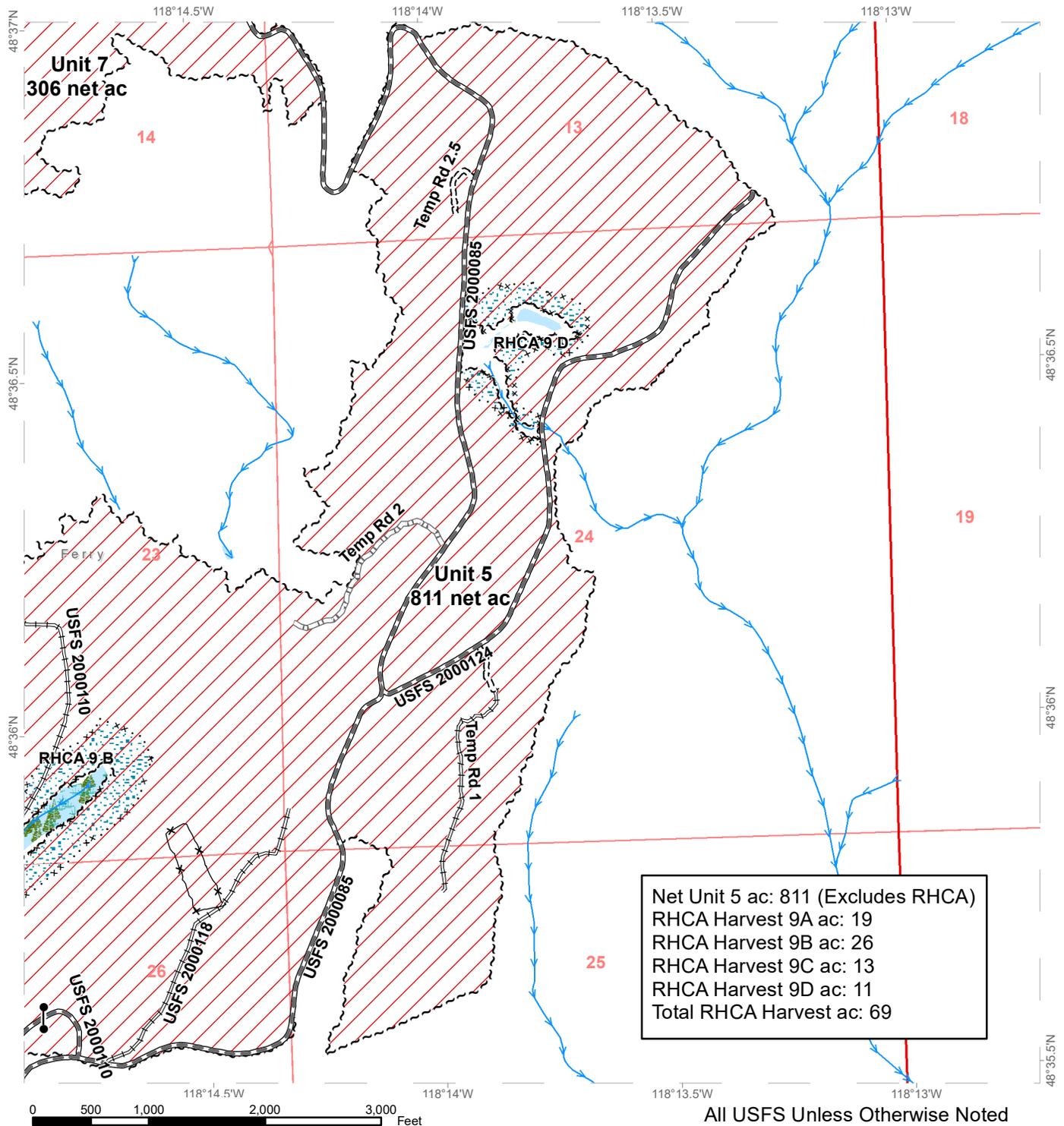


GOOD NEIGHBOR AUTHORITY TIMBER SALE MAP

Map 4

SALE NAME: West Trout Lake
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REGION: Northeast Region
COUNTY(S): Ferry
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Net Unit 5 ac: 811 (Excludes RHCA)
 RHCA Harvest 9A ac: 19
 RHCA Harvest 9B ac: 26
 RHCA Harvest 9C ac: 13
 RHCA Harvest 9D ac: 11
 Total RHCA Harvest ac: 69

All USFS Unless Otherwise Noted

Harvest Area	Optional Reconstruction	Gates
RHCA Harvest	Streams	Weather Station
Required Pre-Haul Maintenance	Waterbodies	Fenced Enclosure
Existing Roads	Wetlands - Non-forested	Public Land Survey Townships
Required Construction	Forested Wetland	Public Land Survey Sections
Required Reconstruction	Rock Pit	

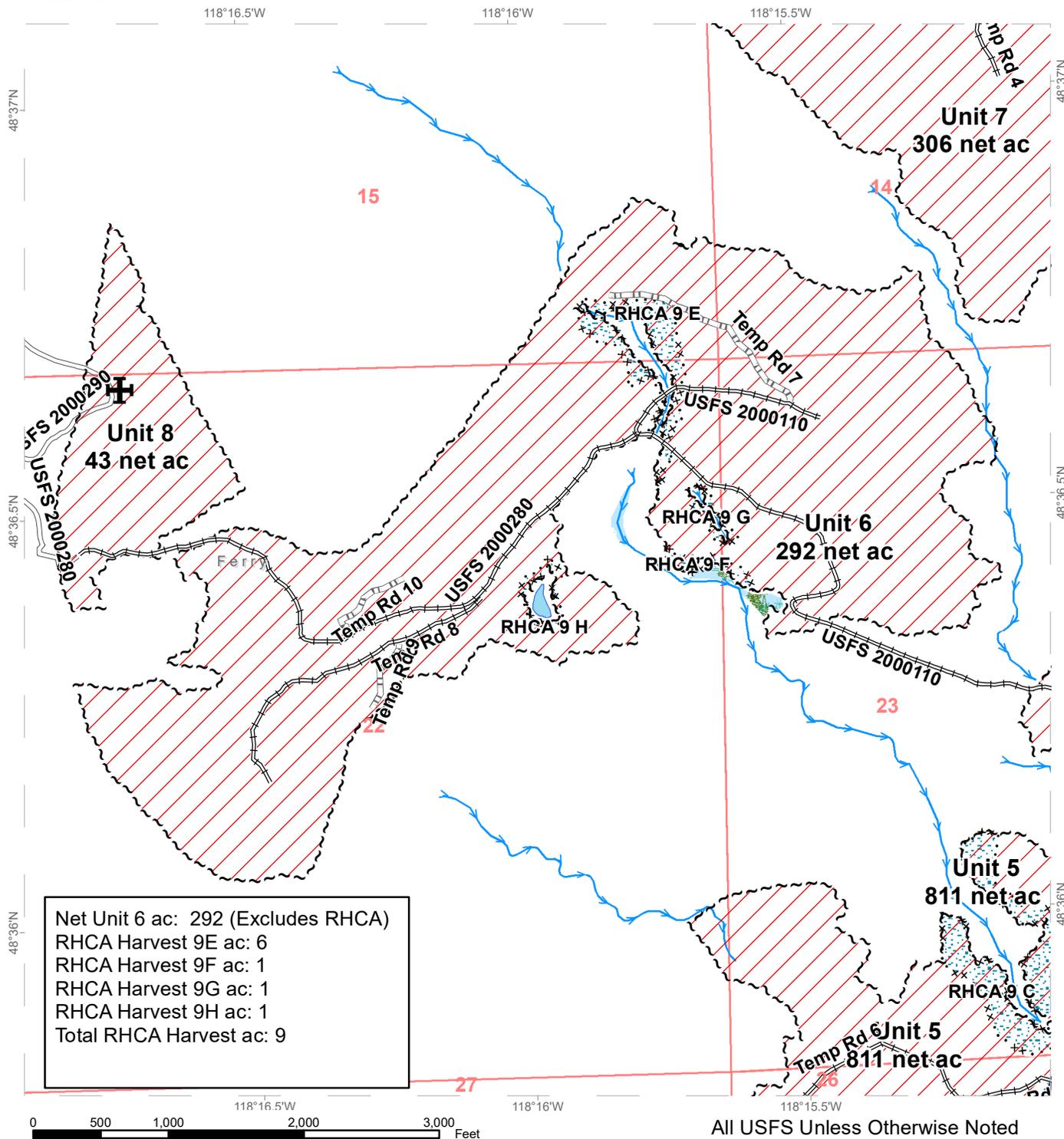


GOOD NEIGHBOR AUTHORITY TIMBER SALE MAP

Map 5

SALE NAME: West Trout Lake
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FOREST: Colville N.F.

REGION: Northeast Region
COUNTY(S): Ferry
ELEVATION RGE: 2800-4760



Net Unit 6 ac: 292 (Excludes RHCA)
 RHCA Harvest 9E ac: 6
 RHCA Harvest 9F ac: 1
 RHCA Harvest 9G ac: 1
 RHCA Harvest 9H ac: 1
 Total RHCA Harvest ac: 9

Harvest Area	Optional Reconstruction	Gates
RHCA Harvest	Streams	Weather Station
Required Pre-Haul Maintenance	Waterbodies	Fenced Enclosure
Existing Roads	Wetlands - Non-forested	Public Land Survey Townships
Required Construction	Forested Wetland	Public Land Survey Sections
Required Reconstruction	Rock Pit	

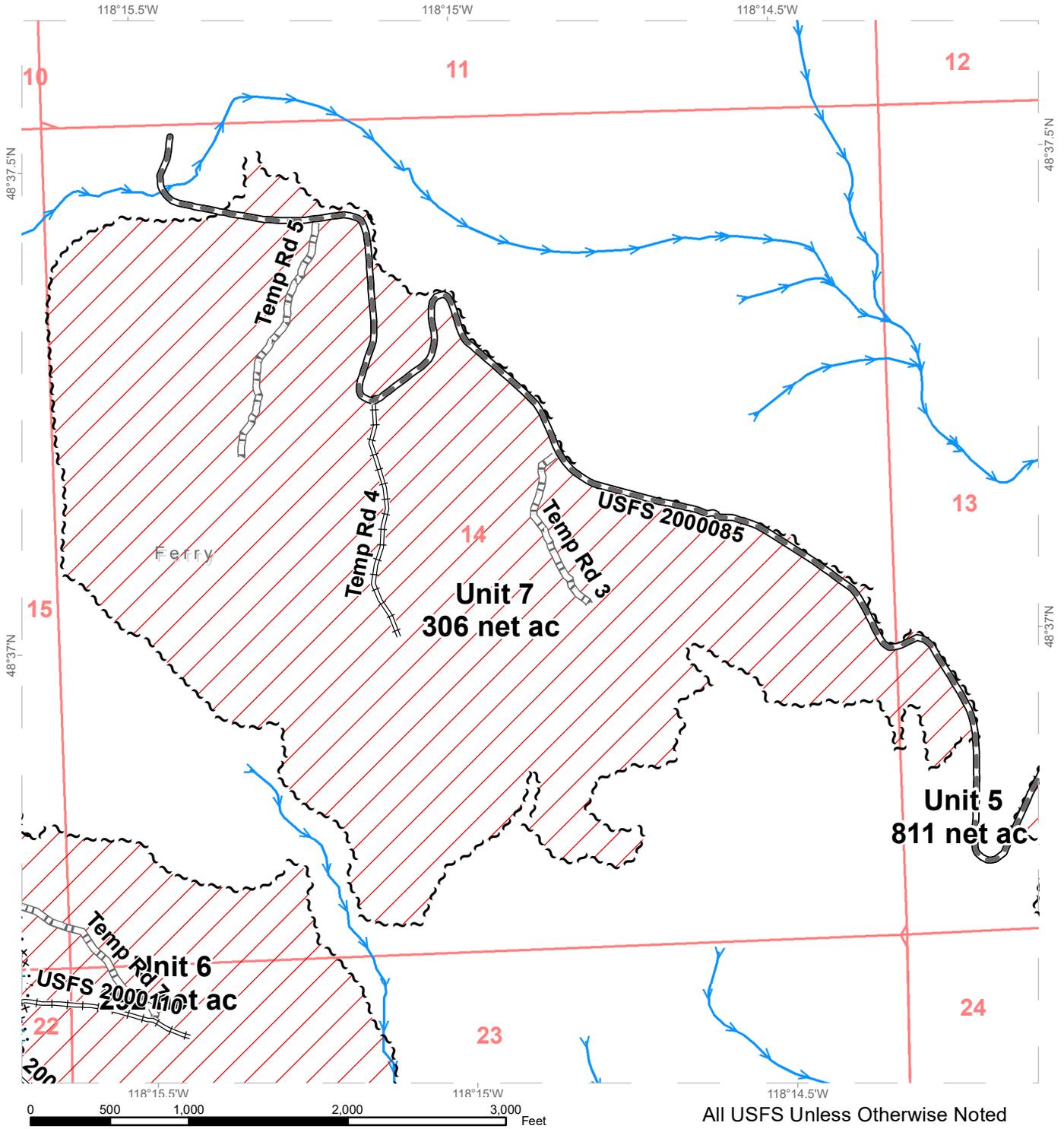


GOOD NEIGHBOR AUTHORITY TIMBER SALE MAP

Map 6

SALE NAME: West Trout Lake
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TOWNSHIP(S): T36R36E
FOREST: Colville N.F.

REGION: Northeast Region
COUNTY(S): Ferry
ELEVATION RGE: 2800-4760



Harvest Area	Optional Reconstruction	Gates
RHCA Harvest	Streams	Weather Station
Required Pre-Haul Maintenance	Waterbodies	Fenced Enclosure
Existing Roads	Wetlands - Non-forested	Public Land Survey Townships
Required Construction	Forested Wetland	Public Land Survey Sections
Required Reconstruction	Rock Pit	

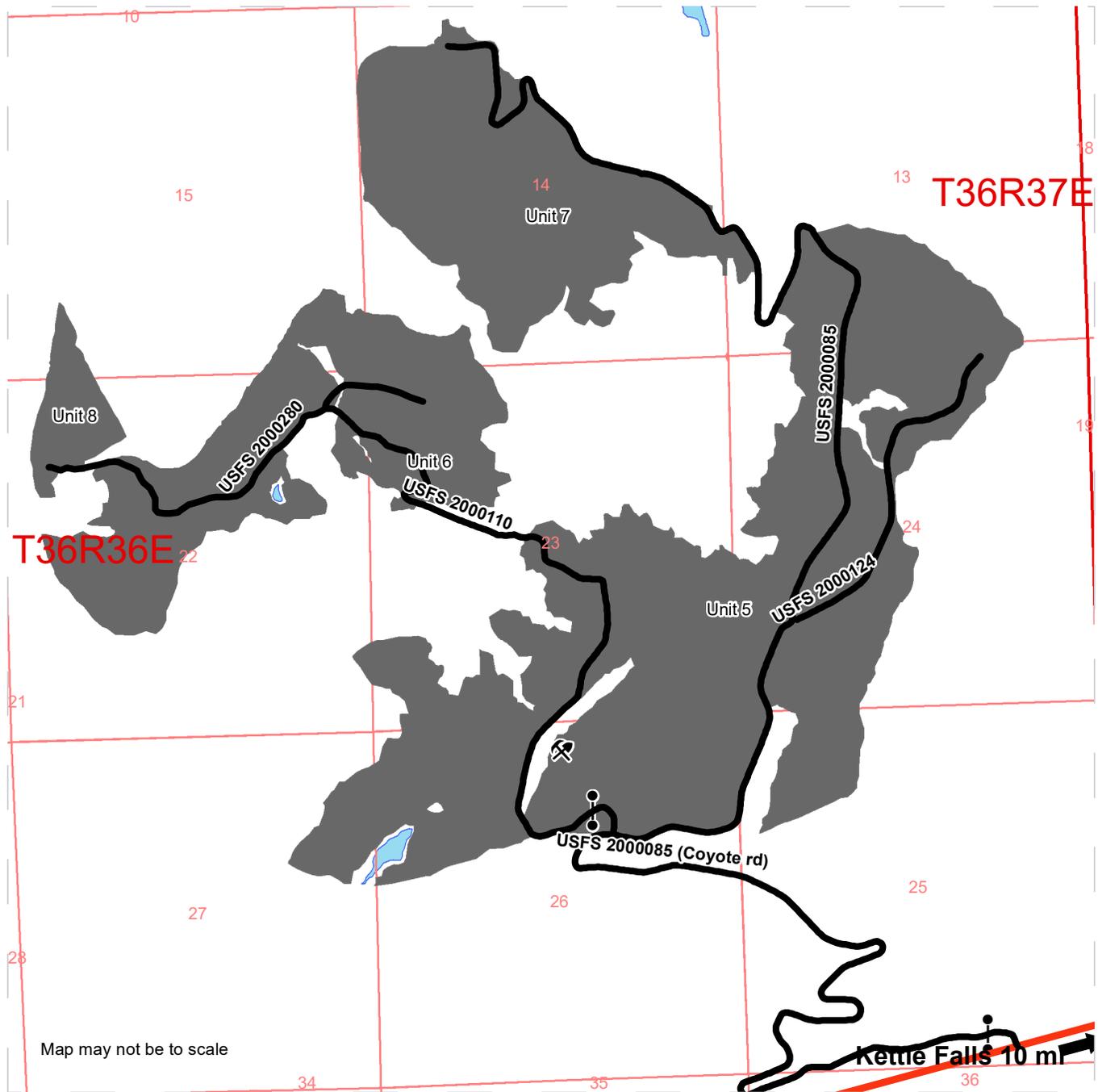


GOOD NEIGHBOR AUTHORITY DRIVING MAP

Map 1

SALE NAME: West Trout Lake
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Legend

- Timber Sale Unit
- Haul Route
- Highway
- Gates
- Rock Pit

DRIVING DIRECTIONS:

- To access all units travel west on Hwy 20 from the intersection of Hwy 395 and Hwy 20 (Tribal Trails Gas Station) for 6.8 miles. Turn north on 085 (Coyote) FS road, travel 2.8 miles to the intersection of the 110 and 085 roads, this location is just within Unit 5.
- To access Unit 7 continue on the 085 road from the intersection of the 110 road for 2.7 miles.
- To access Units 6 and 8 travel 1.7 miles up the 110 road from the intersection of the 2000085 road to enter Unit 6. Continue 0.5 miles up the 110 road to the intersection of the 110 and 280 road. Turn west on the 280 road and travel 0.8 miles to Unit 8.



**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

**BILL OF SALE AND CONTRACT FOR
GOOD NEIGHBOR AGREEMENT FOREST PRODUCTS**

Export Restricted Tonnage Scale AGREEMENT NO. 36-099675

SALE NAME: West Trout Lake

This Bill of Sale and Contract for Good Neighbor Agreement Forest Products (Contract) is entered into between the Washington State Department of Natural Resources (DNR), acting as the agent for the United States Department of Agriculture Forest Service (U.S. Forest Service) pursuant to the authority granted in 16 USC § 2113a, and [TBD] Purchaser, herein collectively referred to as the “Parties” or individually as “Party”.

In consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the State and Purchaser hereby agree to the following terms and conditions for the Contract.

SECTION G: GENERAL TERMS

G-001 Definitions

The following definitions apply throughout this contract;

Bill of Sale and Contract for Forest Products: The contract between the Purchaser and the State, which sets forth the procedures and obligations of the Purchaser in exchange for the right to remove forest products from the sale area.

Contract Administrator: DNR’s State Forester’s designee responsible for assuring that the contractual obligations of the Purchaser are met.

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

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

Road Construction: Includes construction of new temporary roads, reconstruction and maintenance of existing forest roads and associated work as authorized and described in the Road Plan.

State: The State of Washington represented by the Washington State Department of Natural Resources (Seller), acting under an agreement with the US Forest Service to act as their agent in the selling of Forest Products from the timber sale area, located on U.S. Forest Service land, under the Good Neighbor Authority in 16 USC § 22113a.

The State is represented by the State Forester as designated on the Contract signature page. Contractual obligations of the Purchaser under the Contract are enforced by the State Forester or the designated Contract Administrator.

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

United States Forest Service (US Forest Service): An agency of the U.S. Department of Agriculture responsible for administering the nation's national forests.

G-010 Products Sold and Sale Area

Purchaser was the successful bidder on January 28, 2020 and the sale was confirmed on [REDACTED]. The State, as the U.S. Forest Service's agent, agrees to sell to Purchaser, and Purchaser agrees to purchase, cut, and remove the following forest products:

All green conifer species less than 21 inches in Diameter at Breast Height (DBH) not banded with orange paint in Units 6 and 7 bounded by white timber sale boundary tags outside of established Riparian Habitat Conservation Areas (RHCA); and all green conifer species less than 21 inches in DBH not described as leave trees in Schedule A within Units 5 and 8 bounded by white timber sale boundary tags outside of established RHCAs; and all green conifers banded by blue paint in 9A, 9B, 9C, 9D, 9E, 9F, 9G, and 9H (collectively referenced as harvest area 9) located behind blue special management tags within units 5 and 6 bound by white timber sale boundary tags. Units are within part(s) of Sections 13, 14, 15, 22, 23, 24, 25, 26, and 27 all in Township 36 North, Range 36 East, W.M., containing approximately 1,530 net harvest acres.

Forest products purchased under a contract that is designated as export restricted shall not be exported until processed.

G-020 Inspection by Purchaser

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

G-025 Schedules

The following attached schedules are hereby incorporated by reference:

<u>Schedule</u>	<u>Title</u>
A	Leave Tree Selection Criteria

G-030 Contract Term

Unless terminated earlier as authorized under the Contract, Purchaser shall remove the forest products conveyed and complete all work required by this contract prior to October 31, 2022 (Termination Date), unless this termination date is adjusted pursuant to G-040 or extended pursuant to G-050, in which case the new Termination Date shall be as established by the State.

G-040 Contract Term Adjustment - No Payment

Purchaser may request an adjustment in the contract term due to an interruption or delay in operations. A request for an adjustment must be submitted in writing and received by the State within 30 days after the start of the interruption or delay and describe Purchaser's reason for seeking a contract term adjustment. The request must also indicate the actual or anticipated length of interruption or delay. The State may grant an adjustment without charge only if the cause for contract term adjustment is beyond Purchaser's control (force majeure). A force majeure includes, but is not limited to acts of God, acts of the public enemy, acts of the Government, labor disputes, fires, insurrections, floods ; Road and bridge failures that deny Purchaser access to, or out of, the sale area, Access road closures imposed by a road owner, excessive suspensions as provided in clause G-220; and regulatory actions that don't arise from Purchaser's failure to comply with the Contract and which will prevent timber harvest for a period of less than 6 months.

The State shall adjust the term of the Contract to provide for additional calendar days equal to the actual time lost for the period that such force majeure continues in effect. All other terms and conditions of the Contract shall remain in effect during periods of force majeure. Lack of funds on the part of Purchaser, adverse market conditions, State approval or assistance delays, and/or similar conditions shall not constitute force majeure.

G-050 Contract Term Extension - Payment

Extensions of this contract term may be granted only if, in the judgment of the State, Purchaser is acting in good faith and has diligently performed in accordance with contract provisions and the approved Plan of Operations. The term of this contract may be extended for a reasonable time by the State, at the State's sole discretion, if all of the following conditions are satisfied:

- a. A written request for extension of the contract term must be received prior to the Termination Date of the Contract.
- b. Purchaser has completed all required roads and is in compliance with all contract and regulatory requirements (e.g. applicable federal, state, and local laws).
- c. For the first extension, not to exceed 1 year, payment of at least 25 percent of the contract value based on the contract payment rate and advertised volume.

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

The payments shall not include the initial deposit that shall be held until Purchaser has completed all obligations under this Contract.

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

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

- e. Payment of [INSERT UPON AWARD OF CONTRACT] per acre per annum for the acres on which an operating release has not been issued.
- f. In no event will the extension charge be less than \$500.00.
- g. Extension payments are non-refundable.

G-060 Exclusion of Warranties

The PARTIES AGREE that the IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE and ALL OTHER WARRANTIES EXPRESSED OR IMPLIED ARE EXCLUDED from this transaction and shall not apply to the goods sold. For example, THE FOLLOWING SPECIFIC MATTERS ARE NOT WARRANTED, and are EXCLUDED from this transaction:

- a. The MERCHANTABILITY of the forest products. The use of the term "merchantable" in any document is not intended to vary the foregoing.
- b. The CONDITION of the forest products. The forest products will be conveyed "AS IS."

- c. The ACREAGE contained within any sale area. Any acreage descriptions appearing in the timber notice of sale, timber sale contract, or other documents are estimates only, provided solely for administrative and identification purposes.
- d. The VOLUME, QUALITY, OR GRADE of the forest products. The State neither warrants nor limits the amount of timber to be harvested. The descriptions of the forest products to be conveyed are estimates only, made solely for administrative and identification purposes.
- e. The CORRECTNESS OF ANY SOIL OR SURFACE CONDITIONS, PRE-SALE CONSTRUCTION APPRAISALS, INVESTIGATIONS, AND ALL OTHER PRE-BID DOCUMENTS PREPARED BY OR FOR THE STATE. These documents have been prepared for the State's appraisal purposes only.
- f. THAT THE FORESTRY OPERATIONS to be performed under this contract WILL BE FREE FROM REGULATORY ACTIONS by governmental agencies.
- g. Items contained in any other documents prepared for or by the State.

G-066 Termination Due to Governmental Regulatory Actions, Harm to the Environment or Administrative Appeal or Litigation

The State may terminate the Contract, in whole or in part, for any of the following reasons: (1) to prevent actual or potential harm to the environment including without limitation, harm to the land, water, air, habitat, animals, cave resources, or cultural resources; (2) to ensure consistency with U.S. land and resource management plans, requirements imposed for the timber sale in any documents, prepared pursuant to the National Environmental Policy Act of 1969, 42 USC 1531, et seq., or compliance with any State or federal law; (3) to conduct environmental analysis, including but not limited to, the Endangered Species Act of 1973, 16 USC 1531, et seq.; or (4) due to an existing or threatened administrative appeal or litigation involving the U.S. Forest Service or State that might affect or involve the timber sale, regardless of whether the Forest Service or State is required by an administrative or court order to terminate this Contract, or this Contract is named in such a proceeding.

In the event of termination for a reason stated above, Purchaser shall be entitled to a refund, or release of advanced deposits for timber cut but not removed from the sale area, and reimbursement of out-of-pocket expenses incurred as a direct result of the termination of operations; provided, however, that Purchaser shall not be entitled to any compensation provided herein when the Contract is terminated under this clause due to the Purchaser's violation of any provision of the Contract. Out of pocket expenses do not include, lost profits, attorney's fees, replacement cost of timber, cost or expenses of running a sawmill or other processing facility, expectancy damages, or any other anticipatory expenses suffered by Purchaser.

G-066.1 Termination Due to Catastrophic Damage

The Contract may be terminated by the State, in whole or in part, or the Purchaser may request in writing that the Contract be terminated in whole or in part, if the value of timber remaining to be cut is diminished materially because of catastrophic damage caused by forces beyond the control of the Purchaser. Catastrophic damage is defined as a major change or damage to timber on the sale area, or access to the sale area, or a combination thereof: (a) caused by forces beyond the control of Purchaser, occurring within a 12 month period, including, but not limited to, wind, flood, earthquake, landslide, fire, forest pest epidemic (except as provided below), or other major natural phenomenon; and (b) affecting the value of any trees or products authorized for sale under the Contract estimated to total (i) either more than half of the estimated timber volume stated in the Notice of Sale; or (ii) more than 6.0 MMBF or equivalent.

A forest pest epidemic shall not be considered catastrophic damage under this clause when the major change or damage to timber is caused by insect and disease that occurs after felling of the timber unless Purchaser is prevented from removing such timber for reasons that would qualify for a Contract Term Adjustment in G-040.

In the event of termination for the reasons stated above, Purchaser shall be entitled to a refund or release of advanced deposits for timber cut but not removed from the sale area, and reimbursement of out-of-pocket expenses incurred as a direct result of termination of operations. Out of pocket expenses do not include, lost profits, attorney's fees, replacement cost of timber, cost or expenses of running a sawmill or other processing facility, expectancy damages, or any other anticipatory expenses suffered by Purchaser.

G-070 Limitation on Damage

In the event of a breach of any provision of this contract by the State, the exclusive remedy available to Purchaser will be limited to a return of the initial deposit, unapplied payments, and credit for unamortized improvements made by Purchaser, and payment of out-of-pocket expenses but only under the circumstances where the Contract is terminated under G-066, or G-066.1 and the State is required to pay such out-of-pocket expenses. The State shall not be liable for any damages, whether direct, incidental or consequential.

G-080 Scope of State or U.S. Forest Service Advice

No advice by any agent, employee, or representative of the State or U.S. Forest Service regarding the method or manner of performing operations shall constitute a representation or warranty that said method, manner or result thereof will conform to the Contract or be suitable for Purchaser's purposes under the Contract. Purchaser's reliance on any State or U.S. Forest Service advice regarding the method or manner of performance shall not relieve Purchaser of any risk or obligation under the Contract. Purchaser retains the final responsibility for its operations under this Contract and State or U.S. Forest Service shall not be liable for any injuries resulting from Purchaser's

reliance on any State or U.S. Forest Service advice regarding the method or manner of performance.

G-090 Sale Area Adjustment

The Parties may agree to adjustments in the sale area boundary due to the circumstances specified in G-066.1 or G-066. The State shall adjust the total contract price by subtracting from the total contract price an amount determined in the following manner: The State shall cause the timber sale area excluded from harvest due to the circumstances to be measured. The State shall reduce the total contract price by that calculated percentage. However, variations in species, value, costs, or other items pertaining to the affected sale area will be analyzed and included in the adjustment if deemed appropriate by the State. The State will further reduce the total contract price by the reasonable cost of unamortized roads Purchaser constructed but was unable to fully use for removing timber. A reduction in total contract price terminates all of the Purchaser's rights to purchase and remove the timber and all other interest in the affected sale area.

G-100 Forest Products Not Designated

Any forest products not designated for removal, which must be removed in the course of operations authorized by the State, shall be approved and designated by the Contract Administrator. Added forest products become a part of this contract and shall be paid for at the same rate and manner as other forest products under this contract.

G-110 Title and Risk of Loss

Title. All right, title, and interest in, and to any timber, shall remain in the U.S. Forest Service until it has been cut, scaled, removed from Contract Area or other authorized cutting area, and paid for, at which time title shall vest in Purchaser. Any right of Purchaser to cut and remove the timber from the sale area shall end at the time this Contract terminates. Any timber not removed by the termination date remains the property of the U.S. Forest Service.

Risk of Loss. If timber is destroyed or damaged by an “unexpected event” that significantly changes the nature of the timber, the party holding the timber shall bear the timber value loss resulting from such destruction or damage. An “unexpected event” is defined to mean fire, wind, flood, insects or disease, or any similar cause; except that such losses caused by insect or disease after felling of timber shall be borne by Purchaser, unless Purchaser is prevented from removing such timber for reasons that would qualify for a Contract Term Adjustment in Clause G-040.

Except as provided above, Purchaser will not be obligated to remove and pay for destroyed timber for which the U.S. Forest Service holds title. If timber is damaged by an unexpected event, and the U.S. Forest Service holds title and risk of loss for the damaged timber, the Contract Administrator shall make an appraisal to determine for

each species the difference between the appraised unit value of the timber immediately prior to the value loss and the appraised unit value of timber after the loss. Current contract rates in effect at the time for the value loss shall be adjusted by differences to become the re-determined rates for the affected timber.

There shall be no obligation for the State to supply federal timber, or for the Purchaser to accept and pay for other federal timber, in lieu of that destroyed or damaged. Neither this contract provision, nor any other provision of the Contract, shall be construed to relieve Purchaser of liability for negligence resulting from its operations.

G-120 Responsibility for Work

All work, equipment, and materials necessary to perform this contract shall be the responsibility of Purchaser.

So far as practicable, Purchaser shall protect roads and other improvements (e.g., trails, telephone lines, ditches, fences, weather stations) existing in the sale area. When Purchaser's operations are adjacent to properties of railway, telephone, or power companies, or other property, work shall not begin until Purchaser has identified actions necessary to prevent damage to such property. Purchaser shall cooperate with the owners of any underground or overhead utility lines in their removal and/or rearrangement operations in order that these operations may progress in a reasonable manner such that utility duplication rearrangement work may be reduced to a minimum, and services shall not be unnecessarily interrupted. In the event of interruption to utility services because of accidental breakage or as a result of lines being exposed or unsupported, Purchaser shall promptly notify the proper authority and shall cooperate with that authority in the restoration of service until the service is restored.

Any damage to roads and improvements, except as provided in clause G-121 or unless the State issues an operating release pursuant to clause G-280, shall be repaired promptly to the satisfaction of the State and at Purchaser's expense. Road is defined as the road bed, including but not limited to its component parts, such as subgrade, ditches, culverts, bridges, and cattle guards. Improvement is defined to include trails, telephone and utility lines, gates, fences, buildings or any other type of structure.

G-121 Exceptions

Exceptions to Purchaser's responsibility for repairs in clause G-120 shall be limited exclusively to the following:

1. Failure of (a) required improvements or roads designated in clause C-050, or (b) required or optional construction/reconstruction completed to the point that authorization to haul has been issued;
2. Caused by a single event from forces beyond the control of Purchaser, its employees, agents, or invitees, including independent contractors; and

3. Includes, but is not limited to natural disasters such as earthquakes, volcanic eruptions, landslides, and floods.

These exceptions shall not apply where road damage occurs due to Purchaser's failure to take reasonable precautions or to exercise sound forest engineering and construction practices.

The repair work identified by the State shall be promptly completed by Purchaser at an agreed price. If the Parties are unable to reach an agreement on price, Purchaser shall complete the repairs based on DNR's determination of the price. Purchaser shall be entitled to challenge the costs through the dispute resolution process in clause G-240. Nothing contained in clauses G-120 and G-121 shall be construed as relieving Purchaser of responsibility for, or damage resulting from, Purchaser's operations or negligence, nor shall Purchaser be relieved from full responsibility for making good any defective work or materials. Authorization to haul does not warrant that Purchaser built roads are free from material defect and the State may require additional work, at Purchaser's expense regardless of cost, to remedy deficiencies at any time.

G-140 Indemnity

To the fullest extent permitted by law, Purchaser shall indemnify, defend and hold harmless the State, agencies of the State, and all officials, agents and employees of the State (hereinafter all collectively referred to as "the State"), from and against all claims arising out of, or in any way whatsoever resulting from, 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 brought against the State, including without limitation claims brought against the State by Purchaser's agents, employees, representatives, or any subcontractor or its employees. Purchaser expressly agrees to indemnify, defend, and hold harmless the State for any claim arising out of or incident to Purchaser's or any subcontractors' performance or failure to perform the Contract. Purchaser's obligation to indemnify, defend, and hold harmless the State shall not be eliminated or reduced by any actual or alleged concurrent negligence of the State or its agents, agencies, employees and officials. Purchaser waives its immunity under Title 51 RCW to the extent it is required to indemnify, defend and hold harmless State or U.S. Forest Service and its agencies, officials, agents or employees.

G-150 Insurance

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

All insurance and surety bonds should be issued by companies admitted to do business within the State of Washington and have a rating of A-, Class VII or better in the most

recently published edition of Best's Reports. If an insurer is not admitted, all insurance policies and procedures for issuing the insurance policies must comply with Chapter 48.15 RCW and 284-15 WAC.

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

1. Insurers subject to Chapter 48.18 RCW (admitted and regulated by the Insurance Commissioner): The insurer shall give the State 45 days advance notice of cancellation or non-renewal. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.
2. Insurers subject to Chapter 48.15 RCW (surplus lines): The State shall be given 20 days advance notice of cancellation. If cancellation is due to non-payment of premium, the State shall be given 10 days advance notice of cancellation.

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

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

The State of Washington, Department of Natural Resources, U.S. Forest Service, 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. Purchaser waives all rights against State for recovery of damages to the extent these damages are covered by general liability or umbrella insurance maintained pursuant to this contract.

By requiring insurance herein, State does not represent that coverage and limits will be adequate to protect Purchaser and such coverage and limits shall not limit Purchaser's liability under the indemnities and reimbursements granted to State in this contract.

The limits of insurance, which may be increased as deemed necessary by State of Washington, Department of Natural Resources, shall not be less than as follows:

Commercial General Liability (CGL) Insurance. Purchaser shall maintain general liability (CGL) insurance, and commercial umbrella insurance with a limit of not less than \$1,000,000.00 per each occurrence. If such CGL insurance contains aggregate limits, the General Aggregate limit shall be at least twice the "each occurrence" limit. CGL insurance shall have products-completed operations aggregate limit of at least two times the "each occurrence" limit. CGL coverage shall include a Logging and Lumbering Endorsement (i.e. Logger's Broad-Form) to cover the events that include, but are not limited to; fire suppression expenses, accidental timber trespasses, and wildfire property damage with limits of not less than \$2,000,000.00 each occurrence.

CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 (or a substitute form providing equivalent coverage). All insurance shall cover liability arising out of premises, operations, independent contractors, products completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another party assumed in a business contract), and contain separation of insured (cross liability) condition.

Employer's Liability "Stop Gap" Insurance. Purchaser shall buy employers liability insurance and, commercial umbrella liability insurance with limits not less than \$1,000,000.00 each accident for bodily injury by accident or \$1,000,000.00 each employee for bodily injury by disease.

Workers' Compensation Coverage. Purchaser shall comply with all State of Washington workers' compensation statutes and regulations. Workers' compensation coverage shall be provided for all employees of Purchaser and employees of any subcontractor or sub-subcontractor. Coverage shall include bodily injury (including death) by accident or disease, which exists out of or in connection with the performance of this contract. Except as prohibited by law, Purchaser waives all rights of subrogation against State for recovery of damages to the extent they are covered by workers' compensation, employer's liability, commercial general liability, or commercial umbrella liability insurance.

If Purchaser, subcontractor or sub-subcontractor fails to comply with all State of Washington workers' compensation statutes and regulations and State incurs fines or is required by law to provide benefits to or obtain coverage for such employees, Purchaser shall indemnify State. Indemnity shall include all fines, payment of benefits to Purchaser or subcontractor employees, or their heirs or legal representatives, and the cost of effecting coverage on behalf of such employees.

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

1990 or later editions of CA 00 01. Purchaser waives all rights against State or US Forest Service for the recovery of damages to the extent they are covered by business auto liability or commercial umbrella liability insurance.

G-151 Aviation Insurance

If Purchaser elects or is required to use aircraft to perform the duties as required by this contract, Purchaser shall buy and maintain aircraft liability insurance coverage for bodily injury and property damage, including passengers, for all operations involving the aircraft including, but not limited to, liability assumed under the Contract. The limits shall be not less than per occurrence and a general aggregate limit of \$5,000,000. Failure to buy and maintain the required insurance may result in a breach and/or termination of the Contract at State's option. State may suspend Purchaser operations until required insurance has been secured.

G-160 Agents

The State's rights and duties will be exercised by the State Forester of DNR's Northeast Region Office in Colville, Washington. The State Forester will notify Purchaser in writing who is responsible for administering the Contract (Contract Administrator). The State Forester has sole authority to waive, modify, or amend the terms of this Contract in the manner prescribed in clause G-180. No agent, employee, or representative of the State or U.S. Forest Service has any authority to bind the State or U.S. Forest Service to any affirmation, representation, or warranty concerning the forest products conveyed beyond the terms of this Contract. The Contract Administrator shall be the State's authorized agent for purposes of receipt of notices under G-200.

Purchaser is required to have a person on site during all operations who is authorized to receive instructions and notices from the State. Purchaser shall inform the State in writing who is authorized to receive instructions and notices under G-200 from the State, and any limits to this person's authority.

G-170 Assignment of Rights; Delegation of Performance (Subcontracting)

No rights or interest in this Contract shall be assigned by Purchaser without the prior written permission of the State, which approval shall be at the sole discretion of the State. Such approval shall not relieve the Purchaser of his or her responsibilities or liabilities under the Contract and may be given only if the third party assignee (assignee) has not been debarred or suspended from bidding on the award of U.S Forest Service timber sale contracts in accordance with 36 CFR § 223.130 through 36 CFR § 223.145 and: (a) the assignee acquiring the rights of the Purchaser is acceptable to the State under the conditions and requirements then in effect for similar GNA timber sales, and assumes in writing all of the obligations to the State under the terms of the Contract as to the uncompleted portion; or (b) the rights are acquired by the assignee in trust as security and subject to such conditions as may be necessary for the protection

of the public interests. Any attempted assignment shall be void and ineffective for all purposes unless made in conformity with this paragraph.

Purchaser may perform any duty through a delegate (i.e., subcontractor), but Purchaser is not thereby relieved of any duty to perform or any liability under this contract. Any delegate shall be bound by the terms of the contract in the same manner as Purchaser.

G-180 Modifications

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

G-190 Contract Complete

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

G-200 Notice

All notices required to be given under this Contract shall be in writing and personally delivered to the Party's authorized agent as provided in G-160, or sent by U.S. mail (certified receipt requested), or personally delivered to a Party at the address listed below:

Department of Natural Resources
225 S. Silke Road
Colville, WA 99114

Purchaser
XXXXXXXXXXXX

A party can designate a different authorized agent or address in writing by serving notice of such change as provided in this clause.

G-210 Violation of Contract

- a. If Purchaser violates any provision of this contract, the Contract Administrator, by written notice, may suspend those operations in violation. If the violation is capable of being remedied, Purchaser has 30 days after receipt of a suspension notice to remedy the violation. If the violation cannot be remedied or Purchaser fails to remedy the violation within 30 days after receipt of a suspension notice, the State may terminate the rights of Purchaser under this contract and collect damages. Purchaser shall not be entitled to any compensation if the Contract is terminated by the State as provided in this clause.
- b. If the contract expires pursuant to clause G-030 without Purchaser having performed all its duties under this contract, Purchaser's right to operate is

terminated and Purchaser shall not have the right to remedy the breach. This provision shall not relieve Purchaser of any payment obligations.

- c. The State has the right to remedy the breach in the absence of any indicated attempt by Purchaser or if Purchaser is unable, as determined by the State, to remedy the breach. Any expense incurred by the State shall be charged to Purchaser and shall be paid within 30 days of receipt of billing.
- d. If Purchaser's violation is a result of a failure to make a payment when due, in addition to a. and b. above, interest shall accrue on the unpaid balance at 12 percent per annum, beginning on the date payment was due.

G-220 State Suspends Operation

The Contract Administrator may suspend any operation of Purchaser under this Contract for any of the reasons stated in G-066, for any other reason as provided for in the Contract or, if deemed necessary in the public interest.

Purchaser shall be in breach of this contract if the operation continues after the suspension notice or if the operation resumes without prior approval and notice from the Contract Administrator.

Purchaser may request a modification of a suspension within 30 days of the start of suspension through the dispute resolution process in clause G-240. If this process results in a finding that the suspension exceeded the time reasonably necessary to stop or prevent damage to the State or US Forest Service, Purchaser is entitled to request a contract term adjustment under clause G-040.

If it reasonably appears that the damage that the State or U.S. Forest Service is suffering, or can reasonably be expected to suffer if the operation is allowed to continue, will prevent harvest for a period that will exceed 6 months, and Purchaser has complied with all terms and conditions of this Contract, then the State may elect to terminate the Contract under G-066 just as if the harvest was prevented by a governmental regulation, statute or order.

G-230 Unauthorized Activity

Any cutting, removal, or damage of forest products by Purchaser, its employees, agents, or invitees, including independent contractors, in a manner inconsistent with the terms of this Contract or Federal law, is unauthorized. Purchaser agrees to pay two times the current Contract rates for any unauthorized cutting, removal or damage of forest products.

G-240 Dispute Resolution

The following procedures apply in the event of a dispute regarding interpretation or administration of this Contract. The Parties agree that these procedures must be

followed before a lawsuit can be initiated against the State. Purchaser's failure to submit a request for resolution of a dispute under the procedures set forth shall relieve the State of any obligations whatsoever arising under the Contract. As used herein, a dispute means a demand or assertion by Purchaser seeking, as a legal right, the extension or adjustment of the term of the Contract, or any other relief under the Contract, including a claim for the payment of any money.

- a. In the event of a dispute, Purchaser must submit a written request to the State Forester for resolution of any dispute prior to seeking other relief. If the dispute involves a claim for money owed by the State, Purchaser shall submit with the written request a demand for the amount owed and any appropriate data necessary to establish that the amount requested accurately reflects what Purchaser claims is owing under the Contract for which the State is liable.
- b. The State Forester will issue a written decision on Purchaser's request within ten business days for matters not involving a claim for money. In the case of a claim by Purchaser for money owed under the Contract, the State Forester shall render a decision within 30 days, or notify Purchaser of the date when a decision will be issued. The State Forester's decision shall be final unless Purchaser submits a request under c.
- c. Within ten business days of receipt of the State Forester's decision, Purchaser may submit a written request for resolution of the dispute to the Deputy Supervisor - Uplands of the Department of Natural Resources.
- d. Unless otherwise agreed, a conference will be held by the Department Supervisor within 30 calendar days of the receipt of Purchaser's request for review of the State Forester's written decision. Purchaser and the State Forester will have an opportunity to present their positions. The Department Supervisor will issue a decision within a reasonable time of being presented with both Parties' positions.

G-250 Compliance with All Laws

Purchaser is responsible for completing all operations in compliance with all applicable statutes, regulations and laws, and in compliance with all applicable requirements of the USDA Forest Service, Trout Lake Insect and Disease Restoration Project Decision Memo and Finding of No Extraordinary Circumstances, including all applicable Project Design Features in Exhibit B of the Decision Memo, and any applicable requirements within the Project Records. Failure to comply may result in suspension, and/or termination of this Contract.

G-260 Venue

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

G-270 Equipment and Personal Property Left on US Forest Service Land

All equipment and personal property owned or in the possession of Purchaser, its employees, agents, or invitees, including independent contractors, shall be removed from the sale area and other U.S. Forest Service land by the termination date of this contract. Any equipment or personal property remaining on U.S. Forest Service land 60 days after the expiration of the contract may be removed and disposed of by the State. Purchaser shall pay to the State all costs of moving, storing, and disposing of such personal property and equipment. The State and the U.S. Forest Service shall not be responsible for any damages to or loss of the personal property or equipment, or damage caused by the moving, storing or disposal of the personal property or equipment.

G-280 Operating Release

An operating release is a written document, signed by the State and Purchaser, indicating that Purchaser has been relieved of certain rights or responsibilities with regard to the entire, or a portion of, the Contract. Purchaser and State may agree to an operating release for this sale, or portion of this sale, prior to the Contract expiration, when all contract requirements pertaining to the release area have been satisfactorily completed. Upon issuance of a release, Purchaser's right to cut and remove forest products on the released area will terminate.

G-310 Road Use Authorization

Purchaser is authorized to use the following U.S. Forest Service roads, State roads, and roads for which the State has acquired easements and/or road use permits; USFS 2000085, USFS 2000110, USFS 2000118, USFS 2000124, USFS 2000280, TEMP 1, TEMP 2, TEMP 2.5, TEMP 3, TEMP 4, TEMP 5, TEMP 6, TEMP 7, TEMP 8, TEMP 9, TEMP 10 and Coyote Pit Road. The State may authorize in writing the use of other roads subject to fees, restrictions, and prior rights.

The U.S. Forest Service shall have the right to use any road constructed by Purchaser during the term of the Contract for any and all purposes in connection with the protection and administration of the National Forest. Other parties, in connection with the logging of tributary National Forest timber, may use roads constructed by Purchaser when the Contract Administrator determines that such use will not materially interfere with Purchaser's Operations. The State may grant others the right to use the roads constructed by Purchaser during the term of the Contract if such uses are authorized by the U.S. Forest Service and will not materially interfere with Purchaser's operations.

G-320 Erosion Control

Purchaser shall deliver 1,500 pounds of grass seed to a location designated by the Contract Administrator. Seed provided shall meet the following specifications:

40% Intermediate Wheatgrass; 40% Hard Fescue; and 20% Stream bank Wheatgrass. Seed shall be certified weed free and premixed in 50-pound bags. Seed will be applied as needed by the Contract Administrator.

G-330 Pre-work Conference

Purchaser shall arrange with the Contract Administrator to review this Contract and examine the sale area before beginning any operations. Purchaser shall furnish the State a written Plan of Operations at the pre-work conference that includes the Harvest Plan required in H-040, and sets forth planned periods for road construction and completion of all other contractual requirements. The State's written approval of the Plan of Operations is a prerequisite to commencement of Purchaser's operations. A revised Plan of Operations shall be submitted by Purchaser for the Contract Administrator's approval to accommodate a contract adjustment under G-040, a contract extension under G-050, or if determined necessary by the Contract Administrator. To the extent that the Plan of Operations is inconsistent with the Contract, the terms of the Contract shall prevail. State's acceptance and approval of Purchaser's Plan of Operations shall not be construed as any statement or warranty that the Plan of Operations is adequate for Purchaser's purposes or complies with applicable laws.

G-340 Preservation of Markers

Purchaser shall protect all survey monuments, witness corners, reference monuments, and bearing trees (hereinafter collectively referred to as "survey markers") against destruction, obliteration, or damage during operations performed under the Contract. If any survey markers are destroyed, obliterated, or damaged by such operations, Purchaser shall hire an appropriate county surveyor or registered land surveyor to reestablish or restore the survey markers at the same location, using surveying procedures as required by the U.S. Forest Service under federal law and the State under RCW 58.24, and shall record such survey in appropriate county records. The Contract Administrator may prescribe in writing additional requirements for protection of monuments, corners, and bearing trees.

G-370 Blocking Roads

Purchaser shall not block USFS 2000085 Road, unless authority is granted in writing by the Contract Administrator.

While the project is active, unauthorized vehicle access will be blocked on reconstructed roads and temporary roads through use of signage and gates or other closure devices.

G-430 Open Fires

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

SECTION P: PAYMENTS AND SECURITIES

P-010 Initial Deposit

Purchaser paid **DATA MISSING** as an initial deposit to the State, which will be maintained until Purchaser has completed all obligations under this Contract. Purchaser shall not be entitled to any interest earned on the initial deposit. However, all or a portion of the initial deposit may be applied as the final payment for the timber if the State determines that adequate security exists for the performance or fulfillment of any remaining obligations of the Purchaser under the Contract. If the Contract expires without Purchaser's payment of the full amount specified in P-024, the initial deposit will be immediately forfeited to the State, and will be offset against Purchaser's remaining balance due. Any excess initial deposit funds not needed to ensure full payment of the Contract price, or not needed to complete any remaining obligations of the Purchaser existing after Contract expiration, will be refunded to the Purchaser.

P-024 Payment for Forest Products

Purchaser agrees to pay the following rate per ton for forest products conveyed.

Item	Contract Bid Price	Fees	Contract Payment Rate
Douglas-fir			
Western larch			
Ponderosa pine			
Grand fir			
Engelmann spruce			
Alpine fir			
Lodge pole pine			
Western red cedar			

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

P-027 Payment for Removal of Optional Forest Products

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

P-040 Weighing and Scaling Costs

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

P-045 Guarantee of Payment

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

P-052 Payment Procedure

Purchaser shall pay for forest products removed on a monthly basis. Payments will be submitted to the Northeast Region office on or before the due date shown on the State generated invoice or, according to an alternate payment schedule as approved by the State with at least one payment each month for timber removed. The alternate payment schedule, once approved by the State, shall become part of this contract and may be changed only with written approval of the State.

Payment will be based on the contract rate multiplied by the tons (tonnage contracts) or volume (mbf contracts) removed during the month or payment period. Included with the payment will be a summary report along with all related load tickets and the corresponding certified weight tickets for the payment period. The summary report will be generated using a computer spreadsheet and list the load tickets in ascending numerical order with the corresponding ticket number and weight or volume for each load.

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

Forest products included in this agreement which are destroyed, damaged, stolen, lost, or mismatched shall be paid for by Purchaser on demand of the State. The rates contained in clause P-024 shall apply. If such material is not listed in P-024, the State shall establish the rates to be paid.

P-080 Payment Account Refund

Advance payments made under P-045 remaining on account above the value for the charges shall be returned to Purchaser within 30 days following the final report of charges. Interest shall accrue at the rate of five percent per month, or fraction thereof, on any balance owed after expiration of the thirty days.

P-090 Performance Security

Purchaser agrees to furnish, within 30 days of the confirmation date of the sale, security acceptable to the State in the amount of [INCLUDE ON EXECUTION OF CONTRACT]. The Security provided shall guarantee performance of all provisions of this contract, and payment of any damages caused by operations under this contract or resulting from Purchaser's noncompliance with any rule or law. Acceptable performance security may be in the form of a performance bond, irrevocable letter of credit, cash, savings or certificate of deposit account assignments, and must name the State as the obligee or beneficiary. A letter of credit must comply with Title 62A

RCW, Article 62A.5 (Letters of Credit). Performance security must remain in full force over the duration of the contract length. Surety bonds issued shall conform to the issuance and rating requirements in clause G-150. The State shall retain the performance security until all contractual obligations of the Purchaser are satisfied. Purchaser shall not operate unless the performance security has been accepted by the State. If at any time the State decides that the security document or amount has become unsatisfactory, Purchaser agrees to suspend operations and, within 30 days of notification, to replace the security with one acceptable to the State or to supplement the amount of the existing security.

P-100 Performance Security Reduction

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

SECTION L: LOG DEFINITIONS AND ACCOUNTABILITY

L-010 Forest Products Conveyed

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

L-060 Load Tickets

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

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

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

L-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.

Prior to forest products being hauled, the Contract Administrator must authorize in writing the use of State approved measurement and/or weighing facilities that are at or enroute to final destinations. Forest products from this sale shall be measured or

weighed at facilities, which are currently approved for use by the State and are currently authorized for this sale. The State reserves the right to verify load volume and weights with State employees or contractors at the State's own expense. The State reserves the right to revoke the authorization of previously approved measurement locations.

SECTION H: HARVESTING OPERATIONS

H-001 Operations Outside the Sale Boundaries

No operations shall occur outside the sale boundaries unless approved in writing by the Contract Administrator.

H-010 Cutting and Yarding Schedule

Falling and yarding will not be permitted from February 15 to May 31 due to spring breakup unless authorized in writing by the Contract Administrator.

Additionally, falling and yarding will not be permitted in designated deer and elk winter range and other areas as shown on Exhibit A map from December 1 through March 31.

H-011 Certification of Fallers and Yarder Operators

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

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

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

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

H-012 Leave Tree Damage Definition

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

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

- a. A leave tree has one or more scars on its trunk exposing the cambium layer, which in total exceeds 200 square inches.

- b. A leave treetop is broken or the live crown ratio is reduced below 30 percent.
- c. A leave tree has more than 1/3 of the circumference of its root system injured such that the cambium layer is exposed.

If the Contract Administrator determines that a leave tree has been cut or damaged, the Purchaser may be required to pay liquidated damages for Excessive Leave Tree Damage as detailed in clause D-040.

H-016 Skid Trail Requirements

A skid trail is defined as an area that is used for more than three passes by any equipment.

Purchaser shall comply with the following during the yarding operation:

- a. A skid trail will not exceed 16 feet in width, including rub trees.
- b. Skid trails shall not cover more than 15 percent of the total acreage on one unit.
- c. Skid trails should be re-established at previous skid trail locations, except where existing skid trails are causing detrimental soil or hydrologic conditions that could be avoided with alternative skid trail locations.
- d. Except for rub trees, skid trails shall be felled and yarded prior to the felling of adjacent timber.
- e. Rub trees shall be left standing until all timber tributary to the skid trail has been removed.
- f. Excessive soil damage is not permitted. Excessive soil damage is described in clause H-017
- g. Purchaser will not have more than five skid trails open to active skidding at any one time. All other skid trails used for skidding timber will be closed.
- h. Once a skid trail is closed, Purchaser will not reopen a skid trail unless approved in writing by the Contract Administrator.
- i. Skid trails will be water barred and rehabilitated as necessary to assure that normal drainage patterns are maintained.

Purchaser shall not deviate from the requirements set forth in this clause without prior written approval from the Contract Administrator. Contract Administrator may stop harvest and skidding operations if excessive damage is occurring.

H-017 Preventing Excessive Soil Disturbance

Fine and coarse organic matter shall be retained outside of skid trails on top of the soil with minimum of 35% soil cover (preferably 50%). Where practicable exposed soil surfaces will be covered with slash or seeded with weed free grass seed.

To reduce damage, the CA may require water bars to be constructed, certified, weed free grass seed to be placed on exposed soils, or other mitigation measures to be taken by the Purchaser. Suspended operations shall not resume unless approval to do so has been given, in writing, by the Contract Administrator.

H-025 Timing Requirements for Timber Removal

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

H-030 Timber Falling

Protect all authorized improvements (access road USFS Rd 2000290, culverts, fences, weather station). Trees shall be felled and logs shall be bucked to obtain the greatest practicable utilization of forest products and other valuable materials conveyed.

H-035 Fall Trees into Sale Area

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

H-040 Purchaser Harvest Plan

Purchaser shall, as part of the Plan of Operations, prepare an acceptable Harvest Plan for each operating season for planned units. The Harvest Plan shall address the harvest and haul operations and be presented to the Contract Administrator at the pre-work conference. The Harvest Plan shall be approved by the Contract Administrator prior to beginning the harvest operation. Purchaser shall not deviate from the Harvest Plan without prior written approval by the Contract Administrator.

H-052 Branding and Painting

All timber shall be painted with a spot of highway yellow paint not less than three square inches in size, and branded on each end with a hammer brand approved by the State prior to removal from the sale area unless otherwise agreed to by the US Forest Service. Purchaser shall not use the brand pattern selected to mark timber from another source in violation of the requirements set forth in 36 CFR § 223.195.

H-060 Skid Trail Locations

Locate skid trails 100 feet apart, edge to edge, except when converging at landings or avoiding obstacles. Skidding equipment must travel on designated skid trails. Where feasible, re-use old skid trails.

Locate forwarder trails 40 feet apart, edge to edge, except when converging at landings or avoiding obstacles. Four to eight inches of un-compacted slash should cover forwarder trails.

H-080 Snags Not to be Felled

Snags not required to be felled for safety reasons shall be left standing. Snags over 16" dbh felled for safety reasons shall not be removed and must remain where felled. Areas near roads with excess fuels may be excluded from this requirement by the Contract Administrator.

H-110 Stump Height

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

H-120 Harvesting Equipment

Forest products sold under this contract shall be felled by hand or mechanical means and yarded by ground-based equipment unless authority to use other equipment is granted in writing by the State.

With the exception of feller-bunchers and harvesters, all equipment shall be kept on the designated skid trails. Feller bunchers should concentrate use on skid trails and should travel in an efficient manner with limited passes off skid trails.

H-131 Hauling Schedule

The hauling of forest products will not be permitted from February 15 to May 31 unless authorized in writing by the Contract Administrator.

H-140 Special Harvest Requirements

Purchaser shall accomplish the following during the harvest operations:

- 1) The USFS 2000085 gate shall to be closed daily when harvest activities are occurring between December 1 and March 31 to protect Deer and Elk winter range.
- 2) Falling and yarding shall not be permitted in designated deer and elk winter range and other areas as shown on Exhibit A map from December 1 through March 31.

- 3) Road salts shall not be applied to USFS roads for dust abatement or removing ice from road surfaces.
- 4) Hand felling of trees and retrieval with bull line and chockers may be required in isolated areas.
- 5) Appropriate warning signs shall be posted at locations designated by the Contract Administrator
- 6) If snow plowing occurs, it shall be done under an approved Snow Removal Plan and require, among other things, that turnouts are created and snow berms be removed at locations designated by the Contract Administrator.
- 7) In the event of road rutting that may compromise sub-grade the Contract Administrator may restrict haul activities to during periods when soil is dry, frozen, or snow packed.
- 8) Tractor and skidder yarding will be limited to slopes less than 35%. Short slope lengths may be steeper.
- 9) Feller bunchers, harvester-forwarder systems, and other tracked heavy equipment shall be limited to slopes less than 40%. Short slope lengths may be steeper.
- 10) Immediately following their use, temporary roads, spur roads and landings will be deactivated through re-contouring, ripping, blocking and covering with forest debris.
- 11) Any proposed unit external skid trails to be located on U.S. Forest Service lands shall be flagged by the purchaser and approved by the Contract Administrator in writing prior to use.
- 12) No fuel storage or refueling shall occur in Riparian Habitat Conservation Areas (RHCAs). Additionally, parking, staging areas, and landings shall be located outside of the Riparian Habitat Conservation Areas unless there is no other suitable location. In that case, a Hydrologist or Fisheries Biologist shall be consulted on all proposed landing locations within RHCAs.

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

H-150 Required Removal of Forest Products

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

Species	Net bd ft	Log length (ft)	Log dib (in)
Green PP and WRC	10	12	5.6
All other Green conifers	10	12	4.6

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

costs associated with scaling, measuring and computing the billing will be borne by the Purchaser.

H-157 Optional Removal of Forest Products Not Designated

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

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

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

H-160 Mismanufacture

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

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

H-190 Completion of Settings

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

H-220 Protection of Residual or Adjacent Trees

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

H-250 Additional Falling Requirements

Within all units, all healthy hardwood species shall be retained unless removal is necessary for operability and/or to mitigate a hazardous condition.

All non-merchantable stems greater than 3 feet in height and less than 7 inches Dbh, in all units, shall be felled concurrently with harvest operations. Reference areas shown in Exhibit A where this requirement is waived in portions of Unit 5. The Contract Administrator may exclude areas of healthy regeneration from this requirement.

H-260 Fall Leaners

Trees that have been pushed over in falling or skidding operations shall be felled.

SECTION C: CONSTRUCTION AND MAINTENANCE

C-040 Road Plan

Purchaser shall comply with all of the road construction, associated work provisions, and all other terms and conditions of the Road Plan for this sale, dated September 11, 2019 which is hereby made a part of this Contract.

C-050 Purchaser Road Maintenance and Repair

Purchaser shall perform road maintenance and repair work at its own expense on USFS 2000085, USFS 2000110, USFS 2000118, USFS 2000124, USFS 2000280, TEMP 1, TEMP 2, TEMP 2.5, TEMP 3, TEMP 4, TEMP 5, TEMP 6, TEMP 7, TEMP 8, TEMP 9, TEMP 10 and Coyote Pit Road. Purchaser shall perform road maintenance on access roads as used and needed for the Matson and Bisbee pits. All work shall be completed to the specifications detailed in the Road Plan.

C-080 Landing Locations Approved Prior to Construction

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

C-090 Landing Location

Landings should be located where past landings were located, unless a new location would cause less resource effect or where no past landings were used to harvest the unit.

Locate landings off the USFS 2000085 road within Unit 5 where possible.

Landings will be limited to the area needed for safe and efficient yarding and loading operations and have proper drainage.

C-130 Dust Abatement

Purchaser shall abate dust on the following roads from July 1 through September 30 unless waived by the Contract Administrator in writing: USFS 2000085, USFS 2000110, USFS 2000124, USFS 2000280 and Coyote Pit Road. The Contract Administrator may require Purchaser, by written notice, when deemed necessary to: (1) abate dust on the roads designated even after a waiver has been granted if conditions change, or during any time before or after the period specified; and (2) require

Purchaser to abate dust on any other roads affected by the operations under this Contract. Materials used for dust abatement, other than water, will require approval of the State and shall meet specifications furnished by the U.S. Forest Service.

C-140 Water Bars

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

SECTION S: SITE PREPARATION AND PROTECTION

S-001 Emergency Response Plan

An Emergency Response Plan (ERP) Plan shall be provided to the Contract Administrator containing but not limited to, a plan for the prevention and reporting of wildfires within the sale area; a communication plan for reporting wildfires; a description of fire prevention and control measures on the logging unit; and a list of qualified personnel and equipment available for implementing the plan. The ERP shall include the valid contact numbers for qualified personnel available for implementing the ERP, and the equipment available, and procedures for responding to, medical emergencies, fire, hazardous spills, forest practice violations and any unauthorized or unlawful activity occurring 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 to the Contract Administrator for inspection and approval at the prework meeting and kept readily available to all personnel, including subcontractors, on site during active operations. Purchaser shall make any revisions to the ERP required by the Contract Administrator, either upon initial inspection or anytime thereafter, required for operations within the sale area during the Contract.

S-010 Fire Hazardous Conditions

Fire Precautionary Period. The fire precautionary period or “closed season” for this Contract is April 1 to October 31. The Contract Administrator may change the dates of the closed season by advance written notice. Required tools and equipment shall be kept in serviceable condition and immediately available for firefighting at all times during Purchaser’s Operations in Fire Precautionary Period.

Purchaser acknowledges that operations under this Contract may increase the risk of fire. Purchaser shall conduct all operations under this Contract 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. Purchaser shall, both independently and in cooperation with the State and U.S. Forest Service, take the highest degree of care to prevent fires resulting from Purchaser’s Operations. Purchaser shall furnish and maintain in good and serviceable conditions such wildland firefighting tools and equipment, and take such fire prevention measures as may be required by the

US Forest Service or the State to meet the fire protection requirements of the Contract and the existing fire danger. The requirements shall not be less than are required under the laws of the State of Washington (i.e. WAC 332-24-401 through .411).

In the event of an uncontrolled fire, Purchase shall immediately report the incident to the appropriate authorities specified in the ERP. Purchaser agrees to provide equipment and personnel working at the site to safely and effectively engage in first response suppression activity. Purchaser agrees to reimburse the State and U.S. Forest Service for the cost of fire suppression incurred as the result of the negligence or willful acts of its employees, agents, subcontractors, etc.

The Contract Administrator may require the Purchaser to suspend any or all of Purchaser's Operations when ignition conditions identified in the ERP are met, or when fire is within or threatening the Operational Area. Purchaser's failure to effectively engage in fire-safe operations is considered a breach and may result in suspension of operations.

S-030 Landing Debris Clean Up

Landing debris shall be disposed of in a manner approved in writing by the Contract Administrator. All slash generated during manufacturing of logs shall be piled at landings and all landings shall be separated from the road prism at completion of harvest. Landing slash may be used for skid trail or temp road mitigation.

S-035 Logging Debris Clean Up

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

Slash and other harvest generated material shall be promptly removed from roads, ditch lines and other improvements.

S-040 Noxious Weed Control

Purchaser shall thoroughly pressure wash all harvest equipment prior to entry onto U.S. Forest Service land, or before moving equipment between infested sites, to remove all contaminated soils, plant parts, seeds, vegetative matter, or other debris that could contain or hold seeds. Equipment shall be considered free of soil, seed, and other such debris when a visual inspection does not disclose such material. The Contract Administrator reserves the right to also require the cleaning of equipment as required by this clause in cases where equipment is being moved onto nonfederal lands.

Purchaser shall notify the Contract Administrator in advance of moving all off-road logging and construction equipment onto US Forest Service lands. Notification will include a location approved by the Contract Administrator where the equipment will be cleaned by the Purchaser, and made available for inspection by the Contract

Administrator at a time agreed by the Parties. Only logging and construction equipment cleaned as required under this clause, and inspected by the Contract Administrator (or designee), will be allowed to operate on federal lands within the sale area. All subsequent move-ins of equipment to the sale area shall be treated in the same manner as the initial move in. "Off-road equipment" includes all logging and construction machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars and similar vehicles.

S-060 Pump Truck or Pump Trailer

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

S-100 Stream Cleanout

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

S-120 Stream Protection

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

S-130 Hazardous Materials

a. Hazardous Materials and Waste - Regulatory Compliance

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

b. Hazardous Materials Spill Prevention

All operations shall be conducted in a manner that prevents the release of hazardous materials, including petroleum products, into the environment (water, air or land). If the total oil or oil products storage exceeds 1320 gallons or if any single container exceeds a capacity of 660 gallons, the purchaser will prepare and provide the Contract Administrator a Spill Prevention Control and Counter measures Plan prior to commencing operations. The plan shall meet EPA requirements including certification by a registered professional engineer.

c. Hazardous Materials Spill Containment, Control and Cleanup

If safe to do so, Purchaser shall take immediate action to contain and control all hazardous material spills. Purchaser shall ensure that enough quick response spill kits capable of absorbing 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, Purchaser must be able to effectively control a container leak and contain & recover a hazmat spill equal to the largest single on site storage container volume. (HAZWOPER reg. 29 CFR 1910.120(j)(1)(vii)).

d. Hazardous Material Release Reporting

Releases of oil or hazardous materials to the environment must be reported to the Washington State Department of Ecology Eastern Region Office at 1-509-329-3400. It is the responsibility of the Purchaser to have all emergency contact information readily available and a means of remote communication for purposes of quick notification.

In addition to the above, Purchaser shall immediately notify the Contract Administrator if any leakage or spillage enters any stream, watercourse or area of open water.

S-131 Refuse Disposal

All Purchaser generated refuse shall be removed from State or U.S. Forest Service lands for proper disposal prior to termination of this contract. No refuse shall be burned, buried or abandoned on State or U.S. Forest Service lands. All refuse shall be transported in a manner such that it complies with RCW 70.93 and all loads or loose materials shall be covered/secured such that these waste materials are properly contained during transport.

SECTION D: DAMAGES

D-010 Liquidated Damages

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

D-021 Failure to Remove Forest Products

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

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

Where:

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

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

Where:

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

D-030 Inadequate Log Accountability

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

Enforcement actions for unauthorized removal of forest products for each improperly branded load, improperly ticketed load, lost or unaccounted for tickets, or use of a facility not authorized for this sale or improper submission of scaling data are impractical, expensive, time consuming and are not an adequate remedy. Therefore, Purchaser agrees to pay the State, as liquidated damages, a sum of \$100 each time a load of logs does not have branding as required in the contract, \$250 each time a load of logs does not have a load ticket as required by the contract, \$250 each time a load ticket has not been filled out as required by the plan of operations, \$250 each time a load is weighed or scaled at a location not approved as required under this contract, \$250 each time a log ticket summary report is not submitted properly, and if a third party Log and Load Reporting Service is required, \$250 each time scaling or weight data is not properly submitted to the Log and Load Reporting Service per clause L-071, and \$250 each time a ticket is either lost or otherwise unaccounted for.

D-040 Leave Tree Excessive Damage

When Purchaser's operations exceed the damage limits set forth in Clause H-012, Leave Tree Damage Definition, the trees damaged result in substantial injury to the National Forest. The value of the damaged leave trees at the time of the breach is not readily ascertainable. Therefore, Purchaser agrees to pay the State as liquidated damages at the rate of \$1,000 per tree for all damaged trees in the sale area.

Section M: MISCELLANEOUS

M-010 Federal Endangered Species Act

The Federal Endangered Species Act of 1973 (ESA), 16 USC § 1531 et seq., prohibits a person from taking any federally listed threatened or endangered species. Taking under the federal ESA may include alteration of habitat. Neither this Contract, or the State's approval of Purchaser's Plan of Operations, is certification that Purchaser's operations under the plan are lawful under the ESA. Purchaser's compliance with the plan is not in lieu of compliance with any federal requirements under the ESA or its implementing regulations.

M-020 Forest Resources Conservation and Shortage Relief Act of 1990

Purchaser must comply with the provisions of the Forest Resources Conservation and Shortage Relief Act of 1990 (Act), (16 USC 620 et seq.), and its implementing regulations (36 CFR § 223.185 et seq.), as the Act and rules now exist or are hereafter amended. Prior to award, during the life of this contract, and for a period of three years from the Contract Termination Date, Purchaser shall upon request furnish to the State and the U.S. Forest Service records showing the volume and geographic origin of unprocessed timber from private lands exported or sold for export by Purchaser or affiliates. Prior to delivering unprocessed timber to another party, Purchaser shall require each buyer, exchangee, or recipient to execute an acceptable agreement that will: (i) identify the Federal origin of the timber; (ii) specify domestic processing for the timber involved; (iii) require the execution of such agreements between the parties to any subsequent transactions involving the timber; (iv) require that all hammer brands and/or yellow paint must remain on logs until they are either legally exported or domestically processed, whichever is applicable; and (v) otherwise comply with the requirements of the Act, 16 USC 620(d). No later than 10 (ten) days following the execution of any such agreement between Purchaser and another party, Purchaser shall furnish to U. S. Forest Service a copy of each such agreement. Purchaser shall retain, for three years from the Termination Date, the records of all sales, exchanges, or dispositions of all timber. For breach of this Subsection, the State may terminate this contract and the U.S. Forest Service may take such other action as may be provided by statute or regulation, including the imposition of penalties. When the Contract is terminated by the State for a violation of the Act or rules under this clause, the State shall not be liable for any Claim submitted by Purchaser relating to the termination.

M-030 Debarment, Suspension, Ineligibility, and Exclusion.

Purchaser is a corporation organized and existing under the laws of the State of Washington and certifies by execution of the Contract that it is not, nor are its principals, presently debarred, suspended, proposed for debarment or suspension, declared ineligible, or excluded from participation in any transaction with the Federal government. Purchaser shall immediately notify the State without undue delay if it receives a notice from the Federal government that it or its principals are proposed for debarment or suspension, or are debarred, suspended, declared ineligible, or excluded from participating in a transaction with the Federal government.

Purchaser shall require all subcontractors to provide written certification that they are not debarred, suspended, ineligible, or excluded from participating in a transaction with the Federal government. (Execution of Department of Agriculture Form AD-1048 is sufficient to satisfy this requirement.) Purchaser shall maintain a file of certifications and provide a copy to the Contract Administrator upon request.

M-040 Certification Regarding Felony Conviction and Tax Delinquent Status.

Purchaser, by signature below, certifies that: (1) Neither the corporation or its principals have been convicted of a felony violation under any Federal law within the preceding 24 months of the effective date of the Contract; and (2) Neither the corporation or its principals have failed to file all Federal tax returns required during the three years preceding the Contract; have been convicted of a criminal offense under the Internal Revenue Code; or have been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default,

M-050 Human Remains, Artifacts, and Other Cultural and Historic Items

In the event that human remains, burials, funerary items, sacred objects, object of cultural patrimony, prehistoric artifacts (i.e., arrowheads, spear points, mortars, pestles, other ground stone tools, knives, scrapers, or flakes from the manufacture of tools, fire pits, peeled trees, etc.) or historic period artifacts or features (i.e., fragments of old plates or ceramic vessels, weathered glass, dumps of old cans, cabins, root cellars, etc.) are found during project implementation, work on the site shall cease immediately to protect the find from further damage or disruption and the U.S. Forest Archeologist will be notified. No further work shall be allowed on the site until the Forest Archeologist has approved a plan for managing or preserving the remains or items.

M-060 Payment of Taxes

The State makes no representations concerning tax liability or consequences arising from the purchase of Federal timber under the Contract. It is Purchaser's sole responsibility to pay all taxes owed, including any forest excise taxes under RCW 84.33.

M-070 Non-Discrimination in Employment

In connection with the performance of work under this Contract, Purchaser agrees not to discriminate against any applicant for employment, employee, or independent contractor based on race, color, national origin, sex, religion, age, disability, sexual orientation, or marital status. This shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment, layoff or termination; rates of pay, or other forms of compensation; and selection for training, including apprenticeship. Purchaser agrees to comply with all federal and state laws governing non-discrimination in employment applicable to the work performed under the Contract.

M-080 Records

Purchaser shall maintain all reports, data, correspondence, other and information pertaining to this Contract for a period of 6 years, and provide copies to the State upon request.

M-090 Waiver

Any provision of the Contract that is determined to be invalid, void, or illegal shall in no way affect, impair, or invalidate any other provision of the Contract, such other provisions remaining in full force and effect.

M-100 Severability Clause

Any provision of the Contract that is determined to be invalid, void, or illegal shall in no way affect, impair, or invalidate any other provision of the Contract, such other provisions remaining in full force and effect.

M-110 Effective Date

This Contract shall be effective upon the date signed by the State of Washington, Department of Natural Resources.

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

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

Purchaser

State Forester

Date: _____
Address: _____

Date: _____

SCHEDULE A; WEST TROUT
LEAVE TREE SELECTION CRITERIA

General Harvest Instructions

1. All persons engaged in the felling of timber and manufacturing of logs or poles must receive certification in writing from the Contract Administrator. Certification may be revoked when the Contract Administrator determines that take tree selection, log utilization, or manufacturing has been performed in a manner that does not achieve silvicultural objectives, optimize value, or otherwise causes damage to the State or U.S. Forest Service.
2. Unit boundaries are marked with pink flagging, white “Timber Sale Unit Boundary” tags along with orange flashers. The road centerline is flagged with orange ribbon. Riparian Habitat Conservation Areas (RHCA) are behind blue flagging, blue “Special Management Boundary” tags and bounded by pink flagging and tagged with white “Timber Sale Boundary” tags at unit edge.
3. Follow the prescribed cutting instructions according to the unit which is being harvested.
4. Harvest all green Douglas fir, Western Larch, alpine fir, engelmann spruce, grand fir, and lodgepole pine that is not described as being a leave tree, capable of at least yielding a log with a 4.6 inch small end DIB and all ponderosa pine and red cedar that is not described as being a leave tree, capable of at least yielding a log with a 5.6 inch small end DIB that is at least 12 feet long in all Units.
5. The irregular availability of quality leave trees and clumped nature of merchantable trees may result in spacing distances greater than 100 feet or less than those described for individual unit target spacing indicated in #6 below. Harvested openings shall not create voids of greater than 400 feet between leave trees.
6. Adhere to the following leave tree requirements
 - I. Units 6 and 7 will have scattered and clumped leave trees marked with orange paint.
 - II. Harvest area 9 consists of 8 Riparian Habitat Conservation Areas (RHCA) – 9A, 9B, 9C, 9D, 9E, 9F, 9G, and 9H located within Units 5 and 6. These RHCAs are marked for take (removal) in blue paint. **LEAVE ALL TREES NOT MARKED WITH BLUE PAINT.**
 - III. Units 5 and 8 will be prescriptive harvest, see individual unit descriptions.
 - IV. The below applies to all units.
 - a. Leave all 21 inch DBH and larger conifer trees.
 - b. Leave all hardwood species.
 - c. Leave all snags greater than 16 inch DBH (as safe and practicable to do so).

Unit 5: 811 net harvest acres:

This management will be an uneven-aged prescriptive harvest targeting suppressed and diseased trees in the understory, midstory and overstory cohorts for removal. The average unit TPA is 20 (intent is to vary between 15-30 TPA).

- Leave trees will be selected preferring healthy PP and WL of larger diameter with good form and live crown ratio of +30%.
- Remove all DF, AF, ES, GF, LP, RC less than 21 inch DBH capable of yielding a log described in 4 above.
- Within 100 feet of Aspen Clumps leave only mandatory trees as described in 6.IV and PP/WL free of disease and have 50% live crown ratios (as long as TPA of PP/WL is 5 TPA or less).
- Remove all WL less than 21 inch DBH that have infection of mistletoe.
- **The target average leave tree spacing for this unit will be 46 feet by 46 feet where densities and desirable species allow.**
- An emphasis will be placed on clumping healthy WL and PP and removing trees that have disease/insect damage (See Clumping Aid).

- All non-merchantable stems greater than 3 feet in height and less than 7 inches Dbh, shall be felled concurrently with harvest operations (see contract clause H-250 and Exhibit A map for whipfelling restrictions on portion of unit). Areas of healthy regeneration may be excluded from whip felling as approved by the contract administrator.

Unit 6: 292 net harvest acres:

- Remove all green conifer species not marked with orange paint capable of yielding a log described in 4 above.
- All non-merchantable stems greater than 3 feet in height and less than 7 inches Dbh, shall be felled concurrently with harvest operations. Areas of healthy regeneration may be excluded from whip felling as approved by the contract administrator.
- Leave all snags (as safe and practicable to do so).

Unit 7: 306 net harvest acres:

- Remove all green conifer species not marked with orange paint capable of yielding a log described in 4 above.
- All non-merchantable stems greater than 3 feet in height and less than 7 inches Dbh, shall be felled concurrently with harvest operations. Areas of healthy regeneration may be excluded from whip felling as approved by the contract administrator.
- Leave all snags (as safe and practicable to do so).

Unit 8: 43 net harvest acres:

This management will be an uneven-aged prescriptive harvest targeting suppressed and diseased trees in the understory, midstory and overstory cohorts for removal. The average unit TPA is 19 (intent is to vary between 15-30 TPA).

- Leave trees will be selected preferring healthy PP and WL of larger diameter with good form and live crown ratio of +30%.
- Remove all DF, AF, ES, GF, LP, RC less than 21 inch DBH capable of yielding a log described in 4 above.
- Within 100 feet of large PP and WL leave only mandatory trees as described in 6.III.
- Remove all WL less than 21 inch DBH that have infection of mistletoe.
- **The target average leave tree spacing for this unit will be 48 feet by 48 feet where densities and desirable species allow.**
- An emphasis will be placed on clumping healthy WL and PP and removing trees that have disease/insect damage (See Clumping Aid).
- All non-merchantable stems greater than 3 feet in height and less than 7 inches Dbh, shall be felled concurrently with harvest operations. Areas of healthy regeneration may be excluded from whip felling as approved by the contract administrator.

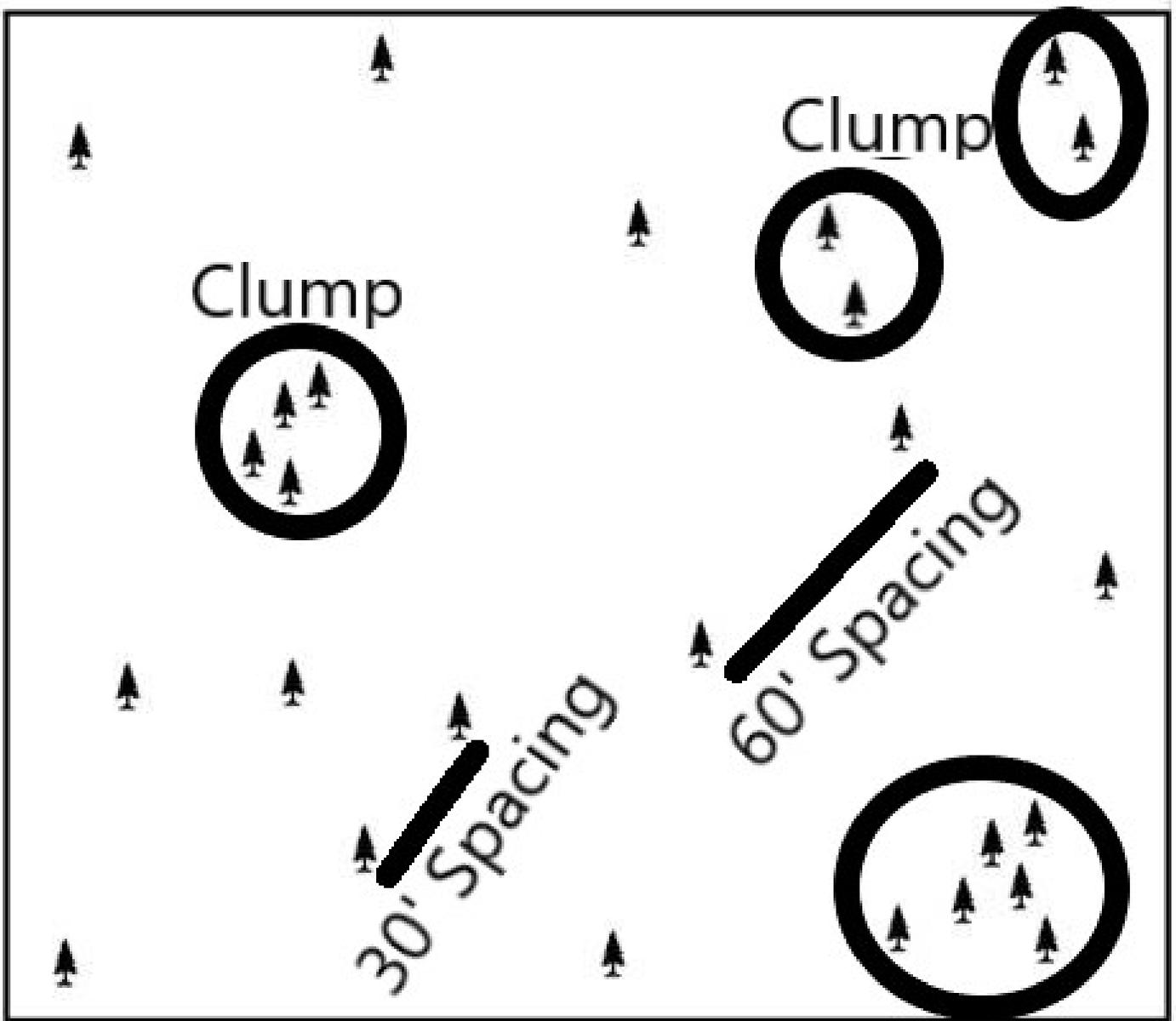
RHCAs 78 net harvest acres:

This management will be a riparian thinning targeting suppressed and diseased trees in the understory and midstory cohorts for removal. There are 8 RHCA harvests: 9A, 9B, 9C, 9D, 9E, 9F, 9G, and 9H - 4 areas in U5 and 4 areas in U6, prescription applies to all RHCA harvests.

- Remove all green conifer species marked with blue paint.
- All non-merchantable stems greater than 3 feet in height and less than 7 inches Dbh, shall be felled concurrently with harvest operations. Areas of healthy regeneration may be excluded from whip felling as approved by the contract administrator.

West Trout Tree Clumping Aid

- The intent of clumping is to have spatial variability where **openings** are created between clumps and single trees.
- Clumps are defined as 2 or more trees within 20 feet of one another.
 - Target number of trees per clump will vary from 2 to 6 trees per clump.
- Where quality leave trees are present the general clumping target will be 1 clump for every 2-4 single trees.
- Clumps will generally be composed of healthy cohorts of similar size.
- There will be areas within units where natural clumps exist of healthy large diameter older PP and WL
- Unit average spacing will be increased as clumps are created or where they exist naturally (see spatial arrangement example below).

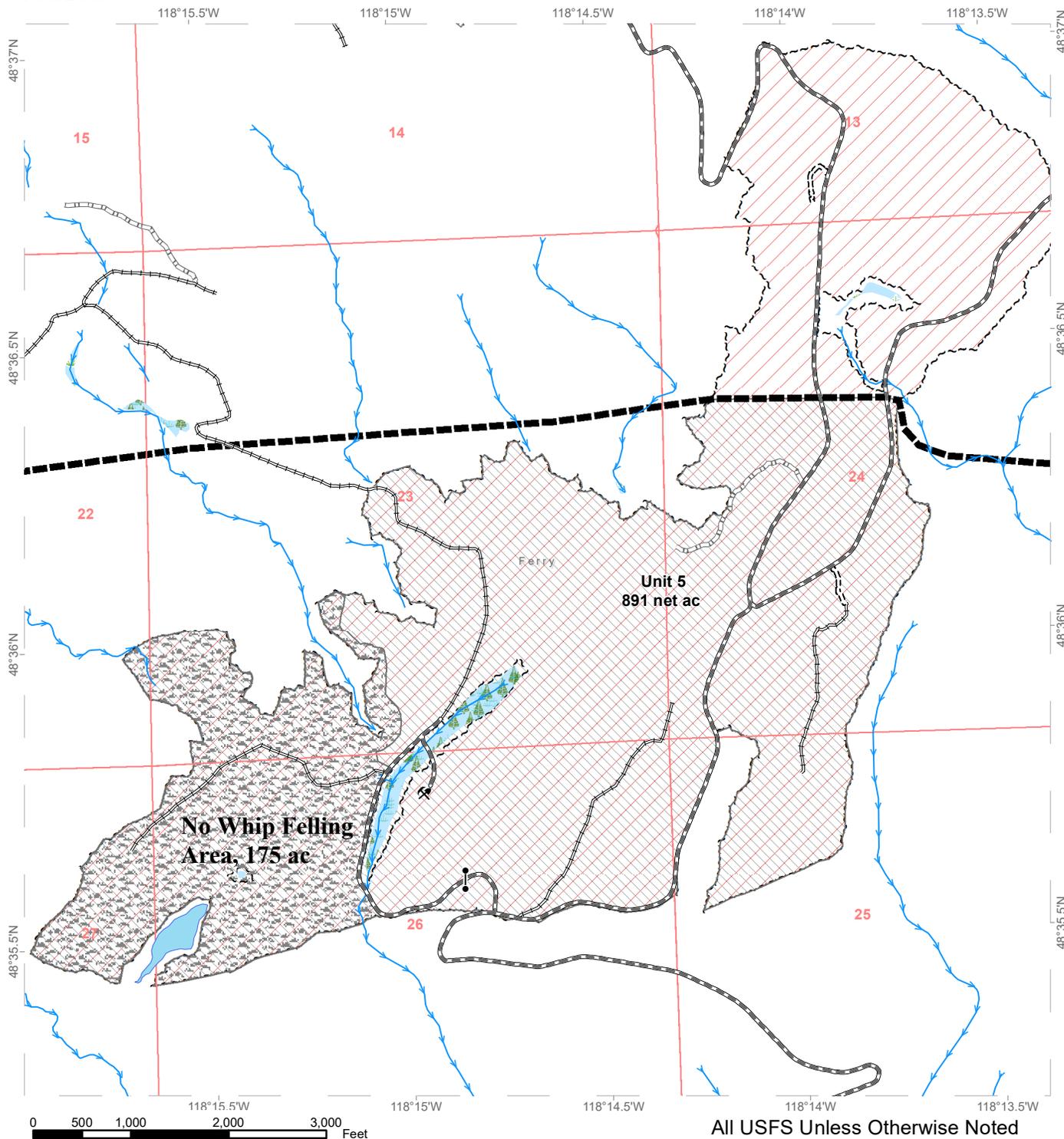


GOOD NEIGHBOR AUTHORITY TIMBER SALE MAP

Exhibit A

SALE NAME: West Trout Lake
AGREEMENT #: 36-099675
TOWNSHIP(S): T36R36E
FOREST: Colville N.F.

REGION: Northeast Region
COUNTY(S): Ferry
ELEVATION RGE: 2800-4760



All USFS Unless Otherwise Noted

	Harvest Area		Required Pre-Haul Maintenance		Waterbodies
	RHCA Harvest		Required Construction		Wetlands - Non-forested
	Winter Range		Required Reconstruction		Forested Wetland
	Winter Range		Optional Reconstruction		Rock Pit
	No Whip Fell		Streams		Gates





WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

FOREST EXCISE TAX ROAD SUMMARY SHEET

Region:

Timber Sale Name:

Application Number:

EXCISE TAX APPLICABLE ACTIVITIES

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

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

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

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

Pre-Haul Maintenance: linear feet
Existing road to receive maintenance work (specifically required by the contract) prior to haul

EXCISE TAX EXEMPT ACTIVITIES

Temporary Optional Construction: linear feet
Optional roads to be constructed and then abandoned

Temporary Optional Reconstruction: linear feet
Optional roads to be reconstructed and then abandoned

New Abandonment: linear feet
Abandonment of roads constructed or reconstructed under the contract

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

(Revised 1/17)

**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

**TIMBER SALE CONTRACT
EXTENSION AGREEMENT**

Sale Name: West Trout Lake

Agreement No.: 36-099675

Region: Northeast

Bond No.: 0

Pursuant to RCW 79.15.100, and in consideration of the sum of \$200 to be paid by the Purchaser on or before the Commissioner of Public Lands, having determined on that a time extension would be granted, the State and the Purchaser hereby extend the time which timber may be removed in the above captioned timber contract for a period of 0 months, from the date of to the date of .

The following conditions are made a part of the timber sale contract and extension agreement:

PURCHASER

By _____

Print Name _____

Title _____

**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

By _____
Region Manager

Date _____

Cruise Narrative

Sale Name: West Trout	Region: Northeast
Agreement Number: 36-99675	District: 3 Rivers (Colville National Forest)
Lead Cruiser: Kellen Salseina	Completion Date: 11/5/2019
Other Cruisers on sale: Dylan Worlock, Nate Janiga, Berny Beardslee, Nichole Peters, Nate Simpkins.	Legal: Sections 13, 14, 15, 22, 23, 24, 25, 26, 27 & 36; T 36 N, R 36 E WM.

Unit Cruise Acreage Specifications:

Unit #	Gross Acres	Net Acres	Total Deletions	RHCA	Leave Tree Acres	Existing Roads	Other
5	891.20	810.50	80.70	68.90	0.00	11.80	
6	301.60	291.90	9.70	9.70	0.00	0.00	
7	305.60	305.60	0.00	0.00	0.00	0.00	
8	42.70	42.70	0.00	0.00	0.00	0.00	
9 (RHCA)	0.00	78.80	0.00	0.00	0.00	0.00	
Total	1541.10	1529.50	90.40	78.60	0.00	11.80	0.00

Cruise Sample Design:

This timber sale was cruised using the **variable plot** sampling method. The cruise/count system was implemented; A single BAF was used to determine Basal Area on both the cruise and count trees. Each cruise plot was fully cruised. Diameters were taken on all count plots. Plot locations were created using a computer generated grid, and found using a hand held GPS unit. In unit 5, plots 116, 39, 74, 104 & 59 were dropped. In unit 7, plot 49 was dropped. In unit 8, plot 1 was dropped. In Unit 9 RHCA, plots E3, H2 & H5 were dropped. Average bole heights are around 69'. ***** Advertised volume does not include any of the volume for trees designated as (L) leave trees.**

Unit #	BAF (cruise)	Sighting height	Grid size (plot spacing in feet)	% Cruise to count Target	Total number of Plots
5	25.15	D4H	347 x 347	1:3	288
6	25.15	D4H	435 x 435	1:2	67
7	33.6	D4H	418 x 418	1:2	75
8	25.15	D4H	249 x 249	1:1	29
9	20	D4H	304 x 304	100 %	34

Cruise Specifications:

Minor species cruise intensity:	Minor species were cruised as we came upon them the first time.
Minimum top dib: Ponderosa Pine: 5.6" All other Species: 4.6'	Ponderosa Pine: Trees were cruised to a 6" top. All other species: Trees less than 17.5" DBH have a minimum top of 4.6" dib. Trees 17.6" and greater DBH were cruised to a 6" top.
Minimum dbh:	Ponderosa pine: 8.0 inches DBH All other species: 7.0 inches DBH
Log lengths:	Saw logs: 32 feet where possible, minimum of 12 feet Firewood: None included Utility: 16 feet where possible, minimum of 12 feet
Take / Leave tree description:	Harvest all trees not banded with orange paint in Units 6 and 7 that are less than 21" DBH. Do not cut 21"+ For Units 5, and 8 do not cut 21"+; See schedule A for additional harvesting prescriptions. In Unit 9 RHCA, cut trees are banded with blue paint. Do not cut un-banded trees or.
Commercial species observed in sale area, but not in cruise:	
Utility wood:	Comprised of non-board foot volume and volume below the minimum top diameter of 5" or 40% of DOB at 16' to a minimum of a 2.6" top.
Status codes used:	L – leave tree
Sort codes used	D – saw log, U – utility log,
Species table used:	NE 2 inch
Grade table used:	Eastgrad
Other tables used (cruise adjustment):	

Field Observations:

Location:	Eastern Ferry County, 9.7 miles west of the Tribal Trails Gas Station in Kettle Falls, Washington.
Aspect:	North, East, South and West
Elevation:	2800 to 4720
Slope:	Unit 5 – 0% to 42%, Average 5% Unit 6 – 0% to 52%, Average 15% Unit 7 – 0% to 75%, Average 20% Unit 8 – 0% to 52%, Average 30% Unit 9- 0% to 57%, Average 10%
Harvest Methods:	100% Ground base yarding.
Stand Composition:	All units are primarily Ponderosa Pine, Douglas-Fir and Western larch. Unit 7 is a mixture of all species. The stands are second growth with some scattered remnant trees.
Stand Health:	There are some scattered root rot pockets. Bark beetles are active and the woodpeckers are working on these trees. There was some slight wind damage in October of 2019. The majority of the sale area timber is mostly healthy.
Timber Quality:	The timber is a mix of average quality. Douglas Fir is the majority of the volume.
Non-board Foot Volume:	
Other Considerations:	

Prepared by: Kellen Salseina

Title: Natural Resource Specialist 1 (Fed Lands)

CC: Timber Sales Document Center & File #

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																		
<div style="border: 1px solid black; padding: 5px;"> T022 R036 S36 TyU6 THRU T036 R036 S24 TyU7 </div>				Project: WESTTRT										Page 1								
				Acres 1,529.50										Date 12/5/2019		Time 1:11:45PM						
Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre	
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf		
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99						
DF	D	2		7	.7	300	298	455				99	1			100	32	13	215	1.49	1.4	
DF	D	3		65	3.8	2,778	2,671	4,085			95	5		1	2	97	1	32	8	90	0.71	29.6
DF	D	4		25	2.3	1,057	1,033	1,580	79	21				22	31	47	0	24	5	30	0.29	35.0
DF	U	UT		3		100	100	152	95	5				82	10	8		17	3	9	0.13	10.8
DF Totals				39	3.1	4,234	4,101	6,272	22	68	10	0		8	9	82	1	26	6	53	0.50	76.7
DF	L	D	2	63	1.4	413	407	623			89	11				100	32	13	259	1.89	1.6	
DF	L	D	3	30		188	188	288	0	92	7	1			1	99	32	9	119	0.73	1.6	
DF	L	D	4	7		44	44	68	97	2	1			6	94		23	5	30	0.30	1.5	
DF Totals				6	.9	646	640	979	7	27	59	7		0	7	93		29	9	137	1.05	4.7
WL	D	2		7		112	112	172			100					100	32	13	195	1.36	.6	
WL	D	3		66	3.9	968	930	1,423	0	99	0			2	3	96	31	8	78	0.59	11.9	
WL	D	4		22	6.6	348	325	497	79	21				22	23	56	24	5	28	0.25	11.7	
WL	U	UT		5		60	60	92	96	4				94		6	16	3	9	0.11	7.0	
WL Totals				14	4.1	1,488	1,427	2,183	22	70	8			10	7	83		25	6	46	0.42	31.2
WL	L	D	2	15		64	64	98			100					100	32	16	340	2.02	.2	
WL	L	D	3	69	4.0	300	288	440		99	1				3	97	32	9	96	0.72	3.0	
WL	L	D	4	13		56	56	86	62	38				6		94	27	5	40	0.28	1.4	
WL	L	U	UT	3		11	11	16	100					100			16	3	10	0.11	1.1	
WL Totals				4	2.8	431	419	640	11	73	16			3	2	95		28	7	74	0.60	5.6
PP	L	D	4	46	.8	782	776	1,186		37	59	4		3	3	90	4	32	11	183	1.29	4.2
PP	L	D	5	54	2.6	902	878	1,343		97	3	0		13	19	68	1	25	7	64	0.61	13.7
PP Totals				16	1.8	1,684	1,654	2,530		69	29	2		8	11	78	2	27	8	92	0.80	17.9
PP	D	4		28	.3	152	152	232		59	41				6	88	6	31	11	171	1.16	.9
PP	D	5		72	3.6	395	381	582		97	3			7	24	64	5	27	7	60	0.55	6.3
PP Totals				5	2.7	548	533	815		86	14			5	19	71	5	27	8	74	0.63	7.2
AF	D	2		12		34	34	53			100					100	32	12	190	1.18	.2	
AF	D	3		50	23.4	183	140	215		100						100	31	8	62	0.64	2.3	
AF	D	4		33	6.6	97	90	138	80	8	12			32	20	48	24	5	33	0.28	2.8	
AF	U	UT		5		14	14	21	68	32				58	42		18	3	14	0.16	1.0	
AF Totals				3	15.0	328	279	427	29	54	16			13	9	78		26	6	45	0.46	6.2
AF	L	D	3	86	29.5	4	3	5		55	45					100	32	13	155	1.42	.0	
AF	L	D	4	14		0	0	1	100							100	32	5	50	0.40	.0	
AF Totals				0	26.5	5	4	5	14	47	39					100		32	10	120	1.08	.0
GF	D	2		6	8.3	52	48	73			100					100	32	14	247	1.72	.2	
GF	D	3		57	3.1	420	406	622		100						92	8	32	8	90	0.63	4.5
GF	D	4		34	3.4	251	243	371	80	20				13	28	58	27	5	35	0.28	7.0	
GF	U	UT		3		18	18	27	100					100			14	3	6	0.11	2.8	
GF Totals				7	3.5	741	715	1,094	30	63	7			7	10	79	4	26	6	49	0.42	14.5
RC	D	3		56	9.6	262	237	362		100							30	8	72	0.67	3.3	

T022 R036 S36 TyU6 THRU T036 R036 S24 TyU7	Project: WESTTRT Acres 1,529.50	Page 2 Date 12/5/2019 Time 1:11:45PM
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S Spp	So T	Gr rt ad	% Net BdFt	Bd. Ft. per Acre Def% Gross Net			Total Net MBF	Percent of Net Board Foot Volume								Average Log				Logs Per /Acre
								Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf	
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
RC	D	4	44	.1	185	184	282	80	17	3		17	59	24		25	5	30	0.31	6.1
RC Totals			4	5.7	447	421	644	35	64	1		10	34	51	6	27	6	45	0.46	9.4
LP	D	2	12		30	30	45			100		43	57			24	13	146	1.40	.2
LP	D	3	46	6.4	113	106	162		76	24			18	82		31	8	90	0.70	1.2
LP	D	4	38	2.2	93	91	139	20	55	25		13	16	71		26	7	59	0.49	1.5
LP	U	UT	4		7	7	11	100				21	79			23	3	10	0.13	.7
LP Totals			2	3.9	243	234	357	11	56	33		11	24	65		27	7	64	0.56	3.6
ES	D	2	28	.0	37	37	57			100				100		32	13	236	1.53	.2
ES	D	3	60		77	77	117		100				13	87		31	8	101	0.69	.8
ES	D	4	10	.0	13	13	20	59	41			38	21	41		18	5	23	0.30	.6
ES	U	UT	2		2	2	3	100				100				17	3	10	0.16	.2
ES Totals			1		129	129	197	7	64	29		5	10	85		25	7	76	0.65	1.7
Totals				3.4	10,922	10,554	16,143	17	66	17	1	8	11	80	1	26	6	59	0.53	178.7

TC PSTATS		PROJECT STATISTICS							PAGE	1	
		PROJECT WESTTRT							DATE	12/5/2019	
TWP	RGE	SC	TRACT	TYPE		ACRES	PLOTS	TREES	CuFt	BdFt	
022	036	36	WEST TROUT	U6	THR	1,529.50	488	1,865	S	E	
036	036	24	WEST TROUT	U7							
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES				
TOTAL			488	1865	3.8						
CRUISE			175	573	3.3	118,174	.5				
DBH COUNT			44	186	4.2	20,635	.9				
REFOREST COUNT			233	844	3.6						
BLANKS			36								
100 %											
STAND SUMMARY											
SAMPLE TREES		TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC	
DOUG FIR	398	40.7	12.5	68	9.8	34.8	4,234	4,101	999	999	
DOUG FIR-L	30	1.6	21.4	88	0.9	3.9	646	640	143	143	
P PINE	68	4.3	14.5	58	1.3	4.9	548	533	124	124	
P PINE-L	70	8.2	17.5	68	3.3	13.7	1,684	1,654	383	383	
W LARCH	106	13.0	12.1	81	3.0	10.5	1,488	1,427	327	327	
W LARCH-L	8	2.0	15.6	94	0.7	2.7	431	419	93	93	
GR FIR	44	8.3	11.1	67	1.7	5.6	741	715	160	160	
WR CEDAR	31	7.5	10.8	50	1.5	4.8	447	421	114	114	
ALP FIR	11	2.9	12.1	77	0.7	2.3	328	279	73	73	
ALP FIR-L	1	.0	21.1	94	0.0	.0	5	4	1	1	
LP PINE	11	1.5	13.5	78	0.4	1.5	243	234	55	55	
E SPRUCE	8	.7	14.6	79	0.2	.8	129	129	28	28	
TOTAL	786	90.8	13.1	69	23.6	85.5	10,922	10,554	2,499	2,499	
CONFIDENCE LIMITS OF THE SAMPLE											
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR											
CL	68.1	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR		57.9	3.5	131	136	141					
DOUG FIR-L		34.2	12.1	437	497	557					
P PINE		56.3	7.7	151	163	176					
P PINE-L		58.7	8.2	226	247	267					
W LARCH		52.1	6.0	148	157	166					
W LARCH-L		63.3	28.2	178	248	318					
GR FIR		74.6	11.6	117	132	147					
WR CEDAR		66.5	12.6	59	67	76					
ALP FIR		74.6	24.8	79	105	131					
ALP FIR-L											
LP PINE		69.1	21.8	143	183	223					
E SPRUCE		50.6	19.1	193	239	284					
TOTAL		69.9	2.9	152	157	161	195	49	22		
CL	68.1	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.		
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR		52.5	3.2	32	33	35					
DOUG FIR-L		28.2	10.0	104	116	127					
P PINE		48.6	6.6	35	38	40					
P PINE-L		55.8	7.8	53	57	62					
W LARCH		49.9	5.7	34	36	38					
W LARCH-L		51.1	22.7	45	58	71					
GR FIR		71.5	11.1	27	30	34					
WR CEDAR		65.1	12.3	17	20	22					
ALP FIR		60.2	20.0	26	33	39					
ALP FIR-L											
LP PINE		59.2	18.7	34	42	50					

TC PSTATS										PROJECT STATISTICS		PAGE	2
										PROJECT WESTTRT		DATE	12/5/2019
TWP	RGE	SC	TRACT	TYPE		ACRES		PLOTS	TREES	CuFt	BdFt		
022	036	36	WEST TROUT	U6	THR	1,529.50		488	1,865	S	E		
036	036	24	WEST TROUT	U7									
CL	68.1		COEFF	SAMPLE TREES - CF				# OF TREES REQ.	INF. POP.				
SD:	1.00		VAR.	S.E.%	LOW	AVG	HIGH	5	10	15			
E SPRUCE			48.8	18.4	42	51	61						
TOTAL			64.0	2.7	37	38	39	163	41	18			
CL	68.1		COEFF	TREES/ACRE				# OF PLOTS REQ.	INF. POP.				
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15			
DOUG FIR			167.6	7.6	38	41	44						
DOUG FIR-L			307.5	13.9	1	2	2						
P PINE			283.4	12.8	4	4	5						
P PINE-L			174.5	7.9	8	8	9						
W LARCH			315.8	14.3	11	13	15						
W LARCH-L			373.1	16.9	2	2	2						
GR FIR			451.1	20.4	7	8	10						
WR CEDAR			442.1	20.0	6	8	9						
ALP FIR			637.5	28.8	2	3	4						
ALP FIR-L			2209.1	99.9	0	0	0						
LP PINE			587.9	26.6	1	2	2						
E SPRUCE			956.6	43.3	0	1	1						
TOTAL			107.1	4.8	86	91	95	458	114	51			
CL	68.1		COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.	INF. POP.				
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15			
DOUG FIR			150.3	6.8	32	35	37						
DOUG FIR-L			298.9	13.5	3	4	4						
P PINE			280.3	12.7	4	5	6						
P PINE-L			171.9	7.8	13	14	15						
W LARCH			299.8	13.6	9	10	12						
W LARCH-L			368.5	16.7	2	3	3						
GR FIR			427.3	19.3	4	6	7						
WR CEDAR			444.1	20.1	4	5	6						
ALP FIR			603.5	27.3	2	2	3						
ALP FIR-L			2209.1	99.9	0	0	0						
LP PINE			569.2	25.7	1	2	2						
E SPRUCE			880.2	39.8	0	1	1						
TOTAL			83.0	3.8	82	86	89	275	69	31			
CL	68.1		COEFF	NET BF/ACRE				# OF PLOTS REQ.	INF. POP.				
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15			
DOUG FIR			151.0	6.8	3,821	4,101	4,381						
DOUG FIR-L			298.8	13.5	553	640	726						
P PINE			292.9	13.2	462	533	603						
P PINE-L			172.5	7.8	1,525	1,654	1,783						
W LARCH			305.7	13.8	1,230	1,427	1,625						
W LARCH-L			371.3	16.8	348	419	489						
GR FIR			438.0	19.8	573	715	857						
WR CEDAR			469.3	21.2	332	421	511						
ALP FIR			616.0	27.9	201	279	357						
ALP FIR-L			2209.1	99.9	0	4	7						
LP PINE			570.8	25.8	173	234	294						
E SPRUCE			907.5	41.0	76	129	182						
TOTAL			85.2	3.9	10,148	10,554	10,961	290	73	32			
CL	68.1		COEFF	NET CUFT FT/ACRE				# OF PLOTS REQ.	INF. POP.				
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15			
DOUG FIR			149.4	6.8	931	999	1,066						
DOUG FIR-L			299.3	13.5	123	143	162						
P PINE			285.8	12.9	108	124	141						
P PINE-L			172.0	7.8	353	383	412						
W LARCH			304.6	13.8	282	327	373						
W LARCH-L			368.9	16.7	77	93	108						
GR FIR			430.8	19.5	129	160	191						

TC PSTATS		PROJECT STATISTICS							PAGE	3		
		PROJECT			WESTTRT				DATE	12/5/2019		
TWP	RGE	SC	TRACT	TYPE		ACRES			PLOTS	TREES	CuFt	BdFt
022	036	36	WEST TROUT	U6	THR	1,529.50			488	1,865	S	E
036	036	24	WEST TROUT	U7								
CL	68.1		COEFF	NET CUFT FT/ACRE			# OF PLOTS REQ.			INF. POP.		
SD:	1.00		VAR.	S.E.%	LOW	AVG	HIGH	5			10	15
WR CEDAR			456.6	20.7	91	114	138					
ALP FIR			601.1	27.2	53	73	93					
ALP FIR-L			2209.1	99.9	0	1	2					
LP PINE			568.1	25.7	41	55	69					
E SPRUCE			888.4	40.2	17	28	39					
TOTAL			<i>84.1</i>	<i>3.8</i>	<i>2,404</i>	<i>2,499</i>	<i>2,594</i>	<i>282</i>	<i>71</i>	<i>31</i>		
CL	68.1		COEFF	V_BAR/ACRE			# OF PLOTS REQ.			INF. POP.		
SD:	1.0		VAR.%	S.E.%	LOW	AVG	HIGH	5			10	15
DOUG FIR			119.7	5.4	110	118	126					
DOUG FIR-L			70.7	3.2	140	162	184					
P PINE			239.0	10.8	94	108	122					
P PINE-L					112	121	131					
W LARCH			218.8	9.9	117	136	155					
W LARCH-L					131	157	184					
GR FIR			273.0	12.3	103	128	154					
WR CEDAR			301.6	13.6	70	88	107					
ALP FIR			365.7	16.5	87	120	154					
ALP FIR-L			2209.1	99.9	0	148	296					
LP PINE			331.4	15.0	113	152	192					
E SPRUCE			873.6	39.5	94	160	226					
TOTAL			<i>81.0</i>	<i>3.7</i>	<i>119</i>	<i>123</i>	<i>128</i>	<i>262</i>	<i>65</i>	<i>29</i>		

T036 R036 S23 TU5 **T036 R036 S23 TU5**
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 036 036 23 WEST TROUT U5 810.50 288 981 S E

S Sp	So T	Gr rt	%	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre	
				Net BdFt	Def%	Gross		Net	Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft		CF/ Lf
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
DF	D	2	7		349	349	283	100				100				32	13	218	1.47	1.6	
DF	D	3	67	4.1	3,130	3,002	2,433	95	5		1	2	95	2	32	8	90	0.71	33.5		
DF	D	4	23	1.9	1,042	1,022	828	74	26		21	27	51	1	24	5	30	0.29	34.2		
DF	U	UT	3		118	118	96	100				75	16	9		17	3	10	0.12	12.3	
DF	Totals		42	3.2	4,640	4,492	3,641	19	69	11	7	8	83	1	26	6	55	0.51	81.7		
DF	L D	2	63		622	622	504	100				100				32	13	240	1.78	2.6	
DF	L D	3	29		285	285	231	100				100				32	9	110	0.68	2.6	
DF	L D	4	8		78	78	63	100				100				24	5	30	0.29	2.6	
DF	L Totals		9		984	984	798	8	29	63		8	92		29	9	127	0.97	7.8		
PP	L D	4	46	.5	1,371	1,364	1,106	39	61		3	3	90	4	31	11	176	1.25	7.7		
PP	L D	5	54	2.6	1,604	1,562	1,266	100				13	19	67	1	25	7	63	0.60	24.9	
PP	L Totals		27	1.6	2,975	2,927	2,372	72	28		8	12	78	3	27	8	90	0.78	32.6		
PP	D	4	34	.3	276	275	223	61	39			6	87	7	31	11	169	1.14	1.6		
PP	D	5	66	4.9	554	527	427	100				10	28	55	7	26	7	56	0.52	9.5	
PP	Totals		7	3.3	830	802	650	87	13		6	21	66	7	27	8	72	0.63	11.1		
WL	L D	2	15		122	122	98	100				100				32	16	340	2.02	.4	
WL	L D	3	68	2.9	545	529	428	100					3	97		32	9	96	0.71	5.5	
WL	L D	4	14		106	106	86	62	38		6		94		27	5	40	0.28	2.6		
WL	L U	UT	3		19	19	16	100				100				16	3	10	0.10	1.9	
WL	L Totals		7	2.0	791	775	628	11	73	16	3	2	95		28	7	74	0.59	10.4		
WL	D	2	9		51	51	41	100				100				32	12	194	1.37	.3	
WL	D	3	68	2.4	365	357	289	2	98			3	97		32	8	88	0.63	4.1		
WL	D	4	19	4.4	102	98	79	93	7		24	28	49		24	5	27	0.23	3.6		
WL	U	UT	4		18	18	15	100				61		39		18	3	9	0.09	2.1	
WL	Totals		5	2.5	536	523	424	22	68	10	7	7	86		26	6	52	0.44	10.0		
LP	D	2	19		56	56	45	100				43	57		24	13	146	1.40	.4		
LP	D	3	30		83	83	67	43	57			43	57		28	11	143	1.00	.6		
LP	D	4	49	2.8	141	138	111	69	31		12		88		26	8	77	0.64	1.8		
LP	U	UT	2		5	5	4	100				100				26	3	10	0.16	.5	
LP	Totals		3	1.4	286	282	228	2	46	52	14	26	60		26	8	85	0.71	3.3		
RC	D	3		100.0	5											20	12		1.50	.0	
RC	D	4	100		8	8	6	100				74	26			21	5	23	0.28	.3	
RC	Totals		0	39.8	13	8	6	100				74	26			21	6	20	0.44	.4	
GF	D	2	40		10	10	8	100				100				32	14	270	1.74	.0	
GF	D	3	50	12.4	14	12	10	100				100				32	7	58	0.45	.2	

T036 R036 S23 TU5		T036 R036 S23 TU5
Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt		BdFt
036 036 23 WEST TROUT U5 810.50 288 981 S		E

S Spp	So T	Gr rt ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre	
								Log Scale Dia.				Log Length				Ln	Dia	Bd	CF/		
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99	Ft	In	Ft	Lf		
GF	D	4	10	3	3	2	100					100					15	5	12	0.21	.2
GF	Totals		0	6.5	27	25	21	10	49	41		10		90			24	7	54	0.52	.5
Type Totals				2.4	11,082	10,818	8,768	11	67	22		7	10	82	2		27	7	69	0.61	157.8

T036 R036 S24 TU7 **T036 R036 S24 TU7**
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 036 036 24 WEST TROUT U7 305.60 75 293 S E

S Sp	So T	Gr rt ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre		
				Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf			
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99							
WL	D	2	6		234	234	71	100				100				32	12	195	1.41	1.2		
WL	D	3	68	5.6	2,770	2,615	799	100				3	3	94	31	8	74	0.57	35.2			
WL	D	4	22	7.3	878	813	249	77	23					28	28	44	22	5	25	0.23	33.0	
WL	U	UT	4		141	141	43	100				100				16	3	9	0.10	15.5		
WL	Totals		31	5.4	4,023	3,804	1,162	20	74	6	12	8	80	25	6	45	0.41	84.8				
RC	D	3	58	8.7	1,245	1,137	347	100				4	15	70	11	30	8	73	0.67	15.5		
RC	D	4	42		797	797	243	90	10					18	54	28	25	5	30	0.30	26.7	
RC	Totals		16	5.3	2,042	1,934	591	37	63					10	31	53	6	27	6	46	0.45	42.3
GF	D	2	4	14.8	147	126	38	100				100				32	14	230	1.74	.5		
GF	D	3	57	2.7	1,602	1,559	476	100				90 10				32	8	94	0.65	16.6		
GF	D	4	36	4.0	1,010	970	297	80	20					12	32	56	28	5	34	0.27	28.3	
GF	U	UT	3		74	74	23	100				100				14	3	7	0.11	10.9		
GF	Totals		22	3.7	2,834	2,728	834	31	64	5	7	11	76	6	26	6	48	0.41	56.3			
DF	D	3	72	4.9	1,186	1,128	345	100				3 97				32	8	78	0.59	14.5		
DF	D	4	26	7.9	445	410	125	62	38					21	30	48	23	5	26	0.28	15.7	
DF	U	UT	2	.0	26	26	8	100				100				14	3	6	0.13	4.3		
DF	Totals		13	5.6	1,656	1,564	478	18	82					7	10	83	26	6	45	0.43	34.5	
AF	D	2	13		172	172	53	100				100				32	12	190	1.18	.9		
AF	D	3	55	23.7	907	692	212	100				100				31	8	62	0.64	11.2		
AF	D	4	28	8.1	393	362	111	100					40	25	35	24	5	28	0.25	12.8		
AF	U	UT	4		40	40	12	100				100				16	3	10	0.12	4.0		
AF	Totals		10	16.3	1,513	1,266	387	32	55	14	14	7	78	26	6	44	0.45	28.9				
ES	D	2	28	.0	186	186	57	100				100				32	13	236	1.53	.8		
ES	D	3	60		384	384	117	100				13 87				31	8	101	0.69	3.8		
ES	D	4	10	.0	64	64	20	59	41					38	21	41	18	5	23	0.30	2.8	
ES	U	UT	2		11	11	3	100				100				17	3	10	0.16	1.1		
ES	Totals		5		645	645	197	7	64	29	5	10	85	25	7	76	0.65	8.4				
LP	D	3	73	10.9	333	297	91	100				100				32	8	72	0.62	4.1		
LP	D	4	21		85	85	26	100				14 86				26	5	31	0.26	2.8		
LP	U	UT	6		21	21	6	100				36 64				21	3	10	0.11	2.1		
LP	Totals		3	8.3	439	403	123	26	74					5	21	74	28	6	45	0.42	9.0	
Type Totals				6.1	13,152	12,343	3,772	26	68	6	10	13	75	2	26	6	47	0.43	264.3			

T	TSPCSTGR	Species, Sort Grade - Board Foot Volumes (Type)										Page	1								
												Date		12/5/2019							
												Time		1:11:45PM							
T036 R036 S22 TU8												T036 R036 S22 TU8									
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	CuFt	BdFt												
036	036	22	WTRT	U8	42.70	29	138	S	E												
Spp	S	So	Gr	%	Net	Bd. Ft. per Acre	Total	Percent Net Board Foot Volume								Average Log				Logs Per /Acre	
								Def%	Gross	Net	Net MBF	Log Scale Dia.				Log Length					Ln
								4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99	Ft	In	Ft			
DF	D	2		10		5.4 661 625	27			83	17			100		32	13	232	1.72		2.7
DF	D	3		53		5.8 3,294 3,101	132			83	17			100		32	9	109	0.85		28.5
DF	D	4		33		1,894 1,894	81	82	18			13	21	66		27	5	39	0.29		48.5
DF	U	UT		4		230 230	10	100				64		36		21	3	13	0.12		17.5
DF	Totals			36		3.8 6,079 5,850	250	30	50	18	2	7	7	86		28	6	60	0.50		97.2
DF	L	D	2	65		7.0 2,989 2,781	119			41	59			100		32	17	388	2.64		7.2
DF	L	D	3	32		1,336 1,336	57	0	58	36	5		5	95		31	10	174	1.05		7.7
DF	L	D	4	3		114 114	5	62	23	15		86	14			17	5	25	0.42		4.5
DF	L	Totals		26		4.7 4,439 4,231	181	2	19	39	40	2	2	96		28	11	218	1.63		19.4
PP	L	D	4	51		4.7 1,984 1,890	81			38	62			100		32	16	393	2.50		4.8
PP	L	D	5	49		3.0 1,856 1,801	77		45	51	4	7	18	75		27	9	103	0.84		17.4
PP	L	Totals		22		3.9 3,840 3,691	158		22	45	33	3	9	88		28	10	166	1.26		22.2
PP		D	4	7		5.3 76 72	3			100				100		32	12	180	1.48		.4
PP		D	5	93		.0 950 950	41		82	18				100		32	8	104	0.70		9.1
PP	Totals			6		.4 1,026 1,022	44		77	23				100		32	9	107	0.73		9.5
WL		D	3	77		5.5 1,034 977	42		92	8				100		32	9	98	0.76		10.0
WL		D	4	23		288 288	12	100				16	8	76		25	5	34	0.28		8.4
WL	Totals			8		4.3 1,322 1,265	54	23	71	6		4	2	95		29	7	69	0.57		18.4
WL	L	D	3	94		32.8 395 266	11		50	50				100		32	11	113	1.08		2.4
WL	L	U	UT	6		15 15	1	100				100				15	4	13	0.23		1.2
WL	L	Totals		2		31.5 410 281	12	5	47	47		5		95		26	8	79	0.92		3.5
AF	L	D	3	86		29.5 157 111	5		55	45				100		32	13	155	1.42		.7
AF	L	D	4	14		18 18	1	100						100		32	5	50	0.40		.4
AF	L	Totals		1		26.5 175 129	5	14	47	39				100		32	10	120	1.08		1.1
Type Totals						4.8 17,292 16,469	703	13	39	29	18	4	5	91		28	8	96	0.76		171.4

T036 R036 S23 TU9 **T036 R036 S23 TU9**
 Twp Rge Sec Tract Type Acres Plots Sample Trees CuFt BdFt
 036 036 23 WEST TROUT U9 78.80 37 244 S E

Spp	S T	So rt	Gr ad	% Net BdFt	Bd. Ft. per Acre			Total Net MBF	Percent Net Board Foot Volume								Average Log				Logs Per /Acre
					Def%	Gross	Net		Log Scale Dia.				Log Length				Ln Ft	Dia In	Bd Ft	CF/ Lf	
									4-5	6-11	12-16	17+	12-20	21-30	31-35	36-99					
DF		D	3	49	7.1	1,147	1,066	84	92	8				100	32	8	91	0.78	11.7		
DF		D	4	45	6.0	1,048	985	78	82	18			15	25	60	26	5	33	0.29	29.7	
DF		U	UT	6		120	120	9	100				100			17	3	10	0.10	12.0	
DF	Totals			56	6.2	2,315	2,171	171	43	53	4		12	11	76	26	5	41	0.40	53.4	
GF		D	3	73	7.0	672	625	49		100				100	32	8	87	0.63	7.2		
GF		D	4	25		219	219	17	100				24	30	46	24	5	32	0.28	6.8	
GF		U	UT	2	.0	11	11	1	100				100			14	3	6	0.10	1.8	
GF	Totals			22	5.2	902	855	67	27	73			7	8	85	27	6	54	0.46	15.8	
PP		D	4	31		84	84	7		100				100	32	13	240	1.45	.4		
PP		D	5	69		181	181	14		100			16	65	19	24	6	33	0.40	5.5	
PP	Totals			7		265	265	21		68	32		11	44	45	24	7	46	0.49	5.8	
RC		D	3	72	6.9	201	187	15		100				100	32	7	70	0.62	2.7		
RC		D	4	28	6.1	76	71	6		100			6	94		17	5	14	0.20	5.1	
RC	Totals			7	6.6	276	258	20		100			2	26	72	22	6	33	0.40	7.8	
WL		D	3	79	6.5	160	149	12		100				14	86	30	8	72	0.65	2.1	
WL		D	4	21		39	39	3	100				65	35		21	5	25	0.26	1.6	
WL	Totals			5	5.2	199	189	15	21	79			14	11	75	26	7	52	0.52	3.6	
LP		D	3	77		58	58	5		100				100	32	7	70	0.53	.8		
LP		D	4	23		17	17	1	100				100			18	5	20	0.20	.8	
LP	Totals			2		75	75	6	22	78			22	78	25	6	45	0.41	1.7		
AF		D	3	84		41	41	3		100				100	32	9	110	1.10	.4		
AF		D	4	16		7	7	1	100				100			20	5	20	0.29	.4	
AF	Totals			1		48	48	4	15	85			15	85	26	7	65	0.79	.7		
Type Totals					5.4	4,080	3,861	304	32	64	4		11	13	76	25	6	43	0.42	88.7	

Species Summary - Trees, Logs, Tons, CCF, MBF

T022 R036 S36 TyU6	291.9
T036 R036 S22 TyU8	42.7
T036 R036 S24 TyU7	305.6

Project WESTTRT
Acres 1,529.50

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Species	S T	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
		Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
DOUG FIR		62,221	117,370	43,536	24.55	13.02	0.51	15,276	15,276	6,476	6,272
P PINE	L	12,483	27,396	14,042	46.87	21.36	0.82	5,851	5,850	2,575	2,530
W LARCH		19,951	47,704	12,019	25.10	10.50	0.42	5,008	5,008	2,276	2,183
GR FIR		12,721	22,121	7,007	19.23	11.06	0.43	2,446	2,446	1,134	1,094
DOUG FIR	L	2,406	7,128	6,218	90.69	30.61	1.06	2,182	2,182	987	979
P PINE		6,556	11,022	4,568	29.03	17.27	0.62	1,903	1,903	837	815
WR CEDAR		11,483	14,314	4,106	15.21	12.21	0.47	1,747	1,747	683	644
W LARCH	L	3,084	8,607	3,396	45.88	16.44	0.61	1,415	1,415	659	640
ALP FIR		4,466	9,461	2,808	25.15	11.87	0.45	1,123	1,123	502	427
LP PINE		2,366	5,563	2,009	35.38	15.05	0.56	837	837	371	357
E SPRUCE		1,057	2,578	1,105	40.21	16.49	0.66	425	425	197	197
ALP FIR	L	15	46	40	103.67	34.56	1.08	16	16	7	5
Totals		138,810	273,309	100,853	27.54	13.99	0.54	38,228	38,228	16,705	16,143

Wood Type Species	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
	Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
C	138,810	273,309	100,853	27.54	13.99	0.54	38,228	38,228	16,705	16,143
Totals	138,810	273,309	100,853	27.54	13.99	0.54	38,228	38,228	16,705	16,143

Log Stock Table - MBF

T022 R036 S36 TyU6
 THRU
 T036 R036 S24 TyU7

Project: WESTTRT
Acres 1,529.50

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Spp	S T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches									
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29
DF		D	2	32	458		455	7.3				426	25	4				
DF		D	3	16	9		9	.1			9							
DF		D	3	20	16		16	.3			7	10						
DF		D	3	24	34		34	.5				20	14					
DF		D	3	26	7		7	.1			7							
DF		D	3	28	7		7	.1			7							
DF		D	3	30	19	9.5	17	.3			9	8						
DF		D	3	32	4,115	3.9	3,953	63.0			1131	1439	1189	194				
DF		D	3	36	23		23	.4				23						
DF		D	3	40	18		18	.3			18							
DF		D	4	12	52		52	.8			50	2						
DF		D	4	13	1	100.0												
DF		D	4	14	51		51	.8			51							
DF		D	4	16	47	12.1	42	.7			42							
DF		D	4	17	2		2	.0		2								
DF		D	4	18	42		42	.7			42							
DF		D	4	20	153	1.1	151	2.4			142	4	5					
DF		D	4	24	92	2.5	90	1.4			77	4	8					
DF		D	4	26	113		113	1.8			113							
DF		D	4	28	141		140	2.2			140							
DF		D	4	30	144	2.7	140	2.2			140							
DF		D	4	32	771	2.8	749	11.9			433	280	35					
DF		D	4	36	8		8	.1			8							
DF		U	UT	12	3		3	.0			3							
DF		U	UT	14	30		30	.5		30								
DF		U	UT	16	34		34	.5		28	6							
DF		U	UT	18	21		21	.3		21								
DF		U	UT	20	36		36	.6		29	7							
DF		U	UT	24	4		4	.1		4								
DF		U	UT	26	3		3	.1		3								
DF		U	UT	28	8		8	.1		8								
DF		U	UT	32	12		12	.2		4	9							
DF		Totals			6,476	3.1	6,272	38.9		129	1256	1485	1516	1235	620	25	4	
DF	L	D	2	32	632	1.4	623	63.6					504	46	48	20	5	
DF	L	D	3	23	0		0	.0		0								
DF	L	D	3	26	3		3	.3			1		2					

Log Stock Table - MBF

T022 R036 S36 TyU6
 THRU
 T036 R036 S24 TyU7

Project: WESTTRT
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Spp	S T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches												
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+	
DF	L	D	3	32	273		273	27.9				237	17	9	5	6					
DF	L	D	3	34	12		12	1.2			1		6	4							
DF	L	D	4	14	0		0	.0	0												
DF	L	D	4	15	0		0	.0	0												
DF	L	D	4	16	2		2	.3	0	0	0	0		1							
DF	L	D	4	18	1		1	.1		1											
DF	L	D	4	20	1		1	.1		1											
DF	L	D	4	24	64		64	6.5		64											
DF		Totals			987		979	6.1	1	65	3	237	25	517	51	53	20	5			
WL		D	2	32	172		172	7.9				172									
WL		D	3	18	24		24	1.1				24									
WL		D	3	24	2		2	.1		2											
WL		D	3	26	13		13	.6		13											
WL		D	3	28	14		14	.6		14											
WL		D	3	30	9		9	.4		5	5										
WL		D	3	32	1,418	4.1	1,360	62.3		5	445	390	517	3							
WL		D	4	12	24		24	1.1		23	2										
WL		D	4	14	15		15	.7		15											
WL		D	4	16	17		17	.8		17											
WL		D	4	18	19		19	.9		19											
WL		D	4	20	33		33	1.5		31	2										
WL		D	4	24	25	9.6	23	1.0		23											
WL		D	4	26	29		29	1.3		29											
WL		D	4	28	42		42	1.9		5	36										
WL		D	4	30	19		19	.9		19											
WL		D	4	32	309	10.5	276	12.7		211	66										
WL		U	UT	14	17		17	.8	12	2	3										
WL		U	UT	16	39		39	1.8	39												
WL		U	UT	18	27		27	1.2	20	7											
WL		U	UT	20	3		3	.2	3												
WL		U	UT	34	6		6	.3	6												
WL		Totals			2,276	4.1	2,183	13.5	80	405	588	394	542	175							
WL	L	D	2	32	98		98	15.4						98							
WL	L	D	3	26	12		12	1.8		12											
WL	L	D	3	32	447	4.1	428	66.9		70	69	284	4	2							

Log Stock Table - MBF

T022 R036 S36 TyU6
 THRU
 T036 R036 S24 TyU7

Project: WESTTRT
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Spp	S T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches										
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39
WL	L	D	4	14	5		5	.8		5									
WL	L	D	4	32	80		80	12.5		48	32								
WL	L	U	UT	14	0		0	.0		0									
WL	L	U	UT	15	6		6	.9		6									
WL	L	U	UT	16	10		10	1.6		10	0								
WL		Totals			659	2.8	640	4.0		16	54	113	69	284	4	2	98		
PP	L	D	4	20	30		30	1.2				30							
PP	L	D	4	30	38		38	1.5				38							
PP	L	D	4	32	1,082		1,072	42.4			136	222	454	161	63	33	4		
PP	L	D	4	40	46		46	1.8				46							
PP	L	D	5	12	16	13.6	14	.6			14								
PP	L	D	5	14	26		26	1.0			26								
PP	L	D	5	16	14		14	.6			14								
PP	L	D	5	17	3		3	.1			3								
PP	L	D	5	18	30		30	1.2			30								
PP	L	D	5	20	82		82	3.2			28	38	16						
PP	L	D	5	24	76		76	3.0			19	39	18	1					
PP	L	D	5	26	73		73	2.9			32		41						
PP	L	D	5	28	45		45	1.8			29	13		3					
PP	L	D	5	30	57		57	2.3			50			4		3			
PP	L	D	5	32	891	3.8	857	33.9			106	392	326	20	12				
PP	L	D	5	34	52		52	2.1					52						
PP	L	D	5	36	14		14	.5			14								
PP		Totals			2,575	1.8	2,530	15.7			366	619	750	515	177	63	36	4	
PP		D	4	24	14		14	1.7			5	9							
PP		D	4	32	180		180	22.0				97	83						
PP		D	4	34	24		24	3.0				11	13						
PP		D	4	36	15		15	1.8				15							
PP		D	5	12	1		1	.1			1								
PP		D	5	13	2	50.0	1	.1			1								
PP		D	5	14	3		3	.4			3								
PP		D	5	16	11		11	1.4			11								
PP		D	5	17	2		2	.2			2								
PP		D	5	18	9		9	1.1			9								
PP		D	5	20	16		16	2.0			5	6	5						

Log Stock Table - MBF

T022 R036 S36 TyU6
 THRU
 T036 R036 S24 TyU7

Project: WESTTRT
Acres 1,529.50

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Spp	S T	So rt	Gr de	Log Len	Gross MBF	Def %	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches														
									2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+			
LP		D	4	30	9		9	2.6		9													
LP		D	4	32	101	3.1	98	27.5			31	14	18		35								
LP		U	UT	16	2		2	.7	2														
LP		U	UT	24	4		4	1.2	4														
LP		U	UT	26	4		4	1.2	4														
LP		Totals			371	3.9	357	2.2	11	27	65	102	34	64	55								
ES		D	2	32	57		57	28.9					20	37									
ES		D	3	30	16		16	7.9		16													
ES		D	3	32	102		102	51.6		17	28	57											
ES		D	4	12	4		4	1.9		4													
ES		D	4	14	1		1	.3		1													
ES		D	4	16	3		3	1.5		3													
ES		D	4	28	4		4	2.0		4													
ES		D	4	32	8		8	4.1		8													
ES		U	UT	16	2		2	1.1	2														
ES		U	UT	18	1		1	.5	1														
ES		Totals			197		197	1.2	3	11	41	28	57	20	37								
Total		All Species			16,705	3.4	16,143	100.0	278	2458	3431	3653	3510	2090	439	215	60	9					

Project Log Stock Table - TONS(SED)

T022 R036 S36 TyU6
THRU
T036 R036 S24 TyU7

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Spp	S T	So rt	Gr de	Log Len	SED	TONS	Tons by Scaling Diameter in Inches									
							2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29
DF		D	2	32	12.7	2,880					2717	137		25		
DF		D	3	16	7.0	63			63							
DF		D	3	20	8.4	129			39	90						
DF		D	3	24	8.6	267				161	106					
DF		D	3	26	7.0	49			49							
DF		D	3	28	7.0	43			43							
DF		D	3	30	7.2	119			71	48						
DF		D	3	32	8.2	27,979			8447	10212	8026	1294				
DF		D	3	36	10.0	156				156						
DF		D	3	40	6.0	148			148							
DF		D	4	12	5.0	366		346	20							
DF		D	4	13	3.0	6	6									
DF		D	4	14	5.0	400		400								
DF		D	4	16	5.0	214		214								
DF		D	4	17	3.0	9	9									
DF		D	4	18	5.0	254		254								
DF		D	4	20	5.0	1,073		973	55	44						
DF		D	4	24	5.1	582		500	32	50						
DF		D	4	26	5.0	739		739								
DF		D	4	28	5.0	1,249		1249								
DF		D	4	30	5.0	1,126		1126								
DF		D	4	32	5.4	4,624		2427	1994	203						
DF		D	4	36	5.0	55		55								
DF		U	UT	6	3.0											
DF		U	UT	12	3.1	122	105	18								
DF		U	UT	14	3.0	145	145									
DF		U	UT	16	3.2	189	151	38								
DF		U	UT	18	3.0	129	129									
DF		U	UT	20	3.2	256	171	85								
DF		U	UT	24	3.0	34	34									
DF		U	UT	26	3.0	31	31									
DF		U	UT	28	3.0	37	37									
DF		U	UT	32	3.2	62	21	41								
Graded						43536	840	8381	11046	10718	8377	4011	137	25		
DF		Totals			6.0	43,536	840	8381	11046	10718	8377	4011	137	25		
DF	L	D	2	32	15.7	4,148					3410	301	307	103	26	

Project Log Stock Table - TONS(SED)

T022 R036 S36 TyU6
 THRU
 T036 R036 S24 TyU7

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Spp	S T	So rt	Gr de	Log Len	SED	TONS	Tons by Scaling Diameter in Inches										
							2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39
Graded						12019	367	2134	3243	2341	2995	937					
WL		Totals			6.0	12,019	367	2134	3243	2341	2995	937					
WL	L	D	2	32	16.0	449							449				
WL	L	D	3	26	6.0	77			77								
WL	L	D	3	32	9.4	2,405			371	426	1550	39	20				
WL	L	D	4	14	5.0	37		37									
WL	L	D	4	32	5.4	363		179	184								
WL	L	U	UT	14	3.0	1	1										
WL	L	U	UT	15	3.0	26	26										
WL	L	U	UT	16	3.4	37	35	2									
Graded						3396	63	218	632	426	1550	39	20	449			
WL		Totals			7.3	3,396	63	218	632	426	1550	39	20	449			
PP	L	D	4	20	11.0	157				157							
PP	L	D	4	30	12.0	237					237						
PP	L	D	4	32	13.4	5,616			744	1318	2265	811	310	150	19		
PP	L	D	4	40	11.0	291				291							
PP	L	D	5	12	6.0	144		144									
PP	L	D	5	14	6.0	130		130									
PP	L	D	5	16	6.0	92		92									
PP	L	D	5	17	6.0	24		24									
PP	L	D	5	18	6.0	206		206									
PP	L	D	5	20	7.1	549		254	217	78							
PP	L	D	5	24	7.6	411		125	199	83	4						
PP	L	D	5	26	6.7	499		221		278							
PP	L	D	5	28	7.9	271		169	84		17						
PP	L	D	5	30	8.7	273		248				15		10			
PP	L	D	5	32	9.2	4,814		648	2258	1750	105	53					
PP	L	D	5	34	11.0	243				243							
PP	L	D	5	36	6.0	85		85									
Graded						14042		2347	3503	4197	2627	879	310	160	19		
PP		Totals			9.1	14,042		2347	3503	4197	2627	879	310	160	19		
PP		D	4	24	9.5	81			25	56							
PP		D	4	32	11.8	882				486	396						
PP		D	4	34	11.5	142				73	70						
PP		D	4	36	11.0	81				81							

Project Log Stock Table - TONS(SED)

T022 R036 S36 TyU6
 THRU
 T036 R036 S24 TyU7

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Spp	S T	So rt	Gr de	Log Len	SED	TONS	Tons by Scaling Diameter in Inches											
							2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+
RC		D	4	34	5.0	153		153										
Graded						4106		1337	958	1234	487	90						
RC		Totals				6.2	4,106		1337	958	1234	487	90					
LP		D	2	20	14.0	109						109						
LP		D	2	28	12.0	146						146						
LP		D	3	24	11.0	69				69								
LP		D	3	28	9.0	70			70									
LP		D	3	32	7.7	800			145	478		177						
LP		D	4	16	6.0	20			20									
LP		D	4	18	5.2	29		6	24									
LP		D	4	20	5.5	75		21	54									
LP		D	4	26	5.0	29		29										
LP		D	4	28	5.0	47		47										
LP		D	4	30	5.0	41		41										
LP		D	4	32	8.9	493			156	83	80	173						
LP		U	UT	16	3.0	8		8										
LP		U	UT	24	3.0	29		29										
LP		U	UT	26	3.0	43		43										
Graded						2009		81	143	398	632	150	323	282				
LP		Totals				6.3	2,009		81	143	398	632	150	323	282			
ES		D	2	32	13.1	308					102	206						
ES		D	3	30	6.0	91			91									
ES		D	3	32	8.9	563			86	180	297							
ES		D	4	12	5.0	22		22										
ES		D	4	14	5.0	7		7										
ES		D	4	16	5.0	15		15										
ES		D	4	28	5.0	33		33										
ES		D	4	32	7.0	45		45										
ES		U	UT	16	3.0	14		14										
ES		U	UT	18	3.0	8		8										
Graded						1105		22	77	222	180	297	102	206				
ES		Totals				7.0	1,105		22	77	222	180	297	102	206			
Total		All Species					100,853		1622	15221	22841	23576	21328	12430	2410	1091	289	45

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	WESTTRT		DATE	12/5/2019		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
036	036	23	WEST TROUT	U5	810.50	288	981	S	E	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				PLOTS	TREES	TREES	TREES			
TOTAL		288	981	3.4						
CRUISE		79	277	3.5	59,212		.5			
DBH COUNT										
REFOREST										
COUNT		183	663	3.6						
BLANKS		26								
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR	151	40.3	13.0	69	10.3	37.2	4,640	4,492	1,092	1,092
DOUG FIR-L	1	2.6	20.8	88	1.3	6.1	984	984	222	222
P PINE	42	6.0	14.7	58	1.8	7.1	830	802	188	188
P PINE-L	41	14.9	17.4	67	5.9	24.5	2,975	2,927	681	681
W LARCH	28	3.7	12.9	90	0.9	3.4	536	523	117	117
W LARCH-L	5	3.7	15.5	94	1.2	4.9	791	775	170	170
LP PINE	5	1.3	15.4	76	0.4	1.7	286	282	62	62
WR CEDAR	2	.3	9.9	42	0.1	.2	13	8	3	3
GR FIR	2	.2	12.2	74	0.1	.2	27	25	6	6
TOTAL	277	73.1	14.6	71	22.3	85.1	11,082	10,818	2,541	2,541
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL:	68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		55.8	4.6	136	143	149				
DOUG FIR-L										
P PINE		51.5	7.9	155	168	182				
P PINE-L		47.5	7.4	208	225	241				
W LARCH		47.2	9.1	161	177	193				
W LARCH-L		68.9	34.2	167	254	341				
LP PINE		48.1	23.9	212	278	344				
WR CEDAR		47.1	44.1	17	30	43				
GR FIR		112.0	104.8		240	492				
TOTAL		57.9	3.5	162	168	173	134	33	15	
CL:	68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		49.2	4.0	33	35	36				
DOUG FIR-L										
P PINE		44.5	6.9	36	39	42				
P PINE-L		39.1	6.1	49	52	55				
W LARCH		45.4	8.7	36	40	43				
W LARCH-L		58.0	28.8	39	54	70				
LP PINE		43.3	21.5	47	60	73				
WR CEDAR		111.5	104.4		23	47				
GR FIR		102.2	95.7	2	51	100				
TOTAL		49.9	3.0	38	39	41	100	25	11	
CL:	68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		122.2	7.2	37	40	43				
DOUG FIR-L		255.9	15.1	2	3	3				
P PINE		241.0	14.2	5	6	7				
P PINE-L		123.6	7.3	14	15	16				
W LARCH		524.6	30.9	3	4	5				
W LARCH-L		284.4	16.7	3	4	4				
LP PINE		561.5	33.1	1	1	2				

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT	WESTTRT			DATE	12/5/2019	
TWP	RGE	SECT	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
036	036	23	WEST TROUT	U5	810.50		288	981	S	E
CL:	68.1 %	COEFF		TREES/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15	
WR CEDAR		1460.1	86.0	0	0	1				
GR FIR		1426.0	84.0	0	0	0				
TOTAL		79.6	4.7	70	73	76	253	63	28	
CL:	68.1 %	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		116.7	6.9	35	37	40				
DOUG FIR-L		255.9	15.1	5	6	7				
P PINE		237.7	14.0	6	7	8				
P PINE-L		123.8	7.3	23	24	26				
W LARCH		448.2	26.4	3	3	4				
W LARCH-L		283.3	16.7	4	5	6				
LP PINE		564.1	33.2	1	2	2				
WR CEDAR		1197.9	70.5	0	0	0				
GR FIR		1197.9	70.5	0	0	0				
TOTAL		66.4	3.9	82	85	88	176	44	20	
CL:	68.1 %	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		120.4	7.1	4,174	4,492	4,810				
DOUG FIR-L		255.9	15.1	836	984	1,133				
P PINE		250.9	14.8	684	802	920				
P PINE-L		125.2	7.4	2,711	2,927	3,142				
W LARCH		442.3	26.0	387	523	659				
W LARCH-L		283.5	16.7	646	775	904				
LP PINE		569.7	33.5	187	282	376				
WR CEDAR		1324.5	78.0	2	8	13				
GR FIR		1251.7	73.7	7	25	44				
TOTAL		70.3	4.1	10,370	10,818	11,265	197	49	22	
CL:	68.1 %	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		118.4	7.0	1,016	1,092	1,168				
DOUG FIR-L		255.9	15.1	189	222	256				
P PINE		243.9	14.4	161	188	214				
P PINE-L		124.3	7.3	631	681	731				
W LARCH		445.1	26.2	86	117	148				
W LARCH-L		283.4	16.7	142	170	198				
LP PINE		567.6	33.4	41	62	83				
WR CEDAR		1223.7	72.0	1	3	6				
GR FIR		1211.1	71.3	2	6	10				
TOTAL		68.5	4.0	2,439	2,541	2,643	187	47	21	
CL:	68.1 %	COEFF		V-BAR/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		24.3	1.4	112	121	129				
DOUG FIR-L				137	161	185				
P PINE		192.2	11.3	97	113	130				
P PINE-L				111	120	129				
W LARCH		399.5	23.5	114	154	194				
W LARCH-L				132	158	185				
LP PINE		261.5	15.4	113	170	227				
WR CEDAR		1324.5	78.0	10	43	77				
GR FIR		1251.7	73.7	38	146	253				
TOTAL		429.4	25.3	122	127	132	7,361	1,840	818	

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	WESTTRT		DATE	12/5/2019		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
022	036	36	WEST TROUT	U6	291.90	59	209	S	E	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				PLOTS	TREES	TREES	TREES			
TOTAL		59	209	3.5						
CRUISE		23	71	3.1	9,511		.7			
DBH COUNT		32	135	4.2	18,991		.7			
REFOREST										
COUNT										
BLANKS		4								
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR	141	65.6	12.2	65	15.2	52.9	6,053	5,935	1,456	1,456
W LARCH	40	20.2	11.7	71	4.4	15.0	1,849	1,808	418	418
GR FIR	13	6.0	12.2	67	1.4	4.9	598	589	134	134
P PINE	10	3.2	14.6	58	1.0	3.8	344	344	80	80
WR CEDAR	3	1.7	11.2	73	0.3	1.1	92	92	26	26
ALP FIR	2	1.0	12.0	80	0.2	.8	124	124	25	25
TOTAL	209	97.6	12.1	66	22.5	78.5	9,059	8,892	2,139	2,139
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	62.5	9.5	127	140	154					
W LARCH	64.3	18.5	99	122	144					
GR FIR	76.6	25.5	112	150	188					
P PINE	55.9	38.7	63	103	143					
WR CEDAR										
ALP FIR										
TOTAL	65.8	7.8	124	134	145	173	43	19		
CL: 68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	57.2	8.7	31	34	37					
W LARCH	59.4	17.1	23	28	33					
GR FIR	73.4	24.4	26	34	42					
P PINE	46.5	32.2	18	26	34					
WR CEDAR										
ALP FIR										
TOTAL	60.9	7.2	30	32	34	148	37	16		
CL: 68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	137.1	17.8	61	74	88					
W LARCH	162.1	21.1	18	23	28					
GR FIR	310.0	40.3	4	7	10					
P PINE	321.6	41.8	2	4	5					
WR CEDAR	524.7	68.3	1	2	3					
ALP FIR	621.0	80.8	0	1	2					
TOTAL	92.3	12.0	98	111	124	340	85	38		
CL: 68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
DOUG FIR	121.1	15.8	51	60	70					
W LARCH	153.6	20.0	14	17	20					
GR FIR	280.4	36.5	4	6	8					
P PINE	312.8	40.7	3	4	6					

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT	WESTTRT		DATE	12/5/2019		
TWP	RGE	SECT	TRACT	TYPE	ACRES		PLOTS	TREES	CuFt	BdFt
022	036	36	WEST TROUT	U6	291.90		59	209	S	E
CL:	68.1 %	COEFF		BASAL AREA/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15	
WR CEDAR		435.8	56.7	1	1	2				
ALP FIR		538.4	70.0	0	1	1				
TOTAL		<i>81.1</i>	<i>10.5</i>	80	89	98	263	66	29	
CL:	68.1 %	COEFF		NET BF/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		124.3	16.2	5,650	6,740	7,829				
W LARCH		160.8	20.9	1,624	2,054	2,483				
GR FIR		282.6	36.8	423	669	915				
P PINE		313.6	40.8	231	390	549				
WR CEDAR		454.2	59.1	43	105	167				
ALP FIR		559.2	72.7	38	141	243				
TOTAL		83.7	10.9	8,999	10,098	11,197	280	70	31	
CL:	68.1 %	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		122.7	16.0	1,389	1,653	1,917				
W LARCH		159.3	20.7	376	475	573				
GR FIR		280.1	36.4	97	152	208				
P PINE		311.3	40.5	54	91	128				
WR CEDAR		436.4	56.8	13	30	46				
ALP FIR		541.3	70.4	8	28	48				
TOTAL		83.3	10.8	2,166	2,429	2,693	277	69	31	
CL:	68.1 %	COEFF		V-BAR/ACRE			# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		124.3	16.2	107	127	148				
W LARCH		160.8	20.9	108	137	165				
GR FIR		282.6	36.8	87	137	187				
P PINE		313.6	40.8	62	104	146				
WR CEDAR		454.2	59.1	38	93	148				
ALP FIR		559.2	72.7	51	187	323				
TOTAL		83.7	10.9	115	129	143	280	70	31	

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	WESTTRT		DATE	12/5/2019		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
036	036	24	WEST TROUT	U7	305.60	75	293	S	E	
				TREES	ESTIMATED TOTAL	PERCENT SAMPLE				
				PER PLOT	TREES	TREES				
PLOTS		TREES		PER PLOT		TREES		PERCENT SAMPLE		
TOTAL	75	293	3.9							
CRUISE	31	97	3.1	42,855		.2				
DBH COUNT										
REFOREST										
COUNT	40	146	3.7							
BLANKS	4									
100 %										
STAND SUMMARY										
	SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
W LARCH	24	34.5	12.0	84	7.9	27.3	4,023	3,804	875	875
WR CEDAR	20	33.4	10.9	49	6.5	21.5	2,042	1,934	520	520
GR FIR	17	32.9	10.8	67	6.4	21.1	2,834	2,728	607	607
DOUG FIR	15	18.2	11.6	69	3.9	13.4	1,656	1,564	383	383
ALP FIR	8	13.6	12.0	77	3.1	10.8	1,513	1,266	340	340
E SPRUCE	8	3.5	14.6	79	1.1	4.0	645	645	139	139
LP PINE	5	4.1	11.8	79	0.9	3.1	439	403	105	105
TOTAL	97	140.2	11.5	69	29.8	101.2	13,152	12,343	2,968	2,968
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL: 68.1 %	COEFF	SAMPLE TREES - BF					# OF TREES REQ.	INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
W LARCH	55.0	11.5	131	148	165					
WR CEDAR	62.4	14.3	63	74	85					
GR FIR	73.9	18.5	95	117	139					
DOUG FIR	51.2	14.2	99	115	131					
ALP FIR	80.6	30.4	75	108	140					
E SPRUCE	50.6	19.1	193	239	284					
LP PINE	31.7	15.8	89	106	123					
TOTAL	68.7	7.0	116	124	133	188	47	21		
CL: 68.1 %	COEFF	SAMPLE TREES - CF					# OF TREES REQ.	INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
W LARCH	52.9	11.0	31	35	39					
WR CEDAR	59.3	13.6	18	21	24					
GR FIR	72.7	18.2	22	27	32					
DOUG FIR	44.3	12.3	24	28	31					
ALP FIR	62.0	23.4	26	34	42					
E SPRUCE	48.8	18.4	42	51	61					
LP PINE	26.8	13.3	24	28	31					
TOTAL	61.1	6.2	29	30	32	149	37	17		
CL: 68.1 %	COEFF	TREES/ACRE					# OF PLOTS REQ.	INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
W LARCH	173.5	20.0	28	35	41					
WR CEDAR	167.2	19.3	27	33	40					
GR FIR	194.4	22.4	26	33	40					
DOUG FIR	212.3	24.5	14	18	23					
ALP FIR	249.5	28.8	10	14	18					
E SPRUCE	365.6	42.2	2	3	5					
LP PINE	352.4	40.7	2	4	6					
TOTAL	73.5	8.5	128	140	152	216	54	24		
CL: 68.1 %	COEFF	BASAL AREA/ACRE					# OF PLOTS REQ.	INF. POP.		
SD: 1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15		
W LARCH	169.9	19.6	22	27	33					
WR CEDAR	167.7	19.4	17	22	26					

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT	WESTTRT			DATE	12/5/2019	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
036	036	24	WEST TROUT	U7	305.60	75	293	S	E	
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15	
GR FIR		188.8	21.8	16	21	26				
DOUG FIR		205.5	23.7	10	13	17				
ALP FIR		236.3	27.3	8	11	14				
E SPRUCE		334.5	38.6	2	4	6				
LP PINE		359.8	41.5	2	3	4				
TOTAL		<i>71.4</i>	<i>8.2</i>	<i>93</i>	<i>101</i>	<i>110</i>	<i>204</i>	<i>51</i>	<i>23</i>	
CL:	68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
W LARCH		172.3	19.9	3,048	3,804	4,560				
WR CEDAR		177.0	20.4	1,539	1,934	2,328				
GR FIR		194.4	22.4	2,117	2,728	3,340				
DOUG FIR		208.1	24.0	1,188	1,564	1,939				
ALP FIR		244.8	28.2	909	1,266	1,623				
E SPRUCE		345.6	39.9	388	645	902				
LP PINE		353.9	40.8	238	403	567				
TOTAL		<i>77.9</i>	<i>9.0</i>	<i>11,234</i>	<i>12,343</i>	<i>13,452</i>	<i>242</i>	<i>61</i>	<i>27</i>	
CL:	68.1 %	COEFF	NET CUFT FT/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
W LARCH		171.4	19.8	702	875	1,048				
WR CEDAR		172.5	19.9	416	520	623				
GR FIR		191.0	22.0	473	607	741				
DOUG FIR		206.0	23.8	292	383	474				
ALP FIR		235.5	27.2	247	340	432				
E SPRUCE		337.8	39.0	85	139	193				
LP PINE		355.1	41.0	62	105	148				
TOTAL		<i>74.3</i>	<i>8.6</i>	<i>2,714</i>	<i>2,968</i>	<i>3,223</i>	<i>221</i>	<i>55</i>	<i>25</i>	
CL:	68.1 %	COEFF	V-BAR/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
W LARCH		67.7	7.8	112	139	167				
WR CEDAR		87.0	10.0	72	90	108				
GR FIR		73.7	8.5	101	130	159				
DOUG FIR		149.0	17.2	88	116	144				
ALP FIR		111.3	12.8	84	118	151				
E SPRUCE		331.7	38.3	96	160	224				
LP PINE		306.9	35.4	76	128	181				
TOTAL		<i>275.6</i>	<i>31.8</i>	<i>111</i>	<i>122</i>	<i>133</i>	<i>3,033</i>	<i>758</i>	<i>337</i>	

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	WESTTRT		DATE	12/5/2019		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
036	036	22	WTRT	U8	42.70	29	138	S	E	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				PLOTS	TREES	TREES	TREES			
TOTAL		29	138	4.8						
CRUISE		16	63	3.9	2,335		2.7			
DBH COUNT		12	51	4.3	1,644		3.1			
REFOREST										
COUNT										
BLANKS		1								
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR	54	58.1	12.2	66	13.4	46.8	6,079	5,850	1,354	1,354
DOUG FIR-L	29	7.2	25.4	88	5.0	25.1	4,439	4,231	894	894
P PINE	11	7.8	15.0	86	2.5	9.5	1,026	1,022	223	223
P PINE-L	29	10.2	21.3	73	5.5	25.1	3,840	3,691	775	775
W LARCH	11	8.4	14.4	86	2.5	9.5	1,322	1,265	302	302
W LARCH-L	3	1.2	20.1	86	0.6	2.6	410	281	86	86
ALP FIR-L	1	.4	21.1	94	0.2	.9	175	129	37	37
TOTAL	<i>138</i>	<i>93.2</i>	<i>15.3</i>	<i>72</i>	<i>30.6</i>	<i>119.7</i>	<i>17,292</i>	<i>16,469</i>	<i>3,671</i>	<i>3,671</i>
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL:	68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR	69.4	13.1		117	135	153				
DOUG FIR-L	34.3	12.9		445	511	577				
P PINE				240	240	240				
P PINE-L	69.3	23.1		259	337	415				
W LARCH	45.9	17.3		148	179	210				
W LARCH-L										
ALP FIR-L										
TOTAL	<i>78.3</i>	<i>10.0</i>		<i>212</i>	<i>235</i>	<i>259</i>	<i>245</i>	<i>61</i>	<i>27</i>	
CL:	68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR	66.5	12.6		29	33	37				
DOUG FIR-L	27.5	10.4		107	119	132				
P PINE				55	55	55				
P PINE-L	70.9	23.6		61	79	98				
W LARCH	44.6	16.8		35	42	49				
W LARCH-L										
ALP FIR-L										
TOTAL	<i>75.3</i>	<i>9.6</i>		<i>51</i>	<i>56</i>	<i>62</i>	<i>226</i>	<i>57</i>	<i>25</i>	
CL:	68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR	115.2	21.8		45	58	71				
DOUG FIR-L	131.4	24.8		5	7	9				
P PINE	284.4	53.7		4	8	12				
P PINE-L	136.3	25.7		8	10	13				
W LARCH	213.9	40.4		5	8	12				
W LARCH-L	304.9	57.6		1	1	2				
ALP FIR-L	538.5	101.7			0	1				
TOTAL	<i>81.0</i>	<i>15.3</i>		<i>79</i>	<i>93</i>	<i>107</i>	<i>272</i>	<i>68</i>	<i>30</i>	
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR	89.3	16.9		39	47	55				
DOUG FIR-L	122.5	23.1		19	25	31				

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT	WESTTRT			DATE	12/5/2019	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
036	036	22	WTRT	U8	42.70	29	138	S	E	
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15	
P PINE		248.3	46.9	5	10	14				
P PINE-L		110.2	20.8	20	25	30				
W LARCH		191.8	36.2	6	10	13				
W LARCH-L		299.6	56.6	1	3	4				
ALP FIR-L		538.5	101.7		1	2				
TOTAL		52.3	9.9	108	120	131	113	28	13	
CL:	68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		104.5	19.7	4,695	5,850	7,005				
DOUG FIR-L		124.6	23.5	3,236	4,231	5,226				
P PINE		240.5	45.4	558	1,022	1,486				
P PINE-L		117.2	22.1	2,874	3,691	4,508				
W LARCH		192.3	36.3	806	1,265	1,725				
W LARCH-L		302.3	57.1	121	281	441				
ALP FIR-L		538.5	101.7		129	259				
TOTAL		53.8	10.2	14,797	16,469	18,141	120	30	13	
CL:	68.1 %	COEFF	NET CUFT FT/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		94.8	17.9	1,112	1,354	1,597				
DOUG FIR-L		122.8	23.2	686	894	1,101				
P PINE		237.3	44.8	123	223	323				
P PINE-L		112.8	21.3	610	775	940				
W LARCH		191.8	36.2	193	302	412				
W LARCH-L		299.9	56.6	37	86	134				
ALP FIR-L		538.5	101.7		37	75				
TOTAL		52.7	9.9	3,306	3,671	4,037	115	29	13	
CL:	68.1 %	COEFF	V-BAR/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		104.5	19.7	100	125	150				
DOUG FIR-L		124.6	23.5	129	168	208				
P PINE		240.5	45.4	58	107	156				
P PINE-L		117.2	22.1	114	147	179				
W LARCH		192.3	36.3	84	133	181				
W LARCH-L		302.3	57.1	46	108	170				
ALP FIR-L		538.5	101.7		148	299				
TOTAL		53.8	10.2	124	138	152	120	30	13	

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	WESTTRT		DATE	12/5/2019		
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
036	036	23	WEST TROUT	U9	78.80	37	244	S	E	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
				PLOTS	TREES	TREES	TREES			
TOTAL		37	244	6.6						
CRUISE		26	65	2.5	4,262		1.5			
DBH COUNT										
REFOREST										
COUNT		10	35	3.5						
BLANKS		1								
100 %										
STAND SUMMARY										
	SAMPLE	TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS	NET
	TREES	/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC	CF/AC
DOUG FIR	37	30.3	11.0	64	6.0	20.0	2,315	2,171	541	541
GR FIR	12	9.2	11.4	73	1.9	6.5	902	855	192	192
P PINE	5	5.1	11.7	31	1.1	3.8	265	265	68	68
WR CEDAR	6	6.8	9.4	61	1.1	3.2	276	258	71	70
W LARCH	3	1.6	13.8	81	0.4	1.6	199	189	49	49
LP PINE	1	.8	10.9	71	0.2	.5	75	75	17	17
ALP FIR	1	.4	16.3	71	0.1	.5	48	48	15	15
TOTAL	65	54.1	11.1	63	10.9	36.2	4,080	3,861	952	952
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL:	68.1 %	COEFF	SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		43.2	7.5	103	111	120				
GR FIR		53.4	16.1	101	120	139				
P PINE		152.4	75.7	23	94	165				
WR CEDAR		75.0	33.4	41	62	82				
W LARCH		44.6	30.9	97	140	183				
LP PINE										
ALP FIR										
TOTAL		58.5	7.5	100	108	116	136	34	15	
CL:	68.1 %	COEFF	SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		47.4	8.2	27	29	32				
GR FIR		57.2	17.2	23	28	32				
P PINE		123.8	61.5	8	22	35				
WR CEDAR		76.6	34.1	12	18	24				
W LARCH		52.4	36.2	24	38	51				
LP PINE										
ALP FIR										
TOTAL		56.9	7.3	26	28	30	129	32	14	
CL:	68.1 %	COEFF	TREES/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		162.6	26.7	22	30	38				
GR FIR		267.9	44.0	5	9	13				
P PINE		253.1	41.6	3	5	7				
WR CEDAR		458.1	75.2	2	7	12				
W LARCH		367.6	60.4	1	2	2				
LP PINE		608.3	99.9	0	1	2				
ALP FIR		608.3	99.9	0	0	1				
TOTAL		107.8	17.7	45	54	64	464	116	52	
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		147.2	24.2	15	20	25				
GR FIR		252.3	41.4	4	6	9				

TC TSTATS				STATISTICS				PAGE	2	
				PROJECT	WESTTRT			DATE	12/5/2019	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
036	036	23	WEST TROUT	U9	78.80	37	244	S	E	
CL:	68.1 %	COEFF	BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15	
P PINE		244.1	40.1	2	4	5				
WR CEDAR		448.3	73.6	1	3	6				
W LARCH		341.3	56.1	1	2	3				
LP PINE		608.3	99.9	0	1	1				
ALP FIR		608.3	99.9	0	1	1				
TOTAL		94.6	15.5	31	36	42	357	89	40	
CL:	68.1 %	COEFF	NET BF/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		162.9	26.8	1,590	2,171	2,751				
GR FIR		253.8	41.7	498	855	1,211				
P PINE		261.5	43.0	151	265	379				
WR CEDAR		431.5	70.9	75	258	440				
W LARCH		350.9	57.6	80	189	298				
LP PINE		608.3	99.9	0	75	150				
ALP FIR		608.3	99.9	0	48	97				
TOTAL		103.5	17.0	3,204	3,861	4,517	428	107	48	
CL:	68.1 %	COEFF	NET CUFT FT/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		153.9	25.3	404	541	677				
GR FIR		251.4	41.3	113	192	271				
P PINE		249.0	40.9	40	68	95				
WR CEDAR		444.3	73.0	19	70	122				
W LARCH		343.5	56.4	21	49	77				
LP PINE		608.3	99.9	0	17	34				
ALP FIR		608.3	99.9	0	15	31				
TOTAL		100.1	16.4	796	952	1,109	400	100	44	
CL:	68.1 %	COEFF	V-BAR/ACRE				# OF PLOTS REQ.		INF. POP.	
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15	
DOUG FIR		162.9	26.8	79	109	138				
GR FIR		253.8	41.7	77	132	187				
P PINE		229.9	37.8	40	70	100				
WR CEDAR		431.5	70.9	23	79	136				
W LARCH		350.9	57.6	49	116	184				
LP PINE		608.3	99.9	0	139	278				
ALP FIR		608.3	99.9	0	90	179				
TOTAL		107.5	17.7	88	107	125	462	115	51	

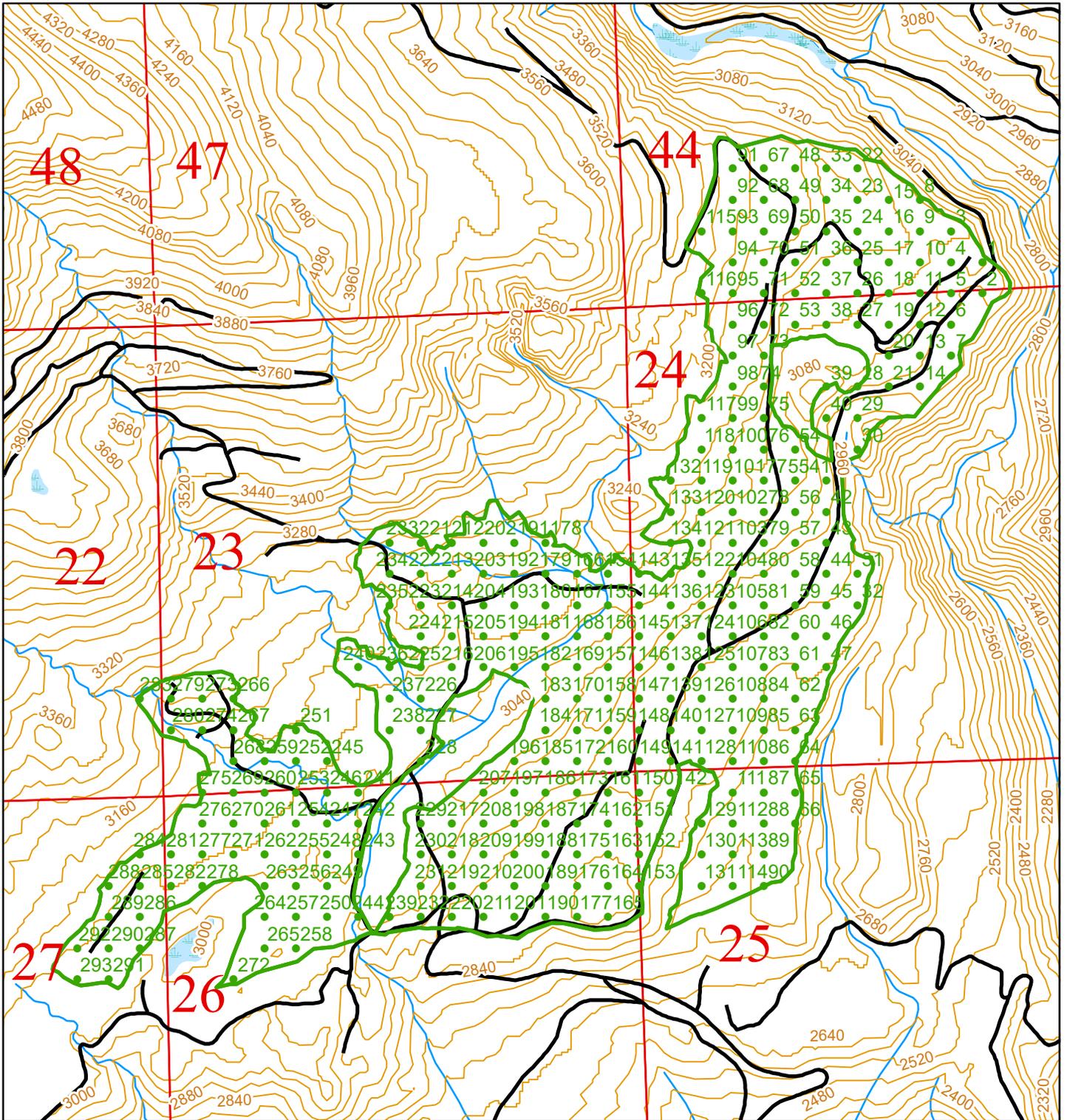
TC		TSTNDSUM													Stand Table Summary		
Project															WESTTRT		
T036 R036 S23 TU5										T036 R036 S23 TU5							
Twp	Rge	Sec	Tract		Type	Acres	Plots	Sample Trees			Page:	1					
036	036	23	WEST TROUT		U5	810.50	288	981			Date:	11/14/2015					
											Time:	3:07:33PM					
Spc	S T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	T o t a l s				
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.		Net Bd.Ft.	Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF	
DF		7	8	83	17	2.431	.70										
DF		8	17	81	27	4.249	1.48	1.74	5.2	25.8	.26	9	45	207	73	36	
DF		9	19	81	28	3.799	1.66	1.43	6.2	29.9	.25	9	43	204	71	35	
DF		10	25	82	37	4.153	2.18	3.03	7.1	30.5	.61	22	92	497	174	75	
DF		11	29	80	41	3.909	2.53	4.05	8.9	32.7	1.03	36	132	831	292	107	
DF		12	35	80	40	3.923	3.06	3.35	11.0	45.3	1.05	37	152	853	299	123	
DF		13	43	80	45	4.070	3.76	3.99	13.2	54.3	1.50	53	217	1,214	426	176	
DF		14	44	81	36	3.627	3.84	2.38	15.0	60.9	1.02	36	145	825	290	117	
DF		15	38	82	37	2.714	3.32	1.88	16.3	66.9	.87	31	126	708	248	102	
DF		16	51	82	42	3.252	4.45	3.01	17.9	76.7	1.53	54	231	1,244	436	187	
DF		17	29	81	35	1.613	2.53	1.00	21.9	85.8	.62	22	86	505	177	70	
DF		18	39	81	38	1.955	3.41	1.55	23.6	92.6	1.04	37	144	845	297	117	
DF		19	26	81	32	1.161	2.27	.59	27.4	109.4	.46	16	64	374	131	52	
DF		20	23	81	45	.927	2.01	.96	28.5	120.3	.78	27	116	633	222	94	
DF		Totals	426	81	36	41.783	37.20	28.95	13.4	55.0	11.03	387	1,592	8,942	3,137	1,291	
PP	L	9	2	85	17	.383	.17										
PP	L	10	2	86	17	.327	.17										
PP	L	11	6	84	25	.798	.52	.13	13.7	40.0	.04	2	5	36	15	4	
PP	L	12	7	85	17	.772	.61										
PP	L	13	6	85	17	.558	.52										
PP	L	14	15	85	24	1.235	1.31	.33	13.5	57.1	.11	4	19	86	36	15	
PP	L	15	19	84	39	1.365	1.66	.90	16.2	68.7	.35	15	62	284	118	50	
PP	L	16	23	85	26	1.440	2.01	.31	20.5	92.4	.15	6	28	123	51	23	
PP	L	17	25	84	29	1.386	2.18	.52	18.7	79.8	.23	10	41	189	79	34	
PP	L	18	19	84	36	.948	1.66	.56	22.2	98.3	.30	13	55	244	102	45	
PP	L	19	23	83	37	1.029	2.01	.77	21.7	87.2	.40	17	67	326	136	55	
PP	L	20	19	84	35	.770	1.66	.53	23.7	98.1	.30	13	52	244	101	42	
PP	L	21	18	85	29	.655	1.57	.26	28.5	129.8	.18	7	34	145	60	27	
PP	L	22	24	85	27	.796	2.10	.30	26.9	125.5	.19	8	37	156	65	30	
PP	L	23	24	85	17	.734	2.10										
PP	L	24	16	85	22	.446	1.40	.08	33.5	166.7	.07	3	14	55	23	11	
PP	L	25	13	85	22	.336	1.14	.07	35.8	166.7	.06	3	12	52	22	10	
PP	L	26	7	86	17	.167	.61										
PP	L	27	2	86	17	.044	.17										
PP	L	28	3	85	17	.062	.26										
PP	L	29	3	85	17	.057	.26										
PP	L	30	1	86	17	.018	.09										
PP	L	33	1	85	17	.015	.09										
PP	L	36	1	86	17	.013	.09										
PP	L	49	1	85	17	.007	.09										
PP		Totals	280	85	27	14.361	24.45	4.78	20.9	89.7	2.39	100	429	1,940	808	347	
PP		8	1	59	21	.232	.09	.23									
PP		9	3	85	17	.585	.26										
PP		10	3	84	29	.456	.26	.15	10.4	40.0	.04	2	6	30	12	5	
PP		11	4	80	47	.549	.35	.41	11.2	36.3	.11	5	15	89	37	12	
PP		12	7	85	44	.812	.61	.46	12.5	64.4	.14	6	29	111	46	24	
PP		13	6	82	55	.578	.52	.77	10.0	38.8	.19	8	30	151	63	24	
PP		14	4	85	17	.338	.35										
PP		15	9	82	51	.634	.79	.70	16.0	60.9	.27	11	43	220	92	35	
PP		16	7	81	65	.456	.61	.65	18.8	74.0	.29	12	48	238	99	39	
PP		17	12	84	68	.675	1.05	1.12	18.6	85.5	.50	21	96	406	169	78	

TC		Stand Table Summary														
TSTNDSUM		Project WESTTRT														
T036 R036 S23 TU5											T036 R036 S23 TU5					
Twp	Rge	Sec	Tract		Type	Acres	Plots	Sample Trees			Page:					
036	036	23	WEST TROUT		U5	810.50	288	981			2					
											Date:	11/14/2015				
											Time:	3:07:33PM				
S Spc	T	Sample		Av		Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals		
		DBH	Trees	FF 16'	Ht Tot				Net Cu.Ft.	Net Bd.Ft.				Tons	Cunits	MBF
PP		18	9	85	47	.453	.79	.40	25.2	119.0	.24	10	48	197	82	39
PP		19	8	82	63	.362	.70	.50	25.6	111.0	.31	13	56	249	104	45
PP		20	8	84	53	.324	.70	.36	28.3	124.2	.25	10	45	200	83	36
PP		Totals	81	82	46	6.455	7.07	5.77	16.9	72.1	2.33	97	416	1,892	788	337
WL		7	1	77	74	.309	.09	.62	3.5	20.0	.05	2	12	42	18	10
WL		8	1	77	90	.250	.09	.50	5.5	25.0	.07	3	13	53	22	10
WL		9	4	87	17	.841	.35									
WL		10	2	86	17	.328	.17									
WL		11	2	84	87	.272	.17	.82	7.0	30.0	.14	6	24	112	46	20
WL		12	4	84	86	.462	.35	1.28	8.9	36.3	.27	11	46	221	92	38
WL		13	3	84	65	.286	.26	.47	12.0	51.4	.14	6	24	110	46	20
WL		14	6	84	71	.508	.52	1.01	12.5	60.1	.30	13	60	245	102	49
WL		15	7	81	95	.503	.61	1.43	14.7	65.5	.51	21	94	409	171	76
WL		16	1	84	105	.062	.09	.19	17.8	86.7	.08	3	16	64	27	13
WL		17	3	83	102	.170	.26	.51	18.9	83.6	.23	10	43	188	78	35
WL		18	2	87	17	.099	.17									
WL		19	2	83	104	.087	.17	.26	24.6	113.3	.15	6	30	125	52	24
WL		20	1	76	112	.041	.09	.12	25.9	103.3	.08	3	13	62	26	10
WL		Totals	39	83	64	4.219	3.41	7.21	11.6	52.1	2.01	84	376	1,632	680	304
LP		8	1	85	17	.285	.09									
LP		9	1	85	17	.216	.09									
LP		11	1	79	70	.142	.09	.28	9.5	40.0	.06	3	11	53	22	9
LP		12	2	84	17	.234	.17									
LP		15	2	84	17	.139	.17									
LP		16	1	85	17	.067	.09									
LP		17	3	84	43	.168	.26	.17	19.6	83.3	.08	3	14	63	26	11
LP		18	2	83	62	.099	.17	.16	24.4	116.7	.09	4	18	74	31	15
LP		19	3	83	39	.135	.26	.14	20.6	90.0	.07	3	12	54	23	10
LP		20	3	83	51	.122	.26	.13	29.8	146.7	.09	4	19	73	31	15
LP		Totals	19	84	32	1.607	1.66	.87	18.8	85.3	0.39	16	74	317	132	60
WL	L	10	2	87	17	.337	.17									
WL	L	11	4	86	17	.531	.35									
WL	L	12	4	86	36	.430	.35	.32	9.1	43.3	.07	3	14	56	24	11
WL	L	13	2	86	17	.203	.17									
WL	L	14	4	87	17	.324	.35									
WL	L	15	8	86	26	.568	.70	.14	20.1	80.0	.07	3	11	56	23	9
WL	L	16	5	84	49	.310	.44	.38	15.8	69.7	.14	6	26	116	48	21
WL	L	17	6	87	17	.330	.52									
WL	L	18	6	87	17	.298	.52									
WL	L	19	3	86	17	.134	.26									
WL	L	20	1	86	17	.042	.09									
WL	L	21	1	86	17	.038	.09									
WL	L	22	5	86	35	.166	.44	.10	36.2	186.7	.08	3	18	67	28	14
WL	L	23	4	87	17	.122	.35									
WL	L	25	1	86	17	.026	.09									
WL		Totals	56	86	24	3.858	4.89	.93	16.3	74.3	0.36	15	69	295	123	56
GF		10	1	83	72	.177	.09	.35	7.1	25.0	.07	3	9	58	20	7
GF		20	1	82	103	.038	.09	.12	29.4	143.3	.10	3	17	79	28	13

TC		TSTNDSUM		Stand Table Summary												
Project										WESTTRT						
T036 R036 S23 TU5										T036 R036 S23 TU5						
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	3							
036	036	23	WEST TROUT	U5	810.50	288	981	Date:	11/14/2015							
								Time:	3:07:33PM							
Spc	S T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Tons/ Acre	Net	Net	T o t a l s			
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.		Net Bd.Ft.	Cu.Ft. Acre	Bd.Ft. Acre	Tons	Cunits	MBF
GF		Totals	2	83	78	.216	.17	.47	12.6	54.0	0.17	6	25	137	48	21
DF	L	21	17	82	22	.619	1.48	.11	28.6	126.7	.09	3	14	73	26	11
DF	L	22	11	83	17	.366	.96									
DF	L	23	13	83	17	.398	1.14									
DF	L	24	7	83	17	.195	.61									
DF	L	25	3	82	17	.076	.26									
DF	L	26	8	83	17	.190	.70									
DF	L	27	3	83	17	.066	.26									
DF	L	28	5	83	17	.102	.44									
DF	L	30	1	82	17	.018	.09									
DF	L	33	1	82	17	.015	.09									
DF	L	35	1	82	17	.013	.09									
DF		Totals	70	83	19	2.058	6.11	.11	28.6	126.7	0.09	3	14	73	26	11
RC		8	1	72	41	.277	.09	.28	4.9	20.0	.03	1	6	26	11	4
RC		18	1	74	56	.050	.09	.10	20.5	20.0	.05	2	2	39	17	2
RC		Totals	2	72	43	.327	.17	.38	9.0	20.0	0.08	3	8	64	28	6
AS	L	18	1	99	17	.049	.09									
AS		Totals	1	99	17	.049	.09									
BR	L	8	1	99	17	.263	.09									
BR		Totals	1	99	17	.263	.09									
CW	L	20	3	82	17	.120	.26									
CW		Totals	3	82	17	.120	.26									
LP	L	28	1	84	17	.021	.09									
LP		Totals	1	84	17	.021	.09									
Totals			981	82	35	75.337	85.67	49.46	14.4	60.7	18.87	712	3,003	15,293	5,770	2,434

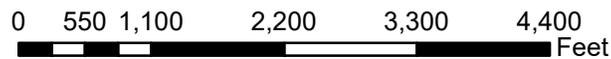
TC		TSTNDSUM												Stand Table Summary		
Project WESTTRT																
T036 R036 S22 TU8										T036 R036 S22 TU8						
Twp	Rge	Sec	Tract	Type	Acres	Plots	Sample Trees	Page:	1							
036	036	22	WTRT	U8	42.70	29	138	Date:	11/14/2015							
								Time:	3:11:07PM							
Spc	S T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals			
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits	MBF
DF		7	2	79	29	6.490	1.73	3.25	4.0	20.0	.37	13	65	16	6	3
DF		8	7	82	39	17.732	6.07	15.56	5.1	28.4	2.26	79	442	96	34	19
DF		10	4	80	37	6.360	3.47	4.77	10.2	36.7	1.39	49	175	59	21	7
DF		11	3	82	53	3.761	2.60	4.89	10.4	40.0	1.46	51	196	62	22	8
DF		12	4	80	56	4.417	3.47	5.52	11.2	46.0	1.77	62	254	75	26	11
DF		13	2	81	50	1.896	1.73	1.88	13.8	65.0	.74	26	122	32	11	5
DF		14	4	81	48	3.234	3.47	3.22	17.3	72.5	1.58	56	234	68	24	10
DF		15	4	77	67	2.820	3.47	4.25	19.6	73.0	2.37	83	310	101	35	13
DF		16	3	80	58	1.863	2.60	2.48	22.0	90.0	1.56	55	224	66	23	10
DF		17	4	82	35	2.234	3.47	1.65	17.6	76.7	.83	29	127	35	12	5
DF		18	4	80	69	1.969	3.47	3.45	24.9	98.4	2.44	86	339	104	37	14
DF		19	9	81	40	3.947	7.81	3.09	28.0	122.3	2.47	87	378	105	37	16
DF		20	3	79	39	1.197	2.60	.80	35.3	115.0	.81	28	92	34	12	4
DF		31	1	83	17	.171	.87									
DF		Totals	54	81	44	58.092	46.83	54.82	12.8	53.9	20.04	703	2,957	856	300	126
PP	L	9	1	79	37	1.963	.87	1.96	4.9	20.0	.23	10	39	10	4	2
PP	L	12	1	80	106	1.104	.87	2.21	11.4	45.0	.61	25	99	26	11	4
PP	L	18	1	85	17	.508	.87									
PP	L	19	3	83	72	1.345	2.60	1.80	29.2	137.6	1.26	53	248	54	22	11
PP	L	20	1	79	72	.398	.87	.80	27.2	95.0	.52	22	76	22	9	3
PP	L	21	3	84	43	1.103	2.60	.74	35.0	170.0	.62	26	126	27	11	5
PP	L	22	3	83	45	.983	2.60	.98	27.8	113.3	.65	27	111	28	12	5
PP	L	26	2	81	59	.465	1.73	.69	39.2	166.7	.65	27	115	28	12	5
PP	L	27	2	80	63	.440	1.73	.68	40.7	170.0	.66	28	115	28	12	5
PP	L	28	2	85	17	.413	1.73									
PP	L	29	1	85	17	.189	.87									
PP	L	32	3	85	17	.467	2.60									
PP	L	33	3	86	17	.438	2.60									
PP	L	34	2	82	59	.275	1.73	.41	66.9	276.7	.66	28	114	28	12	5
PP	L	38	1	86	17	.110	.87									
PP		Totals	29	82	50	10.200	25.15	10.27	23.8	101.6	5.86	244	1,043	250	104	45
DF	L	21	1	83	17	.361	.87									
DF	L	22	4	82	17	1.332	3.47									
DF	L	23	6	80	66	1.812	5.20	3.32	35.7	149.9	3.38	119	498	144	51	21
DF	L	24	2	79	94	.561	1.73	1.40	44.6	176.0	1.78	63	247	76	27	11
DF	L	25	3	83	17	.763	2.60									
DF	L	26	1	82	17	.239	.87									
DF	L	27	1	82	17	.218	.87									
DF	L	28	1	82	17	.203	.87									
DF	L	29	2	81	59	.387	1.73	.58	56.3	263.3	.92	32	151	39	14	6
DF	L	30	3	80	42	.531	2.60	.53	56.4	256.7	.86	30	137	37	13	6
DF	L	31	2	83	17	.335	1.73									
DF	L	32	1	83	17	.155	.87									
DF	L	33	1	82	17	.146	.87									
DF	L	36	1	82	17	.123	.87									
DF		Totals	29	81	39	7.167	25.15	5.83	41.8	177.1	6.94	244	1,033	296	104	44
WL		11	1	80	76	1.338	.87	2.68	9.2	40.0	.59	25	107	25	11	5
WL		12	1	80	80	1.104	.87	2.21	10.8	40.0	.57	24	88	25	10	4
WL		14	3	85	41	2.434	2.60	1.62	16.7	65.0	.65	27	105	28	12	5
WL		15	2	84	53	1.377	1.73	1.41	19.6	90.0	.67	28	127	28	12	5

TC		TSTNDSUM		Stand Table Summary													
Project										WESTTRT							
T036 R036 S22 TU8										T036 R036 S22 TU8							
Twp	Rge	Sec	Tract		Type	Acres	Plots	Sample Trees			Page:	2					
036	036	22	WTRT		U8	42.70	29	138			Date:	11/14/2015					
											Time:	3:11:07PM					
Spc	T	Sample		Av	Trees/ Acre	BA/ Acre	Logs Acre	Average Log		Net Tons/ Acre	Net Cu.Ft. Acre	Net Bd.Ft. Acre	Totals				
		DBH	Trees	FF 16'				Ht Tot	Net Cu.Ft.				Net Bd.Ft.	Tons	Cunits	MBF	
WL		16	1	83	97	.621	.87	1.86	16.7	76.7	.75	31	143	32	13	6	
WL		17	2	80	90	1.127	1.73	2.80	19.6	82.2	1.32	55	230	56	24	10	
WL		20	1	80	103	.414	.87	1.24	25.8	106.7	.77	32	132	33	14	6	
WL		Totals		11	82	67	8.416	9.54	13.83	16.0	67.5	5.32	222	934	227	95	40
PP		12	1	85	17	1.104	.87										
PP		13	1	86	17	.941	.87										
PP		14	4	85	39	3.245	3.47	1.62	20.3	90.0	.79	33	146	34	14	6	
PP		15	1	85	17	.716	.87										
PP		18	1	79	89	.491	.87	.98	26.3	115.0	.62	26	113	26	11	5	
PP		19	2	82	56	.881	1.73	.88	30.5	140.0	.64	27	123	27	11	5	
PP		20	1	80	94	.398	.87	.80	32.2	135.0	.61	26	107	26	11	5	
PP		Totals		11	84	39	7.775	9.54	4.28	26.0	114.4	2.67	111	490	114	47	21
AF	L	21	1	79	115	.357	.87	1.07	34.6	120.0	.93	37	129	40	16	5	
AF		Totals		1	79	115	.357	.87	1.07	34.6	120.0	0.93	37	129	40	16	5
WL	L	18	1	86	17	.491	.87										
WL	L	21	1	80	91	.361	.87	1.08	25.6	73.3	.66	28	79	28	12	3	
WL	L	22	1	86	17	.329	.87										
WL		Totals		3	84	40	1.180	2.60	1.08	25.6	73.3	0.66	28	79	28	12	3
Totals				138	81	46	93.187	119.68	91.18	17.4	73.1	42.43	1589	6,665	1,812	678	285



West Trout Unit 5

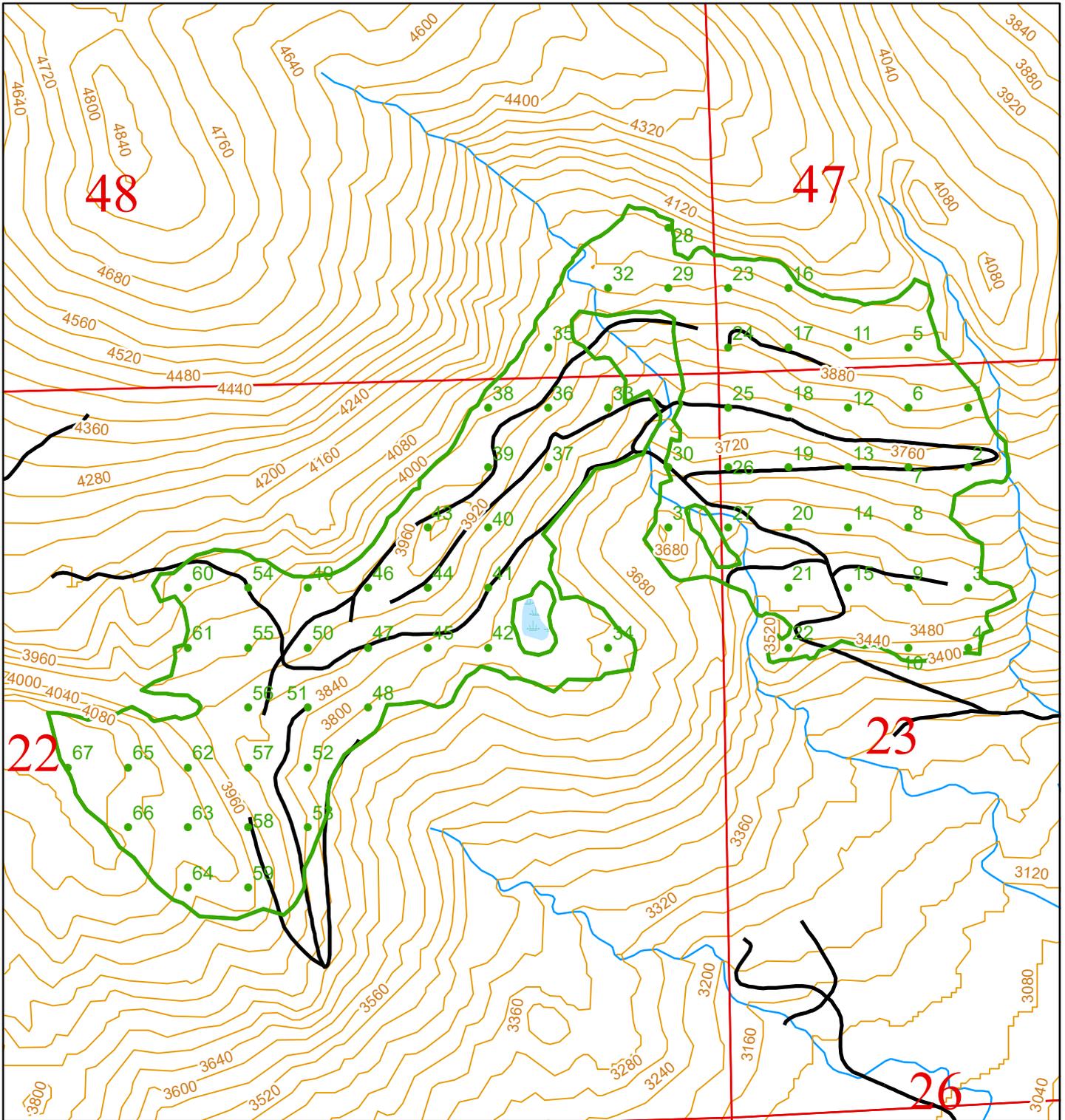
LAYER NAME:	unit 5.shp	Township:	T36R36E
POLY ID:	1	Total Sample Points:	293
Acres:	822	Spacing Between Points:	350
		Point Rotation Degrees:	0



Scale 1:19,000

Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



West Trout Unit 6

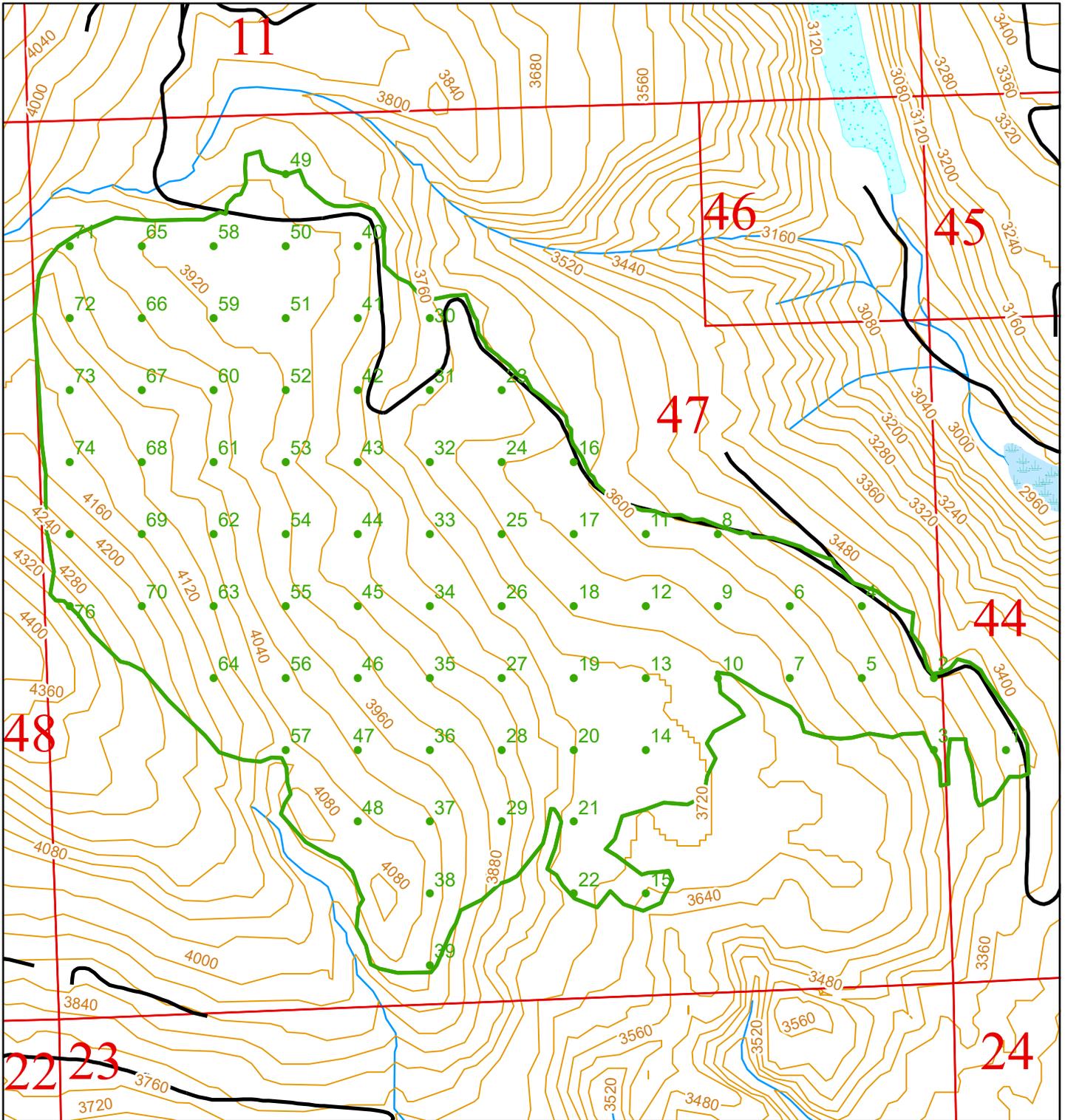
LAYER NAME:	unit 6.shp	Township:	T36R36E
POLY ID:	1	Total Sample Points:	67
Acres:	292	Spacing Between Points:	425
		Point Rotation Degrees:	0



Scale 1:12,000

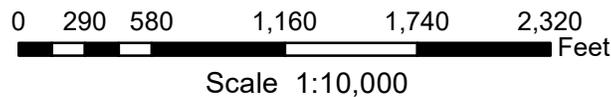
Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



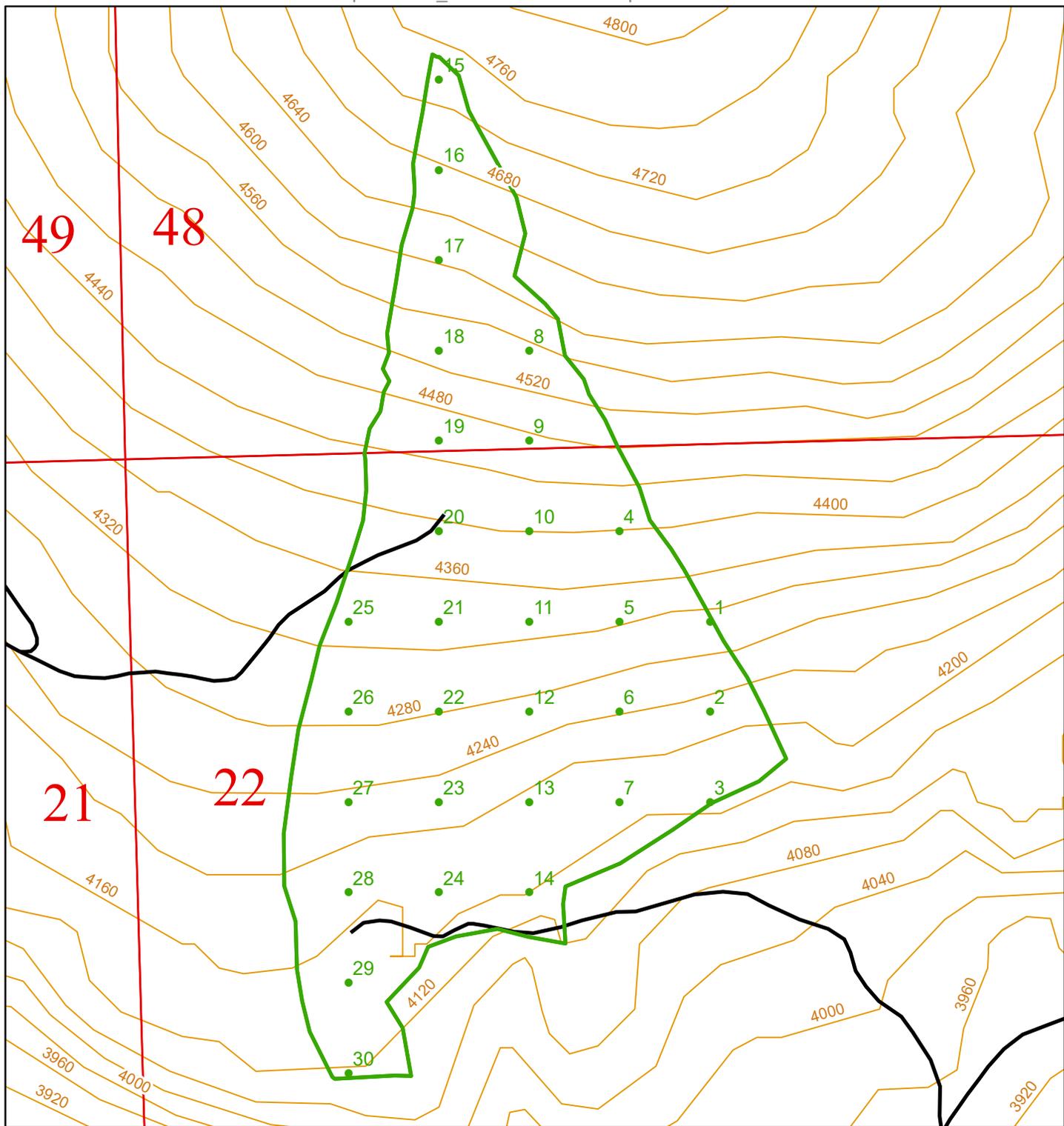
West Trout Unit 7

LAYER NAME:	7.shp	Township:	T36R36E
POLY ID:	1	Total Sample Points:	76
Acres:	306	Spacing Between Points:	425
		Point Rotation Degrees:	0



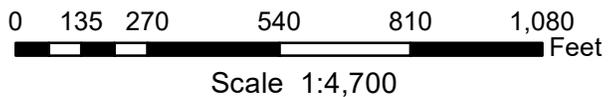
Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



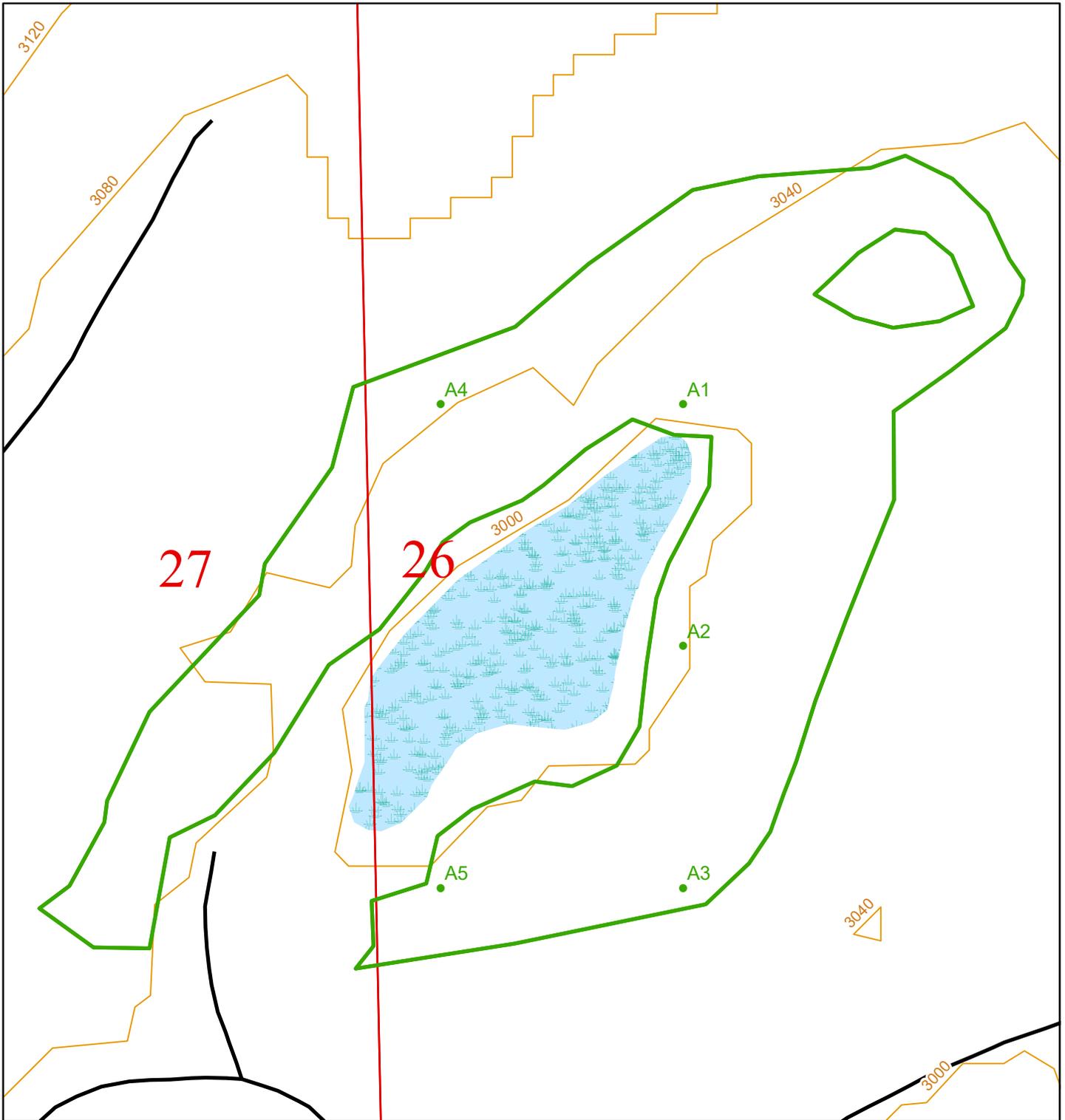
West Trout Unit 8

LAYER NAME:	8.shp	Township:	T36R36E
POLY ID:	1	Total Sample Points:	30
Acres:	43	Spacing Between Points:	250
		Point Rotation Degrees:	0



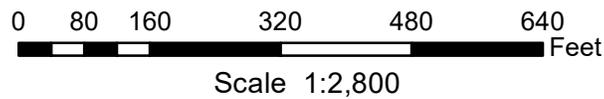
Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



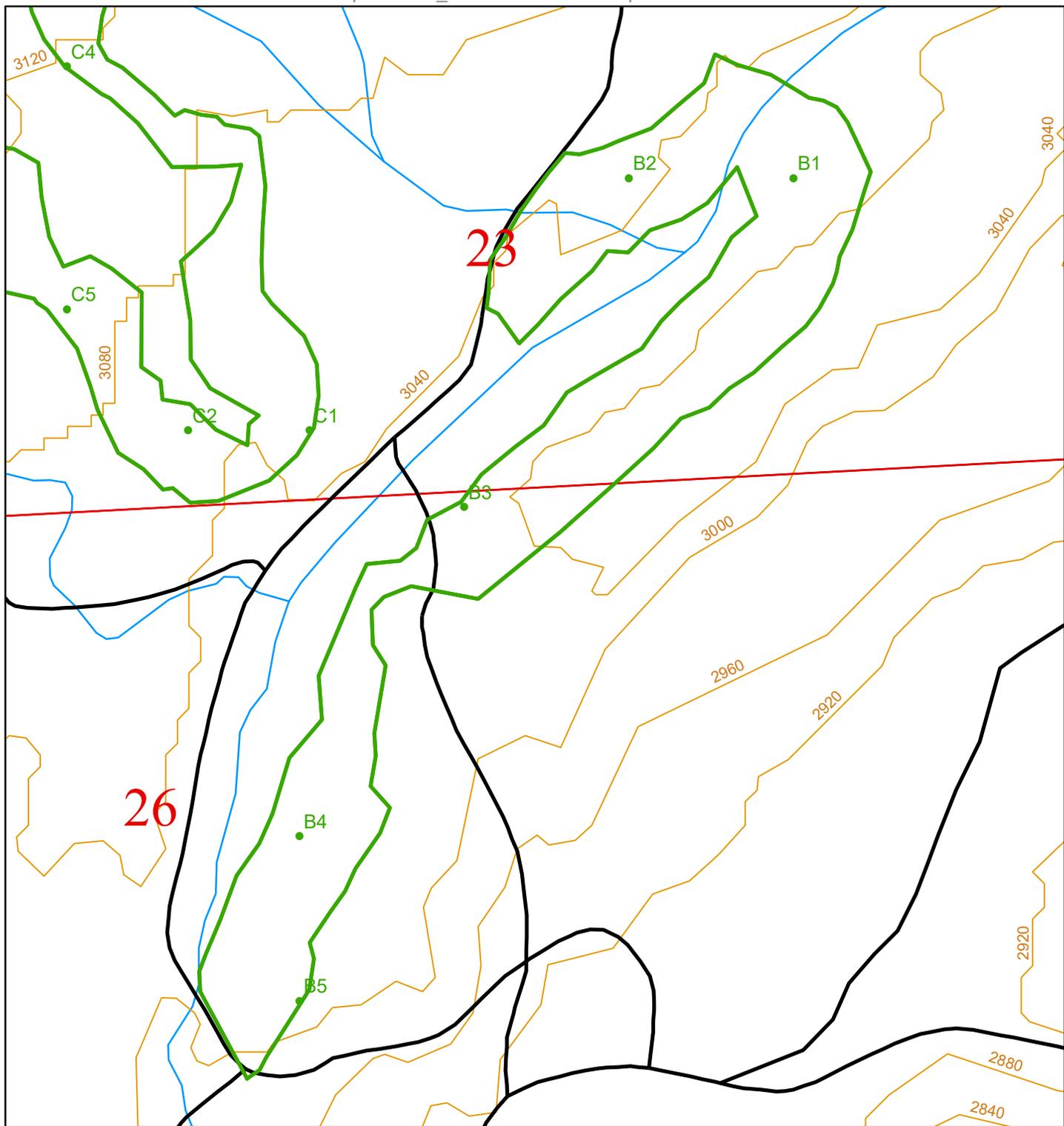
West Trout Unit 9 RHCA

LAYER NAME:	unit_9 rhca merged polys.shp	Township:	T36R36E
POLY ID:	1	Total Sample Points:	5
Acres:	19	Spacing Between Points:	400
		Point Rotation Degrees:	0



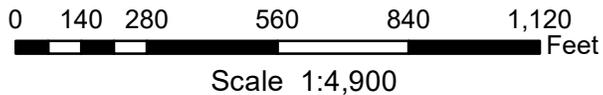
Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



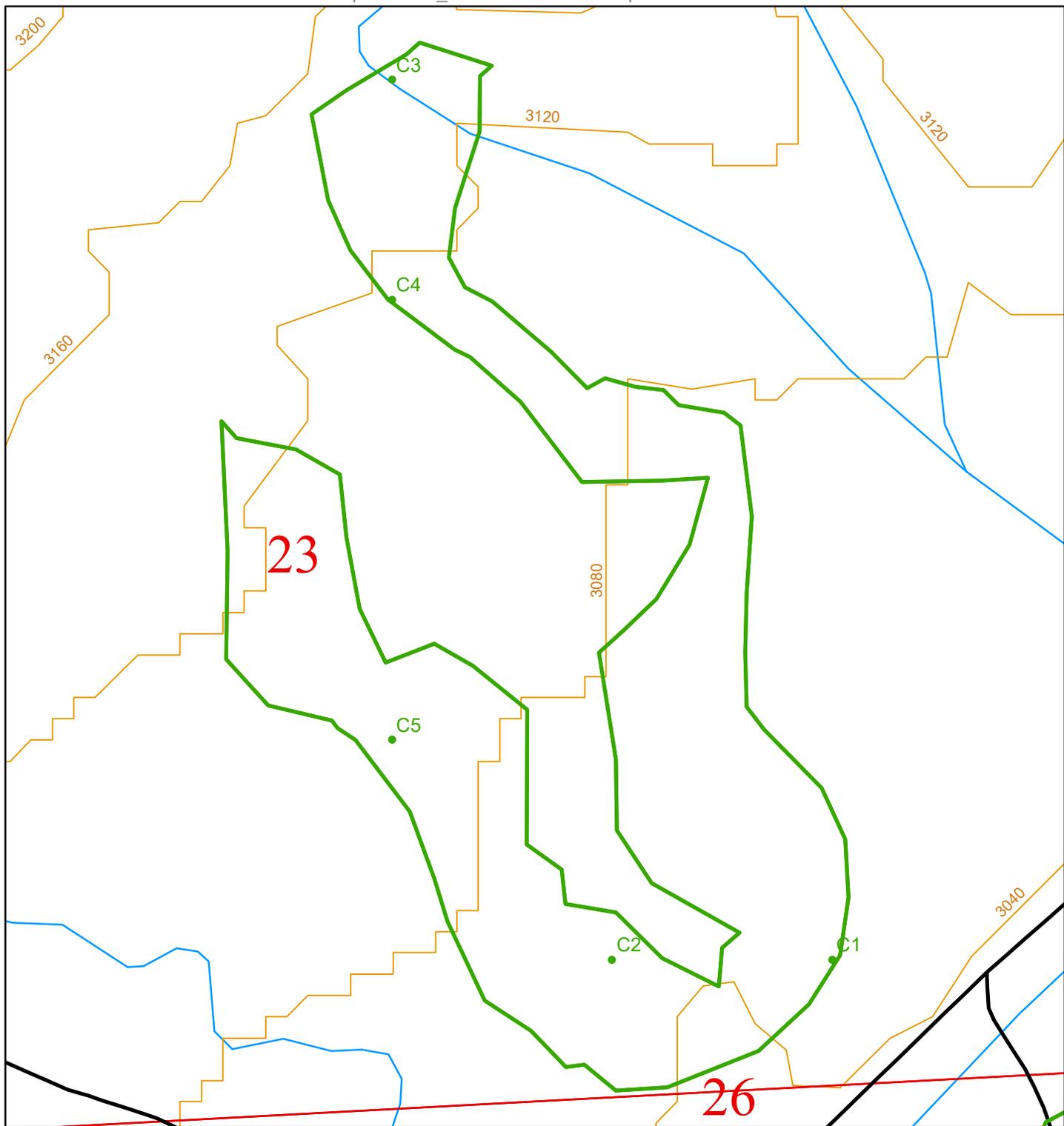
West Trout Unit 9 RHCA

LAYER NAME:	unit_9 rhca merged polys.shp	Township:	T36R36E
POLY ID:	2	Total Sample Points:	5
Acres:	26	Spacing Between Points:	400
		Point Rotation Degrees:	0



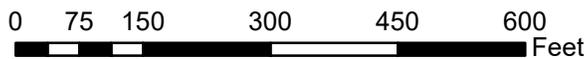
Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



West Trout Unit 9 RHCA

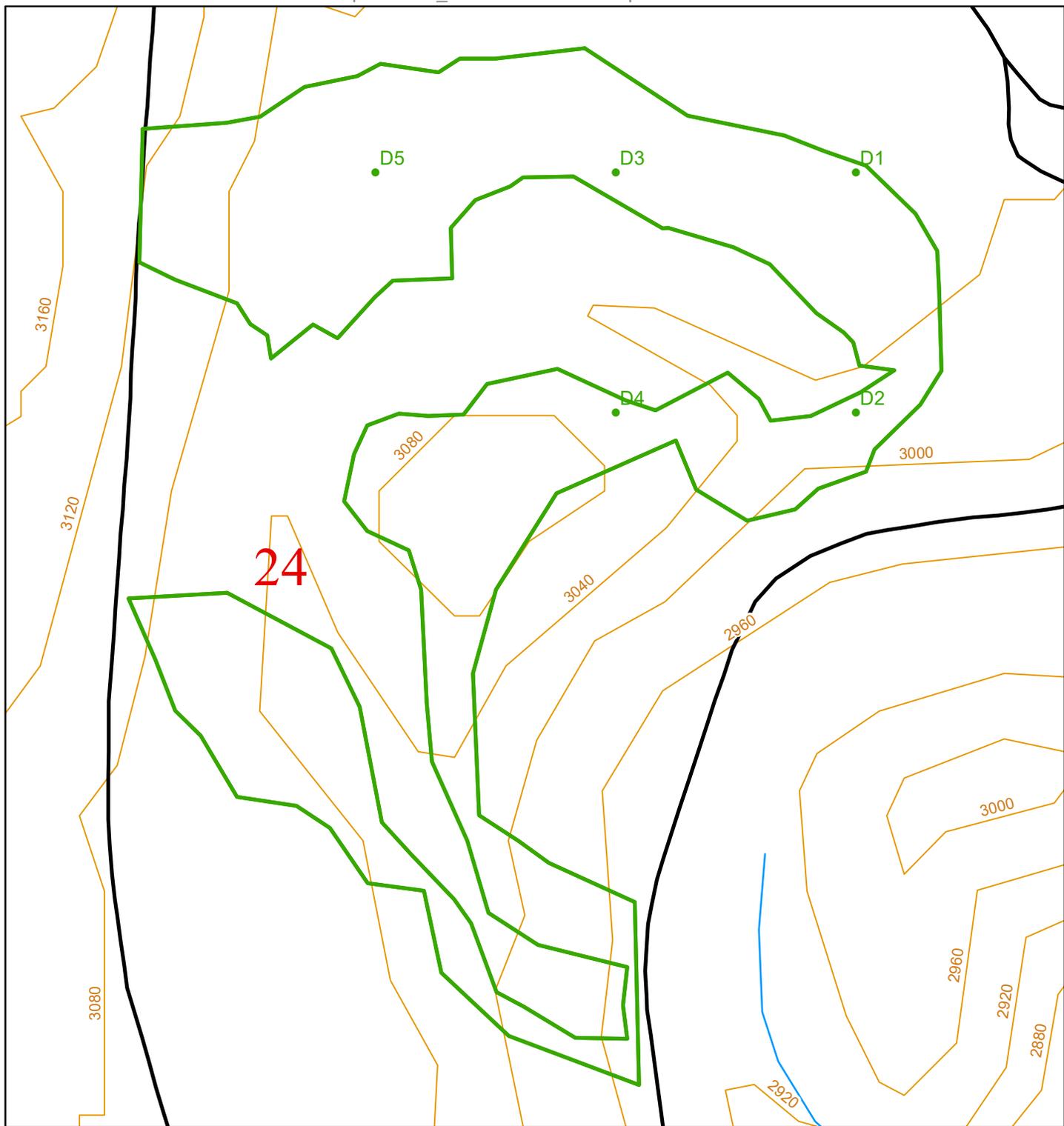
LAYER NAME:	unit_9 rhca merged polys.shp	Township:	T36R36E
POLY ID:	3	Total Sample Points:	5
Acres:	13	Spacing Between Points:	400
		Point Rotation Degrees:	0



Scale 1:2,700

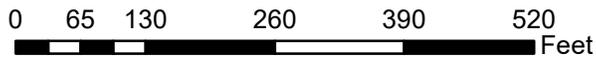
Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



West Trout Unit 9 RHCA

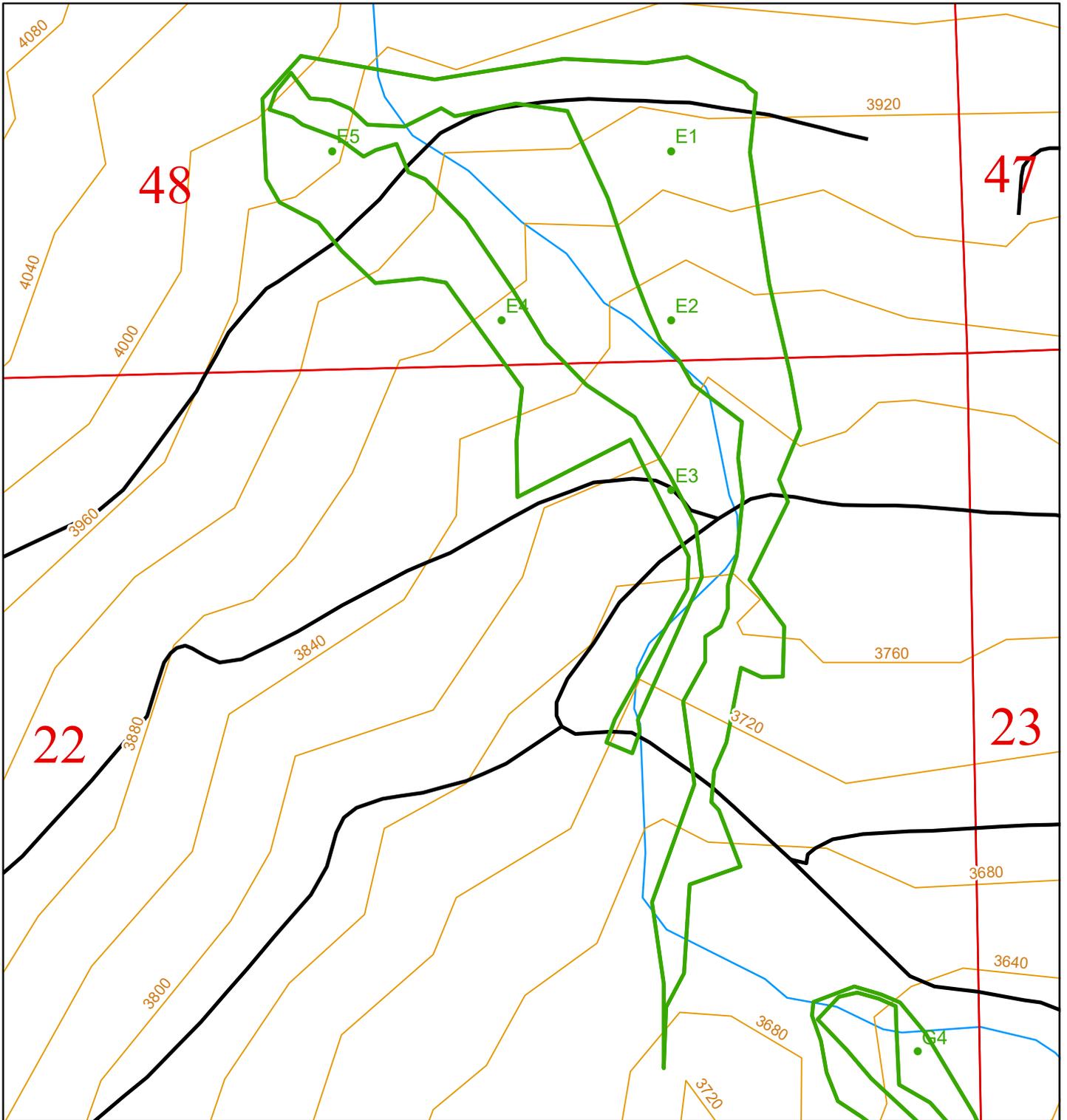
LAYER NAME:	unit_9 rhca merged polys.shp	Township:	T36R36E
POLY ID:	4	Total Sample Points:	5
Acres:	11	Spacing Between Points:	400
		Point Rotation Degrees:	0



Scale 1:2,300

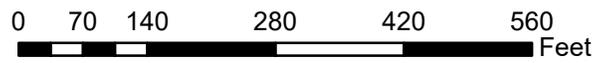
Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



West Trout Unit 9 RHCA

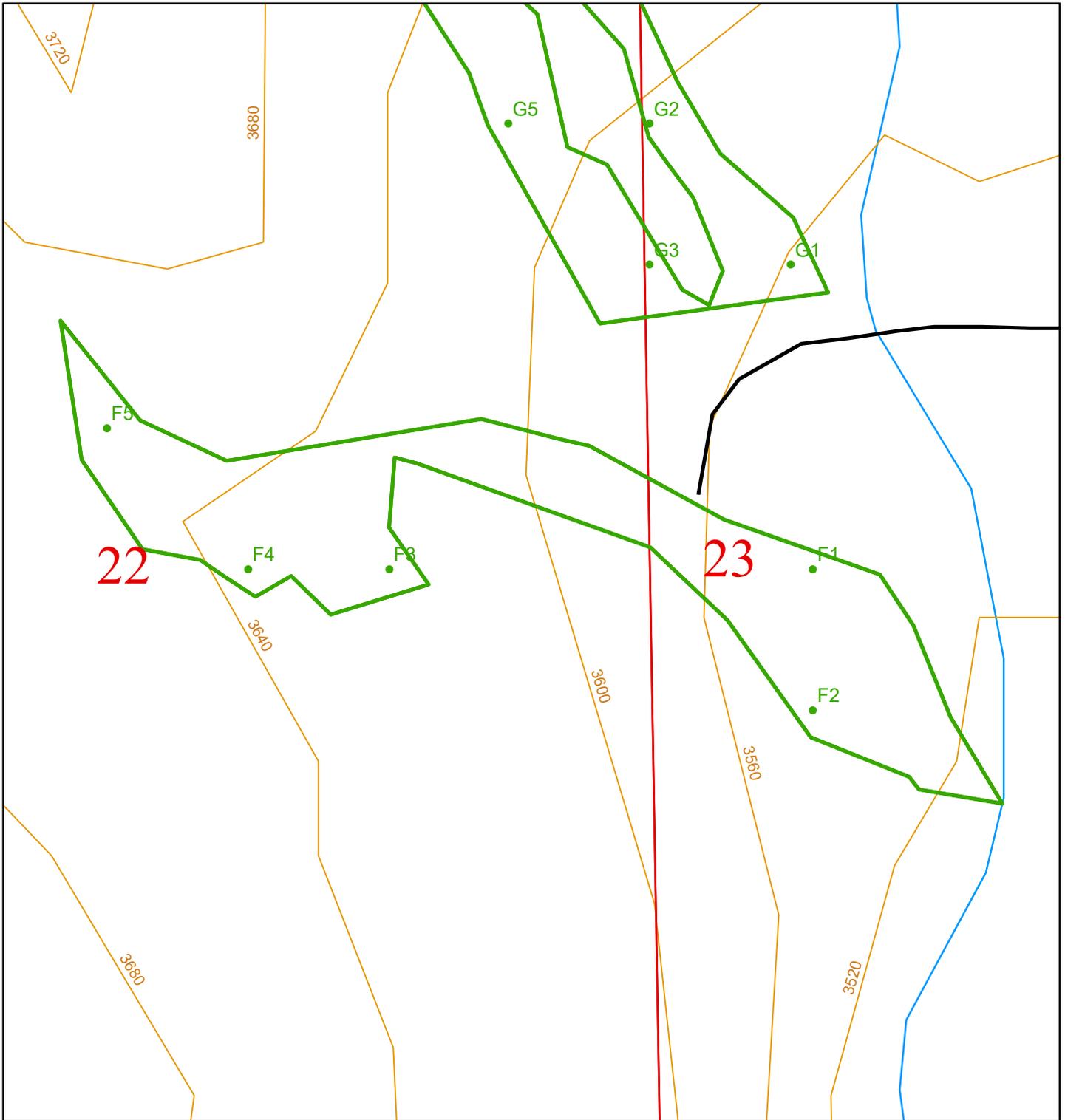
LAYER NAME:	Unit 9 rhca merged polys.shp	Township:	T36R36E
POLY ID:	5	Total Sample Points:	5
Acres:	6	Spacing Between Points:	400
		Point Rotation Degrees:	0



Scale 1:2,500

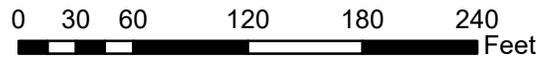
Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



West Trout Unit 9 RHCA

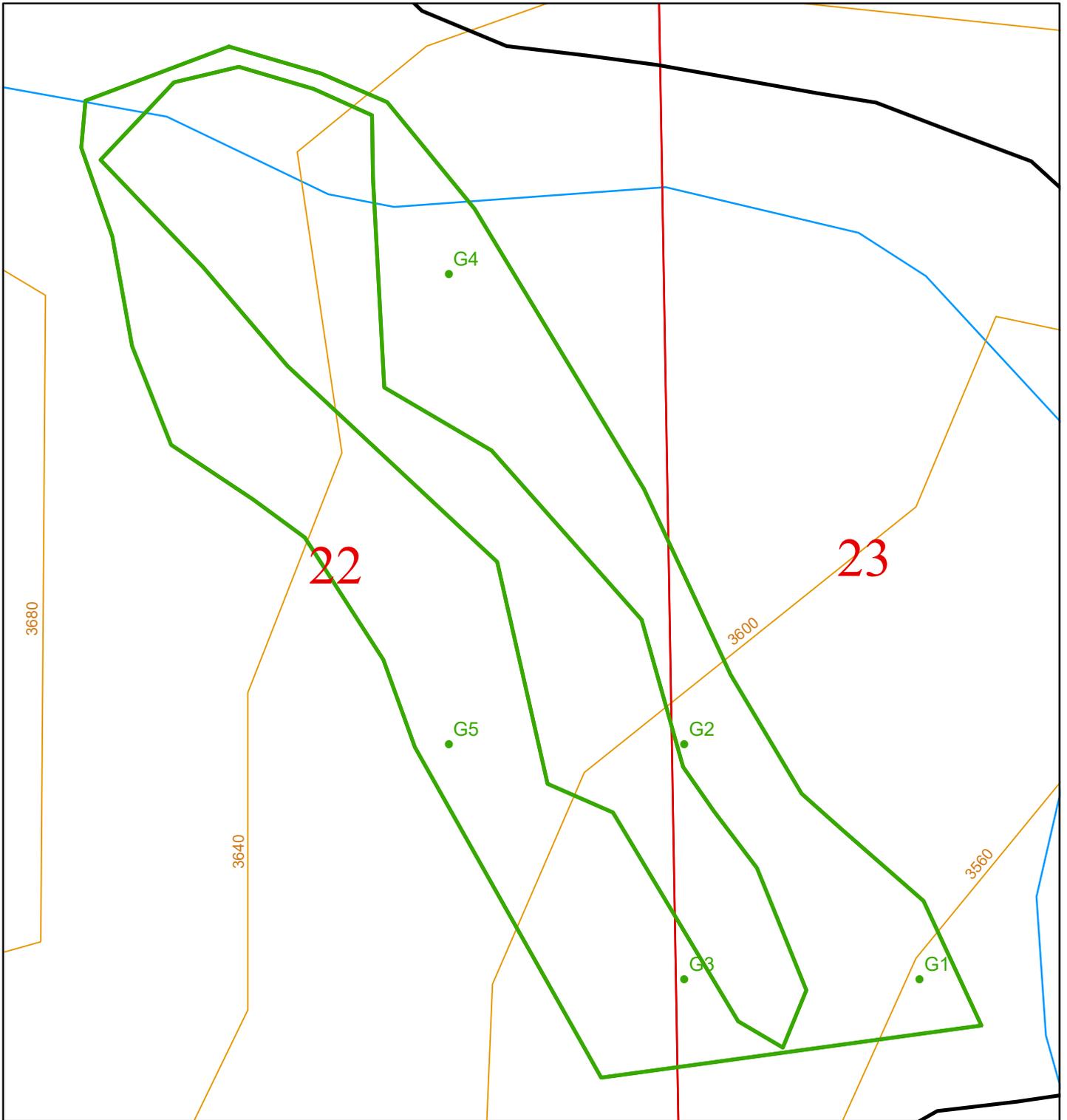
LAYER NAME:	Unit 9 rhca merged polys.shp	Township:	T36R36E
POLY ID:	6	Total Sample Points:	5
Acres:	1	Spacing Between Points:	400
		Point Rotation Degrees:	0



Scale 1:1,200

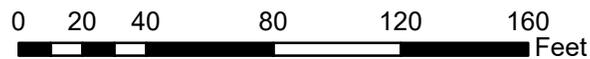
Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



West Trout Unit 9 RHCA

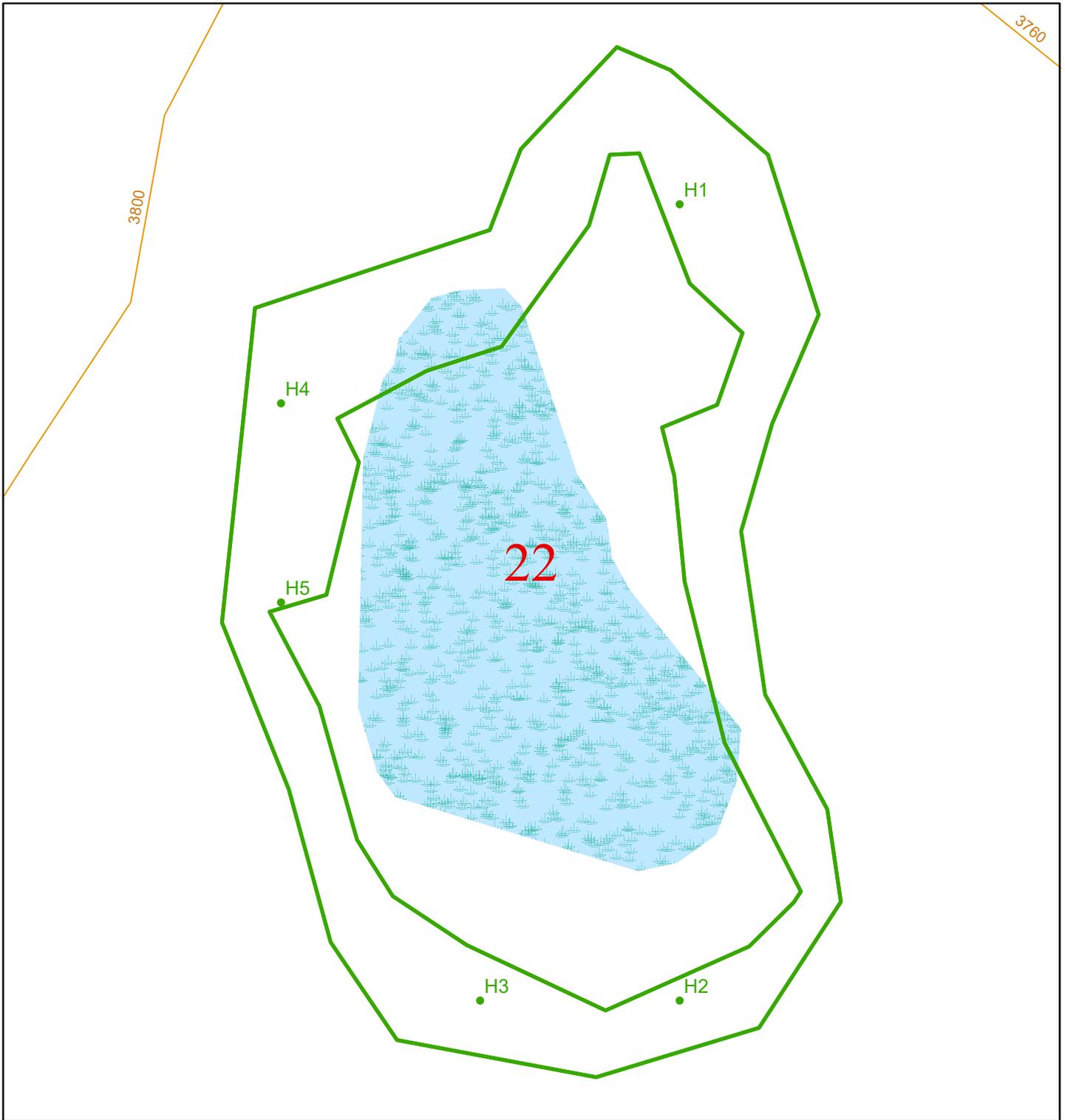
LAYER NAME:	unit_9 rhca merged polys.shp	Township:	T36R36E
POLY ID:	7	Total Sample Points:	5
Acres:	1	Spacing Between Points:	400
		Point Rotation Degrees:	0



Scale 1:720

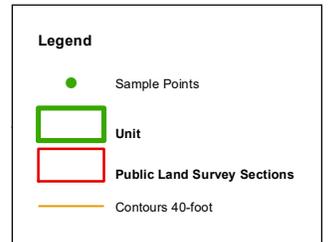
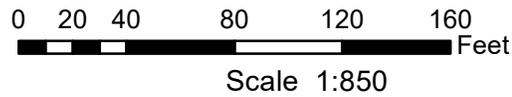
Legend

- Sample Points
- Unit
- Public Land Survey Sections
- Contours 40-foot



West Trout Unit 9 RHCA

LAYER NAME:	unit_9_rhca_merged_polys.shp	Township:	T36R36E
POLY ID:	8	Total Sample Points:	5
Acres:	1	Spacing Between Points:	400
		Point Rotation Degrees:	0



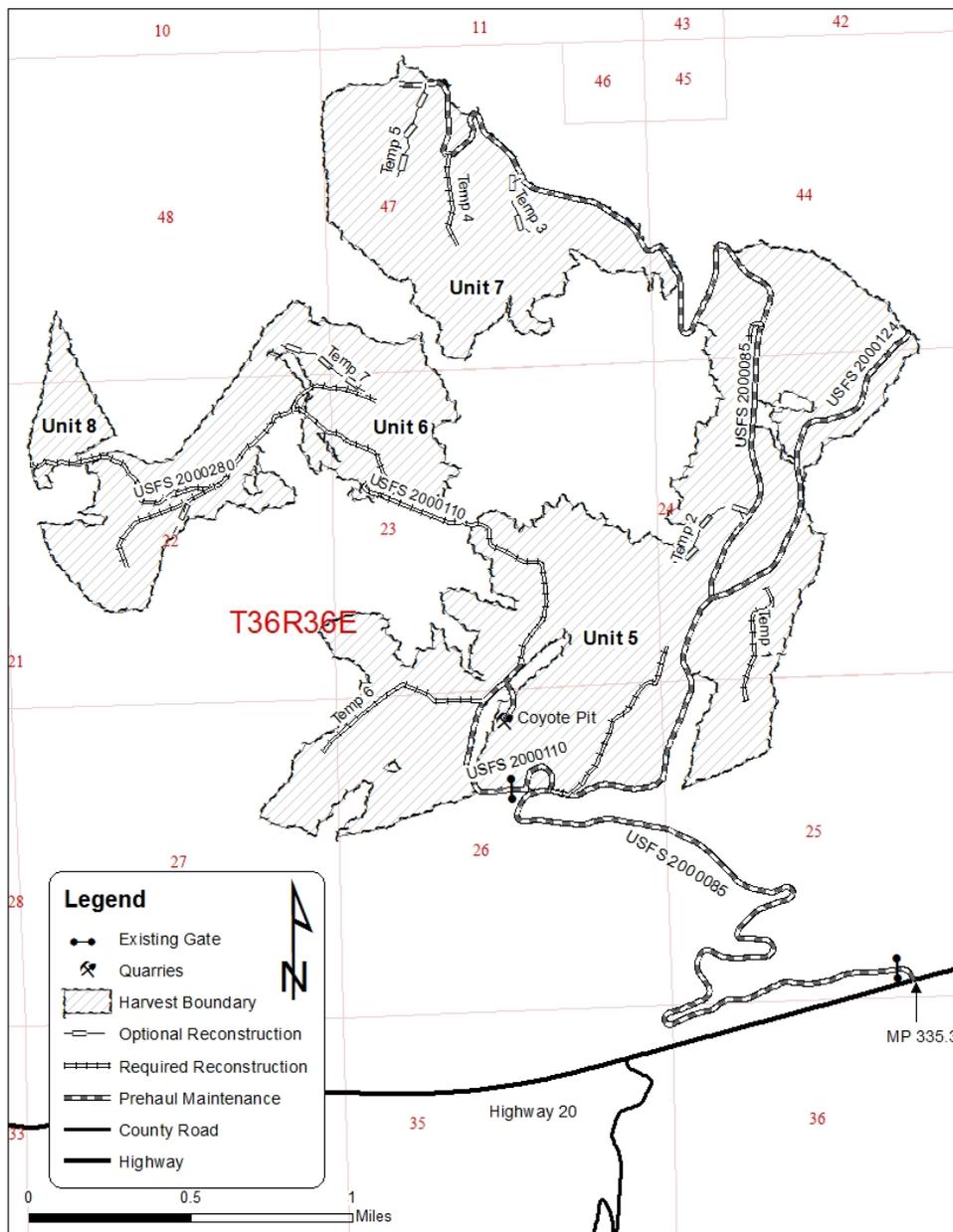
GOOD NEIGHBOR AUTHORITY
COLVILLE NATIONAL FOREST
THREE RIVERS RANGER DISTRICT

WEST TROUT LAKE TIMBER SALE ROAD PLAN
FERRY COUNTY, WASHINGTON

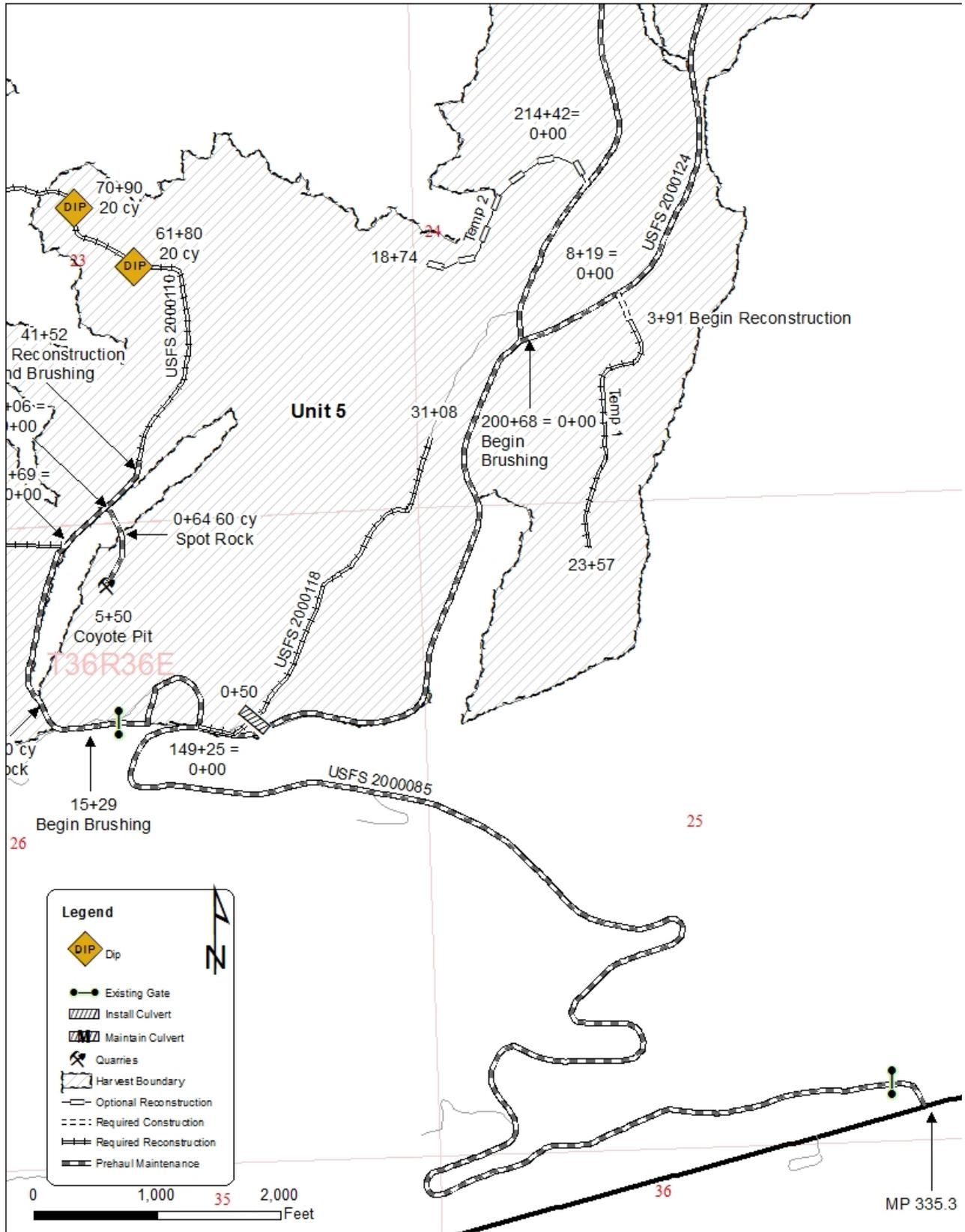
AGREEMENT NO.: 36-099675
DATE: 09/11/2019

DRAWN AND COMPILED BY: MICHAEL CONNELLY
STAFF ENGINEER: JUSTIN LONG

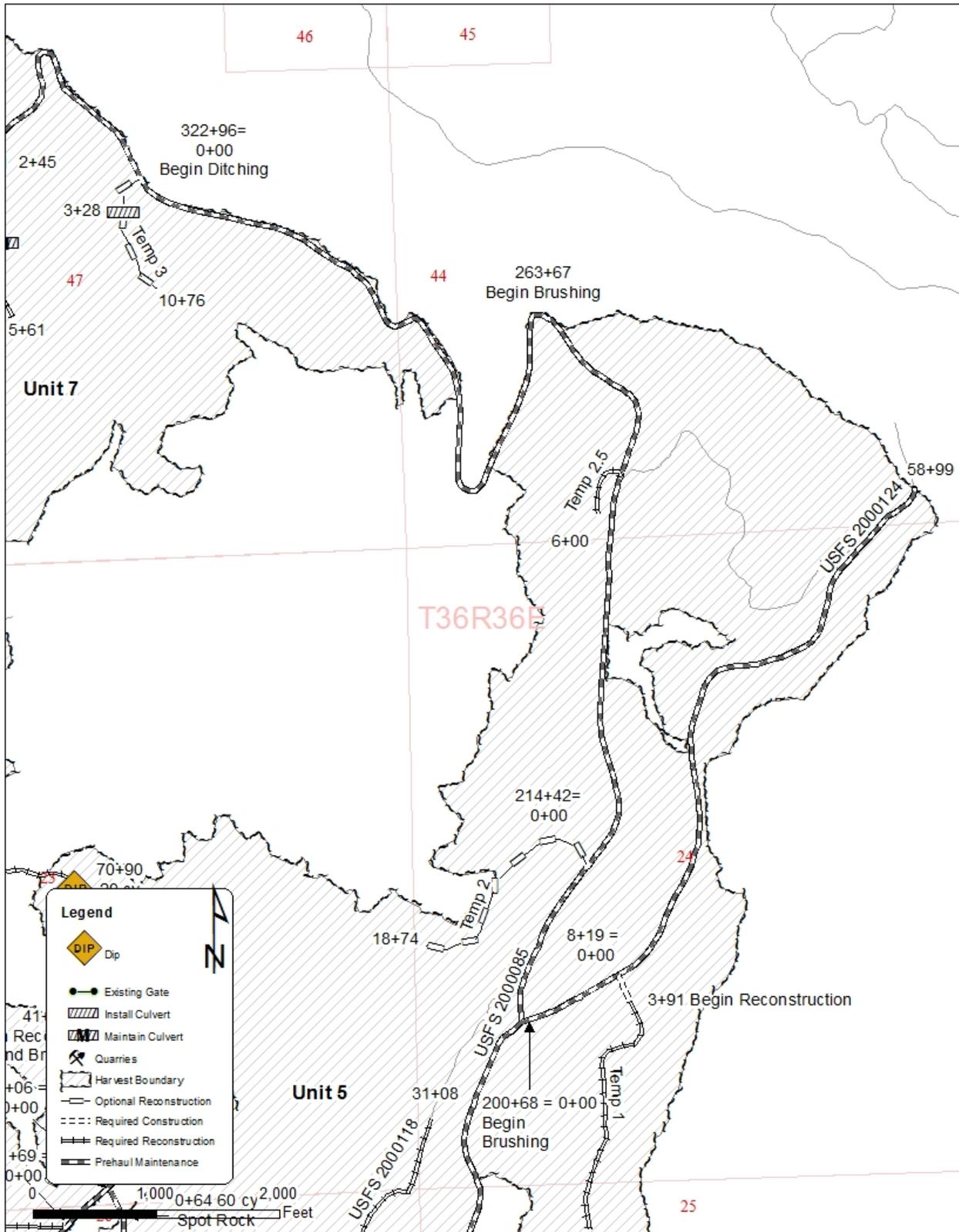
VICINITY MAP
MAP 1 OF 6



MAP 2 OF 6



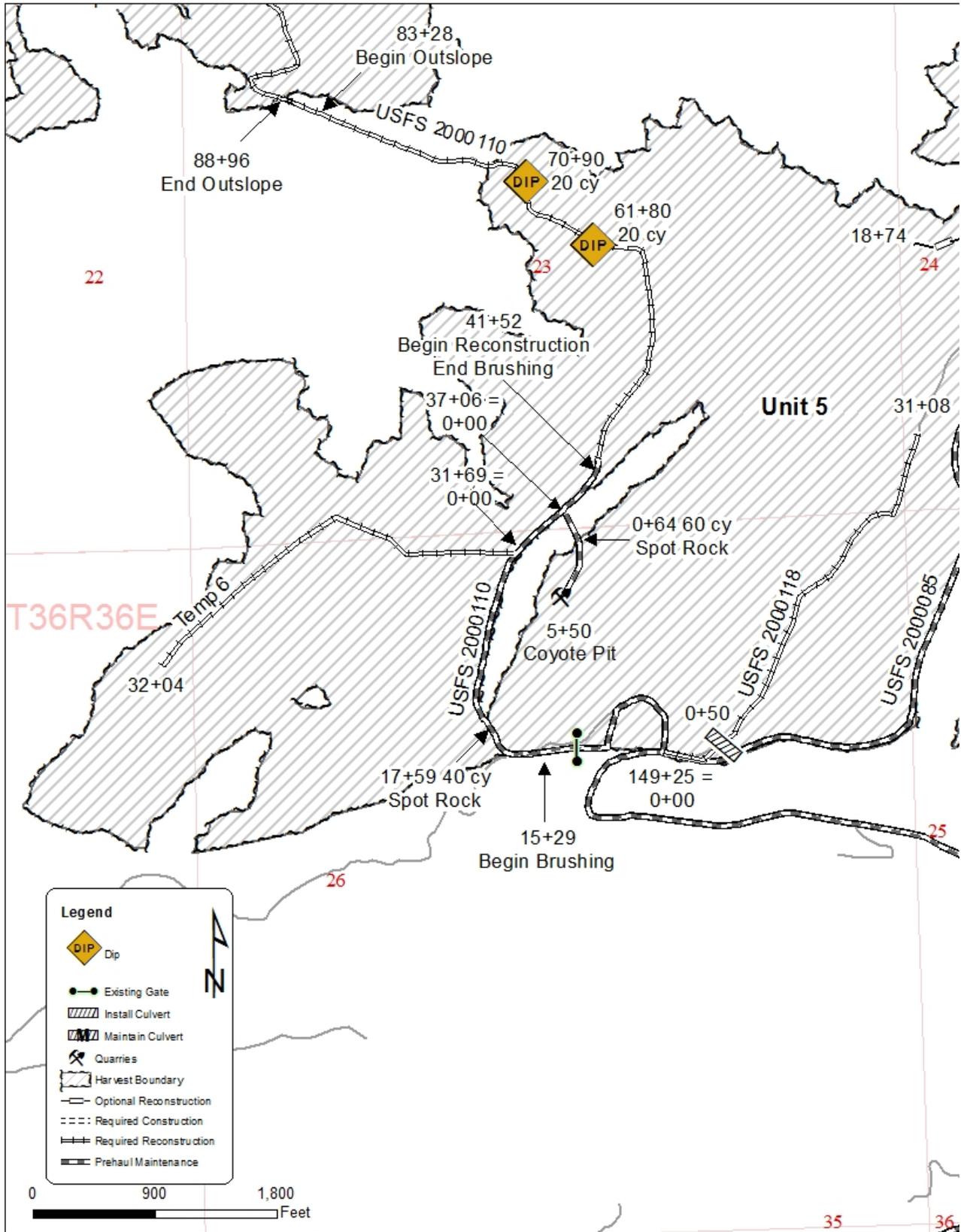
MAP 3 OF 6



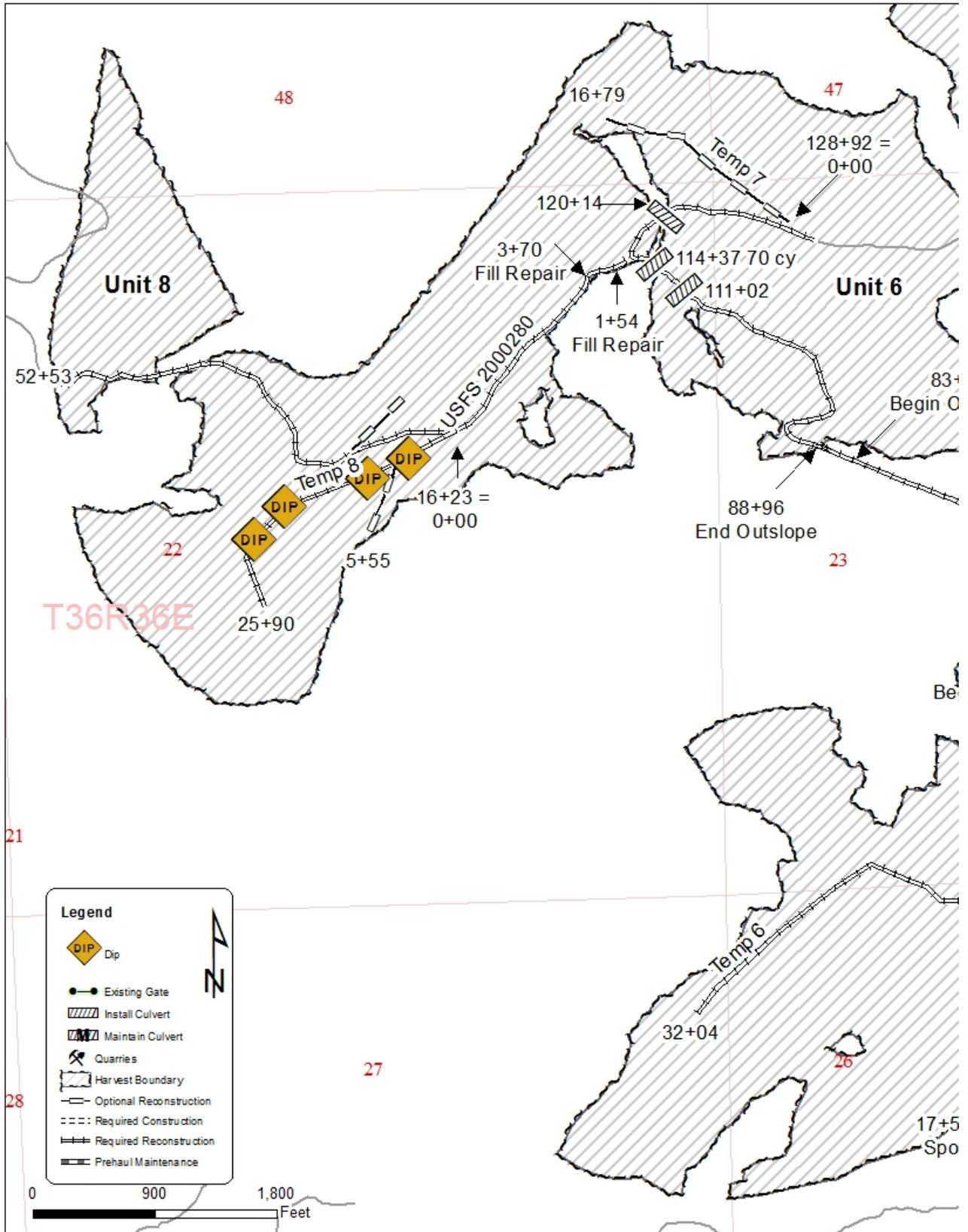
MAP 4 OF 6



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>
USFS 2000085	149+25 to 365+63	PRE-HAUL MAINTENANCE
USFS 2000110	0+00 to 41+52	PRE-HAUL MAINTENANCE
USFS 2000110	41+52 to 131+50	RECONSTRUCTION
USFS 2000118	0+00 to 31+08	RECONSTRUCTION
USFS 2000124	0+00 to 58+99	PRE-HAUL MAINTENANCE
USFS 2000280	0+00 to 52+53	RECONSTRUCTION
Coyote Pit road	0+00 to 5+50	PRE-HAUL MAINTENANCE
Temp 1*	0+00 to 3+91	CONSTRUCTION
Temp 1	3+91 to 23+57	RECONSTRUCTION
Temp 2.5	0+00 to 6+00	RECONSTRUCTION
Temp 4	0+00 to 15+61	RECONSTRUCTION
Temp 6	0+00 to 32+04	RECONSTRUCTION
Temp 8	0+00 to 25+90	RECONSTRUCTION

*Any top soil excavated during temporary construction shall be set aside where practical to facilitate re-contouring road bed before termination of contract as outlined in 9-22 ROAD ABANDONMENT.

0-3 OPTIONAL ROADS

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

<u>Road</u>	<u>Stations</u>	<u>Type</u>
Temp 2	0+00 to 18+74	RECONSTRUCTION
Temp 3	0+00 to 10+76	RECONSTRUCTION
Temp 5	0+00 to 16+13	RECONSTRUCTION
Temp 7	0+00 to 16+79	RECONSTRUCTION
Temp 9	0+00 to 5+55	RECONSTRUCTION
Temp 10	0+00 to 7+99	RECONSTRUCTION

0-4 CONSTRUCTION

Construction includes, but is not limited to clearing, grubbing, excavation and embankment to sub-grade, and landing and turnout construction.

<u>Road</u>	<u>Stations</u>	<u>Type</u>
Temp 1	0+00 to 3+91	CONSTRUCTION

0-5 RECONSTRUCTION

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

<u>Road</u>	<u>Stations</u>	<u>Requirements</u>
USFS 2000110	41+52 to 131+50	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as specified below and as needed or as designated by Contract Administrator.</p> <p>-From station 83+28 to 88+96, pull in outside berm and outslope road taking care not to disturb existing cut slope as much as possible.</p> <p>-Spot application of 70 cubic yards of 3-inch minus ballast rock 50 feet either side of stream crossings at stations 114+37 and 120+14</p> <p>Apply rock as shown on the Rock List.</p> <p>-Clean out existing culverts and ditches</p> <p>-Reconstruct headwalls and catch basins.</p>
USFS 2000110		<p>-Reconstruct dips and drivable water bars as needed</p> <p>-Install new rolling dips as per clause 5-31 ROLLING DIP CONSTRUCTION.</p> <p>-Install new culverts in accordance to MATERIALS LIST.</p>

		<p>-Spot application of 3/4-minus gravel from station 61+80 to 62+30 and station 70+90 to 71+40 and as needed or designated by Contract Administrator in accordance to TYPICAL SECTION SHEET and MATERIALS LIST.</p>
USFS 2000118	0+00 to 31+08	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Install culvert as outlined in MATERIALS LIST.</p>
USFS 2000280	0+00 to 52+53	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p> <p>-Repair fill failures as outlined in clause under SECTION 11, 11-1 FILL FAILURE REPAIR.</p> <p>-Reconstruct dips and drivable water bars as needed</p> <p>-Install new rolling dips as per clause 5-31 ROLLING DIP CONSTRUCTION.</p> <p>-Spot application of 3/4-minus gravel as needed or designated by Contract Administrator in accordance to TYPICAL SECTION SHEET and MATERIALS LIST.</p>
Temp 1	3+91 to 23+57	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p>

Temp 2	0+00 to 18+74	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p>
Temp 2.5	0+00 to 6+00	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p>
Temp 3	0+00 to 10+76	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p> <p>-Ditch from station 0+00 to 1+63 in accordance to CLAUSE 4-25, DITCH CONSTRUCTION AND RECONSTRUCTION.</p> <p>-Install culverts in accordance to MATERIALS LIST</p>
Temp 4	0+00 to 15+61	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p> <p>-Clean out existing culvert and ditches.</p> <p>-Ditch from station 2+45 to 3+23 and station 9+07 to 12+26 in accordance to CLAUSE 4-25, DITCH CONSTRUCTION AND RECONSTRUCTION.</p>

Temp 4		<p>-Install culvert in accordance to MATERIALS LIST</p> <p>-Spot application of 3/4-minus gravel as needed or designated by Contract Administrator in accordance to TYPICAL SECTION SHEET and MATERIALS LIST.</p>
Temp 5	0+00 to 16+13	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p>
Temp 6	0+00 to 32+04	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p>
Temp 7	0+00 to 16+79	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>SEE NEXT PAGE</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p>
Temp 7		
Temp 8	0+00 to 25+90	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p> <p>-Ditch from station 6+84 to 9+16, station 16+89 to 17+39, and station 20+38 to 21+78 in accordance to CLAUSE 4-25, DITCH CONSTRUCTION AND RECONSTRUCTION.</p>

		<p>-Install rolling dips as per clause 5-31 Rolling Dip Construction.</p> <p>-Spot application of 3/4-minus gravel from station 6+84 to 9+16 and as needed or designated by Contract Administrator in accordance to TYPICAL SECTION SHEET and MATERIALS LIST.</p>
Temp 9	0+00 to 5+55	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p> <p>-Ditch from station 0+00 to 1+11 in accordance to CLAUSE 4-25, DITCH CONSTRUCTION AND RECONSTRUCTION.</p> <p>-Install rolling dips as per clause 5-31 Rolling Dip Construction.</p> <p>-Spot application of 3/4-minus gravel from station 0+00 to 1+11 and as needed or designated by Contract Administrator in accordance to TYPICAL SECTION SHEET and MATERIALS LIST.</p>
Temp 9		
Temp 10	0+00 to 7+99	<p>-Reconstruct road in accordance to the TYPICAL SECTION SHEET and Clause 4-3, ROAD GRADE AND ALIGNMENT STANDARDS.</p> <p>-Create positive drainage using combination of insloping, outsloping, and ditchouts as needed or as designated by Contract Administrator.</p>

Reconstruction includes, but is not limited to clearing & grubbing, excavation and embankment to subgrade, rolling dip and culvert installation, fill failure repair, and application of 3-inch minus rock and 3/4-inch minus gravel.

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>
USFS 2000085	0+00 to 365+63	<ul style="list-style-type: none"> -Brush road from station 263+67 to 365+63 in accordance to BRUSHING DETAIL. -Blade and shape road surface to smooth out potholes and preserve as much sod as possible. -Install rolling dips as per clause 5-31 Rolling Dip Construction as needed and as designated by Contract Administrator to reduce surface runoff on road. -Clean inlets and outlets of existing culverts. -Spot application of 3/4-minus gravel as needed or designated by Contract Administrator in accordance to TYPICAL SECTION SHEET and MATERIALS LIST.
USFS 2000110	0+00 to 41+52	<ul style="list-style-type: none"> -Brush road from station 15+29 to 41+52 in accordance to BRUSHING DETAIL. -From station 17+59 to 18+59, apply 40 cubic yards of 3/4-inch minus gravel to fill in hole in road surface. -Blade and shape road surface.
USFS 2000124	0+00 to 58+99	<ul style="list-style-type: none"> -Brush road from station 0+00 to 58+99 in accordance to BRUSHING DETAIL. -Clean inlets and outlets of existing culverts. -Install or reconstruct rolling dips as per clause 5-31 Rolling Dip Construction and as designated by Contract Administrator
Coyote Pit road	0+00 to 5+50	<ul style="list-style-type: none"> -Blade and shape road surface. -Fill in low spot from station 0+64 to 1+64 with 60 yards of 3/4-minus gravel.

Pre-haul maintenance includes, but is not limited to blading, shaping, and ditching the road surface, brushing, existing culvert clean out, construction of rolling dips, and application of 3/4-inch-minus gravel as needed.

0-7 POST-HAUL MAINTENANCE

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

0-9 DECOMMISSIONING

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

0-10 ABANDONMENT

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

0-12 DEVELOP ROCK SOURCE

Purchaser shall use existing rock sources. Work for developing rock sources is listed in Section 6 ROCK AND SURFACING.

SECTION 1 – GENERAL

1-1 ROAD PLAN CHANGES

If the Purchaser desires a change from this road plan including, but not limited to, relocation, extension, change in design, or adding roads; a revised road plan must be submitted in writing to the Contract Administrator for consideration. Before work begins, Purchaser shall obtain approval from the State for any submitted plan that changes the scope of work or environmental condition from the original road plan.

1-2 UNFORESEEN CONDITIONS

Quantities established in this road plan are minimum acceptable values. Additional quantities required by the state due to unforeseen conditions, or Purchaser's choice of construction season or techniques will be at the Purchaser's expense. Unforeseen conditions include, but are not limited to, solid subsurface rock, subsurface springs, saturated ground, and unstable soils.

1-3 ROAD DIMENSIONS

Purchaser shall perform road work in accordance with the dimensions shown on the TYPICAL SECTION SHEET and the specifications within this road plan.

1-4 ROAD TOLERANCES

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

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

1-6 ORDER OF PRECEDENCE

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

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

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

1-8 REPAIR OR REPLACEMENT OF DAMAGED MATERIALS

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

1-9 DAMAGED METALLIC COATING

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

1-10 WSDOT STANDARD SPECIFICATION REFERENCE

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

1-15 ROAD MARKING

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

- Centerline marked with orange ribbon.
- Culvert/rolling dip locations flagged in orange and blue ribbon.
- Spot rock application and new ditch construction locations marked with orange and blue ribbon.

1-21 HAUL APPROVAL

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

1-22 WORK NOTIFICATIONS

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

1-23 ROAD WORK PHASE APPROVAL

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

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

1-25 ACTIVITY TIMING RESTRICTION

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

<u>Activity</u>	<u>Closure Period</u>
Construction and Reconstruction.	October 30 th to June 15 th .

1-26 OPERATING DURING CLOSURE PERIOD

If permission is granted to operate during a closure period listed in Clause 1-25 ACTIVITY TIMING RESTRICTIONS, the Purchaser shall provide a maintenance plan to include further protection of federal resources. Purchaser shall obtain written approval from the Contract Administrator for the maintenance plan, and shall put preventative measures in place before operating during the closure period. Purchaser is required to maintain all haul roads at their own expense.

1-29 SEDIMENT RESTRICTION

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

1-30 CLOSURE TO PREVENT DAMAGE

In accordance with Contract Clause G-220 STATE SUSPENDS OPERATION, the Contract Administrator will suspend road work or hauling right-of-way timber, forest products, or rock under the following conditions:

- Wheel track rutting exceeds 4 inches on jaw run roads.
- Wheel track rutting exceeds 2 inches on crushed rock roads.
- Wheel track rutting exceeds 6 inches on native surface roads.
- Surface or base stability problems persist.
- Weather is such that satisfactory results cannot be obtained in an area of operations.
- When, in the opinion of the Contract Administrator excessive road damage or rutting may occur.

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

1-33 SNOW PLOWING RESTRICTION

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

1-40 ROAD APPROACHES TO COUNTY ROADS AND STATE HIGHWAYS

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

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

1-43 ROAD WORK AROUND UTILITIES

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

SECTION 2 – MAINTENANCE

2-1 GENERAL ROAD MAINTENANCE

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

2-2 ROAD MAINTENANCE – PURCHASER MAINTENANCE

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

2-4 PASSAGE OF LIGHT VEHICLES

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

2-5 MAINTENANCE GRADING – EXISTING ROAD

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

2-6 CLEANING CULVERTS

On the following roads, Purchaser shall clean the inlets and outlets of all culverts:

<u>Road</u>	<u>Stations</u>
USFS 2000085	149+25 to 365+63
USFS 2000110	0+00 to 131+50
USFS 2000124	0+00 to 58+99
Temp 4	0+00 to 15+61

SECTION 3 – CLEARING, GRUBBING, AND DISPOSAL

3-1 BRUSHING

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

<u>Road</u>	<u>Stations</u>
USFS 2000085	263+67 to 365+63
USFS 2000110	15+29 to 41+52
USFS 2000124	0+00 to 58+99

3-5 CLEARING

Purchaser shall fall all vegetative material larger than 2 inches DBH or over 5 feet high between the marked right-of-way boundaries or if not marked in the field, between the clearing limits specified on the TYPICAL SECTION SHEET. Clearing must be completed before starting excavation and embankment.

3-8 PROHIBITED DECKING AREAS

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

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

3-10 GRUBBING

Purchaser shall remove all stumps between the grubbing limits specified on the TYPICAL SECTION SHEET and within waste and debris areas. Purchaser shall also remove stumps with undercut roots outside the grubbing limits.

3-20 ORGANIC DEBRIS DEFINITION

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

3-21 DISPOSAL COMPLETION

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

3-23 PROHIBITED DISPOSAL AREAS

Purchaser shall not place organic debris in the following areas:

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

3-24 BURYING ORGANIC DEBRIS RESTRICTED

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

3-25 SCATTERING ORGANIC DEBRIS

Purchaser shall scatter organic debris in natural openings as directed by the Contract Administrator. 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

Purchaser shall not use dozer blades for piling of organic debris.

3-31 PILING AND SCATTERING

Right-of-way debris shall be scattered unless debris amounts are significant enough to produce piles a minimum of 4' tall by 6' wide. Debris piles shall be made to be burnable, clean, tight, and free of rock or soil. Piles shall be made no closer than 20 feet from standing timber, and no higher than 10 feet. Debris piles shall be placed within cleared right-of-way, or in natural openings, as designated by the Contract Administrator. Placement of debris piles outside of the right-of-way limits is subject to the written approval of the Contract Administrator. No piling within the Riparian Habitat Conservation Area (RHCA)

SECTION 4 – EXCAVATION

4-1 EXCAVATOR CONSTRUCTION

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

4-2 PIONEERING

Pioneering shall not extend past construction that will be completed during the current construction season. Pioneering shall not extend more than 1000 feet beyond completed construction unless approved in writing by the Contract Administrator. In addition, the following actions must be taken as pioneering progresses:

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

4-3 ROAD GRADE AND ALIGNMENT STANDARDS

Purchaser shall follow these standards for road grade and alignment:

- Grade and alignment must have smooth continuity, without abrupt changes in direction.
- Maximum grades may not exceed 18 percent favorable and 12 percent adverse.
- Minimum curve radius is 60 feet at centerline.
- Maximum grade change for sag vertical curves is 10% in 100 feet.
- Maximum grade change for crest vertical curves is 8% in 100 feet.

4-4 SWITCHBACK STANDARDS

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

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

4-5 CUT SLOPE RATIO

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

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

4-6 EMBANKMENT SLOPE RATIO

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

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

4-7 SHAPING CUT AND FILL SLOPE

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

4-8 CURVE WIDENING

The minimum widening placed on the inside of curves is:

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

4-9 EMBANKMENT WIDENING

The minimum embankment widening is:

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

4-11 KEYED EMBANKMENT

On the following road(s), Purchaser shall key embankments into the native slope.

<u>Road</u>	<u>Stations</u>
USFS 2000280	1+54 to 2+54
USFS 2000280	3+70 to 4+70

4-21 TURNOUTS

Purchaser 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. Minimum dimensions are shown on the TYPICAL SECTION SHEET.

4-22 TURNAROUNDS

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

4-25 DITCH CONSTRUCTION AND RECONSTRUCTION

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

4-28 DITCH DRAINAGE

Ditches must drain to cross-drain culverts, rolling dips, or ditchouts.

4-29 DITCHOUTS

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

4-35 WASTE MATERIAL DEFINITION

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

4-36 DISPOSAL OF WASTE MATERIAL

Purchaser may sidecast waste material on side slopes up to 45% if the waste material is compacted and free of organic debris. On side slopes greater than 55%, all waste

material must be end hauled or pushed to the designated embankment sites and waste areas approved by Contract Administrator.

4-38 PROHIBITED WASTE DISPOSAL AREAS

Purchaser shall not deposit waste material in the following areas:

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

4-55 ROAD SHAPING

Purchaser shall shape the subgrade and surface as shown on the TYPICAL SECTION SHEET. The subgrade and surface shape must ensure runoff in an even, un-concentrated manner, and must be uniform, firm, and rut-free. Purchaser shall accomplish all shaping using a motor grader with a minimum of 175 horsepower.

4-56 DRY WEATHER SHAPING

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

4-60 FILL COMPACTION

Purchaser shall compact all embankment and waste material. Minimum acceptable compaction is achieved by placing embankments in 1 foot or shallower lifts, and routing equipment over the entire width of each lift.

Except as otherwise specified in this plan, a vibratory plate compactor or tamper shall be used for areas specifically requiring keyed embankment construction, and for embankment segments too narrow to accommodate equipment. Compaction with a plate compactor shall be made by a minimum of three full coverages; each lift shall not exceed 6 inches in depth.

4-61 SUBGRADE COMPACTION

Purchaser shall compact constructed and reconstructed subgrades deeper than 3 feet at the road shoulder by routing equipment over the entire width. Purchaser shall obtain written approval from the Contract Administrator for subgrade compaction before rock application.

4-63 EXISTING SURFACE COMPACTION

Purchaser shall compact maintained road surfaces by routing equipment over the entire width.

SECTION 5 – DRAINAGE

5-1 REMOVAL OF SHOULDER BERMS

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

5-5 CULVERTS

Purchaser shall install culverts as part of this contract. Culverts must be installed concurrently with subgrade work and must be installed before subgrade compaction and rock application. Culvert locations and the minimum requirements for culvert length and diameter are designated on the MATERIALS LIST. Culvert, downspout, and flume lengths may be adjusted to fit as-built conditions and may not terminate directly on unprotected soil. Culverts may be new or used material and must meet the specifications in Clauses 10-15 through 10-24. Culvert placement shall precede embankment construction.

5-6 CULVERT TYPE

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

5-7 USED CULVERT MATERIAL

Purchaser shall obtain approval from the Contract Administrator for the quality of the used culverts before installation.

5-12 UNUSED MATERIALS STATE PROPERTY

On required roads, any materials listed on the MATERIALS LIST and materials listed in Clause 5-13 CONTINGENCY CULVERTS that are not installed will become the property of the state. Purchaser shall stockpile materials in the Coyote Pit at station 5+50 off the Coyote Pit road.

5-13 CONTINGENCY CULVERTS

The following culverts will be supplied by the Purchaser and are available for installation as directed by the Contract Administrator.

<u>Road</u>	<u>Size</u>
On any portion of road used for timber or rock haul.	3 - 18"x 30' CMPs Staged in Coyote Pit at station 5+50 of Coyote Pit road.

5-15 CULVERT INSTALLATION

Culvert installation must be in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL and the National Corrugated Metal Pipe Association's "Installation Manual for Corrugated Steel Drainage Structures". Culverts must be installed in a manner consistent with the manufacturer's recommendations. Precautions will be taken to ensure no sediment is delivered to live water.

5-17 CROSS DRAIN SKEW AND SLOPE

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

5-18 CULVERT DEPTH OF COVER

All culverts must be installed with a depth of cover of not less than 1 foot of compacted subgrade over the top of the culvert at the shallowest point. Stream crossing culverts must be installed with a depth of cover recommended by the culvert manufacturer for the type and size of the pipe.

5-25 CATCH BASINS

Purchaser 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 with backslopes consistent with Clause 4-5 CUT SLOPE RATIO.

5-26 HEADWALLS FOR CROSS DRAIN CULVERTS

Purchaser shall construct headwalls in accordance with the CULVERT AND DRAINAGE SPECIFICATION DETAIL at all cross drain culverts. Rock used for headwalls shall meet the specifications for Light Loose Rip Rap. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets. Minimum specifications require that rock be placed at a width of one culvert diameter on each side of the culvert opening, and to a height of one culvert diameter above the top of the culvert. Rock may not restrict the flow of water into culvert inlets or catch basins. Placement shall be by zero-drop-height method only. No placement by end dumping or dropping of rock is allowed.

5-27 ARMORING FOR CULVERTS

Purchaser shall place riprap in conjunction with construction of the embankment. Rock must be placed on shoulders, slopes, and around culvert inlets and outlets as designated on the MATERIALS LIST or as directed by the Contract Administrator. Rock shall not restrict the flow of water into culvert inlets or catch basins. Placement must be by zero-drop-height method only. No placement by end dumping or dropping of rock is allowed.

5-30 DRIVABLE WATERBAR CONSTRUCTION

Purchaser shall construct and reconstruct drivable waterbars in accordance with the DRIVABLE WATERBAR DETAIL as needed and as designated by Contract Administrator .

Drivable waterbars must be installed concurrently with construction of the subgrade and must be maintained in an operable condition.

5-31 ROLLING DIP CONSTRUCTION

Purchaser shall construct and reconstruct rolling dips in accordance with the STANDARD 30° ROLLING DIP – D5 as needed or as designated by Contract Administrator. Rolling dips must be installed concurrently with construction of the subgrade and must be maintained in an operable condition. Minimum frequency of rolling dips shall be at a maximum spacing of 400 feet horizontal or one for every 10 feet of vertical change unless waived by Contract Administrator.

5-33 NATIVE SURFACE ROADS

If overwintered, native surface roads must be waterbarred by November 15. Purchaser shall construct waterbars according to the attached NON-DRIVABLE WATERBAR DETAIL at a maximum spacing that will produce a vertical distance of no more than 10 feet between waterbars or between natural drainage paths, and with a maximum spacing of 300 feet.

SECTION 6 – ROCK AND SURFACING

6-1 ROCK SOURCE

Purchaser shall obtain written approval from the Contract Administrator for the use of material from any alternate source for rock used in accordance with the quantities on the TYPICAL SECTION SHEET. Provisions for the purchase and use are outlined below. Contractor shall notify the Contract Administrator a minimum of 5 calendar days before starting any operations in the listed locations.

All rock source(s) must be a USFS weed free certified source before any work in the pit or rock removal. A Certification of Inspection from the USFS is required. USFS contact: Sonja Weinmann, 509-738-7766, Kettle Falls, WA 99141 sweinmann@fs.fed.us

Rock used in accordance with the quantities on the TYPICAL SECTION SHEET may be obtained from the following source(s) at no charge to the Purchaser.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
Coyote Pit	Station 5+50 of the Coyote Pit road	3/4-inch minus gravel
Bisbee Pit	MP 7.1 of Bisbee Mtn. Rd. (T36N, R37E, S8)	3-inch minus ballast rock Rip Rap
Matson Creek Pit	MP 6.1 of Matsen Creek Rd. (T37N, R36E, S1 and S2)	3-inch minus ballast rock Rip Rap

6-3 ROCK SOURCE, EXISTING STOCKPILE

Rock used in accordance with the quantities on the TYPICAL SECTION SHEET may be obtained from the following existing stockpile(s) on federal land at no charge to the Purchaser. Purchaser shall not remove more than 1500 cubic yards. Purchaser shall not remove additional yardage without prior written approval from the Contract Administrator.

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>	<u>Quantity</u>
Coyote Pit	Station 5+50 of the Coyote Pit road	3/4-inch minus gravel	Existing 6000 cubic yard stockpile

6-5 ROCK FROM COMMERCIAL SOURCE

Rock used in accordance with the quantities on the TYPICAL SECTION SHEET shall be obtained from the listed commercial source at the Purchaser's expense. Any alternative rock sources other than those listed above must be USFS weed free certified and are subject to written approval by the Contract Administrator before their use. The following rock source(s) are approved and meet USFS weed free certification:

<u>Source</u>	<u>Location</u>	<u>Rock Type</u>
Interstate Concrete & Asphalt	485 Spanish Prairie Rd, Colville, WA 99114 Phone: (509)-684-6257	3-inch minus ballast rock

6-23 ROCK GRADATION TYPES

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

6-34 3-INCH MINUS BALLAST ROCK

Ballast rock must be 100% equal to, or smaller than, 3 inches in at least one dimension.

Rock may contain no more than 5 percent organic debris, dirt, and trash. All percentages are by weight.

6-50 LIGHT LOOSE RIP RAP

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

<u>Quantity</u>	<u>Approximate Size Range</u>
20% to 90%	500 lbs. to 1 ton (18" - 28")

15% to 80%
10% to 20%

50 lbs. to 500 lbs. (8" - 18")
3 inch to 50 lbs. (3" - 8")

6-55 ROCK APPLICATION MEASURED BY COMPACTED DEPTH

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

6-70 APPROVAL BEFORE ROCK APPLICATION

Purchaser shall obtain written approval from the Contract Administrator for approved completion of subgrade and drainage installations before rock application.

6-71 ROCK APPLICATION

Purchaser shall apply rock in accordance with the specifications and quantities shown on the TYPICAL SECTION SHEET. 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 by routing equipment over the entire width.

6-73 ROCK FOR WIDENED PORTIONS

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

6-76 DRY WEATHER ROCK COMPACTION

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

6-80 WATERING FOR DUST ABATEMENT

Purchaser shall use water for dust abatement as directed by the Contract Administrator.

SECTION 7 – STRUCTURES

7-57 CULVERT SHAPE CONTROL

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

SECTION 8 – EROSION CONTROL

8-1 SEDIMENT CONTROL STRUCTURES

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

8-16 REVEGETATION SUPPLY

The Purchaser shall provide the 1,500 pounds of weed free wheatgrass seed to a location designated by the Contract Administrator.

SECTION 9 – POST-HAUL ROAD WORK

9-1 EARTHEN BARRICADES

Purchaser shall construct barricades in accordance with the SPOILS BERM DETAIL.

9-3 CULVERT MATERIAL removed FROM FEDERAL LAND

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

9-5 POST-HAUL MAINTENANCE

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

9-10 LANDING DRAINAGE

Purchaser shall provide for drainage of the landing surface.

9-11 LANDING EMBANKMENT

Purchaser shall slope landing embankments to the original construction specifications.

9-20 ROAD DECOMMISSIONING

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

<u>Road</u>	<u>Stations</u>
USFS 2000110	41+52 to 131+50
USFS 2000118	0+00 to 31+08
USFS 2000280	0+00 to 52+53

9-21 ROAD ABANDONMENT

If constructed or reconstructed to specifications, Purchaser shall abandon the following required and optional roads before the termination of this contract.

<u>Road</u>	<u>Stations</u>
Temp 1	0+00 to 23+57
Temp 2	0+00 to 18+74
Temp 2.5	0+00 to 6+00
Temp 3	0+00 to 10+76
Temp 4	0+00 to 15+61
Temp 5	0+00 to 16+13
Temp 6	0+00 to 32+04
Temp 7	0+00 to 16+79
Temp 8	0+00 25+90
Temp 9	0+00 to 5+55
Temp 10	0+00 to 7+99

9-22 ABANDONMENT

- Remove all ditch relief culverts. The resulting slopes must be 1:1 or flatter. Place and compact the removed fill material in a location that will not erode into any streams or wetlands.
- Remove all culverts in natural drainages. The resulting slopes must be 1.5:1 or flatter. Strive to match the existing native stream bank gradient. The natural streambed width must be re-established. Place and compact the removed fill material in a location that will not erode into any streams or wetlands.
- Transport all removed culverts off site. All removed culverts are the property of the Purchaser.
- Rip the road surface to a minimum depth of 10 inches or as directed by the Contract Administrator.
- Re-contour road surface by lifting topsoil or organic debris with excavator or backhoe onto the decompacted road bed until there is at least 50 percent organic material cover.
- Scatter woody debris onto re-contoured road surfaces.
- Block the road by constructing an aggressive barrier of dense interlocked large woody debris (logs, stumps, root wads, etc.) so that four wheel highway vehicles cannot pass the point of abandonment. Typical barrier dimensions are 4 feet high by 20 feet deep, spanning the entire road prism from top of cutslope to toe of fillslope. Long term effectiveness is the primary objective. If necessary construct a vehicular turn-around near the point of abandonment.

9-23 DECOMMISSIONING

- Construct non-drivable waterbars at natural drainage points and at a spacing that will produce a vertical drop of no more than 10 feet between waterbars and with a maximum horizontal spacing of 400 feet.
- 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.
- Inslope or outslope the road as appropriate.
- Pull back unstable fill that has potential of failing and entering any waters or wetlands. Place and compact removed material in a stable location.
- Remove berms except as designed.
- Construct barricade at beginning of road in accordance to 9-1 EARTHEN BARRICADES.
- Block the road by constructing an aggressive barrier of dense interlocked large woody debris (logs, stumps, root wads, etc.) so that four wheel highway vehicles cannot pass the point of abandonment. Typical barrier dimensions are 4 feet high by 20 feet deep, spanning the entire road prism from top of cutslope to toe of fillslope. Long term effectiveness is the primary objective. If necessary construct a vehicular turn-around near the point of abandonment.

SECTION 10 MATERIALS

10-15 CORRUGATED STEEL CULVERT

Metallic coated steel culverts must meet AASHTO M-36 (ASTM A-760) specifications. Culverts must be galvanized (zinc coated meeting AASHTO M-218).

10-21 METAL BAND

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

10-24 GAUGE AND CORRUGATION

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

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

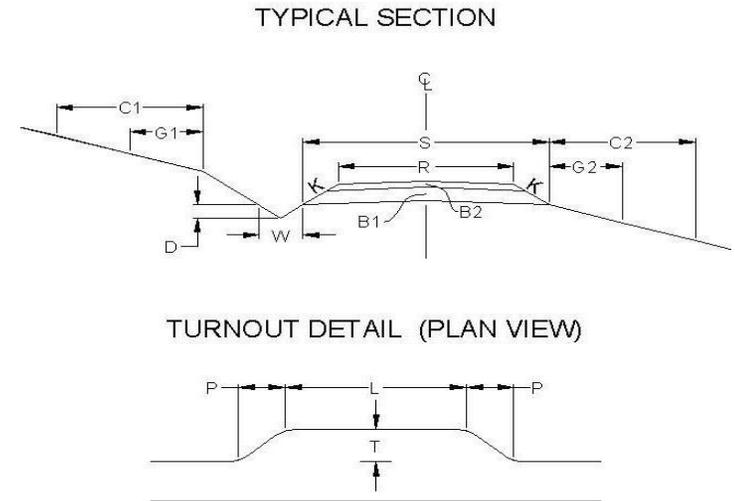
SECTION 11 SPECIAL NOTES

11-1 FILL FAILURE REPAIR

To reconstruct the USFS 2000280, two fill failures will need to be repaired. Prescriptions for repair are outlined below. If an alternative prescription is chosen to repair fill failures, the Contract Administrator shall approve the prescription before work commences.

<u>Road</u>	<u>Stations</u>	<u>Comments</u>
USFS 2000280	1+54 to 2+54	Excavate cut slopes as needed to provide sufficient width for road surface. If any fill is used as part of road prism to get sufficient width, the fill shall be keyed into slope below to avoid sliver fill. A sliver fill is a horizontally narrow fill that is too narrow and too steep to compact. Fill must be compacted as outlined in Clause 4-60, FILL COMPACTION. Any excavated material not used in reconstruction of road prism may be used as fill for fill failure at station 3+70 to 4+35. Smooth and blend any exposed edges of road from failure that is outside the reconstructed road prism. Dimension of road prism shall match those shown on TYPICAL SECTION SHEET.
USFS 2000280	3+70 to 4+70	Use combination of excavation and fill to provide sufficient width for road surface. Excavated material not used for fill failure repair at station 1+54 to 2+54, may be used as fill. If any fill is used as part of road prism to get sufficient width, the fill shall be keyed into slope below to avoid a sliver fill. A sliver fill is a horizontally narrow fill that is too narrow and too steep to compact. Fill must be compacted as outlined in Clause 4-60, FILL COMPACTION. Smooth and blend any exposed edges of road from failure outside of reconstructed road prism. Dimension of road prism shall match those shown on TYPICAL SECTION SHEET.

ROAD #		USFS 2000085	USFS 2000110	USFS 2000110	USFS 2000118
REQUIRED / OPTIONAL		REQUIRED	REQUIRED	REQUIRED	REQUIRED
CONSTRUCT / RECONSTRUCT/PRE-HAUL		PRE-HAUL	PRE-HAUL	RECONSTRUCT	RECONSTRUCT
TOLERANCE CLASS (A/B/C)		C	C	C	C
STATION / MP TO		149+25	0+00	41+52	0+00
STATION / MP		365+63	41+52	131+50	31+08
ROAD WIDTH	R	12	12	12	10
INSLOPE/OUTSLOPE/CROWN ¹		Subgrade shape varies	Subgrade shape varies	Subgrade shape varies; Intermittent ditch	Subgrade shape varies
DITCH WIDTH	W	3	3	3	3
DITCH DEPTH	D	1	1	1	1
TURNOUT LENGTH	L	25	25	25	25
TURNOUT WIDTH	T	10	10	10	10
TURNOUT TAPER	P	25	25	25	25
GRUBBING	G1	3	3	3	3
	G2	3	3	3	3
CLEARING	C1	5	5	5	5
	C2	5	5	5	5
ROCK FILLSLOPE	K:1	1 ½	1 ½	1 ½	1 ½
❖ BALLAST DEPTH	B1	-	-	6	-
CUBIC YARDS / STATION		-	-	34	-
➤ TOTAL CY BALLAST		-	-	70 ^B	-
❖ SURFACING DEPTH	B2	-	-	4	-
CUBIC YARDS / STATION		-	-	21	-
➤ TOTAL CY SURFACING		600	40	100 ^A	-
➤ TOTAL CUBIC YARDS		600 ^A	40 ^A	150	-
SUBGRADE WIDTH	S	N/A	N/A	13.5	12
BRUSHCUT (Y/N)		Y	Y	N/A	N/A
BLADE, SHAPE, & DITCH (Y/N)		Y	Y	Y	Y



SYMBOL NOTES

- ❖ Specified Rock Depth is FINISHED COMPACTED DEPTH in inches.
 - Specified Rock Quantity is LOOSE MEASURE (Truck Cubic Yards) needed to accomplish specified FINISHED COMPACTED DEPTH. Rock quantities include volume for turnouts, curve widening and landings.
1. Road shape and specific ditching locations outlined in Clause 0-5 RECONSTRUCTION under specified road number.
 - A. 3/4-inch minus gravel to be used for spot application and rolling dips as needed and as designated by Contract Administrator. Gravel may be swapped to other roads if needed.
 - B. 3-inch minus ballast rock for spot rock application 50 feet either side of stream crossings as outlined in Clause 0-5 RECONSTRUCTION under specified road number.

Rock Totals Summary

Type	Quantity (Cubic Yards)
3-inch minus ballast rock (Ballast)	70
3/4-inch minus gravel (Surfacing)	1140
Rip Rap	36

ROAD #		USFS 2000124	USFS 2000280	COYOTE PIT	TEMP 1	TEMP 1	TEMP 2	TEMP 2.5	TEMP 3
REQUIRED / OPTIONAL		REQUIRED	REQUIRED	REQUIRED	REQUIRED	REQUIRED	OPTIONAL	REQUIRED	OPTIONAL
CONSTRUCT / RECONSTRUCT		PRE-HAUL	RECONSTRUCT	PRE-HAUL	CONSTRUCT	RECONSTRUCT	RECONSTRUCT	RECONSTRUCT	RECONSTRUCT
TOLERANCE CLASS (A/B/C)		C	C	C	C	C	C	C	C
STATION / MP TO		0+00	0+00	0+00	0+00	3+91	0+00	0+00	0+00
STATION / MP		58+99	52+53	5+50	3+91	23+57	18+74	6+00	10+76
ROAD WIDTH	R	12	12	12	10	10	10	10	10
INSLOPE/OUTSLOPE/CROWN		Subgrade shape varies; Intermittent ditch	Subgrade shape varies	Outslope	Subgrade shape varies	Subgrade shape varies	Subgrade shape varies	Subgrade shape varies; Intermittent ditch	Subgrade shape varies; Intermittent ditch
DITCH WIDTH	W	3	3	3	3	3	3	3	3
DITCH DEPTH	D	1	1	1	1	1	1	1	1
TURNOUT LENGTH	L	25	25	25	25	25	25	25	25
TURNOUT WIDTH	T	10	10	10	10	10	10	10	10
TURNOUT TAPER	P	25	25	25	25	25	25	25	25
GRUBBING	G1	3	3	3	3	3	3	3	3
	G2	3	3	3	3	3	3	3	3
CLEARING	C1	5	5	5	5	5	5	5	5
	C2	5	5	5	5	5	5	5	5
ROCK FILLSLOPE	K:1	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½
❖ BALLAST DEPTH	B1	-	-	-	-	-	-	-	-
CUBIC YARDS / STATION		-	-	-	-	-	-	-	-
➤ TOTAL CY BALLAST		-	-	-	-	-	-	-	-
❖ SURFACING DEPTH	B2	-	-	-	-	-	-	-	-
CUBIC YARDS / STATION		-	-	-	-	-	-	-	-
➤ TOTAL CY SURFACING		-	100	60	-	-	-	-	-
➤ TOTAL CUBIC YARDS		-	100 ^A	60 ^A	-	-	-	-	-
SUBGRADE WIDTH	S	N/A	12	N/A	12	12	12	12	12
BRUSHCUT (Y/N)		Y	N/A	N	N/A	N/A	N/A	N/A	N/A
BLADE, SHAPE, & DITCH (Y/N)		Y	Y	Y	Y	Y	Y	Y	Y

ROAD #		TEMP 4	TEMP 5	TEMP 6	TEMP 7	TEMP 8	TEMP 9	TEMP 10	
REQUIRED / OPTIONAL		REQUIRED	OPTIONAL	REQUIRED	OPTIONAL	REQUIRED	OPTIONAL	OPTIONAL	
CONSTRUCT / RECONSTRUCT		RECONSTRUCT	RECONSTRUCT	RECONSTRUCT	RECONSTRUCT	RECONSTRUCT	RECONSTRUCT	RECONSTRUCT	
TOLERANCE CLASS (A/B/C)		C	C	C	C	C	C	C	
STATION / MP TO		0+00	0+00	0+00	0+00	0+00	0+00	0+00	
STATION / MP		15+61	16+13	32+04	16+79	25+90	5+55	7+99	
ROAD WIDTH	R	10	10	10	10	10	10	10	
CROWN (INCHES @ C/L)		Subgrade shape varies; Intermittent ditch	Subgrade shape varies	Subgrade shape varies	Subgrade shape varies	Subgrade shape varies; Intermittent ditch	Subgrade shape varies; Intermittent ditch	Subgrade shape varies	
DITCH WIDTH	W	3	3	3	3	3	3	3	
DITCH DEPTH	D	1	1	1	1	1	1	1	
TURNOUT LENGTH	L	25	25	25	25	25	25	25	
TURNOUT WIDTH	T	10	10	10	10	10	10	10	
TURNOUT TAPER	P	25	25	25	25	25	25	25	
GRUBBING	G1	3	3	3	3	3	3	3	
	G2	3	3	3	3	3	3	3	
CLEARING	C1	5	5	5	5	5	5	5	
	C2	5	5	5	5	5	5	5	
ROCK FILLSLOPE	K:1	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	
❖ BALLAST DEPTH	B1	-	-	-	-	-	-	-	
CUBIC YARDS / STATION		-	-	-	-	-	-	-	
➤ TOTAL CY BALLAST		-	-	-	-	-	-	-	
❖ SURFACING DEPTH	B2	4	-	-	-	4	4	-	
CUBIC YARDS / STATION		21	-	-	-	21	21	-	
➤ TOTAL CY SURFACING		50	-	-	-	150	40	-	
➤ TOTAL CUBIC YARDS		50 ^A	-	-	-	150 ^A	40 ^A	-	
SUBGRADE WIDTH	S	13.5	12	12	12	13.512	12	12	
BRUSHCUT (Y/N)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	
BLADE, SHAPE, & DITCH (Y/N)		Y	Y	Y	Y	Y	Y	Y	

CULVERT LIST

LOCATION		CULVERT			DWNST		RIPRAP			FILL TYPE	TOLERANCE	REMARKS		
ROAD #	STATION	DIAMETER	LENGTH	TYPE	LENGTH	TYPE	INLET	OUTLET	TYPE					<u>Note:</u> Galvanized metal culverts shall conform to the following specifications for gage and corrugation as a function of the diameter:
														<u>Diameter</u>
												18" 16 2 2/3" x 1/2"		
												24" – 48" 14 2 2/3" x 1/2"		
												54" – 96" 14 3" x 1"		
USFS 2000110	61+80	-	-	-	-	-	-	-	-	NT	C	Rolling dip. Apply 20 cubic yards of 3/4-minus gravel.		
	70+90	-	-	-	-	-	-	-	-	NT	C	Rolling dip. Apply 20 cubic yards of 3/4-minus gravel.		
	111+02	18	40	GM	-	-	2	3	L	NT	C			
	114+37	24	40	GM	-	-	3	5	L	NT	C	Apply 6" lift of 3-inch minus rock on 50 feet either side of culvert.		
	120+14	24	30	GM	-	-	3	5	L	NT	C	Apply 6" lift of 3-inch minus rock on 50 feet either side of culvert.		
USFS 2000118	0+50	18	40	GM	-	-	2	3	L	NT	C	Ditch lay.		
Temp 3	3+28	18	30	GM	-	-	2	3	L	NT	C			
Temp 4	2+45	18	30	GM	-	-	2	3	L	NT	C			
Temp 8	6+84	-	-	-	-	-	-	-	-	NT	C	Rolling dip. Apply 90 cubic yards of 3/4-inch minus gravel from rolling dip to end of ditching.		
	8+64	-	-	-	-	-	-	-	-	NT	C	Rolling dip. Apply 20 cubic yards of 3/4-inch minus gravel.		
	16+90	-	-	-	-	-	-	-	-	NT	C	Rolling dip. Apply 20 cubic yards of 3/4-minus gravel.		
	20+29	-	-	-	-	-	-	-	-	NT	C	Rolling dip. Apply 20 cubic yards of 3/4-minus gravel.		
Temp 9	1+11	-	-	-	-	-	-	-	-	NT	C	Rolling dip. Apply 20 cubic yards of 3/4-minus gravel.		
Any road x3	-	18	30	GM	-	-	-	-	-	NT	C	Contingency culverts staged in Coyote Pit		

GM – Galvanized Metal PS – Polyethylene Pipe Single Wall PD – Polyethylene Pipe Dual Wall AM – Aluminized Metal C – Concrete XX – PD or GM
H – Heavy Loose Riprap L – Light Loose Riprap SR – Shot Rock NT – Native (Bank Run) QS – Quarry Spalls

FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Cuts and Fills

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

Surface

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

Drainage

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

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.

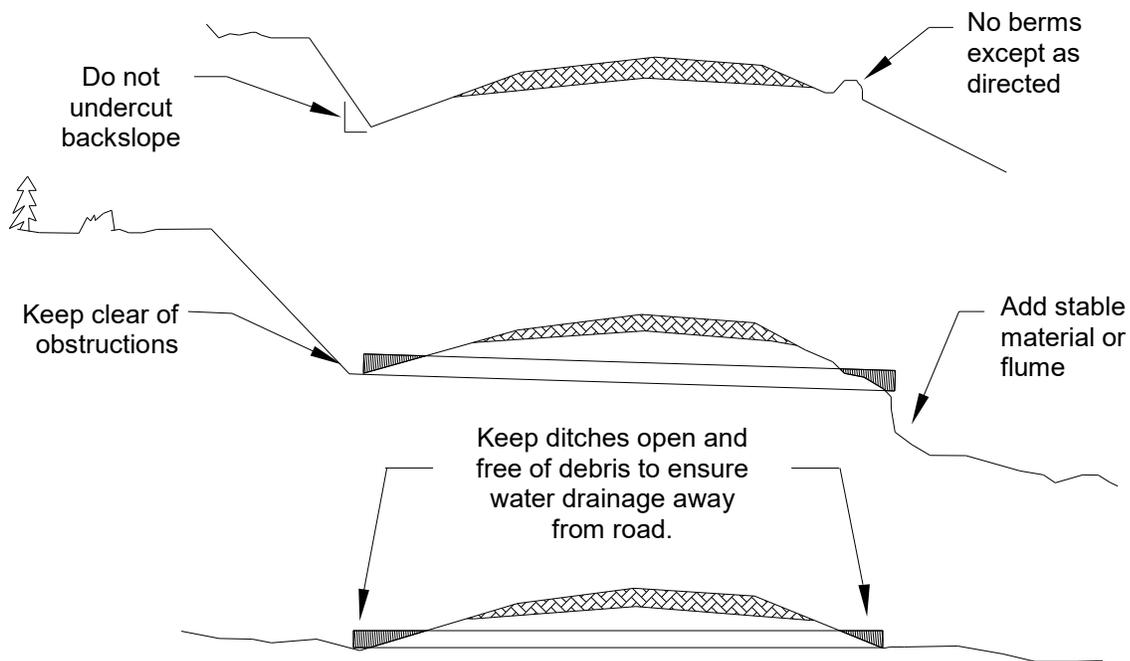
FOREST ACCESS ROAD MAINTENANCE SPECIFICATIONS

Termination of Use or End of Season

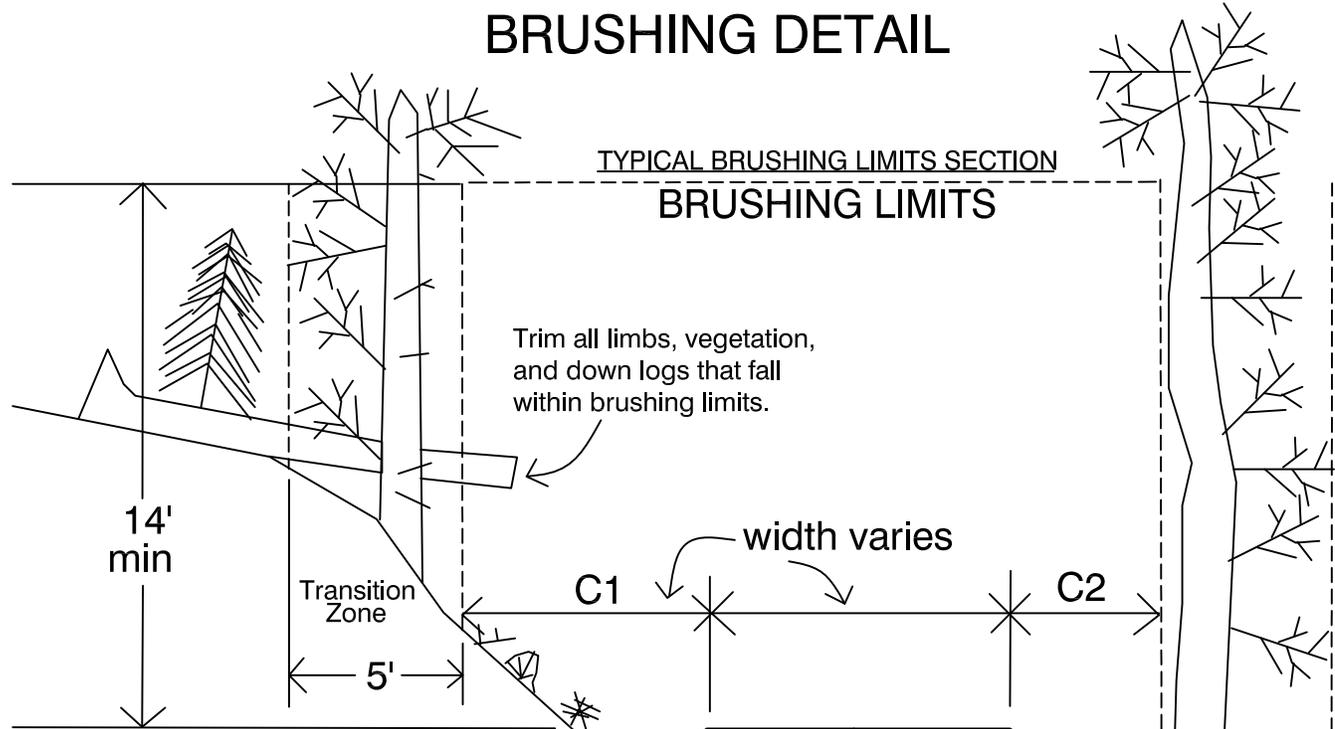
- At the conclusion of logging operations, ensure all conditions of these specifications have been met.

Debris

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



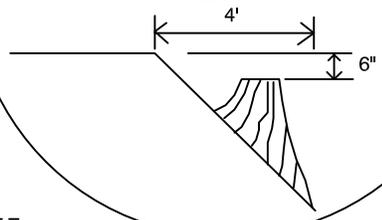
BRUSHING DETAIL



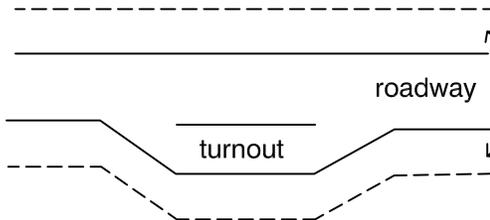
All limbs on standing trees that extend into the brushing limits shall be trimmed within 6" of the stem

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

Trim all stumps and vegetation within 4' of edge of road and in ditch to at least 6" below the elevation of the edge of road.

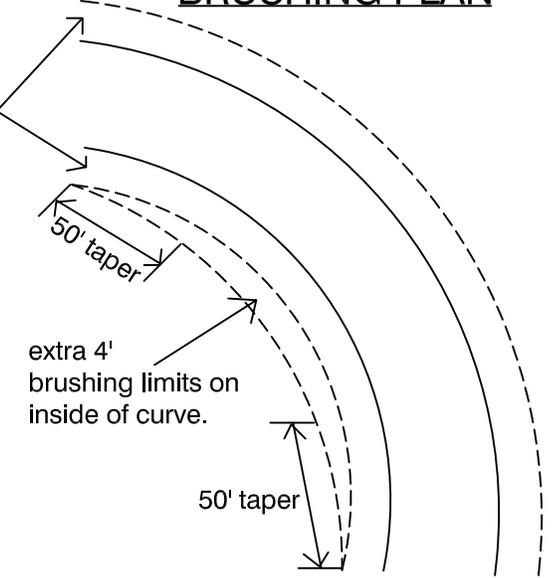


CURVE BRUSHING PLAN



TURNOUT BRUSHING PLAN

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



STANDARD 30° ROLLING DIP - D5

Note: Plan of dip shown is for an outsloped rolling dip. Dips may be either insloped or outsloped. When insloped, dips shall discharge into a culvert, drop inlet, overside drain, or drainage ditch. When outsloped, they shall discharge into an overside drain or on to natural ground. Minimum skew is 30°, and the maximum skew is 45°.

The minimum cross grade from "B" to "E" is 1% greater than the original road grade.

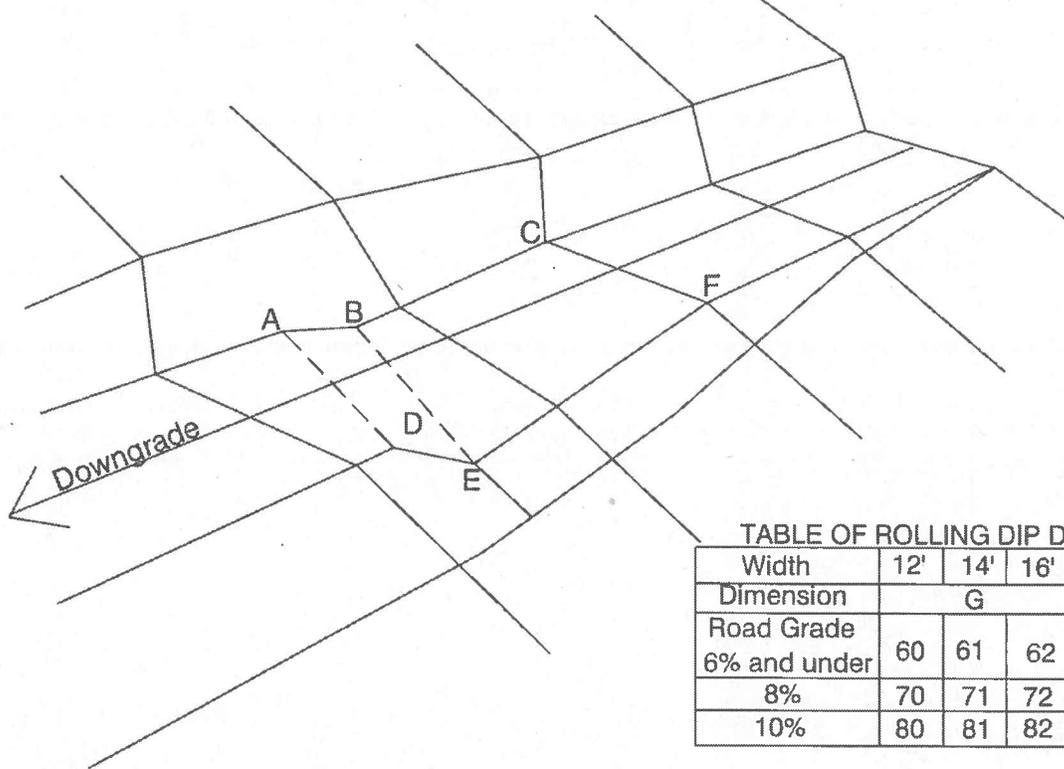
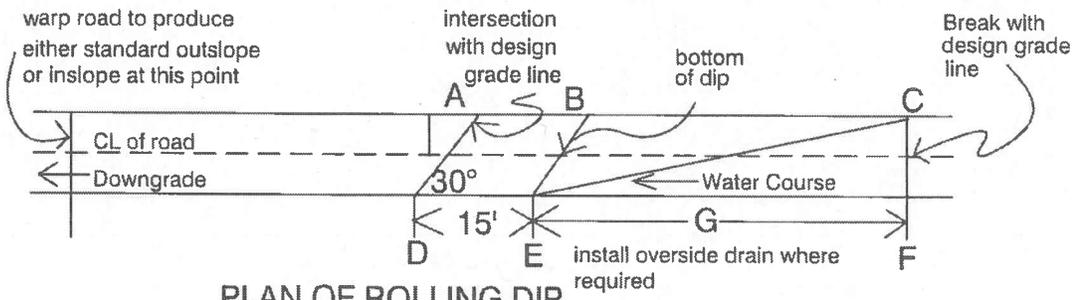
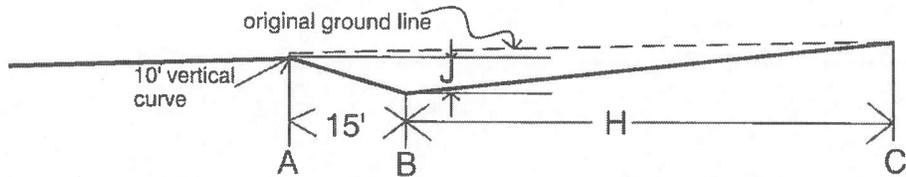


TABLE OF ROLLING DIP DEMENSIONS

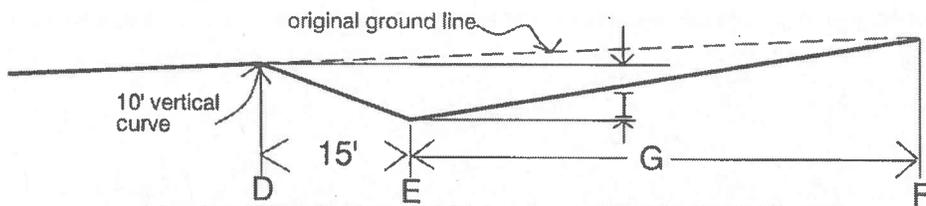
Width	12'	14'	16'	ALL		
Dimension	G			H	I	J
Road Grade 6% and under	60	61	62	52	.8	0.3
8%	70	71	72	62	1.0	0.2
10%	80	81	82	72	1.1	0.1



PLAN OF ROLLING DIP



ROAD PROFILE ALONG A-B-C OF ROLLING DIP

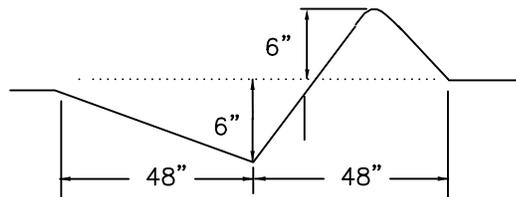
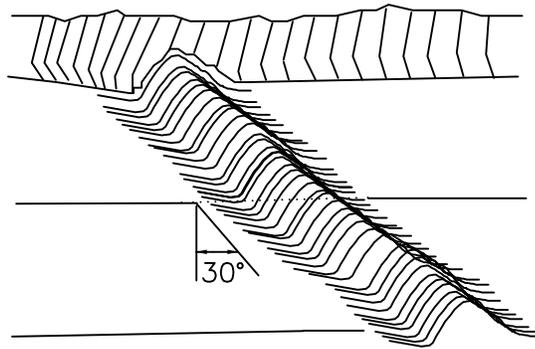


ROAD PROFILE ALONG D-E-F OF ROLLING DIP

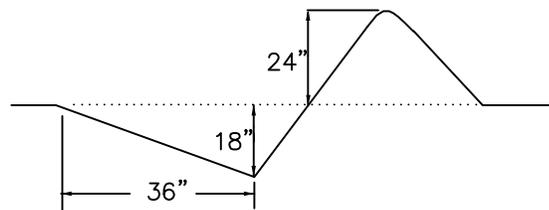
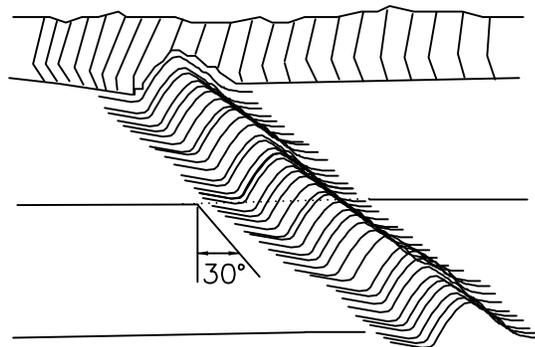
Drawn by: GP

WATERBAR DETAIL—D6

DRIVABLE WATERBAR

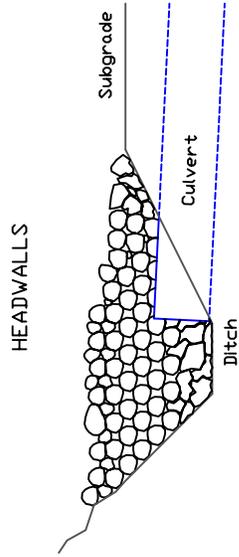
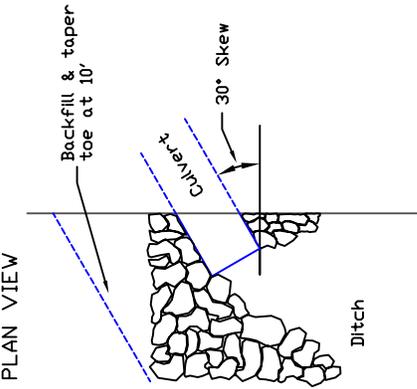


NON DRIVABLE WATERBAR



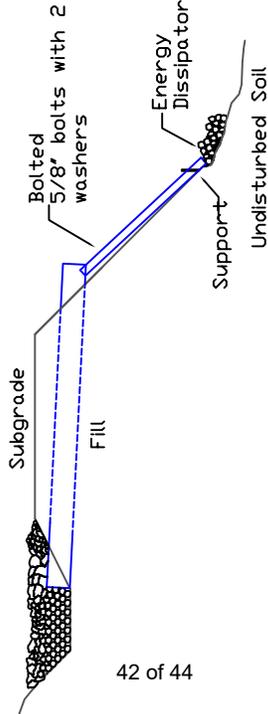
1. Waterbar construction for forest roads Specifications are average and may be adjusted to conditions.
2. Waterbar shall keyed into the bank.
3. The waterbar shall be outsloped for proper drainage.
4. Rock outlet if fill slope is present.

CULVERT AND DRAINAGE SPECIFICATIONS DETAIL - D1



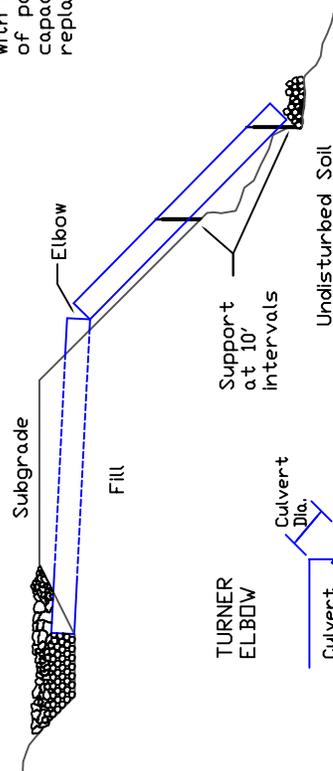
FLUME

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



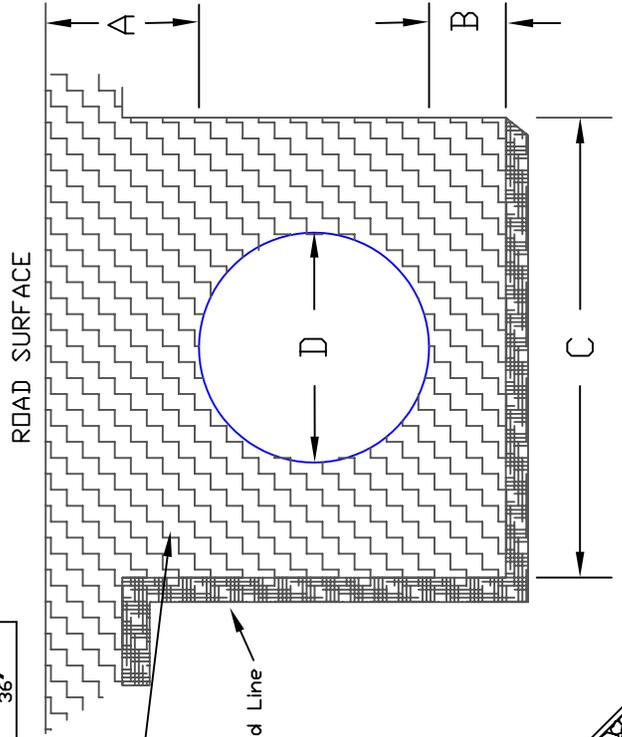
DOWNSPOUT

Use where ground conditions are irregular.



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

CULVERT BACKFILL & BASE PREPARATION (For Culverts Less Than 36')

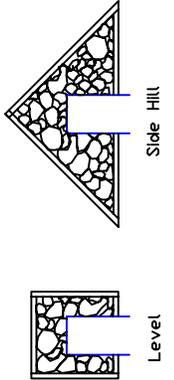


BEDDING MATERIAL:

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

DISSIPATOR SPEC'S

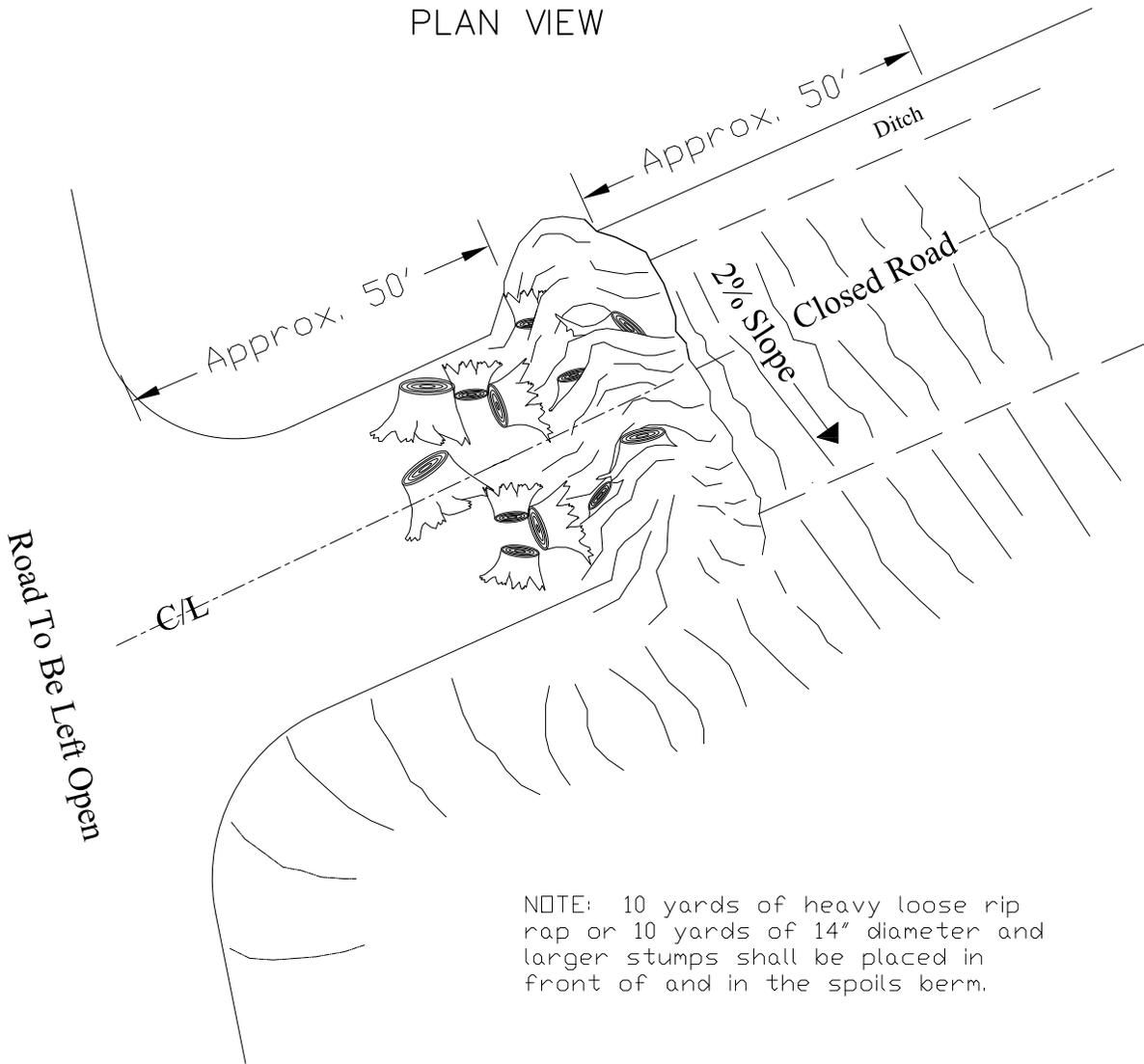
Size in Culvert Diameters
Area 2 X 2
Depth 1
Aggregate 1/3



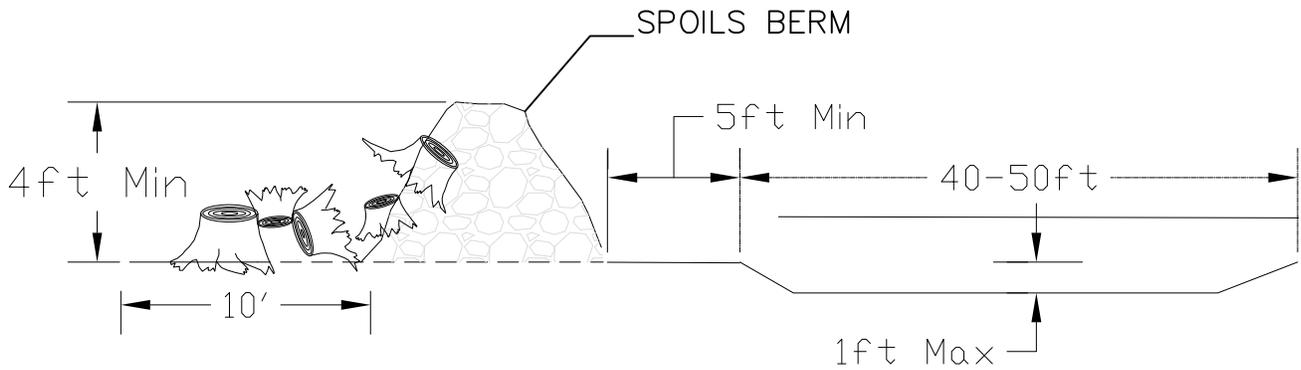
Bolted 5/8" bolts with bridge washers on both sides

SPOILS BERM DETAIL

PLAN VIEW



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



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

**WEST TROUT LAKE TIMBER SALE
SUMMARY - Road Development Costs**

GOOD NEIGHBOR AUTHORITY
COLVILLE NATIONAL FOREST

THREE RIVERS RANGER DISTRICT
FERRY COUNTY WASHINGTON

Compiled by M. Connelly

AGREEMENT #: 36-099675

Date: 12/18/19

ROAD NUMBERS:	Temp 1	System 110, System 118, System 280, Temp 1, Temp 2, Temp 2.5, Temp 3, Temp 4, Temp 5, Temp 6, Temp 7, Temp 8, Temp 9, Temp 10	System 085, System 110, System 124, Coyote Pit road
ROAD STANDARD:	Construction	Reconstruction	Pre-haul
NUMBER OF STATIONS:	3.91	348.76	322.39
CLEARING & GRUBBING:	\$901	\$69,410	\$0
EXCAVATION AND FILL:	\$343	\$34,581	\$0
MISC. MAINTENANCE:	\$0	\$0	\$7,532
ROAD ROCK:	\$0	\$4,532	\$0
ROCK STOCKPILE PROD:	\$0	\$0	\$0
CULVERTS AND DRAINAGE:	\$0	\$7,399	\$3,000
STRUCTURES:	\$0	\$0	\$0
MOBILIZATION:	\$2,358	\$2,358	\$2,358
TOTAL COSTS:	\$1,244	\$118,279.85	\$12,890
COST PER STATION:	\$318	\$339	\$40
ROAD DECOMMISSION & ABANDONMENT COSTS:		\$39,825	
		TOTAL (All Roads) =	\$174,597
		SALE VOLUME MBF (Estimated) =	11,457
		TOTAL \$/MBF =	\$15.24



**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion AD-1048
Lower Tier Covered Transactions**

The following statement is made in accordance with the Privacy Act of 1974 (5 U.S.C. § 552a, as amended). This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, and 2 C.F.R. §§ 180.300, 180.335, Participants' responsibilities. The regulations were amended and published on August 31, 2005, in 70 Fed. Reg. 51865-51880. Copies of the regulations may be obtained by contacting the Department of Agriculture agency offering the proposed covered transaction.

According to the Paperwork Reduction Act of 1995 an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0505-0027. The time required to complete this information collection is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The provisions of appropriate criminal and civil fraud privacy, and other statutes may be applicable to the information provided.

(Read instructions on page two before completing certification.)

- A. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency;
- B. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

ORGANIZATION NAME	PR/AWARD NUMBER OR PROJECT NAME
NAME(S) AND TITLE(S) OF AUTHORIZED REPRESENTATIVE(S)	
SIGNATURE(S)	DATE

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint \(https://www.ascr.usda.gov/filing-program-discrimination-complaint-usda-customer\)](https://www.ascr.usda.gov/filing-program-discrimination-complaint-usda-customer) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442.

Instructions for Certification

- (1) By signing and submitting this form, the prospective lower tier participant is providing the certification set out on page 1 in accordance with these instructions.
- (2) The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension or debarment.
- (3) The prospective lower tier participant shall provide immediate written notice to the person(s) to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (4) The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549, at 2 C.F.R. Parts 180 and 417. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
- (5) The prospective lower tier participant agrees by submitting this form that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- (6) The prospective lower tier participant further agrees by submitting this form that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- (7) A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the System for Award Management (SAM) database.
- (8) Nothing contained in the foregoing shall be construed to require establishment of a system of records to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (9) Except for transactions authorized under paragraph (5) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.