



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

## **INVITATION TO BID: PRE-COMMERCIAL THINNING CONTRACT**

You are invited to bid on the following Pre-Commercial Thinning Contract and are advised to examine the Pre-Commercial Thinning Units prior to bidding. The implied warranty of fitness for a particular purpose, and all other warranties, express or implied, are excluded. For example, the Department of Natural Resources (DNR) does not warrant the acreage for each unit. Any acreage descriptions appearing in each contract are estimates only, solely for administrative and identification purposes.

Contract is attached to this invitation.

<b>Contract #</b>	<b># Acres</b>	<b># Units</b>	<b>Location</b>	<b>Comments</b>
<b>1622</b>	<b>521</b>	<b>9</b>	<b>North of Conconully, WA</b>	<b>See 'Special Remarks' for additional information on scope of work.</b>

### **BID PROCEDURES**

#### **Bid Delivery**

The bidder shall prepare one complete bid form for each contract, available in Section III of the contract. Each bid shall be delivered to the DNR's Region Office in its own envelope marked "Sealed Bid" and addressed to the DNR's Region Manager as specified below.

If multiple bids are submitted by one bidder, those sealed bids can be submitted inside a single envelope.

No facsimiled, e-mailed, or other non-original form of bids will be considered by the DNR.

**Bids will be accepted until 10am on May 6<sup>th</sup> 2016.**

Questions pertaining to this Invitation to Bid can be answered by contacting **Matt Lougy at 509-684-7474**. Oral explanations, interpretation, or instructions given before the award will not be binding.

## **Bid Contents**

Each bid shall include all five of the following items:

- 1) Bid Form (Section III-A of the contract),
- 2) Contractor's Declaration of Industrial Insurance Status (Section III-B of the contract);
- 3) Solicitation to Offer (Section III-C of the contract);
- 4) Photocopy of Washington State Farm Labor Contractors License; and
- 5) Bid deposit.

All documents must be legible and properly completed.

Each sealed bid envelope should be prepared in the following manner:

Addressed to:	Loren Torgerson, Region Manager Washington State Department of Natural Resources Northeast Region 225 S. Silke Rd Colville, WA 99114
Upper left corner:	Bidder's Name Bidder's Address
Lower left corner:	Pre-Commercial Thinning – "Sealed Bid" Invitation to Bid on Contract Number: 1622

## **Bid Form Requirements**

Bids must be submitted on the Bid Form (Section III-A) attached to the contract. The following information must be entered on the Bid Form:

- 1) Bids should include all costs related to the completion of the Work.
- 2) A Unit Bid Price and a Unit Total must be entered for all of the Units in the contract. All Unit Totals for the contract must be summed and entered as the Contract Price. In the event of a difference between the sum of all Unit Totals and the Contract Price, the individual Unit Totals shall prevail.
- 3) All Bid Forms (Section IV-A) must be signed in ink. If the bid is made by a corporation, it shall be signed by the corporation's authorized designee. Incomplete or unsigned bids may be rejected.

## **Offer to Contract**

Your Invitation to Bid is a solicitation to offer to contract with the DNR. All bids shall remain firm for a period of 60 calendar days after the bid opening.

Your bid becomes part of a contract if it is officially awarded by the DNR with a contract award letter.

## **Bid Deposit**

A bid deposit of ONE THOUSAND DOLLARS (\$1,000) is required. This deposit is for the purpose of assuring the DNR that the bidder will accept award of any contract on which the bidder is the lowest responsible bidder.

The bid deposit must be in the form of certified check made payable to the Washington State Department of Natural Resources and include a reference to the contract number. The bid deposit must be delivered to the DNR's Region Office with the delivery of the bid.

The bid deposit of a bidder awarded the contract will be released when the performance/damage deposit has been approved, or the bid deposit may be converted to apply to part or all of the required performance/damage deposits after contract award.

After DNR and the lowest responsible bidder sign the contract, bid deposits will be returned to all unsuccessful bidders. In the event the bidder rejects award of any contract included in this Invitation to Bid, the bidder will forfeit the bid deposit.

### **Bidder Insurance**

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. Any exception shall be reviewed and approved by DNR's risk manager before the contract is accepted. If an insurer is not admitted, all insurance policies and procedures for issuing the insurance policies must comply with Chapter 48.15 RCW and 284-15 WAC.

### **Bid Opening**

At the time and date specified in the bid delivery clause above, all bids will be opened and read aloud. Individuals who wish to request special accommodations for the bid opening (e.g., sign language, interpreters, Braille, etc.) should contact the Northeast office ten (10) working days prior to the scheduled bid opening.

### **Withdrawal of Bid**

A bidder's authorized representative may withdraw a bid in person before the opening of any one of the bids. Bidder's representative(s) will be required to show photo identification and sign on the bid summary sheet before the bid will be released.

### **Rejection of Bids**

To be considered, bids must conform to the above requirements, except that the DNR may waive informalities and minor irregularities in bids received. The DNR reserves the right to reject any or all bids received.

### **Lowest Responsible Bidder**

Award of the contract shall be to the lowest responsible bidder as determined by the DNR. In determining the lowest responsible bidder, in addition to price, the following may be considered (RCW 39.26.160): (a) the bidder's ability, capacity, and skill to perform the contract; (b) the bidder's character, integrity, reputation, judgment, experience, and efficiency; (c) whether the bidder can perform the contract within the time specified; (d) the quality of the bidder's previous contract performance with the DNR or other landowners; and (e) the bidder's previous and current compliance with laws relating to the contract or services. The DNR's determination that a bidder is not qualified may result in rejection of the bid submitted.

Any bidder who has had unsatisfactory performance resulting in the termination of a DNR silviculture contract, will not be considered a responsible bidder unless the bidder provides government or forest industry references demonstrating acceptable performance on at least one contract with a minimum of 800 acres of Pre-Commercial Thinning since the time of the termination. DNR reserves the right to contact references and make its own judgment regarding their reliability. DNR will review situations on a case-by-case basis, and encourages interested bidders to contact DNR with any questions before the specified bid opening.

### **Award Letter**

The DNR makes every effort to mail an award letter with instructions and the contract to the successful bidder within fifteen (15) business days of bid opening.

### **Conditions on Award**

Within ten (10) business days after the bidder receives their award letter, the DNR must receive the performance and damage deposit and insurance certificate at the DNR's Region Office. The Contract Manager specified in the contract may extend this time upon written request.

If the bidder fails to submit the above items within the time specified, the DNR may consider the contract award rejected, in which case the bidder will forfeit the bid deposit.

### **Right to Amend Invitation to Bid**

The DNR reserves the right to amend this Invitation to Bid, in which case DNR will notify all known bidders prior to bid opening.

### **Registration with the Office of Financial Management**

Payments on this Invitation to Bid can only be paid out to contractors who are registered with the Office of Financial Management (OFM) <http://www.ofm.wa.gov/isd/vendors.asp>.

Please follow the link for instructions on how to register, or contact OFM at:

Statewide Payee Desk  
P.O. Box 43113  
Olympia, WA 98504-3113  
Phone: 360-664-7779

### **Special Remarks**

Term of contract: **May 16, 2016 to August 15, 2016**

Work start date **May 16, 2016**

Timing restrictions **No work on State and Federal holidays, In addition, Pre-Commercial Thinning Units are subject to the following timing restrictions: Units 6 and 10 – Operating Season is July 1, 2016 to August 15, 2016**

Unique or special requirements: **There is approximately 156 acres of hand piling slash, 99 acres of pruning, and 10 acres of lop and scatter associated with this contract. (See unit descriptions and clause B-13 of the contract).**

Logistical details: Information pertaining to driving directions, vicinity maps, gate keys, etc. can be obtained by contacting **Jason Emsley 509-675-2702**

Bid deposit amount **\$1,000 for each contract you may be submitting a bid for.**

Hospitals: It is the contractor's responsibility to identify appropriate hospitals for any emergency care required. The following is a courtesy list and should be verified by any potential contractor

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HOSPITAL NAME & ADDRESS	PHONE	LATITUDE	LONGITUDE
North Valley Hospital 203 S Western Ave Tonasket, WA 98855	509-486-2151	N 48° 42.463'	W 119° 26.317'

<b>Mid Valley Hospital 810 Jasmine Street Omak, WA 98841</b>	<b>509-826-1760</b>	<b>N 48° 23.804'</b>	<b>W 119° 32.982'</b>
<b>Okanogan/Douglas Hospital 507 Hospital Way, Brewster, WA 98812</b>	<b>509-689-2517</b>	<b>N 48° 23.609'</b>	<b>W 119° 54.369'</b>



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## Northeast Region

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# PRE-COMMERCIAL THINNING

## Contract Number #1622

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### **Contract Digest:** Pre-Commercial Thinning

- Definitions

#### **SECTION I – CONTRACT CLAUSES**

- A. General Provisions
- B. Specifications for the Activity
- C. Compliance Inspection and Payments

#### **SECTION II – MAPS AND UNIT INFORMATION**

- A. Unit Descriptions
- B. Unit Maps
- C. Vicinity Map

#### **SECTION III – FORMS FOR BIDDER TO COMPLETE**

- A. Bid Form
- B. Contractor's Declaration of Industrial Insurance Status
- C. Solicitation to Offer and Contract Award

## DEFINITIONS

**'Buffer Zone'** means an area designated to be left along roads or other features in which there will be no cutting.

**'Compliance Forester'** means the DNR staff person(s) identified in the Pre-Work Conference who perform the compliance inspections, approve Work, recommend payment to the Contract Manager, and manage the Work Schedule.

**'Conifer'** means a tree that is a Douglas-fir, true fir, pine, western hemlock, spruce, or cedar.

**'Contract Manager'** means the DNR staff person who processes this contract, makes payments, provides and facilitates dispute resolution, provides technical advice to the Compliance Forester, and is the first point of contact for questions relating to this contract or interpretation of Work. The Contract Manager may perform the duties of the Compliance Forester.

**'Contractor'** means the business entity engaged with DNR to complete the terms of this contract.

**'Contractor Selection of Leave Trees'** means crop and leave trees are unmarked and will be selected by the Contractor.

**'Crop Tree'** means the largest undamaged conifer trees with good form and free of disease.

**'DBH'** means Diameter at Breast Height, a point on the tree stem four and one-half feet above ground level.

**'DNR'** means the Washington State Department of Natural Resources, acting through an authorized employee.

**'Designated Contract Representative(s)'** means those individual(s) designated by the Contractor on the Pre-Work form during the Pre-Work Conference.

**'Force Majeure'** means those acts that are unforeseeable and beyond the control of either party to the contract. Acts of Force Majeure include, but are not limited to acts of God, the public enemy, fire, or other casualty.

**'Hardwood'** means any tree or tall shrub with broad leaves. Examples include alder, elderberry, big leaf maple, vine maple, madrone, cottonwood, cherry, and willow.

**'Mechanical Treatment'** means the use of power saws, axes, or other approved tools to remove trees.

**'Mistletoe Thinning'** means the removal of designated conifer trees bearing visible mistletoe plants on branches as well as visible plants or infections on the stem.

**'Pre-Work Conference'** is the meeting between DNR and Contractor after award of the contract and before commencement of Work. Its purpose is to agree upon logistics and the Work Schedule.

**'Region Manager'** means the designated DNR staff person responsible for managing the affairs of DNR in designated large geographic areas. The Region Manager may perform the duties of the Contract Manager.

**'Slash'** means all debris created on the Work area by the pre-commercial thinning operation.

**'Surplus Trees'** means all trees designated for cutting.

**'Thinning'** means the cutting down of trees according to the specifications of this contract.

**'Unit'** is the individual geographical area on which Work will be done. Each Unit is specifically identified by number on the Unit Description (Section II-A), corresponding Unit Map (Section II-B), and Bid Form (Section III-A).

**'Unit Bid Price'** is the rate per acre, written in the Unit Bid Price column of the Bid Form (Section III-A).

**'Work'** means the services the Contractor is required to satisfactorily complete in this contract, according to the requirements of Section I (Contract Clauses), and within the Units described in Section II (Maps and Unit Information).

**'Work Schedule'** means the approved order and timeline for how the requirements of this contract, including Work on individual Units or groups of Units, will be fulfilled by the Contractor.

## **SECTION I-A: GENERAL PROVISIONS**

### **A-01 Contractor's Warranty**

Contractor warrants that it has had an opportunity to fully inspect the contract area and enters this contract based upon its own judgment of the costs of performing the Work, formed after its own examination and inspection. Contractor also warrants to DNR that it enters this contract without any reliance upon estimates, acreage, pre-bid documentation, or any other representation by DNR, including but not limited to:

- A. Conditions bearing upon transportation, disposal, handling, and storage of materials;
- B. Availability of labor, water, electric power, and road;
- C. Uncertainties of weather, river stages, tides, or similar physical conditions at the Unit(s);
- D. The confirmation and conditions of the ground;
- E. Seasonal conditions that may affect the timing and use of materials needed for the Work;  
and
- F. The character of equipment and facilities needed to complete the Work.

Any failure of Contractor to take the actions described in this Clause will not relieve Contractor from responsibility for properly estimating the cost of completing this contract.

### **A-02 Modifications**

Waivers, modifications, or amendments of the terms of this contract must be in writing signed by Contractor and DNR to become effective.

### **A-03 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, except, the Region Manager may modify or cancel this contract pursuant to A-07 without a writing signed by the Contractor.

### **A-05 Scope of DNR Advice**

No advice by any agent, employee, or representative of DNR regarding the method or manner of performing shall constitute a representation or warranty that said method, manner or result thereof will conform to the contract or be suitable for Contractor's purposes under the contract.

Contractor's reliance on any DNR advice regarding the method or manner of performance shall not relieve Contractor of any risk or obligation under the contract. Contractor retains the final responsibility for its operations under this contract and DNR shall not be liable for any injuries resulting from Contractor's reliance on any DNR advice regarding the method or manner of performance.

### **A-06 Performance Security**

Contractor agrees to furnish, within ten (10) business days of receipt of the award letter, security in the amount of ten percent (10%) of the total awarded contract price. The security shall be in the form of certified check or cashiers' check made payable to the Washington State Department of Natural Resources, an irrevocable letter of credit, or a savings account assignment. A letter of

credit must comply with Title 62A RCW, Article 5. This security guarantees performance of this contract and payment of any damages resulting from Contractor's noncompliance with any contract provisions, negligent or imprudent actions, or the law. Performance security must remain in full force over the duration of the contract. In the event DNR needs to utilize the security, Contractor may be required to replace the portion(s) utilized within five (5) business days of receiving written notice from DNR. Contractor shall not operate unless the performance security has been accepted by DNR. If at any time DNR decides that the security document or amount has become unsatisfactory, Contractor agrees to suspend operations and, within 30 days of notification, to replace the security with one acceptable to DNR or to supplement the amount of the existing security.

#### **A-07 Contract Modification or Cancellation**

The Region Manager reserves the right to modify or cancel this contract in part or whole without cause. Contractor shall be paid only for Work performed satisfactorily prior to cancellation of the contract. Any modification or cancellation of this contract by the Region Manager under this section does not require consent of the Contractor or a writing signed by the Contractor.

#### **A-08 Attachments**

The following attached documents are hereby incorporated by reference:

- A. List of nearby Medical Facilities
- B. The Hawksworth Six-class Dwarf Mistletoe Rating System
- C. Pre-work Conference Notes, which will be completed and signed at the Pre-work Conference, then become part of this agreement.

#### **A-09 Compliance with all Laws**

Contractor shall comply with all laws and regulations of the United States, State of Washington, and counties where the Work is located. Contractor will make any payments, contributions, remittances, and reports or statements required under those laws.

#### **A-10 Licenses and Permits**

Contractor shall, without additional expense to DNR, obtain all required licenses and permits necessary for executing the contract.

#### **A-11 Indemnity**

To the fullest extent permitted by law, Contractor shall indemnify, defend and hold harmless DNR and all officials, agents and employees of DNR, from and against all claims arising out of or resulting from the performance of the contract. "Claim" as used in this contract means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorneys' fees, attributable for bodily injury, sickness, disease or death, or injury to or destruction of tangible property including loss of use resulting therefrom. Contractor's obligations to indemnify, defend, and hold harmless includes any claim by Contractor's agents, workers, or representatives. Contractor expressly agrees to indemnify, defend, and hold harmless DNR for any claim arising out of or incident to Contractor's performance or failure to perform the contract. Contractor's obligation to indemnify, defend, and hold harmless DNR shall not be eliminated or reduced by any actual or alleged concurrent negligence of DNR or its agents, agencies, employees and officials. Contractor waives its immunity under Title 51 RCW to the extent it is required to indemnify, defend and hold harmless DNR and its agencies, officials, agents or employees.

#### **A-12 Insurance**

Contractor shall, at all times during the term of this contract 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 the termination of the contract at DNR's option.

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.

DNR shall be provided written notice before cancellation or non-renewal of any insurance referred to therein, in accord with the following specifications:

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

Before starting work, Contractor shall furnish DNR with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements specified and, if requested, copies of policies to DNR. The certificate of insurance shall reference the State of Washington, Department of Natural Resources, and the contract number.

The State of Washington, Department of Natural Resources, its elected and appointed officials, agents and employees shall be named as an additional insured on all general liability, excess, umbrella, and property insurance policies.

All insurance provided in compliance with this contract shall be primary as to any other insurance or self-insurance programs afforded to or maintained by DNR.

Contractor waives all rights against DNR for recovery of damages to the extent these damages are covered by general liability or umbrella insurance maintained pursuant to this contract.

If Contractor is self-insured, evidence of its status as a self-insured entity shall be provided to DNR. If requested by DNR, Contractor must describe its financial condition and the self-insured funding mechanism.

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

The limits of insurance, which may be increased by DNR, as deemed necessary, shall not be less than as follows:

- A. Commercial General Liability (CGL) Insurance:** Contractor shall maintain general liability (CGL) insurance covering claims for bodily injury, personal injury, or property damage arising on the property and/or out of Contractor's operations and, if necessary, commercial umbrella insurance with a limit of not less than \$1,000,000 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 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.

**B. Employer’s Liability (“Stop Gap”) Insurance:** Contractor shall buy employer’s liability insurance, and, if necessary, commercial umbrella liability insurance with limits not less than \$1,000,000 for each accident for bodily injury by accident or \$1,000,000 for each worker for bodily injury or disease.

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

**D. Workers’ Compensation Coverage:** Contractor shall comply with all State of Washington workers’ compensation statutes and regulations. Coverage shall include bodily injury (including death) by accident or disease, which exists out of or in connection with the performance of this contract. Except as prohibited by law, Contractor waives all rights of subrogation against DNR for recovery of damages to the extent they are covered by workers’ compensation, employer’s liability, commercial general liability, or commercial umbrella liability insurance.

If Contractor fails to comply with all state of Washington workers’ compensation statutes and regulations and DNR incurs fines or is required by law to provide benefits to or obtain coverage for such workers, Contractor shall indemnify DNR, consistent with Clause A-11, above.

### **A-13 Safety Compliance**

Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work.

A. During the contract performance, Contractor shall protect the lives and health of workers performing the Work and other persons who may be affected by the Work and prevent damage to property at the Unit or adjacent to it. Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

B. In an emergency affecting the safety or life of its workers or adjoining property, Contractor is

responsible to act to prevent such threatened loss or injury. Within 24 hours of any emergency, Contractor shall notify the Compliance Forester. Contractor shall prepare an incident report and submit it to DNR's Region Manager within five (5) business days following an emergency if directed to do so by the Compliance Forester.

- C. The Compliance Forester reserves the right to shut down the work site when any condition of imminent danger is present. The work site will remain shut down until the danger has been removed by the contractor.

**A-14 Venue**

Disputes arising under this contract shall be brought in the State of Washington and the venue shall be Thurston County.

**A-15 Dispute Resolution**

Before initiating any litigation over the terms of this contract, Contractor commits to the following process:

- A. Any concerns or disputes which Contractor has relating to this contract shall first be brought to the attention of the Compliance Forester.
- B. If the Compliance Forester is unable to resolve the dispute to Contractor's satisfaction, Contractor will notify the Contract Manager in writing of its dispute with specificity. The Contract Manager will review and provide a written suggestion for resolution within ten (10) business days.
- C. If Contractor is not satisfied with the Contract Manager's response, it will notify the Region Manager in writing of its dispute. The Region Manager will review and set a meeting with Contractor within fifteen (15) business days, unless Contractor agrees to a longer period. After the meeting, the Region Manager will provide a written response.

**A-16 Subcontracting**

Contractor shall not enter into any subcontract or assignment of this contract.

**A-17 Nondiscrimination**

During the performance of this contract, Contractor shall comply with all federal and state nondiscrimination laws, regulations, and policies.

In the event of Contractor's noncompliance or refusal to comply with any nondiscrimination law, regulation, or policy this contract may be rescinded, canceled, or terminated in whole or in part, and Contractor may be declared ineligible for further contracts with DNR. Contractor shall, however, be given a reasonable time in which to cure this noncompliance.

**A-18 Pre-Work Conference**

Contractor shall attend a Pre-Work Conference before beginning Work. The Compliance Forester will notify Contractor of the time and place of the Pre-Work Conference.

**A-19 Purpose of the Pre-Work Conference**

The purpose of the Pre-Work Conference is for DNR and Contractor to agree upon and document the following on the Pre-Work Conference Form:

- A. Name(s) and contact information for Contractor and Designated Contract Representative(s), including all personnel authorized to sign Unit completion forms and payment invoices;
- B. Names(s) and contact information for the Contract Manager and Compliance Forester(s);
- C. The Work Schedule for this contract;
- D. Time interval(s) at which Units will be processed for payment; and
- E. Clarification of any unique requirements or conditions of the Work within this contract prior to commencing Work.

**A-20 Work Delay**

Contractor shall promptly notify the Compliance Forester of any actual or anticipated event which is delaying or could delay the Work, including the expected duration of the delay, the anticipated effect of the delay on the schedule, and the action being or to be taken to get back on schedule. The notification does not relieve Contractor of its obligation to complete the Work within the time required by this contract.

**A-21 Non-conformances with Work Schedule**

If Contractor is not in conformance with the Work Schedule for reasons other than acts of Force Majeure, Contractor shall bring its activities into conformance with the schedule or request the Compliance Forester to revise the schedule to reconcile with the actual progress of the Work. The Compliance Forester may require a meeting prior to granting a revision. A revision to the Work Schedule for one Unit shall not change the timing for any other Unit unless expressly authorized. In the event the Contractor stops Work or if the initial start-up is delayed for a period of one (1) week or more, a new Pre-Work Conference may be required.

**A-22 Work Days**

Work shall only proceed on regular Monday through Friday work days. Work on weekends or on designated State holidays requires written permission from the Compliance Forester.

**A-23 Breach of Contract**

Contractor's unsatisfactory performance of contract requirements shall constitute breach of contract. DNR may require reworking of portions of Unit(s), or withhold funds from the performance security.

- A. If Contractor violates any provision of this contract, Compliance Forester, by written notice, may suspend those operations in violation. If the violation is capable of being remedied, Contractor has 30 days after receipt of a suspension notice to remedy the violation. If the violation cannot be remedied or Contractor fails to remedy the violation within 30 days after receipt of a suspension notice, DNR may terminate the rights of Contractor under this contract and collect damages.
- B. If the contract expires pursuant to clause A-33 without Contractor having performed all its duties under this contract, Contractor's right to operate is terminated and Contractor shall not have the right to remedy the breach. This provision shall not relieve Contractor of any payment obligations.
- C. DNR has the right to remedy the breach in the absence of any indicated attempt by Contractor or if Contractor is unable, as determined by DNR, to remedy the breach. Any expense

incurred by DNR shall be charged to Contractor and shall be paid within 30 days of receipt of billing.

**A-24 Default of Contract**

Contractor's breach of contract or failure to comply with the Work Schedule may lead to default of contract. If DNR determines that the contract is in default, it may exercise its right to terminate the contract, with forfeiture of performance security, and/or make a claim for damages.

**A-25 Washington State Forest Fire Protection Requirements**

Contractor and workers shall be familiar with the Washington State Forest Fire Protection Requirements and adhere to them. These requirements are found in: [Revised Code of Washington Chapter 76.04](#)

**A-26 Inspection**

DNR may inspect the Units for adherence to regulations and presence of fire tools. Any inspections by DNR shall not limit Contractor's liability for failure to adhere to applicable regulations.

**A-27 Spark Arresters**

All of Contractor's spark emitting engines will be equipped with spark arresters.

**A-28 Open Fires**

Contractor shall not build any open fires at any time of the year in the contract area without first obtaining written permission from the Compliance Forester.

**A-29 Removal of Merchantable Products**

Contractor is prohibited from removing merchantable or potentially merchantable products from the Units for commercial use. Separate approval by agreement or contract with DNR is required for removal of firewood, poles, posts, and other merchantable or potentially merchantable material.

**A-30 Garbage**

Contractor shall dispose of garbage brought onto DNR lands in garbage disposal areas meeting all state, county, and local requirements. Garbage includes materials used for equipment maintenance, abandoned equipment, containers, and other expended materials.

**A-31 Camping**

Contractor is prohibited from using or authorizing its workers to camp on DNR managed lands outside of designated camp grounds.

**A-32 Abbreviations**

The following tree species abbreviations will be used: AF = Subalpine Fir; AS = Quaking Aspen; BC = Black Cottonwood; DF = Douglas-fir; ES = Engelmann Spruce, GF = Grand Fir; LP = Lodgepole Pine; MA = Big-leaf Maple; MH = Mountain Hemlock; NF = Noble Fir; PP = Ponderosa Pine; RA = Red Alder; RC = Western Red cedar; SF = Pacific Silver Fir; SS = Sitka Spruce; WH = Western Hemlock; WL = Western Larch; WO = Willow; WP = Western White Pine; YC = Alaska Yellow Cedar.

**A-33 Term of Contract** The term of this contract is from **May 16, 2016 to August 15, 2016**. The contract shall not be extended without written permission from the DNR Region Manager.

## SECTION I-B: SPECIFICATIONS FOR THE ACTIVITY

Contractor shall perform pre-commercial thinning work as described below.

### **B-01 Precedence between Sections**

Section I-B covers the general standards that apply over the whole contract. If a change is required on a site by site basis those differences will be outlined on the Unit Description Form (Section II-A). The site specific details found on the Unit Description Form should take precedence over these general guidelines when they exist. If special requirements noted in the Unit Description conflict with requirements in this Section, the special requirements will prevail.

### **B-02 Boundaries**

The boundaries depicted on Unit Map (Section II-B) delineate the thinning area. Contractor is responsible for completing all Work to boundaries. The thinning boundaries will consist of easily identifiable features (including but not limited to roads, streams, or abrupt changes in forest type or age). Flagging will be used for areas where identifiable features are absent. Contractor is responsible for understanding the location of all boundaries. Failure to complete Work to boundaries in any Unit renders Work in that Unit incomplete, and no payment will be made to Contractor for any Work on that Unit. No payment will be provided for Unit(s) with Work that extends beyond Unit boundaries. Work extending beyond Unit boundaries will be considered breach of contract. See Clause A-23, above.

### **B-03 Contractor shall furnish:**

The Contractor shall provide all of the following at its own expense:

- A. A minimum crew size of 10 workers, and a maximum crew size of 14 workers, unless otherwise approved by the Compliance Forester;
- B. Adequate crew supervision, including at least one qualified non-thinning, English-speaking foreperson per crew, unless otherwise allowed by the Compliance Forester. The foreperson must have one season (at least three (3) months) of pre-commercial thinning experience. Documentation of a foreperson's experience shall be provided to the DNR upon request;
- C. All equipment and supplies for mechanical treatment, as well as any specific tool requirements that are detailed in the Unit Description (Section II-A);
- D. All safety equipment;
- E. All costs of operation and maintenance not specifically furnished by the DNR;

### **B-04 DNR shall furnish:**

- A. Compliance Forester(s) to acquaint the Contractor with each unit to be worked and to conduct periodic field inspections.
- B. Boundary marking and access to the unit as reasonably necessary to complete the contract.

### **B-05 Thinning Methods**

Selection of leave trees or crop trees will be made by the Contractor according to the following specifications as well as those found in the Unit Description table (Section II-A). Two contrasting thinning procedures are recognized. The particular method to be used is designated for each unit

on the Unit Description Table. These are Simple Spacing Thinning and Diameter Limit Thinning.

**A. Simple Spacing Thinning**

When thinning on a spacing basis, Contractor will select and leave uncut the largest live conifer trees of good form and vigor that will maintain the average spacing designated in the Unit Description Table. To maintain average spacing, Contractor may not need to cut as many trees immediately adjacent to gaps. However, clumps or patches should not be left unthinned to make up gaps in the stand. If the Compliance Forester determines that narrower spacing is appropriate for portions of a Unit, 8' x 8' spacing will be used. Spacing is the average distance between trees that will result in the correct number of tree left per acre. The number of trees left per acre will be measured by DNR to determine compliance with the Per Acre Zone of Acceptance as described in Clause C-02.

**B. Diameter Limit Thinning**

When thinning on a diameter limit basis, Contractor shall cut trees smaller than the diameter limit, specified in the Unit Description, and will leave uncut the largest live conifer trees of good form and vigor that will maintain the spacing designated in the Unit Description. Contractor will only cut trees larger than the diameter limit when individual trees are clearly diseased, damaged, or deformed. As a general rule, small trees growing into the canopy of the larger trees will be cut. Spacing will be determined by the average number of trees left uncut per acre, including trees both above and below the diameter limit. Contractor shall not damage the stand by cutting trees that will create undesirable gaps in the stand. The number of trees left per acre will be measured by DNR to determine compliance with the Per Acre Zone of Acceptance as described in Clause C-02, except when desirable trees exceeding the diameter limit comprise a majority of the total tree count. In that case, the Per Acre Zone of Acceptance will be increased by the number of trees above the diameter limit exceeding a simple majority.

**B-06 Order of Selection of Leave Trees**

The order of selection of leave or crop trees will be as follows:

- A. Leave dominant and necessary co-dominant trees.
- B. Maintain specified average number of trees per acre.
- C. Maintain specified average spacing.
- D. Select crop tree by species in the following order unless otherwise specified in the Unit Description:
  - 1. ponderosa pine
  - 2. western larch
  - 3. Douglas-Fir
  - 4. Engelmann Spruce
  - 5. Subalpine Fir

**B-07 Trees to Be Cut**

Except for crop or leave trees specified above and in the Unit Description Table, the Contractor shall cut the following:

- A. When thinning is done on a spacing basis, cut all surplus conifer trees more than two (2) feet in height. When thinning is done on a diameter limit basis, cut all surplus conifer trees more than one (1) inch in diameter two (2) feet above ground.
  
- B. All damaged or deformed trees as described below shall be cut, except when their removal will create gaps in the stand with dimensions greater than twenty-five (25) feet in width, unless a whip-felling prescription is in effect.
  - 1. Trees with scars or open wounds on the lower stem involving more than one-half (1/2) of the circumference of the stem.
  - 2. Trees with more than twenty (20) degrees lean or trees with crook or sweep in the lower stem protruding outward from a straight line more than twelve (12) inches.
  - 3. Trees with broken stems or girdling of the stem where only the lower part of the living crown remains.
  - 4. Trees with double tops of forked trees when other more suitable trees are available.
  - 5. Douglas-fir, Subalpine Fir, and Engelmann Spruce with defoliation and dead tops due to the impacts of Western Spruce Budworm.
  
- C. All diseased trees as described below shall always be cut, regardless of gaps created.
  - 1. Trees with thin, ragged crowns with yellowing needles typical of Phellinus (Poria) weirii and Armillaria mellea infection (root rot).
  - 2. Douglas-fir or western larch with a Hawksworth mistletoe rating of 2 or higher. (see Attachment A-08)

**B-08 Cut Trees**

Trees will be cut below the lowest live limb and cut completely free of the stump. Cut trees must not be left "hung up" or leaning against crop trees. Stumps shall not exceed a four (4) inch height unless snow conditions prevent this. In no case shall stumps exceed an eighteen (18) inch height.

**B-09 Progression of Daily Work**

Contractor work shall progress in an orderly fashion to avoid accidentally leaving untreated areas, with workers regularly connecting treated areas. At the end of each work day, no "islands" of untreated areas shall be left within areas that have been treated.

**B-10 Streams**

Trees felled into streams shall be removed and streams shall be left in their original state. If certain streams will be protected and cutting will not be permitted within the specified area, they will be marked on the ground and designated on the Unit Map.

**B-11 Fences and Improvements**

Contractor shall not damage fences and other improvements within or adjacent to the Units during the thinning operation. Any such damage will be repaired at Contractor's expense. Trees adjacent to fences or other improvements shall be felled away. All slash falling on fences and other improvements shall be removed and distributed back into the unit by Contractor. Trees and

slash felled onto lands not owned by the State shall also be removed and distributed back into the unit.

**B-12 Slash in Roads and Buffer Zones**

Slash or debris resulting from the pre-commercial thinning operation, that falls into roads, ditches, road banks, or designated buffer zones, shall be removed by Contractor and redistributed within the thinned Unit(s) at the end of every day, or more often on well-traveled roads.

**B-13 Special Requirements**

**NOTE:** There is approximately 156 acres of hand piling slash, 99 acres of pruning, and 10 acres of lop and scattering of pine.

**A. Mistletoe Control Thinning**

When mistletoe control is an objective of the thinning, the spacing requirements are waived when acceptable crop trees are not available. Acceptable crop trees are to be selected by the following priorities. Mistletoe infected trees not within the following priorities are to be cut regardless of spacing and/or diameter.

Priority 1: Free from visible infection.

Priority 2: Use the following cutting priority mistletoe rating table.

Cut all trees exceeding the rating below:

<u>DBH Classes</u>	<u>Maximum Allowable Rating<sup>1</sup></u>
1" - 2"	0
3" - 4"	1
5" - 6"	2
7" +	3

<sup>1</sup>Significance of the rating is shown on plastic pocket card provided the Contractor when thinning in mistletoe.

**B. Fire Protection Hazard Abatement**

Within all units except Unit 9, a slash piling and pruning zone along certain roads will be required for fire protection purposes (See Unit Maps & Unit Descriptions). Buffer zones will be shown on the unit map, and 150 feet wide as specified in the Unit Description(s). No special markings will be provided on the ground. For all Hazard abatement areas, the Contractor is to measure out the correct width from the tree line at the edge of the road. Measurements are to be taken at right angles to the roadway and measured using horizontal distance. All cut trees, pruning slash and existing slash will be piled within 150ft of the road. Piles will be 6 to 8 feet in diameter and a minimum of 4 feet tall. Each pile will contain at least 10 inches of fine material (<1" diameter stems, branches, and needles) on the bottom and larger fuels no bigger than 3 inches in diameter on top. Piles will be constructed so the material lies flat in dense layers with no branches or stems protruding from the sides. Piles will be located away from leave trees and in openings where

available. Piles will not be placed on old stumps, logs, ditch lines, drainage structures, or active road surfaces. All ponderosa pine and lodge pole pine stems 3 inches and greater in diameter will be cut into 3 foot sections and scattered away from leave trees in openings where available. Leave trees will be pruned to 6 feet in height or 60% live crown ratio, whichever is lower.

## SECTION I-C: UNIT COMPLIANCE INSPECTION AND PAYMENT

### C-01 Determination of Payment

Compliance and payment for work performed will be based on the following:

- A. Work completed to boundaries (see Clause B-02). If work extends beyond unit boundaries, charges may be levied against the Contractor by the DNR for damages suffered, or other parties suffering damages.

### C-02 Determination of Satisfactorily Completed Work

Satisfactorily completed work will be determined using the following criteria:

- A. The Compliance Forester will establish circular plots, generally either 1/20th acre (26.3 foot radius horizontal distance) or 1/50<sup>th</sup> acre (16.7 foot radius horizontal distance), to check contract specifications compliance and as a basis for determining satisfactory quality.
- B. The Compliance Forester will attempt to measure a minimum of two (2) plots for each five (5) acres accomplished.
- C. The Compliance Forester will determine acceptable spacing and number of trees per acre as specified in the Unit Description Table for the unit based on the following Per Acre Zone of Acceptance:

<b>PER ACRE ZONE OF ACCEPTANCE</b>			
<b>Spacing</b>	<b>Number of Crop Trees</b>		
	<b>Minimum</b>	<b>Average</b>	<b>Maximum</b>
11' x 11'	330	360	380
12' x 12'	273	303	320
13' x 13'	228	258	278
14' x 14'	192	222	242
15' x 15'	164	194	214
16' x 16'	140	170	190
17' x 17'	121	151	171
18' x 18'	104	134	154
19' x 19'	100	121	140
20' x 20'	90	109	120

- D. The required number of "crop trees" per acre must fall between the maximum and minimum as listed in the Per Acre Zone of Acceptance and as specified by spacing in the Unit Description Table, or Work on the Unit will be considered unsatisfactory.

Example: In a 12' x 12' spacing basis, every plot should contain 5 to 7 properly selected crop trees except for gaps (Clause C-02).

### C-03 Unsatisfactory Work Compliance

The DNR Representative will inspect the contract work to determine if treatment is satisfactory. The Contractor will be notified of any unsatisfactory unit(s) or parts thereof.

- A. Removal of crop trees or poor selections of crop trees for any reason is defined as stand damage.
- B. If overcutting of acceptable crop trees leaves a maximum treeless space (dimensions shown below) on one-half (1/2) of the compliance plots installed, or if any one such gap exceeds three times the spacing requirement, the work on that unit will not be paid for. More severe damage will result in cancellations of the contract and forfeiture of the performance/damage deposit.

	<b>Maximum Treeless</b>
<b>Spacing (ft.)</b>	<b>Space Permitted (ft.)</b>
11' x 11'	22' x 22'
12' x 12'	24' x 24'
13' x 13'	26' x 26'
14' x 14'	28' x 28'
15' x 15'	30' x 30'

- C. If undercutting occurs according to the contract specification, payment will be withheld on the unsatisfactory unit(s). The Contractor shall return at no additional expense to the DNR, and re-treat unsatisfactory unit(s) or parts thereof. In the event the contract is terminated for unsatisfactory performance, payment will be made as set forth in Clause C-05 below for work satisfactorily completed.
- D. All undercutting work must be corrected to the satisfaction of the DNR Representative before work may be performed in any other portion of the unit or other units.

**C-04 Payment shall be made as follows:**

Payment may be made by the month, unit or by one total payment. Details of payment schedule will be determined in the pre-work conference. The DNR will attempt to comply with the desires and needs of the Contractor but assumes no legal duty or obligations to adhere to the schedule of payments so arranged.

**C-05 Partial payment**

Partial payment may be made upon completion of part of a unit as determined by the DNR. Request for partial payment is to be made by the Contractor utilizing the Contractor's Billing Invoice and Compliance Report provided by the DNR. The Contractor or contract representative identified during pre-work conference (Clause A-19) shall sign the Contractor's Billing Invoice and Compliance Report after completion of each such "sub-unit" being submitted for payment. The DNR Representative will then make payment recommendations for the invoice and forward the Contractor's Billing Invoice and Compliance Report to the DNR's Region office for processing.

- A. Contractor or contract representative and the DNR Representative shall sign the Contractor's Billing Invoice and Compliance Report form at the conclusion of work on each unit. Final payment will not be made to the Contractor unless the Contractor's Billing Invoice and

Compliance Report form are signed by the Contractor or contract representative and the DNR Representative, and "final" payment is designated thereon.

B. If a unit's contract acreage is disputed the Contractor may upon completion of the unit request a verification traverse by the DNR; the request must be in writing and signed by the Contractor. The DNR will pay the Contractor based on acres determined from the verification traverse. If the verification traverse indicates the net acres specified in the Unit Description are correct within plus or minus five percent (5%) the Contractor shall pay the cost of the verification traverse at a rate of ten dollars (\$10.00) per one hundred (100) feet of traversed boundary.

**C. L&I Insurance Premiums**

DNR shall retain ten percent (10%) of all payments due to Contractors who hire workers as security for Labor & Industries industrial insurance premiums owed for its workers. After completion of the contract, and upon determination that Contractor has met all financial obligations for industrial insurance premiums related to the contract, the 10% retainage will be returned to Contractor.

**C-06 Liquidated damages**

Damages will be assessed for any and all delays extending beyond the final contract completion date according to the following schedule based on growth losses resulting from delays. Delays beyond the Contractor's control, resulting from Acts of God, and/or shutdowns or delays imposed by the DNR because of fire conditions, weather, threat of insect damage, conflict with other operations, and labor strikes will not count toward the contract time period, and lieu-time extending beyond the original completion date will be earned for such delays.

**Schedule of Liquidated Damages**

	High Site (S.I. 110+)	Low Site (S.I. 110 and below)
Lost Growth Value per acre Per season*	\$10/Ac/Yr.	\$5/Ac/Yr.
	\$1.43/Ac/Mo	\$.71/Ac/Mo

Note: Ages less than 10 years deduct 33%  
 Ages 10-14 use full value  
 Ages 15-19 years deduct 33%  
 Ages 20 years + deduct 66%

\*Season refers to growing season. Defined as March 15 through October 15, a total of seven (7) months. Proration for parts of the year will be from mid-month to mid-month, 1/7 of the total above per monthly period, based on whole months only. No damages will be assessed for extension or delays outside the growing season.

## SECTION II-A: UNIT DESCRIPTION

**INSTRUCTIONS:** Fill out one row per Unit to be thinned.

Unit #	Admin Unit	Unit Name (FMU)	Treatment Acres	Year Planted	Elevation	Gate	Fire Zone	Key	Est. Current TPA	Crop Tree Priority Order	Thinning Method	Target Spacing	Target TPA	Comments
4	Highlands	MIDDLE MTN PCT U4	54	N/A	3872-4097	No	678 W	N/A	128-800	1-PP, 2-WL, 3-DF, 4-ES, 5-SAF	Whip Felling/ Simple Spacing	12 x 12	270-300	
5	Highlands	MIDDLE MTN PCT U5	86	2016	4357 -4800	No	678 W	N/A	100-1300	1-PP, 2-WL, 3-DF 4-ES 5-SAF	Whip Felling/ Simple Spacing	12 x 12	270-300	
6	Highlands	MIDDLE MTN PCT U6	57	N/A	3852-4174	No	678 W	N/A	0-2800	1-PP, 2-WL, 3-DF, 4-ES, 5-SAF	Whip Felling/ Simple Spacing	12 x 12 14 x 14	190-222	Spacing will increase to 14 x 14 in pine dominated stands.
7	Highlands	MIDDLE MTN PCT U7	77	2016	3818-4202	No	678 W	N/A	310-4800	1-PP, 2-WL, 3-DF, 4-ES, 5-SAF	Simple Spacing	12 x 12	270-300	
8	Highlands	MIDDLE MTN PCT U8	94	2016	3470-3958	No	678 W	N/A	112-1800	1-PP, 2-WL, 3-DF, 4-ES, 5-SAF	Simple Spacing	12 x 12	270-300	
9	Highlands	MIDDLE MTN PCT U9	38	N/A	3000-3958	No	678 W	N/A	106-1800	1-PP, 2- WL, 3-DF, 4-ES, 5-SAF, 6-LPP	Simple Spacing	12 x 12	270-300	
10	Highlands	MIDDLE MTN PCT U10	34	N/A	3800-3960	No	678 W	N/A	259-2800	1-PP, 2- WL, 3-DF, 4-ES, 5-SAF, 6-LPP	Simple Spacing	12 x 12 14 x 14	190-222	Spacing will increase to 14 x 14 in pine dominated stands.
11	Highlands	MIDDLE MTN PCT U11	54	N/A	4040-4480	No	678 W	N/A	2800	1-PP, 2-WL, 3-DF, 4-ES, 5-SAF	Simple Spacing	12 x 12	270-300	
12	Highlands	MIDDLE MTN PCT U12	27	N/A	4240-4560	No	678 W	N/A	2800	1-PP, 2-WL, 3-DF, 4-ES, 5-SAF	Simple Spacing	12 x 12	270-300	

## SECTION II-A, UNIT DESCRIPTION

PRECOMMERCIAL THINNING:

INVITATION TO BID/CONTRACT NUMBER: 1622

Region: **Northeast**

District: **Highlands**

Unit Name: **Middle Mtn PCT**

Item Number:

Unit Number: **4**

Trust: **03**

**Unit # 4:** Section 7 Township 36, Range 25

### SPECIFICATIONS

Contract Period: **May 16, 2016 to August 15, 2016**

Net Acres: **54**

Desired Spacing: **Whip felling trees less than 8" DBH or 12ft x 12ft spacing when applicable.**

Stems/Acre after Thinning: **170-300**

Boundaries: **Unit #4 is marked with blue "Special Management Unit" tags, and pink flagging.** See unit map for boundaries on pages: 29-30

Disposal of Trees: **Pre- existing roads will be left unobstructed using directional falling or slash removal. All material that lands on or across fences shall be removed and any damage caused will be repaired immediately. All materials generated will be slashed 3ft or less above the ground. Any trees felled into adjacent standing trees will be cut out and slashed. Hand piling of slash will also be required in certain areas, see "Special Requirements".**

Special Requirements:

- 1. All trees less than 8" DBH, and growing within 16' of overstory trees will be targeted for removal. Areas with higher stems per acre with minimal overstory will be spaced at 12ft x 12ft, leaving trees free of disease and insect damage. Fell all trees less than 8" DBH with a Hawksworth mistletoe rating of 2 or greater (See attachment A-08). Pruning will be conducted on all leave trees within the 150ft extreme hazard abatement area. (Approximately 18 acres) Contractor will leave 60% of the live crown, or to 6 feet in height, whichever is lower. All limbs pruned from leave trees shall be cut outside the limb collar.**
- 2. Crop Tree Priority: ponderosa pine, western larch, Douglas- fir, free of defect with at least 40% crown ratio meeting the average spacing and whip felling criteria. Minimum live tree cutting height will be 2ft tall. Do not cut trees 8 inches DBH or greater.**
- 3. All snags will be retained unless they are deemed and occupational hazard (do not use them as a consideration for spacing)**
- 4. Maximum stump height will be 4 inches cut flush (horizontal) with no hinging or live limbs acceptable.**
- 5. Extreme hazard abatement will be conducted along both State Lands route E362423A and E362518C (see unit map) all cut trees, pruning slash and existing slash will be piled within 150ft of road. (Approximately 18 acres) Piles will be 6 to 8 feet in diameter and a minimum of 4 feet tall. Each pile will contain at least 10 inches of fine material (<1" diameter stems, branches, and needles) on the bottom and larger fuels no bigger than 3 inches in diameter on top. Piles will be constructed so the material lies flat in dense layers with no branches or stems protruding from the sides. Piles will be located away from leave trees and in openings where available. Piles will not be placed on old stumps, logs, ditch lines, drainage structures, or active road surfaces.**

GENERAL INFORMATION – The following information is provided as a courtesy to bidders. This information is a general estimate and as such may not be accurate.

Elevation: **3,872-4,097 feet** Slope: **8-29%** Aspect: **East** Snow Period: **Dec. 1 to Apr. 15**

Shutdown Zone: **678W**

Existing Species: **ponderosa pine, western larch, Douglas-fir, subalpine fir, Engelmann spruce.**

Approx. Stems/Acre to be cut: **A Forest Health Assessment was completed in 2013 and based on plot data the unit had 0-800 trees per acre with an average of 128 trees per acre of regeneration. This number may vary due to the recent harvest activity. Stems to be removed will vary from 20-100 stems per acre.**

Approx. Average Diameter:

Additional Comments: **This unit was harvested in 2015 using an uneven-aged harvest method leaving an average of 70 TPA (Wildlife Recruitment + Green Recruitment). The unit is mixed species dominated by ponderosa pine, western larch, and Douglas-fir over story. The Douglas-fir has been impacted by Western spruce budworm and are being defoliated causing dead tops and mortality. These trees are to be targeted and removed. Most of the work will be in the Northern portion of the unit which has higher stems per acre. The purpose of this treatment is to reduce competition and increase more growing space for the over story trees which in turn will increase stand resiliency and reduce the risk of extreme wildfire spread.**

## SECTION II-A, UNIT DESCRIPTION

PRECOMMERCIAL THINNING:

INVITATION TO BID/CONTRACT NUMBER: 1622

Region: **Northeast**

District: **Highlands**

Unit Name: **Middle Mtn PCT**

Item Number:

Unit Number: **5**

Trust: **03**

Unit # 5: Section 12 Township 36, Range 24

### SPECIFICATIONS

Contract Period: **May 16, 2016 to August 15, 2016**

Net Acres: **86**

Desired Spacing: **Whip felling trees less than 8" DBH or 12ft x 12ft spacing when applicable.**

Stems/Acre after Thinning: **170-300**

Boundaries: **Unit# 5 is marked with blue "Special Management Unit" tags, pink flagging, and red flagging.** See unit map for boundaries on pages: 31-32

Disposal of Trees: **Pre- existing roads will be left unobstructed using directional falling or slash removal. All material that lands on or across fences shall be removed and any damage caused will be repaired immediately. All materials generated will be slashed to less than 3ft above the ground. Any trees felled into adjacent standing trees will be cut out and slashed. Hand piling of slash will also be required in certain areas, see "Special Requirements".**

Special Requirements:

- 1. All trees less than 8" DBH, and growing within 16' of overstory trees will be targeted for removal. Areas with higher stems per acre with minimal overstory will be spaced at 12ft x 12ft, leaving trees free of disease and insect damage. Fell all trees less than 8" DBH with a Hawksworth mistletoe rating of 2 or greater (See attachment A-08). Pruning will be conducted on all leave trees within the 150ft extreme hazard abatement area. (Approximately 9 acres) Contractor will leave 60% of the live crown, or to 6 feet in height, whichever is lower. All limbs pruned from leave trees shall be cut outside the limb collar. The North portion of this unit has higher stems per acre and will follow the 12ft x 12ft average spacing requirement. The southern portion of this unit is a drier site with less stems per acre and will follow the whip felling criteria. The unit is separated with red flagging.**
- 2. Fell all crop trees less than 8" with a Hawksworth mistletoe rating of 2 or greater (See Hawks worth rating system).**
- 3. Unit will be planted in spring of 2016. Ponderosa pine and western larch seedlings will be planted throughout unit and in openings. Contractor shall use precautions when felling trees near planted stock and will remove and slash tress that fall onto planted stock.**
- 4. Crop tree priority: ponderosa pine, western larch, and Douglas-fir free of defect with at least 40% crown ratio meeting the average spacing criteria.**
- 5. Maximum stump height will be 4 inches cut flush (horizontal) with no hinging or live limbs acceptable. Minimum live tree cutting height will be 2ft tall. Do not cut trees 8" DBH or greater.**
- 6. All snags will be retained unless they are deemed to be an occupational hazard. Do not use them as a consideration for spacing.**
- 7. Extreme hazard abatement will be conducted along State Lands route E362518B. (See unit map) all cut trees, pruning slash and existing slash will be piled within 150ft of road. (Approximately 9 acres) Piles will be 6 to 8 feet in diameter and a minimum of 4 feet tall. Each pile will contain at least 10 inches of fine material (<1" diameter stems, branches, and needles) on the bottom and larger fuels no bigger than 3 inches in diameter on top. Piles will be constructed so the material lies flat in dense layers with no branches or stems protruding from the sides. Piles will be located away from leave trees and in openings where available. Piles will not be placed on old stumps, logs, ditch lines, drainage structures, or active road surfaces. Contractors will take extreme precautions not to place piles on any planted stock.**

GENERAL INFORMATION – The following information is provided as a courtesy to bidders. This information is a general estimate and as such may not be accurate.

Elevation: **4,357-4,800 feet** Slope: **0-78%** Aspect: **North and South** Snow Period: **Dec. 1 to Apr. 15**

Shutdown Zone: **678W**

Existing Species: **ponderosa pine, Douglas-fir, western larch, Engelmann spruce, and subalpine fir**

Approx. Stems/Acre to be cut: **A Forest Health Assessment was completed in 2013 and data showed variability across unit ranging from 0-1300 TPA with an average of 100. Stems to be removed is approximately 20-100 TPA**

Approx. Average Diameter: **4 inches**

Additional Comments **USFS land lies to the west of the unit, take caution not to cut outside of the unit boundaries. The North & Northeast portion of the unit is a wetter site consisting of higher stems per acre of mixed species. Majority of the work will be in the North & Northeast portions of the unit. Due to the harvesting of the unit, it is variable in stems per acre. The purpose of this treatment is to reduce competition and increase more growing space for the over story trees and newly planted stock, which in turn will increase stand resiliency and reduce the risk of extreme wildfire spread.**

## SECTION II-A, UNIT DESCRIPTION

PRECOMMERCIAL THINNING:

INVITATION TO BID/CONTRACT NUMBER: 1622

Region: **Northeast**

District: **Highlands**

Unit Name: **Middle Mtn PCT**

Item Number:

Unit Number: **6**

Trust: **03**

Unit # 6: Section **18** Township **36**, Range **25**

### SPECIFICATIONS

Contract Period: **May 16, 2016 to August 15, 2016**

Net Acres: **57**

Desired Spacing: **Whip felling trees less than 8" DBH or 12ft x 12ft spacing when applicable. (Pine dominated areas will be spaced 14ft x 14ft)**

Stems/Acre after Thinning: **190-222**

Boundaries: **Unit #6 is marked with blue "Special Management Unit" tags, pink flagging.** See unit map for boundaries on pages: 33-34

Disposal of Trees: **Pre- existing roads will be left unobstructed using directional falling or slash removal. All material that lands on or across fences shall be removed and any damage caused will be repaired immediately. All materials generated will be slashed to 3ft or less above the ground. Any trees felled into adjacent standing trees will be cut out and slashed. Hand piling of slash will also be required in entire unit, see "Special Requirements".**

#### Special Requirements:

- 1. All trees less than 8" DBH, and growing within 16' of overstory trees will be targeted for removal. Areas with higher stems per acre with minimal overstory will be spaced at 12ft x 12ft, leaving trees free of disease and insect damage. Pine dominated stands will be spaced to an average of 14ft x 14ft. Fell all trees less than 8" DBH with a Hawthorn mistletoe rating of 2 or greater (See attachment A-08). Cut all Douglas fir unless it is the only viable tree.**
- 2. Crop tree priority: ponderosa pine, western larch, and Douglas-fir free of defect with at least 40% crown ration meeting the average spacing criteria.**
- 3. All snags will be retained unless they are deemed an occupational hazard (do not use them as a consideration for spacing)**
- 4. Maximum stump height will be 4 inches cut flush (horizontal) with no hinging or live limbs acceptable. Minimum live tree cutting height will be 2ft tall. Do not cut trees 8 inches DBH or greater.**
- 5. Extreme hazard abatement will be conducted throughout entire unit (See unit map) all cut trees and existing slash will be piled. (Approximately 57 acres) Piles will be 6 to 8 feet in diameter and a minimum of 4 feet tall. Each pile will contain at least 10 inches of fine material (<1" diameter stems, branches, and needles) on the bottom and larger fuels no bigger than 3 inches in diameter on top. Piles will be constructed so the material lies flat in dense layers with no branches or stems protruding from the sides. Piles will be located away from live trees and in openings where available. Piles will not be placed on old stumps, logs, ditch lines, drainage structures, or active road surfaces.**
- 6. This unit will not be cut until July 1<sup>st</sup> due to the abundance of Ponderosa Pine. This will help reduce the chance of an Ips epidemic.**

GENERAL INFORMATION – The following information is provided as a courtesy to bidders. This information is a general estimate and as such may not be accurate.

Elevation: **3,852-4,174 feet** Slope: **1-47%** Aspect: **South and East** Snow Period: **Dec. 1 to Apr. 15**

Shutdown Zone: **678W**

Existing Species: **ponderosa pine, western larch, Douglas-fir, Engelmann spruce, and subalpine fir.**

Approx. Stems/Acre to be cut: **A Forest Health Assessment was completed in 2013 and based on plot data the stand showed variability of 0-2800 stems per acre with an average of 260. Approximately 140 stems per acre are to be removed**

Approx. Average Diameter: **4 inches**

Additional Comments: **USFS land lies to the west of the unit, take caution not to cut outside of the unit boundaries. Stand was harvested in 2015 using an uneven-aged harvest method leaving an average of 40 trees per acre (Wildlife Recruitment + Green Recruitment). The purpose of this treatment is to reduce competition and increase more growing space for the over story trees which in turn will increase stand resiliency and reduce the risk of extreme wildfire spread**

## SECTION II-A, UNIT DESCRIPTION

PRECOMMERCIAL THINNING:

INVITATION TO BID/CONTRACT NUMBER: 1622

Region: **Northeast**

District: **Highlands**

Unit Name: **Middle Mtn PCT**

Item Number:

Unit Number: **7**

Trust: **03**

Unit # 7: Section **18** Township **36**, Range **25**

### SPECIFICATIONS

Contract Period: **May 16, 2016 to August 15, 2016**

Net Acres: **77**

Desired Spacing: **12ft x 12ft**

Stems/Acre after Thinning: **170-300**

Boundaries: **Unit #7 is marked with blue "Special Management Unit" tags, pink flagging.** See unit map for boundaries on pages: 35-36

Disposal of Trees: **Pre- existing roads will be left unobstructed using directional falling or slash removal. All material that lands on or across fences shall be removed and any damage caused will be repaired immediately. All materials generated will be slashed to less than 3ft above the ground. Any trees felled into adjacent standing trees will be cut out and slashed. Hand piling of slash will also be required in certain areas, see "Special Requirements".**

Special Requirements:

- 1. All trees less than 8" DBH, and growing within 16' of overstory trees will be targeted for removal. Areas with higher stems per acre with minimal overstory will be spaced at 12ft x 12ft, leaving trees free of disease and insect damage. Fell all trees less than 8" DBH with a Hawksworth mistletoe rating of 2 or greater (See attachment A-08). Pruning will be conducted on all leave trees within the 150ft extreme hazard abatement area. (Approximately 10 acres) Contractor will leave 60% of the live crown, or to 6 feet in height, whichever is lower. All limbs pruned from leave trees shall be cut outside the limb collar.**
- 2. Crop tree priority: ponderosa pine, western larch, and Douglas-fir free of defect with at least 40% crown ratio meeting the average spacing criteria.**
- 3. Unit will be planted in spring of 2016. Stock will be planted throughout unit and in openings. Contractor shall use precautions when felling trees near planted stock and will remove and slash tress that fall onto planted stock.**
- 5. Maximum stump height will be 4 inches cut flush (horizontal) with no hinging or live limbs acceptable. Minimum live tree cutting height will be 2ft tall. Do not cut trees 8 inches DBH or greater.**
- 6. All snags will be retained unless they are deemed to be an occupational hazard. Do not use them as a consideration for spacing.**
- 7. Extreme hazard abatement will be conducted along state lands route E362518F (see unit map) all cut trees, pruning slash and existing slash will be piled within 150ft of road. (Approximately 10 acres) Piles will be 6 to 8 feet in diameter and a minimum of 4 feet tall. Each pile will contain at least 10 inches of fine material (<1" diameter stems, branches, and needles) on the bottom and larger fuels no bigger than 3 inches in diameter on top. Piles will be constructed so the material lies flat in dense layers with no branches or stems protruding from the sides. Piles will be located away from leave trees and in openings where available. Piles will not be placed on old stumps, logs, ditch lines, drainage structures, or active road surfaces. **Contractors will take extreme precautions not to place piles on any planted stock.****

GENERAL INFORMATION – The following information is provided as a courtesy to bidders. This information is a general estimate and as such may not be accurate.

Elevation: **3,818-4,202 feet** Slope: **2-61%** Aspect: **East** Snow Period: **Dec. 1 to Apr. 15**

Shutdown Zone: **678W**

Existing Species: **ponderosa pine, western larch, Douglas-fir, subalpine fir and Engelmann spruce**

Approx. Stems/Acre to be cut: **A Forest Health Assessment was completed in 2013 and plot data showed variability of low, moderate to high stems per acre. Data showed approximately 0-4800 stems per acre with an average of 310. Approximately 160 stems per acre are to be removed.**

Approx. Average Diameter: **4 inches**

Additional Comments: **USFS land lies to the west of the unit, take caution not to cut outside of the unit boundaries. Unit was harvested in 2015 using an uneven-aged harvest method leaving 13 TPA of healthy over story trees. Unit will be planted in spring 2016. The top of the unit will have minimal work due to open sparse ground. The purpose of this treatment is to reduce competition and increase more growing space for the over story trees which will increase stand resiliency and reduce the risk of extreme wildfire spread.**

## SECTION II-A, UNIT DESCRIPTION

PRECOMMERCIAL THINNING:

INVITATION TO BID/CONTRACT NUMBER: 1622

Region: **Northeast**

District: **Highlands**

Unit Name: **Middle Mtn PCT**

Item Number:

Unit Number: **8**

Trust: **03**

Unit # 8: Section **17, 18** Township **36**, Range **25**

### SPECIFICATIONS

Contract Period: **May 16, 2016 to August 15, 2016**

Net Acres: **94**

Desired Spacing: **12ft x 12ft**

Stems/Acre after Thinning: **170-300**

Boundaries: **Unit #8 is marked with blue "Special Management Unit" tags, pink flagging.** See unit map for boundaries on pages: 37-38

Disposal of Trees: **Pre- existing roads will be left unobstructed using directional falling or slash removal. All material that lands on or across fences shall be removed and any damage caused will be repaired immediately. All materials generated will be slashed to less than 4ft above the ground. Any trees felled into adjacent standing trees will be cut out and slashed. Hand piling of slash will also be required in certain areas, see "Special Requirements".**

Special Requirements:

- 1. All trees less than 8" DBH, and growing within 16' of overstory trees will be targeted for removal. Areas with higher stems per acre with minimal overstory will be spaced at 12ft x 12ft, leaving trees free of disease and insect damage. Fell all trees less than 8" DBH with a Hawthorn mistletoe rating of 2 or greater (See attachment A-08). Pruning will be conducted on all leave trees within the 150ft extreme hazard abatement area. (Approximately 31 acres) Contractor will leave 60% of the live crown, or to 6 feet in height, whichever is lower. All limbs pruned from leave trees shall be cut outside the limb collar.**
- 2. Crop tree priority: ponderosa pine, western larch, and Douglas-fir free of defect with at least 40% crown ration meeting the average spacing criteria.**
- 3. Unit will be planted in spring of 2016. Stock will be planted throughout unit and in openings. Contractor shall use precautions when felling trees near planted stock and will remove and slash tress that fall onto planted stock.**
- 4. Maximum stump height will be 4 inches cut flush (horizontal) with no hinging or live limbs acceptable. Minimum live tree cutting height will be 2ft tall. Do not cut trees 8" DBH or greater.**
- 5. All snags will be retained unless they are deemed to be an occupational hazard. Unit was impacted by fire and has pockets of dead standing regen and over story trees. They will also be retained unless deemed an occupational hazard. Do not use them as a consideration for spacing.**
- 6. Extreme hazard abatement will be conducted along State Lands route E362507B and E362518E (see unit map) all cut trees, pruning slash and existing slash will be piled within 150ft of road. (Approximately 31 acres) Piles will be 6 to 8 feet in diameter and a minimum of 4 feet tall. Each pile will contain at least 10 inches of fine material (<1" diameter stems, branches, and needles) on the bottom and larger fuels no bigger than 3 inches in diameter on top. Piles will be constructed so the material lies flat in dense layers with no branches or stems protruding from the sides. Piles will be located away from leave trees and in openings where available. Piles will not be placed on old stumps, logs, ditch lines, drainage structures, or active road surfaces. Contractors will take extreme precautions not to place piles on any planted stock.**

GENERAL INFORMATION – The following information is provided as a courtesy to bidders. This information is a general estimate and as such may not be accurate.

Elevation: **3,470 - 3,958 feet** Slope: **1-73%** Aspect: **South** Snow Period: **Dec. 1 to Apr. 15**

Shutdown Zone: **678W**

Existing Species: **ponderosa pine, western larch, Douglas-fir, Engelmann spruce and subalpine fir**

Approx. Stems/Acre to be cut: **A Forest Health Assessment was completed in 2013 and plot data showed variability of low, moderate, and high stems per acre. Plot data showed 0-1800 stems per acre with an average of 112. Due to recent harvest activity and burn severity within the unit the stems per acre may vary. Approximately 250 stems per acre are to be removed**

Approx. Average Diameter: **4 inches**

Additional Comments: **Unit is adjacent to forest service land and needs to take caution not to cut across boundary lines. Unit was harvested in 2015 using an uneven-aged harvest method leaving 13 TPA of healthy over story trees. The purpose of this treatment is to reduce competition and increase more growing space for the over story trees and planted stock which in turn will increase stand resiliency and reduce the risk of extreme wildfire spread.**

## SECTION II-A, UNIT DESCRIPTION

PRECOMMERCIAL THINNING:

INVITATION TO BID/CONTRACT NUMBER: 1622

Region: **Northeast**

District: **Highlands**

Unit Name: **Middle Mtn PCT**

Item Number:

Unit Number: **9**

Trust: **03**

Unit # 9: Section **12** Township **36**, Range **25**

### SPECIFICATIONS

Contract Period: **May 16, 2016 to August 15, 2016**

Net Acres: **38**

Desired Spacing: **12ft x 12ft**

Stems/Acre after Thinning: **170-300**

Boundaries: **Unit #9 is marked with blue "Special Management Unit" tags, pink flagging, and red flagging.** See unit map for boundaries on pages: 39-40

Disposal of Trees: **Pre- existing roads will be left unobstructed using directional falling or slash removal. All material that lands on or across fences shall be removed and any damage caused will be repaired immediately. All materials generated will be slashed to less than 4ft above the ground. Any trees felled into adjacent standing trees will be cut out and slashed.**

Special Requirements:

- 1. All trees less than 8" DBH, and growing within 16' of overstory trees will be targeted for removal. Areas with higher stems per acre with minimal overstory will be spaced at 12ft x 12ft, leaving trees free of disease and insect damage. Fell all trees less than 8" DBH with a Hawksworth mistletoe rating of 2 or greater (See attachment A-08). If an entire contiguous patch is infected, leave the healthiest and least diseased crop trees at a spacing of 16ft X 16ft.**
- 2. Crop tree priority: ponderosa pine, western larch, and Douglas-fir free of defect with at least 40% crown ration meeting the average spacing criteria.**
- 3. Maximum stump height will be 4 inches cut flush (horizontal) with no hinging or live limbs acceptable. Minimum live tree cutting height will be 2ft tall. Do not cut trees 8" DBH or greater.**
- 6. All snags will be retained unless they are deemed to be an occupational hazard. Do not use them as a consideration for spacing.**

GENERAL INFORMATION – The following information is provided as a courtesy to bidders. This information is a general estimate and as such may not be accurate.

Elevation: **3,000 - 3,958 feet** Slope: **0-78%** Aspect: **North** Snow Period: **Dec. 1 to Apr. 15**

Shutdown Zone: **678W**

Existing Species: **ponderosa pine, western larch, Douglas-fir, Engelmann spruce and subalpine fir,**

Approx. Stems/Acre to be cut: **A Forest Health Assessment was completed in 2013 and plot data showed variability of low, moderate, and high stems per acre. Plot data showed 0-1800 stems per acre with an average of 106. Approximately 250 stems per acre are to be removed**

Approx. Average Diameter: **4 inches**

Additional Comments: **Boundary on both sides of roads running through the unit will be flagged with red flagging. The purpose of this treatment is to reduce competition and increase more growing space for the over story trees and which in will increase stand resiliency and reduce the risk of extreme wildfire spread.**

## SECTION II-A, UNIT DESCRIPTION

PRECOMMERCIAL THINNING:

INVITATION TO BID/CONTRACT NUMBER: 1622

Region: **Northeast**

District: **Highlands**

Unit Name: **Middle Mtn PCT**

Item Number:

Unit Number: **10**

Trust: **03**

Unit # 10: Section **18** Township **36**, Range **25**

### SPECIFICATIONS

Contract Period: **May 16, 2016 to August 15, 2016**

Net Acres: **34**

Desired Spacing: **12ft x 12ft**

Stems/Acre after Thinning: **190-222**

Boundaries: **Unit #10 is marked with red flagging.** See unit map for boundaries on pages: 41-42

Disposal of Trees: **Pre- existing roads will be left unobstructed using directional falling or slash removal. All material that lands on or across fences shall be removed and any damage caused will be repaired immediately. All materials generated will be slashed to less than 3ft above the ground. Any trees felled into adjacent standing trees will be cut out and slashed. Any trees felled into streams will be removed immediately and slashed. Hand piling of slash will also be required in certain areas, see "Special Requirements".**

Special Requirements:

- 1. All trees less than 8" DBH, and growing within 16' of overstory trees will be targeted for removal. Areas with higher stems per acre with minimal overstory will be spaced at 12ft x 12ft, leaving trees free of disease and insect damage. Fell all trees less than 8" DBH with a Hawksworth mistletoe rating of 2 or greater (See attachment A-08). Pruning will be conducted on all leave trees within the 150ft extreme hazard abatement area. (Approximately 4 acres) Contractor will leave 60% of the live crown, or to 6 feet in height, whichever is lower. All limbs pruned from leave trees shall be cut outside the limb collar. All ponderosa pine and lodgepole pine stems 3 inches and greater in diameter will be cut into 3 foot sections and scattered away from leave trees in openings where available. (Approximately 10 acres)**
- 2. Crop tree priority: ponderosa pine, western larch, and Douglas-fir free of defect with at least 40% crown ratio meeting the average spacing criteria.**
- 4. Maximum stump height will be 4 inches cut flush (horizontal) with no hinging or live limbs acceptable. Minimum live tree cutting height will be 2ft tall. Do not cut trees 8 inches DBH or greater.**
- 5. All snags will be retained unless they are deemed to be an occupational hazard.**
- 6. Extreme hazard abatement will be conducted along State Lands route E362518F (see unit map) all cut trees, pruning slash and existing slash will be piled within 150ft of road. (Approximately 4 acres) Piles will be 6 to 8 feet in diameter and a minimum of 4 feet tall. Each pile will contain at least 10 inches of fine material (<1" diameter stems, branches, and needles) on the bottom and larger fuels no bigger than 3 inches in diameter on top. Piles will be constructed so the material lies flat in dense layers with no branches or stems protruding from the sides. Piles will be located away from leave trees and in openings where available. Piles will not be placed on old stumps, logs, ditch lines, drainage structures, or active road surfaces.**
- 7. This unit will not be cut until July 1<sup>st</sup> due to the abundance of Ponderosa Pine. This will help reduce the chance of an Ips epidemic.**

GENERAL INFORMATION – The following information is provided as a courtesy to bidders. This information is a general estimate and as such may not be accurate.

Elevation: **3,800 - 3,960 feet** Slope: **1-20%** Aspect: **South** Snow Period: **Dec. 1 to Apr. 15**

Shutdown Zone: **678W**

Existing Species: **ponderosa pine, western larch, Douglas-fir, Engelmann spruce and Lodgepole pine**

Approx. Stems/Acre to be cut: **There is variability throughout the unit of zero, low, moderate, and high stems per acre. There are approximately 0-2800 stems per acre with an average of 259. Approximate removal of 109 stems per acre**

Approx. Average Diameter: **4 inches**

Additional Comments: **USFS land lies to the west of the unit, take caution not to cut outside of the unit boundaries. The purpose of this treatment is to reduce competition and increase more growing space for the over story trees which will increase stand resiliency and reduce the risk of extreme wildfire spread.**

## SECTION II-A, UNIT DESCRIPTION

PRECOMMERCIAL THINNING:

INVITATION TO BID/CONTRACT NUMBER: 1622

Region: **Northeast**

District: **Highlands**

Unit Name: **Middle Mtn PCT**

Item Number:

Unit Number: **11**

Trust: **03**

Unit # 11: Section 7 Township 36 Range 25

### SPECIFICATIONS

Contract Period: **May 16, 2016 to August 15, 2016**

Net Acres: **54**

Desired Spacing: **12ft x 12ft**

Stems/Acre after Thinning: **170-300**

Boundaries: **Unit #11 is marked with red flagging.** See unit map for boundaries on pages: 43-44

Disposal of Trees: **Pre- existing roads will be left unobstructed using directional falling or slash removal. All material that lands on or across fences shall be removed and any damage caused will be repaired immediately. All materials generated will be slashed to less than 4ft above the ground. Any trees felled into adjacent standing trees will be cut out and slashed. Hand piling of slash will also be required in certain areas, see "Special Requirements".**

Special Requirements:

- 1. All trees less than 8" DBH, and growing within 16' of overstory trees will be targeted for removal. Areas with higher stems per acre with minimal overstory will be spaced at 12ft x 12ft, leaving trees free of disease and insect damage. Fell all trees less than 8" DBH with a Hawksworth mistletoe rating of 2 or greater (See attachment A-08). Pruning will be conducted on all leave trees within the 150ft extreme hazard abatement area. (Approximately 14 acres) Contractor will leave 60% of the live crown, or to 6 feet in height, whichever is lower. All limbs pruned from leave trees shall be cut outside the limb collar.**
- 2. Crop tree priority: ponderosa pine, western larch, and Douglas-fir free of defect with at least 40% crown ration meeting the average spacing criteria.**
- 4. Maximum stump height will be 4 inches cut flush (horizontal) with no hinging or live limbs acceptable. Minimum live tree cutting height will be 2ft tall. Do not cut trees 8 inches DBH or greater.**
- 5. All snags will be retained unless they are deemed to be an occupational hazard. Don't use them as a consideration for spacing.**
- 6. Extreme hazard abatement will be conducted along State Lands route E362518B and E362518C (see unit map) all cut trees, pruning slash and existing slash will be piled within 150ft of road. (Approximately 14 acres) Piles will be 6 to 8 feet in diameter and a minimum of 4 feet tall. Each pile will contain at least 10 inches of fine material (<1" diameter stems, branches, and needles) on the bottom and larger fuels no bigger than 3 inches in diameter on top. Piles will be constructed so the material lies flat in dense layers with no branches or stems protruding from the sides. Piles will be located away from leave trees and in openings where available. Piles will not be placed on old stumps, logs, ditch lines, drainage structures, or active road surfaces.**

GENERAL INFORMATION – The following information is provided as a courtesy to bidders. This information is a general estimate and as such may not be accurate.

Elevation: **4,040 – 4,480 feet** Slope: **1-45%** Aspect: **North, Northeast** Snow Period: **Dec. 1 to Apr. 15**

Shutdown Zone: **678W**

Existing Species: **ponderosa pine, western larch, Douglas-fir, Engelmann spruce, and subalpine fir**

Approx. Stems/Acre to be cut: **300**

Approx. Average Diameter: **4 inches**

Additional Comments: **The purpose of this treatment is to reduce competition and increase more growing space for the over story trees which in turn will increase stand resiliency and reduce the risk of extreme wildfire spread.**

## SECTION II-A, UNIT DESCRIPTION

PRECOMMERCIAL THINNING:

INVITATION TO BID/CONTRACT NUMBER: 1622

Region: **Northeast**

District: **Highlands**

Unit Name: **Middle Mtn PCT**

Item Number:

Unit Number: **12**

Trust: **03**

Unit # 12: Section 7 Township 36 Range 25

Section 12 Township 36 Range 24

### SPECIFICATIONS

Contract Period: **May 16, 2016 to August 15, 2016**

Net Acres: **27**

Desired Spacing: **12ft x 12ft**

Stems/Acre after Thinning: **170-300**

Boundaries: **Unit #12 is marked with red flagging.** See unit map for boundaries on pages: 45-46

Disposal of Trees: **Pre- existing roads will be left unobstructed using directional falling or slash removal. All material that lands on or across fences shall be removed and any damage caused will be repaired immediately. All materials generated will be slashed to less than 4ft above the ground. Any trees felled into adjacent standing trees will be cut out and slashed. Hand piling of slash will also be required in certain areas, see "Special Requirements".**

Special Requirements:

- 1. All trees less than 8" DBH, and growing within 16' of overstory trees will be targeted for removal. Areas with higher stems per acre with minimal overstory will be spaced at 12ft x 12ft, leaving trees free of disease and insect damage. Fell all trees less than 8" DBH with a Hawksworth mistletoe rating of 2 or greater (See attachment A-08). Pruning will be conducted on all leave trees within the 150ft extreme hazard abatement area. (Approximately 13 acres) Contractor will leave 60% of the live crown, or to 6 feet in height, whichever is lower. All limbs pruned from leave trees shall be cut outside the limb collar.**
- 2. Crop tree priority: ponderosa pine, western larch, and Douglas-fir free of defect with at least 40% crown ratio meeting the average spacing criteria.**
- 3. Maximum stump height will be 4 inches cut flush (horizontal) with no hinging or live limbs acceptable. Minimum live tree cutting height will be 2ft tall. Do not cut trees 8 inches DBH or greater.**
- 4. All snags will be retained unless they are deemed to be an occupational hazard. Do not use as a consideration for spacing.**
- 5. Extreme hazard abatement will be conducted along State Lands route E362518B, E362507N, and E362518B (see unit map) all cut trees, pruning slash, and existing slash will be piled within 150ft of road. (Approximately 13 acres) Piles will be 6 to 8 feet in diameter and a minimum of 4 feet tall. Each pile will contain at least 10 inches of fine material (<1" diameter stems, branches, and needles) on the bottom and larger fuels no bigger than 3 inches in diameter on top. Piles will be constructed so the material lies flat in dense layers with no branches or stems protruding from the sides. Piles will be located away from leave trees and in openings where available. Piles will not be placed on old stumps, logs, ditch lines, drainage structures, or active road surfaces.**

GENERAL INFORMATION – The following information is provided as a courtesy to bidders. This information is a general estimate and as such may not be accurate.

Elevation: **4,240 – 4,560 feet** Slope: **1-55%** Aspect: **North** Snow Period: **Dec. 1 to Apr. 15**

Shutdown Zone: **678W**

Existing Species: **ponderosa pine western larch Douglas-fir, Engelmann spruce, and subalpine fir**

Approx. Stems/Acre to be cut: **300**

Approx. Average Diameter: **4 inches**

Additional Comments: **This unit runs along a portion of the Lynx analysis boundary to the North and is to take caution not to cut across flagged boundary. The purpose of this treatment is to reduce competition and increase more growing space for the over story trees which in turn will increase stand resiliency and reduce the risk of extreme wildfire spread.**

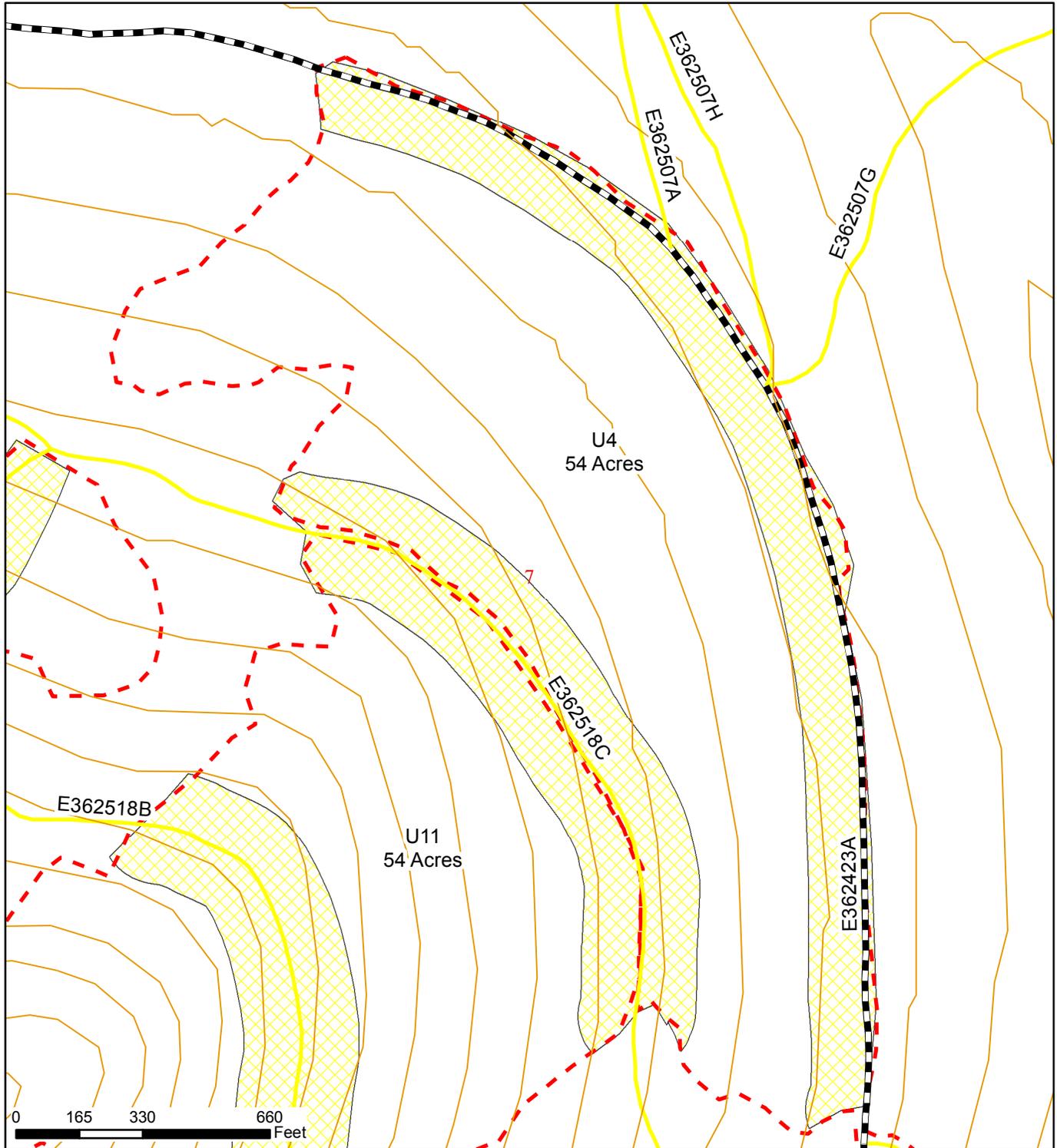
# SECTION II - B : UNIT MAP

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 4  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,872-4,097



- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Hazard abatement Buffer



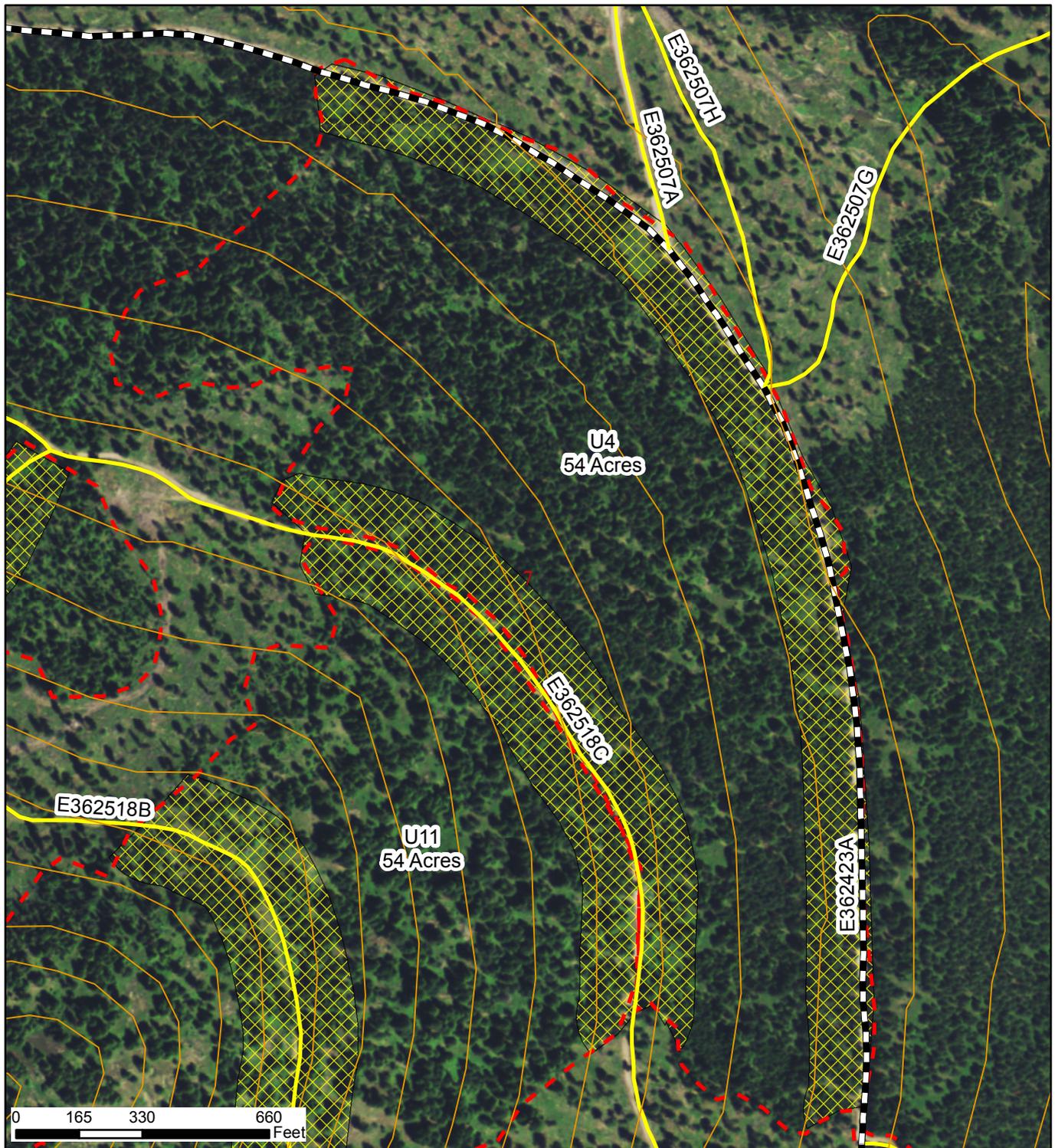
# SECTION II - B : UNIT MAP (ORTHO)

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 4  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,872-4,097



- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Hazard abatement Buffer



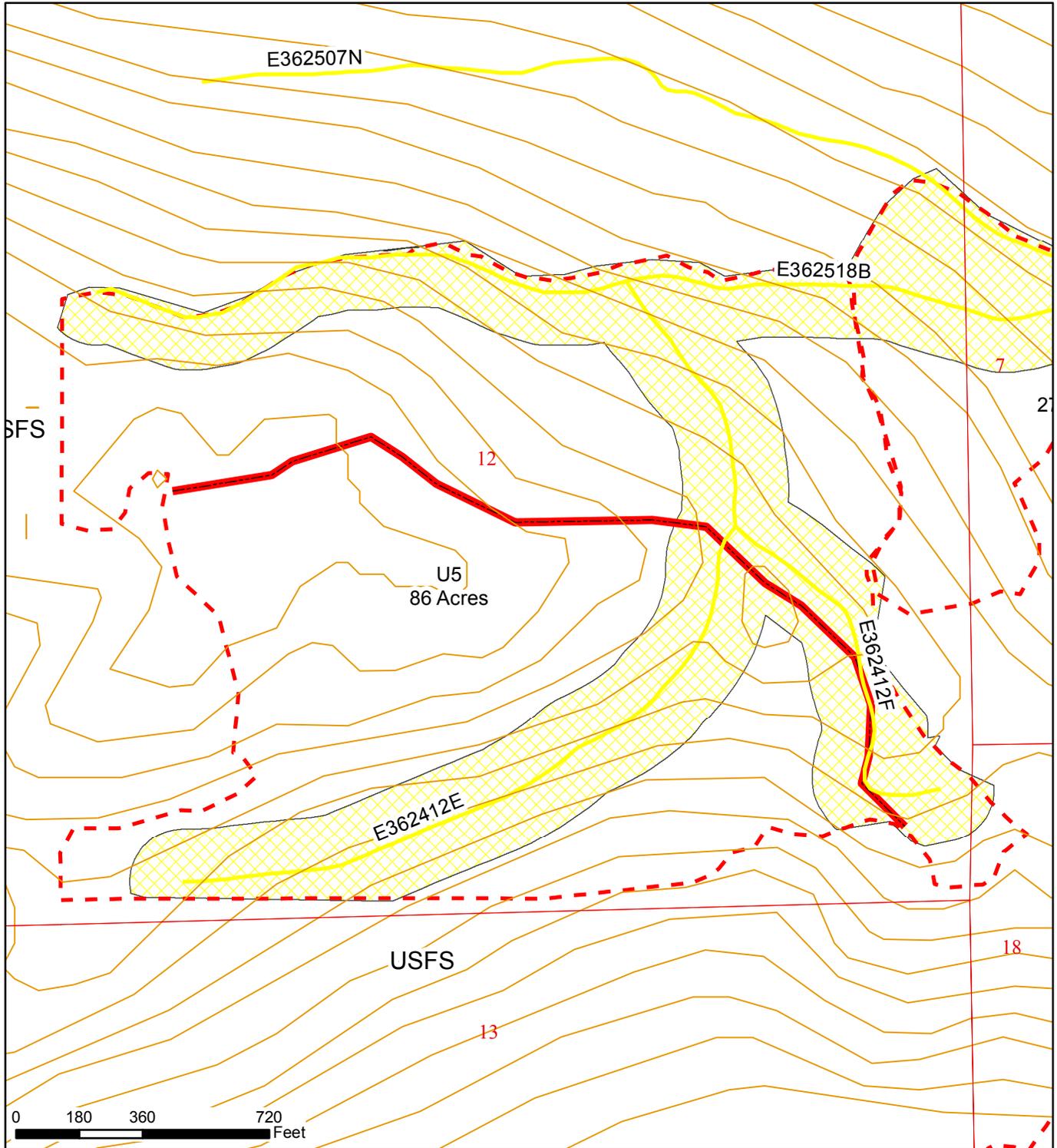
# SECTION II - B : UNIT MAP

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 5  
TRUST(S): 03  
TOWNSHIP(S): T36N R24E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 4,357-4,800



- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Unit\_5\_Split
- Hazard abatement Buffer



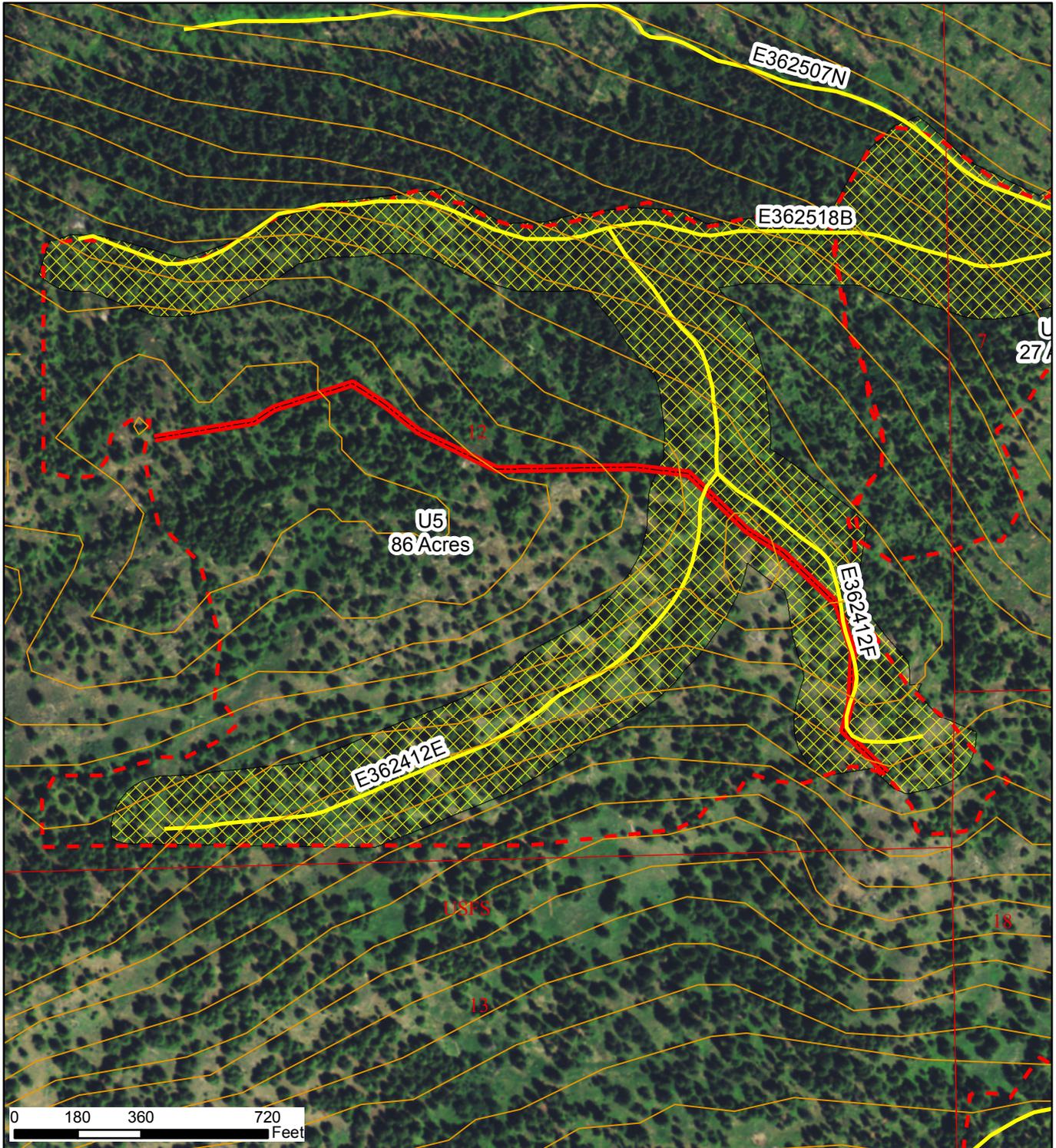
# SECTION II - B : UNIT MAP (ORTHO)

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 5  
TRUST(S): 03  
TOWNSHIP(S): T36N R24E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 4,357-4,800



- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Hazard abatement Buffer
- Unit\_5\_Split



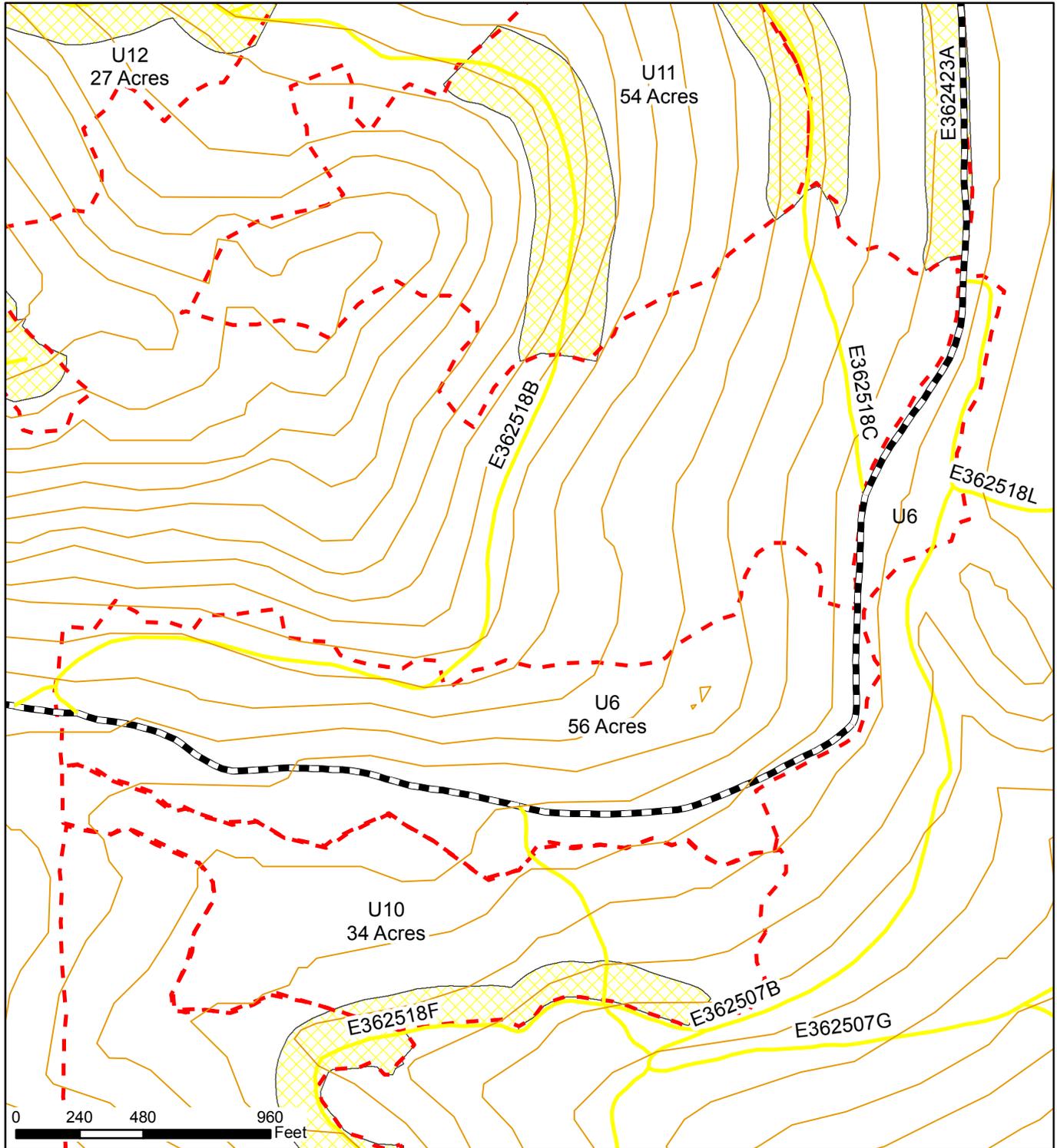
# SECTION II - B : UNIT MAP

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 6  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,852-4,174



- Contours 40-foot
- Thinning units
- Hazard abatement Buffer
- Mainline
- Roads



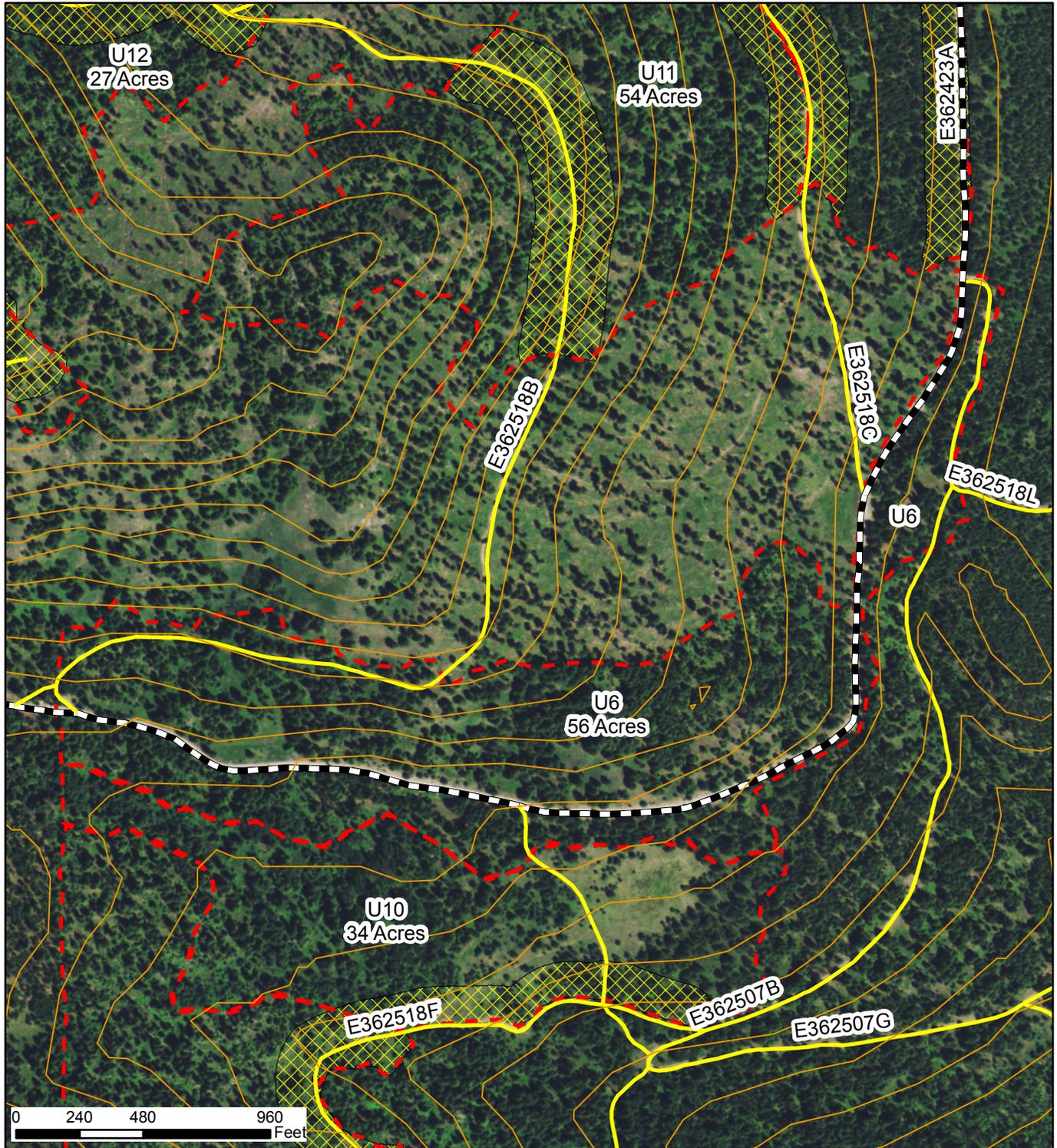
# SECTION II - B : UNIT MAP (ORTHO)

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 6  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,852-4,174



- Contours 40-foot
- Thinning units
- Hazard abatement Buffer
- Mainline
- Roads



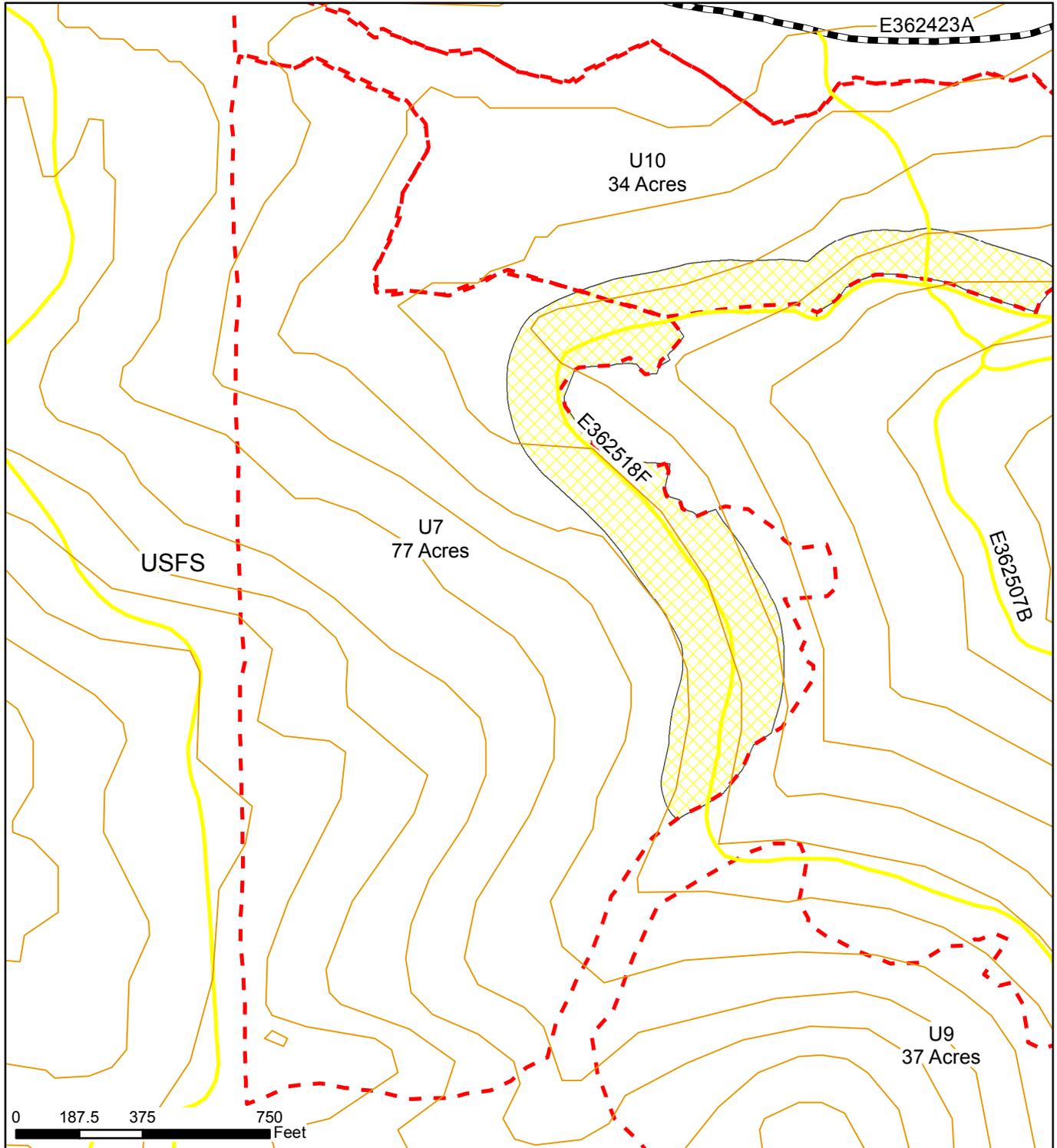
# SECTION II - B : UNIT MAP

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 7  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,818-4,202



- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Hazard abatement Buffer



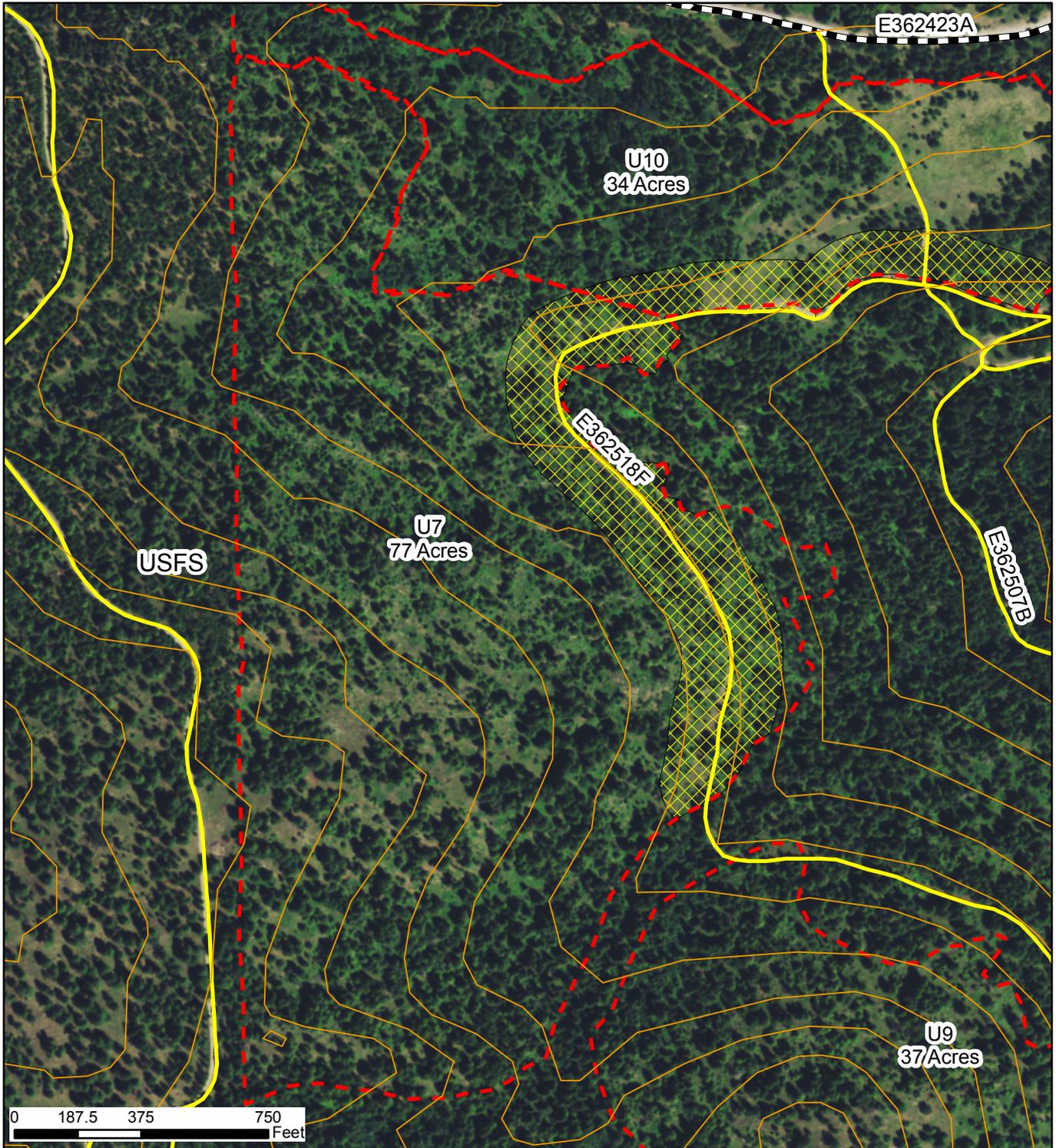
# SECTION II - B : UNIT MAP (ORTHO)

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 7  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,818-4,202



Contours 40-foot	Thinning units	Hazard abatement Buffer
Mainline		
Roads		

Page Number 36  
Contract Number 1622

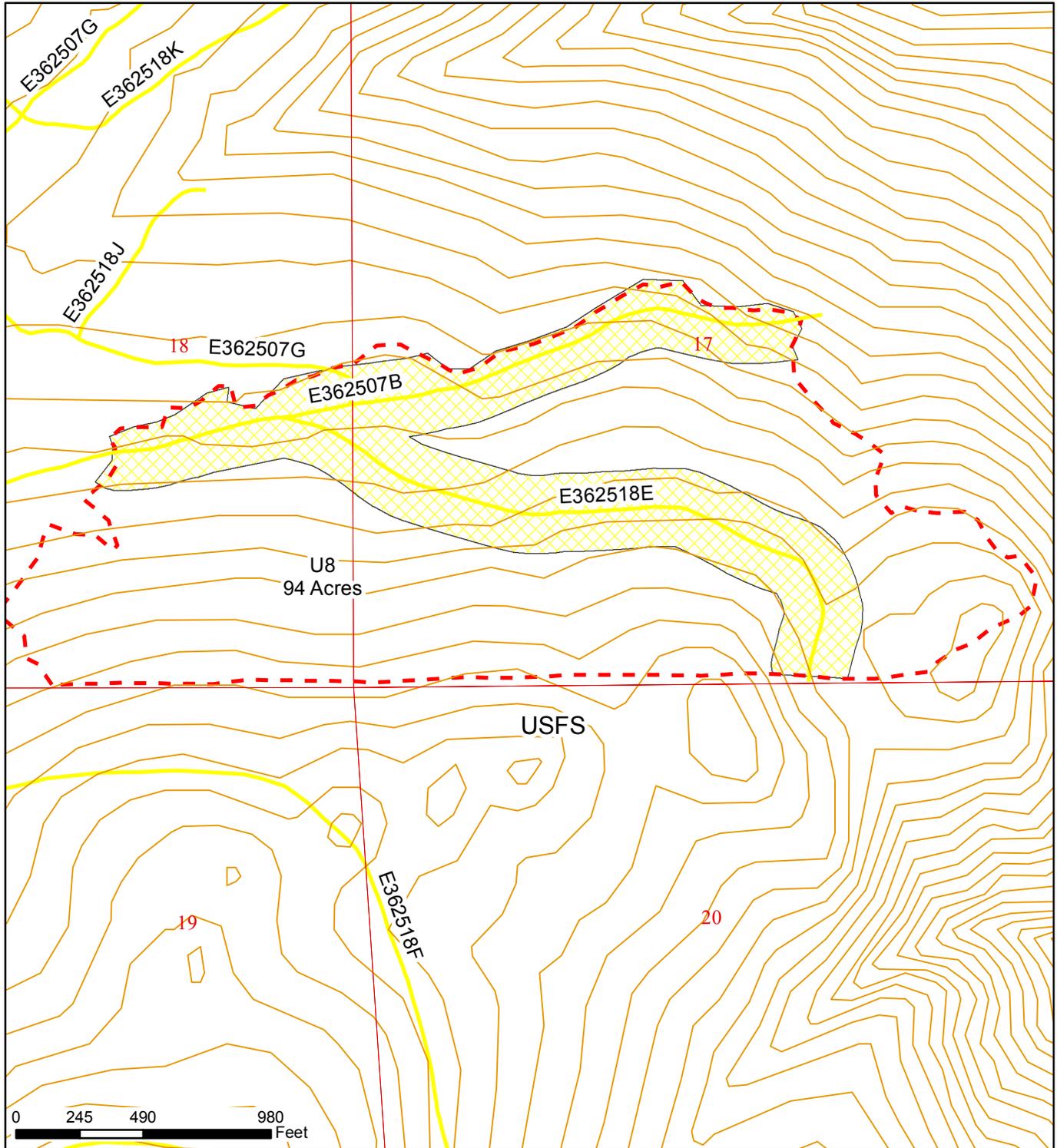
# SECTION II - B : UNIT MAP

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 8  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,470-3,958



- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Hazard abatement Buffer

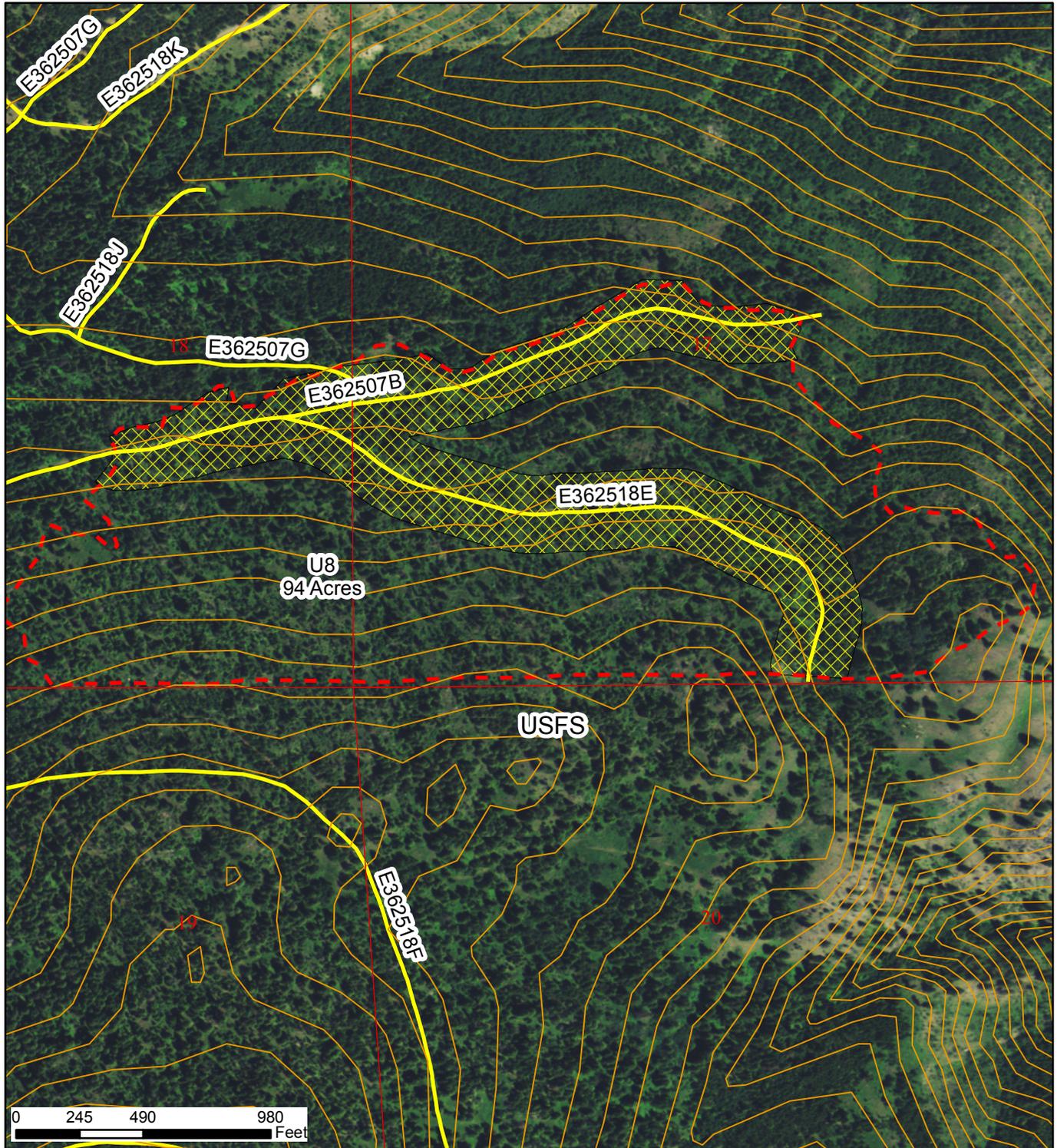
# SECTION II - B : UNIT MAP (ORTHO)

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 8  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,470-3,958



- Contours 40-foot
- Thinning units
- ▨ Hazard abatement Buffer
- ▬ Mainline
- Roads



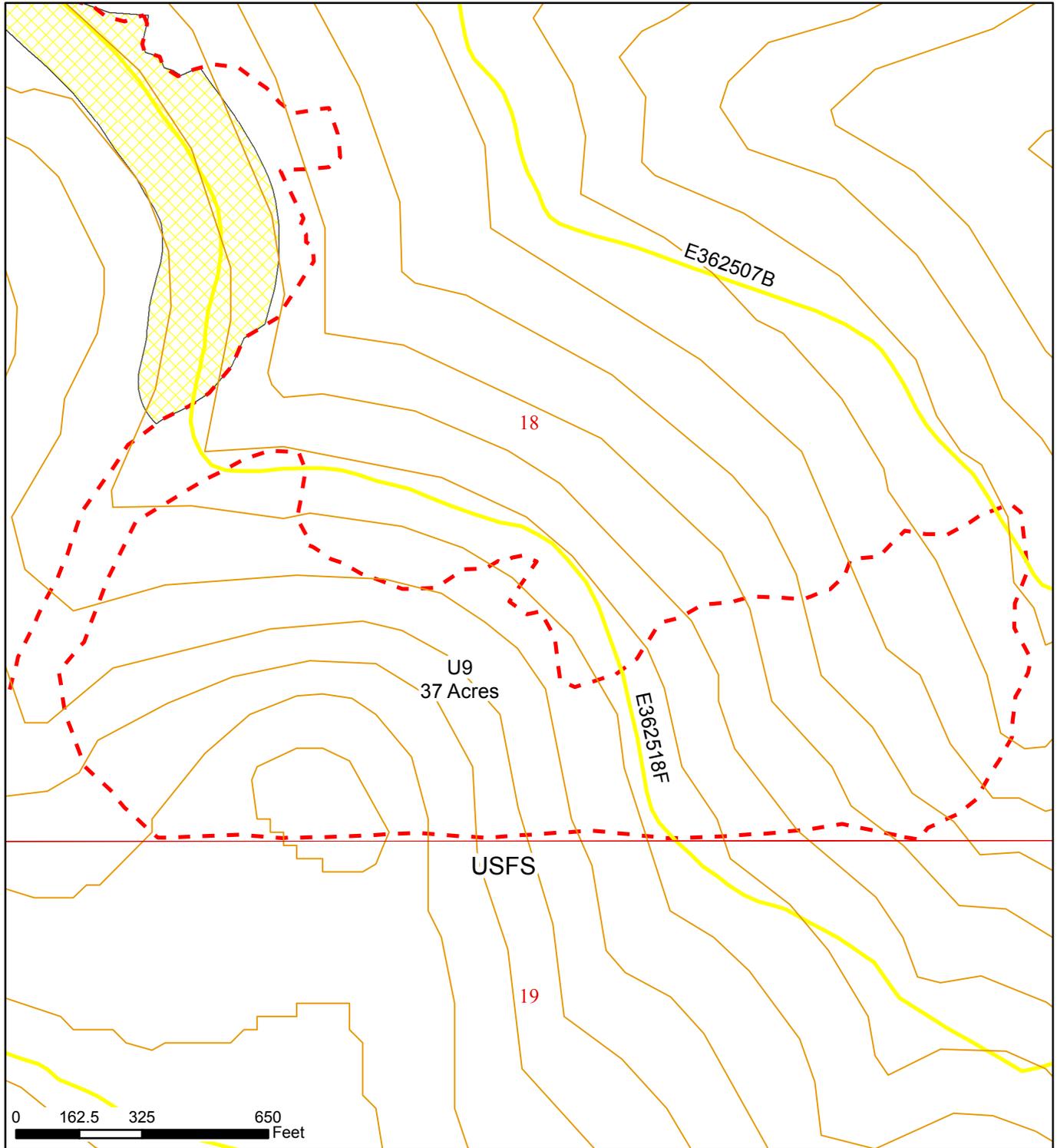
# SECTION II - B : UNIT MAP

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 9  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,000-3,958



- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Hazard abatement Buffer



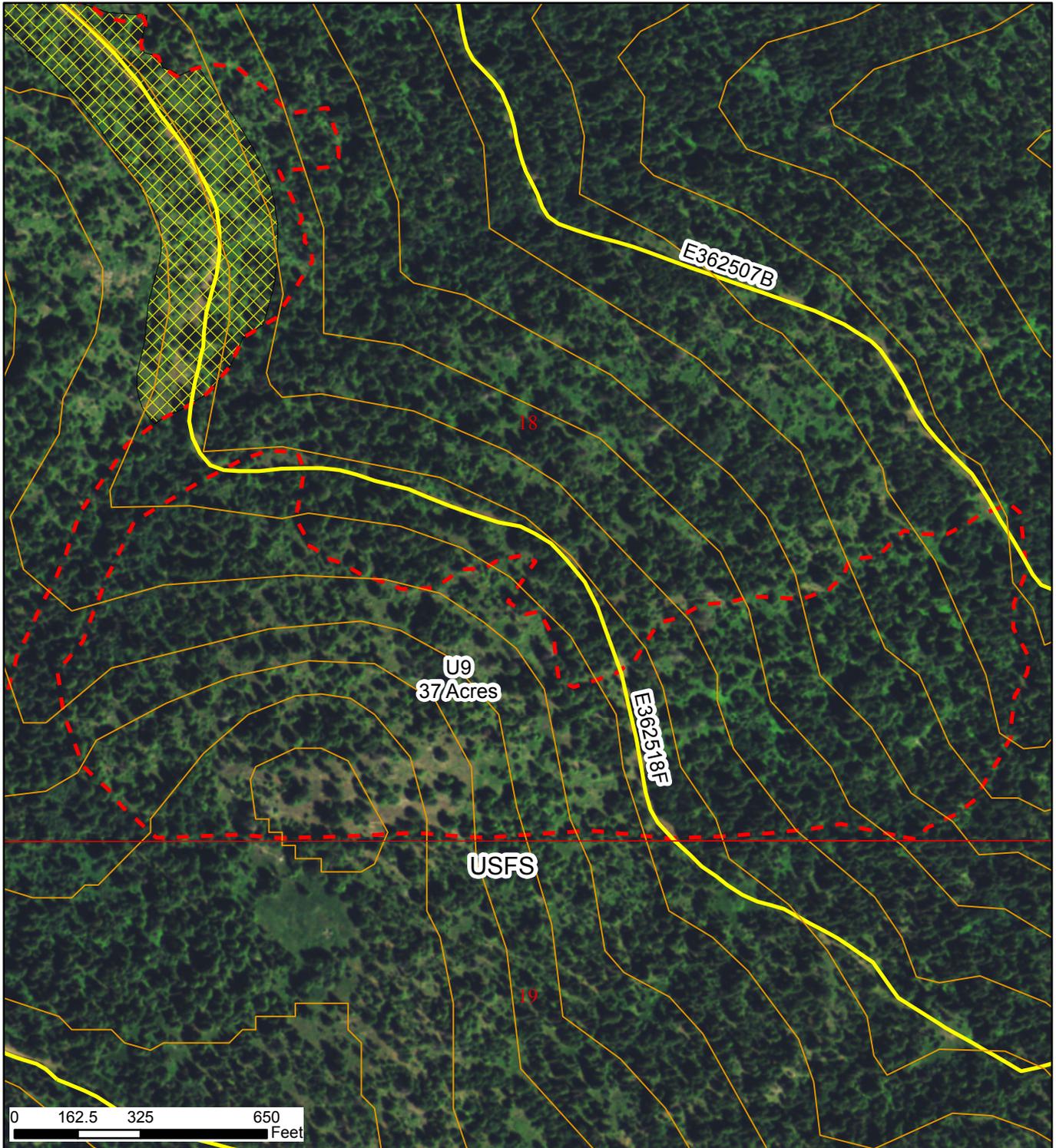
# SECTION II - B : UNIT MAP (ORTHO)

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 9  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,000-3,958



- Contours 40-foot
- - - Thinning units
- ▤ Hazard abatement Buffer
- ▬ Mainline
- Roads



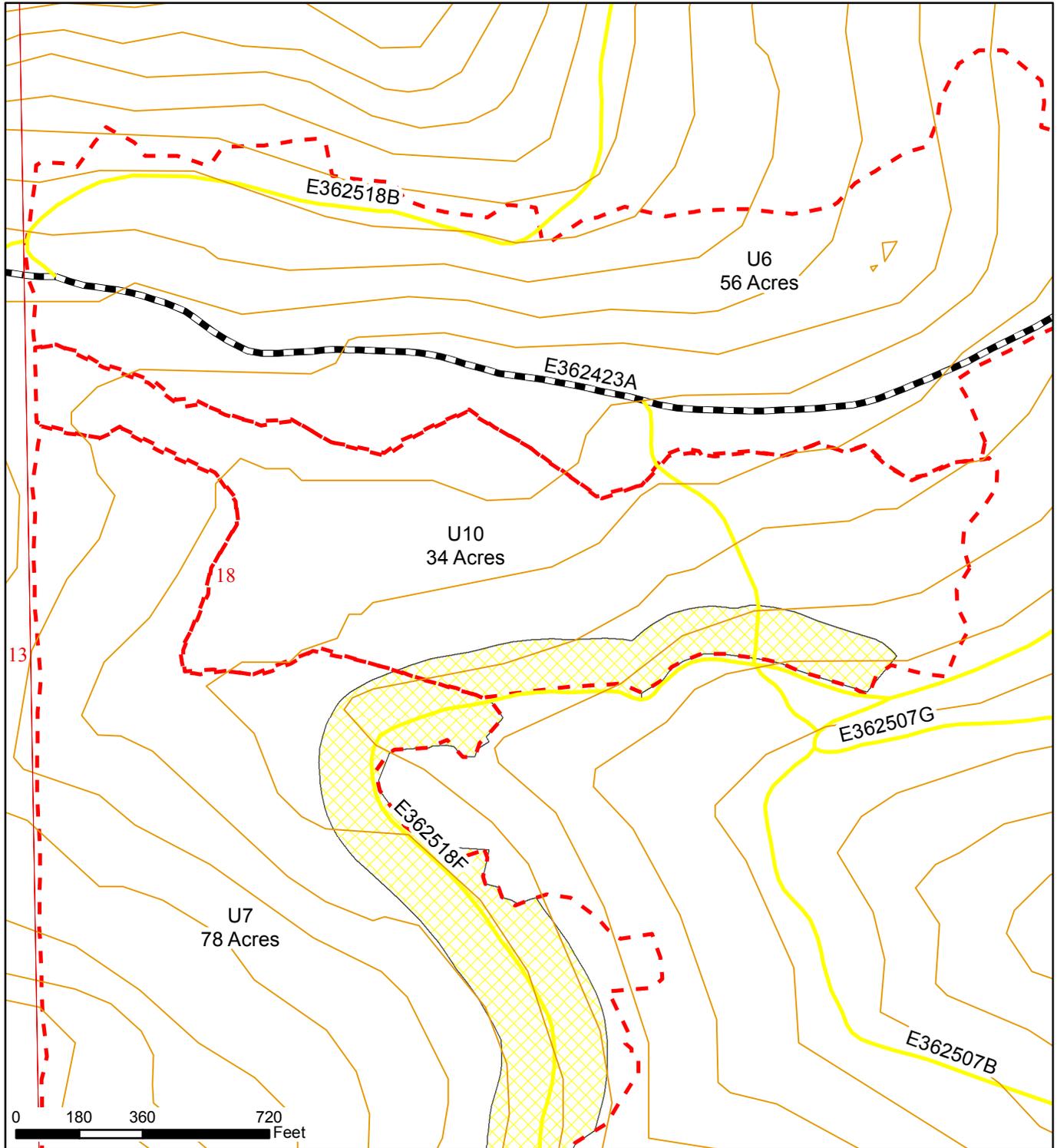
# SECTION II - B : UNIT MAP

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 10  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,800-3,960



- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Hazard abatement Buffer



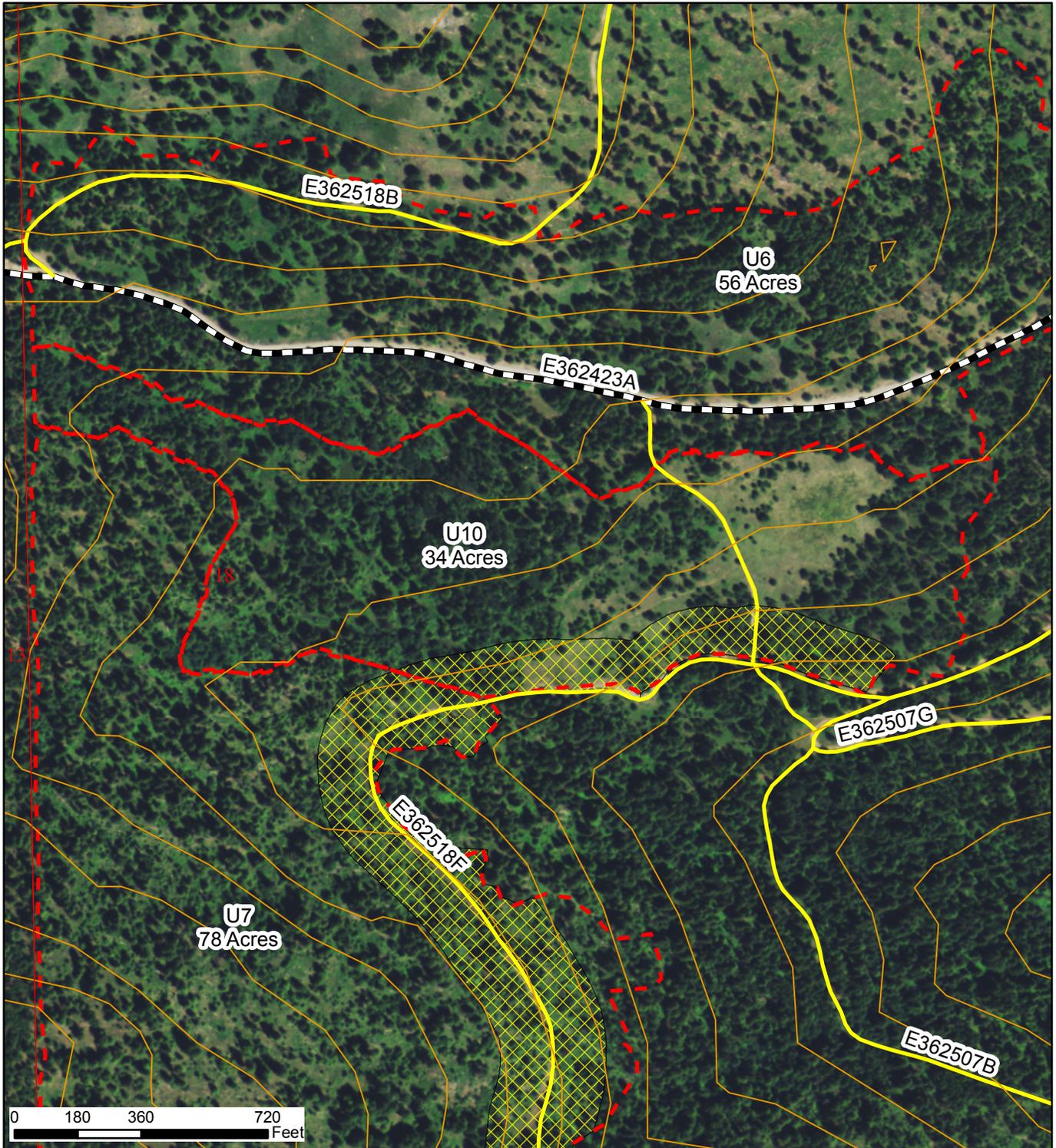
# SECTION II - B : UNIT MAP (ORTHO)

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 10  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 3,800-3,960



- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Hazard abatement Buffer



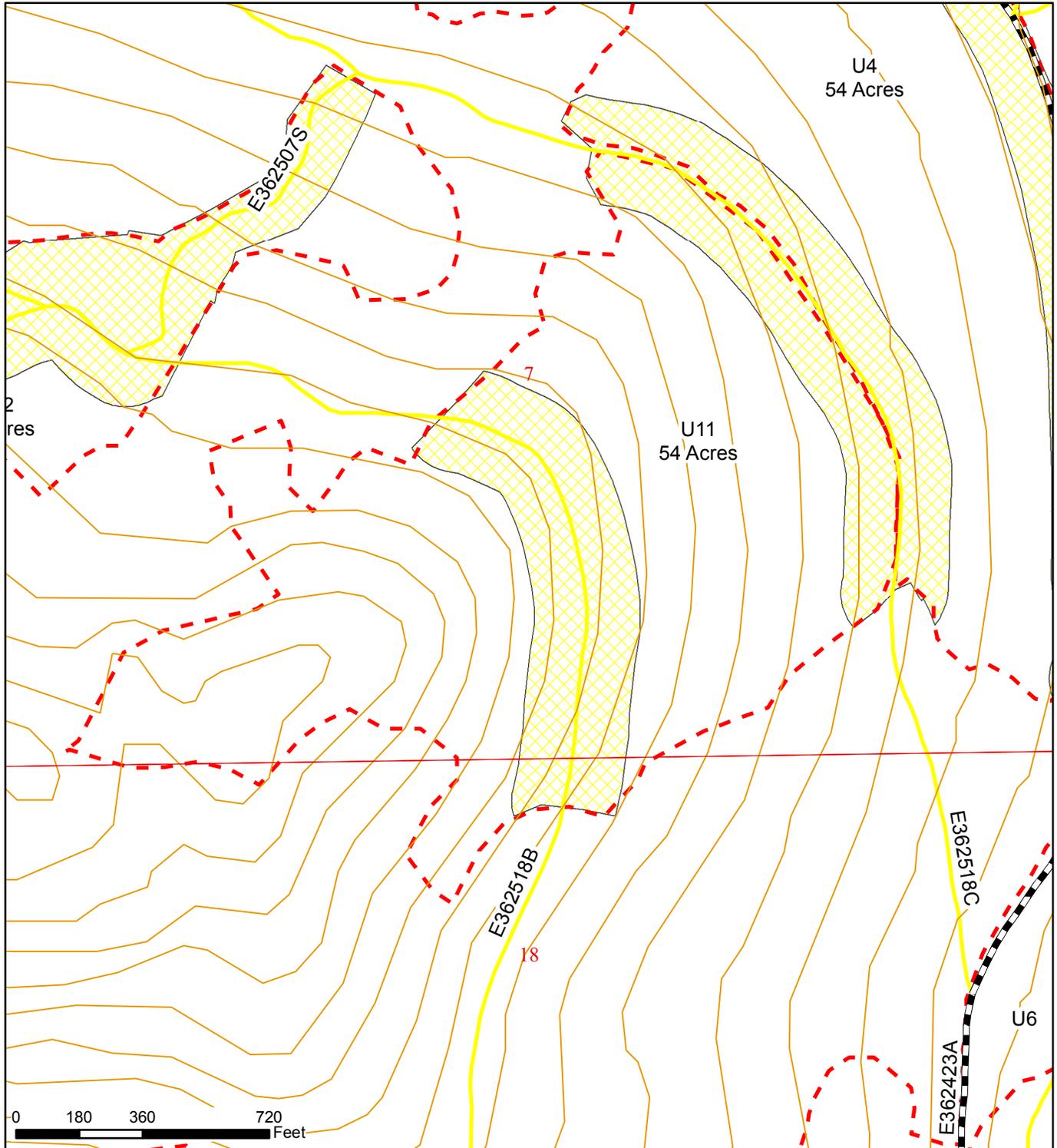
# SECTION II - B : UNIT MAP

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 11  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 4,040-4,480



- Contours 40-foot
- Thinning units
- Hazard abatement Buffer
- Mainline
- Roads

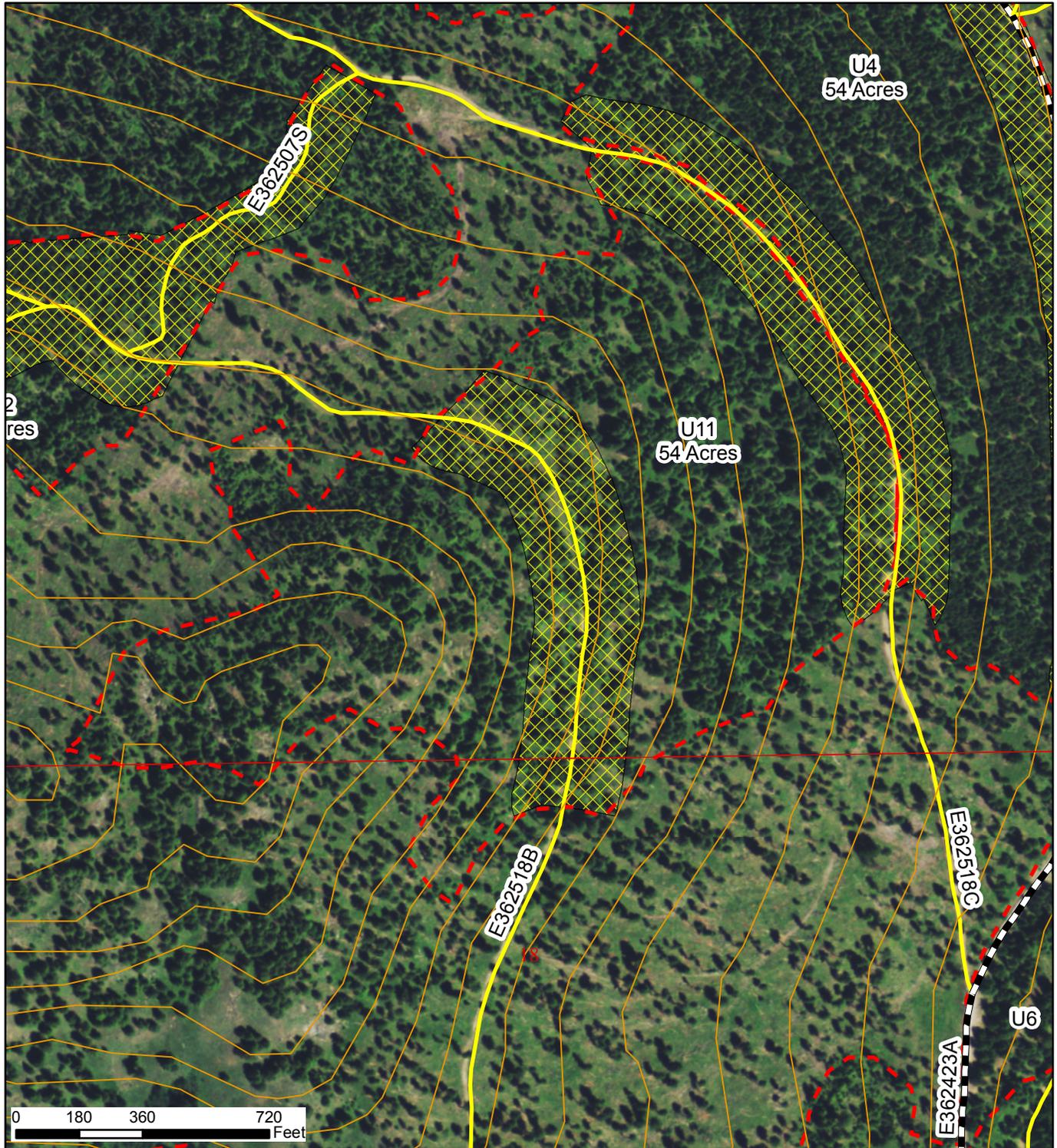
# SECTION II - B : UNIT MAP (ORTHO)

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 11  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 4,040-4,480



- Contours 40-foot
- Thinning units
- Hazard abatement Buffer
- Mainline
- Roads

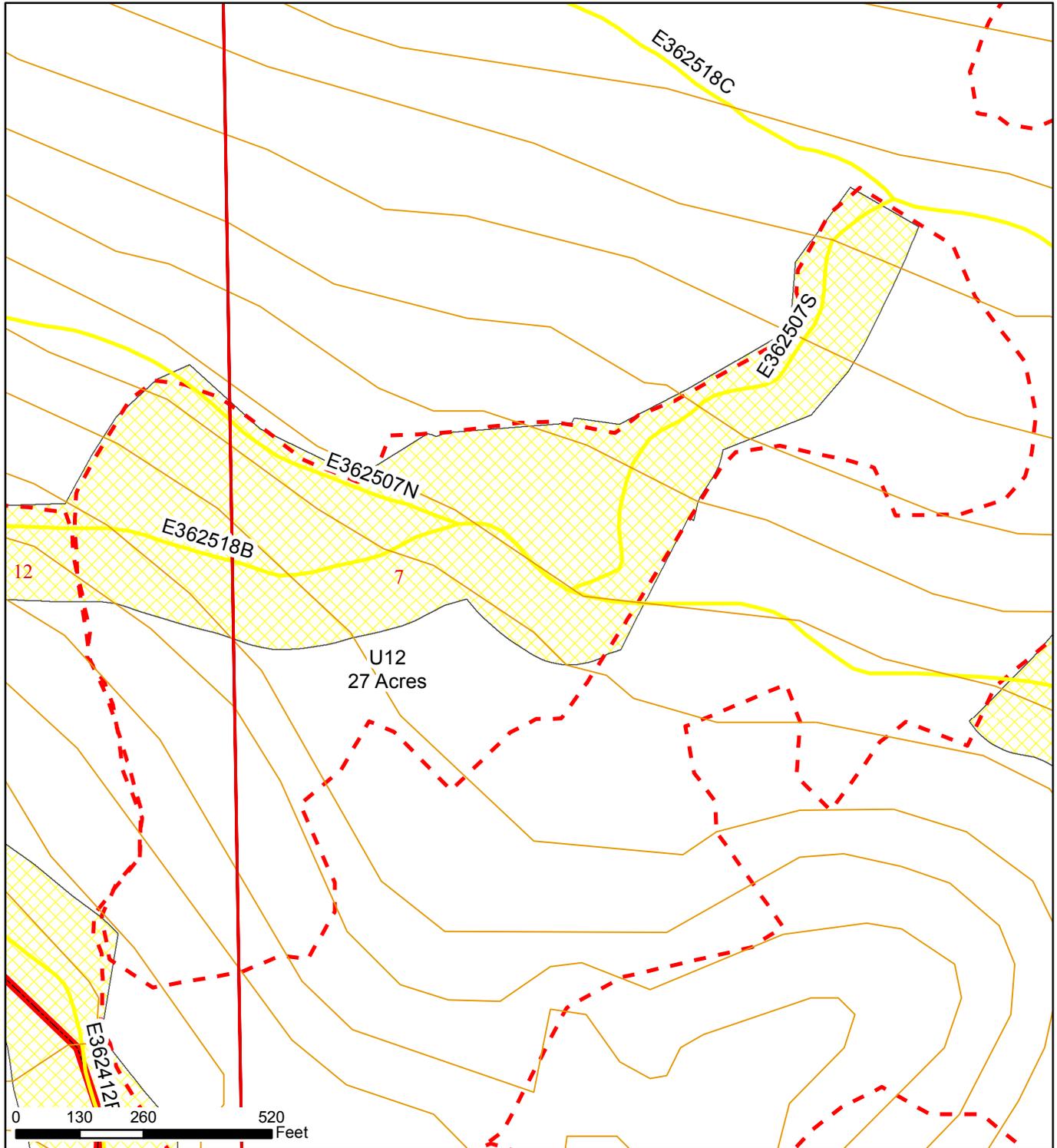
# SECTION II - B : UNIT MAP

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 12  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E - T36N R24E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 4,240-4,560



- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Hazard abatement Buffer

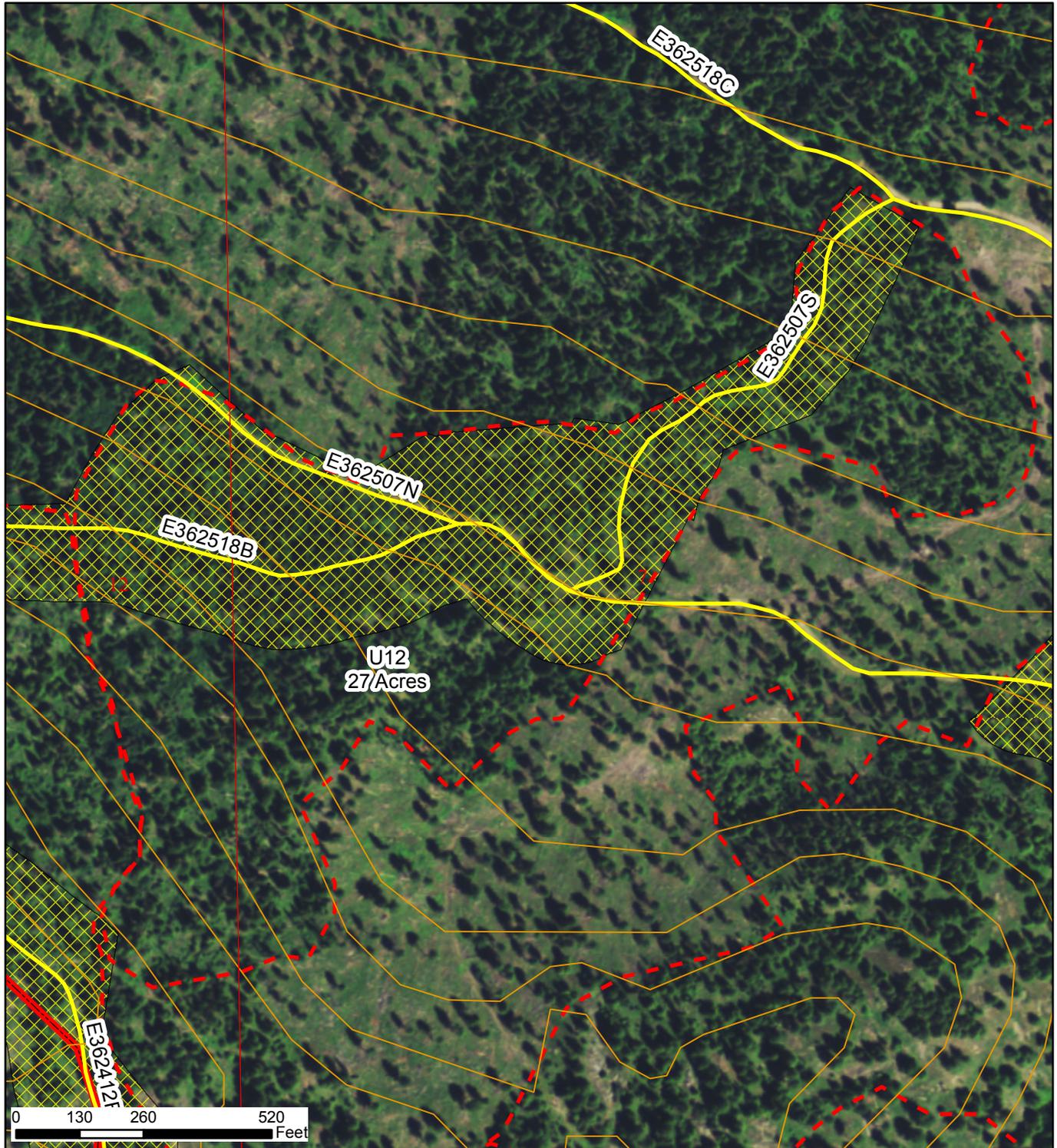
# SECTION II - B : UNIT MAP (ORTHO)

## PRE-COMMERCIAL THINNING

## CONTRACT NUMBER:

CONTRACT NAME: Middle Mtn PCT  
UNIT NUMBER: Unit 12  
TRUST(S): 03  
TOWNSHIP(S): T36N R25E - T36N R24E

REGION: Northeast  
COUNTY(S): Okanogan  
DISTRICT: Highlands  
Elevation: 4,240-4,560



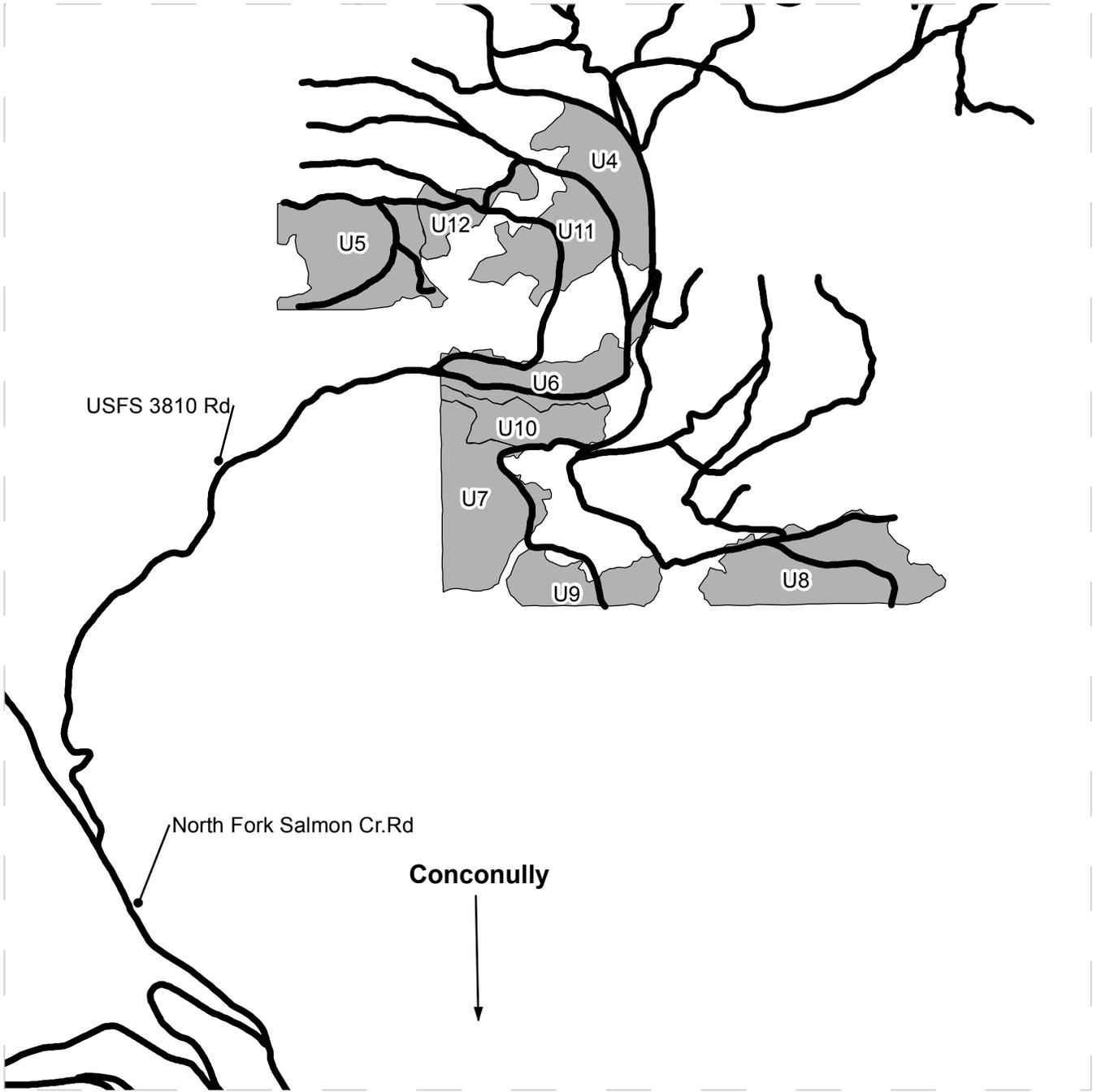
- Contours 40-foot
- Mainline
- Roads
- Thinning units
- Hazard abatement Buffer



# DRIVING MAP

**CONTRACT NAME:** MIDDLE MTN PCT  
**UNIT(S) #:** 4, 5, 6, 7, 8, 9, 10, 11, 12  
**TOWNSHIP(S):** T36R24E, T37R25E, T36R25E  
**TRUST(S):** 03

**REGION:** Northeast Region  
**COUNTY(S):** OKANOGAN  
**ELEVATION RGE:** 3,000-4800



PCT Units  
 Routes

**DRIVING DIRECTIONS:**

From Conconully, travel north on North Fork Salmon Creek/USFS 38 road for 3.2 miles. Turn right on USFS 3810 road, travel 2.2 miles to the DNR property boundary (here the USFS 3810 road turns into the DNR E362423A road), at this point Unit 6 will be on either side of the road. For access to Unit 11,12, and 5 turn left just as you enter DNR, travel 1.2 miles on the E362518B.

For Units 4, 7, 8, 9, and 10 continue from the USFS/DNR boundary on the E362423A road 1.1 miles to Unit 4 then turn right on the E362507B road. Travel 0.7 miles to the intersection of the E362518F road, Unit 7 and 10 is 0.2 miles up the E362518F road and Unit 9 is 0.4 miles further. Unit 8 is 0.8 miles further along the E362507B road.

# SECTION III-A: BID FORM

## CONTRACT NUMBER 1622

**INSTRUCTIONS:** Bids should include all costs related to the completion of the Work. A Unit Bid Price and a Unit Total must be entered for all of the Units in the Contract. Each Unit Total is calculated by multiplying the Unit Bid Price (Per Acre) by the Unit Acres. All Unit Totals for the Contract must be summed and entered as the Contract Price. In the event of a difference between the sum of all Unit Totals and the Contract Price, the individual Unit Totals shall prevail. All Bid Forms must be signed in ink. If the bid is made by a corporation, it shall be signed by the corporation's authorized designee. Incomplete or unsigned bids may be rejected.

At the following rates, the undersigned hereby offers and agrees to furnish materials, equipment, supplies, supervision, and services in compliance with all terms, conditions and specifications of the Invitation to Bid on Contract Number **1622**.

Unit #	Unit Acres	unit Bid price(per acre)	Unit total
4	54		
5	86		
6	57		
7	77		
8	94		
9	38		
10	34		
11	54		
12	27		
<b>Contract acres total</b>	<u>521</u>	<b>Contract Price</b>	<u>0</u>

Bidder's Name and Address:

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Note:

Detach and return this Section as per Invitation to Bid.

# SECTION III-B: CONTRACTOR'S DECLARATION OF INDUSTRIAL INSURANCE STATUS

INVITATION TO BID ON CONTRACT NUMBER   #1622    
(For Bidder Use Only)

The undersigned represents that they operate as        an individual, as        a partnership, or as        a corporation incorporated in the State of                                   . The undersigned further certifies that they will not be assisted by other individuals in the performance of this Contract.

For the purpose of Industrial Insurance premiums payable to the Department of Labor and Industries, every individual in a partnership or joint venture must sign this bid sheet. Individuals not signing the bid sheet but assisting with the Contract Work will be considered workers for the purpose of Industrial Insurance except at the express approval of the Department of Labor and Industries.

Bidder's Name _____	Labor & Industries Account # _____
Signature _____	Washington Business License # _____
Title _____	Additional Signatures _____
Address _____	_____
City and State _____	_____
Business Phone _____	_____
Home Phone _____	_____

To whom it may concern:

The purpose of this form is to inform persons engaged in contracting forest activities of their liabilities under the mandatory provisions of the Industrial Insurance Act, Title 51 RCW.

The law provides benefits for a worker, injured in the course of his employment, or his family or dependents in case of death of the worker.

Worker is defined in the law as every person engaged in the employment of an employer under Title 51 RCW or every person working under an independent contract. RCW 51.08.180.

As one whom contracts to perform forest activities, you may require the assistance of other individuals to complete this Contract. In that case, you are required to establish an industrial insurance account with the Department of Labor and Industries and pay the prescribed premium on behalf of your workers.

In the event you obtain the assistance of another person or persons to perform Work in connection with this Contract, regardless of the circumstances, you should contact the Department of Labor and Industries at one of its statewide service locations or its Olympia headquarters. You will then be provided with the necessary information regarding opening an account, premium rates, and reporting requirements.

The law also provides that any agency or firm that lets a contract is liable for payment of industrial insurance premiums should the Contractor fail to do so. The agency or firm may also withhold money due the Contractor to insure payment of premium. Consequently, failure to comply with the above requirements could delay payment of retained funds.

NOTE: Return one (1) copy of this form with each Bid Form (Section III-A) as per the Invitation to Bid.

# SECTION III-C: SOLICITATION TO OFFER AND CONTRACT AWARD

## SOLICITATION TO OFFER (For Bidder Use Only)

On condition of a Contract award for the Contract Price, the undersigned hereby offers and agrees to furnish services in compliance with all terms, conditions, and specifications of the Invitation to Bid on Contract Number 1622. Submittal of this offer with authorized signature constitutes complete understanding of all terms and conditions. Further, submittal of this offer constitutes acceptance of and agreement to comply with all terms and conditions of the Contract if awarded, and verifies that all services will be available throughout the period of the Contract.

\_\_\_\_\_  
(Bidder's Name)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(City) (State) (Zip)

\_\_\_\_\_  
(UBI No.)

\_\_\_\_\_  
(L & I Industrial Insurance Account No.)

\_\_\_\_\_  
(Farm Labor Contractor License No.)

\_\_\_\_\_  
(Federal I.D. No. or Social Security No.)

\_\_\_\_\_

By: \_\_\_\_\_

(Signature) (Date)

\_\_\_\_\_  
(Typed or Printed Name)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(phone No.)

## CONTRACT AWARD (For Dept. of Nat. Resources Use Only)

Contract Number 1622 is hereby awarded to \_\_\_\_\_

State of Washington,  
Department of Natural Resources

By: \_\_\_\_\_

(Signature) (Date)

Loren D. Torgerson  
Northeast Region Manager

NOTE: Return one (1) copy of this form with each Bid Form (Section III-A) as per the Invitation to Bid.

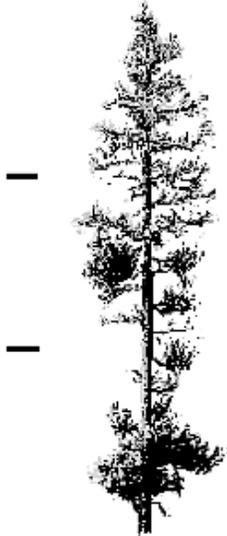
**A-08 Attachment**

**A. List of Nearby Medical Facilities**

HOSPITAL NAME & ADDRESS	PHONE	LATITUDE	LONGITUDE
North Valley Hospital 203 S Western Ave Tonasket, WA 98855	509-486-2151	N 48° 42.463'	W 119° 26.317'
Mid Valley Hospital 810 Jasmine Street Omak, WA 98841	509-826-1760	N 48° 23.804'	W 119° 32.982'
Okanogan/Douglas Hospital 507 Hospital Way, Brewster, WA 98812	509-689-2517	N 48° 23.609'	W 119° 54.369'

**Instructions**

- Step 1** Divide live crown into thirds.
- Step 2** Rate each third separately. Each third should be given a rating of 0, 1, or 2 as described below:
- (0) no visible infections
  - (1) light infection (1/2 or less of total number of branches in the third infected)
  - (2) heavy infection (more than 1/2 total number of branches in the third infected).
- Step 3** Add ratings of thirds to obtain rating for total tree.



**Example**

- If this third has no visible infections, its rating is (0).
- If this third is lightly infected, its rating is (1).
- If this third is heavily infected, its rating is (2).
- The tree in this example gets a rating of: 0 + 1 + 2 = 3.