

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Salem District Office
1717 Fabry Road, S.E.
Salem, Oregon 97306

ThunderKat Timber Sale
ORS04-TS-2016.0503
Date: November 18, 2015

PROSPECTUS

THIS IS A PROSPECTUS ONLY. ATTACHMENTS MAY NOT INCLUDE ALL EXHIBITS REFERRED TO IN THE CONTRACT. THE COMPLETE CONTRACT, INCLUDING ALL EXHIBITS, IS AVAILABLE FOR INSPECTION AT THE SALEM DISTRICT OFFICE.

NOTICE IS HEREBY GIVEN that the Bureau of Land Management will offer for sale timber as described herein for oral auction, pursuant to Instructions to Bidders, as stated on Form No. 5440-9, attached. Written and oral bids will be received by the District Manager, or her representative, in the timber sale room at the District Office, 1717 Fabry Road, S.E., Salem, Oregon. Written bids and deposits will be accepted beginning at 8:30 a.m. and the timber sale oral auction will commence at 9:00 a.m., on Wednesday, December 16, 2015.

THIS TIMBER SALE NOTICE does not constitute the decision document for purposes of protest and appeal of a forest management decision. Consistent with 43 CFR Subpart 5003-Administrative Remedies, the notice of a timber sale, when published as a legal ad in a newspaper of general circulation shall constitute the decision document for purposes of protest and appeal. Protests may be filed with the Contracting Officer within 15 days of the publication of the aforementioned decision document in the newspaper. It is anticipated that the decision document will be published in the Stayton Mail on or about November 18, 2015. BLM does not warrant publication on this exact date. All parties considering protest of the timber sale decision document are encouraged to review the aforementioned newspaper to ensure accurate knowledge of the exact publication date.

AN ENVIRONMENTAL ASSESSMENT was prepared for each timber sale tract, and a Finding of No Significant Impact has been documented. These documents are available for inspection as background for each timber sale tract at the Salem District Office.

A WRITTEN BID on Form 5440-9 at not less than the advertised appraised price on a unit basis per species and the required minimum bid deposit shall be required to participate in oral bidding.

THE SUCCESSFUL BIDDER, as a condition of award, will be required to sign Form 5430-11, a certification that the bid was arrived at by the bidder or offeror independently, and was tendered without collusion with any other bidder or offeror. Also, Form 5450-17, Export Determination must be completed by the successful bidder. To expedite procedure, this form should be completed and submitted with the written bid.

THE VOLUMES LISTED herein are estimates only. The sale volumes listed are based on 16-foot taper breaks which must be taken into consideration if comparisons are made with volume predictions based on other standards. The volumes based on 32-foot taper breaks are shown for comparison purposes. No sale shall be made for less than the advertised appraised price. The Purchaser shall be liable for the total purchase price, without regard to the amount bid per unit, even though the quantity of timber actually cut or removed or designated for taking is more or less than the estimated volume or quantity so listed.

THIS TIMBER SALE has been cruised based upon Eastside Scribner board foot measure. The minimum bid figures shown by species are dollars per thousand board feet (MBF). The minimum bid increment will be \$0.10 per MBF.

A PERFORMANCE BOND in an amount not less than 20 percent of the total purchase price will be required for all contracts of \$2,500 or more. A minimum performance bond of not less than \$500 will be required for all installment contracts less than \$2,500.

QUALIFIED SMALL BUSINESS concerns may apply to SBA for a loan to provide financing for access road construction required under the terms of qualifying timber sale contracts, and necessary contract changes will be made. Approval of loan applications rests with SBA and may be contingent on availability of funds. Applicants for such loans shall notify BLM of their intention to apply for a loan.

PRE-AWARD QUALIFICATIONS. The high bidder may be required to furnish information to determine the ability to perform the obligations of the contract. If the high bidder is determined not qualified, responsible or refuses to respond within fifteen (15) days of a request for information pertaining to qualifications, the contract may be offered and awarded for the amount of the high bid to the highest of the bidders who is qualified, responsible, and willing to accept the contract.

LOG EXPORT AND SUBSTITUTION: All timber sales, including timber from Federal rights-of-ways, shall be subject to the restrictions relating to the export and substitution of unprocessed timber from the United States in accordance with P.L. 94-165 and 43 CFR 5400 and 5420, as amended.

LOG EXPORT AND SUBSTITUTION RESTRICTIONS: Excepting Port-Orford-cedar, all timber offered for sale hereunder is restricted from export from the United States in the form of unprocessed timber and is prohibited from being used as a substitute for exported private timber. The BLM has revised the log export restrictions special provision to reduce the log branding and painting requirements. The new requirements include branding of one end of all logs with a scaling diameter of over 10 inches. All loads of 11 logs or more, regardless of the diameter of the logs, will have a minimum of 10 logs branded on one end. All logs will be branded on loads of 10 logs or less. One end of all branded logs will be marked with yellow paint. At the discretion of the Contracting Officer, the Purchaser may be required to brand and paint all logs. The Purchaser shall bear any increased costs for log branding and painting.

CONTRACT TERMINATION: A revised Special Provision has been added to the contract which enables the Contracting Officer to suspend the contract to facilitate protection of certain plant or animal species, and /or to modify or terminate the contract when necessary to:

1. Comply with the Endangered Species Act, or;
2. Comply with a court order, or;
3. Protect occupied marbled murrelet sites in accordance with the Standards and Guidelines of the Salem District Record of Decision (ROD) and Resource Management Plan (RMP), or;
4. Protect species which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP.

This contract provision limits the liability of the Government to the actual costs incurred by the Purchaser which have not been amortized by timber removed from the contract area.

ADDITIONAL INFORMATION concerning this timber sale tract is available at the above District Office. A copy of the timber sale contract is also available for inspection at the District Office. The prospectus for this/these sale(s) is also available online at: <http://www.blm.gov/or/districts/salem/timbersales/index.php>. The prospectus includes maps and tables that cannot be made Section 508 compliant. For help with its data or information, please contact the Salem District Office at 503-375-5646.

Attachments:

Form 5450-17

Form 5430-11

Form 5440-9

TIMBER SALE NOTICE

SALEM DISTRICT
CASCADE RESOURCE AREA
SALEM DISTRICT MASTER UNIT

SALE DATE: DECEMBER 16, 2015

CONTRACT NO. ORS04-TS-2016.0503, THUNDERKAT TIMBER SALE:
LINN COUNTY, OREGON: O&C: ORAL AUCTION: BID DEPOSIT REQUIRED: \$43,900.00.

All timber designated for cutting on: Lot1, Lot2, S1/2NE1/4, Sec.5, T. 10S., R. 2E., W.M.

THIS TIMBER SALE HAS BEEN CRUISED BASED UPON EASTSIDE SCRIBNER MEASURE.

Minimum bid figures shown by species are dollars per thousand board feet (MBF). The minimum bid increment will be \$0.10 per MBF.

Approx. No. Merchantable Trees	Est. Vol. MBF 32' Log	Species	Est. Vol. MBF 16' Log	Appraised Price Per MBF	Estimated Volume Times Appraised Price
3,132	1,278	western hemlock	1,500	\$187.40	\$281,100.00
660	322	Douglas-fir	389	\$301.80	\$117,400.20
350	140	grand fir	172	\$174.20	\$29,962.40
408	29	bingleaf maple	37	\$74.30	\$2,749.10
718	23	red alder	28	\$253.60	\$7,100.80
5,268	1,792	Totals	2,126		\$438,312.50

LOG EXPORT AND SUBSTITUTION RESTRICTIONS: All timber offered for sale hereunder is restricted from export from the United States in the form of unprocessed timber and also prohibited from substitution of exported private timber.

CRUISE INFORMATION: The 5,268 trees have been cruised using the 3P system to select sample trees. The sample trees were cruised and the volume expanded to a total sale volume. Approximately 0% of the total sale volume is salvage material. With respect to merchantable trees of all species: the average tree is 17.5 inches DBHOB; the average log contains 98 bd. ft.; the total gross volume is approximately 2,318 MBF and 92% recovery is expected.

CUTTING AREA: One unit totaling approximately approximately 50 acres shall be regeneration harvest cut and approximately 1 acre of right-of-way shall be cut. Acres shown on Exhibit A have been computed using a Trimble Geo XT Global Positioning System receiver. Acreage was calculated based on Global Positioning System traverse procedures including differential correction.

DURATION OF CONTRACT: Will be 36 months for cutting and removal of timber.

LOCATION: All directions originating from the town of Lyons, Oregon.

Access to the Unit as follows:

- Head west on OR-226W Albany-Lyons Hwy for approximately 2.5 miles
- Turn left, heading south onto W. McCully Mountain road for approximately 2.5 miles
- Turn Right, heading south onto S. McCully Mountain road for approximately 1.4 miles
- Veer left, heading southeast onto McCully Mountain road 9-1E-36.0 for approximately 1.7 miles
- Veer left, heading northeast onto 10-2E-6 road for approximately 1 mile. This road accesses the southern portion of the unit. To access the north portion, veer left at the 10-3E-5 road and continue for approximately 0.6 miles.

For overview of sale area please refer to the Timber Sale Contract Location Map.

ACCESS AND ROAD MAINTENANCE:

Gate keys are required for access. Prospective bidders may obtain a 4C17 key from the Salem District Office, Monday through Friday from 7:45 a.m. to 4:30 p.m. A credit card is required at the time of checking out a key. A \$50.00 charge will apply if key is not returned.

In the use of Bureau of Land Management controlled roads which the Purchaser is authorized to use, the Purchaser shall pay a road maintenance obligation for rock wear in the amount of three thousand, one hundred, fifty-four and 21/100ths dollars, (\$3,154.21) to the Bureau of Land Management. The Purchaser will be required to maintain certain Bureau of Land Management controlled roads as shown on Exhibit E map.

Purchaser maintenance shall include frequent blading and shaping of road surface; spot rocking; ditch, culvert, and catch basin cleaning; removal of minor slides, blow-down trees and other debris. Roads shall be left in a condition to withstand adverse weather at the end of each seasonal operation. Purchaser shall also be responsible for performing post storm inspections and maintenance during the winter season for all Purchaser maintained roads.

ROAD CONSTRUCTION AND RENOVATION: The Purchaser will be required to do all work set forth below. The Purchaser shall supply all materials unless otherwise indicated.

1. New Construction:

Road 10-2E-05, 605 feet, 14-foot subgrade, outsloped, no ditch, Surfacing-dirt, Usable width 12 feet.

Road 10-2E-05.2, 1220 feet, 14-foot subgrade, outsloped, no ditch, Surfacing-dirt, Usable width 12 feet.

2. Renovation:

4.12 miles of road to be brushed, bladed with grader, spot rocking, ditch cleaned, clean inlet, outlet and barrel of all existing culverts.

3. Estimated Quantities:

Clearing:

1.3 acres of new construction

Excavation:
387 cubic yards of common

4. Aggregate Material:

<u>Quantity</u>	<u>Description</u>
800 cubic yards (truck measure)	2 inch minus crushed rock

Rock Sources:
All aggregate to be purchased from commercial source.
Aggregate to be hauled, processed and compacted for spot rocking purposes.

Watering: as needed

Rolling: = 1 hour per 6 stations of new road construction 0.34 mile = 3 hours

5. Major Structures:

None

6. Miscellaneous Items:

a. Right-of-way Debris Disposal:

Debris resulting from new construction on BLM shall be disposed of by scattering.

b. Final Maintenance:

Shape with grader 4.12 miles of road, place water bars on 0.34 mile of road and construct 2 barricades consisting of either a debris or trench and berm barricade.

Seed, fertilizer and mulch 1.25 acres of new road construction.

OTHER:

The Purchasers logging plan may include the option to rock newly constructed roads in accordance with specifications shown in Exhibit C. Any additional cost for rocking these roads will be at the Purchasers expense.

SPECIAL ATTENTION ITEMS:

Sec. 41.a-d. -Reserve timber
Sec. 42.g.1-5. -Seasonal restrictions
Sec. 42.x. -Contributed funds

Seasonal Restriction Matrix

Seasonal Restriction	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All activities due to migratory birds (42.g.1)												
Mechanical felling skidding and site preparation operations due to wet soil conditions (42.g.2)**												
In-Stream work period (42.g.3)												
Road construction or decommissioning (42.g.4)**												
Hauling on natural surface roads (42.g.5)												

Operations Restricted
No Restrictions

Restricted Times are Shaded

Shaded areas in the left side of individual cells indicate effective dates from the 1st to the 14th of each month. Shaded areas in the right side of individual cells indicate effective dates from the 15th to the end of each month.

**Seasonal restrictions may be shortened or extended as determined by Authorized Officer.

TIMBER SALE CONTRACT SPECIAL PROVISIONS

Sec. 41.

RESERVED

- a. All timber within the Reserve Area shown on Exhibit A and all painted orange trees which mark the boundaries of the Reserve Area shown on Exhibit A.
- b. All trees marked with orange paint above and below stump height within the boundary of the Regeneration Harvest Area shown on Exhibit A.
- c. All existing snags greater than fifteen (15) inches DBH and greater than fifteen (15) feet tall within the boundary of the Regeneration Harvest Area shown on Exhibit A.
- d. All existing down logs greater than twenty (20) inches diameter on the large end and greater than twenty (20) feet long within the boundary of the Regeneration Harvest Area shown on Exhibit A.

Sec. 42. Special Provisions -

LOGGING

a. Periodic Payment And First Installment Adjustment

1. Notwithstanding the provisions of Sec. 3(b), the amount of the first installment may be reduced by the Government when the Contracting Officer requests the Purchaser to interrupt or delay operations for a period expected to last more than thirty (30) days during the operating season. Such interruption or delay must be beyond the Purchaser's control. Operating Season shall be defined, for this purpose, as the time of year in which operations of the type required are normally conducted and not specifically restricted under the contract. The first installment may be reduced to five (5) percent of the installment amount listed in Sec. 3(b), during the delay period. The Purchaser must request such a reduction in writing. When the Contracting Officer notifies the Purchaser that operations may proceed, the Purchaser shall have fifteen (15) days after such notification to return the first installment to the full value specified in Sec. 3(b). Failure to return the first installment to the full value within the allotted time will be considered a material breach of contract. No timber shall be cut or removed from the contract area until the first installment is restored to the full amount.

2. Notwithstanding the provisions of Sec. 3(b), adjustments in the due dates for periodic payments may be made by the Government if the Contracting Officer interrupts or delays contract operations for a period expected to last at least thirty (30) days, and the interruption or delay is beyond the Purchaser's control. Any adjustment made shall provide the Purchaser with an equal amount of operating time as would have been available without the delay. The Purchaser shall request such adjustment in writing before the due date for a periodic payment contained in Sec. 3(b).

b. Prior to the commencement of operations, the Purchaser shall obtain from the Authorized Officer written approval of a written operations and logging plan commensurate with the terms and conditions of the contract which shall include measures needed to assure protection of the environment and watershed. A pre-work conference between the Purchaser's authorized representative and the Authorized Officer's representative must be held at a location designated by the Authorized Officer before the logging plan will be approved. The Purchaser shall provide a minimum of seven (7) days' notice when requesting the scheduling of a pre-work conference. Before beginning operations on the Contract Area for the first time or after a shutdown of seven (7) or more days, the Purchaser shall notify the Authorized Officer in writing of the date the Purchaser plans to begin operations.

c. In the Regeneration Harvest Area – Ground-Based Yarding, shown on Exhibit A, skidding shall be done by a skidder equipped with a winch capable of winching logs seventy-five (75) feet unless otherwise approved by the Authorized Officer. The minimum distance between skid trails shall be one hundred fifty (150) feet unless otherwise approved by the Authorized Officer. Such skid trails shall be limited to twelve (12) feet for skidding of logs with minimum damage to reserve trees. All trees that must be removed to facilitate construction of these skid trails shall be felled and skidded prior to falling operations in the remainder of these areas unless otherwise approved by the Authorized Officer. The Purchaser shall directionally fall trees into lead with the winching or skidding direction and winch to these skid trails. The leading end of all logs shall be transported free of the ground during skidding. No skidding equipment shall be permitted to operate off these skid trails.

d. Excessive damage to the reserve timber, as determined by the Authorized Officer, will result in suspension of operation until mitigation measures are in place to prevent further damage as directed by the Authorized Officer.

e. No winching or skidding is permitted across Reserve Area or streams shown on Exhibit A unless approved by Authorized Officer.

f. No trees may be felled in or into the reserve areas designated on Exhibit A, unless expressly authorized by other provisions of this contract. Tops, limbs, and other logging debris entering the reserve area from felling operations shall be pulled back into the Regeneration Harvest Area as shown on Exhibit A.

g. The following seasonal restrictions shall be observed:

1. All activities within the Regeneration Harvest Area as shown on Exhibit A, from April 1st to July 15th both days inclusive due to migratory birds.
2. No mechanized felling, skidding, or site preparation operations shall be conducted between December 1st of one calendar year and April 30th of the following calendar year both days inclusive, or during other periods of wet soil conditions as determined by the Authorized Officer.
3. No in-Stream work shall be conducted on the contract area shown on Exhibit A between October 1st of one calendar year and May 31st of the following calendar year both days inclusive, or during other periods of high stream flow as determined by the Authorized Officer.

4. No road construction or decommissioning as shown on Exhibit A and C between December 1st of one calendar year and April 30th of the following calendar year both days inclusive or during other periods of wet soil conditions as determined by the Authorized Officer.
5. No hauling on natural surface roads as shown on Exhibit A between November 1st of one calendar year and May 31st of the following calendar year both days inclusive, or during periods of wet soil conditions as determined by the Authorized Officer.

ROAD CONSTRUCTION, RENOVATION, MAINTENANCE AND USE

- h. The Purchaser shall construct and renovate roads in strict accordance with the plans and specifications shown on Exhibit C which is attached hereto and made a part hereof.
- i. The Purchaser shall have the option to rock specific roads as shown on Exhibit A, in accordance with specifications shown in Exhibit C. Any additional cost for rocking these roads will be at the Purchasers expense.
- j. Any required construction or renovation of roads shall be completed and accepted prior to the removal of any timber, except right-of-way timber, over that road.
- k. The Purchaser shall not commence work until receipt of written notice to do so from the Authorized Officer.
- l. Upon completion of hauling the Purchaser shall water bar, construct barricades, seed and fertilize in accordance with the plans and specifications shown on Exhibit D and E, which are attached hereto and made a part hereof.
- m. The Purchaser is authorized to use the roads listed below and shown on Exhibit E which are under the jurisdiction of the Bureau of Land Management for the removal of Government timber sold under the terms of this contract and the hauling of rock as required in Exhibit C, provided that the Purchaser comply with the conditions set forth in Section 42.o. and pay the required rockwear obligation described in Section 42.n. The Purchaser shall pay current Bureau of Land Management rockwear fees for the sale of additional timber under modification of the contract.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type
9-1E-36, A/1, A/2, B, C, D	1.75	BLM	ASC
10-2E-06, A, B, C, D	1.28	BLM	ASC
10-2E-05, A, B part	0.74	BLM	ASC
10-2E-05, B part	0.11	BLM	Natural
10-2E-05.2, All part	0.35	BLM	ASC
10-2E-05.2, All part	0.23	BLM	Natural

n. The Purchaser shall pay to the Government a road maintenance obligation for rockwear in the amount of three thousand one hundred fifty-four and 21/100 dollars (\$3,154.21), for the transportation of timber included in the contract price and for transportation of any mineral material required under terms of the contract over road or roads listed in Section 42.m. The amount of the rockwear shown above shall be paid prior to removal of timber from the contract area; provided, however, that if the total of such amount exceeds five-hundred dollars (\$500.00), the Purchaser may elect to make the payment in installments in the same manner as and together with payments required in Sec. 3 of this contract.

o. The Purchaser shall perform any road repair and maintenance work on roads used by him, under the terms of Exhibit D, "Purchaser Road Maintenance Specifications," of this contract which is attached hereto and made a part hereof.

p. The Purchaser also agrees that if they elect to use any other private road which is the subject of a right-of-way agreement with the Government for the removal of Government timber sold under the terms of this contract, Purchaser shall request and agree to the modification of this contract to provide for such use and for allowances for amortization of the Government's share of the capital investment of any such road.

q. The Purchaser shall be required to secure written approval to use vehicles or haul equipment over Government-owned or private bridges or culvert structures when such vehicles or equipment exceed the maximum allowable weights or dimensions established by the State for vehicles operating without a permit.

Tracked-type equipment shall not be allowed to cross over concrete-bridge decks, other concrete surfaced structures, or asphalt surfaced roads without the proper protection of that surface. Prior approval shall be obtained from the Authorized Officer or bridge owner when crossing with protective devices.

Details of such equipment shall be furnished to the Authorized Officer or bridge owner for evaluation of load characteristics at least fifteen (15) days prior to proposed move in.

Details shall include:

- A. Axle weights when fully loaded.
- B. Axle spacing.
- C. Transverse wheel spacing.
- D. Tire size.
- E. Outside width of vehicles.
- F. Operating speed.
- G. Frequency of use.
- H. Special features (e.g., running tracks, overhang loads, etc.)

The Purchaser shall be responsible for repair of any damage to roads or structures caused by the use of overweight or over dimension or tracked vehicles or equipment: (1) without written approval, or (2) in violation of the conditions of a written approval, or (3) in a negligent manner. The amount of actual damage shall be determined by the Authorized Officer following technical inspection and evaluation.

ENVIRONMENTAL PROTECTION

r. In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall clean all plant parts and soil from all earth disturbing equipment and logging equipment prior to entry onto lands managed by the BLM unless otherwise agreed by the Authorized Officer to reduce or prevent the spread of noxious weeds to the Contract Area shown on Exhibit A. Equipment shall be inspected by the Authorized Officer at a site approved by the Authorized Officer to verify that the equipment had been reasonably cleaned prior to entry onto lands managed by the BLM.

s. The Purchaser shall install water bars or comparable erosion control measures, and block entrances or other created access points on the contract areas shown on Exhibit A as directed by the Authorized Officer. This work shall be completed within fifteen (15) days after completion of log hauling from each landing.

t. The Purchaser shall immediately discontinue specified construction or timber harvesting operations upon written notice from the Contracting Officer that:

- (1) threatened or endangered plants or animals protected under the Endangered Species Act of 1973, as amended, may be affected by the operation, and a determination is made that consultation or reinitiating consultation will be required concerning the species prior to continuing operation, or;
- (2) when, in order to comply with the Endangered Species Act (or to protect occupied Marbled Murrelet sites in accordance with the Standards and Guidelines of the Salem District Record of Decision (ROD) and Resource Management Plan (RMP)), the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
- (3) federal proposed, federal candidate, Bureau sensitive or State listed species protected under BLM Manual 6840 - Special Status Species Management - have been identified, and a determination is made that continued operations would affect the species or its habitat, or;
- (4) other active raptor nests have been discovered, and a determination is made that continued operations under this contract would adversely affect the present use of the discovered nesting area by the raptor, or;
- (5) when, in order to comply with a court order which enjoins operations on the sale or otherwise requires the Bureau of Land Management to suspend operations, or;
- (6) when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract.
- (7) species have been discovered which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, and the Contracting Officer determines that continued operation would affect the species or its habitat, or;

- (8) when, in order to protect species which were identified for protection through survey and manage and/or protection buffer standard and guidelines established in the ROD and RMP, the Contracting Officer determines it may be necessary to modify or terminate the contract.

Those operations necessary for a safe removal of personnel and equipment from the contract area and those directed by the Contracting Officer which are required in order to leave the contract area in an acceptable condition will be permitted. Discontinued operations may be resumed upon receipt of written instructions and authorization by the Contracting Officer.

During any period of suspension, the Purchaser may withdraw performance and payment bond coverage aside from that deemed necessary by the Authorized Officer to secure cut and/or removed timber for which the Bureau of Land Management has not received payment, and/or unfulfilled contract requirements associated with harvest operations that have already occurred and associated post-harvest requirements.

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the First Installment held on deposit may be temporarily reduced upon the written request of the Purchaser. For the period of suspension extending beyond 30 days, the First Installment on deposit may be reduced to five percent of the First Installment amount listed in Section 3.b. of the contract. Any First Installment amount temporarily reduced may be refunded or transferred to another BLM contract at the request of the Purchaser. However, if the Purchaser has outstanding debt owing the United States, the Contracting Officer must first apply the amount of First Installment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3710, *et seq.*). Upon Purchaser's receipt of a bill for collection and written notice from the Contracting Officer lifting the suspension, the Purchaser shall restore the First Installment to the full amount shown in Section 3.b. of the contract within 15 days after the bill for collection is issued, subject to Section 3.h. of the contract. The Purchaser shall not resume contract operations until the First Installment amount is fully restored.

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the unamortized Out-of-Pocket Expenses for road or other construction required pursuant to Exhibit C of the contract shall be refunded or transferred to another BLM contract at the request of the Purchaser. Upon written notice from the Contracting Officer lifting the suspension, the Purchaser shall reimburse the Government the amounts refunded or transferred. The Purchaser may choose to pay this reimbursement at once or in installments payable at the same time as payments are due for the timber under the contract and in amounts approximately equal to the expenses associated with the timber for which payment is due.

In the event that operating time is lost as a result of the incorporation of additional contract requirements, or delays due to Endangered Species Act consultation with the U.S. Fish and Wildlife Service or U.S. National Marine Fisheries Service, or court-ordered injunctions, the Purchaser agrees that an extension of time, without reappraisal, will constitute a full and complete remedy for any claim that delays due to the suspension hindered performance of the contract or resulted in damages of any kind to the Purchaser.

The Contracting Officer may determine that it is necessary to terminate the cutting and removal rights under the contract in order to comply with the Endangered Species Act, protect species that have been discovered which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, or comply with a court order. Following the issuance of a written notice that cutting and removal rights will be terminated, the Purchaser will be permitted to remove timber cut under the contract, if allowed by the Endangered Species Act, survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, or court order requirements necessitating the modification or termination.

In the event cutting and removal rights are terminated under this subsection, the Purchaser agrees that the liability of the United States shall be limited to the actual costs incurred by the Purchaser which have not been amortized by timber removed from the contract area. This calculation of liability shall utilize actual Purchaser costs and Government estimates of timber volumes. At the Authorized Officer's request, the Purchaser agrees to provide documentation of the actual costs incurred in the performance of the contract. In addition, the Purchaser shall be released from the obligation to pay the contract price for any timber which is not authorized to be removed from the contract area.

The Purchaser specifically and expressly waives any right to claim damages, other than those described in the preceding paragraphs, based on an alleged breach of any duty to the Purchaser, whether express or implied, in regard to the manner in which the Government defended the litigation which resulted in the court order affecting the operation of the contract. This waiver also extends to any claims based on effects on the operation of the contract that arise from litigation against another agency. Furthermore, the Purchaser specifically acknowledges and agrees that a court ruling that the Government violated the Administrative Procedures Act cannot be interpreted, in itself, to mean that the Government had not acted reasonably in regard to its duties to the Purchaser under this contract.

FIRE PROTECTION

u. Primarily for purposes of fire prevention and control, the Purchaser shall comply with the following provisions when operating at Oregon Department of Forestry Industrial Fire Precaution Level (IFPL) I (Closed Fire Season). At IFPL II and III, additional fire prevention and control provisions may be added as determined by the Authorized Officer and specified in written instructions to the Purchaser to mitigate dry fuel and weather conditions.

(1) Prior to the operation of power-driven equipment in construction or logging operations under this contract during the closed fire season or periods of fire danger, prepare a fire prevention and control plan to the satisfaction of the Authorized Officer.

(2) Provide and maintain in good working order, and immediately available on the contract area, the following equipment for use during closed fire season or periods of fire danger:

(a) Fire fighting tools shall be kept at each landing or at such other place at the Authorized Officer shall designate whenever people are working on the contract area. All fire fighting tools shall be kept in a sturdily constructed box which shall be painted red and lettered on the front or top in large letters "For Fire Only." The box shall have a hinged lid and a hasp by which the lid can be sealed. One (1) box may serve two landings, not over six

hundred (600) feet apart. When filled, the box shall not weigh over two hundred (200) pounds. The fire tools shall be in good condition, be tight on strong handles, and have sharp cutting edges. There shall be not less than four (4) tools in each box or less than one (1) tool for each man working on the contract area. Three-fourths (3/4) of all fire tools shall be shovels, hazel hoes, or other scraping tools. The fire tools shall be used only for fighting fire.

(b) At each landing or such other place as the Authorized Officer shall designate during periods of operation, one (1) fire engine or tank truck of one thousand (1000) gallons or more capacity, or multiple engines equal to 1000 gallons capacity, with five hundred (500) feet of 1 ½ inch hose, one thousand (1000) feet of 1 inch hose, one (1) 1 ½ inch gated wye, one (1) 1 inch gated wye, two (2) 1 ½ to 1 inch reducers, and three (3) 1 inch nozzles. The fire engine, tank truck or smaller engines shall be equipped with a pump capable of delivering a minimum of forty (40) pounds per square inch (psi) engine pressure through fifty (50) feet of 1 ½ inch hose. The pump may be either a power take off (PTO), or a truck-mounted auxiliary engine. All equipment shall be acceptable to the Authorized Officer and shall conform to the standards set forth in Oregon Revised Statutes 477.645 through 477.670 and any rule promulgated pursuant to these statutes. All hose couplings shall have the standard thread adopted by the BLM (1 ½ inch National Hose Thread (NH), 1 inch National Pipe Straight Hose Thread (NPSH) or be provided with suitable adapters. At the close of each working day, all bulldozers, tank trucks, and/or engines shall be filled with fuel and made ready for immediate use. All tank trucks, and /or engines and portable tanks shall be filled with water and made available for immediate use.

(c) Two (2) backpack pumps at each landing and one (1) at each tail block, or any other block, all to be kept full of water and in good operating condition.

(d) A chemical fire extinguisher of at least eight (8) ounces minimum capacity of a type approved by the Oregon State Forester and a size 0 or larger shovel shall be carried during the closed fire season or periods of fire danger by each falling crew and each buckner using a power saw on the contract area. Such fire extinguisher shall be filled and in effective operating condition and shall at all times be immediately available to the operator when the saw is being fueled or the motor of the saw is running. Any fueling of a power saw shall be done in an area which has first been cleared of all flammable material. Power saws shall be moved at least twenty (20) feet from the place of fueling before the engine is started. Each power saw shall be equipped with an exhaust system and a spark arresting device which are of types approved by the Oregon State Forester.

(e) Where blocks and cables are used on the contract area during periods of fire danger, the Purchaser shall remove all flammable material at least ten (10) feet from the place where the tail or any other block shall hang when the cable is tight. Such clearings shall be inspected periodically by the Purchaser and shall be kept free of flammable material.

(f) During Oregon Department of Forestry Closed Fire Season, no smoking shall be permitted outside of closed vehicles.

LOGGING RESIDUE REDUCTION

v. The Purchaser shall perform logging residue reduction within the Fuel Reduction Area as shown on Exhibit F, which is attached hereto and made a part hereof. All work shall be done as directed by the Authorized Officer in accordance with the specifications described on Exhibit G which is attached hereto and made a part hereof. This logging residue work will occur upon completion of logging operations on any individual unit where it is required within thirty (30) days after completion of skidding or yarding on each Fuel Reduction Area unless otherwise agreed by the Authorized Officer.

w. Notwithstanding the provisions of Section 15 of this contract, the Government shall assume all obligations for the disposal or reduction of the fire hazards caused by slash created by the Purchaser's operations on Government lands, except for logging residue reduction operations listed above, and burning and fire control assistance as required herein. Upon phone notification by the Authorized Officer of required performance prior to ignition, the Purchaser shall, under supervision of the Authorized Officer or his designated representative, assist in landing pile, machine pile, and hand pile burning, and fire control on the day (or days) of ignition by furnishing, at his own expense, the services of personnel and equipment as shown below:

- (1) One (1) work leader (Firefighter Type 1 (FFT1)) to supervise crew and to serve as Purchaser's representative.
- (2) A ten (10) person crew (Firefighter Type 2 (FFT2)) for ignition of landing, machine, and hand piles.
- (3) Twelve (12) drip torches with eighty-five (85) gallons of slash fuel. (4:1 ratio of diesel to gasoline).
- (4) Aluma-gel or other incendiary device.
- (5) One (1) chain saw with fuel.
- (6) One (1) hand tool per above listed personnel on the day of ignition.

All listed personnel shall be physically fit, experienced and fully capable of functioning as required. In addition, all listed personnel shall be qualified according to the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System Guide, PMS-310-1 and provide documentation of these qualifications. On the day of ignition all listed personnel shall be fluent in speaking and understanding English, clothing shall consist of long pants and long sleeved shirts, and be of approved aramid fabric (Nomex™ or equivalent), as well as being free of diesel fuel oil. All personnel shall wear lug sole boots with minimum eight (8) inch tall uppers that provide ankle support, approved hardhats and leather gloves. Personnel who do not meet these requirements or do not have proper clothing and personal protective equipment (PPE) will not be allowed to participate.

All listed tools and equipment shall be in good usable condition. All power-driven equipment shall be fully fueled and available for immediate use. During periods of use under this subsection, the Purchaser shall provide fuel and maintenance for all such power-driven equipment.

In the event of a fire escapement, the Purchaser's personnel and equipment shall, under supervision of the Authorized Officer or his designated representative, take action to control and mop-up the escaped fire until released from such service by the Government. If it becomes necessary to suppress a fire which escapes from the prescribed fire area for a period beyond midnight of ignition day, then the Government shall, at its option: (1) reimburse the Purchaser for such additional use of personnel and equipment at wage rates shown in the current Administratively Determined Pay Rates for the Western Area and at equipment rates shown in

the current Oregon-Washington Interagency Fire Fighting Equipment Rental Rates schedule until the Purchaser is released from such service by the Government or (2) release the Purchaser from additional suppression work and assume responsibility for suppressing the escaped fire.

In case of injury to personnel or damage to equipment furnished as required by this subsection, liability shall be borne by the Purchaser, unless such injury or damage is caused by Government negligence.

Time is of the essence in complying with this provision. In the event the Purchaser fails to provide the personnel and equipment required herein, the Purchaser shall be responsible for all additional cost incurred by the Government in disposing of slash including but not limited to the wages and other costs of providing federal employees and others as substitute labor force, the cost of providing substitute equipment and appropriate additional overhead expenses. If the Purchaser's failure results in a deferral of burning and new conditions necessitate additional site preparation work and/or the use of additional personnel and equipment to accomplish the planned burn, the Purchaser also shall be responsible for such additional costs.

CONTRIBUTED FUNDS

x. The Purchaser shall assist the Government in the pile burning in accordance with Sec. 42.w. and Exhibit G pertaining to Prescribed Burning. The Purchaser shall have the option of completing this work, or in lieu thereof, may make a contribution to the Bureau of Land Management in the amount of Five thousand one hundred eighty-eight and 44/100 dollars (\$5,188.44). Upon making such contribution, the Purchaser shall be relieved of the obligations set out in Sec.42.w. The Purchaser shall notify the Authorized Officer in writing of his intention to make this contribution prior to approval of this contract. If the Purchaser elects to make a contribution, the Authorized Officer shall establish an installment schedule of payments of the contribution.

LOG EXPORT RESTRICTIONS

y. All timber sold to the Purchaser under the terms of the contract, except exempted species, is restricted from export under the United States in the form of unprocessed timber and is prohibited from being used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs, except those of utility grade or below, such as sawlogs, peeler logs and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three-quarters (8-3/4) inches in thickness; (3) split or round bolts or other roundwood not processed to standards or specifications or suitable for end-product uses; or (4) western red cedar lumber which does not meet lumber of American Standards Grades of Number 3 dimension or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 Common or better. Thus, timber manufactured into the following will be considered processed: (1) lumber and construction timbers regardless of size, manufactured to standards and specifications suitable for end-product uses; (2) chips, pulp, and pulp products; (3) green or dry veneer and plywood; (4) poles and piling cut or treated for use as such; (5) cants, squares, and lumber cut for remanufacturing of eight and three-quarters (8-3/4) inches in thickness or less; (6) shakes and shingles.

Substitution will be determined under the definition found in 43 CFR 5400.0-5(n).

The Purchaser is required to maintain and upon request to furnish the following information:

1. Date of last export sale.

2. Volume of timber contained in last export sale.
3. Volume of timber exported in the past twelve (12) months from the date of last export sale.
4. Volume of Federal timber purchased in the past twelve (12) months from the date of last export sale.
5. Volume of timber exported in succeeding twelve (12) months from date of last export sale.
6. Volume of Federal timber purchased in succeeding twelve (12) months from date of last export sale.

In the event the Purchaser elects to sell any or all of the timber sold under this contract in the form of unprocessed timber, the Purchaser shall require each party buying, exchanging or receiving such timber to execute a "Certificate as to Nonsubstitution and the Domestic Processing of Timber". The original of such certification shall be filed with the Authorized Officer. Additionally, when the other party is an affiliate of the Purchaser, the Purchaser will be required to update information under item (2) of Form 5450-17 (Export Determination) and file the form with the Authorized Officer.

In the event an affiliate of the Purchaser has exported private timber within twelve (12) months prior to purchaser or otherwise acquiring Federal timber sold under this contract, the Purchaser shall, upon request, obtain from the affiliate information in the form specified by the Authorized Officer and furnish the information to the Authorized Officer.

Prior to the termination of this contract, the Purchaser shall submit to the Authorized Officer Form 5460-15 (Log Scale and Disposition of Timber Removed Report) which shall be executed by the Purchaser. In addition, the Purchaser is required under the terms of this contract, to retain for a three-year period from the date of termination of the contract the records of all sales or transfer of logs involving timber from the sale for inspection and use of the Bureau of Land Management.

Unless otherwise authorized in writing by the Contracting Officer, the Purchaser shall brand clearly and legibly one end of all logs with a scaling diameter (small end inside bark) of over ten (10) inches, prior to the removal of timber from the contract area. All loads of eleven (11) logs or more will have a minimum of ten (10) logs clearly and legibly branded on one end regardless of the diameter of the logs. All logs will be branded on loads of ten (10) logs or less. One end of all branded logs to be processed domestically will be marked with a three (3) square inch spot of highway yellow paint. The Purchaser will stop trucks for accountability monitoring at mutually agreed upon locations when notified by the Authorized Officer.

If multiple trailers (mule trains) are used, each bunked load shall be considered an individual load and these guidelines will apply to each bunked load. If a flatbed stake trailer is used, each bundle will be treated as a separate load.

At the discretion of the Contracting Officer, the Purchaser may be required to brand and paint all logs. Any increased cost for log branding and painting shall be the responsibility of the Purchaser.

In the event of the Purchaser's noncompliance with this subsection of the contract, the Authorized Officer may take appropriate action as set forth in Sec. 10 of this contract. In addition, the Purchaser may be declared ineligible to receive future awards of Government timber for a period of one year.

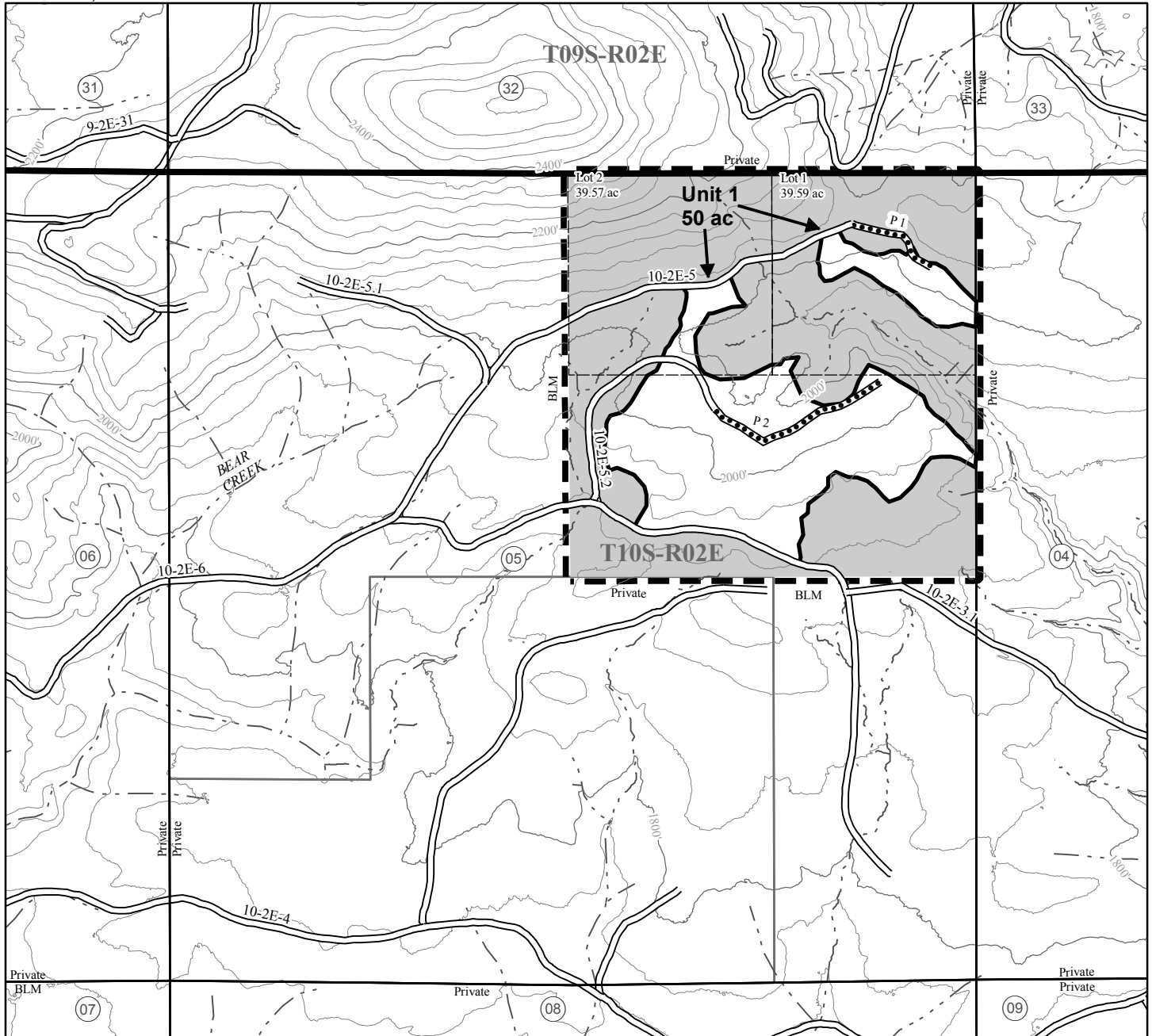
United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Salem District - Oregon

ThunderKat
Timber Sale
Exhibit A
Page 1 of 1

TIMBER SALE CONTRACT MAP - Contract No.ORS04-TS-2016.0503

T.10S., R.2E., Section 5 W. M.

October 30, 2015



1,000 500 0 Feet

- Existing Road
- Road to be Constructed
- Regeneration Harvest Area
- Lot
- Reserve Area
- ▤ Contract Area
- Ownership

Regeneration Harvest Area	50 Acres
Road Right of Way	1 Acres
Reserve Area	108.16 Acres
Contract Area	159.16 Acres

Contour Interval : 40'



Note: Boundaries of Regeneration Harvest Area are painted orange and posted.

Note: Unit acres do not include existing. Acres shown on Exhibit A have been computed using a Trimble Geo XT global positioning system receiver. Acreage was calculated based on global positioning system traverse procedures including differential correction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

EXHIBIT B / PRE-SALE

5450-3

Contract No.

ORS04-TS-2016.0503

ThunderKat

The following estimates and calculations of value of timber sold are made solely as an administrative aid for determining: (1) adjustments made or credits given in accordance with Secs. 6, 9, or 11; (2) when payments are due; and (3) value of timber subject to any special bonding provisions. The value of timber will be determined by multiplying the value per acre as shown below, times the amount of acreage as determined by the Authorized Officer, which has been cut or removed or designated for taking. Except as provided in Sec. 2, Purchaser shall be liable for total purchase price even though quantity of timber actually cut or removed or designated for taking is less than the estimated volume or quantity shown. Cutting areas are shown on **Exhibit A**.

SPECIES	ESTIMATED VOLUME OR QUANTITY (Units Specified)		PRICE PER UNIT	ESTIMATED VOLUME OR QUANTITY X UNIT PRICE
Western Hemlock	1,500.0	MBF	\$187.40	\$281,100.00
Douglas Fir	389.0	MBF	\$301.80	\$117,400.20
Grandfir	172.0	MBF	\$174.20	\$29,962.40
Bigleaf Maple	37.0	MBF	\$74.30	\$2,749.10
Red Alder	28.0	MBF	\$253.60	\$7,100.80
TOTALS	2,126.0	MBF		\$438,312.50

The apportionment of the total purchase price is as follows:

Unit 1

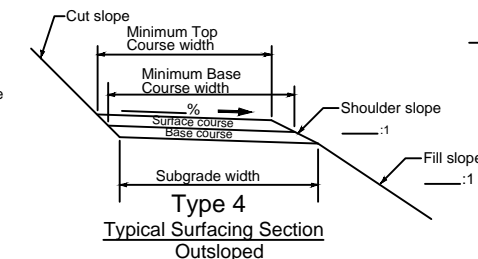
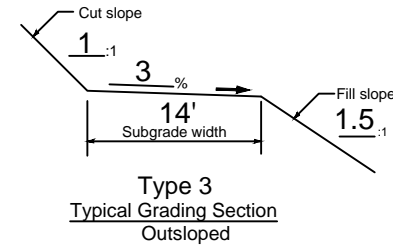
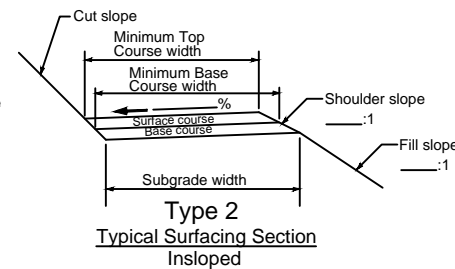
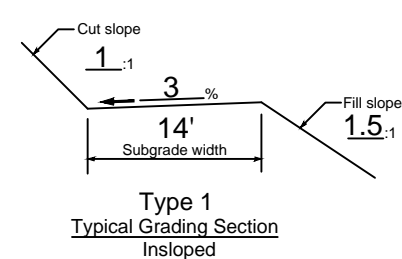
Western Hemlock	1,470.0 MBF	X	\$187.40	=	\$275,478.00
Douglas Fir	382.0 MBF	X	\$301.80	=	\$115,287.60
Grandfir	169.0 MBF	X	\$174.20	=	\$29,439.80
Bigleaf Maple	36.0 MBF	X	\$74.30	=	\$2,674.80
Red Alder	27.0 MBF	X	\$253.60	=	\$6,847.20
Total	2084.0 Mbf				\$429,727.40 ÷ 50.0 acres = \$8,594.55/Acre

Unit R/W

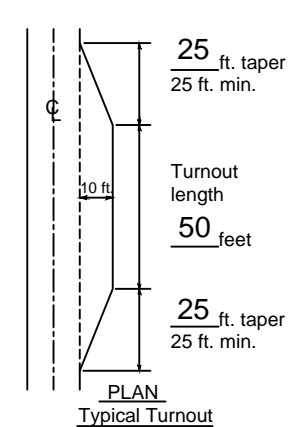
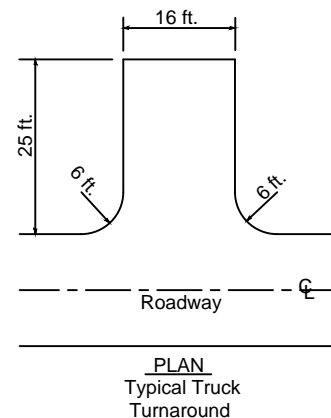
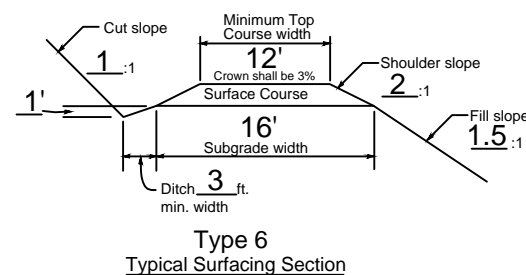
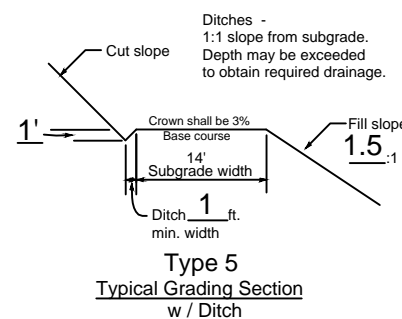
Western Hemlock	30.0 MBF	X	\$187.40	=	\$5,622.00
Douglas Fir	7.0 MBF	X	\$301.80	=	\$2,112.60
Grandfir	3.0 MBF	X	\$174.20	=	\$522.60
Bigleaf Maple	1.0 MBF	X	\$74.30	=	\$74.30
Red Alder	1.0 MBF	X	\$253.60	=	\$253.60
Total	42.0 Mbf				\$8,585.10 ÷ 1.0 acres = \$8,585.10/Acre

U.S. DEPT. OF THE INTERIOR
Bureau of Land Management
SALEM DISTRICT OFFICE - OREGON

EXHIBIT C
ThunderKat
ORS04-TS-2016.0503
Sheet 9 of 26

[illegible]

NOTE: TYPE 2 through 5 TYPICAL SECTIONS not to be used where grade exceeds 6%



*NOTES

1. Extra subgrade widths
Add to each shoulder: 1 ft. for fills of 1-6 ft. and 2 ft. for fills over 6 ft. Widen the inside shoulder of curves as follow:
1 ft. for 75 ft. radius
2 ft. for 60 ft. radius
 2. Backslopes

Materials	Cut slopes	Fill slopes
Solid rock	1/4:1	Angle of repose
Soft rock and shale	1/2:1	_____
Common		
Slopes under 55%	1:1	1-1/2:1
Slopes over 55%	3/4:1	1-1/2:1

Note:
Full bench construction is required on side slopes exceeding 60%.
 3. Surface type

	Grading
PRR - Pit run rock	A - 3"
GRR - Grid rolled rock	B - 2"
SRN - Screened rock	C - 3" jaw run
JRR - Jaw run rock	
ABC - Aggr. base course	C - 1-1/2"
ASC - Aggr. surface course	D - 1"
WC - Wood chips	E - 3/4"
 4. Turnouts
Width - 10 ft. in addition to subgrade width, or as shown on the plans.
Located approximately as shown on the plans.
Intervisible and not more than 750 ft. apart.
 5. Surfacing
Turnouts, curve widening and road approach aprons shall be surfaced.
 6. Clearing width
See Section 200.
 7. As posted and painted for Right-of-Way:
 8. Drainage
See Culvert List, Sheet ____ of ____.
 9. Grading
See Sections 300 & 500
 10. Compaction
See Sections 300, 500 and 1200

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Road Plan Map

SECS. 36, T. 9 S., R. 1 E., WILL. MER.
SECS. 1, 5, 6, T. 10 S., R. 1 & 2 E., WILL. MER.

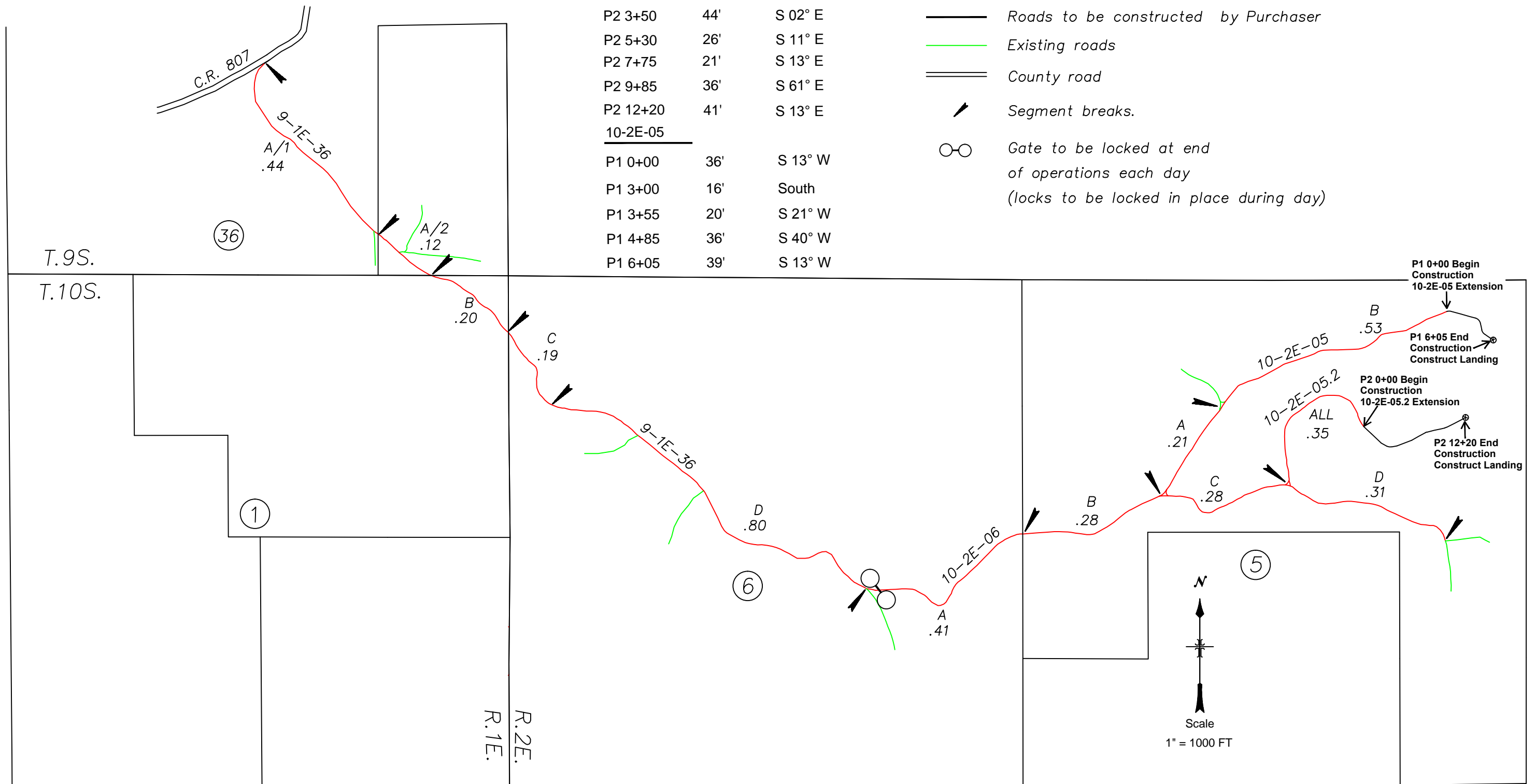
Exhibit "C"
ThunderKat
ORS04-TS-2016.0503
Sheet 26 of 26

REFERENCE LIST

Station	Horiz. Dist.	Brng. from R.P.
10-2E-05.2		
P2 0+00	41'	N 76° E
P2 1+80	31'	S 48° W
P2 3+50	44'	S 02° E
P2 5+30	26'	S 11° E
P2 7+75	21'	S 13° E
P2 9+85	36'	S 61° E
P2 12+20	41'	S 13° E
10-2E-05		
P1 0+00	36'	S 13° W
P1 3+00	16'	South
P1 3+55	20'	S 21° W
P1 4+85	36'	S 40° W
P1 6+05	39'	S 13° W

LEGEND

- Roads to be renovated by Purchaser
- Roads to be constructed by Purchaser
- Existing roads
- County road
- ↗ Segment breaks.
- ○ Gate to be locked at end of operations each day (locks to be locked in place during day)

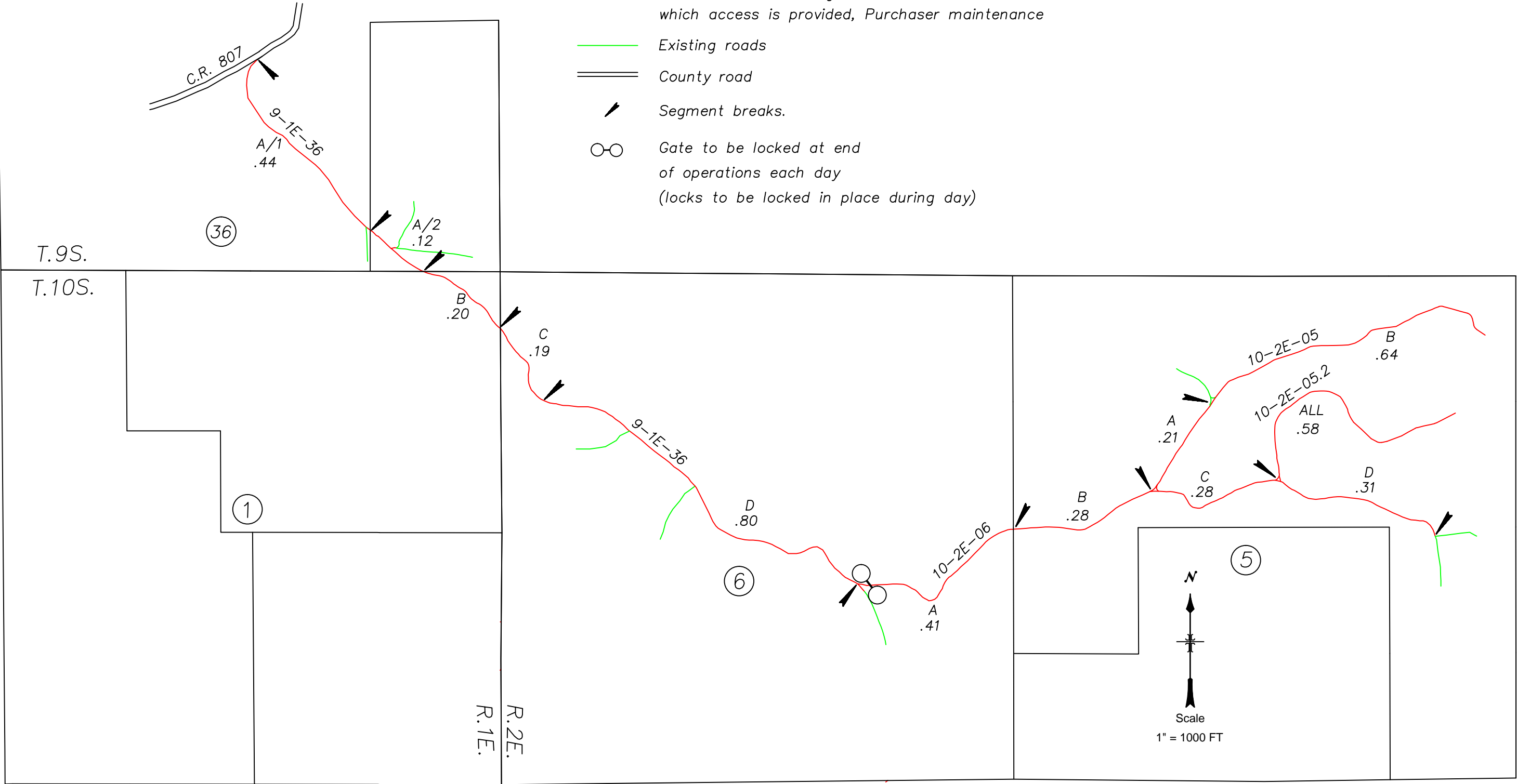


UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Road Use and Maintenance Map
SECS. 36, T. 9 S., R. 1 E., WILL. MER.
SECS. 1, 5, 6, T. 10 S., R. 1 & 2 E., WILL. MER.

Exhibit "E"
ThunderKat
ORS04-TS-2016.0503

LEGEND

- Bureau of Land Management controlled roads over which access is provided, Purchaser maintenance
- Existing roads
- County road
- Segment breaks.
- Gate to be locked at end of operations each day (locks to be locked in place during day)



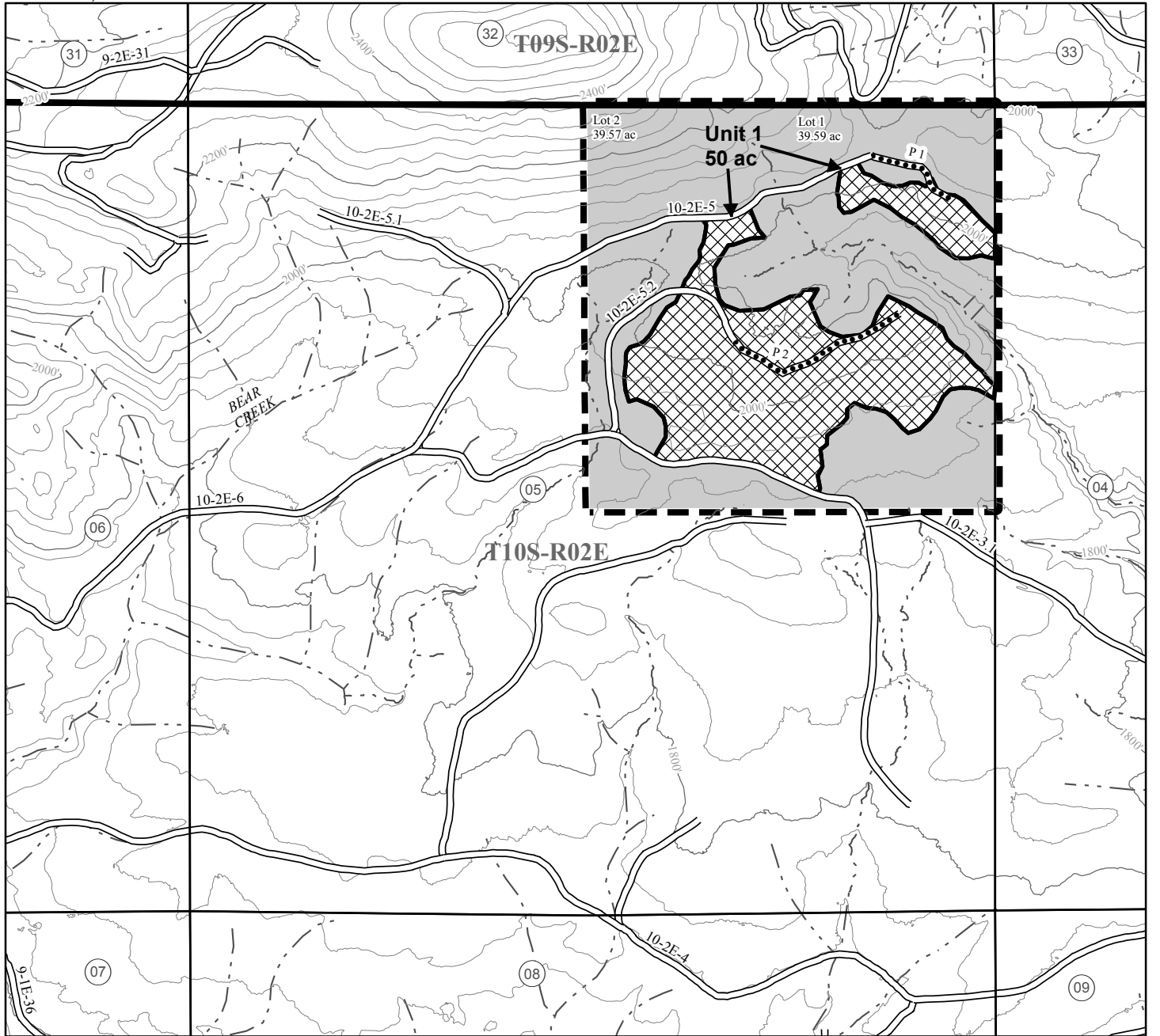
United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Salem District - Oregon

ThunderKat
Timber Sale
Exhibit F
Page 1 of 1

TIMBER SALE CONTRACT MAP - Contract No.ORS04-TS-2016.0503

T.10S., R.2E., Section 5 W. M.

October 22, 2015



1,000 500 0 Feet

Contour Interval : 40'



- Existing Road
- New Road Construction
- Regeneration Harvest Area
- Reserve Area
- Contract Area

Fuel Reduction Area

- ▨ Machine Pile

Note: Unit acres do not include existing roads. Acres shown on Exhibit F have been computed using a Trimble Geo XT global positioning system receiver. Acreage was calculated based on global positioning system traverse procedures including differential correction.

LOGGING RESIDUE REDUCTION

Immediately upon completion of harvest, activity generated logging slash at all landings, along specified unit boundaries, and in specified units as shown on Exhibit F will be treated as follows:

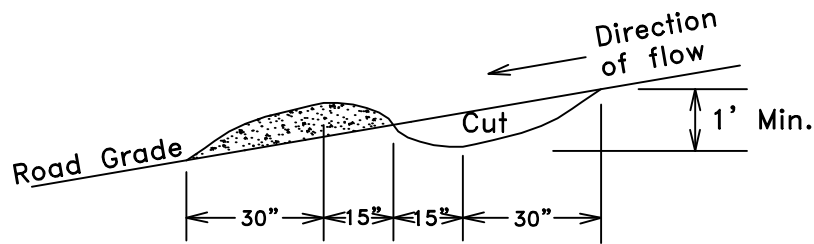
CONSTRUCTION AND COVERING OF LANDING PILES

1. Within twenty-five (25) feet (horizontal distance) of the edge of each landing, all tops, broken pieces, limbs, and other activity generated woody debris greater than one (1) inch in diameter at the large end and longer than three (3) feet in length shall be piled and covered for burning within fifteen (15) days of the removal of logs from the landing area.
2. Landing piles shall be located as far as possible from green trees, snags, or unit boundaries to minimize damage.
3. Landing piles shall be kept free of dirt and other non-wood debris and constructed as compactly as possible. There shall be an adequate supply of finer fuels located within and under the covered area of the pile to ensure ignition of the larger fuels, and the completed piles shall be free of projecting limbs or slash which would interfere with the adequate covering of the piles. To the maximum extent possible, hardwood slash shall be mixed with conifer slash to create piles that are more burnable.
4. The landing piles shall be adequately covered with four (4) mil. (0.004) inch thick black polyethylene plastic not to exceed 100 square feet to ensure ignition. The plastic shall be furnished by the Purchaser. The plastic shall be oriented southwest (SW) to northeast (NE) and over the top of the pile. Plastic shall be held in place with woody debris or tied with rope or twine. The plastic must be secured so that it is held in place during strong wind conditions. Covering shall be completed as directed by the Authorized Officer.
5. No landing debris shall be dozed off the landing and covered with dirt. Debris which has been buried and is determined to be the source of holdover fire shall be excavated by the Purchaser, at the Purchaser's expense, with a tractor and/or hydraulic excavator as directed by the Authorized Officer.
6. If landing debris is minimal and determined by the Authorized Officer to not be a major fire hazard, the debris shall be removed from the landing area and scattered on yarding corridors or skid trails to a depth not to exceed six (6) inches, as directed by the Authorized Officer.
7. If the construction of the landing piles will not permit adequate consumption of the piled debris, the Purchaser shall be required to re-pile the debris at the direction of the Authorized Officer.

2. A track mounted hydraulic excavator shall be used to pile woody debris.
3. All equipment shall meet the approval of the Authorized Officer.
3. Prior to piling; the excavator shall be cleaned in accordance with section 42.r.
4. The excavator shall be equipped with a hydraulic thumb or a rotating controllable grapple head. The machine shall have a minimum reach of twenty-five (25) feet. The excavator shall not operate on slopes greater than thirty-five (35) percent.
5. Along roads, the excavator shall be limited to construction of machine piles from the roadbed to avoid compaction within the harvest area.
6. In ground based harvest areas away from roads, the excavator shall be required to work on a slash mat in order to reduce compaction. No more than one pass over the same ground shall be permitted.
7. Machine piles shall be located as far as possible from green trees, snags, or unit boundaries to minimize damage.
8. Machine piles shall be kept free of dirt and other non-wood debris and constructed as compactly as possible. There should be an adequate supply of finer fuels located within and under the covered area of the pile to ensure ignition of the larger fuels, and the completed piles shall be free of projecting limbs or slash which would interfere with the adequate covering of the piles. To the maximum extent possible, hardwood slash shall be mixed with conifer slash to create piles that are more burnable. Logging debris greater than six (6) inches in diameter at the small end shall not be piled.
9. The machine piles shall be adequately covered with four (4) mil. (0.004) inch thick black polyethylene plastic not to exceed 100 square feet to ensure ignition. The plastic shall be furnished by the Purchaser. The plastic shall be oriented southwest (SW) to northeast (NE) and over the top of the pile. Plastic shall be held in place with woody debris or tied with rope or twine. The plastic must be secured so that it is held in place during strong wind conditions. Covering shall be completed as directed by the Authorized Officer.

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Salem District

EXHIBIT H
ThunderKat
ORS04-TS-2016.0503
Sheet 1 of 2

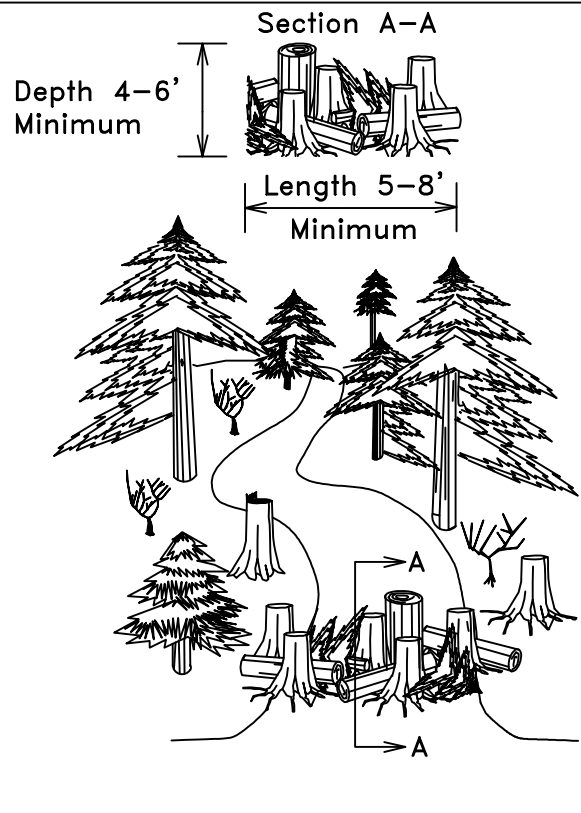


1. Waterbars shall be constructed as shown.
2. Exact locations will be flagged by the Authorized Officer prior to construction.
3. All waterbars shall be skewed 30 degrees.
4. Waterbars shall extend from the cut bank to the fill slope and be readily crossed by passenger type vehicles.
5. See itemized Project List for quantities and locations.

Typical Waterbar Details
(Not to scale)

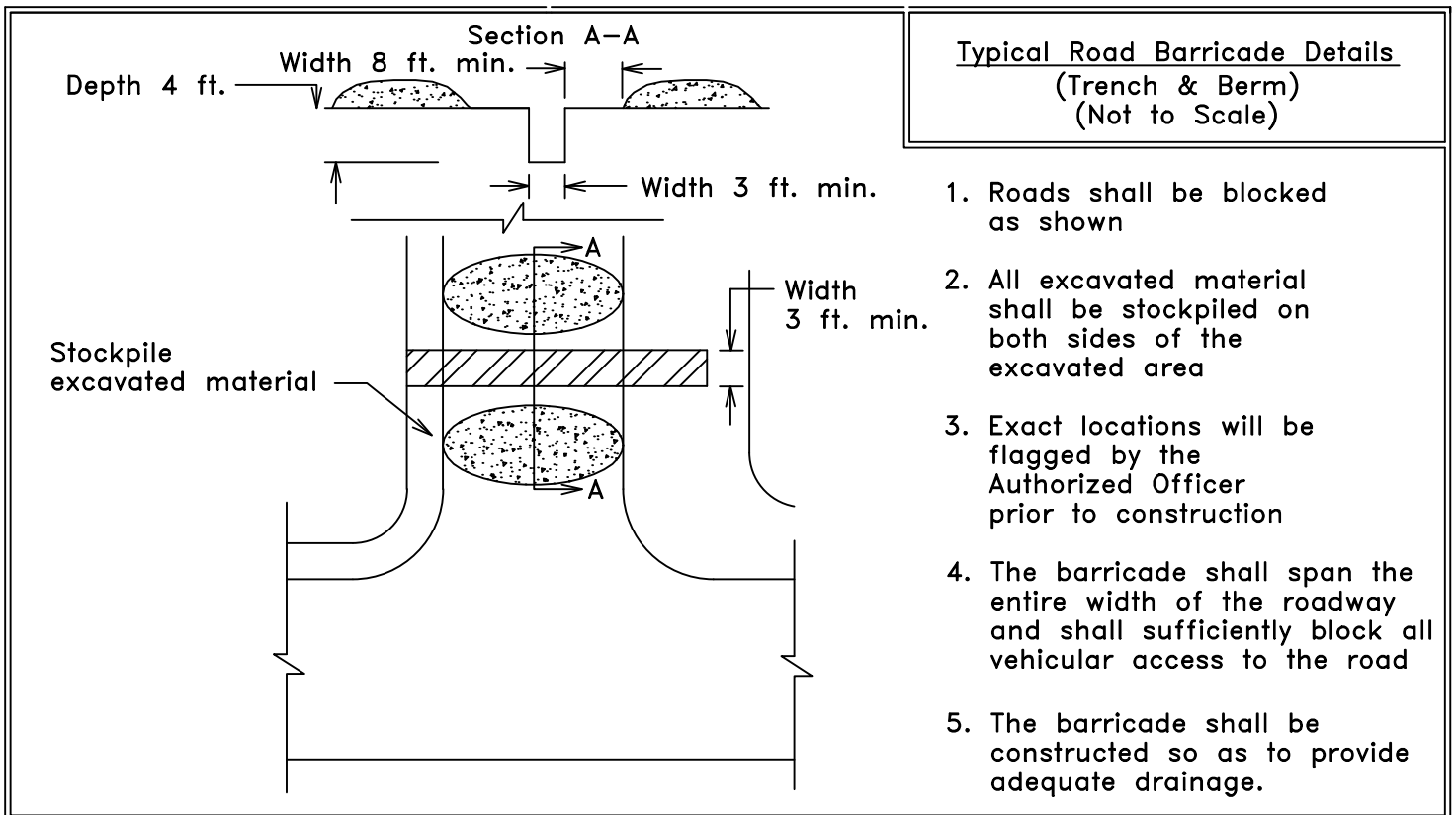
Typical Debris Barricade Details
(Debris & Earth berm)
(Not to Scale)

1. Roads shall be blocked as shown using available debris
2. All barricade material shall be stockpiled in a large configuration of stumps, logs, large rocks, woody material and earth. Earth will be used to aid debris from being cut or removed from the site.
3. Barricade locations will be flagged by the Authorized Officer prior to construction
4. The barricade shall span the entire width of the roadway and shall sufficiently block all vehicular access to the road



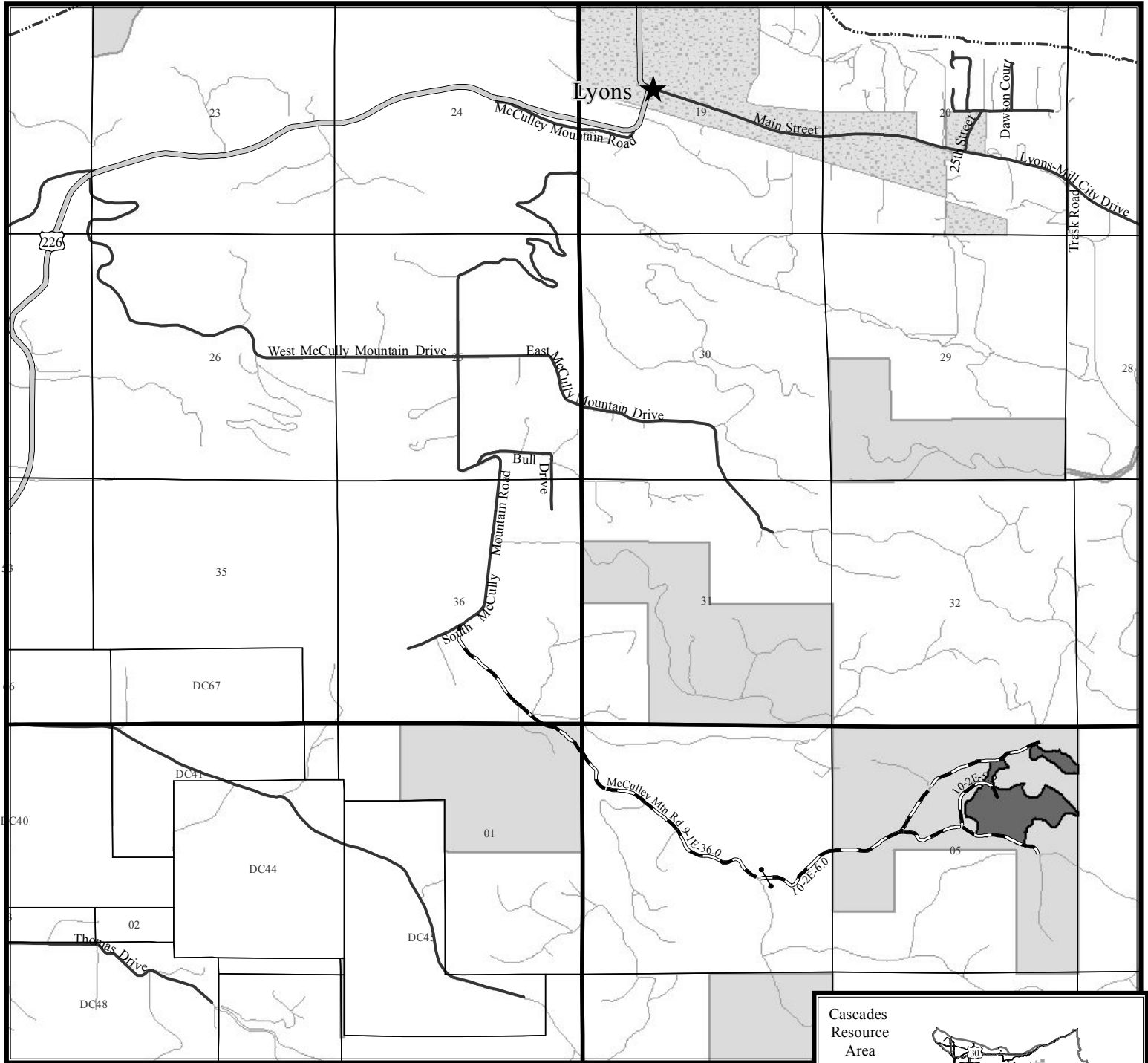
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Salem District

Exhibit H
ThunderKat
ORS04-TS-2016.0503
Sheet 2 of 2



United States Department of the Interior
BUREAU OF LAND MANAGEMENT
TIMBER SALE CONTRACT LOCATION MAP
Thunder Kat Timber Sale - Contract No. ORS04-TS-2016.0503
T.10S, R.2E Section 5 W. M. - SALEM DISTRICT - OREGON

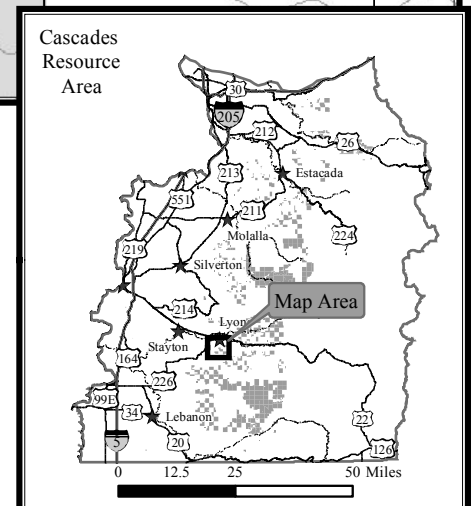
11/4/2015



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.



- Gate
- Haul Route
- County Road
- Other Roads
- State Hwys
- Major Streams
- Harvest Unit Boundary
- Bureau of Land Management



**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Timber - Sale - Summary**

Salem
ThunderKat
ORS04-TS-2016.503

Legal Description

Forest Type	Township	Range	Section	Subdivision
O&C	10S	2E	5	Lot1, Lot2, S1/2NE1/4; W.M.

Cutting Volume (16' MBF)

Unit	WH	DF	GF	BLM	RA				Total	Regen	Partial	ROW
1	1,470	382	169	36	27				2,084	50	0	0
RW	30	7	3	1	1				42	0	0	1
Totals	1,500	389	172	37	28				2,126	50	0	1

Logging Costs per 16' MBF

Stump to Truck	\$ 136.19
Transportation	\$ 29.29
Road Construction	\$ 10.97
Road Amortization	\$ 0.00
Road Maintenance	\$ 6.52
Other Allowances :	

Equipment Washing	\$ 0.35
Misc	\$ 12.41
Total Other Allowances :	\$ 12.76

Profit & Risk

Total Profit & Risk	11 %
Basic Profit & Risk	11 % + Additional Risk 0 %
Back Off	0 %

Tract Features

Avg Log	Western Hemlock : 99 bf	All : 98 bf
Recovery	Western Hemlock : 92 %	All : 92 %
Salvage	Western Hemlock : 0 %	All : 0 %
Avg Volume (16' MBF per Acre)		42
Avg Yarding Slope		20 %
Avg Yarding Distance (feet)		400
Avg Age		78
Volume Cable		0 %
Volume Ground		100 %
Volume Aerial		0 %
Road Construction Stations		18.25
Road Improvement Stations		0.00
Road Renovation Stations		217.53
Road Decommission Stations		0.00

Cruise

Cruised By	Poteet
Date	08/11/2015
Type of Cruise	3P
County, State	Linn, OR

Net Volume

Green (16' MBF)	2,126
Salvage (16' MBF)	0
Western Hemlock Peeler	0
Export Volume	0
Scaling Allowance (\$0.00 per 16' MBF)	\$0.00

Total Logging Costs per 16' MBF

\$ 195.72

Utilization Centers

Center #1 : Lyons OR.	10 Miles
Center #2	0 Miles
Weighted distance to Utilization Centers	10

Length of Contract

Cutting and Removal Time	36 Months
Personal Property Removal Time	1 Months

UNITED STATES
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Salem
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Stumpage Summary

Stumpage Computation (16' MBF)

Species	Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Cost	(+) Marginal Log Value	(-) Back Off	Appraised Price	Appraised Value
WH	3,132	1,500	\$ 430.49	\$ 47.35	\$ 195.72			\$ 187.40	\$ 281,100.00
DF	660	389	\$ 559.01	\$ 61.49	\$ 195.72			\$ 301.80	\$ 117,400.20
GF	350	172	\$ 415.69	\$ 45.73	\$ 195.72			\$ 174.20	\$ 29,962.40
BLM	408	37	\$ 257.87	\$ 28.37	\$ 195.72	\$ 40.54		\$ 74.30	\$ 2,749.10
RA	718	28	\$ 402.49	\$ 44.27	\$ 195.72	\$ 91.07		\$ 253.60	\$ 7,100.80
Totals	5,268	2,126							\$ 438,312.50

Log Code by Percent

Species	Code #1	Code #2	Code #3	Code #4	Code #5	Code #6
Grand Fir				79.0	19.0	2.0
Douglas-fir			5.0	71.0	22.0	2.0
Western Hemlock				69.0	28.0	3.0
Bigleaf Maple				48.0	52.0	
Red Alder					100.0	

Marginal Log Volume

Species	Grade #7	Grade #8
Grand Fir		
Douglas-fir		
Western Hemlock		
Bigleaf Maple	10	
Red Alder	17	

Appraised By : Poteet, Jeremy

Date : 09/28/2015

Area Approval By :

Date :

District Approval By :

Date :

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Salem
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Prospectus

Appraisal Method : (16' MBF)

Species	Trees	Net Volume 16' MBF	Net Volume 32' MBF	Net Volume CCF
Western Hemlock	3,132	1,500	1,278	
Douglas-fir	660	389	322	
Grand Fir	350	172	140	
Bigleaf Maple	408	37	29	
Red Alder	718	28	23	
Total	5,268	2,126	1,792	

All Species

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
2,318	5,268	440	17.5	2,306	23,610	98

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
23,610	1,430	25,040	4.8	2,126	2,318	92 %

Western Hemlock

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
1,633	3,132	521	18.3	1,621	16,397	99

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
16,397	102	16,499	5.3	1,500	1,633	92 %

Cutting Areas

Unit	Regen Acres	Partial Cut Acres	Right Of Way Acres	Total Acres
1	50			50
RW			1	1
Totals :	50		1	51