

PROSPECTUS

GRANTS PASS RESOURCE AREA
JOSEPHINE MASTER UNIT

Medford Sale # 10-05
September 16th, 2010 (JB)

#1. TENNESSEE LIME, Josephine County, O&C

BID DEPOSIT REQUIRED: \$4,400.00

All timber designated for cutting in NE1/4NE1/4, S1/2NE1/4 Section 35 T. 38S. R. 8W.,
N1/2NE1/4, SE1/4NE1/4 Section 15, NW1/4NE1/4, E1/2NW1/4 Section 17 T. 39S. R.8W.
Willamette Meridian.

Approx. Number Merch. Trees	Est. Volume MBF 32' Log	Est. Volume CCF	Species	Est. Volume MBF 16' Log	Appr. Price Per MBF*	Est. Volume Times Appraised Price
3244	430	908	Douglas-fir	502	\$80.90	\$40,611.80
133	32	68	Sugar Pine	40	**\$25.40	\$1,016.00
126	28	60	Ponderosa Pine	36	**\$24.20	\$871.20
52	9	20	Incense-cedar	11	\$129.20	\$1,428.90
3555	499	1056	Totals	589		\$43,927.90

*Stumpage values have been determined by market value estimates and analytical appraisal methods were used to compute the appraised price. Additional information concerning the appraised price is available at the Medford Interagency Office, or Grants Pass Interagency Office.

**Minimum stumpage values were used to compute the appraised price (10% of pond value).

TIMBER AUCTION LOCATION – The timber auction will be held at the BLM Medford District Office, located at 3040 Biddle Rd., Medford, Oregon, at 9 a.m., on Thursday, September 16, 2010.

Bidders will be restricted to bidding on a unit (MBF) rate of the Douglas-fir volume. All other species will be sold at appraised price per unit (MBF). The minimum bid increment will be \$0.10 per MBF.

CRUISE INFORMATION - The Douglas-fir has been cruised using the 3-P sampling method to select sample trees. Maps showing the location and description of these sample trees are available at the Grants Pass Interagency Office. The sample trees have been measured, utilizing the VOLT system of measurement, and the volume expanded to a total sale volume.

The volume of all other species in this sale has been derived from individual tree measurements taken during a 100% cruise using form class tables for estimating board foot volume of trees in 16-foot logs. 1% of the total sale volume is salvage material. With respect to merchantable trees of all conifer species: the average tree is 14 inches DBHOB; the average gross merchantable log contains 49 bd. ft.; the total gross volume is approximately 664 M bd. ft; and 89% recovery is expected. (Average DF is 13.6 inches DBHOB; average gross merchantable log DF contains 46 bd. ft.)

LOG EXPORT AND SUBSTITUTION RESTRICTIONS - All timber sold to the Purchaser under the terms of the contract, except exempted species, is restricted from export from the United States in the form of unprocessed timber and is prohibited from use 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.

CUTTING AREA – Four (4) units containing 73 acres must be partial cut.

CUTTING TIME - Contract duration will be 36 months for cutting and removal of timber.

ACCESS - Access to the sale area is available via a public road through the contract area and existing BLM roads; 39-8-4, 38-8-35, 39-8-15 and 39-8-17.

ROAD MAINTENANCE - The Purchaser will be required to maintain 2.36 miles of existing BLM road. The Purchaser will be required to pay a maintenance and rockwear fee of \$4.28 per MBF or a total of \$2,527.75 for the use of these roads.

ROAD CONSTRUCTION - The contract will require the Purchaser to improve 173 stations of road. Additional information is available in the timber sale prospectus.

SOIL DAMAGE PREVENTION - Pursuant to Section 25 of Form 5450-3, Timber Sale Contract, the Purchaser shall not operate or cause to have operated on the contract area, any tractor-type logging equipment when soil moisture content exceeds 25 percent by weight as determined by a Speedy Moisture Meter.

EQUIPMENT REQUIREMENTS – Yarding tractor not greater than 8.5 feet wide as measured from the outer edges of standard width track pads and equipped with an integral arch and winch capable of lining logs 75 feet.

SLASH DISPOSAL - Slash disposal will consist of hand pile and cover twenty-six (26) acres, hand pile burn twenty-six (26) acres and lop and scatter eighteen (18) acres.

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 Medford 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.

PERFORMANCE BOND - A performance bond in the amount of 20% of the total purchase price will be required.

OTHER -

1. No extension of time beyond the normal 30 days will be granted for completing bonding and contract signing requirements.
2. Seasonal operating constraints, (L-18).
3. Slash treatment will be concurrent with logging.
4. Cleaning of equipment to eliminate noxious weed seeds is required prior to move in of equipment onto federal lands.

NARRATIVE DESCRIPTION OF HOW TO GET TO THE TIMBER SALE AREA - From Kerby, Oregon, go west on Finch Road for approximately 0.8 miles to Westside Road. Turn south on Westside Road and go approximately 0.8 miles. Turn west on BLM Road 39-8-17. On the north side of the BLM road will be Unit 17-2 of the timber sale. BLM Road 39-8-17 is gated.

ENVIRONMENTAL ASSESSMENT - An environmental assessment (EA-OR117-06-02) was prepared for this sale, and a Finding of No Significant Impact has been documented. This document is available for inspection as background for this sale at the Medford Interagency Office.

Seasonal Restriction Matrix

Sheet 1 of 1
Tennessee Lime
OR-110-TS10-05

*Restricted Times are Shaded

Sale Area	Activity	Jan		Feb		Mar		Apr		May		June		July		Aug		Sept		Oct		Nov		Dec	
		1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15
All Units	Yarding, hauling on natural surface roads, temporary spurs, road construction/renovation, and landing construction ^{1, 2}																								
Unit 35-1A	Falling, yarding, hauling, ,road construction, road improvement, landing construction, chainsaw operation, and prescribed fire operations																								

¹ Hauling restriction may be shortened or extended depending on adequacy of road surfacing, (rock).

² Wet season restrictions may be shortened or extended depending on weather conditions.

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THIS IS A SALE PROSPECTUS ONLY. THESE ARE THE SPECIAL PROVISIONS AS THEY WILL BE WRITTEN IN THE CONTRACT. ATTACHMENTS MAY NOT INCLUDE ALL EXHIBITS REFERRED TO IN THE CONTRACT PROVISIONS. THE COMPLETE CONTRACT, INCLUDING ALL EXHIBITS, IS AVAILABLE FOR INSPECTION AT THE MEDFORD DISTRICT OFFICE.

Sec. 40. TIMBER RESERVED FROM CUTTING - The following timber on the contract area is hereby reserved from cutting and removal under the terms of this contract and is retained as the property of the Government.

- (A) AR-1 All timber on the Reserve Areas as shown on Exhibit A and all orange painted/or posted trees which are on or mark the boundaries of the Reserve Areas.
- (B) IR-6 All hardwood trees which are larger than eight (8) D.B.H.O.B. in all units as shown on Exhibit A.
- (C) IR-6 All snags greater than sixteen (16) inches D.B.H.O.B. and all wind thrown trees in all units except hazard snags. Any felled hazard snags must remain where felled or as directed by the Authorized Officer.
- (D) IR-7 All conifer trees except approximately three thousand five hundred fifty-five (3,555) trees marked for cutting heretofore by the Government with blue paint above and below stump height in all units 15-3A, 15-4B, 17-2, and 35-1A as shown on Exhibit A.
- (E) IR-10 All trees marked with a band of orange paint about six feet from the ground and with a yellow, metal, SEED TREE tag in the partial cutting area shown on Exhibit A. These trees are selected, genetically superior trees and are specially valued as a component of the tree improvement program. Any damage to such reserve trees caused by the Purchaser shall be charged for on the basis of the resulting total loss to the Government including any loss in value as a superior seed source
- (F) IR-11 All trees marked with an orange W in all units shown on Exhibit A. These trees are selected wildlife trees and are specially valued as a component of the Wildlife Habitat Management program. Selected wildlife trees damaged or destroyed by the Purchaser shall

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- (G) be valued for purposes of determining damages at current market value of the merchantable volume plus the cost to replace the damaged or destroyed trees. The Purchaser will be liable under applicable sections of this contract for the removal or destruction of these selected wildlife trees, except for such trees which the Authorized Officer determines to be a safety hazard as defined by applicable safety codes and regulations. When selected wildlife trees are determined to be danger trees, written approval to fell such trees shall be obtained from the Authorized Officer conforming to all requirements of Section 8 of this contract.

- (H) IR-11M All trees which were severed from the stump or cut into logs prior to the date this contract was entered into, and all pre-existing dead and down woody debris within all units as shown on Exhibit A.

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Section 41

(A) Log Exports

- (1) LE-1 All timber to the Purchaser under the terms of this contract, except exempted species, 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. 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 and specifications suitable for end-product uses; or (4) western red cedar lumber which does not meet lumber of American Lumber 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 timber, 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:

- (a) Date of last export sale.
- (b) Volume of timber contained in last export sale.
- (c) Volume of timber exported in the past twelve (12) months from the date of last export sale.
- (d) Volume of Federal timber purchased in the past twelve (12) months from the date of last export sale.
- (e) Volume of timber exported in succeeding twelve (12) months from date of last export sale.

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- (f) 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 certificate 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 purchasing 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.

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

In the event of the Purchasers noncompliance with this subsection of the contract, the Authorized Officer may take appropriate action as set forth in Section 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.

(B) Logging

- (1) L-1 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 he plans to begin operations. This written notification must be received by the Authorized Officer no less than seven (7) days prior to the date the Purchaser plans to begin or resume operations. The Purchaser shall also notify the Authorized Officer in writing if he intends to cease operations for any period of seven (7) or more days.
- (2) L-4 All conifers marked with blue paint for cutting shall be felled in all units as shown on Exhibit A.
- (3) L-6M All logs shall be completely limbed prior to being yarded in all units as shown on Exhibit A unless approved prior to yarding by the Authorized Officer.
- (4) L-7MC Yarding on the areas designated herein and shown on Exhibit A shall be done in accordance with the yarding requirements or limitations for the designated area.

Designated Area	Yarding Requirements or Limitations
Entire contract area	All operator spurs will not exceed fourteen (14) feet in width.
Units:15-3A, 15-4B, 17-2, 35-1A	Yarding tractor width will not be greater than eight and one-half (8.5) feet as measured from the outer edges of standard width track shoes. The location of the tractor skid roads must be clearly designated on the ground, and approved by the Authorized Officer prior to felling of timber to be yarded over that tractor skid road.

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Designated Area	Yarding Requirements or Limitations
Units: 15-3A, 15-4B, 17-2, 35-1A	<p>Use of mechanized equipment off of designated skid roads shall require approval from the Authorized Officer. All operations shall maintain soil compaction of 12% or less across the harvest area and avoid excessive injury to timber otherwise reserved in Section 40 of the contract.</p> <p>Yarding tractors will be equipped with integral arches capable of one-end suspension during skidding and winch systems capable of lining logs at least seventy-five (75) feet.</p> <p>No yarding will be allowed up or down draw bottoms.</p> <p>Landing size shall not exceed one-quarter (1/4) acre.</p> <p>Ground based equipment shall be limited to slopes less than thirty-five (35) percent.</p>

- (5) L-9 Except for operations described in Section 41(B)(6) no tractor equipment is permitted in the seventy-five (75) feet adjacent to the streams in unit 35-1A.
- (6) L-10 Yarding across intermittent streams in unit 35-1A shall be limited to not more than four (4) dry crossings. Upon completion of yarding crossing locations shall be water barred, seeded and mulched as directed by the Authorized Officer.
- (7) L-10 Yarding across the intermittent stream adjacent to unit 15-4B shall be limited to not more than one dry crossing. Upon completion of yarding crossing location shall be water barred, seeded and mulched as directed by the Authorized Officer.
- (8) L-18 No road construction, road improvement, landing construction, hauling, felling, yarding, chainsaw operation, or prescribed fire operations shall be conducted within unit 35-1A between March 1 and June 30 of the same calendar year, both days inclusive.
- (9) L-18 No hauling shall be conducted on the contract area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. Purchaser may request, in writing, a conditional waiver of this restriction. If soil moisture conditions or rain events do not result in road damage or the transport of sediment to nearby stream channels as determined by the Authorized Officer, the Contracting Officer may approve a conditional waiver. If impacts to roads and

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stream channels resulting from said conditional waiver are not acceptable, as determined by the Authorized Officer, the waiver will be revoked.

- (10) L-18 No yarding, road renovation, road construction , or landing construction shall be conducted on the contract area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. Purchaser may request, in writing, a conditional waiver of this restriction. If soil moisture conditions are dry as determined by soil moisture content of less than 25 percent at a depth of six inches as determined by the Authorized Officer, Contracting Officer may approve a conditional waiver. If impacts to soil resulting from said conditional waiver are not acceptable, as determined by the Authorized Officer, the waiver will be revoked.
- (11) L-20 During logging operations, the Purchaser shall keep West Side Road where it passes through the contract area, clear of trees, rock, dirt and other debris so far as practicable. The road shall not be blocked by such operations for more than fifteen (15) minutes.
- (12) L-21 The Purchaser shall provide appropriate signs and flaggers to control traffic on West Side Road where it passes through the contract area whenever necessary for public safety.
- (13) L-24 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 prework conference between the Purchasers authorized representative and the Authorized Officers representative must be held at a location designated by the Authorized Officer before the logging plan will be approved.
- (14) L-25 Before cutting and removing any trees necessary to facilitate logging in all units and adjacent reserve areas shown on Exhibit A, the Purchaser shall identify the location of the skid roads, cable yarding roads, and tailhold, tieback, guyline, lift, intermediate support, and danger trees on the ground in a manner approved by the Authorized Officer at the pre-work conference and documented in the Logging Plan. Said Purchaser identification of trees to be cut and removed does not constitute authority to proceed with cutting and removal. In addition, before proceeding with cutting the following conditions must be met:
 - (a) All skid and/or cable yarding roads upon which timber is identified by the Purchaser to be cut and removed in accordance with this special provision must be necessary for the removal of timber sold under this contract and shall be limited to the

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minimum width necessary for yarding of logs with a minimum of damage to reserve trees, however, unless otherwise approved in writing by the Authorized Officer, the width of each cable yarding road shall be limited to twelve (12) feet.

(b) The Purchaser may immediately cut and remove additional timber to clear skid and/or cable yarding roads; and provide tailhold, tieback, guyline, lift, and intermediate support trees; and clear danger trees when the trees have been marked with red paint above and below stump height by the Authorized Officer and thereby approved for cutting and removal by the Authorized Officer. The volume of the timber will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures. No timber may be cut or removed under terms of this provision unless sufficient installment payments have been made in accordance with Section 3.(b). of the contract or sufficient bonding has been provided in accordance with Section 3.(d). of the contract.

(c) The Purchaser agrees that sale of this additional timber shall be accomplished by a unilateral modification of the contract executed by the Contracting Officer and that such timber shall be sold at the unit prices shown in Exhibit B of this contract unless: the value of the timber must be reappraised subject to the terms for contract extension set forth in Section 9 of the contract; or, the Authorized Officer determines any tree that exceeds 36 inches diameter at breast height shall be appraised and sold by bilateral modification of the contract at current fair market value in accordance with Section 8 of the contract.

(d) This authorization for the Purchaser to cut and remove additional timber prior to the execution of a modification may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser has cut and removed any tree not previously marked and approved for cutting by the Authorized Officer, which under Section 10 of the contract constitutes a violation of the contract and under Section 13 of the contract may constitute a trespass rendering the Purchaser liable for damages under applicable law.

(e) If authorization is withdrawn, the Contracting Officer shall issue a written notice to the Purchaser that the sale of additional timber under this special provision is no longer approved. In this case, the Purchaser shall inform the Authorized Officer at least one (1) working day prior to the need for cutting and removing any additional timber, and execute a bilateral modification prior to cutting for such additional approved timber at the unit prices shown in Exhibit B of the contract or in accordance with Section 8 or Section 9 of the contract as determined by the Authorized Officer in accordance with this provision. The Contracting Officer may issue a written order to the Purchaser to suspend, delay, or interrupt any or all

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contract work for the period of time deemed necessary and appropriate for the Government to safely measure and mark additional timber.

- (15) L-27 In all units shown on Exhibit A, all trees designated for cutting which are within a tree length of the streams and springs to be protected shall be felled away from those streams and springs.
- (16) L-27 In all units shown on Exhibit A, all trees designated for cutting which are within a tree length of the unit boundaries shall be felled away from the boundaries and into the unit.
- (17) L-27 In unit 17-2 as shown on Exhibit A, all trees designated for cutting which are within a tree length of West Side Road shall be felled away from West Side Road and into the unit.
- (18) L-27 In all tractor yarding units as shown on Exhibit A, all trees designated for cutting shall be directionally felled towards pre-approved skid trails.

(C) Road Construction - Maintenance – Use

- (1) RC-1a The Purchaser shall construct, improve and/or renovate all roads and other structures in strict accordance with the plans and specifications shown on Exhibit C, which is attached hereto and made a part hereof.
- (2) RC-1b Prior to removal of any timber, except right-of-way timber, logging spurs, the Purchaser shall complete all construction, improvement, or renovation of structures and roads as specified in Exhibit C.
- (3) RC-1f Upon completion of logging activities, the Purchaser shall scarify the entire roadway of roads shown on Exhibit C in strips of not less than twenty-four (24) inches or more than twenty-eight (28) inches in width to a minimum depth of twelve (12) inches, provided that no scarification shall be required where the road traverses rock outcroppings. All natural water courses shall be opened to prevent erosion of the roadways. Barriers shall be constructed so as to prevent further use of the road by vehicles.
- (4) RC-2 The Purchaser is authorized to use the roads listed below and shown on Exhibit D which are under the jurisdiction of the Bureau of Land Management and/or Josephine County, for the removal of Government timber sold under the terms of this contract and/or the hauling of rock as required in Exhibit C, provided that the Purchaser pay the required maintenance obligations described in Sections

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41(C)(6). Any road listed below and requiring improvement or renovation in Exhibit C of this contract, shall be maintained by the Purchaser until receiving written acceptance of the improvement or renovation from the Authorized Officer. The Purchaser shall pay current Bureau of Land Management maintenance fees for the sale of additional timber under modification to the contract.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type
39-8-4	1.74	BLM	BST
June Drive	0.11	Jo.Co.	ASC
Total Miles	1.85		

- (5) RC-2a The Purchaser is authorized to use the roads listed below and shown on Exhibit D 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/or the hauling of rock as required in Exhibit C, provided that the Purchaser comply with the conditions set forth in Section 41(C)(8) and pay the required rockwear obligation described in Section 41(C)(7) The Purchaser shall pay current Bureau of Land Management rockwear fees for the sale of additional timber under modification to the contract.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type
38 S 08 W 35	1.59	BLM	PRR
39 S 08 W 4	0.20	BLM	ASC
39 S 08 W 15	0.27	BLM	NAT
39 S 08 W 17	0.30	BLM	NAT
Total Miles	2.36		

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- (6) RC-2c The Purchaser shall pay the Government a road maintenance obligation in the amount of ONE THOUSAND EIGHT HUNDRED FIFTY FOUR and 06/100 dollars (\$1,854.06) for the transportation of timber included in the contract price and for the transportation of any mineral material required under the terms of the contract over road or roads listed in Section 41(C)(4).

The above road maintenance amount is for use of 1.85 miles of road or less. Unless the total maintenance amount is paid prior to commencement of operations on the contract area, payments shall be made in installments of not less than FIVE HUNDRED and /100 dollars (\$500.00); payable in the same manner as and together with payments required in Sec. 3 of this contract.

- (7) RC-2g The Purchaser shall also pay to the Government a road maintenance obligation for rockwear in the amount SIX HUNDRED SEVENTY THREE and 69/100 dollars (\$673.69) 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 41(C)(5). 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 and no/100 dollars (\$500.00), the Purchaser may elect to make the payment in installments in the same manner as and together with payments required in Section 3 of this contract.
- (8) RC-2h The Purchaser shall perform any required road repair and maintenance work on roads used by him, under the terms of Exhibit D, "Road Maintenance Specifications," of this contract, which is attached hereto and made a part hereof.
- (9) RC-3d The Purchaser 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, the 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.
- (10) RC-8 The Purchaser shall be required to secure written approval to use vehicles or haul equipment over Government owned or controlled roads and/or structures when that vehicle or equipment exceeds the maximum allowable weights or dimensions established by the State for vehicles operating without a permit.

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Details of such equipment shall be furnished to the Authorized Officer 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 vehicle.
- (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 vehicles (1) without written approval, (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 a technical inspection and evaluation.

(D) Environmental Protection

- (1) E-1 In addition to the requirement set forth in Section 25 of this contract, the Purchaser shall, prior to October 15 of the same operating season, "winterize" all temporary roads by properly installing any water bars, berms, sediment basins, gravel pads, seed and/or mulch, to reduce sediment runoff as directed by the Authorized Officer.
- (2) E-1 In addition to the requirement set forth in Sec. 25 of this contract, the Purchaser shall construct water dips and/or water bars on all tractor skid roads, spur roads, and cable yarding corridors. Construction for skid roads will be concurrent with yarding, in accordance with Exhibit W, or as directed by the Authorized Officer. Water bar construction for cable yarding corridors shall be as directed by the Authorized Officer. Skid roads shall be blocked where they intersect with haul roads.
- (3) E-1 In addition to the requirement set forth in Sec. 25 of this contract, the Purchaser shall construct earth/log barricade in accordance with Exhibit F at locations shown on

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Exhibit A. Barricades shall be constructed upon completion of the road decommissioning, or as directed by the Authorized Officer.

- (4) E-1 In addition to the requirement set forth in Sec. 25 of this contract, the Purchaser shall hand seed and straw mulch (native and weed free) all natural surfaced landings, and spur roads with native grass seed at a rate of twenty-five (25) pounds per acre as directed by the Authorized Officer. Native grass seed and straw shall be supplied by the government. If the quantity of native grass seed is not available from the government a mixture of annual rye, native grass, and sterile wheatgrass shall be applied at a rate of twenty-five (25) pounds per acre. The purchaser shall provide written certification that the seed is free of noxious weeds. (Mixture requirements: thirteen (13) pounds annual rye, nine (9) pounds native grass, three (3) pounds sterile wheatgrass). Seed shall be applied from February 1 to April 1 or September 30 to November 1.
- (5) E-1 In addition to the requirements set forth in Sec. 25 of this contract, the Purchaser shall:
- (a) Use a minimum two hundred (200) flywheel horsepower tractor with mounted rippers having shanks and teeth consistent with drawings and specifications shown on Exhibit R of this contract, which is attached hereto and made a part hereof.
 - (b) Use rippers as shown on Exhibit R to fulfill ripping requirements of this provision.
 - (c) Rip to a depth of (18) inches. Areas to be ripped will have two offset passes or as determined by the Authorized Officer.
 - (d) Rip during the period of June 1 to September 15, both dates inclusive.
 - (e) Rip all main tractor skid roads, and natural surface landings constructed or used during the logging operation or as directed by the Authorized Officer.
- (6) E-1 In addition to the requirement set forth in Sec. 25 of this contract, the Purchaser shall only be allowed to use logging, construction, rock crushing, and/or transportation equipment that is free of noxious weed seeds prior to entering federal lands in the contract area as shown on Exhibit A. If equipment is not considered free of noxious weed seeds by the Government, it shall be cleaned prior to entering federal lands. Cleaning shall be defined as removal of dirt, grease, plant parts, and material that may carry noxious weed seeds on to federal lands. Cleaning prior to entering federal lands may be accomplished by using a pressure hose.

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Equipment shall be subject to visual inspection by the Government to certify that the equipment is free of noxious weed seeds. Only equipment inspected by the Government shall be allowed to operate on federal lands within the contract area. The Purchaser shall make equipment available for Government inspection at an agreed upon location off federal lands prior to any move-in of equipment.

Requirements as outlined above may be waived by the Government if move-in is from one "weed free area" to another "weed free area", as determined by the Government, or as conditions warrant.

- (7) E-1 In addition to the requirement set forth in Section 25 of this contract, the Purchaser shall not store, or cause to have stored, any fuel or other petroleum products inside any riparian reserve area. All petroleum products shall be stored in durable containers and located so that any accidental releases will be contained and not drain into any stream system. Refueling of equipment shall be done outside of riparian reserve areas.
- (8) E-3 If, in connection with operations under this contract, the Purchaser, their contractors, subcontractors, or the employees of any of them, discovers, encounters, or becomes aware of any objects or sites of cultural value on the contract area such as historical or prehistorical ruins, graves or grave markers, fossils, or artifacts, the Purchaser shall immediately suspend all operations in the vicinity of the cultural value and shall notify the Authorized Officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the Authorized Officer.
- (9) E-4 The Purchaser shall immediately discontinue specified construction or timber harvesting operations upon written notice from the Contracting Officer that:
 - (a) 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 reinitiation of consultation is required concerning the species prior to continuing operation, or;
 - (b) 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 Medford 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;

TENNESSEE LIME
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- (c) 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;
- (d) 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;
- (e) 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;
- (f) when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
- (g) 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 operations would affect the species or its habitat, or,
- (h) when, in order to protect species which were identified for protection through survey and manage and/or protection buffer standards 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

TENNESSEE LIME
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extending beyond 30 days, the First Installment on deposit may be reduced to five (5) 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 State, 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.

TENNESSEE LIME
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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.

(E) Miscellaneous

- (1) M-2 The Government, at its option, may administratively check scale any portion of the timber removed from the contract area, and if necessary, conduct check scaling of independent scalers contracted to BLM for administrative check scaling purposes. The Purchaser hereby agrees to make such contract timber available for such scaling at a location or locations to be approved in writing by the Authorized Officer. At the approved location or locations, the Purchaser shall provide an area for logs to be safely rolled out for scaling, to unload logs from trucks, place logs in a manner so that both ends and three faces of each log are visible for scaling, and to reload or remove logs after scaling has been completed. In the event that BLM elects to administratively check scale and if such check scaling causes a delay in log transportation time, an adjustment will be made to the purchase price as follows: If the entire sale is check scaled, the purchase price of this contract shall be reduced by four hundred forty-one and 75/100 dollars (\$441.75). In the event that only a portion of the contract timber is scaled, the purchase price shall be reduced by that portion of four hundred forty-one and 75/100 dollars (\$441.75) which is equal to the percentage of timber sold which was actually scaled by the Government. For purposes of computing this price reduction, the percentage of timber sold which has been scaled shall be determined by the Government. Any reduction in purchase price under the terms of this provision shall be full compensation to the Purchaser for any expense or

TENNESSEE LIME
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loss incurred as a result of such scaling. Scaling shall be conducted in accordance with the Northwest Log Rules Eastside Log Scaling Handbook, as amended, or supplemented by BLM before the first advertisement date of the sale, by BLM scalers, and/or independent scalers contracted to BLM. A copy of the scale report will be made available to the Purchaser upon request.

(F) Fire Prevention and Control

(1) F-1a Fire Prevention and Control. Primarily for purposes of fire prevention and control, the Purchaser shall comply with the following provisions:

(a) 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 State of Oregon, Department of Forestry.

(b) Provide and maintain in good repair, on the contract area, the following equipment for use during closed fire season or periods of fire danger:

(1) F-2a Fire fighting tools shall be kept at each landing or at such other place as 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 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 not be less than four (4) tools in each box nor less than one (1) tool for each person working on the contract area. Three-fourths (¾) of all fire tools shall be shovels, hazel hoes, or other scraping tools. The fire tools shall be used only for fighting fire.

(2) F-2b A round pointed size "0" or larger shovel in good condition, shall be within fifty (50) feet of any power saw when in operation

TENNESSEE LIME
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- (3) F-2c At each landing during periods of operation one (1) tank truck. Each truck shall have three hundred (300) gallons minimum capacity with five hundred (500) feet minimum of hose and a nozzle acceptable to the Authorized Officer and a mounted or portable pump conforming to the standards set forth in Oregon Revised Statute (ORS) 477.645 through ORS 477.670 and any rule promulgated pursuant to those statutes. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.410 as amended or be provided with suitable adapters. At the close of each working day, all bulldozers and tank trucks shall be filled with fuel and made ready for immediate use. All tank trucks and portable tanks shall be filled with water and made available for immediate use.
- (4) F-2d Serviceable radio or radio-telephone equipment able to provide prompt and reliable communication between the contract area and Grants Pass, Oregon. Such communication shall be available during periods of operation including the time watch-service is required.
- (5) F-2e A pair of headlights capable of being quickly attached to each bulldozer used on the contract area. The headlights shall be adequate to provide illumination sufficient to allow use of the bulldozers for fire fighting and construction of fire trails at night.
- (6) F-2f A headlight for each person in the woods crew adequate to provide sufficient illumination for night fire fighting. A headlight shall be of the type that can be fastened to the head so as to allow independent use of the hands. It shall be equipped with a battery case so designed that it can be either carried in the hip pocket or fastened to the belt. The head of the light and the battery case shall be connected by insulated wires. At least one extra set of batteries shall be provided for each such headlight.
- (7) F-2g Two (2) back-pack pumps at each landing and one (1) at each tail block, all to be kept full of water and in good operating condition.
- (8) F-2h A chemical fire extinguisher of at least eight (8) ounces minimum capacity of a type approved by the Oregon State Forester shall be carried during the closed fire season or periods of fire danger by each saw operator 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. A size "0"

TENNESSEE LIME
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or larger shovel shall be available with each gas can when refueling. 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.

(G) Slash Disposal and Site Preparation

- (1) SD-1 Fire Hazard Reduction. In addition to the requirements of Sec. 15 of this contract, and notwithstanding the Purchasers satisfactory compliance with State laws and regulations regarding offsetting or abating the additional fire hazard created by this operation and the States willingness to release the Purchaser from liability for such hazard, the Purchaser shall remain responsible to the Government for performance of the following hazard reduction measure(s) required by this contract:

- (a) SD-1a LOP AND SCATTER Lop and scatter all slash over the entire cutting area within riparian thin zones shown on Exhibit A concurrently with the normal felling operation. All top and side branches must be cut free of the central stem so that such stem is reduced to the extent that it is within twelve (12) inches of the ground at all points.

- (b) SD-1c HAND PILING Hand pile all slash in units designated by the Authorized Officer in accordance with the following specifications:

Slash, as defined for this section, shall mean all material (brush, limbs, tops, unmerchantable stems, and chunks) severed or knocked over as a result of Purchasers operations under the terms of this contract.

Piling shall be accomplished by hand. Finished piles shall be tight and free of earth.

Pile all slash which is between one (1) and seven (7) inches in diameter on the large end and exceeds two (2) feet in length.

A six (6) foot by six (6) foot sheet of four (4) mil. black plastic shall be placed in each pile in a manner such that approximately one-third (1/3) of the pile lies above it to hold it in place and so that a two (2) foot by two (2) foot dry ignition point is maintained for one (1) year or until burned. The ignition

TENNESSEE LIME
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point will consist of fine fuel material such as needles, small limbs, and branches less than one-half (1/2) inch in diameter and free of dirt. Piles shall be constructed by aligning individual pieces in the same direction and placing the heavier slash on top. Piles shall have a stable base to prevent toppling. The long axis of individual pieces shall be oriented up and down the slope. Protruding pieces shall be trimmed to allow covering in a manner that permits the pile to shed water. Height shall be no less than five (5) feet and no greater than eight (8) feet; width shall not exceed six (6) feet; piles shall be circular and not windrowed. No pile shall be located in any stream channel; on down logs, stumps, talus slopes, roadways, drainage ditches, within ten (10) feet of reserve trees, within twenty-five (25) feet of designated wildlife trees and within ten (10) feet of any other pile or boundary. No portion of the pile will be under the crown of any living conifer tree.

Operations required by this provision shall be kept current with yarding as directed by the Authorized Officer and shall be conducted as follows:

- (1) Units shall be piled and covered during the same season that they are logged. Piling shall be completed in each unit or portion thereof, within eight (8) weeks after being notified of BLM site treatment determination.
- (c) SD-1i LANDING PILES Pile all slash located within fifty (50) feet on each side of log landing. Slash shall be piled by hand or machine. Finished piles shall be tight and free of earth and located away from reserve trees adjacent to landing.
 - (1) A ten (10) foot by ten (10) foot cover of four (4) mil. black plastic material shall cap each tractor pile to maintain a dry ignition point. The cover shall be firmly fixed to each pile to hold it in place. Landings shall be piled and covered during the same season that they are logged.
- (2) SD-2 Notwithstanding the provisions of Sec. 15 of this contract, the Government shall assume all obligations for disposal or reduction of fire hazards created by Purchasers operations on Government lands, except for burning and mop-up assistance as required herein. In accordance with written instructions to be issued by the Authorized Officer at least ten (10) days in advance of earliest date of required performance, the Purchaser shall, under supervision of the Authorized Officer or designated representative, assist in preparing units for burning, mop-up, and patrol by furnishing, at the Purchasers own expense, the services of personnel and equipment on each unit as shown below.

TENNESSEE LIME
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- (a) Burn and mop-up piled units and landings in accordance with Section 41(G)(2)(a)(1) and 41(G)(2)(a)(2).

(1) For Igniting and Burning All Hand Piles in Units and All Landing Piles as described by the Authorized Officer

- (a) One (1) person to supervise crew(s) and equipment operators, and to serve as Purchasers representative.
- (b) One (1) crew with ten (10) members per crew, including a designated crew foreman. Each crew shall be equipped with fuel, ten (10) drip torches, shovels, pulaskis, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
- (c) All crews shall arrive on the project area(s) with radios capable of inter-crew communications and communications with a BLM representative at a ratio of one (1) radio per every five (5) crew members.
- (d) All ignition personnel will be directly supervised by a BLM representative.

(2) For Mop-up of All Hand Piles in Units and All Landing Piles as described by the Authorized Officer

- (a) One (1) person to supervise crew(s) and equipment operators, and to serve as Purchasers representative.
- (b) One (1) crew with ten (10) members per crew, including a designated crew foreman. Each crew shall be equipped with fuel, ten (10) drip torches, shovels, pulaskis, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
- (c) All crews shall arrive on the project area(s) with radios capable of inter-crew communications and communications with a BLM representative at a ratio of one (1) radio per every five (5) crew members.

TENNESSEE LIME
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- (d) All ignition personnel will be directly supervised by a BLM representative.

Aircraft and pilots used for logging residue reduction or the suppression of escaped fires from logging residue reduction operations, shall be acquired from a list of aircraft and pilots approved (i.e., carded for these specific activities) by the Office of Aircraft Services or the U.S. Forest Service. This list is available from BLM District Offices upon request.

All listed personnel shall be physically fit, experienced, and fully capable of functioning as required. All personnel shall arrive at the project area(s) with the following personal safety equipment: long sleeve Aramid shirts, full length Aramid trousers, minimum eight (8) inch top leather boots, hardhat, and leather gloves. 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.

Except as provided hereafter for fire escapement, the Purchaser shall continue the required assistance in mop-up on each unit to be burned as shown on Exhibit A as required in Section 41(G) for forty (40) work hours for each piled unit and piled landing as directed by the Authorized Officer within a three (3) day period for each piled unit and piled landing beginning 8:00 a.m. the day following completion of ignition in that unit or until released from such services by the Authorized Officer, whichever occurs first.

In the event of a fire escapement, Purchasers personnel and equipment shall, under supervision of the Authorized Officer or designated representative, take action to suppress, including 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 Purchaser for such additional use of personnel and equipment at wage rates shown in the current Administratively Determined Pay Rates for 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.

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In situations where an escaped fire is controlled and contained by an adequate fire break (i.e., trail, road, stream, rock formation, etc.), the Government may permit the Purchaser to remove personnel for that day; provided that, all mop-up work on the escaped fire area is included with mop-up work on the prescribed fire area. In such an event, the Purchaser must sign a statement of agreement to complete mop-up work on all escaped fire areas concurrently with mop-up work on the prescribed fire area.

In case of injury to personnel or damage to equipment furnished by the Purchaser 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 costs 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 deferral of burning and new conditions necessitate additional site preparation work and/or use of additional personnel and equipment to accomplish planned burning, the Purchaser also shall be responsible for such additional costs.

- (3) SD-5 Perform logging residue reduction and site preparation work on approximately seventy-three (73) acres of harvest area located in the harvest units as shown on Exhibit A.
- (a) The required work shall consist of any treatment or combination of treatments listed in the table below as determined by the Authorized Officer and specified in writing by the Contracting Officer. The number of acres of each treatment shall be determined by the Authorized Officer.

Treatment		Cost/Acre
Hand pile and Cover	0-40 piles/ac	\$382.46
Hand pile and Cover	41-60 piles/ac	\$508.12
Hand pile and Cover	> 60 piles/ac	\$628.32
Hand Pile Burn	0-40 piles/ac	\$43.71
Hand Pile Burn	41-60 piles/ac	\$60.10
Hand Pile Burn	> 60 piles/ac	\$71.03
Lop and Scatter		\$43.71

TENNESSEE LIME
SPECIAL PROVISIONS

- (b) The following treatments were assumed for appraisal purposed on this contract:

Appraised Treatment	Acres	Cost/Acre	Total Cost per Treatment
Hand Pile and Cover 0-40 piles/ac	26	\$382.46	\$9,943.96
Hand Pile Burn 0-40 piles/ac	26	\$43.71	\$1,136.46
Lop and Scatter	18	\$43.71	\$786.78
Total Appraised Cost			\$11,867.20

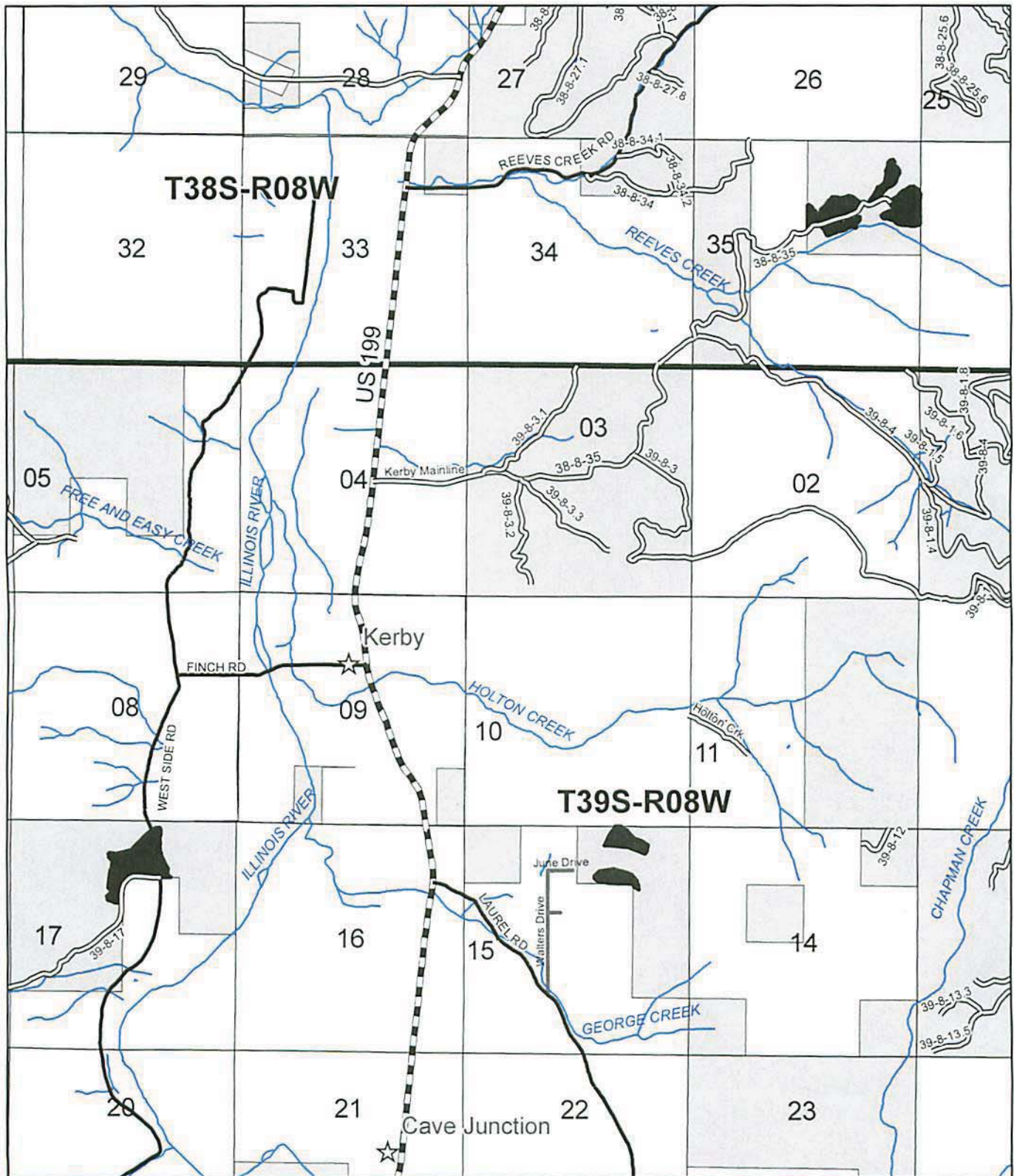
- (c) The Total Purchase Price set forth in Section 2 shall be adjusted by the amount that the total cost of the site preparation treatment designated pursuant to section 41 (G)(3)(a) differs from \$11,867.20, as calculated by using the estimated acres determined by the Authorized Officer and the per acre cost listed in Section 41 (G)(3)(a).

- (H) Equal Opportunity in Employment

Certification of Nonsegregated Facilities attached hereto and made a part hereof.

USDI MEDFORD DISTRICT TIMBER SALE
 TENNESSEE LIME TIMBER SALE
 GRANTS PASS RESOURCE AREA

TIMBER SALE LOCATION MAP
 T.38S, R.8W, SECTION 35,
 T.39S, R.8W, SECTION 15 and 17
 CONTRACT NUMBER 10-05



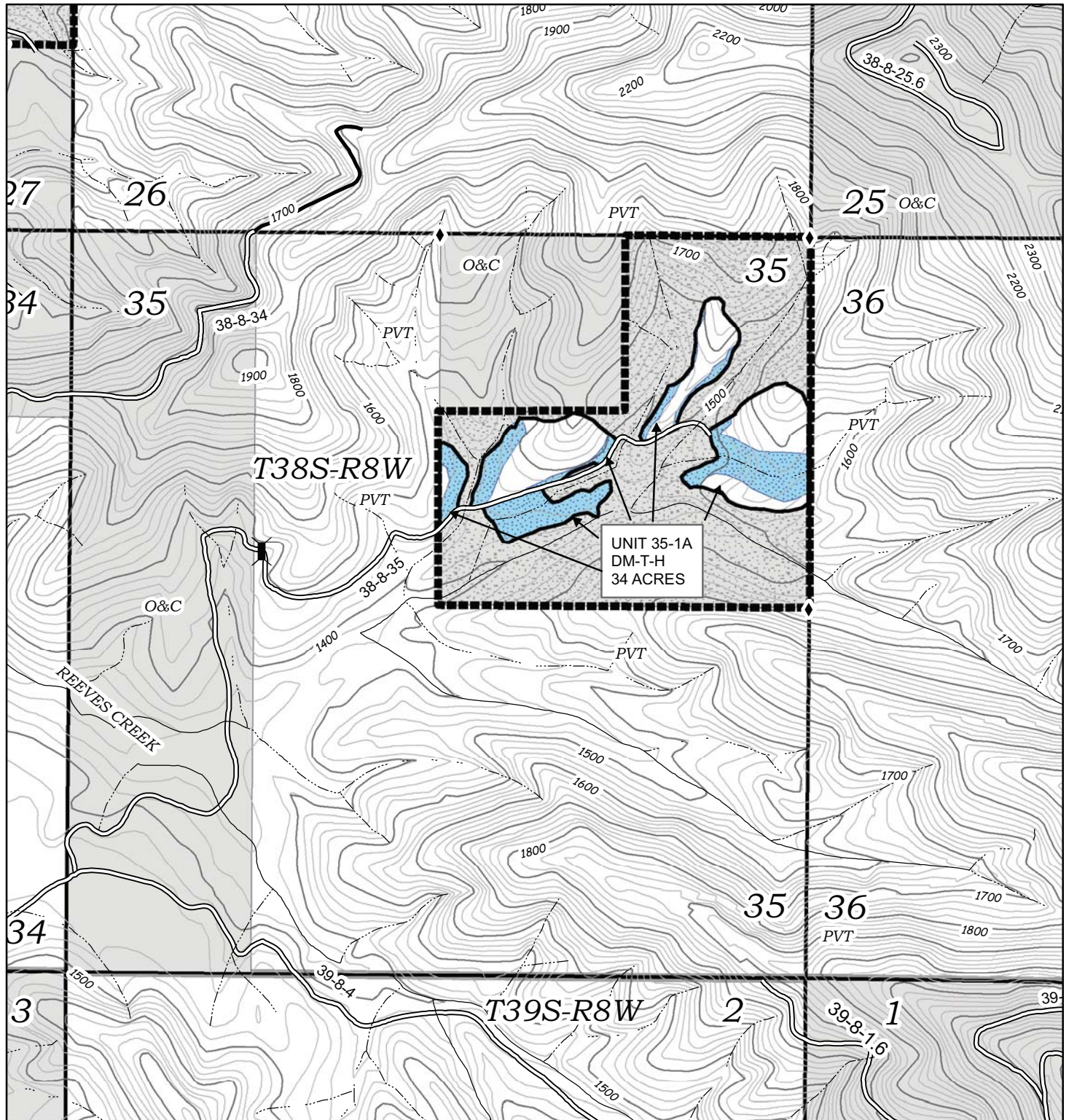
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data.



United States
 Department of the Interior
 Bureau of Land Management
 Medford District
 Grants Pass Resource Area
 Grants Pass Interagency Office
 2164 NE Spalding Avenue
 Grants Pass, Oregon 97526

USDI MEDFORD DISTRICT TIMBER SALE
T.38S, R.8W, SECTION 35
TENNESSEE LIME TIMBER SALE
GRANTS PASS RESOURCE AREA

TIMBER SALE CONTRACT MAP
CONTRACT NUMBER TS 10-05
EXHIBIT A
PAGE 1 OF 4



United States
Department of the Interior
Bureau of Land Management
Medford District
Grants Pass Resource Area
Grants Pass Interagency Office
2164 NE Spalding Avenue
Grants Pass, Oregon 97526



1 inch = 1000 feet

0 500 1,000 2,000 Feet

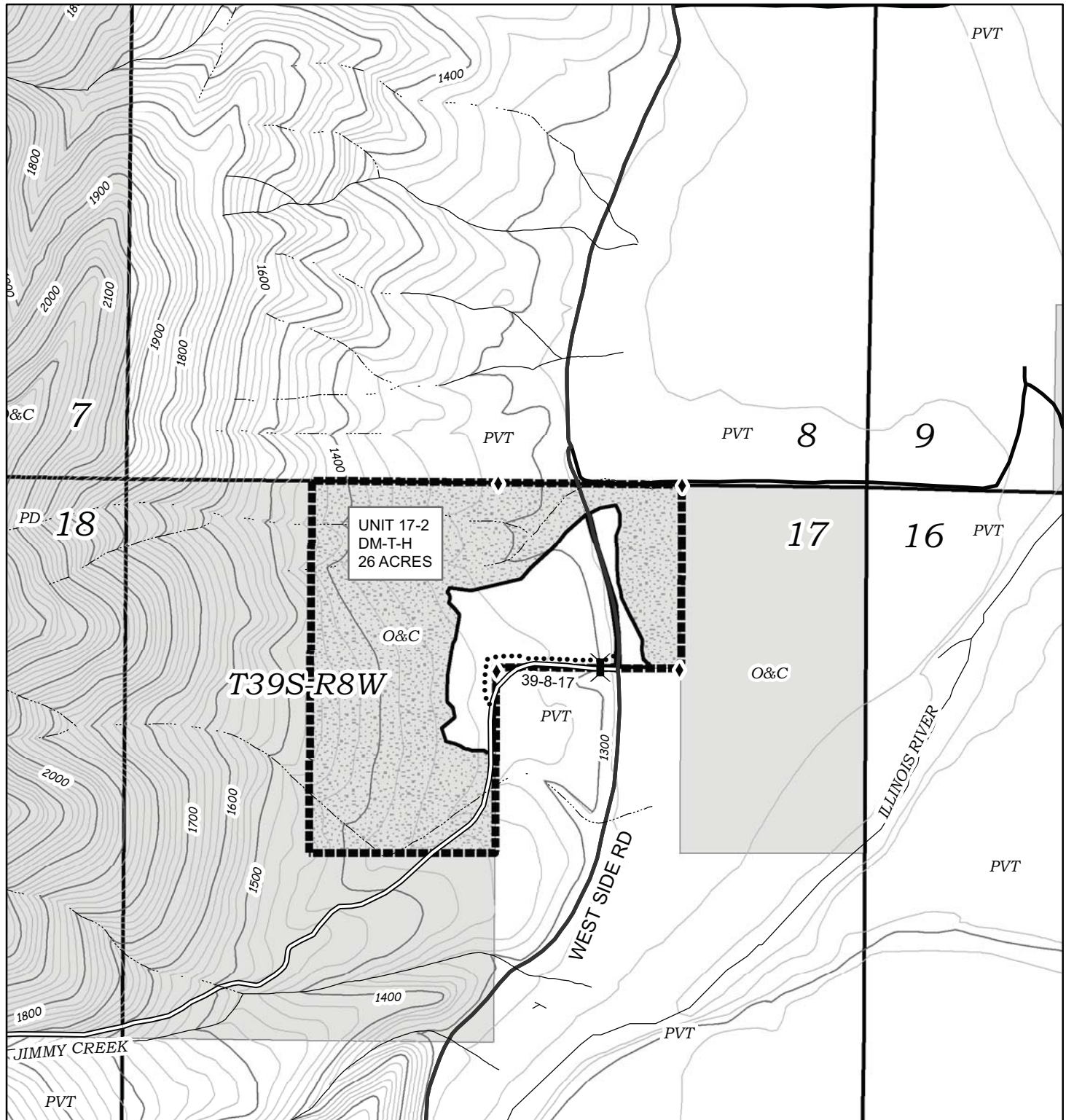


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data

July 27, 2010

USDI MEDFORD DISTRICT TIMBER SALE
T.39S, R.8W, SECTION 17
TENNESSEE LIME TIMBER SALE
GRANTS PASS RESOURCE AREA

TIMBER SALE CONTRACT MAP
CONTRACT NUMBER TS 10-05
EXHIBIT A
PAGE 2 OF 4



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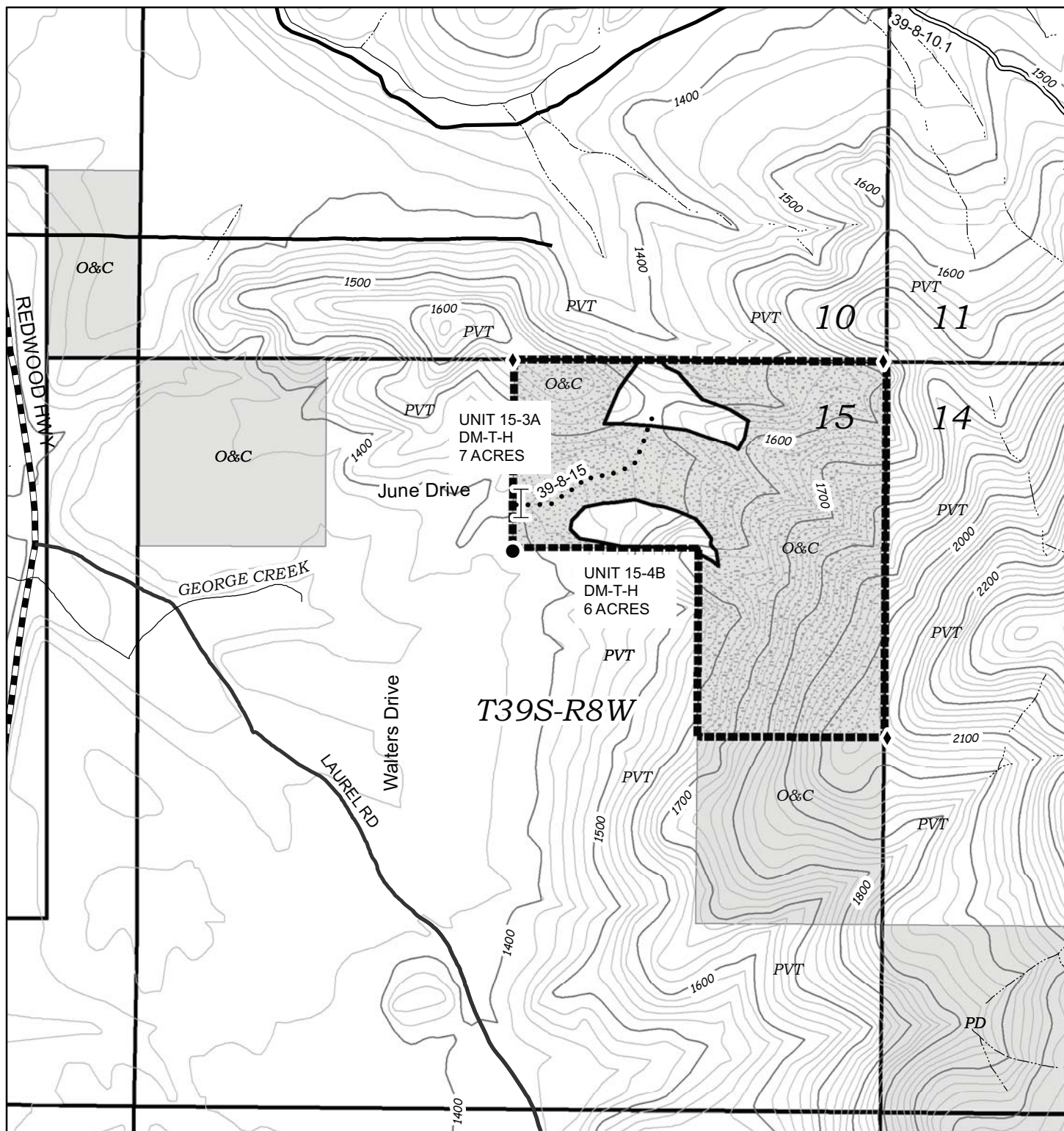


1 inch = 1000 feet
0 500 1,000 2,000 Feet



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Bureau of Land Management as to
the accuracy, reliability, or
completeness of these data for
individual or aggregate use with
other data

July 27, 2010



Legend

Acres:

DM-T-H Density Management- Tractor Yard
Harvest Trees are Blue Marked
Units:15-3A, 15-4B, 17-2, and 35-1A

73


Total 73

Total Reserve Area..... 287


Total Contract Area..... 360

 County Road

 Road (Existing)

 Road to Construct

 Earth/Log Barricade
to Construct

 Existing Gate (re-install as directed)

O&C BLM lands: Oregon & California
PD revested land, or Public Domain

PVT Private Land


 Brass Cap or Monument

 Iron Pipe

 Contours 100'

 Contours 20'

 Reserve Area

 Boundary of Contract Area

 Boundary of Cutting Unit

 Riparian Thin Zone

 Perennial Stream

 Intermittent Stream

<u>Unit</u>	<u>Acres</u>	<u>Logging</u>
<u>Number</u>		<u>System</u>
15-3A	7	DM-T-H
15-4B	6	DM-T-H
17-2	26	DM-T-H
35-1A	34	DM-T-H
Total	73	

Unit boundaries are flagged with orange ribbon, and posted with signs.

Unit acreages were determined by the Global Positioning System (GPS).

7/27/2010



United States of America
Department of the Interior
Bureau Of Land Management
Timber Sale Appraisal

District : Medford	Contract # : TS 10-05
Sale Name : Tennessee Lime 2010	Job File # : M11249
Sale Date : 09/16/2010	Master Unit : Josephine
Appraisal Method : 16' MBF	Planning Unit : Grants Pass

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

Medford
Tennessee Lime 2010
TS 10-05

Legal Description

Forest Type	Township	Range	Section	Subdivision
O&C	38S	8W	35	NE1/4NE1/4, S1/2NE1/4
O&C	39S	8W	15	N1/2NE1/4, SE1/4NE1/4
O&C	39S	8W	17	NW1/4NE1/4, E1/2NW1/4

Cutting Volume (16' MBF)

Unit	DF	SP	PP	IC					Total	Regen	Partial	ROW
15-3A	69	6	1						76		7	
15-4B	23	3							26		6	
17-02	203	13	24	11					251		26	
35-1A	207	18	11						236		34	
Totals	502	40	36	11					589	0	73	0

Logging Costs per 16' MBF

Stump to Truck	\$	165.69
Transportation	\$	73.25
Road Construction	\$	40.86
Road Amortization	\$	0.00
Road Maintenance	\$	4.28

Other Allowances :

Fuels Treatment	\$20.15
Other Costs	\$7.17
Total Other Allowances :	\$ 27.32

Profit & Risk

Total Profit & Risk	7 %
Basic Profit & Risk	7 % + Additional Risk 0 %
Back Off	0 %

Tract Features

Avg Log	Douglas-fir : 46 bf	All : 49 bf
Recovery	Douglas-fir : 88 %	All : 89 %
Salvage	Douglas-fir : 0 %	All : 0 %
Avg Volume (16' MBF per Acre)		8
Avg Yarding Slope		20 %
Avg Yarding Distance (feet)		400
Avg Age		0
Volume Cable		0 %
Volume Ground		100 %
Volume Aerial		0 %
Road Construction Stations		0.00
Road Improvement Stations		0.00
Road Renovation Stations		0.00
Road Decommission Stations		0.00

Cruise

Cruised By	J. Blixt and A. Franks
Date	09/20/2009
Type of Cruise	3P and 100%
County, State	Josephine, OR

Net Volume

Green (16' MBF)	589
Salvage (16' MBF)	0.00
Douglas-fir Peeler	10.00
Export Volume	0
Scaling Allowance (\$0.75 per 16' MBF)	\$441.75

Total Logging Costs per 16' MBF

\$ 311.40

Utilization Centers

Center #1 : Glendale, OR	60 Miles
Center #2	0 Miles
Weighted distance to Utilization Centers	60

Length of Contract

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Stumpage Summary

Medford
Tennessee Lime 2010
TS 10-05

Stumpage Computation (16' MBF)

Species	Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Cost	(+) Marginal Log Value	(-) Back Off	Appraised Price	Appraised Value
DF	3,244	502	421.88	29.53	311.40			80.90	40,611.80
SP	133	40	253.64	17.75	311.40			25.40	1,016.00
PP	126	36	241.82	16.93	311.40			24.20	871.20
IC	52	11	474.56	33.22	311.40			129.90	1,428.90
Totals	3,555	589							\$ 43,927.90

Log Code by Percent

Species	Code #1	Code #2	Code #3	Code #4	Code #5	Code #6
Sugar Pine			2.0	35.0	39.0	24.0
Ponderosa Pine				23.0	32.0	45.0
Douglas-fir			2.0	35.0	54.0	9.0
Incense-cedar					7.0	93.0

Marginal Log Volume

Species	Grade #7	Grade #8
Sugar Pine		
Ponderosa Pine		
Douglas-fir		
Incense-cedar		

Appraised By : Franks, Annie

Date : 06/11/2010

Area Approval By : Blixt, John

Date : 06/14/2010

District Approval By :

Date :

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

Medford
Tennessee Lime 2010
TS 10-05

Prospectus

Appraisal Method : (16' MBF)

Species	Trees	Net Volume 16' MBF	Net Volume 32' MBF	Net Volume CCF
Douglas-fir	3,244	502	430	908
Sugar Pine	133	40	32	68
Ponderosa Pine	126	36	28	60
Incense-cedar	52	11	9	20
Total	3,555	589	499	1,056

All Species

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
664	3,555	186	14.0	622	12,657	49

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
12,657	754	13,411	3	589	664	89 %

Douglas-fir

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
572	3,244	176	13.6	534	11,577	46

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
11,577	704	12,281	3	502	572	88 %

Cutting Areas

Unit	Regen Acres	Partial Cut Acres	Right Of Way Acres	Total Acres
15-3A		7		7
15-4B		6		6
17-02		26		26
35-1A		34		34
Totals :		73		73

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

Medford
Tennessee Lime 2010
TS 10-05

Exhibit B

The following estimates and calculations of timber sold are made solely as an administrative aid for determining: (1) Adjustments made or credits given in accordance with Sections 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 provided in Section 2, Purchaser shall be liable for the total purchase price even though the 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 the Exhibit A.

Sale Totals (16' MBF)

Species	Net Volume	Bid Price	Sale SubTotal
Douglas-fir	502		
Sugar Pine	40		
Ponderosa Pine	36		
Incense-cedar	11		
Sale Totals	589		

Unit Details (16' MB)

Unit 15-3A **7 Acres** **Value per Acre : \$0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	69		
Ponderosa Pine	1		
Sugar Pine	6		
Unit Totals	76		

Unit 15-4B **6 Acres** **Value per Acre : \$0.00**

Species	Net Volume	Bid Price	Species Value
Douglas-fir	23		
Sugar Pine	3		
Unit Totals	26		

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

Medford
Tennessee Lime 2010
TS 10-05

Unit 17-02 26 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	203		
Incense-cedar	11		
Ponderosa Pine	24		
Sugar Pine	13		
Unit Totals	251		

Unit 35-1A 34 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	207		
Ponderosa Pine	11		
Sugar Pine	18		
Unit Totals	236		

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

Medford
Tennessee Lime 2010
TS 10-05

Sale Volume Totals

73 Acres

0 Regen

73 Partial

0 R/W

4 Units

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Net	16' MBF GM	16' MBF Gross	32' MBF Net	32' MBF GM	32' MBF Gross	CCF Net	CCF GM	CCF Gross
Douglas-fir	3,244	11,577	704	502	534	572	430	456	491	908	965	1,031
Sugar Pine	133	493	17	40	41	42	32	33	34	68	69	71
Ponderosa Pine	126	426	26	36	36	38	28	28	30	60	61	64
Incense-cedar	52	161	7	11	11	12	9	9	9	20	21	21
Totals	3,555	12,657	754	589	622	664	499	526	564	1,056	1,116	1,187

Unit Totals

Unit : 15-3A

7 Acres

0 Regen

7 Partial

0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	439	1,750	114	80	74	69
Sugar Pine	28	103	3	7	6	6
Ponderosa Pine	10	23	1	1	1	1
Unit Totals	477	1,876	118	88	81	76

Unit : 15-4B

6 Acres

0 Regen

6 Partial

0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	160	500	32	26	24	23
Sugar Pine	18	58		4	4	3
Unit Totals	178	558	32	30	28	26

Unit : 17-02

26 Acres

0 Regen

26 Partial

0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	855	3,588	226	233	218	203
Ponderosa Pine	69	244	11	25	24	24
Sugar Pine	18	80	5	13	13	13
Incense-cedar	52	161	7	12	11	11
Unit Totals	994	4,073	249	283	266	251

Unit : 35-1A

34 Acres

0 Regen

34 Partial

0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	1,790	5,739	332	233	218	207

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

Medford
Tennessee Lime 2010
TS 10-05

Sugar Pine	69	252	9	18	18	18
Ponderosa Pine	47	159	14	12	11	11
Unit Totals	1,906	6,150	355	263	247	236

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Stump to Truck Costs**

Medford
Tennessee Lime 2010
TS 10-05

Total (16' MBF)

Total Stump to Truck Costs	Net Volume	Cost / Net Volume
\$97,591.38	589	\$165.69

Detail

Yarding & Loading

Yarding System	Unit Of Measure	Units	Cost / Unit	Total Cost
Track Skidder	GM MBF	622	\$154.19	\$95,906.18
Subtotal				\$95,906.18

Other Costs

Explanation	Unit Of Measure	Units	Cost / Unit	Total Cost
Directional Falling	GM MBF	60	\$1.42	\$85.20
Subtotal				\$85.20

Additional Move-Ins

Equipment	# Move-In	Cost / Move In	Total Cost
Dozer	2	\$400.00	\$800.00
Yarder / Loader	2	\$400.00	\$800.00
Subtotal			\$1,600.00

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

Medford
Tennessee Lime 2010
TS 10-05

Other Allowances Costs

Total (16' MBF)

Total Other Allowances Costs	Net Volume	Cost / Net Volume *	Total Buy Out Cost
\$16,088.70	589	\$27.32	\$0.00

Fuels Treatment

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Hand Pile, Cvr - Level 3	9,943.96	16.88	N	0.00
Hand Pile Brn-Level 3	1,136.46	1.93	N	0.00
Lop and Scatter-Lvl 4	786.78	1.34	N	0.00
Subtotal	11,867.20	20.15		0.00

Other Costs

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Waterbar Skids	675.00	1.15	N	0.00
Ripping	750.00	1.27	N	0.00
Skid Location	144.00	0.24	N	0.00
Skid Construction	1,050.00	1.78	N	0.00
Hand Seeding @ 17 lb seed per hour	373.50	0.63	N	0.00
Mulching (2 hours/5 bales)	260.00	0.44	N	0.00
Landing Clean up	825.00	1.40	N	0.00
Equipment Washing	144.00	0.24	N	0.00
Subtotal	4,221.50	7.17		0.00

* Cost / Net Volume has been rounded to the nearest \$0.01 Subtotals may not tie to Sale Total Cost / Net Volume.

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

Medford
Tennessee Lime 2010
TS 10-05

General

Yarding & Loading

Road Costs

(see Engineering Appraisal for details).

Transportation

(see Transportation appendix for details).

Other Allowances

Waterbar Skids- Estimate no more than 8 acres of skid (9 hours x \$75/hr = \$675)
Ripping- Estimate no more than 5 acres of ripping (5 acres x \$150/acre = \$750)
Skid Location- Estimate one full day for sale (9 hours x \$16/hr = \$144)
Skid Construction- 73 total sale acres (7 +or- 10% of sale acres x \$150/10 acres = \$1,050)
Hand Seeding- Ripped skid trails and ripped landings (9 hours x \$41.50/hr = \$373.50)
Mulching- Mulch ripped skid trails and ripped landings- no more than 5 acres (5 acres x \$52/acre = \$260)
Landing Clean up- 1 hour/landing estimate 11 landings (11 landings x \$75/hr = \$825)
Equipment Washing- Allowing 9 hours for equipment washing for entire sale (9 hours x \$16/hr = \$144)

FUELS TREATMENTS:

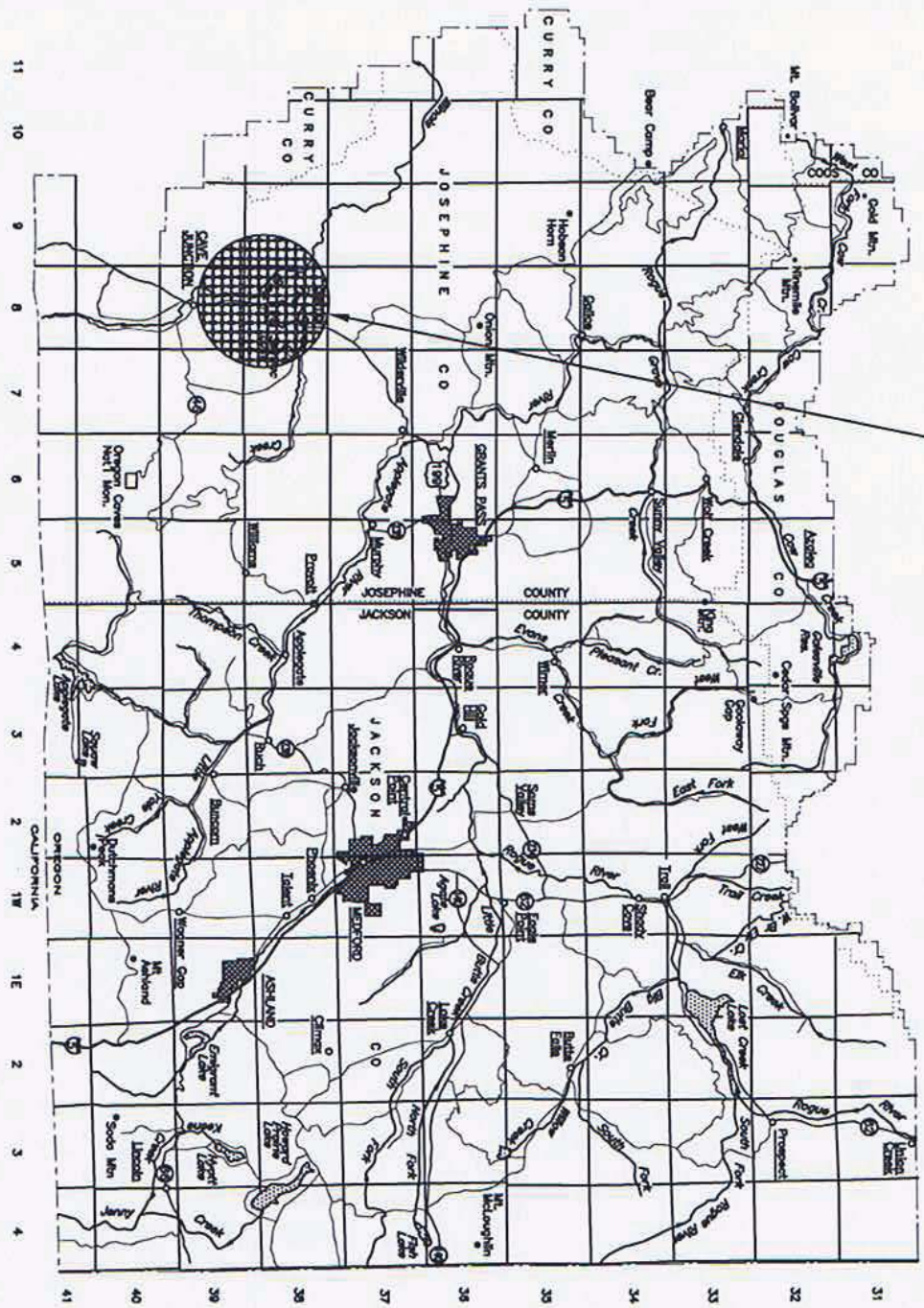
Hand Pile and Cover - 0-40 piles/acre (26 acres x \$382.46/acre = \$9,943.96)
Hand Pile Burn - 0-40 piles/acre (26 acres x \$43.71/acre = \$1,136.46)
Lop and Scatter - 0-12 Trees per acre (18 acres x \$43.71/acre = \$786.78)

Prospectus

All Douglas Fir cruised by 3P, all minor species cruised 100%

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
TENNESSEE LIME TIMBER SALE
TRACT NO. TS10-05

EXHIBIT C - 1
SHEET 1 OF 1



C-1	Title Sheet
C-2	Exhibit C Road Location Map
C-3	Estimate of Quantities
C-4	Specification Sheet
C-5	Culvert Band Details
C-6	Culvert Installation Details
C-7	Drainage & Erosion Control Installation
C-8	Roadside Brushing Detail
C-9	Removal Work List
C-10	Road Plan and Profile
C-11	Typical Slope Staking
C-12	Specification Section
D-1	Road Maintenance Specifications
D-2	Exhibit D Map



0 6 12
SCALE IN MILES

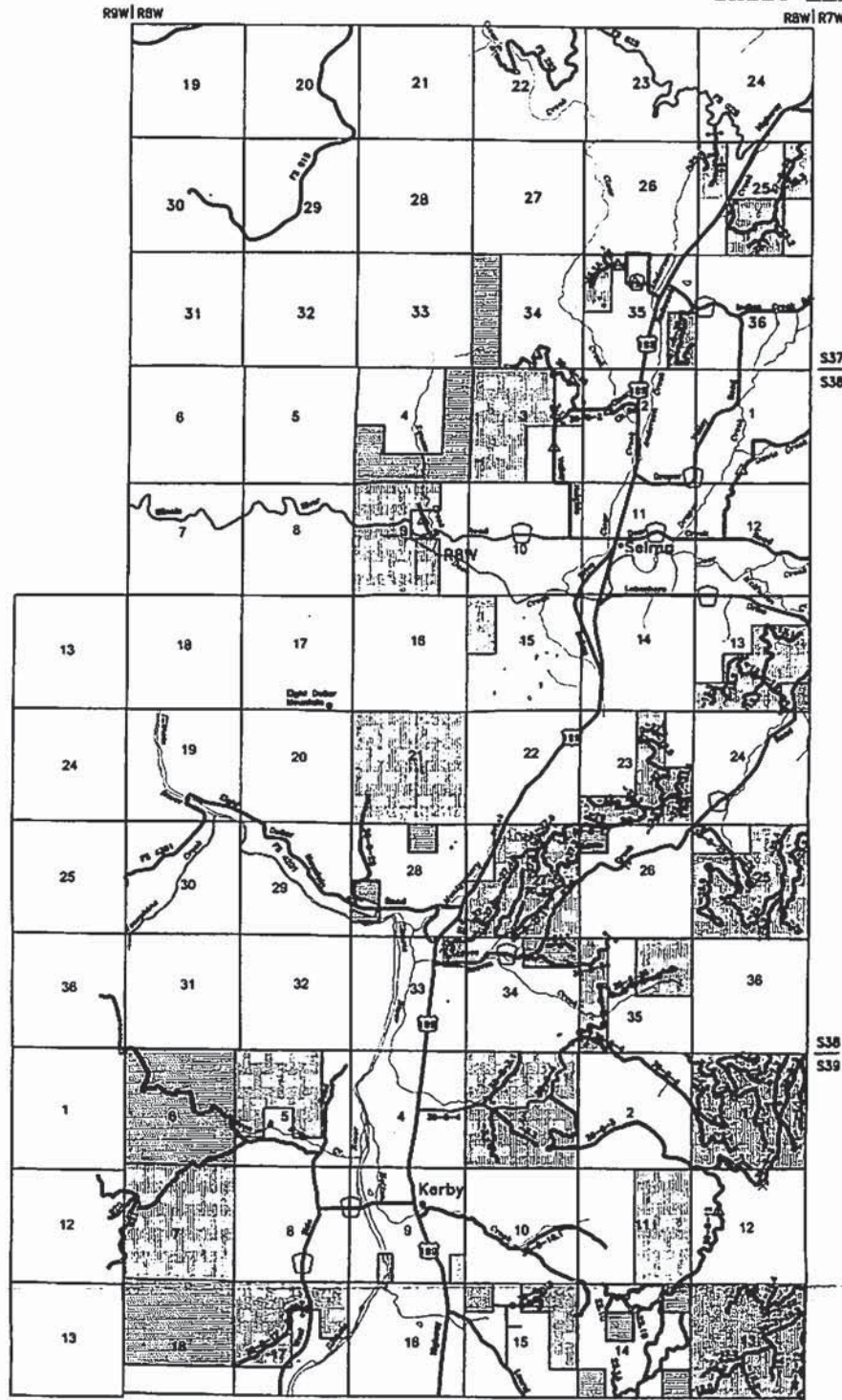
TITLE SHEET

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT - MEDFORD, OREGON

DESIGNED *[Signature]*
REVIEWED *[Signature]*
APPROVED *[Signature]*
DRAWN JMR
DATE August 2006
SHEET 1 OF 1
DRAWING NO. OR-117-TS08-26-C1

TENNESSEE LIME TIMBER SALE

EXHIBIT C 2
SHEET 1 OF 1



LEGEND

- Road To Be Renovated
- ★ Roadside Brushing Only
- Temporary Road To Be Constructed Then Obliterated Following Treatment
- ⊕ Road To Be Renovated and Decommissioned Following Treatment
- Existing Gate
- ◆ Road To Be Constructed
- ◇ Temporary Road To Be Constructed
- Rock Surface Road
- Natural Surface Road
- Paved Road
- BLM Lands

0 1/2 1
SCALE IN MILES



Township 37 South, Range 8 West
Township 38 South, Range 8 West
Township 39 South, Range 8 West

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT MEDFORD, OREGON	
EXHIBIT C ROAD LOCATION MAP	
DESIGNED: <i>John P. Poon</i>	SCALE: AS SHOWN
REVIEWED: <i>John P. Poon</i>	SHEET 1 OF 1
APPROVED: <i>Michael J. Poon</i>	
DRAWN: JWR	
DATE: August 2006	
DRAWING NO. 08-117-TS06-28-C2	

EXHIBIT C 3 SHEET 1 OF 1

ROAD NUMBER	FROM	TO	LENGTH	CLEARING AND GRUBBING	EXCAVATION		CORRUGATED METAL PIPE										RENOVATION		AGGREGATE **		BERM BARRICADE	ROADSIDE BRUSHING	SLOPE STAKING	POWDER RIVER GATE	STEEL PIPE GATE
							SIZE			ELBOWS	DOWNSPOUT														
							12"	18"	24"		EA.	HALF ROUND	RECT. FLUME												
SPECIFICATION NO. —————→				200	300	300	400	400	400	400	400	400	400	500	EA.	EA.	900	1000	1200	1400	EA	2100	2300	EA	EA
UNIT→	MP/STA	MP/STA	MILE/STA	ACRE	C.Y.	C.Y.	L.F.	L.F.	L.F.	EA.	L.F.	L.F.	L.F.	MILE	MILE	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	MILE	STA.	EA	EA	
38-8-35	0.00	1.59	1.59											1.59	1	25	0	0	0	14		1.59			
39-8-17	0.00	0.30	0.30	0.70		522		60								0	0	20			0.30	12+50		1	
39-8-15	0.00	0.27	0.27	0.70				30						0.27		0	0	0		1	0.27				
39-8-4	0.00	1.94	1.94													0	0	0			0.20				

Drainage dips
Item 900 - Screened Rock Grading A will be used to construct water dips
Place class 3 riprap 14 C.Y. for slope protection when noted on worklist

ITEM 900
SIZE _____ GRADE
3 inch minus A
ITEM 1200
SIZE _____ GRADE
1 inch minus D

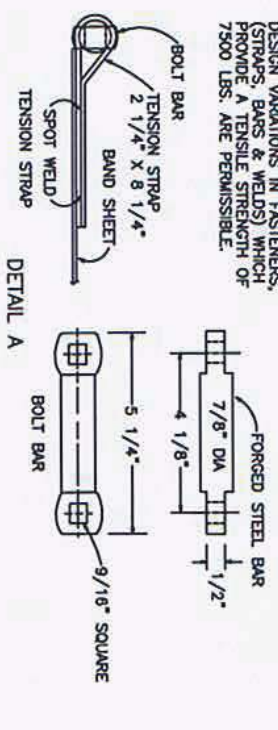
* FOR INFORMATIONAL USE ONLY,
QUANTITIES SHOWN ARE NOT PAY ITEMS.

**Indicate gradation in circle. ○

REV. NO.	DESCRIPTION	DATE	APPROV.
DESIGNED	UNITED STATES DEPARTMENT OF THE INTERIOR		
REVIEWED	BUREAU OF LAND MANAGEMENT		
APPROVED	MEDFORD DISTRICT - MEDFORD, OREGON		
DRAWN	DATE August 2006	SHEET 1 OF 2	
DRAWING NO.	OR-117-1506-26-C3.1		

ESTIMATE OF
QUANTITIES*

NOTE: DESIGN VARIATIONS IN FASTENERS, (STRAPS, BARS & WELDS) WHICH PROVIDE A TENSILE STRENGTH OF 7500 LBS. ARE PERMISSIBLE.

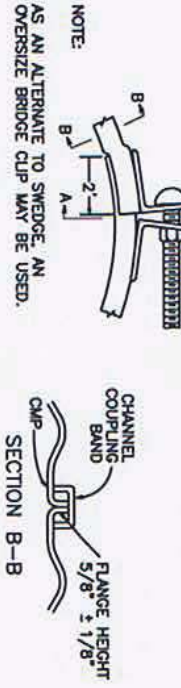


2" x 2" x 3/16" ANGLE

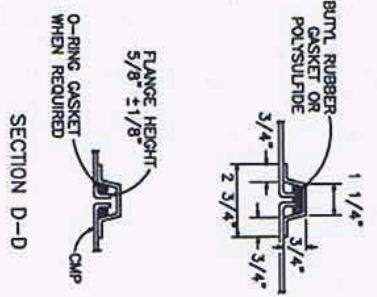
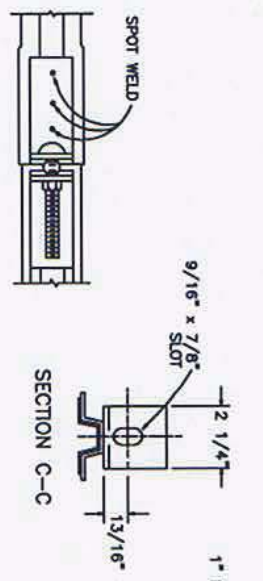
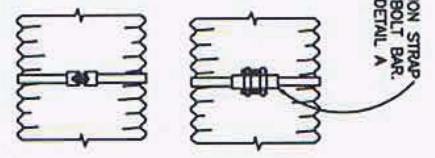
1/2" x 4" CARRIAGE BOLT

SECTION A-A

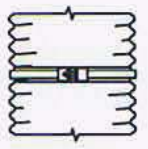
DIMENSIONS IN INCHES	
T	A
.078	3/4
.109	.109 OR LIGHTER
1	.135 OR HEAVIER



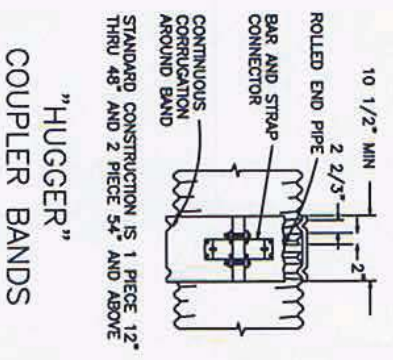
CHANNEL BAND COUPLER



FLANGED END COUPLER



SHOWN WITH ALTERNATE TYPES OF JOINT SEALERS



THE HUGGER COUPLER BAND OR AN APPROVED EQUIVALENT COUPLER BAND SHALL BE MADE OF THE SAME MATERIAL AND FINISH AS THE PIPES JOINED. THE COUPLER BANDS SHALL HAVE A MINIMUM WIDTH OF 10 1/2 INCHES AND MAY BE TWO NUMERICAL THICKNESSES DESIGNATED FOR THE CONDUIT JOINED. THE BAND SHALL BE DESIGNED TO BE DRAWN TOGETHER WITH TWO 1/2 INCH BOLTS THROUGH USE OF A BAR AND STRAP SUITABLY WELDED TO THE BAND. THE BAND SHALL ENGAGE AND MESH WITH THE SECOND ANNULAR CORRUGATION INWARD FROM THE END OF EACH OF THE CONDUIT SECTIONS JOINED.

"HUGGER" COUPLER BANDS

WHEN DESIGNATED ON THE PLANS OR IN THE SPECIAL PROVISIONS, GASKETS SHALL BE INSTALLED WHEN THE "HUGGER" TYPE, OR AN APPROVED EQUIVALENT COUPLER BAND IS INSTALLED ON SPILLWAY, OVERSIDE OR DOWN DRAINS.

STANDARD COUPLER BANDS									
CULVERT SIZE INCHES	CORRUGATED				FLAT-DIMPLED				NO. OF BOLTS
	STD. ANNULAR WIDTH	NO. OF BOLTS	HELICAL WIDTH	NO. OF BOLTS	3" X 1" WIDTH	NO. OF BOLTS	6" X 1" WIDTH	NO. OF BOLTS	
UNDER 18	7	2	7	2					
18 TO 54	12	3	12	3	14	3	18	3	2
OVER 54	24	5	24	5	24	5	24	4	4

DATA IN THIS BLOCK DOES NOT APPLY TO PERFORATED PIPE UNDERDRAIN. FOR BANDS WITH "PUNCH-OUT" TYPE CONNECTIONS, 2 BOLTS ARE PERMISSIBLE FOR EACH LAP. BANDS SHALL LAP 1/2 WIDTH ONTO EACH SECTION OF PIPE AND MUST FULLY ENCIRCLE THE JOINT FORMING A NEARLY WATERTIGHT CONNECTION. SEE SECTION 400.

- Ⓐ BANDS WITH ANGLES
- Ⓑ BANDS WITH TENSION TYPE CONNECTIONS

DESIGNED *John Hopper*

REVIEWED *John Hopper*

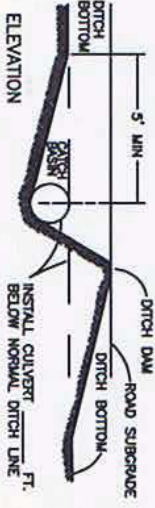
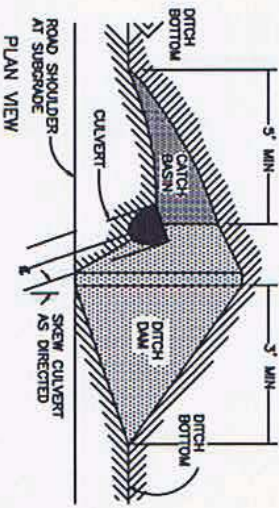
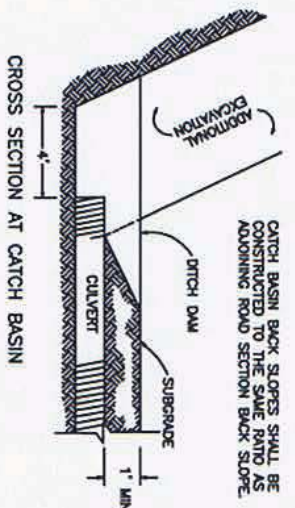
APPROVED *John Hopper*

DRAWN JMR

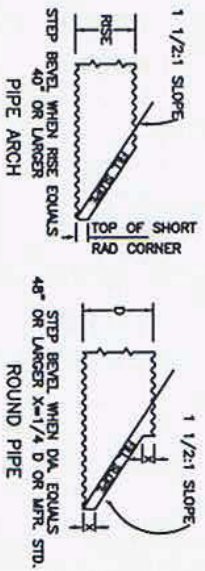
DATE August 2006

SHEET 1 OF 1

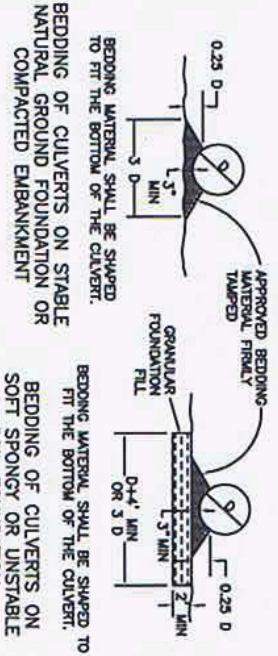
OR-117-TS06-26-C5



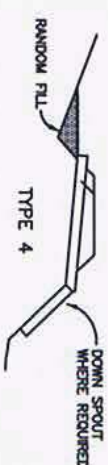
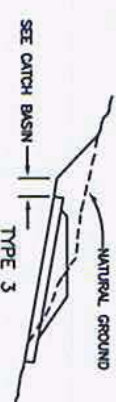
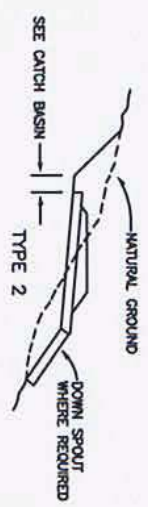
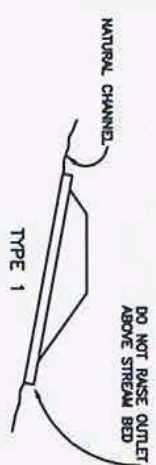
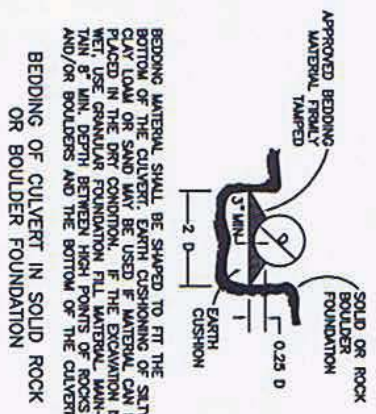
CATCH BASIN



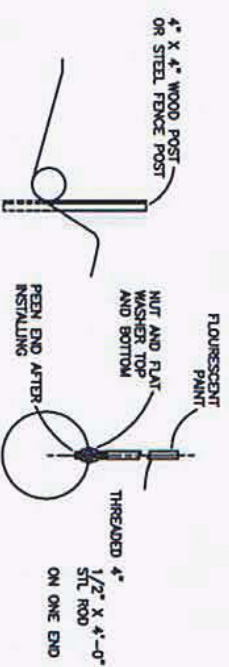
BEVELED END DETAIL



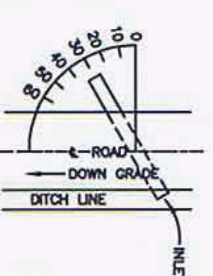
BEDDING OF CULVERTS



CULVERT INSTALLATION TYPES



CULVERT MARKER INSTALLATION

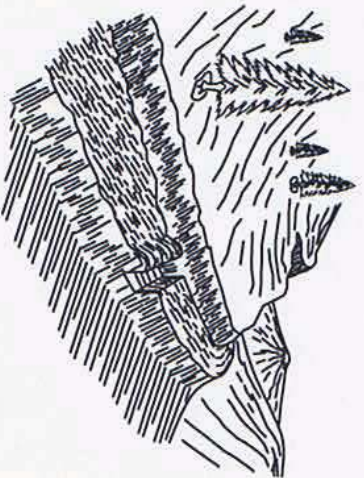


SKEW DIAGRAM

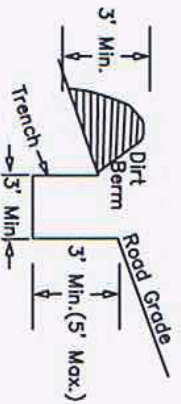
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT - MEDFORD, OREGON

CULVERT INSTALLATION
DETAILS

DESIGNED *John R. Kelley*
APPROVED *John R. Kelley*
DRAWN *JMR* SCALE NONE
DATE August 2008 SHEET 1 OF 1
DRAWING NO. OR-117-TS06-26-C6

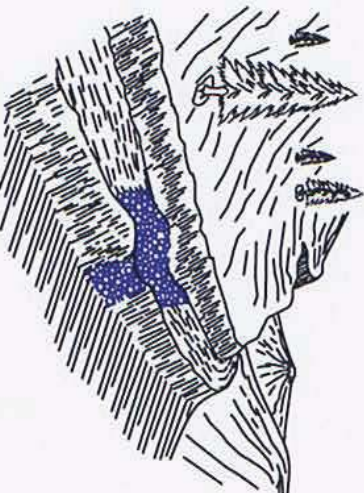


TRENCH BARRICADE

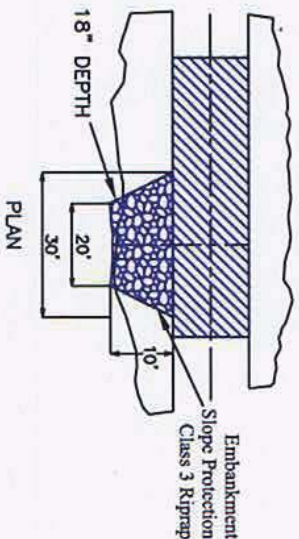
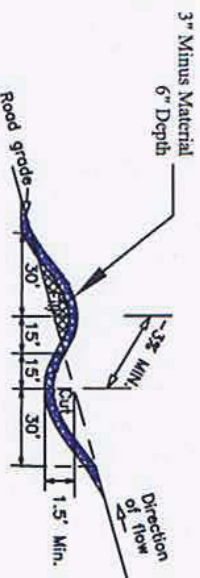


1. BARRICADE LENGTH SHALL EXTEND ACROSS THE ENTIRE ROAD SURFACE TO A POINT SUFFICIENT TO PROHIBIT MOTOR VEHICLE TRAFFIC.
2. THE EXACT LOCATION SHALL BE AS STAKED IN THE FIELD.
3. THE BARRICADE SHALL BE SKEWED AS NEEDED TO DRAIN OR AS DIRECTED BY THE AUTHORIZED OFFICERS REPRESENTATIVE.

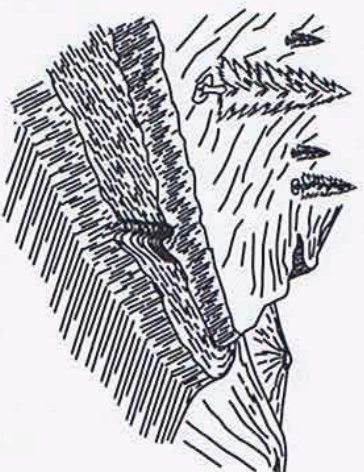
Note: Trench barricade may be installed if log minimum dimensions are not readily available.



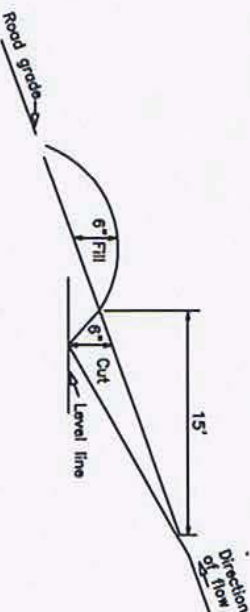
ARMORED WATER DIP



1. WATER DIPS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL WATER DIPS SHALL BE SKEWED 30 DEGREES.
4. THE LENGTH SHALL BE SUFFICIENT TO EXTEND FROM THE CUT BANK TO THE FILL SLOPE AND BE READILY CROSSED BY HIGH CLEARANCE TYPE VEHICLES.
5. MATERIAL SOURCE FOR CLASS 3 RIPRAP AND 3" MINUS CRUSHED SHALL BE FROM A COMMERCIAL SOURCE.

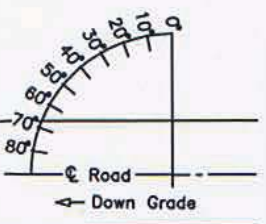


CROSS-DRAIN



1. CROSS-DRAINS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL CROSS DRAINS SHALL BE SKEWED 30 DEGREES.

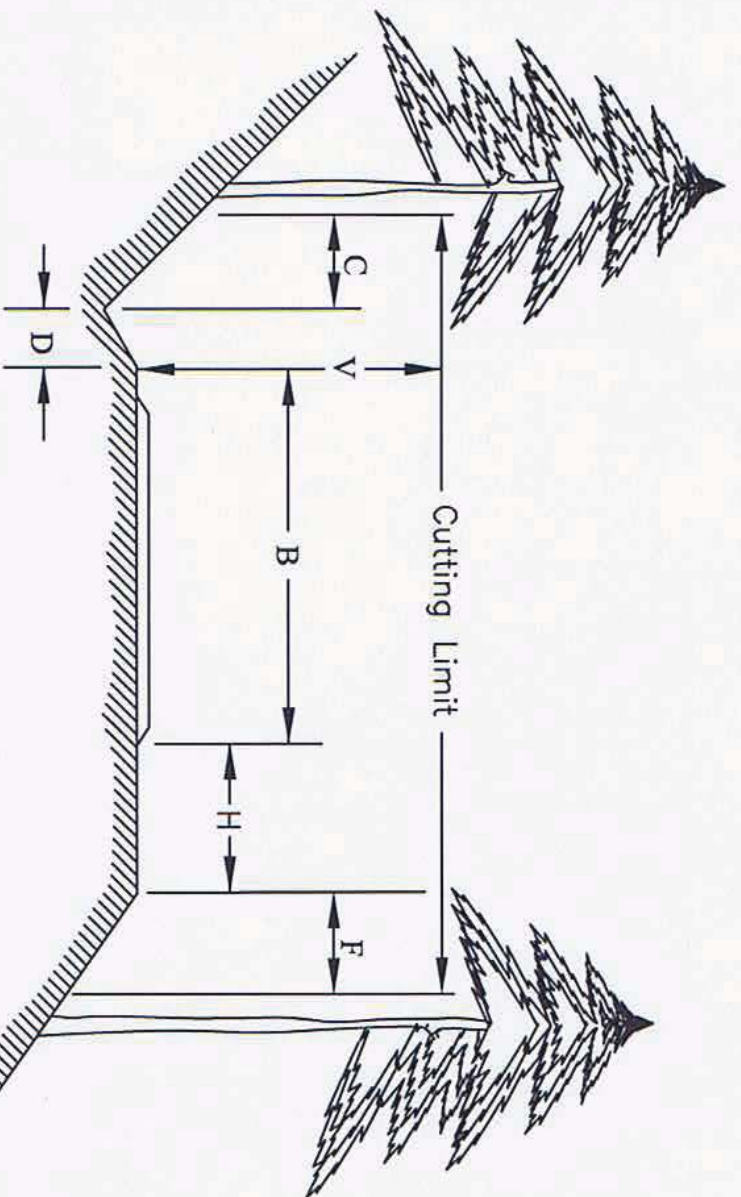
SKETCH DIAGRAM



REV. NO.	DESCRIPTION	DATE	APPROV.
1	DESIGNED	8/2/06	DCM
2	REVIEWED	8/2/06	DCM
3	APPROVED	8/2/06	DCM
4	DRAWN	8/2/06	DCM
5	DATE	August 2006	SHEET 1 OF 1
6	DRAWING NO.	OR-117-TS06-26-C7	

DRAINAGE & EROSION CONTROL INSTALLATION

NOTE:
1. All armored water dips shall be rocked the entire width & length to a depth of 6".



Brushing Diagram

Cutting Limit = $C + D + B + H + F$

B = Basic lane width (includes turnouts)

Width shall be determined by the PI

$C = 4$ ft - Distance to be brushed on cut slope

beyond centerline of ditch

D = Centerline of ditch to inside shoulder

H = Variable distance between edge of basic lane and outside shoulder (does not include turnout widths)

F = Distance to be brushed on fill slope beyond outside shoulder

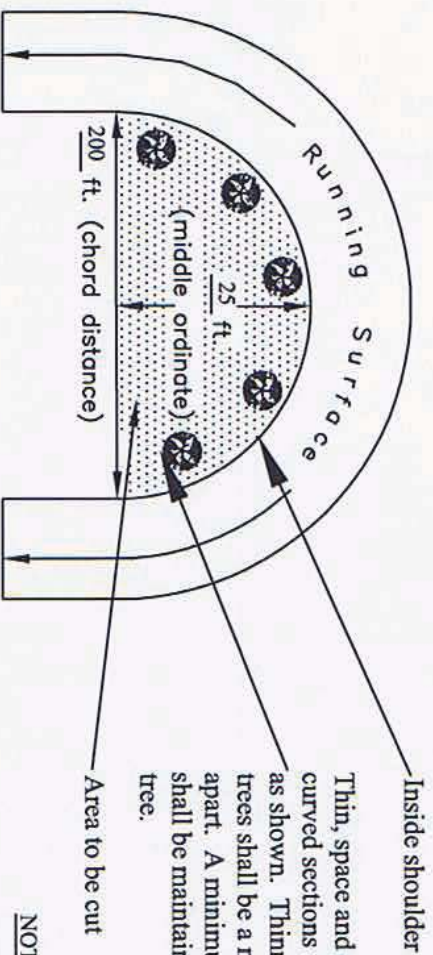
(F = $\frac{4}{4}$ when H is $\frac{4}{4}$ ft or less)

(F = $\frac{4}{0}$ when H is greater than $\frac{4}{4}$ ft)

V = $\frac{14}{14}$ ft - Height of vertical cutting limit

Typical Basic lane widths

- One lane low traffic volume 12 to 16 ft
- One lane medium traffic volume . . 16 to 20 ft
- Two lane high volume traffic 20 to 40 ft
- Turnouts 10 ft



Sight Distance Diagram

NOTES:

Cutting and Removal of vegetation from ditches and roadway is incidental to brushing within cutting limits.

All distances shown are horizontal except for V

**ROADSIDE BRUSHING
DETAIL**

UNITED STATES DEPARTMENT OF THE INTERIOR			
BUREAU OF LAND MANAGEMENT			
MEDFORD DISTRICT - MEDFORD, OREGON			
DESIGNED	REVIEWED	DATE	SCALE
APPROVED	APPROVED	AUGUST 2006	1 OF 1
DRAWN	RRB	SHEET	NONE
DRAWING NO.	OR-117-TS06-26-C8		

Road Renovation/Construction Work List

CCD = Construct Cross-Drain
 CMP = Corrugated Metal Pipe
 CWD = Construct Water Dip
 CWB = Construct Water Bar
 ASC = Aggregate Surface Course
 GRR = Grid Rolled
 PRR = Pit Run
 CY = Cubic Yards

Milepost

38-8-35

0.00	Begin Project. Begin Existing 14' Natural Surface with ditch. Begin Blading and Begin Roadside Brushing.
0.16	CWD. Armor with 25 CY of 3" minus subgrade reinforcement and 14 CY class 3 rip rap for slope protection.
0.34	Existing Dual 36" CMP's.
0.39	Existing 42" CMP.
0.61	Existing 18" CMP.
0.69	Existing 18" CMP.
0.74	Existing 18" CMP.
0.79	Existing Powder River Gate. Existing 18" CMP.
0.95	Existing 18" CMP.
1.05	Existing 18" CMP. Private Drive to left.
1.16	Existing 24" CMP.
1.41	Existing 18" CMP.
1.53	Existing 18" CMP.
1.59	End Project.

Milepost

39-8-4

0.00 Begin Project. Begin Existing 24' BST Surface with ditch.
 0.02 Existing 48" CMP. Clean inlet and outlet from debris.
 1.24 Junction Road 39-8-3 to right.
 1.74 End BST Surface. Begin Existing 18' ASC Surface. Begin Roadside Brushing.
 Existing 12" CMP. Jack inlet open and clean catch basin and outlet.
 1.77 Existing 18" CMP.
 1.80 Existing 18" CMP.
 1.84 Existing 18" CMP.
 1.87 Existing 18" CMP.
 1.94 Junction Road 38-8-35 to left. End Project.

39-8-17

0.00 Begin Project. Begin construction of Road 39-8-17 reroute. Begin brushing. Install 18"x60' CMP in West Side Road ditch line. Begin placing $\frac{3}{4}$ " crushed aggregate base at 6" depth for 25'.
 0.03 Install pipe gate.
 0.24 End construction of reroute.
 0.29 Begin Turn around construction 40' wide for 60' long.
 0.30 End turn around construction. End Project.

39-8-15

0.00 Begin Project. Begin road Renovation. Remove temporary culvert and construct Earth Berm Barricade after log haul.
 0.01 Existing 18" CMP. Fill with 10 CY of backfill.
 0.16 End Renovation. Junction 39-8-15.1 to right. Begin Spur Construction.
 0.18 Install temporary 18"x 30' CMP.
 0.27 End Project.

Exhibit C 10
Pomroy Lookout #39-8-17
Sheet 1 of 1

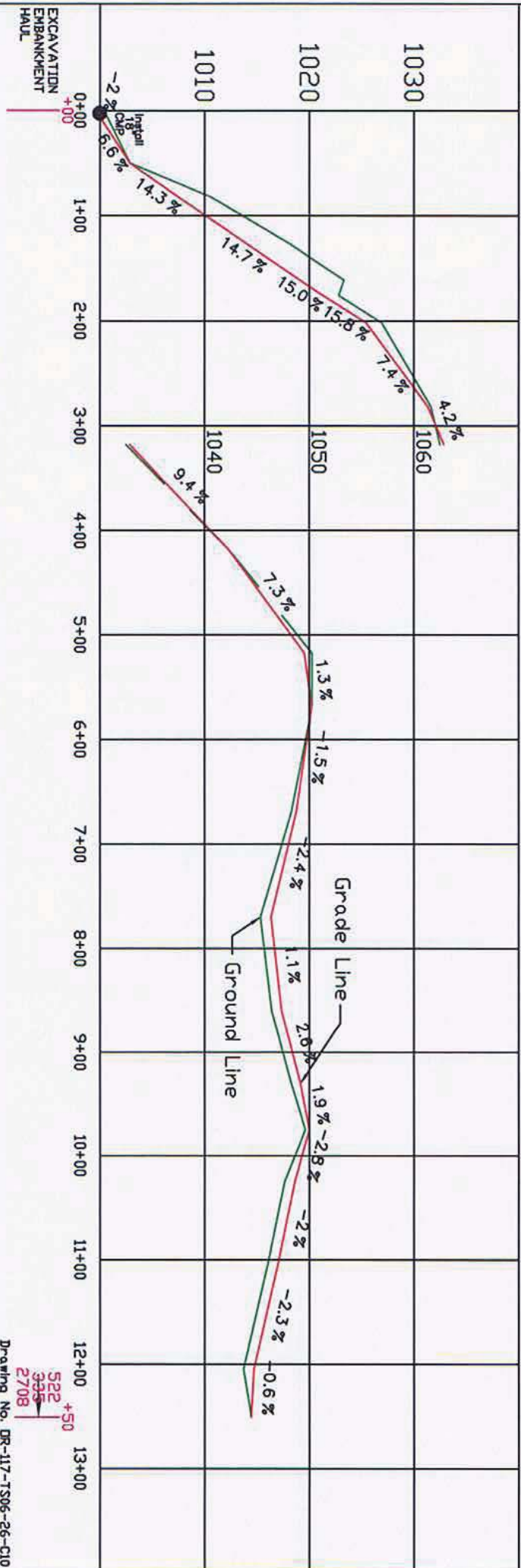
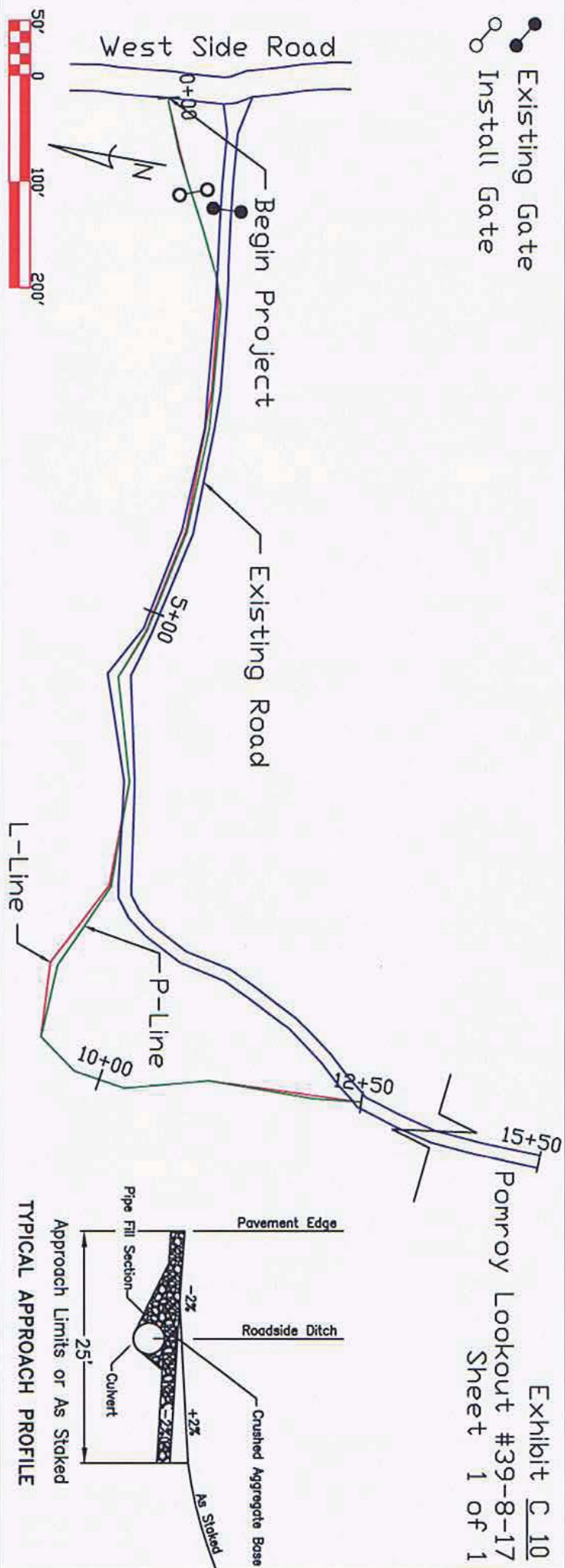
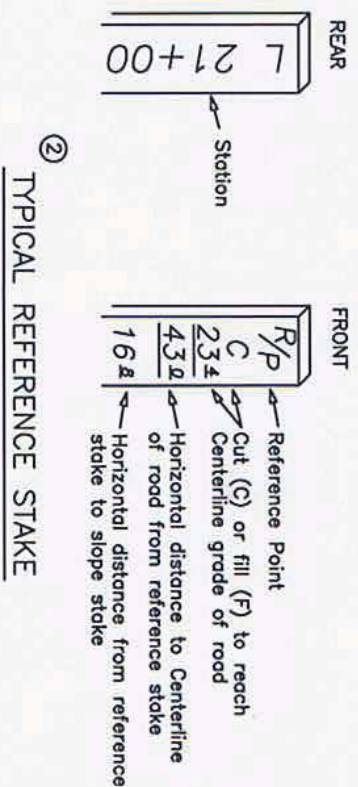
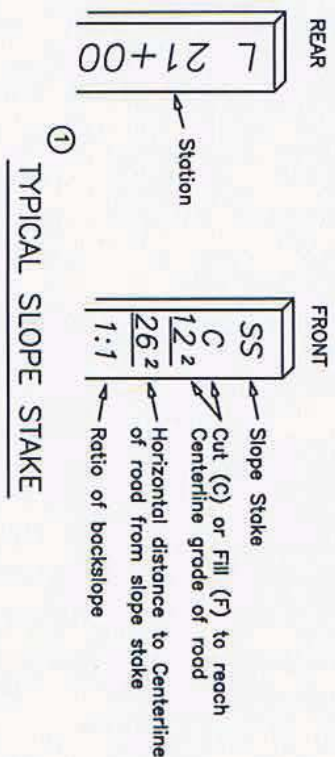
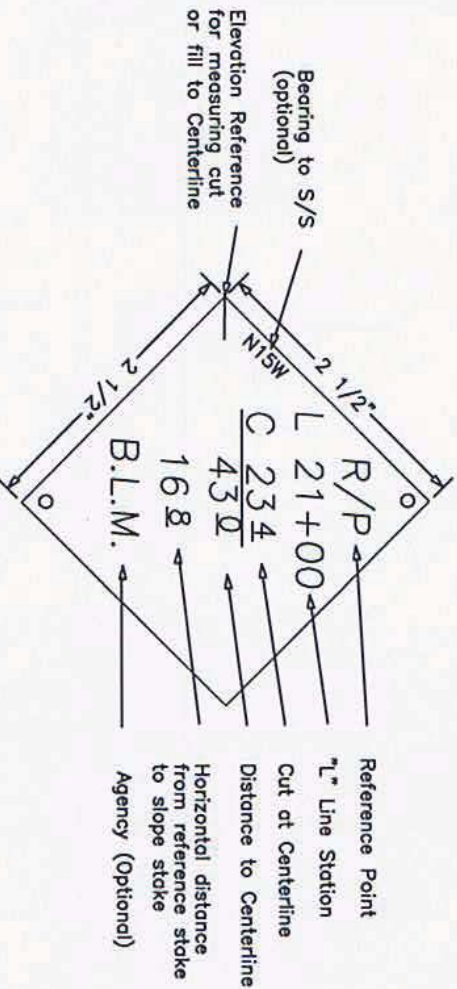
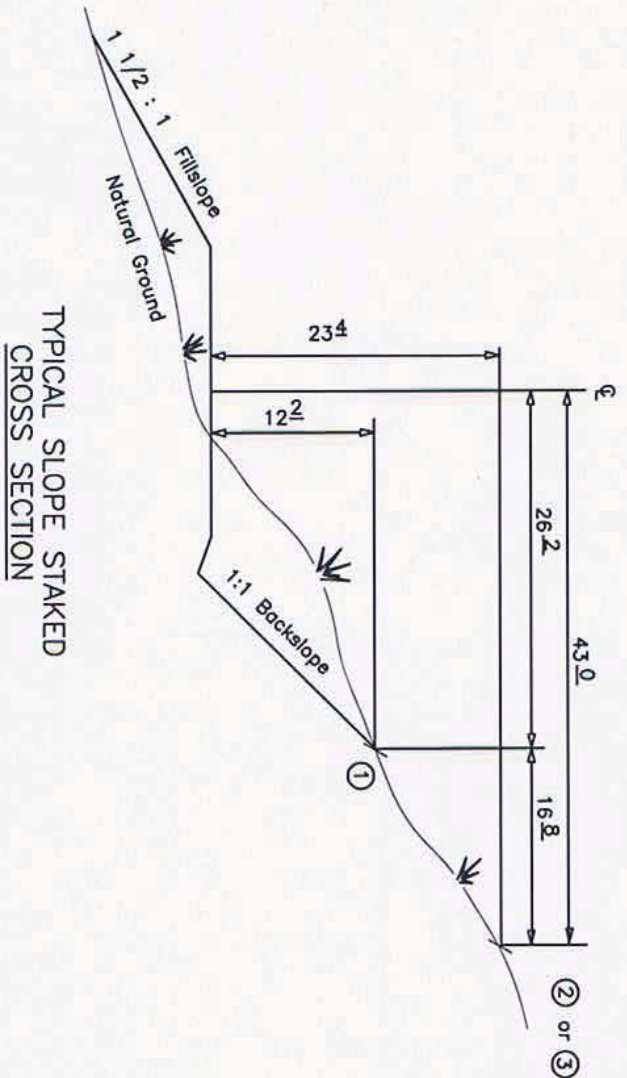


EXHIBIT C 11

SHEET 1 OF 1



UNITED STATES DEPARTMENT OF THE INTERIOR			
BUREAU OF LAND MANAGEMENT			
MEDFORD DISTRICT - MEDFORD, OREGON			
TYPICAL SLOPE STAKING			
DESIGNED	<i>[Signature]</i>		
REVIEWED	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DRAWN	JMR	SCALE	NONE
DATE	August 2008	SHEET	1 OF 1
DRAWING NO.	OR-117-TS06-26-C11		

SPECIAL PROVISIONS

1. All road segments not completed during dry weather periods shall be winterized, by providing a well-drained roadway by water barring, maintaining drainage and any additional measures necessary to minimize erosion and other damage to the roadway, as directed by the Authorized Officer. Any portion of road not having surfacing rock in place will be blocked or barricaded to prevent vehicular traffic.
2. Before beginning road construction operations for the first time or after a shutdown of seven or more days, the Purchaser shall notify the Authorized Officer of the date he plans to begin operations. The Purchaser shall also notify the Authorized Officer if he intends to cease operations for any period of 30 or more days.
3. Prior to entering BLM lands, construction equipment shall be washed and free of all dirt, grease, and plant parts that may carry noxious weed seeds or vegetative parts, at home unit or approved wash stations. Water sources shall be approved by the authorized officer and shall be un-infested water sources or water shall be treated with Clorox. Equipment shall be inspected by the Authorized Officer prior to entering BLM lands and after required washings.
4. The P-line as staked in the field and as shown on Exhibit C, are intended to be used as a control, and should be considered as being in the area of the finished grade.
5. Proposed rock source: Commercial – Grants Pass/Cave Junction area.
6. All turnouts and landings shall be staked for length and width 24 hours in advance of surfacing operations.
7. Curve widening, as shown on the plans, shall be surfaced per Section 1000.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ROAD SPECIFICATIONS

Road No(s).
38-08-35, 39-08-4, 39-08-15, 39-08-17

Sections 23, 27, 33, 35, T.38 S., R. 8 W.,
Sections 15, 17, T.39 S., R. 8 W.,

Willamette Meridian

Josephine County, Oregon

INDEX

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200	CLEARING AND GRUBBING
300	EXCAVATION AND EMBANKMENT
400	PIPE CULVERTS
500	RENOVATION OF EXISTING ROADS
600	WATERING
900	AGGREGATE BASE COURSE (SCREENED ROCK)
1200	AGGREGATE SURFACE COURSE (CRUSHED ROCK)
1400	SLOPE PROTECTION
2100	ROADSIDE BRUSHING
R2300	SLOPE STAKING

GENERAL - 100

A prework conference will be held prior to the start of new construction, reconstruction, and brushing operations. The Purchaser shall request the conference at least 48 hours prior to the time it is to be held. The conference will be attended by the Purchaser and/or his representative(s), subcontractor(s) and/or his or their representative(s) and the Authorized Officer and/or his representative(s).

The purpose will be to review the required work, exhibits and specifications, and to establish a work schedule and a list of the Purchaser's representatives and subcontractor(s). A Prework conference shall be scheduled at the work site.

102 - Definitions:

AASHTO - American Association of State Highway and Transportation Officials.
Current editions of tests and specifications.

Abrasion Resistance - The ability of a fabric surface to resist wear by friction.

ACI - American Concrete Institute.

Apparent Opening Size (AOS) - Number of the U.S. Bureau of Standard sieve (or its opening size in millimeters or inches) having openings closest in size to the diameter of uniform particles which will allow 5 percent by weight to pass through the geotextile material when shaken in a prescribed manner. Also referred to as Equivalent Opening Size (EOS).

ASTM - American Society for Testing and Materials.

Base Course - Surfacing structure consisting of crushed gravel or stone, crushed sandstone, pitrun rock, bank or river-run gravels, etc., to provide support and, in the event no surface course is placed, the running surface for traffic load.

BLM - Bureau of Land Management

Borrow - Excavated material required for embankments and other portions of the work.

Burst Strength - The resistance of a geotextile material to rupture from pressure applied at right angles to the plane of the geotextile material under specified conditions, usually expressed as the amount of pressure causing failure. Rupture or burst results from tensile failure of the geotextile material.

Culvert - A pipe, pipe-arch, arch, or box structure constructed of metal, concrete, plastic or wood which provides an opening under the roadway primarily for the conveyance of liquids, pedestrians or livestock.

Curve Widening - Widening required on inside of curves to accommodate long log and equipment hauling trucks.

Embankment - A structure of soil, aggregate, or rock material placed on a prepared ground surface and constructed to subgrade.

End Haul - Excavated material moved, other than by dozer, to an embankment or waste area to prevent sidecasting material outside of the road prism.

Excess Excavation - Material from the roadway in excess of that needed for construction of the designed roadway (waste).

Grab Tensile Strength - A modified tensile strength of a geotextile material. The strength of a specific width of geotextile material together with the additional strength contributed by adjacent areas. Typically, grab strength is determined on a 12-inch-wide strip of geotextile material, with the tensile load applied at the midpoint of the geotextile material width through 1-inch-wide jaw faces.

Grading - Leveling to grade, shaping and smoothing of a road subgrade; the shaping of roadside ditches as to grade and contour. In some instances includes smoothing of the cut bank.

Nonwoven Geotextile Material - A textile structure produced by bonding or interlocking of fibers, or both, accomplished by mechanical or chemical means.

Overhaul - Distance excavated material is transported in excess of the distance included in the cost for excavation.

Pioneer Road - Temporary construction access built along the route of the project.

Penetration Resistance - The geotextile material property determined by the force required to penetrate a geotextile material with a sharp pointed object. Initial penetration is by separating the fibers. Further penetration is essentially a tearing process.

Percent Open Area - The net area of a geotextile material that is not occupied by geotextile material filaments, normally determinable only for woven and nonwoven geotextile material having distinct, visible, and measurable openings that continue directly through the geotextile material.

Permeability - The geotextile material property which permits water to be transmitted in the longitudinal or transverse planes of the geotextile material.

Piping - The process by which soil particles are washed in or through pore spaces in drains and filters or poorly compacted fill/backfill material.

Plans - The approved drawings, or exact reproductions thereof which show the locations, character, dimensions, and details of the work to be done.

Pore Size - The size of an opening between geotextile material filaments; apparent opening size (AOS) is used to quantify this geotextile material property.

Puncture Resistance - The geotextile material property determined by the force required to penetrate a geotextile material with a blunt object. Failure results in a tearing of the geotextile material.

Purchaser - The individual, partnership, joint venture, or corporation contracting with the Government under the terms of a Timber Sale Contract and acting independently or through their, or its agents, employees, or contractors.

Reasonably Close Conformity - Compliance with reasonable and customary manufacturing and construction tolerances where working tolerances are not specified.

Reinforcement - Strengthening of concrete with iron bars or mesh: geotextile with geotextile material inclusion: subgrade with aggregate: etc.

Roadbed - The graded portion of the road within top and side slopes, prepared as a foundation for the pavement structure and shoulders.

Road Centerline - Longitudinal center of roadbed.

Road Improvement - Work done to an existing road which improves it over its original design standard.

Road Renovation - Work done to an existing road which restores it to its original design.

Roadway - The portion of a road within limits of construction. Usually from the toe of the fill slope to a point where the cut slope intersects natural ground line. Synonym - road prism.

Scale - In quarrying, consists of the removal of loose or overhanging rock adhering to the solid face after a shot or a round of shots has been fired.

Scarification - The process of loosening or breaking up of the surface layer of soil or road, usually to a specified depth.

Separation - Function of geotextile material as a partition between adjacent materials to prevent mixing of those materials.

Shoulder - The portion of the roadbed contiguous with the traveled way designed for accommodation of stopped vehicles, safety, and lateral support of base and surface courses.

Spalls - Flakes or chips of stone.

Specifications - A general term applied to all directions, provisions, and requirements pertaining to performance of the work.

Specific Gravity - The ratio of the density of a material to the density of water obtained by weighing known volumes of both items in air. A specific gravity less than one implies that the material will float.

Structures - Bridges, culverts, catch basins, retaining walls, underdrains, flumes, splash pads, downspouts, and other project features which may be involved in the work and not otherwise classified in these specifications.

Subbase - Reinforcement of the subgrade with large particles of pitrun or crushed stone. Usually confined to roads having wet subgrades or subgrades with weak support characteristics.

Surface Course - Top layer of a road structure consisting of finely crushed gravels or asphalt designed to provide a smooth running surface for traffic load.

Subgrade - The top surface of a roadbed upon which the traveled way and shoulders are constructed.

Tackifier - A compound which facilitates the penetration of the compound into the earth and assists in creating a crust through the cohesive bonding of the surface materials to a depth sufficient to stabilize the soil surface.

Tensile Strength - The strength shown by a geotextile material subjected to tension as distinct from torsion, compression, or shear.

Tensile Stress - Strain Modulus - A measure of the resistance to elongation under stress. The ratio of the change in tensile stress to the corresponding change in strain.

Tensile Test - A test which subjects geotextile material to tensile forces and measures resultant stresses and strains.

Timber - Standing trees, downed trees, or logs which can be measured in board feet.

Traveled Way - The portion of the roadbed used for the movement of vehicles, exclusive of shoulders.

Typical Cross Sections - Cross-sectional plane of a typical roadway; showing natural ground line and designed roadway in relation to cut and fill, through cut, and through fill.

Turnout - Extra widening of the roadbed at appropriate intervals on single-lane roads for passing purposes.

Ultraviolet (UV) Radiation Stability - The ability of geotextile material to resist deterioration from exposure to sunlight.

Unaged Cloth - Cloth in condition received from the manufacturer or distributor.

Woven Geotextile Material - A textile structure comprising two or more sets of filaments of yarns interlaced in such a way that the elements pass each other at essentially right angles with one set of elements parallel to the geotextile material axis.

102a - Tests Used in These Specifications:

<u>AASHTO T 11</u>	Quantity of rock finer than No. 200 sieve.
<u>AASHTO T 27</u>	Sieve analysis of fine and coarse aggregate using sieves with square openings; gradation.
<u>AASHTO T 89</u>	Liquid limit of material passing the No. 40 sieve. Water content at which the soil passes from a plastic to a liquid state.
<u>AASHTO T 90</u>	Plastic limits and plasticity index of soil. a. Plastic limit - lowest water content at which the soil remains plastic. b. Plasticity index - range of water content, within which the material is in a plastic state. Numerical difference between the liquid and plastic limits of the soil.
<u>AASHTO T 96</u>	Resistance to abrasion of small size coarse aggregate by use of the Los Angeles machine.
<u>AASHTO T 99</u>	Relationship between soil moisture and maximum density of soil. Method A - 4 inch mold, soil passing a No. 4 Sieve.25 blows/layer & 3 layers. Method D - 6 inch mold, soil passing a 19.00mm (3/4 inches) sieve. 56 blows/layer & 5 layers.
<u>AASHTO T 176</u>	Shows relative portions of fine dust or clay-like materials in soil or graded aggregate.
<u>AASHTO T 180</u>	(OSHD 106-71) moisture density relationship of soil same as AASHTO T 99 proctor but uses a 10-lb rammer and 18-in drop.
<u>AASHTO T 191</u>	<u>Sand Cone</u> . Density of soil in place: For subgrade use 6-inch or 12-inch cone. For rock surfacing for 1-1/2-inch minus to 3-inch minus use 12-inch cone.

AASHTO T 205 Rubber balloon. Density of soil in place. Use for compacted or firmly bonded soil.

AASHTO T 210 Durability of aggregates based on resistance to produce fines.

AASHTO T 224 Correction for coarse particles in the soil.

AASHTO T 238 Determination of density of soil and soil-aggregates in place by nuclear methods.

AASHTO T 248 Reducing field samples of aggregate to testing size by mechanical splitter, quartering, or miniature stockpile sampling.

DES. E-12 Determination of relative density of cohesionless soils.

DMSO (dimethyl sulfide) - Determines volume of expanding clays in aggregates. Usually associated with marine basalts.

103 - Compaction equipment shall meet the following requirements:

103f - Vibratory roller. The drum diameter shall be not less than 48 inches, the drum width not less than 58 inches, and have a turning radius of 15 feet or less. Vibration frequency shall be regulated in steps to 1400, 1500, and 1600 vibrations per minute (VPM), corresponding to engine speeds of 1575, 1690, and 1800 RPM. The centrifugal force developed shall be 7 tons at 1600 RPM. It shall be activated by a power unit of not less than 25 horsepower. The vibratory roller shall be self-propelled or drawn by a vehicle of sufficient horsepower to enable the unit to travel through a loose layer of material at a speed ranging from 0.9 mile to 1.8 miles per hour, as directed by the Authorized Officer.

The towing vehicle and roller or self-propelled unit meeting the above requirements shall be considered a vibratory roller unit.

103h - Drum drive self-propelled vibratory grid roller. The unit shall consist of one cylindrical drum with a drum diameter of not less than 56 inches, nor more than 66 inches and the drum width shall be 84 inches. Vibratory frequency shall be regulated in steps from 1200 to 1800 vibrations per minute (VPM), and the centrifugal force developed shall be at least 40,000 pounds at 1800 RPM. The vibratory grid roller shall be self-propelled and have a power unit of not less than 112 horsepower. The "grid" design shall be a herringbone or z-bar pattern around the circumference of the

drum. The grid bars shall be 1 inch in height and spaced not more than 8-1/2 inches apart.

- 103i - Other. Compaction equipment approved by the Authorized Officer.

CLEARING AND GRUBBING - 200

- 201 - This work shall consist of clearing, grubbing, removing and disposing of vegetation, debris, surface objects, and protruding obstructions within the clearing limits in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 202 - Where clearing limits have not been staked, established by these specifications or shown on the plans, the limits shall extend 2 feet back of the top of the cut slope and 2 feet out from the toe of the fill slope.
- 202a - Where clearing limits for structures have not been staked or shown on the plans, the limits shall extend 5 feet out from the outside edge of the structure.
- 203 - Clearing shall consist of the removal and disposal of trees, logs, rotten material, brush, and other vegetative materials and surface objects in accordance with these specifications and within the limits established for clearing as specified under Subsection(s) 202, and 202a and as shown on the plans.
- 203a - Brush under 0.5 feet in height need not be cut within the limits established for clearing.
- 203b - Standing trees and snags to be cleared shall be felled within the limits established for clearing, unless otherwise authorized.
- 203c - Disposal of logs from private timber cleared within the limits established, as shown on the plans shall consist of decking at a location designated by the Authorized Officer as staked on the ground.
- 204 - Grubbing shall consist of the removal and disposal of stumps, roots, and other wood material embedded in the ground, and protruding obstacles remaining as a result of the clearing operation in accordance with Subsection(s) 204a, 204b, 204c, 204d, and 204e between the top of the cut slope and the toe of the fill slope. Undisturbed stumps, roots and other solid objects which will be a minimum of 2 feet below subgrades or slope surfaces of embankments are excepted.
- 204a - Stumps shall be removed within the required excavation limits.
- 204b - Stumps and other protruding objects shall be completely removed within the limits of required embankments having heights of less than 4 feet.

- 204c - On excavated areas, roots and embedded wood shall be removed to a depth not less than 6 inches below the subgrade.
- 204d - On areas to be occupied by embankments having heights greater than 4 feet, no stump or portion thereof shall remain within 3 feet of embankment subgrades or slope surfaces after grubbing is completed.
- 204e - Roots and embedded wood material shall be removed to a depth not less than 1 foot below embankment subgrades or slope surfaces.
- 205 - Clearing and grubbing debris shall not be placed or permitted to remain in or under road embankment sections.
- 206 - Disposal of clearing and grubbing debris shall be by scattering over government owned lands outside of established clearing limits in a manner acceptable to the Authorized Officer. The areas for such scattering shall have the prior approval of the Authorized Officer.
- 207 - No grading will be permitted prior to completion and approval by the Authorized Officer of the required clearing and grubbing work, except that stump grubbing may proceed with the excavation of the road prism.
- 208 - No clearing or grubbing debris shall be left lodged against standing trees.

EXCAVATION AND EMBANKMENT - 300

- 301 - This work shall consist of excavating, overhaul, placement of embankments, backfilling, borrowing, leveling, ditching, grading, insloping, outsloping, crowning and scarification of the subgrade, compaction, disposal of excess and unsuitable materials, and other earth-moving work in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 302 - Excavation shall also consist of the excavation of road and landing cut sections, borrow sites, backfilling, leveling, ditching, grading, compaction and other earth moving work necessary for the construction of the roadway in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans,(and as marked on the ground with stakes or metal tags).
- 303 - Suitable material removed from the excavation shall be used in the formation of embankment subgrade, shoulders, slopes, bedding, backfill for structures, and for other purposes as shown on the plans.
- 305 - Embankment construction shall consist of the placement of excavated and borrowed materials, backfilling, leveling, grading, compaction, and other earth-moving work necessary for the construction of the roadway and landings in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans, and as marked on the ground with stakes or metal tags.

- 305a - Material used in the construction of embankment sections shall be free of stumps, cull logs, brush, muck, sod, roots, frozen material and other deleterious materials and shall be placed and compacted as specified.
- 305b - Embankment materials shall be placed in successive parallel layers on areas cleared of stumps, cull logs, brush, sod, and other vegetative and deleterious materials, except as provided under Subsection 204.
- 305c - Embankments formed of material containing less than 25 percent rock not larger than 8 inches in the greatest dimension shall be placed in 12-inch layers. Material containing more than 25 percent rock not larger than 12 inches in the greatest dimension shall be placed in successive layers not exceeding 2 feet in thickness. Individual rocks and boulders greater than 12 inches in diameter may be used to construct 2 foot embankment layers, provided they are carefully distributed, with interstices filled with fine material to form a dense and compact mass.
- 305d - Where embankments are constructed predominantly of blasted rock material, depth of layers shall not exceed 4 feet. Rock fragments having dimensions greater than 4 feet will be permitted provided that they have no dimensions greater than 6 feet and that clearance between adjacent fragments is adequate for the placing and compacting of material in horizontal layers as specified, and that no part of the larger fragments comes within 4 feet of subgrade.
- 306 - Layers of embankment final subgrade material as specified under Subsections 305a, 305b, and 305c, shall be moistened or dried to a uniform optimum moisture content suitable for maximum density and compacted to full width with compacting equipment conforming to requirements of Subsections 103f, 103h, and 103i.
- 306a - Minimum compaction for each layer of embankment and selected roadway excavation material placed shall be 1 hour of continuous compacting for each 150 cubic yards in place or fraction thereof.
- 306e - The final subgrade including landings shall be compacted to full width with compacting equipment conforming to the requirements of Subsections 103b, 103e, 103f, 103h, and 103i. Minimum compaction shall be 1 hour of continuous compacting for each 6 stations of road or a fraction of as measured along the center line of the constructed road. Landings and turnouts shall be compacted by routing construction equipment over full width.
- 308 - In the case of rock fills, placement of material in layers is not required and such material may be placed by end-dumping or other methods approved by the Authorized Officer provided that the rock be reasonably prevented from escaping beyond the embankment toe.
- 311 - In solid rock cuts where pockets that will not drain are formed by blasting below the subgrade elevation, drainage shall be provided by ditching to the edge of the subgrade

and backfilling to grade and compacting both the pockets and the ditch with rock fragments, gravel, or other suitable porous material.

- 312 - When material, except solid rock, encountered in cuts at subgrade, is suitable for use in forming the finished roadbed, the top 6-inch layer of the subgrade shall be thoroughly scarified for the full width of the roadbed. Roots, sod, and other deleterious material or stones that will not pass a 6-inch square opening shall be removed. The scarified material shall be processed to the optimum moisture content suitable for maximum density and compacted in accordance with these specifications.
- 313 - In cut areas where solid rock is encountered at, or near subgrade, the rock shall be excavated to a minimum depth of 6 inches below subgrade elevation and the excavated area backfilled with suitable material. The backfill material shall be processed to the optimum moisture content suitable for maximum density and compacted to full width in accordance with the requirements of Subsection 306.
- 314 - When heavy clays, muck, clay shale, or other deleterious material for forming the roadbed is encountered in cuts at subgrade, it shall be excavated to a minimum depth of 2 feet below the subgrade elevation and the excavated area backfilled with a selected borrow material approved by the Authorized Officer. The backfill material shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density in accordance with the requirements of Subsection 306. Unsuitable material shall be disposed of as directed by the Authorized Officer.
- 320 - Ditches shall conform to the slope, grade, dimensions, and shape of the required cross section shown on the plans. Roots, stumps, rocks, and other projections shall be removed to form smooth, even slopes.
- 321 - Excess excavated, unsuitable, or slide materials shall not be disposed of on areas where the material will encroach on a stream course or other body of water. Such materials shall be disposed of in a location as approved by the Authorized Officer.
- 321c - End-dumping will be permitted for the placement of excess materials under Subsection 321 in designated disposal areas or within areas approved by the Authorized Officer. Watering, rolling, and placement in layers is not required. Materials placed shall be sloped, shaped, and otherwise brought to a neat and sightly condition acceptable to the Authorized Officer.
- 322 - When so indicated on the plans, selected coarse rock encountered in the excavation shall be conserved for slope protection or special rock embankment purposes and placed in accordance with the requirements and details of Section 1400 of these specifications and as shown on the plans.

- 323 - In the construction of channel changes and stream crossing embankment sections, natural stream flow shall be maintained unless otherwise provided.
- 324 - Excavated material shall not be allowed to cover boles of standing trees to a depth in excess of 2 feet on the uphill side.
- 327 - The finished grading shall be approved in writing by the Authorized Officer in segments. The Purchaser shall give the Authorized Officer 3 days notice prior to final inspection of the grading operations.
- 328 - The Purchaser shall adopt methods and procedures in using explosives, which will prevent damage to adjacent landscape features, and which will minimize scattering rocks and other debris outside the road prism.
- 328a - The Purchaser shall establish and be responsible for blasting techniques and shall furnish the Authorized Officer, prior to starting drilling operations, a blasting plan specifying drill-hole diameter, drill-hole spacing, depth of drilling, type of explosive to be used, loading pattern, sequence of firing, the location where the plan is to be used, and other relevant data. Acceptance of the drilling and blasting plan does not relieve the Purchaser of responsibility or liability for the results of the blasting.

PIPE CULVERTS - 400

- 401 - This work shall consist of furnishing and installing pipe culverts, half rounds, downspouts, elbows and other erosion control devices in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans. Individual lengths and locations are approximate; final lengths and locations will be determined by the Authorized Officer from established construction stakes. Additional pipe and erosion control devices may be required at the option of the Authorized Officer, in which case a reduction in the total purchase price shall be made to offset the cost of furnishing and installing such items. Costs will be based upon the unit prices set forth in the current BLM Timber Appraisal Production Cost Schedule.
- 402 - The pipe culverts will be located at the road locations as shown on the Exhibit C drawings.
- 403 - Grade culverts shall have a gradient of from 2 percent to 4 percent greater than the adjacent road grade and shall be skewed down grade 30 degrees as measured from the perpendicular to the centerline unless otherwise specified on the plans.
- 404 - Damage to the spelter, or burn back in excess of 3/8 inch, shall be wire brushed and painted with two coats of zinc-rich paint on zinc-coated and aluminum-rich paint on aluminum or aluminum-coated pipe.

- 405 - Corrugated steel riveted and helical pipe culverts and pipe-arch culverts and special sections shall conform to the requirements of AASHTO M 36 and AASHTO M 218 or AASHTO M 274 as specified on the plans.
- 405a - Corrugated-steel-welded pipe culverts and pipe-arch culverts and special sections shall conform to the requirements of AASHTO M 36 and AASHTO M 218 or AASHTO M 274 as specified on the plans.
- 405b - Corrugated-aluminum-alloy pipe culverts and pipe-arch culverts shall conform to the requirements of AASHTO M 196.
- 405c - Corrugated-steel-structural plate pipe culverts and pipe-arch culverts shall conform to the requirements of AASHTO M 167, except that single plates may exceed 75 pounds in weight.
- 405d - Corrugated-aluminum-structural plate pipe culverts and pipe-arch culverts and special sections shall conform to the requirements of AASHTO M 219.
- 405f - Ring gaskets for rigid pipe shall meet the requirements of AASHTO M 198. Continuous flat gaskets for flexible metal pipe shall meet the requirements of ASTM D 1056, with grade RE 41 used for bands with projections or flat bands, and grade RE 43 used for corrugated bands. When used with metal pipe with annular reformed ends, the ring gasket shall be one-fourth greater in diameter than the depth of the corrugation. Gasket thickness for bands with projections or flat bands shall be 1/2 inch greater than the nominal depth of the corrugation and shall be 3/8 inch for corrugated bands. For pipe with flanged ends, a butyl-rubber-strip gasket shall be placed inside the channel band.
- 406 - Coupling bands shall conform to the requirements of AASHTO M 36 and AASHTO M 218, or AASHTO M 274 with the exception of band widths and the "Hugger"-type band, which shall conform to the details, dimensions, and typical diagram shown on the plans.
- 406a - "Hugger"-type coupling bands shall only be used with annular corrugated pipe and pipe-arch culverts or helically corrugated pipe and pipe-arch culverts having annular reformed ends. Annular reformed ends shall consist of 2 annular corrugations.
- 406b - Coupling bands produced from flat galvanized steel sheets with impressed dimples will be permitted only for connecting annular corrugated steel pipe to helically corrugated steel pipe. Such coupling bands shall conform to the width requirements shown on the plans.
- 406c - Elbow sections used in conjunction with full-round pipe culvert downspouts shall be connected at both ends by "Hugger"-type bands, and "O" ring neoprene gaskets shall be inserted between the band and pipe as shown on the plans to ensure a watertight joint.

- 406f - Channel-type coupling bands may be used on helical pipe with reformed rolled ends and flanged specifically to receive these bands. Such coupling bands shall conform to the requirements shown on the plans.
- 407a - Flumes and half rounds conforming to the material and construction requirements shown on the plans shall be constructed for culverts at the locations as specified in the plans.
- 408 - Pipe culverts and pipe-arch culverts shall be placed on the bed starting at the downstream end with the inside circumferential laps pointing downstream and with the longitudinal laps at the side or quarter points. Coupling bands of the types required under these specifications shall be installed so as to provide the circumferential and longitudinal strength necessary to preserve the pipe alignment, prevent separation of the pipe sections, and minimize infiltration of fill material.
- 410 - Pipe shall be unloaded and handled with reasonable care. If the Authorized Officer determines any structure is damaged to the extent that it is unsuitable for use in the road construction, it shall be replaced at the Purchaser's expense.
- 411 - Trenches necessary for the installation of pipe culverts shall conform to the lines, grades, dimensions, and typical diagram included in the plans and the Culvert Installation Detail Sheet.
- 412 - Where ledge rock, boulders, soft, or spongy soils are encountered, they shall be excavated a minimum of 24 inches below the invert grade for a width of at least one pipe diameter or span on each side of the pipe and shall be backfilled with selected granular or fine readily compactible soil material.
- 413 - Pipe culverts and pipe-arch culverts shall be bedded on a selected granular or fine readily compactible soil material having a depth of not less than 10 percent of the diameter or height of the drainage structure concerned or a minimum depth of:

<u>Pipe Corrugation Depth</u>	<u>Minimum Bedding Depth</u>
2 inch	1 inch
1 inch	2 inches
2 inches	3 inches

Foundation material shall be of uniform density throughout the length of the structure and shall be shaped to fit the pipe.

- 414 - The invert grade of the bedding shall be cambered in accordance with the requirements and details shown on the plans and as directed by the Authorized Officer.

- 414a - The invert grade of the bedding shall be cambered at the middle ordinate a minimum of 1 percent of the total length of the drainage structure. Camber shall be developed on a parabolic curve.
- 421 - Trenches and bedding rock necessary for the installation of perforated pipe shall conform to the lines, grades, dimensions, and typical diagram shown on the plans.
- 423 - Construction of catch basins and ditch dams conforming to lines, grades, dimensions and typical diagrams shown on the plans, shall be required for culverts.
- 424 - Construction of splash pads conforming to lines, grades, dimensions, and typical diagram shall be required for grade culverts and culverts at the locations as shown in the plans.
- 427 - The Purchaser shall record culvert sizes, lengths and location actually installed on a copy of the culvert list. This culvert list shall be furnished to the Authorized Officer.

RENOVATION OF EXISTING ROADS - 500

- 501 - This work shall consist of reconditioning and preparing the roadbed and shoulders, cleaning and shaping drainage ditches, trimming vegetation from cut and embankment slopes, and cleaning and repairing drainage structures of existing roads in accordance with these specifications, as shown on the plans, and as marked on the ground with stakes or metal tags.
- 502 - The existing road surface shall be bladed and shaped to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 502a - Rocks larger than 4 inches in maximum dimension shall be removed from the scarified layers of the roadbed. Material so removed will not be permitted to remain on road shoulders or in ditches.
- 502b - Drainage ditches shall be bladed and shaped in accordance with the lines, grades, dimensions, and typical cross sections shown on the plans.
- 503 - Debris from slides shall be disposed of as directed by the Authorized Officer.
- 504a - Minimum compaction required shall be one (1) hour of continuous (rolling) for each (4) stations of road, or fraction thereof, as measured along the centerline, per layer of material.
- 506 - The inlet end of existing drainage structures shall be cleared of vegetative debris and boulders that are of sufficient size to obstruct normal stream flow. Pipe inverts shall be cleared of sediment and other debris lodged in the barrel of the pipe. The outflow area of pipe structures shall be cleared of rock and vegetative obstructions which will

impede the structures designed outflow configuration. Catch basins shall conform to the lines, grade, dimensions, and typical diagram shown on the plans.

- 507 - The finished grading shall be approved in writing by the Authorized Officer. The Purchaser shall give the Authorized Officer 3 days notice prior to final inspection of the grading operations.

WATERING - 600

- 601 - This work shall consist of furnishing and applying water required for the compaction of embankments, roadbeds, backfills, base courses, surface courses, finishing and reconditioning of existing roadbeds laying dust, or for other uses in accordance with these specifications.
- 602 - Water, when needed for compaction or laying dust, shall be applied at the locations in the amounts and during the hours as directed by the Authorized Officer. Amounts of water to be provided will be the minimum needed to properly execute the compaction requirements in conformance with these specifications, and for laying dust during work periods where the road crosses private property.
- 603 - Water trucks used in this work shall be equipped with a distributing device of ample capacity and of such design as to ensure uniform application of water on the roadbed.
- 605 - The Purchaser shall secure the necessary water permits and pay all required water fees.

AGGREGATE BASE COURSE - 900 SCREENED ROCK MATERIAL

- 901 - This work shall consist of furnishing, hauling, and placing one or more lifts of screened rock material for water dip on roadbeds, in accordance with these specifications and conforming to the dimensions and typical cross sections shown on the plans.
- 902 - Screened rock materials used in this work shall be obtained from a commercial source.
- 902a - Screened rock materials to be used in this work may be obtained from a source selected by the Purchaser, at his option providing the rock materials furnished comply with these specifications and the source is approved in writing by the Authorized Officer prior to use.

- 903 - Screened rock material shall conform to the following gradation requirements:
TABLE 903

SCREENED ROCK MATERIAL GRADATION REQUIREMENTS
Percentage by Weight Passing Square Mesh Sieves
(AASHTO T 27)

Sieve Designation	<u>A</u>	<u>GRADATION</u>
4 inch	100	
3 inch	95-100	
2 inch		
1-1/2 inch		
1 inch		
No. 4	11-44	
No. 200	2-15	

- 904 - Screened rock material retained on the No. 4 sieve shall have a percentage of loss not more than 35 at 500 revolutions, as determined by AASHTO T 96.
- 904a - Screened rock material shall show a durability value of not less than 35, as determined by AASHTO T 210.
- 905 - The roadbed as shaped and compacted under Sections 300 and 500 of these specifications, shall be approved in writing by the Authorized Officer prior to placement of screened rock materials.
- 906 - Screened rock material shall be placed in layers not to exceed 6 inches in thickness. Where the required total thickness is more than 6 inches, the rock material shall be shaped and compacted in two or more layers of approximately equal thickness.
- 906a - Screened rock materials used to repair or reinforce a soft, muddy, frozen, yielding, or rutted subgrade shall not be construed as surfacing under this specification .
- 908 - Screened rock material shall be blade-processed and spread to required dimensions. Processing shall be performed in such a manner as to minimize aggregate segregation.
- 909 - Screened rock material shall be compacted by routing construction and hauling equipment over the full width of each layer placed.
- 910 - Screened rock material, bladed and shaped as specified, shall be moistened or dried to optimum moisture content for maximum compaction and compacted to full width by compaction equipment conforming to the requirements of Subsection 103.

AGGREGATE SURFACE COURSE - 1200
CRUSHED ROCK MATERIAL

- 1201 - This work shall consist of furnishing, hauling, and placing one or more layers of crushed rock material on roadbeds and base courses approved for placing crushed rock material in accordance with these specifications and conforming to the dimensions and typical cross sections shown on the plans. Material not conforming to these specifications will be rejected, and shall be removed from the road.
- 1202 - Crushed rock materials used in this work may be obtained from commercial source(s) selected by the Purchaser at his option and expense, providing the rock materials furnished comply with the specifications in this section.
- 1202a- Crushed rock materials used in this work may be obtained from commercial source(s) selected by the Purchaser at his option and expense, providing the rock materials furnished comply with the specifications in this section.
- 1203 - When crushed rock material is produced from gravel, not less than 75 percent by weight of the particles retained on the No. 4 sieve will have 4 fractured faces. If necessary to meet the above requirements or to eliminate an excess of filler, the gravel shall be screened before crushing.
- 1204 - Crushed rock material shall consist of hard durable rock fragments conforming to the following gradation requirement.

TABLE 1204

AGGREGATE SURFACE COURSE
CRUSHED ROCK MATERIAL

Percentage by weight passing square mesh sieves
AASHTO T 11 & T 27

<u>Sieve</u>	<u>GRADATION</u>
<u>Designation</u>	<u>D</u>
1-1/2 inch	-
1 inch	100
3/4 inch	-
1/2 inch	-
No. 4	30-60
No. 8	-
No. 30	-
No. 40	5-30
No. 200	3-15

- 1205 - Crushed rock material retained on the No. 4 sieve shall have a percentage of loss of not more than 35 at 500 revolutions, as determined by AASHTO T 96.

- 1206 - Crushed rock material shall show a durability value of not less than 35 as determined by AASHTO T 210.
- 1206a- The crushed rock material shall show a loss of not more than 10 percent by weight, when submerged in DMSO, dimethyl sulfoxide, for five days, according to Federal Highway Administration Region 10 Accelerated Weathering Test Procedure.
- 1207 - That portion of crushed rock material passing the No. 40 sieve, including blending filler, shall have liquid limits of not more than 35 and a plasticity index of not less than 4 and not more than 12 as determined by AASHTO T 89 and AASHTO T 90.
- 1207a- That portion of crushed rock material passing No. 4 sieve, including blending filler, shall have a sand equivalent of not less than 35, as determined by AASHTO T 176, except where that portion exhibits a sand equivalence of less than 35, the aggregate will be accepted if it complies with the additional requirement as follows:

<u>Sand Equivalent</u>	<u>Percent Passing #200 Sieve AASHTO T 27</u>
34	9
33	8
32	7
31	6
30	5
29 or less	4

- 1208 - If additional binder or filler material is necessary to meet the grading or plasticity requirements or for satisfactory bonding of the material, it shall be uniformly blended with the crushed rock material at the crushing and screening plant prior to placing on the road, unless otherwise agreed. The material for such purposes shall be obtained from sources approved by the Authorized Officer and shall be free from stones, vegetative matter, and other deleterious materials.
- *1208a- Each layer of crushed rock material shall be thoroughly mixed on the roadbed by alternately blading, to full depth, until a uniform mixture has been obtained. The mixture shall then be spread to full width. When completed, the spreading shall produce a surface which is smooth, presents uniform shoulder lines, and conforms to the specified cross section.
- 1209 - Shaping and compacting of roadbed and base course shall be completed and approved, prior to placing crushed rock material, in accordance to the requirements of Subsection 300 for placing on the roadbed and. Notification for subgrade inspection, prior to rocking, shall be 3 days prior to that inspection and shall be 10 days prior to start of rocking operations.
- 1210 - Crushed rock material conforming to the requirements of these specifications shall be placed on the approved roadbed and base course in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross

sections shown on the plans and staked on the ground. Compacted layers shall not exceed 4 inches in depth. When more than one layer is required, each shall be shaped, processed, compacted, and approved by the Authorized Officer before the succeeding layer is placed. Irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and then adding or removing crushed rock material until the surface is smooth and uniform.

- 1210a- Crushed rock material used to repair or reinforce soft, muddy, frozen, yielding, or rutted roadbed shall not be construed as surfacing required by this specification.
- 1211 - Each layer of crushed rock material placed, processed, and shaped as specified shall be moistened or dried to a uniform moisture content suitable for maximum compaction and compacted to full width by compacting equipment conforming to the requirements of Subsection 103f and 103h. Roller shall be operated over the full width of each layer until visual displacement ceases, but not fewer than three complete passes.

SLOPE PROTECTION - 1400

- 1401 - This work shall consist of furnishing, hauling, and placing stone materials for slope protection in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 1402 - Stone material shall consist of hard angular quarry rock of such quality that it will not disintegrate on exposure to water or weathering, and shall be graded in accordance with these specifications.
- 1403 - Individual machine-placed stones shall vary in weight from 25 to 770 pounds each. Not less than 25 percent of the individual stones shall weigh from 550 to 770 pounds each.
- 1404 - The material shall be well graded from the smallest to the maximum size specified. Stones smaller than the specified 10 percent size shall consist of spalls and fine rock fragments so distributed as to provide a stable compact mass.
- 1405 - The size of machine-placed by volume shall be as follows:

<u>Size of Stone</u>	<u>% of rock by mass</u>
20" – 18"	25
18" – 12"	30
12" – 6"	35
6" - 0	10

- 1406a- The embankment shall be placed in successive horizontal layers of sufficient depth to contain the maximum size rock present in the material. Spalls and finer fragments of stone other than specified in Subsection 1405 shall be used to chock the larger stones solidly in position and to fill voids between the major stones as laid in the embankment. The exposed face of the embankment shall be reasonably smooth and uniform; material shall be prevented from escaping beyond the toe of the structure.
- 1407 - Determination of the acceptability of the slope protection material gradation will be through visual inspection by the Authorized Officer.
- 1408 - Locations of embankment slope protection are shown in the Exhibit C Renovation Work List.

ROADSIDE BRUSHING-2100

- 2101 - This work shall consist of cutting and the removal of vegetation from the road prism - variable distance and inside curves in accordance with these specifications. This work shall conform to the lines, grades, dimensions, and typical cross sections shown on the Roadside Brushing Detail Sheet, at designated locations as shown in the plans.
- 2102 - Roadside brushing may be performed mechanically (approved Rotary Brushing machine) or manually with hand tools, including chain saws.
- 2103 - Vegetation cut manually less than 6 inches in diameter when measured 6 inches above the ground shall be cut to a maximum height of 2 inches above the ground surface or above obstructions such as rocks or stumps on cut and fill sloped and all limbs will be severed from the trunk.
- 2103a - Vegetation shall be cut and removed from the road bed between the outside shoulders and the ditch centerline and such vegetation shall be cut to a maximum height of 1 inch above the ground and running surface. All limbs will be severed from the trunk. Sharp pointed ends will not be permitted. Cuts shall be parallel to the ground line or running surface.
- 2104 - Trees in excess of 6 inches in diameter at D.B.H. shall be limbed, so that no limbs extend into the treated area or over the roadbed to a height of 10 feet above the subgrade of the roadway on cut and fill slopes, within the road prism-variable distance. Limbs shall be cut to within 1 inch of the trunk to produce a smooth vertical face. Removal of trees larger than 6 inches in diameter for sight distance or safety may be directed by the Authorized Officer.
- 2105 - Vegetation that is outside of the road prism-variable distance that protrudes into the road prism and within 14 feet in elevation above the subgrade shall be cut, to within 1 inch of the trunk to produce a smooth vertical face.

- 2107 - Inside curves shall be brushed out for a sight distance of 200 feet chord distance a middle ordinate distance of 25 feet. Overhanging limbs and vegetation in excess of 1 foot in height shall be cut within these areas.
- 2108 - Self propelled equipment shall not be permitted on cut and fill slopes or in ditches.
- 2109 - Debris resulting from roadside brushing shall be scattered downslope from the roadway. Debris shall not be allowed to accumulate in concentrations. Debris in excess of 1 foot in length and 2 inches in diameter shall not be allowed to remain on cut slopes, ditches, roadways or water courses, or as directed by the Authorized Officer.
- 2112 - Roadside brushing shall be performed during the following seasonal periods:

From	To
Jan 1	Dec 31

- 2113 - Roadside brushing shall be accomplished on all roads as specified on the plans.
- 2117 - Traffic warning signs shall be required at each end of the work area. Signs shall meet the requirements of the Manual on Uniform Traffic Devices.

SLOPE STAKING - 2300

- 2301 - This work shall consist of slope staking road locations from notes furnished by the BLM in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 2302 - Slope stakes shall consist of 1-3/4 inch x 1/4 inch smooth-finished wood slats of good quality, approximately 24 inches in length and tipped with red luminous paint.
- 2303 - Slope stakes shall be set as follows:

A slope stake shall be set at the top of the cut slope for cut and fill and full bench sections as shown on the typical road sections sheet included in the plans.

For through cut sections exceeding 2 feet in depth at the centerline, both sides of the road shall be staked. There shall be a ditch on the uphill side of the road.

For through fill sections exceeding 2 feet in depth at the centerline, both sides of the road shall be staked.

The slope stake shall be moved back to the reference stake at time of staking. The Purchaser shall reset the slope stakes after completion of clearing and grubbing operations, where needed.

- 2305 - Slope stakes and reference stakes shall be marked as shown on the plans.
- 2307 - Culvert locations shall be identified with a stake meeting the requirements of Subsection 2302 placed alongside the reference stake or slope stake.
- 2308 - Culvert locations shall have extra widening added to the catch basin side of the roadway based on 1-1/2 times the culvert diameter.
- 2309 - Stationing used is "L" or final location stationing.
- 2310 - Stakes shall be marked with black-lumber crayon or with a permanent waterproof felt-tip marker.
- 2311 - Slope and reference stakes shall be set to the following standards of accuracy:
 - Maximum allowable horizontal error +/- 0.5 feet
 - Maximum allowable vertical error +/- 0.5 feet
- 2312 - The Purchaser shall complete the required slope staking a minimum of 5 days in advance of construction unless otherwise agreed. Staking and slope staking notes shall be approved in writing by the Authorized Officer prior to right-of-way clearing, timber falling, and construction.
- 2313 - The Purchaser will slope stake and reference and furnish the BLM the resulting notes in advance of construction on the roads.

GENERAL MAINTENANCE - 3000

- 3001 - The Purchaser shall be required to maintain all roads listed and/or referenced in Section 41(C)(5) Special Provisions of this contract in accordance with Sections 3000, 3100, 3200, 3300, and 3400 of this exhibit.
- 3001a - The Purchaser shall be required to provide maintenance on roads in accordance with Subsections 3403, 3403a and 3404.
- 3002 - The Purchaser shall maintain the cross section of existing dirt or graveled roads to the existing geometric standards. Any roads required to be constructed, improved, or renovated under terms of this contract shall be maintained to the standards required in Exhibit C of this contract.
- 3003 - The minimum required maintenance on any roads shall include the provisions specified in Subsections 3101, 3104, and 3105.
- 3004 - The Purchaser shall be responsible for providing timely maintenance and cleanup on any road(s) with logging units substantially completed prior to moving operations to other roads. The maximum length of non-maintained or non-cleanup of the road prism, shall not exceed the sum of one (1) mile at any time. Release of maintenance requirements may be granted, upon written request, when the conditions specified in Sections 3300 and 3400 are met satisfactorily.

OPERATIONAL MAINTENANCE - 3100

- 3101 - The Purchaser shall blade and shape the road surface and shoulders with a motor patrol grader. Banks shall not be undercut. Back blading with tractors or similar equipment will be allowed only around landings and other areas when approved by the Authorized Officer.
- 3103 - The Purchaser shall maintain established berms and place additional berms using adjacent material where needed to protect fills as directed by the Authorized Officer.
- 3104 - The Purchaser shall perform other road cleanup including removal of debris, fallen timber, bank slough, and slides which can practicably be accomplished by a motor patrol grader, rubber tired front end bucket loader, rubber tired backhoe or comparable equipment, and by the use of hand tools.
- 3104a - Removal of bank slough and slide material includes placement of material at the nearest suitable turnout or disposal site where material cannot erode into streams, lakes, or reservoirs or cause undue damage to road fill slopes which have been planted or mulched to control soil erosion.

- 3104b - The Purchaser shall be responsible for removal of all slides, up to fifteen (15) station yards in quantity, at any one site. This work includes unlimited multiple sites on all roads required to be maintained by the Purchaser.

Prior to removal of any slough or slide material exceeding fifteen (15) station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, method of disposal, and the disposal site. Work may commence immediately after agreement.

Upon completion of agreed upon work, a reduction in timber sale purchase price will be made to offset the cost of the work, based on current BLM Timber Appraisal Production Cost Schedules. Adjustments in purchase price for completed work shall be made as necessary and no less than once per year when actual work is ongoing.

- 3105 - The Purchaser shall be responsible for maintaining normal flow in drainage structures. This includes cleaning out drainage ditches, catch basins, clearing pipe inverts of sediment and other debris lodged in the barrel of the pipe, and maintaining water dips and water bars using equipment specified in Subsection 3104 and other culvert cleaning and flushing equipment.

- 3106 - The Purchaser shall be responsible for repair and replacement of all material eroded from road shoulders and fill slopes, up to fifteen (15) station yards in quantity, at any one site. The work includes unlimited multiple sites on all roads required to be maintained by the Purchaser. Prior to repair and replacement of eroded material exceeding fifteen (15) station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, borrow source and method of repair. Work may commence immediately after agreement.

Upon completion of agreed upon work, a reduction in timber sale purchase price will be made to offset the cost of the work, based upon current BLM Timber Appraisal Production Cost Schedules. Adjustments in purchase price for completed work shall be made as necessary, and no less than once per year when actual work is ongoing.

- 3107 - The Purchaser shall cut or trim trees and brush which obstructs vision or prevents the safe passage of traffic along the traveled way, when directed by the Authorized Officer.

The Purchaser shall also cut trees or brush encroaching on the road prism that are a result of his activities or winter damage during the contract period. Disposal of such vegetative material shall be by scattering below the road.

- 3108 - The Purchaser shall avoid fouling gravel or bituminous surfaces through covering with earth and debris from side ditches, slides, or other sources. The Purchaser shall also avoid blading surfacing material off the running surface of the roadway. Skidding of logs on the roadway in or outside designated logging units is not authorized without prior written approval by the Authorized Officer. Repair required

by such skidding activity is not considered maintenance and shall be performed at the Purchaser's expense.

- 3108a - The Purchaser shall perform logging operations on gravel and/or bituminous roadways only where the locations have been marked on the ground and/or approved by the Authorized Officer. Repair of the road shall be as specified in Subsection 3401.

SEASONAL MAINTENANCE - 3200

- 3201 - The Purchaser shall perform preventive maintenance at the end of Purchaser's hauling each season and during nonhauling periods which occur between other operations on the contract area. This includes cross ditching, removing ruts or other surface irregularities and all other requirements specified in Section 3100.
- 3202 - The Purchaser shall perform and complete maintenance, specified in Sections 3000, 3100, and 3200, on all roads maintained by him, prior to October 1 each year, except as specified in Subsection 3203, after initial commencement of construction or logging operations. Thereafter all roads shall have continuous preventive maintenance and road cleanup until suspension of seasonal operations. This includes all roads used and not used during the preceding operating seasons.
- 3203 - The Purchaser shall complete road cleanup and maintenance, as specified in Section 3100, at the completion of logging operations on any road(s) located in an area separate from the area where logging activities will resume.
- 3204 - The Purchaser shall be responsible for performing post storm inspections and maintenance during the winter season to minimize erosion and potential roads or watershed damage.

FINAL MAINTENANCE - 3300

- 3301 - The Purchaser shall complete final maintenance and/or damage repairs on all roads used under terms of their contract within 30 calendar days following the completion of hauling and in accordance with Sec. 16(b) of this contract. This work shall include any maintenance and/or damage repairs specified in Sections 3000, 3100, and 3200 necessary to meet the conditions specified in Subsection 3002 and shall be executed in accordance with Subsection 3302 of this section.

The Authorized Officer may grant acceptance of Purchaser's maintenance responsibility in part where certain individual roads or road segments are no longer of any use to the Purchaser's remaining removal operations, providing that all contract requirements as specified under Sec. 16(b), Special Provisions (Sections 3000, 3100, 3200, and 3300 of the maintenance specifications) have been completed and a relinquishment of cutting and removal rights on cutting units tributary to these roads is signed by the Purchaser. Request for partial acceptance must be submitted in writing by the Purchaser.

- 3302 - The Purchaser shall perform final road maintenance only when weather or soil moisture conditions are suitable for normal maintenance equipment operations as determined by the Authorized Officer.

If final maintenance is delayed after the date required in Subsection 3301 of this contract by adverse soil moisture or unsuitable equipment operating conditions, the Purchaser will be notified by the Authorized Officer when soil moisture and equipment operating conditions are suitable. The Purchaser shall then be required to complete final maintenance within 30 days.

OTHER MAINTENANCE - 3400

- 3401 - The Purchaser shall repair any damage to road surfaces that was specified under Subsections 3108 and 3108a. This repair includes restoring the roadway to the designed standard and replacement of surfacing with approved surface material. This repair is not limited to use of equipment specified in Subsection 3104.

- 3402 - The Purchaser shall be permitted to remove ice and snow from roads authorized for use under this contract only when prior written approval has been secured from the Authorized Officer. The Purchaser shall submit a written request for permission to remove ice and snow in advance of the date operations are to begin.

Upon receiving written authorization for ice and snow removal, the Purchaser will perform the work according to the conditions and equipment requirements set forth in the Authorization.

- 3403 - The Purchaser shall be required to furnish and apply non-saline water during dry hauling periods, when directed by the Authorized Officer, for the purpose of laying dust and to prevent loss of surface material. The first application of water shall be made at the rate of one-half gallon per yd² of road surface travelled. Subsequent applications shall be made for each 40 MBF of timber or 120 yds² of rock hauled. Subsequent waterings may be done at a rate less than one-half gallon per yd² when a specified lesser rate is approved by the Authorized Officer.

All haul roads shall be watered for entire length and/or as approved by the Authorized Officer.

- 3403a - During dry hauling conditions when watering is not required, the Purchaser shall reduce hauling speeds to 10 MPH and/or restrict the number of loads hauled to 4 per day in lieu of watering

- 3404 - The Purchaser may at his option and expense, substitute lignin sulfonate, magnesium chloride, or bituminous dust palliatives for water on any or all road segments listed in Subsection 3403 or 3403a provided that written approval is received from the Authorized Officer. Such authorization shall include approval of product specifications for the application of the product to be used. Multiple applications may be required to maintain the conditions specified in Subsection 3403.

LIGNIN SULFONATE DUST PALLIATIVE – 3400

- 3405 - The Purchaser shall notify affected residents along the roads to be treated of the planned application of lignin sulfonate dust palliatives, at least three (3) days prior to the work. Warning signs shall be posted at key intersections to alert users that the road is being treated. All signs shall be removed by the Purchaser within thirty (30) days.

- 3405a - Additional *lignin sulfonate bituminous magnesium chloride dust palliative may be required at the option of the Authorized Officer when the functional qualities of the dust palliative have been reduced or become noneffective due to third party damage, rain, or other events not in control of the Purchaser.

All materials and labor shall be furnished by the Purchaser and placed in amounts and locations designated by the Authorized Officer, in which case a reduction in the total purchase price shall be made to offset the cost. Costs will be based upon the unit prices set forth in the current BLM Timber Appraisal Production Cost Schedule.

If additional dust palliative is required due to events controlled by the Purchaser, such as split hauling season, the Purchaser shall furnish and place such material at his own expense.

- 3405b - The Purchaser shall notify affected residents, along the roads to be treated, of the planned application of *lignin sulfonate bituminous magnesium chloride dust palliatives, at least three 3 days prior to the work. Warning signs shall be posted at key

intersections to alert users that the road is being treated. All signs shall be removed by the Purchaser within thirty (30) days.

3406 - Work Locations - The roads to be treated is a Josephine County Road – Corral Drive shown on Exhibit D Map. Road is to be treated prior to haul each season and as directed by the Authorized Officer.

3407 - Equipment: Ensure that distribution equipment applies dust palliative uniformly on variable widths of road surface. The maximum allowable variation from the specified application rate is ± 10 percent of the specified rate for individual distributor loads, and ± 2 percent of the specified rate over the total project.

Application at controlled rate of 0.4 gallons per square yard with uniform pressure and application.

Spray pattern from each nozzle on the spray bar is uniform across the spray bar.

Provide distribution equipment that includes accurate volume measuring devices or a calibrated tank

3408 - Preparation of Road Surface
Road surface is to be prepared by the Purchaser. Pre-water is to be applied by the Purchaser to the road surface to ensure a near optimum moisture content that will allow adequate penetration of the dust palliative.

3409 - Application of Dust Palliative Treatment.
Ensure that the dust palliative application rate is 0.4 gallons per square yard and the average width of road surface to be covered is 16 feet. Adjust application rate and apply the product in as many stages as necessary to assure thorough penetration and to prevent product runoff.

Obtain uniform distribution at all points. Use blotter material to cover areas with excess dust palliative. Protect the surface of adjacent structures and trees from splattering or marring. Discharge dust palliative material only in approved areas, and do not allow it to flow into ditches or stream courses.

3410 - Material Certification With Shipment

Lignin Sulfonates is from the residue produced by the acid-sulfite pulping of wood. Ensure that its base cation is ammonium, calcium, or sodium and supply it as a uniform mixture that is miscible with an equal weight of water and meets the following requirements:

Undiluted lignin sulfonate:
pH, AASHTO T 200 ...4.5 min
Viscosity at 25 degrees C, AASHTO T 202 ...20.5 poise max.
Total lignin solids concentration...48% min.

Solids:

Lignin sulfonate...50% min

Reducing sugars...25% max

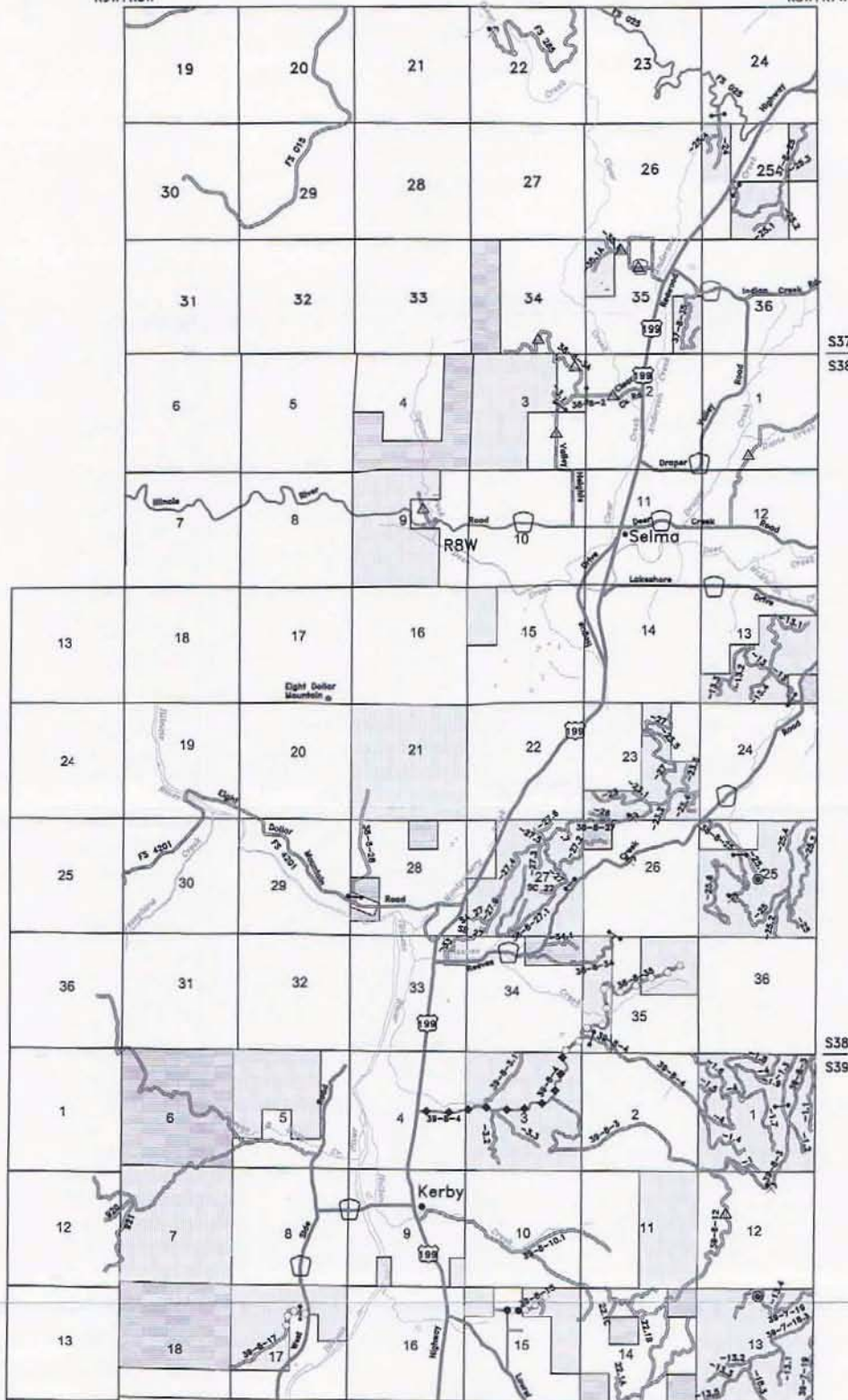
When each load of dust palliative is delivered, furnish the CO with one copy of the Bill of Lading showing that the material meets the requirements state above.

TENNESSEE LIME TIMBER SALE

EXHIBIT D 2
SHEET 1 OF 1

R9W R8W

R8W R7W



LEGEND

- Purchaser Maintenance
- ✂ Existing Gate
- ◆ BLM Maintenance
- Purchaser To Apply Ugnln Sulfonate
- FS Maintenance
- Reek Surface Road
- Natural Surface Road
- Paved Road
- Watershed Boundary
- ▨ BLM Lands

0 1/2 1
SCALE IN MILES



Township 37 South, Range 8 West
Township 38 South, Range 8 West
Township 39 South, Range 8 West

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT MEDFORD, OREGON	
EXHIBIT D	
DESIGNED <i>Jim Rogers</i>	
REVIEWED <i>Andy Walker</i>	
APPROVED <i>Albert Davis</i>	
DRAWN: JWR	SCALE: AS SHOWN
DATE: August 2006	SHEET 1 OF 1
DRAWING NO.	OR-117-T506-26-02

Tract No : TS 10-05
Sale Name: Tennessee Lim
Prep. By : J Roper
Sale Date: 6/2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ROAD MAINTENANCE AND ROAD USE APPRAISAL WORK SHEET

Summary of Costs

1. Road Use - Amortization: (1) $\$0.00/589 \text{ MBF} = \$0.00/\text{MBF } 1/$
(RC-3 & RC-3a) (Tot Sale Vol)

2. Road Maintenance Obligation:

$\frac{\$668.31}{(2.1)}$	+	$\frac{\$0.00}{(3.1)}$	+	$\frac{\$0.00}{(4.1)}$	+	$\frac{\$0.00}{(5.1)}$	=	$\frac{\$668.31}{(RC-2c)}$
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3. Rockwear Obligation:

$\frac{\$0.00}{(4.2)}$	+	$\frac{\$0.00}{(5.2)}$	+	$\frac{\$0.00}{(7.1)}$	+	$\frac{\$0.00}{(7.2)}$	=	$\frac{\$0.00}{(RC-2g)}$
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4. Other Maintenance Payments:

Total (6)	=	$\frac{\$0.00}{(RC-3a)}$
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5. Purchaser Maintenance Allowances:

(7.3A) Move In	\$862.96
(7.3B) Culverts, Catch Basins, Downspouts	\$132.17
(7.3C) Grading, Ditching	\$117.96
(7.3D) Slide Removal and Slump Repair	\$0.00
(7.3E) Dust Palliative (Water)	\$740.97
(7.3F) Surface Repair (Aggregate)	\$0.00
(7.3G) Dust Palliative (Bituminous, Lignin, MgCl)	\$0.00
(7.3H) Other	\$0.00

Total (7.3)	=	$\frac{\$1854.06}{(RC-2a \& \text{Ex D})}$
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(2+3+4+5) Total = $\$2,522.37/589 \text{ MBF} = \underline{\$4.28/\text{MBF } 1/}$
(Total Sale Vol)

Costs are estimates only and do not include Profit and Risk.
1/ Enter on Timber Sale Summary Form OSO 5420-1.

OR110-9113-1

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1. Road Use Fees - Amortization

R/W Number	Road Number	Rd Use Fee	Vol x MBF	Road Use = Obligation
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(1) Subtotal

2. BLM Maintenance - Timber Haul 1/ 2/ 3/ 4/ 5/

Road Number and Segment	A Surf N Type	Maint Mi	Vol x Fee	Vol x MBF	Total = Maint
39-8-4	A BST2	1.74	0.31	236	\$127.30
39-8-4	A ASC	0.20	1.12	236	\$52.86
38-8-35	A PRR	1.59	1.12	236	\$420.27
39-8-15	A NAT	0.27	0.66	102	\$18.18
39-8-17	A NAT	0.30	0.66	251	\$49.70

(2.1) Subtotal \$668.31

- 1/ Enter list of roads in Sec. 41(RC-2).
- 2/ Rockwear is included in fee as a maintenance cost for BLM maintained roads.
- 3/ Include lump sum logging damage repair (see Ex. D, Subsection 3108a Option F & 3401a).

3. BLM Maintenance - Rock Haul 1/ 2/ 3/

Road Number and Segment	A Surf N Type	Maint Mi	Vol x Fee	Vol x C.Y.	Total = Maint
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(3.1) Subtotal

- 1/ Enter list of roads in Section 41(RC-2).
- 2/ Rockwear is included in fee as a maintenance cost for BLM maintained roads.
- 3/ Include lump sum logging damage repair (See Ex. D, Subsection 3108a Option F & 3401a).

4. Third Party Maintenance and Rockwear - Timber Haul 1/

MAINTENANCE (4.1)					ROCKWEAR (4.2) 2/ 3/		
Road Number and Segment	A N	Maint Mi	Vol x Fee	Total x MBF = Maint	Rkwear Vol Mi	Total x Fee	Total x MBF = Rkwear

(4.1) Subtotal (4.2) Subtotal

- 1/ Enter list of roads in Sec. 41(RC-2).
- 2/ Rockwear is included in fee as a maintenance cost for BLM maintained roads.
- 3/ Include lump sum logging damage repair (see Ex. D, Subsection 3108a Option F & 3401a).

5. Third Party Maintenance and Rockwear - Rock Haul 1/

MAINTENANCE (5.1)					ROCKWEAR (5.2) 2/ 3/		
Road Number and Segment	A N	Maint Mi	Vol x Fee	Total x C.Y. = Maint	Rkwear Vol Mi	Total x Fee	Total x C.Y. = Rkwear

(5.1) Subtotal (5.2) Subtotal

- 1/ Enter list of roads in Sec. 41(RC-2).
- 2/ Rockwear is included in fee as a maintenance cost for BLM maintained roads.
- 3/ Include lump sum logging damage repair (see Ex. D, Subsection 3108a Option F & 3401a).

6. Other Maintenance Payments - USFS or Others Perform Maintenance

Agreement	Fee	Vol	Maint
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7. Purchaser Maintenance - Rock Wear

TIMBER HAUL (7.1)

ROCK HAUL (7.2) 2/ 3/

Road No 1/ and Segment	A	N	Mi	RkWear x Fee x	Vol MBF =	Total RkWear	RkWear Mi x Fee x	Vol C.Y. =	Total RkWear
June Drive	N	0.11	0.00	159	\$0.00	0.00	0.00	0	\$0.00

(7.1) Subtotal \$0.00(7.2) Subtotal \$0.00

- 1/ List all purchaser maintained roads and enter list in Section 41(RC-2a). Don't repeat any BLM maintained roads listed on appraisal. List may include new const. roads without fees.
 2/ All surfaced roads have a rockwear fee, except no rockwear fee is charged for rock haul on roads surfaced or resurfaced under this timber sale.
 3/ Include lump sum logging damage repair (See Ex. D, Subsection 3108a Option F & 3401a).

7. Purchaser Operational Maintenance

Cost allowances must be limited to work required under timber sale Exhibit D.
 If purchaser maint. such as dust control/damage repair is performed on BLM maint. roads, add appropriate mandatory Ex. D provisions, RC-2a and RC-2h strips. Note in prospectus.

7.3A Move In

Equipment 1/	No Units	Move x in x	Cost/ 50 Mi x	Dist Factor =	Sub- total
Motor Grader:	1	1	\$335.00	0.67	\$224.45
Back Hoe:	1	1	\$335.00	0.67	\$224.45
Loader:			\$335.00	0.59	\$0.00
Water Truck:	1	3	\$206.00	0.67	\$414.06
Dump Truck 2/:			\$214.00	0.59	\$0.00

(7.3A) Total \$862.96

- 1/ Equipment limited to that allowed in Exhibit D. Refer to Sch. 20 Table 2.
 2/ Dump truck is allowable for surface repair only.

7.3B Culvert Maintenance - Including Catchbasins and Downpipes 1/

Miles	x	Cost/Mi	=	Subtotal
0.11		292.45		\$32.17

Type CMP	No	CMPS	x	Cost/CMP	=	Subtotal
Class I	1			50		\$50.00
Class II	1			50		\$50.00

(7.3B) Total \$132.17

- 1/ Does not include purchase or installation of culvert pipe. Refer to Sch. 20 Table 32.

7.3C Grading (Includes Ditches and Shoulders) 1/

	Miles	x	Cost/Mi	x	Freq	=	Subtotal
Blade Road:	0.11		459.60		2		\$101.11
Blade Ditch:	0.11		153.20		1		\$16.85

(7.3C) Total \$117.96

- 1/ Watch for double allowance on roadway preparation for dust palliative application.

7.3D Slide and Slough removal, Slump Repair (15 sta-yds. ea.) 1/

Equipment	/Slumps	x	Each	x	Cost	=	Subtotal
Grader:	0		0		119.90		\$0.00
Loader:	0		0		84.43		\$0.00
Backhoe:	0		0		62.55		\$0.00

(7.3D) Total \$0.00

1/ Maximum haul is 15 sta. yds. Use grader or front end loader only. Dump truck not allowed in specifications. Refer to Sch. 20 Table 28.

7.3E Dust Palliative (Water) 1/

Spreading Hours

Miles	/	MPH	=	Hours	x	No Days	x	Freq /Day	=	Truck Hours
0.11		10		0.0		3		1		0.0
Load & Haul-Roundtrip =				3.0		3		1		9.0
Fixed Hours (3000 Gal. tanker)										
Total Hours =										9.0

Truck Cost: \$82.33/Hr. x 9.0 Hours = \$740.97

(7.3E) Total \$740.97

1/ Allow water for all BLM maint. non-oiled roads. Subsection 3403 requires 0.50 gal/syd.

7.3F Surface Repair (Aggregate)

Production Cost: 1/	0 C.Y. x \$0.00/C.Y.	=	\$0.00
Haul to Stockpile:	0 C.Y. x \$2.18/C.Y. x 0.00 Mi	=	\$0.00
Stockpile:	0 C.Y. x \$1.18/C.Y.	=	\$0.00
Load from Stockpile:	0 C.Y. x \$1.30/C.Y.	=	\$0.00
Haul from Stockpile:	0 C.Y. x \$2.18/C.Y. x 0.00 Mi	=	\$0.00
Process with Grader:	0 C.Y. x \$1.00/C.Y.	=	\$0.00

(7.3F) Total \$0.00

1/ Use unit cost from Road Construction Cost Guide.

7.3G Dust Palliative (Bituminous, Lignin, Magnesium Chloride)

(7.3G) Total

7.3H Other

Fallen Timber Cutting: 1/	0.0 Hours x \$0.00/Hour	=	\$0.00
Brush Cutting/Tree Trimming: 2/	0.0 Hours x \$0.00/Hour	=	\$0.00
Oil/Asphalt Materials: 3/	Lump Sum	=	\$0.00
Signing for Dust Palliatives: 4/	Lump Sum	=	\$0.00
Misc. L.S.	= \$0.00		

(7.3H) Total \$0.00

- 1/ Exhibit D Subsection 3104.
- 2/ Exhibit D Subsection 3107.
- 3/ Exhibit D Subsection 3401a.
- 4/ Exhibit D Subsection 3405b.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Summary of All Roads and Projects

T.S. Update 04/15/10

T.S. Contract Name: T_Lime Sale Date:

Prepared by: JRoper Ph: 6631 Print Date: 8/18/2010 7:36:41 AM

Construction: 15.84 sta (Surfaced 15.84 sta Natural 0.00 sta)

Improve: 0.00 sta Renov: 206.45 sta Decom: 0.00 sta Temp: 0.00 sta

200 Clearing and Grubbing: 1.4 acres	\$2,494.16
Clearing: 30.1 sta Grubbing: 1.4 acres	
Slash Treatment: 1.4 acres	
300 Excavation: 522 cy	\$1,962.77
Haul: 2,708 sta-yds	
400 Drainage:	\$3,026.16
Culvert: 90 lf wt = 1,890 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$5,689.52
Blading 1.97 mi	
Surfacing:	\$1,094.58
1200 Quarry Name: Commercial/Cave Jct. 45 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$403.79
Gradation Class 3: 14 cy	
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 5.8 acres	\$3,147.98
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 15.84 sta.	\$459.20
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$2,457.27
Mobilization: Const. \$2,999.00 Surf. \$335.00.....	\$3,334.00
Quarry Development:	\$0.00
Total: 589 mbf @ \$40.86/mbf =	\$24,069.42

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities are COMPACTED in place cubic yards.

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ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: T_Lime Sale Date:

Road Number: 38-8-35 Road Name: Reeves Creek H

Road Renovation: 1.59 mi 14 ft Subgrade ft ditch

T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$4,851.82
Blading 1.59 mi	
Surfacing:	\$604.78
1200 Quarry Name: Commercial/Cave Jct. 25 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$403.79
Gradation Class 3: 14 cy	
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 3.9 acres	\$2,434.73
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$400.00
Mobilization: Const. \$1,257.59 Surf. \$186.11.....	\$1,443.70
Quarry Development:	\$0.00
Total:	\$10,138.81

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-8-35 Road Name: Reeves Creek H

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: $\$459.60/\text{mi} \times 1.59 \text{ mi} = \730.76

Scarification: $\$766.01/\text{mi} \times 1.59 \text{ mi} = \$1,217.96$

Compaction: $\$1689.74/\text{mi} \times 1.59 \text{ mi} = \$2,686.69$

Clean Culverts: $\$292.45/\text{mi} \times 0.74 \text{ mi} = \216.41

Subtotal: \$4,851.82

Section 1200 Crushed under 1 1/2 Quarry Name: Commercial/Cave Jct.

Comment: 3 inch minus for water dips

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									25cy

Rock Volume = 25cy

Production: $\$9.08/\text{cy} \times 25\text{cy} = \227.00

Royalty: $\$8.25/\text{cy} \times 25\text{cy} = \206.25

Processing: $\$1.23/\text{cy} \times 25\text{cy} = \30.75

Compaction: $\$1.00/\text{cy} \times 25\text{cy} = \25.00

Basic Rock Haul cost: $\$0.87/\text{cy} \times 25\text{cy} = \21.75

Rock Haul -15% grades: $\$1.31/\text{cy-mi} \times 25\text{cy} \times 1.10 \text{ mi} = \36.03

Rock Haul St& Co Roads: $\$0.58/\text{cy-mi} \times 25\text{cy} \times 4.00 \text{ mi} = \58.00

Subtotal: \$604.78

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Rock Source: Commercial/Cave Jct.

Royalty fee: $\$15.00/\text{cy} \times 14\text{cy} = \210.00

Rip, Sort & Load Class 3 type rock: $\$6.93/\text{cy} \times 14\text{cy} = \97.02

Basic Rock Haul cost: $\$1.02/\text{cy} \times 14\text{cy} = \14.28

Rock Haul -15% grades: $\$1.02/\text{cy-mi} \times 14\text{cy} \times 1.10 \text{ mi} = \15.71

Rock Haul St& Co Roads: $\$0.45/\text{cy-mi} \times 14\text{cy} \times 4.00 \text{ mi} = \25.20

Placement on Fill slopes: $14\text{cy} \times \$2.97/\text{cy} = \41.58

Subtotal: \$403.79

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 10ft. Right: 10ft.

RoadSide Brushing Heavy: $\$624.29/\text{acre} \times 3.90 \text{ acres} = \$2,434.73$

Subtotal: \$2,434.73

Section 2200 Surface Treatment:

Subtotal: \$0.00

Road Number: 38-8-35 Reeves Creek H Continued

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Construct Water Dip

Armored Waterdip 1 EA x \$400.00/EA = \$400.00

Subtotal: \$400.00

Mobilization:

Construction - 41.93% of total Costs = \$1,257.59

Surfacing - 55.56% by rock volume = \$186.11

Subtotal: \$1,443.70

Quarry Development:

Based on 55.56% of total rock volume

Subtotal: \$0.00

Total: \$10,138.81

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: T_Lime Sale Date:

Road Number: 39-8-04 Road Name: Kerby Mainline

Road Renovation: 1.94 mi 24 ft Subgrade 3 ft ditch

T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.5 acres	\$112.37
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$16.25 Surf. \$0.00.....	\$16.25
Quarry Development:	\$0.00
Total:	\$128.63

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 39-8-04 Road Name: Kerby Mainline

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 10ft. Right: 10ft.

RoadSide Brushing Light: \$234.11/acre x 0.48 acres = \$112.37

Subtotal: \$112.37

Section 2200 Surface Treatment:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 0.54% of total Costs = \$16.25

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$16.25

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$128.63

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: T_Lime Sale Date:

Road Number: 39-8-15 Road Name: June

Road Renovation: 0.27 mi 14 ft Subgrade ft ditch

T.S. Update 04/15/10

200 Clearing and Grubbing: 0.7 acres	\$1,235.39
Clearing:14.3 sta Grubbing:0.7 acres	
Slash Treatment:0.7 acres	
300 Excavation:	\$0.00
400 Drainage:	\$1,008.72
Culvert: 30 lf wt = 630 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$787.14
Blading 0.27 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.7 acres	\$437.00
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$57.27
Mobilization: Const. \$509.90 Surf. \$0.00.....	\$509.90
Quarry Development:	\$0.00
Total:	\$4,035.43

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 39-8-15 Road Name: June

Section 200 Clearing and Grubbing:

Clearing - Light: \$14.80/sta x 14.26 sta = \$211.05

Grubbing - Medium: \$767.64/acre x 0.70 acres = \$537.35

Scatter: \$695.70/acre x 0.70 acres = \$486.99

Subtotal: \$1,235.39

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Galvanized 18 inch 14 ga 30 lf x \$28.02/lf x 1.2 = \$1,008.72

Subtotal: \$1,008.72

Section 500 Renovation:

Blading: \$459.60/mi x 0.27 mi = \$124.09

Scarification: \$766.01/mi x 0.27 mi = \$206.82

Compaction: \$1689.74/mi x 0.27 mi = \$456.23

Subtotal: \$787.14

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 10ft. Right: 10ft.

RoadSide Brushing Heavy: \$624.29/acre x 0.70 acres = \$437.00

Subtotal: \$437.00

Section 2200 Surface Treatment:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Construct Earth Berm Barricade

Backhoe 24 in 1 hr x \$57.27/hr = \$57.27

Subtotal: \$57.27

Mobilization:

Construction - 17.00% of total Costs = \$509.90

Road Number: 39-8-15 June Continued

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$509.90

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$4,035.43

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: T_Lime Sale Date:

Road Number: 39-8-17 Road Name: Pomroy Lookout

Road Construction: 0.30 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.7 acres	\$1,258.77
Clearing:15.8 sta Grubbing:0.7 acres	
Slash Treatment:0.7 acres	
300 Excavation: 522 cy	\$1,962.77
Haul: 2,708 sta-yds	
400 Drainage:	\$2,017.44
Culvert: 60 lf wt = 1,260 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$489.80
1200 Quarry Name: Commercial/Cave Jct. 20 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.7 acres	\$163.88
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 15.84 sta.	\$459.20
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$2,000.00
Mobilization: Const. \$1,207.94 Surf. \$148.89.....	\$1,356.83
Quarry Development:	\$0.00
Total:	\$9,708.69

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 39-8-17 Road Name: Pomroy Lookout

Section 200 Clearing and Grubbing:

Clearing - Light: $\$14.80/\text{sta} \times 15.84 \text{ sta} = \234.43
Grubbing - Medium: $\$767.64/\text{acre} \times 0.70 \text{ acres} = \537.35
Scatter: $\$695.70/\text{acre} \times 0.70 \text{ acres} = \486.99

Subtotal: \$1,258.77

Section 300 Excavation:

Excavation - Common: $\$1.75/\text{cy} \times 400 \text{ cy} = \700.00
Excavation - Rippable: $\$3.50/\text{cy} \times 122 \text{ cy} = \427.00
Layer Embankment - Common: $\$0.25/\text{cy} \times 335 \text{ cy} = \83.75
Compaction - Common: $\$0.87/\text{cy} \times 522 \text{ cy} = \454.14
End Hauling - 200 to 5000 ft: $\$0.11/\text{sta-yd} \times 2,708 \text{ sta-yd} = \297.88

Subtotal: \$1,962.77

Section 400 Drainage:

Galvanized 18 inch 14 ga 60 lf x $\$28.02/\text{lf} \times 1.2 = \$2,017.44$

Subtotal: \$2,017.44

Section 500 Renovation:

Subtotal: \$0.00

Section 1200 Crushed under 1 1/2 Quarry Name: Commercial/Cave Jct.

Comment: 1 inch minus for agg base

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									20cy

Rock Volume = 20cy
Production: $\$9.08/\text{cy} \times 20\text{cy} = \181.60
Royalty: $\$8.25/\text{cy} \times 20\text{cy} = \165.00
Processing: $\$1.23/\text{cy} \times 20\text{cy} = \24.60
Compaction: $\$1.00/\text{cy} \times 20\text{cy} = \20.00
Basic Rock Haul cost: $\$0.87/\text{cy} \times 20\text{cy} = \17.40
Rock Haul St& Co Roads: $\$0.58/\text{cy-mi} \times 20\text{cy} \times 7.00 \text{ mi} = \81.20

Subtotal: \$489.80

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 10ft. Right: 10ft.
RoadSide Brushing Light: $\$234.11/\text{acre} \times 0.70 \text{ acres} = \163.88

Subtotal: \$163.88

Section 2200 Surface Treatment:

Subtotal: \$0.00

Section 2300 Engineering:

Both Sides Normal: $\$28.99/\text{sta} \times 15.84 \text{ sta} = \459.20

Subtotal: \$459.20

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Pipe gate

Install steel pipe gate 1 EA x \$2,000.00/EA = \$2,000.00

Subtotal: \$2,000.00

Mobilization:

Construction - 40.28% of total Costs = \$1,207.94

Surfacing - 44.44% by rock volume = \$148.89

Subtotal: \$1,356.83

Quarry Development:

Based on 44.44% of total rock volume

Subtotal: \$0.00

Total: \$9,708.69

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: T_Lime Sale Date:

Road Number: June Drive Road Name: June Drive

Road Renovation: 0.11 mi 18 ft Subgrade 2 ft ditch

T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$50.56
Blading 0.11 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$7.31 Surf. \$0.00.....	\$7.31
Quarry Development:	\$0.00
Total:	\$57.87

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: June Drive Road Name: June Drive

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: $\$459.60/\text{mi} \times 0.11 \text{ mi} = \50.56

Subtotal: \$50.56

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2200 Surface Treatment:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 0.24% of total Costs = \$7.31

Surfacing - 0.00% by rock volume = \$0.00

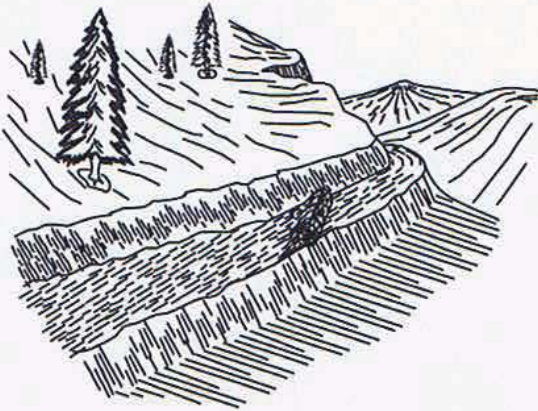
Subtotal: \$7.31

Quarry Development:

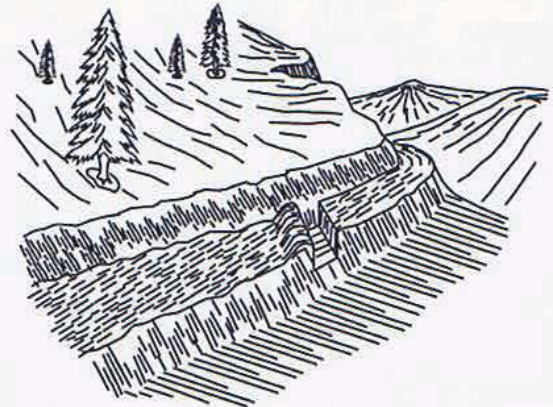
Based on 0.00% of total rock volume

Subtotal: \$0.00

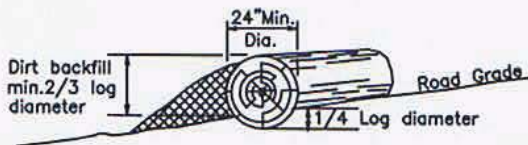
Total: \$57.87



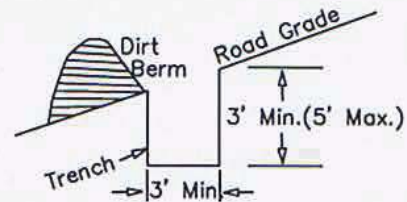
LOG BARRICADE



TRENCH BARRICADE (Optional)

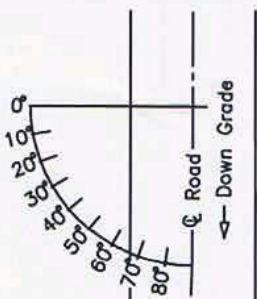


1. LOG BARRICADE SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL BARRICADES SHALL BE SKEWED 30 DEGREES.
4. THE LENGTH SHALL BE SUFFICIENT TO EXTEND FROM THE CUT BANK TO THE FILL SLOPE.
5. THE MINIMUM SMALL END DIAMETER OF THE LOG BARRICADE SHALL BE 24".

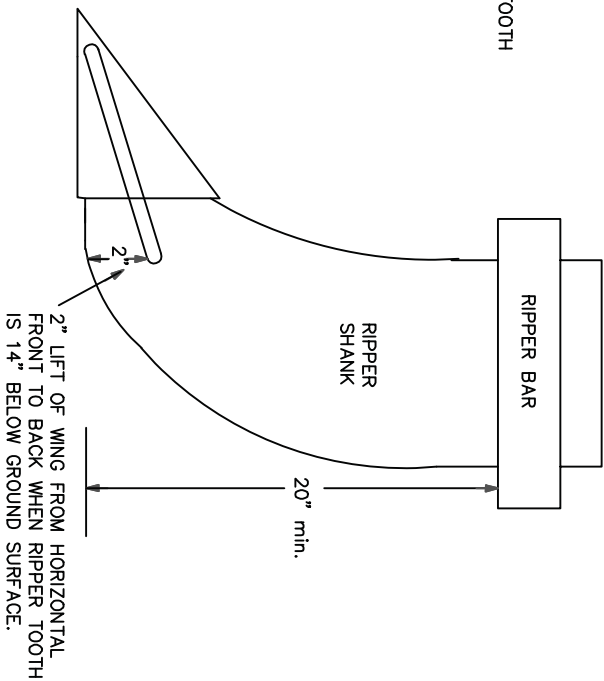
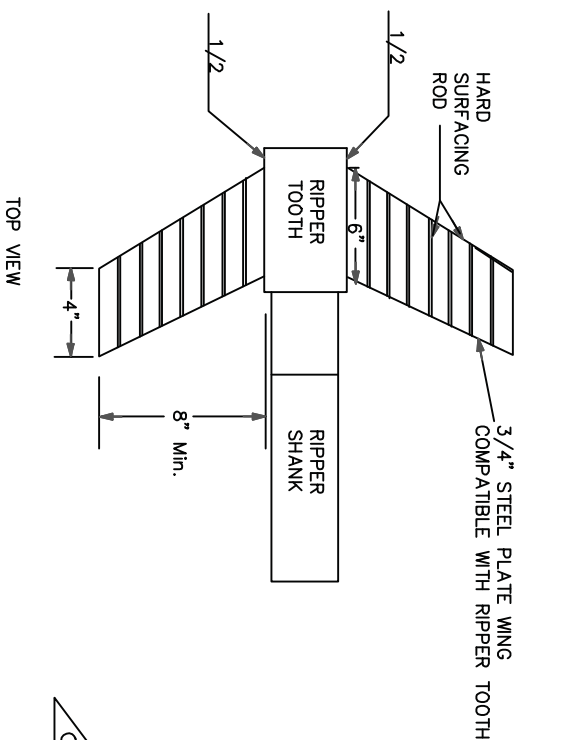


1. BARRICADE LENGTH SHALL EXTEND ACROSS THE ENTIRE ROAD SURFACE TO A POINT SUFFICIENT TO PROHIBIT MOTOR VEHICLE TRAFFIC.
2. THE EXACT LOCATION SHALL BE AS STAKED IN THE FIELD.
3. THE BARRICADE SHALL BE SKEWED AS NEEDED TO DRAIN OR AS DIRECTED BY THE AUTHORIZED OFFICERS REPRESENTATIVE.

SKEW DIAGRAM

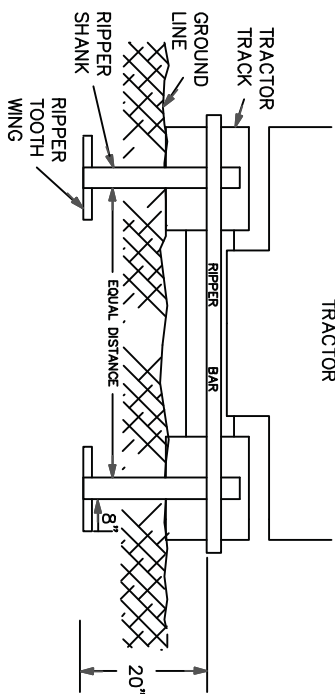


Note: Trench barricade may be installed if log minimum dimensions are not readily available.



SIDE VIEW

TYPICAL RIPPER POSITION



- NOTES: TYPICAL RIPPER TOOTH CONSTRUCTION
1. USE HARD SURFACING ROD FOR ALL EDGE AND SURFACE REINFORCEMENT.
 2. WELD THAT ATTACHES WINGS TO RIPPER TEETH MUST BE COMPATIBLE WITH METAL IN TEETH AND WINGS.
 3. RIPPER SHANKS AND RIPPER TEETH MAY BE NEW OR USED.
 4. WINGS SHALL PROVIDE TWO (2) INCHES OF LIFT FROM THE HORIZONTAL WHEN TEETH ARE EXTENDED FOURTEEN (14) INCHES BELOW THE GROUND SURFACE.

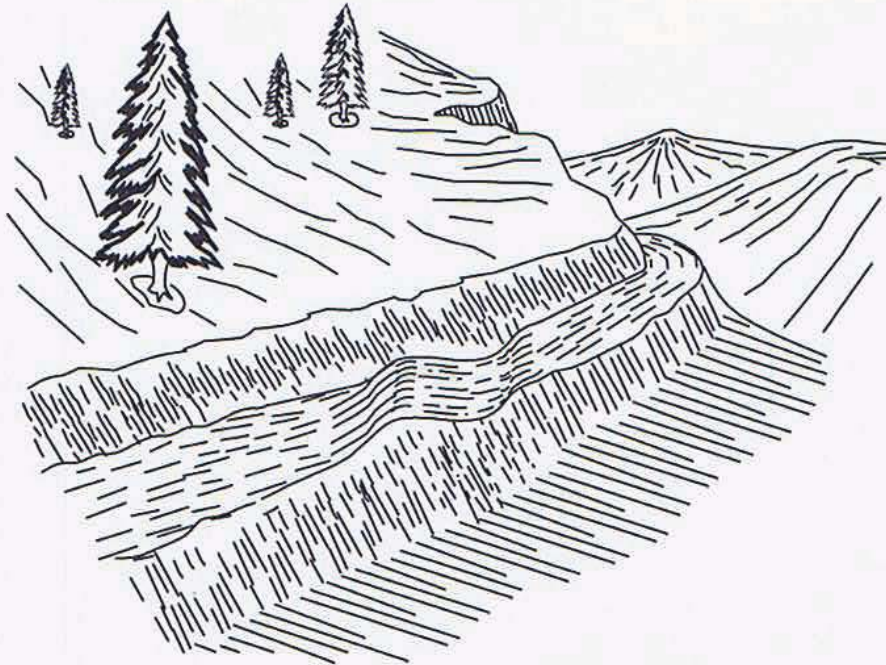
WING RIPPER DETAIL

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ASHLAND RESOURCE AREA MEDFORD DISTRICT

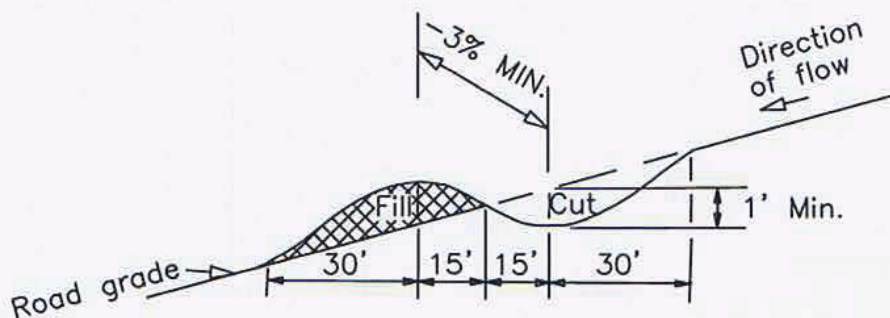
DESIGNED	
REVIEWED	
APPROVED	
CHIEF, DIVISION OF ENGINEERING OR DISTRICT ENGINEER	
DRAWN: JWR	SCALE: NONE
DATE: October 2009	SHEET 1 OF 1
DRAWING NO.	

EXHIBIT

W



WATER BAR



1. WATER BARS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL WATER BARS SHALL BE SKEWED 30 DEGREES.
4. THE LENGTH SHALL BE SUFFICIENT TO EXTEND FROM THE CUT BANK TO THE FILL SLOPE.

Form 1140-4
(June 1974)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NOTICE OF REQUIREMENT FOR CERTIFICATION
OF NONSEGREGATED FACILITIES

Bidders and offerors are cautioned as follows: by signing this bid or offer or entering into this contract or lease, as the case may be, the bidder, offeror, or contractor will be deemed to have signed and agreed to the provisions of the Certification of Non-segregated Facilities in this solicitation. The certification provides that the bidder or offeror does not maintain or provide for his employees facilities which are segregated on a basis of race, color, religion, sex, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that he will not maintain such segregated facilities. Failure of a bidder or offeror to agree to the Certification of Nonsegregated Facilities will render his bid or offer nonresponsive to the terms of solicitations involving awards of contract exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause.

In accordance with 41 CFR 60, as amended May 19, 1967, and Executive Order No. 11246 of September 24, 1965, as amended, this notification will be included in all notices of invitations for bid, lease, offers, and requests for proposal where prospective nonexempt contracts may exceed \$10,000.

INSTRUCTIONS TO BIDDERS

1. **AUTHORITY** – Timber located on the revested Oregon and California Railroad Grant Lands and on the reconveyed Coos Bay Wagon Road Grant Lands is administered and sold pursuant to authority of the Act of August 28, 1937 (50 Stat. 874; 43 U.S.C. 1181a); timber located on other lands and other vegetative resources on all public lands of the United States under jurisdiction of the Bureau of Land Management are administered and sold pursuant to authority of the Act of July 31, 1947 (61 Stat. 681), as amended, by the Act of July 23, 1955 (69 Stat. 367; 30 U.S.C. 601 et. seq.). Regulations of the Secretary of the Interior governing sale of timber are codified in 43 CFR Group 5400.

2. **QUALIFICATIONS OF BIDDERS** – A bidder for sale of timber/vegetative resources must be either (a) a citizen of the United States, (b) a partnership composed wholly of such citizens, (c) an unincorporated association composed wholly of such citizens, or (d) a corporation authorized to transact business in the State in which the timber/vegetative resource is located.

3. **INSPECTION OF TIMBER/VEGETATIVE RESOURCES** – Bidder is invited, urged, and cautioned to inspect the timber/vegetative resource prior to submitting a bid. By executing the timber/vegetative resource sale contract, bidder warrants that the contract is accepted on the basis of his examination and inspection of the timber/vegetative resource and his opinion of its value.

4. **DISCLAIMER OF WARRANTY** – Government expressly disclaims any warranty of the fitness of the designated timber/vegetative resource for any purpose of the bidder; all timber/vegetative resources are to be sold “As Is” without any warranty of merchantability by Government. Any warranty as to the quantity or quality of timber/vegetative resource to be sold is expressly disclaimed by Government.

5. **BIDS** – Sealed or written bids for not less than the advertised appraised price, per timber/vegetative resource must be submitted in duplicate to the District Manager who issued *Timber/Vegetative Resource Sale Notice*.

(a) **Sealed Bid Sales** – Bids will be received until time for opening which is set out in the Notice. Enclose both copies of bid with required bid deposit in a sealed envelope marked on the outside *Bid for Timber/Vegetative Resource*, time bid is to be opened, tract number, and legal description of land on which timber/vegetative resource is located. In event of a tie, the high bidder shall be determined by lot from among those who submitted the tie bids.

(b) **Auction Sales** – Submission of the required bid deposit and a written bid is required to qualify for oral bidding. Oral bidding shall begin from the highest written bid. No oral bid will be considered which is not higher than the preceding bid. In the event there is a tie in high written bids, and no oral bidding occurs, the bidder who was the first to submit his bid deposit and written bid shall be declared the high bidder. If the officer conducting the sale cannot determine who made the first submission of high tie written bids, the high bidder shall be determined by lot. High bidder must confirm his bid, in writing, immediately upon being declared high bidder.

(c) Except as otherwise provided in 43 CFR 5442.2, bids will not be considered in resale of timber/vegetative resource remaining from an uncompleted contract from any person or affiliate of such person who failed to complete the original contract because of (1) cancellation for the purchaser's breach or (2) through failure to complete payment by expiration date.

(d) When it is in the interest of the Government to do so, it may reject any and all bids and may waive minor deficiencies in bids or in sale advertisement.

6. **BID FORMS** – All sealed, written bids, and confirmation of oral bids shall be submitted on forms provided by Government.

(a) **Lump Sum Sales** – Bids shall specify (1) Bureau of Land Management estimated volume, (2) price per unit, and (3) total purchase price. Estimated volume and price per unit are to be used for administrative and appraisal purposes only. Upon award of contract, high bidder shall be liable for total purchase price, including any adjustment which may be made as a result of reappraisal if an extension of time is granted, even though quantity of timber/vegetative resource actually cut, removed, or designated for taking is more or less than the estimated volume or quantity listed.

(b) **Timber Scale Sales** – Bids must state price per thousand board feet that will be paid for each species. High bidder will be determined by multiplying bid price per thousand board feet per species by Bureau of Land Management estimate of volume of each species. Purchaser shall be liable for purchase price of all merchantable timber sold under contract even though all such timber is not actually cut

and removed prior to expiration of time for cutting and removal as specified in contract.*

7. **BID DEPOSIT** – All bidders must make a deposit of not less than the amount specified in the *Timber/Vegetative Resource Notice*. Deposit may be in the form of cash, money orders, bank drafts, cashiers or certified checks made payable to the Department of the Interior – BLM, bid bonds of a corporate surety shown on the approved list of the United States Treasury Department*, or any approved guaranteed remittance approved by the Authorized Officer. Upon conclusion of bidding, the bid deposit of all bidders, except high bidder, will be returned. The cash deposit of the successful bidder may be applied toward the required sale deposit and/or the purchase price. Cash not applied to the sale deposit or the purchase price, or a corporate surety bid bond, will be returned at the time the contract is signed by the Government.

8. **AWARD OF CONTRACT** – Government may require high bidder to furnish such information as is necessary to determine the ability of bidder to perform the obligation of contract. Contract will be awarded to high bidder, unless he is not qualified or responsible or unless all bids are rejected. If high bidder is not qualified or responsible or fails to sign and return the contract together with required performance bond and any required payment, contract may be offered and awarded to the highest bidders qualified, responsible, and willing to accept the contract.

9. **TIMBER/VEGETATIVE RESOURCE SALE CONTRACT** – To be executed by purchaser, has been prepared by Government, and may be examined in the District Manager's office.

10. **PERFORMANCE BOND** -

(a) A performance bond in an amount of not less than 20 percent of total purchase price is required, but the amount of the bond shall not be in excess of \$500,000, except when the purchaser opts to increase the minimum bond to permit cutting prior to payment as provided in 43 CFR 5451.2, or in the event the purchaser is a holder of an unresolved default the bond may be increased as provided in 43 CFR 5450.1(b). Performance bond may be (1) bond of a corporate surety shown on approval list issued by the United States Treasury Department and executed on an approved standard form, (2) personal surety bond executed on an approved standard form if Government determines principals and bondsman are capable of carrying out the terms of the contract, (3) cash bonds, (4) negotiable securities of the United States, or (5) any guaranteed remittance approved by the Authorized Officer.

(b) If purchaser elects to cut timber without skidding or yarding it to a loading point or removing it prior to the payment of the second or subsequent installments, Government shall require an increase in amount of performance bond initially required by an amount equal to the value of timber to be cut. Such increase must be on a bond rider form supplied by Government and be approved, in writing, by Government prior to cutting timber covered by the bond increase. This increased amount of bond shall be used to assure payment for timber cut in advance of payment.*

11. **PAYMENT BOND** – If purchaser elects to (a) cut and remove timber, or (b) remove timber already cut which has been secured by an increased performance bond as provided in paragraph 10(b) above, before payment of the second or subsequent installments, Government shall require a payment bond on a form supplied by Government. Purchaser shall obtain written approval from Government of payment bond prior to cutting and/or removal of timber covered by the bond. Payment bond shall be used to assure payment for timber cut and/or removed in advance of payment.*

12. **PAYMENT OF PURCHASE PRICE** – For sales of \$500 or more, Government may allow payment by installments. Except as discussed in paragraphs 10 and 11 above, no part of any timber/vegetative resource sold may be severed, cut, or removed unless advance payment has been made as provided in contract.

13. **LIQUIDATED DAMAGES** – Within thirty (30) days from receipt of *Timber/Vegetative Resource Sale Contract*, the successful bidder shall sign contract and return it to Government, together with required bond and any required payment. If successful bidder fails to comply within the stipulated time, his bid deposit shall be retained by Government as liquidated damages.

14. **NINETY-DAY SALES** – If no bid is received within time specified in the advertisement of sale and if Government determines that there has been no significant rise in the market value of timber/vegetative resource, it may, in its discretion, keep the sale open, not to exceed ninety (90) days.

*Applies to Timber Only

15. **UNAUTHORIZED USE OF GOVERNMENT PROPERTY** – A sale may be refused to high bidder who has been notified that he has failed to make satisfactory arrangements for payment of damages resulting from unauthorized use of, or injury to, property of the United States.

16. **EQUAL OPPORTUNITY CLAUSE** – This contract is subject to the provisions of Executive Order No. 11246 of September 24, 1965, as amended, which sets forth the nondiscrimination clauses. Copies of this order may be obtained from the District Manager. 43 CFR 60-1.7(b) requires that the Equal Opportunity *Compliance Report Certification* will be completed by prospective contractors. Certification may be obtained from District Manager.

17. **LOG EXPORT** – All timber offered for sale except as noted in the *Timber Sale Notice* is restricted from export from the United States in the form of unprocessed timber and cannot be 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 and specifications suitable for end product use; or (4) western

red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimension or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 common or better. 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 remanufacture of eight and three quarters (8-3/4) inches in thickness or less; or (6) shakes and shingles. In event purchaser wishes to sell any or all of timber restricted from export in the form of unprocessed timber, the buyer, exchanges, or recipient shall be required to comply with contractual provisions relating to “*unprocessed timber*”. Special reporting, branding and painting of logs may be included in contract provisions.*

18. **DETAILED INFORMATION** – Detailed information concerning contract provisions, bid, performance bond forms, tract location maps, and access conditions may be obtained from the District Manager. All persons interested in bidding on the products listed are encouraged to familiarize themselves with all such detailed information.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DEPOSIT AND BID FOR ☒ **TIMBER***
☐ **VEGETATIVE RESOURCE**
(Other Than Timber)

LUMP SUM SALE

Name of Bidder
Tract Number OR110-TS10-05
Sale Name Tennessee Lime
Sale Notice (dated) August 18 th , 2010
BLM District Medford

<input type="checkbox"/> Sealed Bid for Sealed Bid Sale	<input checked="" type="checkbox"/> Written Bid for Oral Auction Sale
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In response to the above dated Sale Notice, the required deposit and bid are hereby submitted for the purchase of designated timber/vegetative resource on the tract specified above.

Required bid deposited is \$ \$4,400.00 and is enclosed in the form of ☐ cash ☐ money order ☐ bank draft
☐ cashier's check ☐ certified check ☐ bid bond of corporate surety on approved list of the United States Treasury
☐ guaranteed remittance approved by the authorized officer.

IT IS AGREED That the bid deposit shall be retained by the United States as liquidated damages if the bid is accepted and the undersigned fails to execute and return the contract, together with any required performance bond and any required payment within 30 days after the contract is received by the successful bidder. It is understood that no bid for less than the appraised price on a unit basis per species will be considered. If the bid is rejected the deposit will be returned.

BID SCHEDULE – LUMP SUM SALE

NOTE: Bidders should carefully check computations in completing the Bid Schedule

BID SUBMITTED					ORAL BID MADE	
PRODUCT SPECIES	UNIT	ESTIMATED VOLUME OR QUANTITY	UNIT PRICE	TOTAL VALUE	UNIT PRICE	TOTAL VALUE
Douglas-fir	MBF	502	X	=	X	=
Sugar Pine	MBF	40	X	=	X	=
Ponderosa Pine	MBF	36	X	=	X	=
Incense-cedar	MBF	11	X	=	X	=
			X	=	X	=
Total	MBF	589	X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
TOTAL PURCHASE PRICE						

(Continued on reverse)

If sale contract is executed, undersigned is liable for total purchase price even though the quantity cut, removed, or designated for taking is more or less than the total estimated volume or quantity shown above. Undersigned certifies bid was arrived at by bidder or offeror independently, and was tendered without collusion with any other bidder or offeror. In submitting or confirming this bid, undersigned agrees to the foregoing provisions, applicable regulations, and certifies that he is authorized to act as, or on behalf of, the bidder.

Bid submitted on *(date)*

(Check appropriate box, sign in ink, and complete the following)

<input type="checkbox"/>	Signature, if firm is individually owned	Name of firm <i>(type or print)</i>
<input type="checkbox"/>	Signatures, if firm is a partnership or L.L.C.	Business address, include zip code <i>(type or print)</i>
<input type="checkbox"/>	Corporation organized under the state laws of	<i>(To be completed following oral bidding)</i>
	Signature of Authorized Corporate Signing Officer	I HEREBY confirm the above oral bid By <i>(signature)</i>
	Title	Date
Submit bid, in <i>duplicate</i> , to qualify for either an oral auction or sealed bid sale together with the required bid deposit made payable to the Department of the Interior – BLM. Oral Auction – Submit to Sales Supervisor prior to closing of qualifying period for tract.		Sealed Bid – Send to District Manager, who issued the sale notice, in a sealed envelope marked on the outside: (1) “Bid for Timber” (2) Vegetative Resource Other Than Timber (3) Time bids are to be opened (4) Legal description

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 38 FR 6280 and 43 CFR 5442.1

PURPOSE: To qualify an oral auction bidder, and then if successful, to bind bidder to certain contract conditions.

ROUTINE USE: To determine that an individual is qualified to participate in oral auction bidding, and, as surety that bidder will fulfill contract requirements.

EFFECT OF NOT PROVIDING INFORMATION: Filing this deposit and bid information is necessary only when an individual wishes to participate in a sealed or auction bid sale for timber or vegetative resources.