

P R O S P E C T U S

LUMP SUM SALE

SEALED BID AUCTION

GRANTS PASS FIELD OFFICE
JOSEPHINE MASTER UNIT

Medford Sale# ORM07-TS-2021.0001
January 28th, 2021 (DES)

#1. Flume Peak Timber Sale
Josephine Counties, O&C, PD

BID DEPOSIT REQUIRED: \$35,900.00

All timber designated for cutting in Lot 8, Lot 9, S½SE¼ Sec 27, SE¼NE¼ Sec 32, N½, N½SW¼, W½SE¼ Sec 33, SW¼SW¼ Sec 34, SW¼SW¼ Sec 35, T. 33 S., R. 06 W.; N½, N½SW¼, Sec 3, T. 34 S., R. 06 W.; Willamette Meridian.

Approx. Number Merch. Trees	Est. Volume MBF 32' Log	Species	Est. Volume MBF 16' Log	Appr. Price Per MBF*	Est. Volume Times Appraised Price
17,084	2024	Douglas- fir	2,475	\$141.20	\$349,470.00
615	109	White Fir	135	\$45.60+	\$6,156.00
286	42	Ponderosa Pine	55	\$29.10+	\$1,600.50
120	21	Sugar Pine	26	\$30.70+	\$798.20
283	14	Incense-cedar	18	\$50.60+	\$910.80
18,388	2,210	Totals	2,709		\$358,935.50

*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 District Office.

+Minimum Stumpage values were used to compute the Appraised Price/MBF (10% of Pond Value). Reduced Douglas-fir total value by \$26,259.75 to pay for deficit species Ponderosa pine, Sugar pine, White Fir and Incense-cedar.

TIMBER AUCTION LOCATION –SEALED BIDS will be received by the District Manager, or his representative, at the Bureau of Land Management Medford Interagency Office, 3040 Biddle Rd., Medford, Oregon 97504, between 8:00 am and 10:00 am, PACIFIC TIME, on Thursday, January 28th, 2021. Bid proposals should be clearly marked, “ATTN: Sealed bid Flume Peak Timber Sale”.

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 have been cruised using the 3P sampling method to select sample trees. 127 Douglas-fir sample trees were selected using a KZ of 560 in units 3-2, 3-6, 27-11, 27-22, 27-24, 32-3, 33-10, 33-11, 33-12, 35-24 and all Right of ways. 90 Douglas-fir sample trees were selected using a KZ of 68 in unit 34-1. All other species were cruised using 100% cruise method. Maps showing the location and description of these sample trees are available at the Grants Pass Interagency Office.

Approximately 0 trees which are considered to be nonmerchantable are designated for cutting.

Approximately 0% of the sale volume is salvage material. With respect to merchantable trees of all conifer species: the average tree is 13.3 inches DBHOB; the average gross merchantable log contains 51 bd. ft.; the total gross volume is approximately 3,063 M bd. ft; and 88% recovery is expected. Average DF is 13.2 inches DBHOB; average gross merchantable DF log contains 50 bd. ft. Cruise maps showing the location of these sample trees are available at the Medford District Office.

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

All logs will be painted and branded at the landing and accounted for in accordance with Section 42 of the contract. If Sale Area is within a State that maintains a log brand register, brands shall be registered with the State. Purchaser shall use assigned brand(s) exclusively on logs from this sale until the Authorized Officer releases the brand(s).

CUTTING AREA – The sale contains a total of Eighteen (18) units containing three hundred thirty-three (333) acres. Eleven (11) units containing three hundred twenty-two (322) acres must be partial cut and seven (7) units containing eleven (11) acres must be clear-cut.

CUTTING TIME – Contract duration will be thirty-six (36) months for cutting and removal of timber.

ACCESS - Access to the sale area is available via: a public state and county road system through the contract area; existing BLM roads; Right-of-Way and Road Use Agreement R-768 with Lone Rock Timber; and Right-of-Way and Road Use Agreement M-2000EA with Olympic Resource Management (ORM) Timber Fund IV (REIT), Inc.

Right-of-Way and Road Use Agreement R-768 with Lone Rock Timber for the use of the 33-6-27.0 Road, Segment A2, which they own and control.

Among other conditions, requires, but is not limited to:

- (1) Completion of an agreement between the Purchaser and the Permittee.
- (2) Road maintenance to be completed by the Purchaser.
- (3) Arbitration of conditions of road use. The Permittee has indicated they are waiving the rockwear obligation for rock in lieu of fees.

Right-of-Way and Road Use Agreement M-2000EA with Olympic Resource Management (ORM) Timber Fund (REIT) for the use of the 33-6-26.0 Road, Segment A2 and 33-6-34.0 Road, which they own and control.

Among other conditions, requires, but is not limited to:

- (1) Completion of an agreement between the Purchaser and the Permittee.
- (2) Road maintenance to be completed by the Purchaser.
- (3) Arbitration of conditions of road use. The Permittee has indicated they require a rockwear obligation of \$57.74.

ROAD MAINTENANCE – The Purchaser will be required to maintain 11.92 miles of existing BLM and Third Party (Industry) roads listed in Section 3100 of Exhibit D1. An allowance in the amount of \$13,854.97 has been made for the maintenance of these roads. The Purchaser will be required to pay a rockwear fee of \$1,262.04 for the use of the BLM roads listed in the contract.

ROAD CONSTRUCTION - The contract will require the Purchaser to renovate 629.39 stations of existing road and reconstruct/construct 65.71 stations of temporary route.

DECOMMISSIONING – An allowance in the amount of \$3,523.67 has been made for temporary route and road decommissioning. Decommissioning work to be performed is described in Section 3500 of Exhibit D1.

SOIL DAMAGE PREVENTION – Pursuant to Section 26 of Form 5450-25, Timber Sale Contract, mechanical ground based harvesting, ground based yarding, skid trail and landing rehabilitation, machine piling, temporary route construction, temporary route reconstruction, or temporary route decommissioning shall be restricted to periods of low moisture (dry conditions). Low soil moisture varies by texture and is based on site-specific considerations. Generally, low soil moisture is determined by the inability of a soil sample taken at four (4) to six (6) inches to maintain form when compressed and by the inability of soil moisture at the surface to be readily displaced, causing ribbons and ruts along equipment tracks. Low soil moisture limits will be determined by the Authorized Officer.

Pursuant to Section 26 of Form 5450-25, Timber Sale Contract, log haul shall not be conducted on all natural surface roads that receive one-half (½) inch or more precipitation within a twenty four (24) hour period. Haul shall not resume for a minimum of forty-eight (48) hours following any storm event, or until road surface is sufficiently dry, as approved by the Authorized Officer. The Purchaser may elect, at their own expense, to apply rock surfacing to these roads to bring them up to wet weather haul standards, as approved by the Authorized Officer.

Pursuant to Section 26 of Form 5450-25, Timber Sale Contract, log haul shall not be conducted on hydrologically connected natural surface roads during conditions that would result in any of the following: surface displacement such as rutting or ribbons, continuous mud splash or tire slides, fines being pumped through road surfacing from the subgrade resulting in a layer of surface sludge, as directed by the Authorized Officer.

Pursuant to Section 26 of Form 5450-25, Timber Sale Contract, the Purchaser shall, prior to October 15 of the same operating season, winterize and rehabilitate temporary routes, landings, hydrologically connected corridors and skid trails and other areas of exposed soils by properly installing and/or using water bars, berms, sediment basins, gravel pads, hay bales, small dense woody debris, seeding and/or mulching, to reduce sediment runoff and divert runoff water away from stream channels, headwalls, slide areas, high landslide hazard locations or steep erodible fill slopes as directed by the Authorized Officer.

In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall, prior to October 15 of the same operating season, perform all non-emergency road maintenance as directed by the Authorized Officer.

EQUIPMENT REQUIREMENTS – A yarding tractor equipped with an integral arch capable of one-end log suspension and a winch for lining logs seventy-five (75) feet. A skyline yarder with a medium (40-50 foot) tower; capable of one-end log suspension with a minimum lateral yarding capability of seventy-five (75) feet while maintaining a fixed position during inhaul; capable of multi-span; and capable of an external yarding distance of one thousand two hundred fifteen (1,215) feet slope distance. A piece of equipment capable of sub-soiling to a depth of twelve (12) inches will be required for fully decommissioning: temporary routes 3-2A TR, 3-2B TR, 3-2C TR, 3-2D TR, 32-3 TR, -33.2 TR, 33-12 TR; and any landings or skid roads within ground based units as necessary to achieve no more than twenty (20) percent detrimental soil compaction within the unit. A fire engine of three hundred (300) gallons or more capacity with five hundred (500) feet of 1½ inch hose (must be adequate length to reach two hundred (200) feet beyond active work sites), six (6) 1½ inch wyes, six (6) 1½ inch to 1 inch reducers, three (3) 1½ inch nozzles and three (3) 1 inch nozzles will be required for fire prevention and control. Each fire engine shall be equipped with a pump capable of delivering a minimum of forty (40) gallons per minute (gpm) water flow at one hundred fifty (150) pounds per square inch (psi) engine pressure through fifty (50) feet of 1½ inch fire hose. The pump may be either power take off driven or truck-mounted auxiliary engine driven, or portable.

SLASH DISPOSAL – Slash disposal will consist of a combination of lop and scatter, machine pile, cover, and burn machine piles, hand pile, cover, and burn hand piles, and machine pile, cover,

and burn landing decks as described in SD-1 and SD-2 of the Special Provisions. A post logging assessment shall be conducted to determine treatment needs in all units. The initial slash disposal appraisal described in SD-5 prescribed approximately two hundred seventy three and three-quarters (273.75) acres of lop and scatter, fifty and three-quarters (50.75) acres machine pile, cover, and burn machine piles, and eight and three-quarters (8.75) acres of cover and burn landing decks.

OPTIONAL CONTRIBUTION – The purchaser will have the option of performing machine pile burning requirements or contributing one thousand four hundred eighty-four and 10/100 dollars (\$1,484.10) in lieu thereof. The option must be declared upon execution of the contract. The optional contribution must be paid in installments payable in the same manner as and together with payments required in Section 3 of the contract.

The purchaser will have the option of performing landing pile burning requirements or contributing five hundred twelve and 80/100 dollars (\$512.80) in lieu thereof. The option must be declared upon execution of the contract. The optional contribution must be paid in installments payable in the same manner as and together with payments required in Section 3 of the contract.

CONTRACT TERMINATION – A 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 comply with the Endangered Species Act, or comply with a court order, in accordance with the Standards and Guidelines of the Medford District Record of Decision (ROD) and Resource Management Plan (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. 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 to prevent incidental take of northern spotted owls in accordance with management direction in the Record of Decision (ROD) and Resource Management Plan (RMP), or; (2) Comply with a stay or remedy issued by the Interior Board of Land Appeals or a court order, or; (3) Protect species which were identified for protection in accordance with management direction established in the ROD and RMP.
3. The Purchaser shall notify the Authorized Officer in writing by February 1 of each calendar year in which operations are expected to take place on the contract area between March 1 and September 30, both days inclusive. If notification is not received by the Authorized Officer by February 1, felling, bucking, yarding, road construction, or any other activity with the potential to disturb nesting northern spotted owls may not be allowed between March 1 and September 30, both days inclusive.

Upon receipt of a notice that the Purchaser expects to perform such operations during this time period, the Government will conduct surveys to determine whether owls have moved into harvest units. If northern spotted owls are detected in or adjacent to the units, operations would be restricted until northern spotted owl occupancy and nesting status has been determined. If it is determined owls are not nesting or that no young have been produced, the Authorized Officer may lift the seasonal restriction on such operations in

writing. Without this approval, such operations are prohibited from March 1 through June 30 of each year.

4. No work in the stream channel shall be conducted between September 15 of one calendar year and June 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a waiver of this restriction.
5. No non-emergency road maintenance shall be conducted from October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a waiver of this restriction.
6. A harvester, feller-processor, or feller-buncher with purpose built carriers with boom-mounted felling heads and a boom with a minimum lateral reach of twenty (20) feet may be used in the ground based portion of harvest units. Mechanized equipment as stated above with self-leveling cabs may be used on slopes up to fifty (50) percent, as approved by the Authorized Officer.
7. In the Riparian Reserve and Late-Successional Reserve portion of units 3-2, 27-11, 27-22, 27-24, 32-3, 33-10, 33-11, 33-12, 34-1 as shown on Exhibit A, the Purchaser shall create a total of five hundred (500) snags via girdling. See Special Provision L-32 and Exhibit A for more details.
8. In unit 27-22 it is acceptable to have skid trails outside of unit boundaries, as approved by the Authorized Officer.

NARRATIVE DESCRIPTION OF HOW TO GET TO THE TIMBER SALE AREA –

To access units 3-2, 3-6 and 34-1: Take I-5 to Exit 71 for Sunny Valley. Continue west onto Leland road for approximately 0.75 miles. Turn right onto the 34-6-3.1 road (Mackin Gulch) and proceed approximately 0.25 miles to unit 3-6 on the right. Continue further to the 34-6-3.2, and 34-6-3.3 roads to access the rest of the units. The 34-6-3.4 road is blocked.

To access unit 32-3, 33-10, 33-11 and 33-12: Take I-5 to Exit 71 for Sunny Valley. Continue west onto Leland road for approximately 3 miles. Turn right onto the 34-6-5.0 (Flume Gulch) road and proceed approximately 1.5 miles to unit 33-12 on the left. Continue further to the 33-6-33.0, 33-6-33.1, 33-6-33.2, 33-6-33.4, 33-6-33.5 and the 33-6-33.6 to access the rest of the units. The 33-6-33.2 road is blocked just north of unit 33-12.

To access units 27-11, 27-22 and 27-24: Take I-5 to Exit 76 for Wolf Creek. At the three-way stop turn south onto Bridge Lane. Continue to 33-6-26.0 (Wolf Creek Divide) road for 0.25 miles. Unit 27-24 will be on both sides of the road. Continue onto the 33-6-27.0 (London Peak) road and the 33-6-27.3 road to access units 27-11 and 27-22.

ENVIRONMENTAL ASSESSMENT – An environmental assessment (DOI-BLM-ORWA-M070-2018-0010-EA) 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 District Office.

OR110-5422-11 (03/2019)

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SPECIAL PROVISIONS

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 INTERAGENCY OFFICE.

Sec. 41. 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 Government.

- (A) AR-1 All timber on the Reserve Areas as shown on Exhibit A and all trees marked with a combination of orange paint, orange flagging, and/or posters which are on or mark the boundaries of the Reserve Areas.
- (B) IR-1 Approximately eight thousand three hundred seventy five (8,375) Douglas-fir, one hundred ninety three (193) ponderosa pine, two hundred sixteen (216) sugar pine, two hundred one (201) incense cedar, four hundred seventy four (474) oak and one hundred sixty seven (167) hardwood trees marked with purple paint above and below stump height in units 3-2, 3-6, 27-11, 27-22, 27-24, 32-3, 33-11 and 35-24, shown on Exhibit A.
- (C) IR-1 Approximately two thousand five hundred fifty four (2,554) Douglas-fir, three hundred seventeen (317) ponderosa pine, sixty three (63) sugar pine, two hundred nineteen (219) incense cedar, seventy three (73) oak, and one hundred twelve (112) hardwood trees marked with orange paint above and below stump height in units 33-10 and 34-1, shown on Exhibit A.
- (D) IR-1 Approximately four thousand four hundred sixty five (4,465) Douglas-fir, seventy four (74) ponderosa pine, one hundred nineteen (119) sugar pine, one hundred twenty eight (128) incense cedar, one hundred seventy seven (177) oak, fifty (50) white fir, and two hundred thirty one (231) hardwood trees marked with either purple or pink paint above and below stump height in unit 33-12, shown on Exhibit A.
- (E) IR-6 All Pacific yew trees in the Contract Area shown on Exhibit A.
- (F) IR-13 All trees greater than thirty six (36) inches D.B.H.O.B that were established prior to 1850 in the contract area as shown on Exhibit A that are cut for safety or operational purposes shall be retained on site as directed by the Authorized Officer.
- (G) IR-13 All existing snags and coarse woody debris in all units shown on Exhibit A which do not present a safety hazard as determined by the Authorized Officer. All snags that are felled for safety reasons, and do not present a safety hazard on the ground, shall be retained on site.

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Section 42

(A) 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 they plan to begin 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-2 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 ensure protection of the environment and watershed. A pre-work conference between the Purchaser's authorized representative and the Authorized Officer must be held at a location designated by the Authorized Officer before the logging plan will be approved. All logging shall be done in accordance with the plan.
- (3) L-4 All trees designated for cutting shall be cut so that the resulting stumps shall not be higher than twelve (12) inches measured from the ground on the uphill side of the trees unless otherwise approved by the Authorized Officer.
- (4) L-5 All conifer trees eight (8) inches or larger D.B.H.O.B., which are not reserved shall be felled in all units shown on Exhibit A.
- (5) L-8 In all units as shown on Exhibit A, all trees designated for cutting shall be felled and whole tree yarded or yarded with tops attached except when excessive stand damage occurs as determined by the Authorized Officer. If excessive stand damage occurs, all trees shall be bucked into log lengths not to exceed forty-one (41) feet prior to being yarded.
- (6) L-11 No trees may be felled into streams, or other resource buffers, shown on Exhibit A.
- (7) L-12 In units shown on Exhibit A, yarding/felling shall be done in accordance with the requirements for the designated area listed below.

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Designated Area	Yarding Requirements or Limitations
<p><u>Ground Based Harvest & Ground Based (Tractor) Yard Units</u></p> <p>3-2 27-22 27-24 32-3 33-10 33-11 33-12 34-1 35-24 3-2a ROW 3-2b ROW 3-2c ROW 3-2d ROW 32-3 ROW 33-6-33.2 ROW 33-12 ROW</p>	<p>Mechanized harvesting operations are optional. All ground-based harvest units may be manually felled.</p> <p>The harvester, feller-processor, or feller-buncher shall be approved by the Authorized Officer prior to the start of mechanized felling operations. Only purpose built carriers with boom-mounted felling heads may be approved. The boom must have a lateral reach of twenty (20) feet or more, and the machine’s lateral reach must be utilized as much as possible. The purpose-built carrier may be of the articulated, rubber-tired design, or the zero-clearance tail swing leveling track-mounted design.</p> <p>Directional falling to lead and away from streams, unit boundaries, and resource buffers shown on Exhibit A will be required.</p> <p>The harvest equipment shall walk on existing or created slash as directed by the Authorized Officer. If Purchaser is required to create slash to walk on, then Purchaser shall not be required to whole-tree-yard.</p> <p>Non-specialized ground-based equipment (without a self-leveling cab) shall be limited to slopes of thirty-five (35) percent or less. Specialized ground-based equipment (with a self-leveling cab) shall be limited to slopes of fifty (50) percent or less. This equipment can operate on steeper ground if it is operating on previously constructed skid trails or accessing isolated ground-based harvest areas requiring short distances over steeper pitches.</p> <p>Mechanized ground-based felling and yarding operations are subject to dry condition operating restrictions as described in Section 42(A)(11)(L-19) of this contract.</p> <p>Yarding tractor shall be equipped with an integral arch and yard with one-end log suspension.</p> <p>Existing skid roads shall be used when possible. Skid roads shall not exceed a width of twelve (12) feet on average per unit and new skid roads shall be placed at least one hundred fifty (150) feet apart where topography will allow, unless the Purchaser proposes an</p>

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<p><u>Ground Based Harvest & Ground Based (Tractor) Yard Units</u> (Continued) 3-2 27-22 27-24 32-3 33-10 33-11 33-12 34-1 35-24 3-2a ROW 3-2b ROW 3-2c ROW 3-2d ROW 32-3 ROW 33-6-33.2 ROW 33-12 ROW</p>	<p>alternate logging plan that limits soil compaction from skids trails to less than fifteen (15) percent over the harvest unit and is approved by the Authorized Officer.</p> <p>Designate skid trails in locations that do not channel water into waterbodies, floodplains, and wetlands, or unstable areas.</p> <p>Rehabilitate utilized skid roads, landings, cable-tractor swing routes, and/or temporary routes as necessary to achieve no more than twenty (20) percent detrimental soil conditions in the ground-based harvest unit, as specified in Sec. 42(C)(12)(E-1).</p> <p>Block skid trails following use.</p> <p>Landing size shall generally not exceed one-quarter ($\frac{1}{4}$) acre, shall be located along existing roads, temporary routes, and/or cable-tractor swing routes within unit boundaries, and shall be approved by the Authorized Officer. Design landings with adequate drainage so that they are not hydrologically connected to draws or the ditch line of roads.</p> <p>Minimize disturbance to existing coarse woody debris. Where skid trails encounter large coarse woody debris, the Purchaser shall buck out a portion for equipment access.</p> <p>The use of blades while tractor yarding will be limited, equipment shall walk over as much ground litter as possible.</p> <p>Skid trails may be needed outside of unit boundaries in units 27-22. These skid trails shall not be located in any of the buffers shown on Exhibit A and shall be approved by the Authorized Officer prior to use.</p>
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Designated Area	Yarding Requirements or Limitations
<p><u>Cable Yard Units</u> 3-2 3-6 27-11 27-24 32-3 33-10 33-12</p>	<p>Yarding will be done with a cable yarding system which will suspend one end of the log clear of the ground during inhaul on the yarding corridor. The cable yarding system shall be capable of yarding one thousand two hundred fifteen (1,215) feet slope distance.</p> <p>Skyline equipment shall be capable of yarding in a multispan configuration.</p> <p>A carriage is required which will maintain a fixed position on the skyline during lateral yarding and has a minimum lateral yarding capability of seventy-five (75) feet.</p> <p>Yarding corridors will be perpendicular to the contours.</p> <p>Prior to falling any timber in the unit, all tail/lift trees and/or intermediate support trees shall be pre-designated by the Purchaser and approved by the Authorized Officer.</p> <p>Existing cable corridors shall be used whenever possible. Yarding corridors shall be approximately one hundred fifty (150) feet apart, measured at the tailholds.</p> <p>Yarding corridor widths shall not exceed six (6) feet either side of the skyline centerline.</p> <p>Landing size shall not exceed one-quarter (1/4) acre, shall be located along existing roads, temporary routes, and/or cable-tractor swing routes within unit boundaries where possible, and shall be approved by the Authorized Officer. Short purchaser spurs into units may be necessary to achieve one-end log suspension. Design landings with adequate drainage so that they are not hydrologically connected to draws or the ditch line of roads.</p> <p>Yarding over streams shall be avoided unless it is the only viable option. If yarding is needed over streams shown on Exhibit A, it shall be done with full suspension within fifty (50) feet of and over streams and shall be approved by the Authorized Officer. Any trees cut for the yarding corridor outside of unit boundaries within one hundred ninety-five (195) feet of streams shown on Exhibit A shall be retained on site as coarse woody debris.</p>

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<u>Cable Yard Units</u> (Continued) 3-2 3-6 27-11 27-24 32-3 33-10 33-12	Directional falling to the lead and away from streams, and unit boundaries shown on Exhibit A will be required. Cable corridors that are hydrologically connected to streams shown on Exhibit A shall be water-barred and shall have slash placed over them prior to winter rain events to protect water quality.
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- (8) L-14 No falling, yarding, or loading is permitted in or through the stream buffers as shown on Exhibit A.
- (9) L-19 No work in the stream channel shall be conducted between September 15 of one calendar year and June 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a waiver of this restriction.
- (10) L-19 No non-emergency road maintenance shall be conducted from October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a waiver of this restriction.
- (11) L-19 No mechanical ground based harvesting, ground based yarding, skid trail and landing rehabilitation, machine piling, road and temporary route construction, road and temporary route reconstruction or temporary route decommissioning shall be conducted in units 3-2, 27-22, 27-24, 32-3, 33-10, 33-11, 33-12, 34-1, 35-24, 3-2a ROW, 3-2b ROW, 3-2c ROW, 3-2d ROW, 32-3 ROW, 33-6-33.2 ROW and 33-12 ROW 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 the inability of a soil sample taken at four (4) to six (6) inches to maintain form when compressed and by the inability of soil moisture at the surface to be readily displaced, causing ribbons and ruts along equipment tracks, the 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.
- (12) L-19 No haul on natural surface roads 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 the Authorized Officer determines that hauling would not result in road damage or the transport of sediment to nearby stream channels based on soil moisture conditions or rain events, Contracting Officer may approve a conditional waiver for hauling. If soil moisture conditions or rain events are anticipated to cause impacts to roads or stream water quality resulting from said conditional waiver are not acceptable as determined by the Authorized Officer, the waiver will be revoked.
- (13) L-22 During logging operations, the Purchaser shall keep the 33-6-26.0, 34-6-3.1 and the first 0.20 miles of the 34-6-3.2 roads, where the road passes through the contract area, clear of trees, rock, dirt,

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and other debris so far as is practicable. The road shall not be blocked by such operations for more than thirty (30) minutes.

- (14) L-24 Before cutting and removing any trees necessary to facilitate logging in the harvest units 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 roads 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 safe and expeditious removal of timber sold under this contract and shall be limited to the minimum width necessary for yarding of logs with a minimum of damage to reserve trees, however, unless otherwise approved in writing by the Contracting Officer, the width of each skid road, and/or cable yarding road shall be limited to twelve (12) feet.
 - (b) The Purchaser may immediately cut and remove additional timber to clear skid roads and cable yarding roads; and provide tailhold, tieback, guyline, lift and intermediate support trees; and clear danger trees when the trees have been marked with paint (color to be determined at pre-work) 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 to be sold 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 that the species of trees are not listed in Exhibit B of this contract 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

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

- (f) The Government may reserve trees previously designated for cutting and removal by applying purple, orange or pink paint as replacements for additional trees cut and removed for skid roads and/or cable yarding roads when the Authorized Officer determines such reservation is necessary to maintain stand densities consistent with objectives set forth in the management prescriptions. This may include the replacement of trees damaged by storm events, or insects or disease. The volume of this timber to be reserved will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures and the value shall be based on the unit prices shown in Exhibit B of the contract. The Purchaser agrees that the Total Purchase Price shall be reduced accordingly through a unilateral modification to the contract executed by the Contracting Officer.
- (15) L-32 In harvest units 3-2, 32-3 and 33-12 the Purchaser shall create snags via girdling, or other method as approved by the Authorized Officer, within one hundred ninety five (195) feet of streams (the Riparian Reserve land use allocation) as shown on Exhibit A. The total number of snags to create in the Riparian Reserve per unit is as follows: 3-2 (26 snags), 32-3 (5 snags) and 33-12 (18 snags). A total of forty-nine (49) snags shall be created in the Riparian Reserve land use allocation portion of these units. Of this total, one-half ($\frac{1}{2}$) of the snags required in each unit shall be greater than ten (10) inches diameter at breast height outside bark and one-half ($\frac{1}{2}$) of the snags required in each unit shall be greater than twenty (20) inches diameter at breast height outside bark. All snags created shall come from reserve marked trees as described in Section 41(B)(IR-1), Section 41(C)(IR-1), or Section 41(D)(IR-1) and shall be distributed in a variety of spatial patterns including aggregated groups and individual trees. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all girdled trees by diameter class and species per unit. At the end of girdling operations, a completed tree tally shall be submitted to the Authorized Officer. Any species of tree available could be used to meet this requirement, except trees described in Section 41(E)(IR-6) and Section 41(G)(IR-13). The Purchaser shall not create snags in locations that may be hazardous to roads, private property, or powerlines.
- (16) L-32 In harvest units 3-2 (portion), 27-11 (all), 27-22 (all), 27-24 (all), 32-3 (all), 33-10 (all), 33-11 (all), 33-12 (all) and 34-1 (all), the Purchaser shall create snags via girdling, or other method as approved by the Authorized Officer, within the Late-Successional Reserve (LSR) land use allocation as shown on Exhibit A, and as designated on the ground by the Authorized Officer. The total number of snags to create in the LSR per unit is as follows: 3-2 (52 snags), 27-11 (4 snags), 27-22 (6 snags), 27-24 (44 snags), 32-3 (19 snags), 33-10 (38 snags), 33-11 (84 snags), 33-12 (152 snags) and 34-1 (52 snags). A total of one hundred twelve (112) snags shall be created in the LSR portion of units. Of this total, one-half ($\frac{1}{2}$) of the snags required in each unit shall be greater than ten (10) inches diameter at breast height outside bark and one-half ($\frac{1}{2}$) of the snags required in each unit shall be greater than twenty (20) inches diameter at breast height outside bark. All snags created shall come from reserve marked trees as described in Section 41(B)(IR-1), Section 41(C)(IR-1), or Section 41(D)(IR-1) and shall be distributed in a variety of spatial patterns including aggregated groups and individual trees. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all girdled trees by diameter class and species per unit. At the end of girdling operations, a

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completed tree tally shall be submitted to the Authorized Officer. Any species of tree available could be used to meet this requirement, except trees described in Section 41(E)(IR-6) and Section 41(G)(IR-13). The Purchaser shall not create snags in locations that may be hazardous to roads, private property, or powerlines.

UNIT	Total # of snags to create
3-2	78
27-11	4
27-22	6
27-24	44
32-3	24
33-10	38
33-11	84
33-12	170
34-1	52
Total	500

- (17) L-33 Purchaser's operations shall facilitate BLM's safe and practical inspection of Purchaser's operations and BLM's conduct of other official duties on Contract Area. Purchaser has all responsibility for compliance with safety requirements for Purchaser's employees, contractors, and subcontractors.

In the event that the Authorized Officer identifies a conflict between the requirements of this contract or agreed upon methods of proceeding hereunder and State or Federal safety requirements, the contract may be modified. If the cost of such contract modification is of a substantial nature (\$2,000.00 or more), the Purchaser may request, in writing, an adjustment in the Total (Actual [include the word "Actual" for all scale for payment contracts using forms 5450-4/26]) Purchase Price specified in Section 2 of the timber sale contract, as amended, to compensate for the changed conditions.

Unless otherwise specified in writing, when operations are in progress adjacent to or on roads and/or trails in the harvest unit area, Purchaser shall furnish, install, and maintain all temporary traffic controls that provide the road or trail user with adequate warning of and protection from hazardous or potentially hazardous conditions associated with its operations. Purchaser shall prepare a Traffic Control Plan, which the Purchaser has determined is compliant with state and local OSHA and Transportation standards no later than the pre-work meeting and prior to commencing operations. Traffic control devices shall be appropriate to current operating and/or weather conditions and shall be covered or removed when not needed., Flagmen and devices shall be as specified in state OSHA and Transportation standards for logging roads or the "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD) published by the U.S. Department of Transportation - Federal Highway Administration. Included in the Traffic Control Plan, Purchaser shall note traffic control device locations on a Purchaser produced copy of the contract Exhibit "A" Map.

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(B) ROAD CONSTRUCTION, MAINTENANCE, AND USE

- (1) R-1 The Purchaser shall construct, improve, renovate, and/or decommission all roads, structures, and temporary routes listed for use under this contract in accordance with the plans and specifications shown on Exhibits C and D, which is attached hereto and made a part hereof.
- (a) R-1a Any required construction, improvement, or renovation of roads and structures shall be completed and accepted, in accordance with Section 18, prior to the removal of any timber, except right-of-way timber, over that road.
- (b) R-1b The Purchaser shall construct, use, and decommission temporary routes TR 03-02-A, TR 03-02-B, TR 03-02-C, TR 03-02-D, TR 33-12, and TR 32-3 by October 15th of the same respective operating season. If a temporary route needs to be used over multiple operating seasons, winterize the temporary route prior to October 15th.
- (c) R-1c The Purchaser shall not commence work on road renovation, construction, and reconstruction until receipt of written notice to do so from the Authorized Officer. Work shall commence no later than 5 days after such notice and shall be completed within 1 year after such notice.
- (d) R-1d Prior to completion and approval of sub-grade construction from all proposed road construction and reconstruction, as well as all temporary route construction and reconstruction, as shown on Exhibit C, all logs shall be removed from the designated right-of-way.
- (2) R-2 The Purchaser is authorized to use the roads listed in the table below and shown on Exhibits C and D for the removal of Government timber sold under the terms of this contract, provided that the Purchaser pay the required maintenance and rockwear obligations described in Section 42(B)(4)(R-2d), Section 42(B)(7)(R-3), and Section 42(B)(8)(R-3). Any road listed on Exhibit C and D and requiring construction, improvement, or renovation in Exhibit C of this contract, shall be maintained by the Purchaser until receiving written acceptance of the construction, improvement, or renovation from the Contracting Officer. The Purchaser shall pay current Bureau of Land Management maintenance and rockwear fees for the sale of additional timber under modification to the contract.

Road No. and Segment	Length Miles Used	Ownership	Road Surface Type	Maintenance Responsibility
33-6-26.0 (A1)	0.11	BLM	AGG	Purchaser
33-6-26.0 (A2)	0.19	ORM	AGG	Purchaser
33-6-26.0 (A3)	0.20	BLM	AGG	Purchaser
33-6-26.0 (B-C)	0.60	BLM	AGG	Purchaser
33-6-27.6 (A)	0.26	BLM	NAT	Purchaser
33-6-27.0 (A1)	0.26	BLM	AGG	Purchaser

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Road No. and Segment	Length Miles Used	Ownership	Road Surface Type	Maintenance Responsibility
33-6-27.0 (A2)	0.07	LRT	AGG	Purchaser
33-6-27.0 (A3)	0.32	BLM	AGG	Purchaser
33-6-27.3	0.11	BLM	AGG	Purchaser
34-6-3.1 (A-C)	1.10	BLM	AGG	Purchaser
34-6-3.3 (A)	1.56	BLM	AGG	Purchaser
34-6-3.4	0.23	BLM	AGG	Purchaser
34-6-3.2	0.82	BLM	AGG	Purchaser
33-6-34.0	0.27	ORM	AGG	Purchaser
SPUR RD 34	0.06	BLM	NAT	Purchaser
34-6-5.0 (A-B)	3.37	BLM	AGG	Purchaser
33-6-33.0	1.18	BLM	AGG	Purchaser
33-6-33.1	0.12	BLM	AGG	Purchaser
33-6-33.2 (A)	0.33	BLM	AGG	Purchaser
33-6-33.2 (B)	0.32	BLM	NAT	Purchaser
33-6-33.5	0.25	BLM	AGG	Purchaser
33-6-33.6	0.13	BLM	AGG	Purchaser
SPUR RD 33	0.06	BLM	NAT	Purchaser
TOTAL	11.92			

- (3) R-2a With the prior written approval of the Authorized Officer, the Purchaser may arrange for cooperative maintenance with other users of roads included in Section 42(B)(2)(R-2) of this contract; provided, that such cooperative arrangement shall not relieve the Purchaser of his liability for the maintenance and repair of such roads resulting from wear or damage, in accordance with this contract. The Purchaser shall furnish the Authorized Officer a copy of any cooperative maintenance agreements entered into with other users on these roads.
- (4) R-2b: The Purchaser shall pay the Government a road rockwear fee of **one thousand two hundred sixty two and 04/100 dollars (\$1,262.04)** for the transportation of timber included in this contract price over said roads. The above road maintenance and rockwear amount is for the use of 11.39 miles of BLM road or less. The total road maintenance and rockwear fee exceeds five hundred and no/100 dollars (\$500.00), therefore the Authorized Officer shall establish an installment schedule of payments of the maintenance and rockwear obligations.
- (5) R-2e The Contracting Officer may at any time, by written notice, terminate the Purchaser's operator

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road maintenance obligations and require instead payment of current Bureau of Land Management road maintenance and rockwear fees for the particular surface type of the roads involved. These fees will be applied to the remaining contract volume on the sale area, as determined by the Authorized Officer, to be transported over the roads listed in Section 42(B)(2)(R-2). If the total road maintenance and rockwear fee does not exceed five hundred and no/100 dollars (\$500.00), the Purchaser shall pay such amount in full prior to use of such roads. If the total road maintenance and rockwear fee exceeds five hundred and no/100 dollars (\$500.00), the Authorized Officer shall establish an installment schedule of payments of the maintenance and rockwear obligations.

- (6) R-2f The Purchaser shall perform any required road repair and maintenance work on roads used by them, under the terms of Exhibit D, Road Maintenance Specifications, of this contract, which is attached hereto and made a part hereof.
- (7) R-3 In the use of Roads 33-6-27.0, Segment A2, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. R-768, between the United States of America and **Lone Rock Timber**. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Payment of a road rockwear obligation to Lone Rock Timber has been waived for rock in lieu of fees.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (8) R-3 In the use of Roads 33-6-26.0, Segment A2 and 33-6-34.0, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000EA, between the United States of America and **Olympic Resource Management (ORM) Timber Fund IV (REIT) Inc.** This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Payment of a road rockwear obligation of **fifty-seven and 74/100 dollars (\$57.74)** to ORM Timber Fund IV (REIT) Inc., payable at the time indicated in the License Agreement.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (9) R-3c The Purchaser agrees that if they elect to use any other private roads, 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

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provide for such use and for allowances for amortization of the Government's share of the capital investment of any such road.

- (10) R-4 The Purchaser shall be required to secure written approval to use vehicles or haul forest products and equipment over Government owned or controlled roads when such vehicles or equipment exceeds the maximum allowable weights or dimensions established by the State for vehicles operating without a permit or if vehicles meet allowable non-permitted State vehicle weights, but the haul route crosses a structure or segment of road that is posted for reduced weights. The Purchaser agrees to abide by any special requirements included in said written approval.

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 or equipment: (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.

- (11) R-5 **Tracked type equipment shall not be allowed to cross over concrete bridge decks, other concrete surfaced structures, or asphalt surfaced roads without the proper protection of that surface.** Prior approval shall be obtained from the Authorized Officer when crossing with protective devices.

The Purchaser shall be responsible for the repair of any damage to roads or structures caused by the use tracked vehicles or equipment: (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.

(C) ENVIRONMENTAL PROTECTION

- (1) E-1 In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall restrict non-road, in unit, ground-based equipment used for harvesting, yarding, machine piling, and rehabilitation operations (including temporary routes, tractor swing routes, and landings) to periods of low soil moisture (dry conditions). Low soil moisture varies by texture and is based on site-specific

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considerations. Generally, low soil moisture is determined by the inability of a soil sample taken at four (4) to six (6) inches to maintain form when compressed and the inability of soil moisture at the surface to be readily displaced, causing ribbons and ruts along equipment tracks. Low soil moisture limits will be determined by the Authorized Officer. Ground-based equipment shall be allowed to operate when the ground is frozen or adequate snow exists to prevent soil compaction and displacement, as determined by the Authorized Officer.

- (2) E-1 In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall not haul on hydrologically connected natural surface or rock roads during conditions that would result in any of the following: surface displacement such as rutting or ribbons, continuous mud splash or tire slide, fines being pumped through road surfacing from the subgrade resulting in a layer of surface sludge, as directed by the Authorized Officer.
- (3) E-1 In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall not haul on all natural surface roads that receive one-half ($\frac{1}{2}$) inch or more precipitation within a twenty four (24) hour period. Haul shall not resume for a minimum of forty-eight (48) hours following any storm event, or until road surface is sufficiently dry, as approved by the Authorized Officer. The Purchaser may elect, at their own expense, to apply rock surfacing to these roads to bring them up to wet weather haul standards, as approved by the Authorized Officer.
- (4) E-1 In addition to the requirement set forth in Section 26 of this contract, the Purchaser shall implement the following noxious weed control measures:
 - (a) In order to prevent the potential spread of noxious weeds into the Medford District BLM, the operator would be required to clean all logging, construction, chipping, grinding, shredding, rock crushing, and transportation equipment prior to entry on BLM lands.
 - (b) Cleaning shall be defined as removal of dirt, grease, plant parts, and material that may carry noxious weed seeds into BLM lands. Cleaning prior to entry onto BLM lands may be accomplished by using a pressure hose.
 - (c) Only equipment inspected by the BLM would be allowed to operate within the Analysis Area. All subsequent move-ins of equipment as described above shall be treated the same as the initial move-in.
 - (d) Prior to initial move-in of any equipment, and all subsequent move-ins, the operator shall make the equipment available for BLM inspection at an agreed upon location off Federal lands.
 - (e) Equipment would be visually inspected by the Authorized Officer to verify that the equipment has been reasonably cleaned.
- (5) E-1 In addition to the requirements set forth in Section 26 of this contract, the Purchaser shall implement the following noxious weed control measures:

Upon decommissioning and prior to fall rains, the Purchaser shall scarify landings (outside of the driving surface) and temporary routes to provide for adequate drainage, then stabilize and revegetate all bare soil with certified weed free straw mulch and a native seed mixture approved by the Authorized

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Officer. Landings on roads and rocky areas that lack soil for seed germination need not be scarified, seeded, or mulched, as determined by the Authorized Officer. The BLM may provide the seed mixture and straw mulch if the purchaser is unable to locate and buy the approved materials from a commercial source. The Purchaser shall reimburse the government for the cost of seed and straw, if provided by the government. The Purchaser shall furnish the specific seed mixture prescribed by the Authorized Officer, which will include up to 3 grasses and 2 forbs from the following list, but may include substitutions approved by the Authorized Officer:

Grasses: *Achnatherum lemmonii*, *Bromus carinatus*, *Brumus vulgaris*, *Elymus glaucus*, *Festuca californica*, *Festuca roemeri*, *Koeleria macrantha*, *Poa secunda*, *Vulpia microstachys*

Forbs: *Achillea millefolium*, *Clarkia purpurea*, *Clarkia homboidea*, *Collinsia grandiflora*, *Eriophyllum lanatum*, *Lupinus bicolor*, *Madia elegans*, *Madia gracilis*

The proportion of each species in the mixture shall be prescribed by the Authorized Officer. The Purchaser shall apply prescribed seed and straw mulch to acres designated for treatment, as directed by the Authorized Officer, at the following rates of application:

Grass seed	20 to 25 lbs/acre (cumulative, all species)
Forb seed	0.5 to 2 lbs/acre (cumulative, all species)
Straw mulch	1000 lbs/acre

The Purchaser shall apply seed and straw mulch between September 1 of one calendar year and March 31 of the following year. Deviations from that timing must be approved by the Authorized Officer. The Purchaser shall notify the Authorized Officer at least 5 days in advance of the date that he/she intends to commence revegetation and soil stabilization work.

If the Purchaser furnishes seed from any source other than the BLM, that seed shall meet the following minimum test standards:

<u>Test</u>	<u>Grasses (%)</u>	<u>Forbs (%)</u>
Purity:	95	80
Germination:	85	70
Other species/weed content (max):	0.2	0.2
Noxious weed content:	Prohibited	Prohibited

Furnished seed shall meet the minimum requirements for either Yellow Tag Source Identified Seed or Blue Tag Certified Class Seed, as defined by the Association of Official Seed Certifying Agencies. Seed source shall be approved by the Authorized Officer and shall be from the EPA Level III Ecoregion in which the project occurs. For each lot of seed, the Purchaser shall furnish the Authorized Officer a Seed Test result from a certified seed testing lab (e.g., Oregon State University), which shall include: test date; lot number; seed source; and results of test for purity, germination, and weed content. All seed lots must have been tested within the previous 12 months to be accepted. Seed that has become wet, moldy, or otherwise damaged shall not be accepted. Seed must be available to the Authorized Officer for inspection at least 5 days in advance of commencing revegetation work. If the Purchaser furnishes straw mulch from any source other than the BLM, the material must be from native grass or other approved sterile grain crops that are certified weed free and free of mold or other objectionable materials. Straw mulch shall be in an air-dry condition and suitable for spreading in a

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uniform manner. Straw mulch must be available to the Authorized Officer for inspection at least 5 days in advance of commencing revegetation work.

- (6) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall prepare a Spill Prevention, Control, and Countermeasure Plan (SPCC) for all hazardous substances to be used in the contract area, as directed by the Authorized Officer. Such plan shall include identification of Purchaser's representatives responsible for supervising initial containment action for releases and subsequent cleanup. Such plans must comply with the State of Oregon DEQ OAR 340-142, Oil and Hazardous Materials Emergency Response Requirements. All operators shall have a Spill Containment Kit (SCK) as described in the SPCC plan on-site during any operation with potential for run-off to adjacent waterbodies. The SCK shall be appropriate in size and type for the oil or hazardous material carried by the Purchaser.
- (7) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall not store any fuel or other petroleum products or refuel heavy mechanized equipment within one hundred fifty (150) feet of all riparian management or wet areas. The Purchaser shall not refuel or maintain handheld equipment such as drip torches and chainsaws within one hundred (100) feet of waterbodies. Portable pumps may be refueled onsite within a spill containment system. 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. Hydraulic fluid and fuel lines on heavy mechanized equipment would be in proper working condition in order to minimize potential for leakage into streams. Absorbent materials shall be onsite to allow for immediate containment of any accidental spills. Spilled fuel and oil shall be cleaned up and disposed of at an approved disposal site.
- (8) E-1 In addition to the requirements set forth in Sec. 26 of this contract, the Purchaser shall prevent the delivery of chemical retardant foam or additives to waterbodies, and wetlands. Ignition devices/materials shall be stored and disposed of at least one hundred fifty (150) feet away from streams and wetlands.
- (9) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall not locate new landings in areas that contribute eroded fines to streams, wet areas, dry draws, and swales. If these landing locations cannot be avoided, ensure that properly installed sediment control measures are placed and maintained, as needed, to keep eroded material onsite.
- (10) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall ensure that silt fencing or other sediment control measures are properly placed and maintained during use and periods of non-use when utilizing landings, skid trails, temp routes, or haul routes that have the potential to release eroded fines into a stream or wet area, directly or via draws or ditch lines. Any project-related activity would be suspended if conditions develop that cause a potential for sediment laden runoff to enter a wetland, floodplain, or waters of the state. Operations can resume when sediment control devices are in place and conditions allow turbidity standards to be met.
- (11) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall, prior to October 15 of the same operating season, winterize and rehabilitate temporary routes, landings, hydrologically connected corridors and skid trails and other areas of exposed soils by properly installing and/or using water bars, berms, sediment basins, gravel pads, hay bales, small dense woody debris, seeding and/or mulching, to reduce sediment runoff and divert runoff water away from stream

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channels, headwalls, slide areas, high landslide hazard locations or steep erodible fill slopes as directed by the Authorized Officer.

- (12) E-1 In addition to the requirement set forth in Section 26 of this contract, the Purchaser shall fully decommission: temporary routes 3-2a ROW, 3-2b ROW, 3-2c ROW, 3-2d ROW, 32-3 ROW, 33-6-33.2 ROW and 33-12 ROW, and rehabilitate ground based skid trails, tractor swing routes and landings outside of the road prism, within ground-based yarding areas **as needed to achieve no more than twenty (20) percent detrimental soil compaction within the unit**, as directed by the Authorized Officer, by one of the following methods:
- (a) If the Authorized Officer deems subsoiling will not cause unacceptable damage to the root systems of residual trees the Purchaser shall discontinuously subsoil, simultaneously water bar, seed, mulch, and barricade. Subsoil to a depth of twelve (12) inches, and no further than thirty-six (36) inches apart. If the Authorized Officer deems subsoiling to this depth will cause an unacceptable amount of damage to the root system of residual trees, the Purchaser shall scarify to a depth of up to six (6) inches and simultaneously water bar, seed, mulch, and barricade.
 - (b) All rehabilitation shall occur within eighteen (18) months of harvest, during dry conditions, and after pile burning is complete.
- (13) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall place material removed during excavation in locations where it cannot enter streams or other water bodies.
- (14) E-2 The water bars to be constructed as required by Sec. 26(c) shall be constructed in accordance with the spacing described in the table below and to the specifications shown on Exhibit C which is attached hereto and made a part hereof.

Gradient (Percent)	Water Bar Spacing by Erosion Class (Feet)		
	High Unit 27-11	Moderate Units 3-2, 3-6, 27-24, 32-3, 33-10, 34-1, 35-24	Low Units 27-22, 33-11, 33-12
2-5%	200	300	400
6-10%	150	200	300
11-15%	100	150	200
16-20%	75	100	150
21-35%	50	75	100
36+%	50	50	50

- (15) E-3 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 prevent incidental take of northern spotted owls in accordance with management direction in the Record of Decision (ROD)

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and Resource Management Plan (RMP), the Contracting Officer determines it may be necessary to modify or terminate the contract, or;

- (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) 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;
- (e) when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
- (f) when, in order to comply with a stay or other remedy issued by the Interior Board of Land Appeals (IBLA) 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 in accordance with management direction 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 in accordance with management direction established in the ROD and RMP, the Contracting Officer determines it may be necessary to modify or terminate the contract.

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

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

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the First Installment held on deposit may be temporarily reduced upon the written request of the Purchaser. For the period of suspension extending beyond 30 days, the First Installment on deposit may be reduced to five (5) percent of the First Installment amount listed in Section 3.a. of the contract. Any First Installment amount temporarily reduced may be refunded or transferred to another BLM contract at the request of the Purchaser. However, if the Purchaser has outstanding debt owing the United States, the Contracting Officer must first apply the amount of First Installment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3710, et seq.). Upon Purchaser's receipt of a bill for collection and written notice from the Contracting Officer lifting the suspension, the Purchaser shall restore the First Installment to the full amount shown in Section 3.a. of the contract within

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15 days after the bill for collection is issued, subject to Section 3.i. 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, court-ordered injunctions, or an IBLA issued stay or remedy, 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 modify the contract or terminate the cutting and removal rights under the contract in order to comply with the Endangered Species Act, prevent incidental take of northern spotted owls in accordance with the ROD and RMP, protect species that have been discovered which were identified for protection in accordance with management direction established in the ROD and RMP, or comply with a court order or an IBLA issued stay or remedy. 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, if able to proceed without causing incidental take of northern spotted owls in accordance with the ROD and RMP, if consistent with species protection in accordance with management direction established in the ROD and RMP, or if consistent with a court order or an IBLA issued stay or remedy.

In the event the contract is modified or 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,

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in itself, to mean that the Government had not acted reasonably in regard to its duties to the Purchaser under this contract.

- (16) E-5 The Purchaser shall notify the Authorized Officer in writing by February 1 of each calendar year in which operations are expected to take place on the contract area between March 1 and September 30, both days inclusive. If notification is not received by the Authorized Officer by February 1, felling, bucking, yarding, road construction, or any other activity with the potential to disturb nesting northern spotted owls may not be allowed between March 1 and September 30, both days inclusive.

Upon receipt of a notice that the Purchaser expects to perform such operations during this time period, the Government will conduct surveys to determine whether owls have moved into harvest units.

If northern spotted owls are detected in or adjacent to the units, operations would be restricted until northern spotted owl occupancy and nesting status has been determined. If it is determined owls are not nesting or that no young have been produced, the Authorized Officer may lift the seasonal restriction on such operations in writing. Without this approval, such operations are prohibited from March 1 through June 30 of each year.

(D) FIRE PREVENTION

- (1) F-1 Fire Prevention and Control. Primarily for purposes of fire prevention and control, the Purchaser shall, 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 of the Authorized Officer.
- (2) F-1a Fire Prevention and Control. Primarily for purposes of fire prevention and control, the Purchaser shall comply with the following provisions:
- (a) At least three (3) days prior to the operation of power-driven equipment during any operations under this contract during the closed fire season or periods of fire danger, prepare a fire prevention and control plan to the satisfaction of the Authorized Officer, the State of Oregon Department of Forestry, and the State of Oregon Douglas Forest Protection Agency.
- (b) Provide and maintain on the contract area in good working order, and immediately available, 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 employees 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 be not less than four (4) tools in each box nor less than one (1) tool for each employee working on the contract area. Three-fourths (3/4) of all fire tools shall be shovels, hazel hoes, or other scraping tools. The fire tools shall be used only for fighting fire.

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2. F-2b At each landing or such other place as the Authorized Officer shall designate during periods of operation one (1) tank truck of three hundred (300) gallons or more capacity with a minimum of five hundred (500) feet of 1½ inch hose (must be adequate length to reach 200 feet beyond active work sites), six (6) 1½ inch wyes, six (6) 1½ inch to 1 inch reducers, three (3) 1½ inch nozzles and three (3) 1 inch nozzles. One (1) three hundred (300) gallon fire engine may be substituted for each required 300 gallon tank truck, provided that the total capability to pump and deliver water remains unchanged. Each fire engine / tank truck shall be equipped with a pump capable of delivering a minimum of forty (40) gallons per minute (gpm) water flow at one hundred fifty (150) pounds per square inch (psi) engine pressure through fifty (50) feet of 1½ inch fire hose. The pump may be either power take off driven or truck-mounted auxiliary engine driven, or portable. All equipment shall be acceptable to and approved by the Authorized Officer and shall conform to the standards set forth in Oregon Revised Statutes 477.645 through 477.670. All hose couplings shall have the standard thread adopted by the BLM (1 ½ inches National Hose Thread (NH), 1 inch National Pipe Straight Hose Thread (NPSH) or be provided with suitable adapters. At the close of each working day, all bulldozers and fire/tank trucks shall be filled with fuel and made ready for immediate use. All fire/tank trucks shall be filled with water and made available for immediate use.
3. F-2c Serviceable cell phone or radio equipment able to provide prompt and reliable communication between the contract area, Medford BLM District Office, Oregon Department of Forestry, and Douglas Forest Protection Agency. Such communication shall be available during periods of operation including the time watchman service is required.
4. F-2d 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 lines at night.
5. F-2f A headlamp for each employee in the woods crew adequate to provide sufficient illumination for night firefighting. A headlight shall be of the type that can be fastened to the head so as to allow independent use of the hands. At least one extra set of batteries shall be provided for each such headlight.
6. F-2f 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.
7. F-2g A chemical fire extinguisher of at least eight (8) ounces minimum capacity of a type approved by the Authorized Officer and a size 0 or larger shovel shall be carried during the closed fire season or periods of fire danger by each falling crew and each buckler using a power saw on the contract area. Such fire extinguisher shall be filled and in effective operating condition and shall at all times be immediately available to the operator when the saw is being fueled or the motor of the saw is running. Any fueling of a power saw shall be done in an area which has first been cleared of all flammable material. Power saws shall be moved at least twenty (20) feet from the place of fueling before the engine is started. Each power saw shall be equipped with an exhaust system and a spark arresting device which are of types approved by the Authorized Officer.

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- (c) F-5 Where blocks and cables are used on the contract area during periods of fire danger, the Purchaser shall remove all flammable material at least ten (10) feet from the place where the tail or any other block will hang when the cable is tight. Such clearings shall be inspected periodically by the Purchaser and shall be kept free of flammable material.
- (3) F-9 During Oregon Department of Forestry regulated use closure, no smoking shall be permitted outside of closed vehicles.

(E) SLASH DISPOSAL

- (1) SD-1 Fire Hazard Reduction. In addition to the requirements of Sec. 15 of this contract, and notwithstanding the Purchaser's satisfactory compliance with State laws and regulations regarding offsetting or abating the additional fire hazard created by this operation and the State's 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 measures required by this contract:
 - (a) SD-1a Lop and scatter all slash outside of the machine pile and burn portions of all units as shown on Exhibit S. All top and side branches must be free of the central stem so that such stem is reduced to the extent that it is within eighteen (18) inches of the ground at all points. Slash includes all woody material (brush, limbs, tops, unmerchantable stems, or chunks) severed, uprooted, or broken from live plants as a result of Purchaser's operations under the terms of this contract. Lop and scatter shall be completed in accordance with Exhibit S as directed by the Authorized Officer.
 1. All slash shall be arranged in a discontinuous pattern across the forest floor.
 2. All slash shall be loped to no more than eight (8) feet in length.
 - (b) SD-1b Machine pile, cover, and burn all slash within 3-2a ROW, 3-2b ROW, 3-2c ROW, 3-2d ROW, 3-2e ROW, 3-2f ROW, 3-2g ROW, 3-2h ROW, 3-2i ROW, 3-2j ROW, 3-2k ROW, 3-2l ROW, 3-2m ROW, 3-2n ROW, 3-2o ROW, 3-2p ROW, 3-2q ROW, 3-2r ROW, 3-2s ROW, 3-2t ROW, 3-2u ROW, 3-2v ROW, 3-2w ROW, 3-2x ROW, 3-2y ROW, 3-2z ROW, 3-2aa ROW, 3-2ab ROW, 3-2ac ROW, 3-2ad ROW, 3-2ae ROW, 3-2af ROW, 3-2ag ROW, 3-2ah ROW, 3-2ai ROW, 3-2aj ROW, 3-2ak ROW, 3-2al ROW, 3-2am ROW, 3-2an ROW, 3-2ao ROW, 3-2ap ROW, 3-2aq ROW, 3-2ar ROW, 3-2as ROW, 3-2at ROW, 3-2au ROW, 3-2av ROW, 3-2aw ROW, 3-2ax ROW, 3-2ay ROW, 3-2az ROW, 3-2ba ROW, 3-2bb ROW, 3-2bc ROW, 3-2bd ROW, 3-2be ROW, 3-2bf ROW, 3-2bg ROW, 3-2bh ROW, 3-2bi ROW, 3-2bj ROW, 3-2bk ROW, 3-2bl ROW, 3-2bm ROW, 3-2bn ROW, 3-2bo ROW, 3-2bp ROW, 3-2bq ROW, 3-2br ROW, 3-2bs ROW, 3-2bt ROW, 3-2bu ROW, 3-2bv ROW, 3-2bw ROW, 3-2bx ROW, 3-2by ROW, 3-2bz ROW, 3-2ca ROW, 3-2cb ROW, 3-2cc ROW, 3-2cd ROW, 3-2ce ROW, 3-2cf ROW, 3-2cg ROW, 3-2ch ROW, 3-2ci ROW, 3-2cj ROW, 3-2ck ROW, 3-2cl ROW, 3-2cm ROW, 3-2cn ROW, 3-2co ROW, 3-2cp ROW, 3-2cq ROW, 3-2cr ROW, 3-2cs ROW, 3-2ct ROW, 3-2cu ROW, 3-2cv ROW, 3-2cw ROW, 3-2cx ROW, 3-2cy ROW, 3-2cz ROW, 3-2da ROW, 3-2db ROW, 3-2dc ROW, 3-2dd ROW, 3-2de ROW, 3-2df ROW, 3-2dg ROW, 3-2dh ROW, 3-2di ROW, 3-2dj ROW, 3-2dk ROW, 3-2dl ROW, 3-2dm ROW, 3-2dn ROW, 3-2do ROW, 3-2dp ROW, 3-2dq ROW, 3-2dr ROW, 3-2ds ROW, 3-2dt ROW, 3-2du ROW, 3-2dv ROW, 3-2dw ROW, 3-2dx ROW, 3-2dy ROW, 3-2dz ROW, 3-2ea ROW, 3-2eb ROW, 3-2ec ROW, 3-2ed ROW, 3-2ee ROW, 3-2ef ROW, 3-2eg ROW, 3-2eh ROW, 3-2ei ROW, 3-2ej ROW, 3-2ek ROW, 3-2el ROW, 3-2em ROW, 3-2en ROW, 3-2eo ROW, 3-2ep ROW, 3-2eq ROW, 3-2er ROW, 3-2es ROW, 3-2et ROW, 3-2eu ROW, 3-2ev ROW, 3-2ew ROW, 3-2ex ROW, 3-2ey ROW, 3-2ez ROW, 3-2fa ROW, 3-2fb ROW, 3-2fc ROW, 3-2fd ROW, 3-2fe ROW, 3-2ff ROW, 3-2fg ROW, 3-2fh ROW, 3-2fi ROW, 3-2fj ROW, 3-2fk ROW, 3-2fl ROW, 3-2fm ROW, 3-2fn ROW, 3-2fo ROW, 3-2fp ROW, 3-2fq ROW, 3-2fr ROW, 3-2fs ROW, 3-2ft ROW, 3-2fu ROW, 3-2fv ROW, 3-2fw ROW, 3-2fx ROW, 3-2fy ROW, 3-2fz ROW, 3-2ga ROW, 3-2gb ROW, 3-2gc ROW, 3-2gd ROW, 3-2ge ROW, 3-2gf ROW, 3-2gg ROW, 3-2gh ROW, 3-2gi ROW, 3-2gj ROW, 3-2gk ROW, 3-2gl ROW, 3-2gm ROW, 3-2gn ROW, 3-2go ROW, 3-2gp ROW, 3-2gq ROW, 3-2gr ROW, 3-2gs ROW, 3-2gt ROW, 3-2gu ROW, 3-2gv ROW, 3-2gw ROW, 3-2gx ROW, 3-2gy ROW, 3-2gz ROW, 3-2ha ROW, 3-2hb ROW, 3-2hc ROW, 3-2hd ROW, 3-2he ROW, 3-2hf ROW, 3-2hg ROW, 3-2hh ROW, 3-2hi ROW, 3-2hj ROW, 3-2hk ROW, 3-2hl ROW, 3-2hm ROW, 3-2hn ROW, 3-2ho ROW, 3-2hp ROW, 3-2hq ROW, 3-2hr ROW, 3-2hs ROW, 3-2ht ROW, 3-2hu ROW, 3-2hv ROW, 3-2hw ROW, 3-2hx ROW, 3-2hy ROW, 3-2hz ROW, 3-2ia ROW, 3-2ib ROW, 3-2ic ROW, 3-2id ROW, 3-2ie ROW, 3-2if ROW, 3-2ig ROW, 3-2ih ROW, 3-2ii ROW, 3-2ij ROW, 3-2ik ROW, 3-2il ROW, 3-2im ROW, 3-2in ROW, 3-2io ROW, 3-2ip ROW, 3-2iq ROW, 3-2ir ROW, 3-2is ROW, 3-2it ROW, 3-2iu ROW, 3-2iv ROW, 3-2iw ROW, 3-2ix ROW, 3-2iy ROW, 3-2iz ROW, 3-2ja ROW, 3-2jb ROW, 3-2jc ROW, 3-2jd ROW, 3-2je ROW, 3-2jf ROW, 3-2jg ROW, 3-2jh ROW, 3-2ji ROW, 3-2jj ROW, 3-2jk ROW, 3-2jl ROW, 3-2jm ROW, 3-2jn ROW, 3-2jo ROW, 3-2jp ROW, 3-2jq ROW, 3-2jr ROW, 3-2js ROW, 3-2jt ROW, 3-2ju ROW, 3-2jv ROW, 3-2jw ROW, 3-2jx ROW, 3-2jy ROW, 3-2jz ROW, 3-2ka ROW, 3-2kb ROW, 3-2kc ROW, 3-2kd ROW, 3-2ke ROW, 3-2kf ROW, 3-2kg ROW, 3-2kh ROW, 3-2ki ROW, 3-2kj ROW, 3-2kl ROW, 3-2km ROW, 3-2kn ROW, 3-2ko ROW, 3-2kp ROW, 3-2kq ROW, 3-2kr ROW, 3-2ks ROW, 3-2kt ROW, 3-2ku ROW, 3-2kv ROW, 3-2kw ROW, 3-2kx ROW, 3-2ky ROW, 3-2kz ROW, 3-2la ROW, 3-2lb ROW, 3-2lc ROW, 3-2ld ROW, 3-2le ROW, 3-2lf ROW, 3-2lg ROW, 3-2lh ROW, 3-2li ROW, 3-2lj ROW, 3-2lk ROW, 3-2ll ROW, 3-2lm ROW, 3-2ln ROW, 3-2lo ROW, 3-2lp ROW, 3-2lq ROW, 3-2lr ROW, 3-2ls ROW, 3-2lt ROW, 3-2lu ROW, 3-2lv ROW, 3-2lw ROW, 3-2lx ROW, 3-2ly ROW, 3-2lz ROW, 3-2ma ROW, 3-2mb ROW, 3-2mc ROW, 3-2md ROW, 3-2me ROW, 3-2mf ROW, 3-2mg ROW, 3-2mh ROW, 3-2mi ROW, 3-2mj ROW, 3-2mk ROW, 3-2ml ROW, 3-2mn ROW, 3-2mo ROW, 3-2mp ROW, 3-2mq ROW, 3-2mr ROW, 3-2ms ROW, 3-2mt ROW, 3-2mu ROW, 3-2mv ROW, 3-2mw ROW, 3-2mx ROW, 3-2my ROW, 3-2mz ROW, 3-2na ROW, 3-2nb ROW, 3-2nc ROW, 3-2nd ROW, 3-2ne ROW, 3-2nf ROW, 3-2ng ROW, 3-2nh ROW, 3-2ni ROW, 3-2nj ROW, 3-2nk ROW, 3-2nl ROW, 3-2nm ROW, 3-2no ROW, 3-2np ROW, 3-2nq ROW, 3-2nr ROW, 3-2ns ROW, 3-2nt ROW, 3-2nu ROW, 3-2nv ROW, 3-2nw ROW, 3-2nx ROW, 3-2ny ROW, 3-2nz ROW, 3-2oa ROW, 3-2ob ROW, 3-2oc ROW, 3-2od ROW, 3-2oe ROW, 3-2of ROW, 3-2og ROW, 3-2oh ROW, 3-2oi ROW, 3-2oj ROW, 3-2ok ROW, 3-2ol ROW, 3-2om ROW, 3-2on ROW, 3-2oo ROW, 3-2op ROW, 3-2oq ROW, 3-2or ROW, 3-2os ROW, 3-2ot ROW, 3-2ou ROW, 3-2ov ROW, 3-2ow ROW, 3-2ox ROW, 3-2oy ROW, 3-2oz ROW, 3-2pa ROW, 3-2pb ROW, 3-2pc ROW, 3-2pd ROW, 3-2pe ROW, 3-2pf ROW, 3-2pg ROW, 3-2ph ROW, 3-2pi ROW, 3-2pj ROW, 3-2pk ROW, 3-2pl ROW, 3-2pm ROW, 3-2pn ROW, 3-2po ROW, 3-2pp ROW, 3-2pq ROW, 3-2pr ROW, 3-2ps ROW, 3-2pt ROW, 3-2pu ROW, 3-2pv ROW, 3-2pw ROW, 3-2px ROW, 3-2py ROW, 3-2pz ROW, 3-2qa ROW, 3-2qb ROW, 3-2qc ROW, 3-2qd ROW, 3-2qe ROW, 3-2qf ROW, 3-2qg ROW, 3-2qh ROW, 3-2qi ROW, 3-2qj ROW, 3-2qk ROW, 3-2ql ROW, 3-2qm ROW, 3-2qn ROW, 3-2qo ROW, 3-2qp ROW, 3-2qq ROW, 3-2qr ROW, 3-2qs ROW, 3-2qt ROW, 3-2qu ROW, 3-2qv ROW, 3-2qw ROW, 3-2qx ROW, 3-2qy ROW, 3-2qz ROW, 3-2ra ROW, 3-2rb ROW, 3-2rc ROW, 3-2rd ROW, 3-2re ROW, 3-2rf ROW, 3-2rg ROW, 3-2rh ROW, 3-2ri ROW, 3-2rj ROW, 3-2rk ROW, 3-2rl ROW, 3-2rm ROW, 3-2rn ROW, 3-2ro ROW, 3-2rp ROW, 3-2rq ROW, 3-2rr ROW, 3-2rs ROW, 3-2rt ROW, 3-2ru ROW, 3-2rv ROW, 3-2rw ROW, 3-2rx ROW, 3-2ry ROW, 3-2rz ROW, 3-2sa ROW, 3-2sb ROW, 3-2sc ROW, 3-2sd ROW, 3-2se ROW, 3-2sf ROW, 3-2sg ROW, 3-2sh ROW, 3-2si ROW, 3-2sj ROW, 3-2sk ROW, 3-2sl ROW, 3-2sm ROW, 3-2sn ROW, 3-2so ROW, 3-2sp ROW, 3-2sq ROW, 3-2sr ROW, 3-2ss ROW, 3-2st ROW, 3-2su ROW, 3-2sv ROW, 3-2sw ROW, 3-2sx ROW, 3-2sy ROW, 3-2sz ROW, 3-2ta ROW, 3-2tb ROW, 3-2tc ROW, 3-2td ROW, 3-2te ROW, 3-2tf ROW, 3-2tg ROW, 3-2th ROW, 3-2ti ROW, 3-2tj ROW, 3-2tk ROW, 3-2tl ROW, 3-2tm ROW, 3-2tn ROW, 3-2to ROW, 3-2tp ROW, 3-2tq ROW, 3-2tr ROW, 3-2ts ROW, 3-2tt ROW, 3-2tu ROW, 3-2tv ROW, 3-2tw ROW, 3-2tx ROW, 3-2ty ROW, 3-2tz ROW, 3-2ua ROW, 3-2ub ROW, 3-2uc ROW, 3-2ud ROW, 3-2ue ROW, 3-2uf ROW, 3-2ug ROW, 3-2uh ROW, 3-2ui ROW, 3-2uj ROW, 3-2uk ROW, 3-2ul ROW, 3-2um ROW, 3-2un ROW, 3-2uo ROW, 3-2up ROW, 3-2uq ROW, 3-2ur ROW, 3-2us ROW, 3-2ut ROW, 3-2uu ROW, 3-2uv ROW, 3-2uw ROW, 3-2ux ROW, 3-2uy ROW, 3-2uz ROW, 3-2va ROW, 3-2vb ROW, 3-2vc ROW, 3-2vd ROW, 3-2ve ROW, 3-2vf ROW, 3-2vg ROW, 3-2vh ROW, 3-2vi ROW, 3-2vj ROW, 3-2vk ROW, 3-2vl ROW, 3-2vm ROW, 3-2vn ROW, 3-2vo ROW, 3-2vp ROW, 3-2vq ROW, 3-2vr ROW, 3-2vs ROW, 3-2vt ROW, 3-2vu ROW, 3-2vv ROW, 3-2vw ROW, 3-2vx ROW, 3-2vy ROW, 3-2vz ROW, 3-2wa ROW, 3-2wb ROW, 3-2wc ROW, 3-2wd ROW, 3-2we ROW, 3-2wf ROW, 3-2wg ROW, 3-2wh ROW, 3-2wi ROW, 3-2wj ROW, 3-2wk ROW, 3-2wl ROW, 3-2wm ROW, 3-2wn ROW, 3-2wo ROW, 3-2wp ROW, 3-2wq ROW, 3-2wr ROW, 3-2ws ROW, 3-2wt ROW, 3-2wu ROW, 3-2wv ROW, 3-2ww ROW, 3-2wx ROW, 3-2wy ROW, 3-2wz ROW, 3-2xa ROW, 3-2xb ROW, 3-2xc ROW, 3-2xd ROW, 3-2xe ROW, 3-2xf ROW, 3-2xg ROW, 3-2xh ROW, 3-2xi ROW, 3-2xj ROW, 3-2xk ROW, 3-2xl ROW, 3-2xm ROW, 3-2xn ROW, 3-2xo ROW, 3-2xp ROW, 3-2xq ROW, 3-2xr ROW, 3-2xs ROW, 3-2xt ROW, 3-2xu ROW, 3-2xv ROW, 3-2xw ROW, 3-2xx ROW, 3-2xy ROW, 3-2xz ROW, 3-2ya ROW, 3-2yb ROW, 3-2yc ROW, 3-2yd ROW, 3-2ye ROW, 3-2yf ROW, 3-2yg ROW, 3-2yh ROW, 3-2yi ROW, 3-2yj ROW, 3-2yk ROW, 3-2yl ROW, 3-2ym ROW, 3-2yn ROW, 3-2yo ROW, 3-2yp ROW, 3-2yq ROW, 3-2yr ROW, 3-2ys ROW, 3-2yt ROW, 3-2yu ROW, 3-2yv ROW, 3-2yw ROW, 3-2yx ROW, 3-2yy ROW, 3-2yz ROW, 3-2za ROW, 3-2zb ROW, 3-2zc ROW, 3-2zd ROW, 3-2ze ROW, 3-2zf ROW, 3-2zg ROW, 3-2zh ROW, 3-2zi ROW, 3-2zj ROW, 3-2zk ROW, 3-2zl ROW, 3-2zm ROW, 3-2zn ROW, 3-2zo ROW, 3-2zp ROW, 3-2zq ROW, 3-2zr ROW, 3-2zs ROW, 3-2zt ROW, 3-2zu ROW, 3-2zv ROW, 3-2zw ROW, 3-2zx ROW, 3-2zy ROW, 3-2zz ROW

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4. Piles shall be less than sixteen (16) feet in height and width.
 5. Machine piling operations are limited to slopes less than thirty five (35) percent slope when using non-specialized equipment (without a self-leveling cab) or to slopes less than fifty (50) percent slope when using specialized equipment (with a self-leveling cab); and to seasonal restrictions as described in Sec. 42(A)(11)(L-19) and dry conditions as described in Sec. 42(C)(1)(E-1). All areas that are identified on Exhibit S that cannot be machine piled would be hand piled.
 6. Machine piles shall be constructed as compactly as possible. There should be an adequate supply of fine fuels located within and under the covered area of the pile to ensure ignition of the larger fuels. Completed piles shall be free of projecting limbs or slash which would interfere with adequate covering of the piles.
 7. Machine piles shall be adequately covered with a cap of ten (10) feet by ten (10) feet of four (4) mil polyethylene sheeting. The polyethylene sheeting shall be held in place with woody debris or tied with rope or twine to ensure coverage. Coverage shall be completed when piles are constructed, or as directed by the Authorized Officer.
 8. Machine piles shall not be placed within fifteen (15) feet of snags, stumps, reserve trees or large woody debris.
 9. Machine piles will be burned in the fall to spring season after one (1) or more inches of precipitation have occurred.
 10. Machine piles will be burned within twenty-four (24) months of harvest completion.
 11. The Purchaser is required to furnish the fuel and equipment for machine pile burning.
- (c) SD-1f Within twenty (20) feet of the edge of each landing pile, all tops, broken pieces, limbs and debris more than one (1) inch in diameter at the large end and longer than two (2) feet in length shall be piled within fourteen (14) days of completion of hauling logs from that landing. Landing piles shall be kept free of dirt and located off of the driving surface of roads and at least fifteen (15) feet from any Reserve Tree and/or as directed by the Authorized Officer.

Landing piles shall be less than sixteen (16) feet in height and width. Cover piles with large enough piece of four (4) mil polyethylene sheeting to ensure a dry ignition spot, generally ten (10) foot by ten (10) foot. The Purchaser is required to furnish the covering materials. The timing of this covering work shall be in accordance with instructions from the Authorized Officer. If the structure of the landing piles will not permit adequate consumption of piled debris by burning, the Purchaser shall re-pile them at the direction of the Authorized Officer.

1. The BLM will prepare a fire burn plan. Smoke clearance shall be obtained by the BLM the day prior to planned ignition for all burn units.

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2. Landing piles will be burned in the fall to spring season after one (1) or more inches of precipitation have occurred.
 3. Landing piles will be burned within twenty-four (24) months of harvest completion.
 4. If purchaser elects to set aside pole/firewood decks and not put the material in landing piles, the purchaser will be required to remove decks before the expiration of cutting rights. Material will be hauled off site for processing. The Authorized Officer will determine location of pole/hardwood decks.
- (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 Purchaser's operations on Government lands, except for burning and mop up assistance as required herein, and measures required in Section 42(E)(1)(SD-1). In accordance with written instruction 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 his designated representative, assist in preparing units for burning, mop-up, and patrol by furnishing, at his own expense, the services of personnel and equipment on each unit as shown below.

All crews shall arrive on the project area with radios capable of inter-crew communications and communication with a BLM representative at a ratio of one (1) radio per every five (5) crew members.

- (a) For igniting and burning machine piles in units 3-2, 3-6, 27-11, 27-22, 27-24, 32-3, 33-10, 33-11, 33-12, 34-1 and 35-24, 3-2a ROW, 3-2b ROW, 3-2c ROW, 3-2d ROW, 32-3 ROW, 33-6-33.2 ROW and 33-12 ROW as shown on Exhibit S:

1. One (1) person to supervise crew and equipment operators who is Burn Boss Qualified at the complexity level of the burn, and to serve as Purchaser's representative.
2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with fuel, drip torches, shovels, pulaskis, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
3. One (1) Wildland Fire Engine Boss.
4. One (1) Wildland Fire Engine. Each engine shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of one and one half (1½) inch hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each engine shall be equipped with a mounted pump conforming to the standards set forth in the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System requirements. Engine and tank shall be in good working order and shall be filled with water.
5. Six (6) drip torches.
6. Hand ignition with drip torches is required in machine pile units.

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7. All ignition personnel will be directly supervised by a BLM representative.
- (b) For mop-up of machine piles in units 3-2, 3-6, 27-11, 27-22, 27-24, 32-3, 33-10, 33-11, 33-12, 34-1 and 35-24, 3-2a ROW, 3-2b ROW, 3-2c ROW, 3-2d ROW, 32-3 ROW, 33-6-33.2 ROW and 33-12 ROW as shown on Exhibit S:
1. One (1) person to supervise crew and equipment operators who is Burn Boss Qualified at the complexity level of the burn, and to serve as Purchaser's representative.
 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with shovels, pulaskis, or scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
 3. One (1) Wildland Fire Engine Boss.
 4. One (1) Wildland Fire Engine. Each engine shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of one and one half (1½) inch hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each engine shall be equipped with a mounted pump conforming to the standards set forth in the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System requirements. Engine and tank shall be in good working order and shall be filled with water.
- (c) For igniting and burning landing piles:
1. One (1) person to supervise crew and equipment operators who is Burn Boss Qualified at the complexity level of the burn, and to serve as Purchaser's representative.
 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with shovels, pulaskis, or scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
 3. One (1) Wildland Fire Engine Boss.
 4. One (1) Wildland Fire Engine. Each engine shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of one and one half (1½) inch hose and nozzles acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each engine shall be equipped with a mounted pump conforming to the standards set forth in the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System requirements. Engine and tank shall be in good working order and shall be filled with water.
- (d) For mop-up landing piles:
1. One (1) person to supervise crew and equipment operators who is Burn Boss Qualified at the complexity level of the burn, and to serve as Purchaser's representative.

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2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with shovels, pulaskis, or scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
3. One (1) Wildland Fire Engine Boss.
4. One (1) Wildland Fire Engine. Each engine shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of one and one half (1½) inch hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each engine shall be equipped with a mounted pump conforming to the standards set forth in the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System requirements. Engine and tank shall be in good working order and shall be filled with water.

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 natural fabric shirt, full length natural fabric trousers, minimum eight (8)-inch top leather boots, hardhat, and leather gloves. All personnel shall wear long pants and long sleeve shirts, lug-soled leather boots with minimum eight (8)-inch tall uppers that provide ankle support, approved hardhat, and leather gloves. On the day of ignition, clothing shall be of approved aramid fabric, Nomex™ or equivalent, and all personnel shall carry an approved fire shelter. Clothing shall be free of diesel fuel oil.

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 hand/machine piled unit and landing decks, four hundred fifty (450) hours as directed by the Authorized Officer within a 10 days 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, Purchaser's personnel and equipment shall, under supervision of the Authorized Officer, 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:

- (a) 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

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shown in current Oregon-Washington Interagency Fire Fighting Equipment Rental Rates schedule, until the Purchaser is released from such service by the Government, or+

- (b) release the Purchaser from additional suppression work and assume responsibility for suppressing the escaped fire.

In situations where an escaped fire is controlled and contained by an adequate fire break (e.g., trail, road, stream, rock formation), 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 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 The Purchaser shall perform logging residue reduction on approximately three hundred thirty-three (333) acres of harvest area located in all 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	Treatment Description	Cost/Acre
Lop and Scatter	0-12 tons/acre	\$42.00
Machine Pile and Cover	Cost per acre	\$375.00
Machine Pile Burn and Mop-up	0-20 piles/acre	\$28.00
Cover and Burn Landing Decks	Cost per acre	\$56.00

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

Appraised Treatment	Acres	Cost/Ac.	Total Cost Per Treatment
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Lop and Scatter	273.70	\$42.00	\$11,495.40
Machine Pile and Cover	50.65	\$375.00	\$18,993.75
Machine Pile Burn and Mop-up	50.65	\$28.00	\$1,418.20
Cover and Burn Landing Decks	8.75	\$56.00	\$490.00
Total Appraised Cost	333.10		\$32,397.35

- (c) The Total Purchase Price set forth in Section 2 shall be adjusted in a unilateral modification executed by the Contracting Officer by the amount that the total cost of the site preparation treatments designated pursuant to Section 42(E)(3)(SD-5)(a&b) differs from thirty two thousand three hundred ninety seven and 35/100 (\$32,397.35), as calculated by using the estimated acres determined by the Authorized Officer and the per acre costs listed in Section 42(E)(3)(SD-5)(a&b).
- (d) Lop and scatter shall be done in accordance with Section 42(E)(1)(SD-1)(a)(SD-1a); Machine piling and burning shall be done in accordance with Section 42(E)(1)(SD-1)(b)(SD-1b) and Section 42(E)(2)(SD-2)(a&b); Pile and burn landing decks shall be done in accordance with Section 42(E)(1)(SD-1)(d)(SD-1f) and Section 42(E)(2)(SD-2)(c&d).

(F) CONTRIBUTIONS

- (1) C-1 The Purchaser shall perform machine pile burning in accordance with Section 42(E)(1)(SD-1)(b)(SD-1b) and Section 42(E)(2)(SD-2)(a&b). The Purchaser shall have the option of completing this work, or in lieu thereof, may make a contribution to the Bureau of Land Management in the amount of one thousand four hundred eighty four and 10/100 (\$1,484.10), and upon making such contribution, the Purchaser shall be relieved of the obligations set out in this subsection. The Purchaser shall notify the Authorized Officer of their intention to make this contribution prior to the date of execution of this contract. If the total contribution does not exceed five hundred and no/100 dollars (\$500.00), the Purchaser shall pay such amount in full prior to the commencement of operations. If the total contribution exceeds five hundred and no/100 dollars (\$500.00), the Authorized Officer shall establish an installment schedule of payments.
- (2) C-1 The Purchaser shall perform landing pile burning in accordance with Section 42(E)(1)(SD-1)(d)(SD-1f) and Section 42(E)(2)(SD-2)(c&d). The Purchaser shall have the option of completing this work, or in lieu thereof, may make a contribution to the Bureau of Land Management in the amount of five hundred twelve and 80/100 dollars (\$512.80), and upon making such contribution, the Purchaser shall be relieved of the obligations set out in this subsection. The Purchaser shall notify the Authorized Officer of their intention to make this contribution prior to the date of execution of this contract. If the total contribution does not exceed five hundred and no/100 dollars (\$500.00), the Purchaser shall pay such amount in full prior to the commencement of operations. If the total contribution exceeds five hundred and no/100 dollars (\$500.00), the Authorized Officer shall establish an installment schedule of payments.

(G) LOG EXPORTS

- (1) LE-1 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

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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 (8³/₄) 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 (8³/₄) 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.
- (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 Form 5460-16 (Certificate as to Nonsubstitution and the Domestic Processing of Timber). The original of such certification shall be filed with the Authorized Officer. Additionally, when the other party is an affiliate of the Purchaser, the Purchaser will be required to update information under item (2) of Form 5450-17 (Export Determination) and file the form with the Authorized Officer.

In the event an affiliate of the Purchaser has exported private timber within twelve (12) months prior to purchasing or otherwise acquiring Federal timber sold under this contract, the Purchaser shall, upon request, obtain from the affiliate information in a 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-

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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 10 inches, prior to the removal of timber from the contract area. All loads of 11 logs or more will have a minimum of 10 logs clearly and legibly branded on one end regardless of the diameter of the logs. All logs will be branded on loads of 10 logs or less. One end of all branded logs to be processed domestically will be marked with a 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.

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

Flume Peak Timber Sale Seasonal Restriction Matrix, Contract # ORM070-TS-2021.0001

Unrestricted Period

Operations Restricted To Dry Condition, Generally May 15- October 15, Waiver Required

Operations Restricted To June 15- September 15, Waiver Required

* Operations will be suspended if unacceptable damage to residual trees occur.

** In-stream work periods for culvert cleaning are June 15 - September 15th.

*** **All road maintenance and improvements must be completed before wet season haul can occur on that road. Haul will be suspended if the road begins to show damage or conditions develop that could cause damage to the road as described in Sec. 42(C)(2&3)(E-1).**

Dry Condition Yarding and Temporary Route work- Ground-based harvesting and yarding; temporary route work, and rehabilitation activities would not occur when soil moisture at a depth of 4-6 inches is wet enough to maintain form when compressed, or when soil moisture at the surface would readily displace, causing ripples and ruts along equipment tracks. These conditions are generally found when soil moisture at a depth of 4-10 inches is between 15-25% depending on soil type.

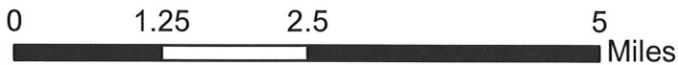
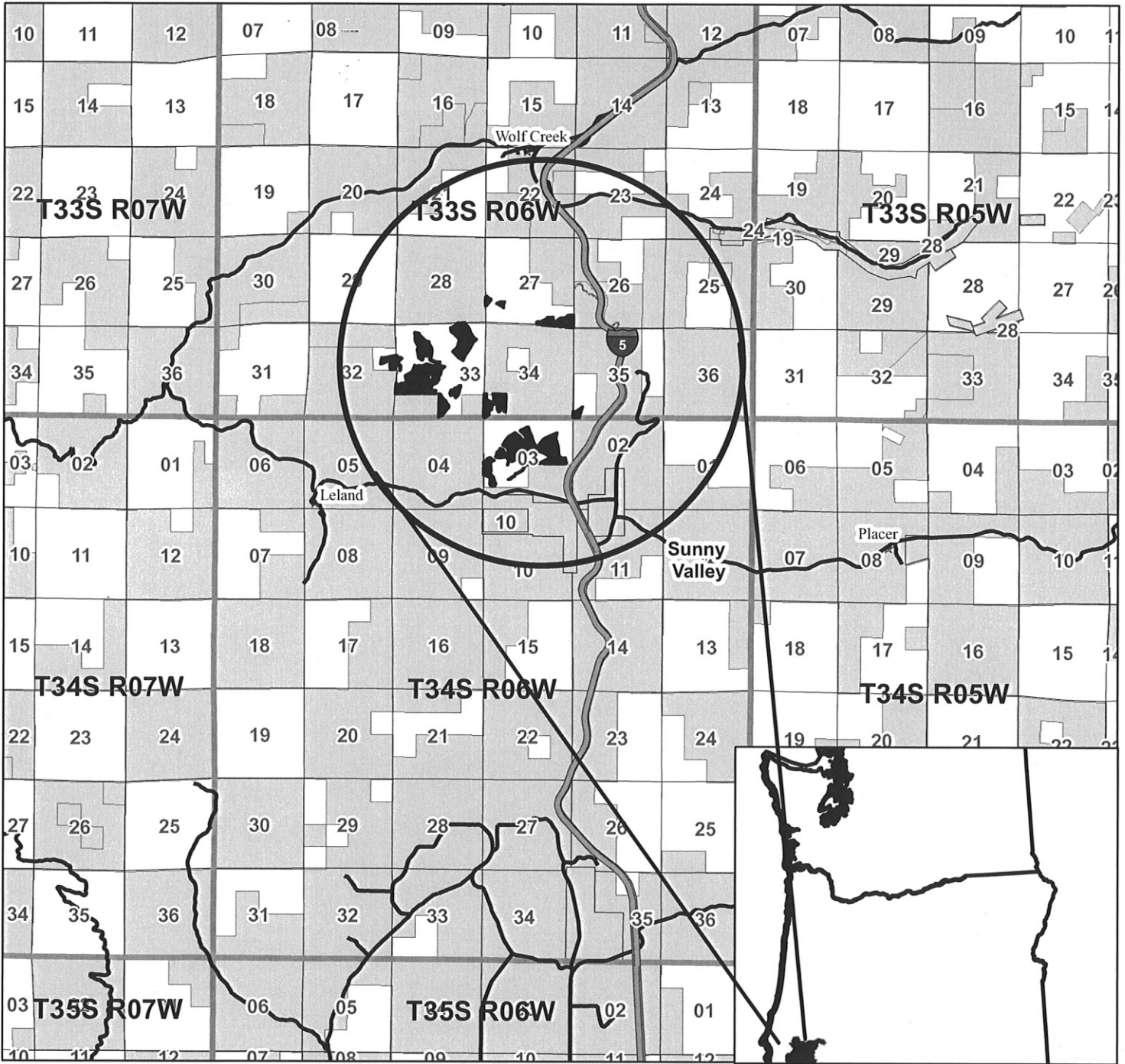
Sale Area	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		1 15	1 15	1 15	1 15	1 15	1 15	1 15	1 15	1 15	1 15	1 15	1 15
Ground Based Yard Units: 27-22, 33-11, 34-1, 35-24, 3-2a ROW, 3-2b ROW, 3-2c ROW, 3-2d ROW, 32-3 ROW, 33-6-33.2 ROW, 33-12 ROW	Manual Falling and Bucking*												
	Mechanical Ground Based Harvesting, Yarding & Piling, Landing Construction, and Rehabilitation Activities Involving Heavy Equipment												
	Road Maintenance**												
	Loading and Hauling***												
	Loading and Hauling on Rocked Temp. Routes & Roads***												
	Manual Falling and Bucking*												
Cable Yard Units: 3-6, 27-11	Mechanical Ground Based Harvesting, Yarding & Piling, Landing Construction, and Rehabilitation Activities Involving Heavy Equipment												
	Road Maintenance**												
	Loading and Hauling***												
	Loading and Hauling on Rocked Temp. Routes & Roads***												

Flume Peak Timber Sale Seasonal Restriction Matrix, Contract # ORM07-TS-2021.0001

Sale Area	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	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
Cable & Ground Based Yard Units: 3-2, 27-24, 32-3, 33-10, 33-12	Manual Falling and Bucking*												
	Mechanical Ground Based Harvesting, Yarding & Piling, Landing Construction, and Rehabilitation Activities Involving Heavy Equipment												
	Road Maintenance**												
	Loading and Hauling***												
	Loading and Hauling on Rocked Temp. Routes & Roads****												

U.S.D.I. BLM MEDFORD DISTRICT
 JOSEPHINE COUNTY
 T. 33 S., R. 6 W., SECTION 27, 32, 33, 34, 35
 T. 34 S., R. 6 W., SECTION 3

TIMBER SALE LOCATION MAP
 FLUME PEAK TIMBER SALE
 SALE NO. ORM070-TS-2021.0001

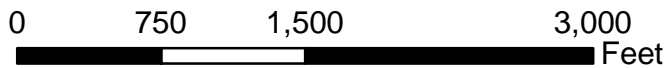
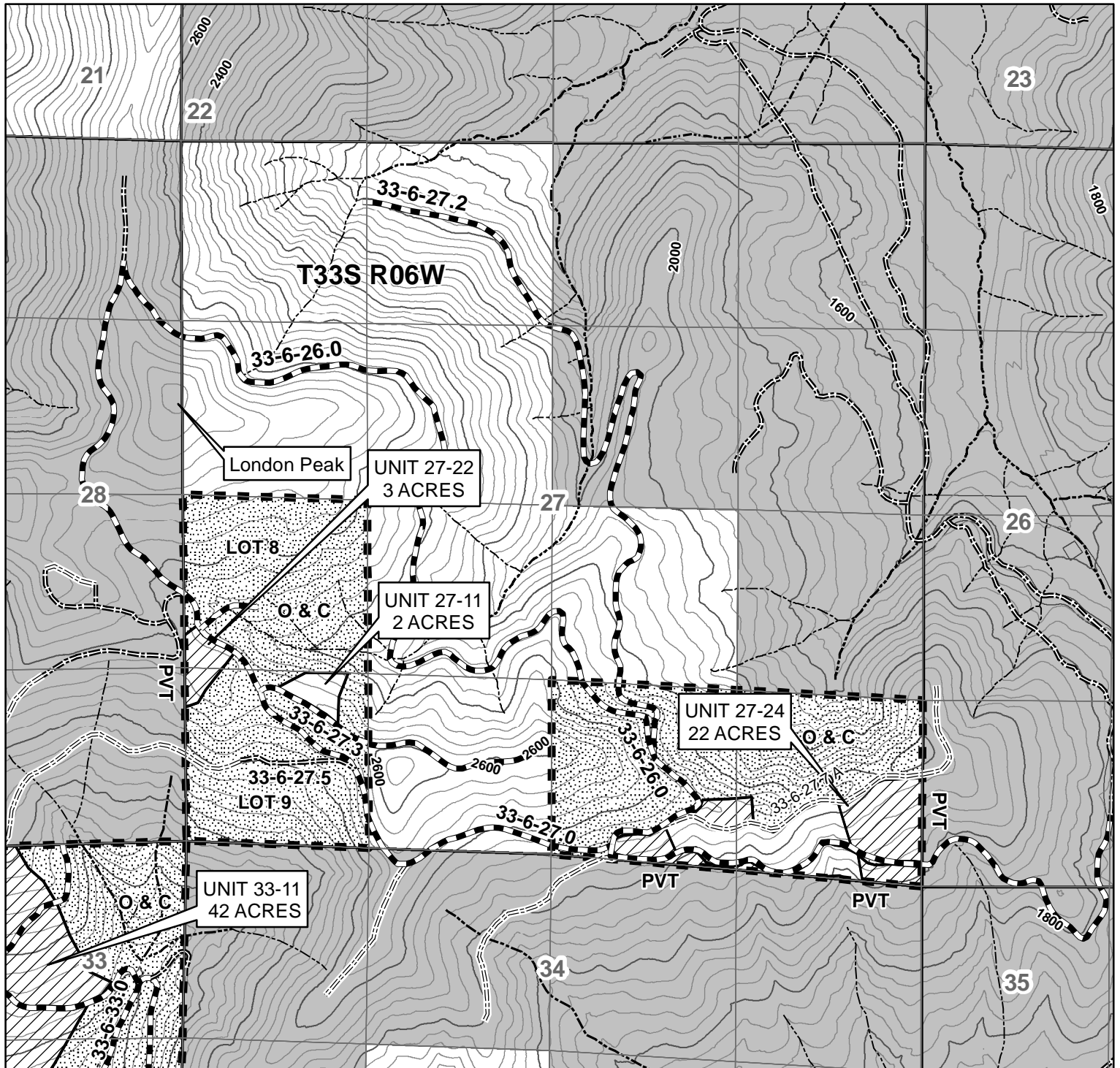


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 Medford, OR 97504
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Map created by DES
 10/29/2020





1 inch = 1,000 feet

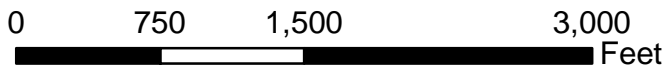
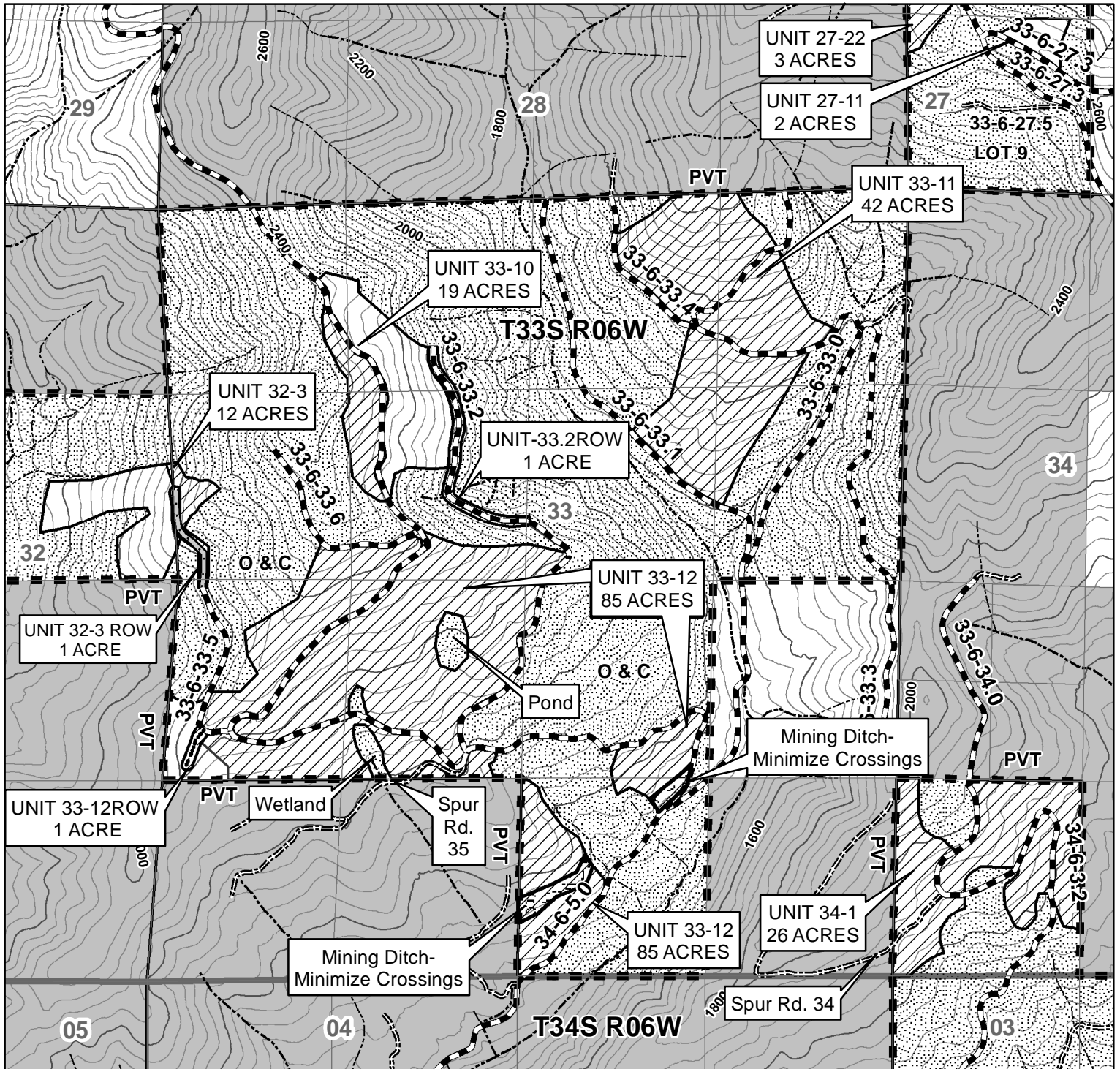
40 FOOT CONTOUR INTERVAL

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9/28/2020





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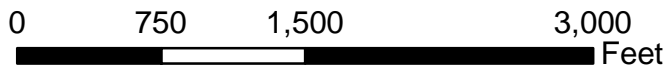
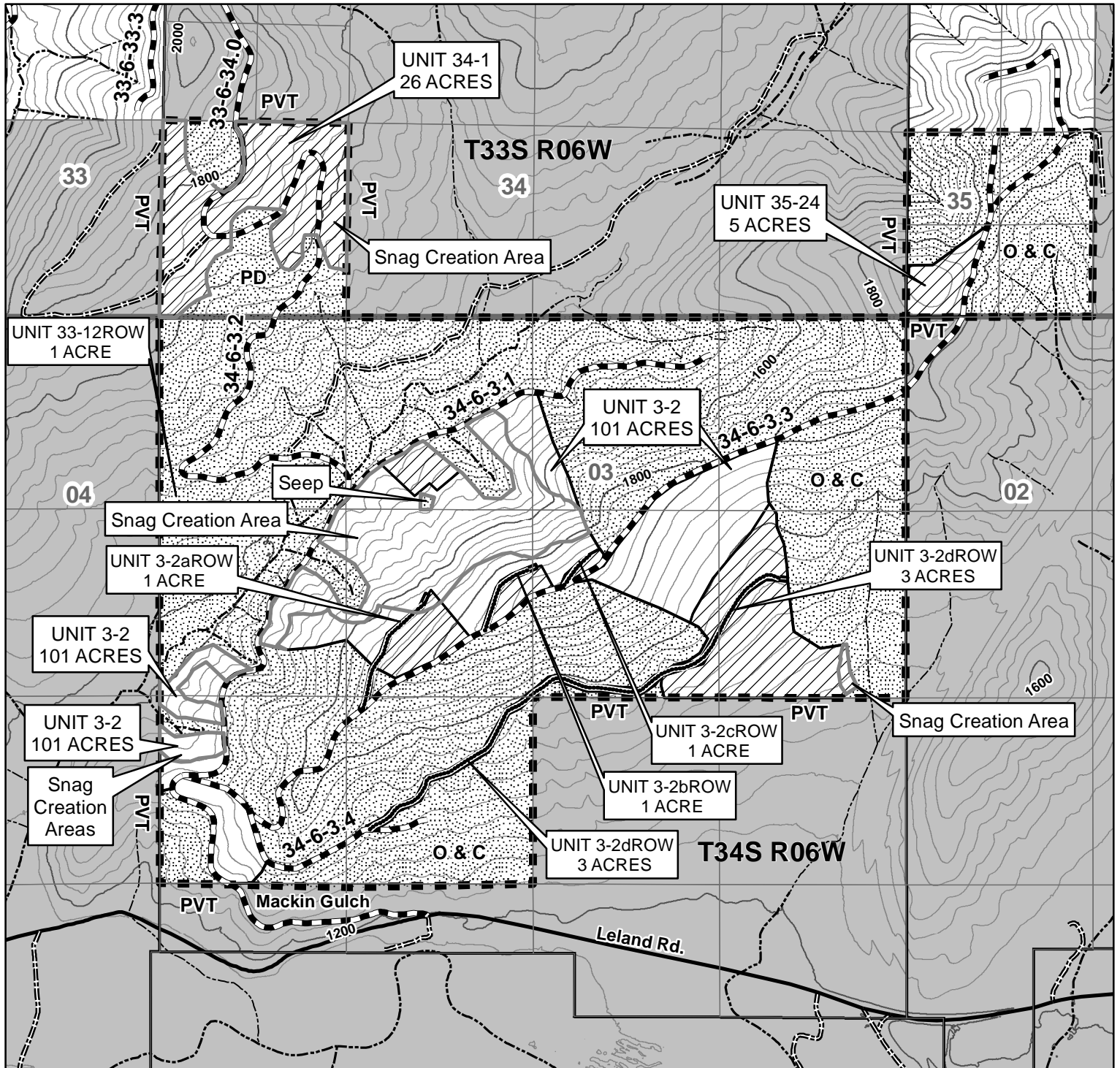
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Legend

Temp Routes

- Temp Route Construction
- Temp Route Reconstruction

Roads

- Paved
- Rocked
- Natural Surface

Streams

- Intermittant
- Perennial



Mining Ditch



Snag Creation Area



Contract Area Boundary

Flume Peak Timber Sale Units

Logging Systems



Cable Yard



Ground Base Yard



Reserve Area Boundary



Township and Range



Sections



Bureau of Land Management



Other

Created by SDT
10/16/2020

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UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management

District: Medford
Sale Number: ORM07-TS-2021.0001
Sale Name: Flume Peak TS

Stumpage Computation

Species	Pond Value	Logging Costs (-)	Profit & Risk (-)	Marg. Logs (+)	Stumpage
Douglas Fir	\$667.50	\$415.57	\$100.13	\$0.00	\$151.81
White Fir	\$455.25	\$415.57	\$68.29	\$0.00	(\$28.61)
Ponderosa Pine	\$290.17	\$415.57	\$43.53	\$0.00	(\$168.93)
Sugar Pine	\$306.93	\$415.57	\$46.04	\$0.00	(\$154.68)
Incense Cedar	\$505.57	\$415.57	\$75.84	\$0.00	\$14.16

Appraised Price Summary

Species	Volume	Unrounded Stumpage & Value		Adjusted Appraised Price	
		\$/M	Value	\$/M	Value
Douglas Fir	2,475.0	\$151.81	\$375,729.75	\$141.20	\$349,470.00
White Fir	135.0	(\$28.61)	(\$3,862.35)	\$45.60	\$6,156.00
Ponderosa Pine	55.0	(\$168.93)	(\$9,291.15)	\$29.10	\$1,600.50
Sugar Pine	26.0	(\$154.68)	(\$4,021.68)	\$30.70	\$798.20
Incense Cedar	18.0	\$14.16	\$254.88	\$50.60	\$910.80
TOTALS	2,709.0				\$358,935.50

Surplus species stumpage has been reduced to compensate for species stumpage below minimum price policy (10% of pond value).

DAVID
CAULFIELD

Digitally signed by
DAVID CAULFIELD
Date: 2020.12.07
15:17:18 -08'00'

Approved by: _____



**United States
Department of the Interior
Bureau of Land Management**

Timber Appraisal

Sale Name: Flume Peak TS	Sale Date: Thursday, January 28, 2021
BLM District: Medford DO	Unit of Measure: 16' MBF
Contract #: ORM07-TS-2021.0001	Contract Term: 36 months
Sale Type: Advertised	Contract Mechanism: 5450-3 Sale of Timber - Lump Sum

Content

Timber Appraisal Summary
Stumpage Summary
Unit Summary
Stump to Truck
Transportation
Engineering Allowances
Other Allowances

Prepared By: Caulfield, David J - 12/7/2020

Approved By: Rentz, George C - 12/7/2020

Legal Description of Contract Area

Land Status	County	Township	Range	Section	Subdivision	Meridian
O&C	Josephine	33S	6W	27	lot 8, lot 9, S1/2SE1/4	Willamette
O&C	Josephine	33S	6W	32	SE1/4NE1/4	Willamette
O&C	Josephine	33S	6W	33	N1/2, N1/2SW1/4,W1/2SE1/4	Willamette
O&C	Josephine	33S	6W	34	SW1/4SW1/4	Willamette
O&C	Josephine	33S	6W	35	SW1/4SW1/4	Willamette
O&C	Josephine	34S	6W	3	N1/2,N1/2SW1/4	Willamette

Species Totals

Species	Net	Gross Merch	Gross	# of Merch Logs	# of Cull Logs	# of Trees
Douglas Fir	2,475.0	2,752.0	2,813.0	54,582	1,013	17,084
White Fir	135.0	142.0	145.0	2,228	75	615
Ponderosa Pine	55.0	58.0	58.0	838	23	286
Sugar Pine	26.0	28.0	28.0	348	17	120
Incense-cedar	18.0	18.0	19.0	524	15	283
Totals	2,709.0	2,998.0	3,063.0	58,520	1,143	18,388

Cutting Area Acres

Regeneration Harvest Acres	Partial Cut Acres	Right of Way Acres	Total Acres	Net Volume per Acre
0.0	322.0	11.0	333.0	8.1

Comments:

*****See Supplemental deficit stumpage worksheet for actual stumpage values*****

Logging Costs

Stump to Truck	\$765,899.61
Transportation	\$181,199.12
Road Construction	\$90,047.31
Maintenance/Rockwear	\$18,698.42
Road Use	\$0.00
Other Allowances	\$69,927.31
Total:	\$1,125,771.77
Total Logging Cost per MBF:	\$415.57

Utilization Centers

<u>Location</u>	<u>Distance</u>	<u>% of Net Volume</u>
White City, OR	50.0 miles	100 %

Profit & Risk

Profit	10 %
Risk	5 %
Total Profit & Risk	15 %

Tract Features

Quadratic Mean DBH	13.3 in
Average GM Log	51 bf
Average Volume per Acre	8.1 mbf
Recovery	88 %
<u>Net MBF volume:</u>	
Green	2,709.0 mbf
Salvage	0 mbf
Export	0 mbf
<u>Ground Base Logging:</u>	
Percent of Sale Volume	60 %
Average Yarding Slope	0 %
Average Yarding Distance	369 ft
<u>Cable Logging:</u>	
Percent of Sale Volume	40 %
Average Yarding Slope	0 %
Average Yarding Distance	267 ft
<u>Aerial Logging:</u>	
Percent of Sale Volume	0 %
Average Yarding Slope	0 %
Average Yarding Distance	0 ft

Cruise

Cruise Completed	September 2020
Cruised By	David Caulfield, Grant Cannon, Jeff Darner

Cruise Method

CRUISE INFORMATION – The Douglas-fir have been cruised using the 3P sampling method to select sample trees. 127 Douglas Fir sample trees were selected using a KZ of 560 in units 3-2, 3-6, 27-11, 27-22, 27-24, 32-3, 33-10, 33-11, 33-12, 35-24 and all Right of ways. 90 Douglas Fir sample trees were selected using a KZ of 68 in unit 34-1. All other species were cruised using 100% cruise method

Stumpage Computation

Species	# of Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Costs	(+) Marginal Log Value	Appraised Price/MBF	Appraised Value
Douglas Fir	17,084	2,475.0	\$667.50	\$100.12	\$415.57	\$0.00	\$151.80	\$375,705.00
White Fir	615	135.0	\$455.25	\$68.29	\$415.57	\$0.00	\$45.60 *	\$6,156.00
Ponderosa Pine	286	55.0	\$290.17	\$43.53	\$415.57	\$0.00	\$29.10 *	\$1,600.50
Sugar Pine	120	26.0	\$306.93	\$46.04	\$415.57	\$0.00	\$30.70 *	\$798.20
Incense-cedar	283	18.0	\$505.57	\$75.84	\$415.57	\$0.00	\$50.60 *	\$910.80
Totals	18,388	2,709.0						\$385,170.50

* Minimum Stumpage values were used to compute the Appraised Price/MBF (10% of Pond Value)

*****See Supplemental deficit stumpage worksheet for actual stumpage values*****

Percent of Volume By Log Grade

Species	No. 1 & 2 Peeler	No. 3 Peeler	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
Douglas Fir				43.0 %	49.0 %	8.0 %	

Comments: Doug fir total value was reduced by \$26,259.75 to make up for Deficit species, White fir, Ponderosa Pine, Sugar Pine, Incense Cedar..

Species	Peeler	No. 1 Sawmill	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
White Fir				55.0 %	40.0 %	5.0 %	

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Ponderosa Pine				56.0 %	38.0 %	6.0 %	

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Sugar Pine			4.0 %	62.0 %	30.0 %	4.0 %	

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Incense-cedar				32.0 %	49.0 %	19.0 %	

Flume Peak TS

Unit Summary

ORM07-TS-2021.0001

Unit: 3-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	808.0	901.0	922.0	5,158
White Fir	129.0	135.0	138.0	564
Ponderosa Pine	20.0	22.0	22.0	64
Sugar Pine	2.0	3.0	3.0	23
Totals:	959.0	1,061.0	1,085.0	5,809

Net Volume/Acre: 9.5 MBF

Regeneration Harvest	0.0
Partial Cut	101.0
Right of Way	0.0
Total Acres:	101.0

Unit: 3-2A

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	7.0	8.0	8.0	48
Sugar Pine	1.0	1.0	1.0	2
Totals:	8.0	9.0	9.0	50

Net Volume/Acre: 8.0 MBF

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
Total Acres:	1.0

Unit: 3-2B

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	5.0	5.0	5.0	27
Totals:	5.0	5.0	5.0	27

Net Volume/Acre: 5.0 MBF

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
Total Acres:	1.0

Unit: 3-2C

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	13.0	15.0	15.0	58
Totals:	13.0	15.0	15.0	58

Net Volume/Acre: 13.0 MBF

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
Total Acres:	1.0

Unit: 3-2D

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	37.0	42.0	43.0	138
Sugar Pine	8.0	9.0	9.0	12
Totals:	45.0	51.0	52.0	150

Net Volume/Acre: 15.0 MBF

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	3.0
Total Acres:	3.0

Unit: 3-6

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	26.0	29.0	30.0	159
Sugar Pine	3.0	3.0	3.0	23
Ponderosa Pine	1.0	1.0	1.0	19
Totals:	30.0	33.0	34.0	201

Net Volume/Acre: 6.0 MBF

Regeneration Harvest	0.0
Partial Cut	5.0
Right of Way	0.0
Total Acres:	5.0

Unit: 27-11

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	16.0	17.0	18.0	115
Totals:	16.0	17.0	18.0	115

Net Volume/Acre: 8.0 MBF

Regeneration Harvest	0.0
Partial Cut	2.0
Right of Way	0.0
Total Acres:	2.0

Unit: 27-22

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	23.0	26.0	27.0	159
Totals:	23.0	26.0	27.0	159

Net Volume/Acre: 7.7 MBF

Regeneration Harvest	0.0
Partial Cut	3.0
Right of Way	0.0
Total Acres:	3.0

Unit: 27-24

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	247.0	276.0	282.0	1,586
Ponderosa Pine	4.0	4.0	4.0	7
Totals:	251.0	280.0	286.0	1,593

Net Volume/Acre: 11.4 MBF

Regeneration Harvest	0.0
Partial Cut	22.0
Right of Way	0.0
Total Acres:	22.0

Unit: 32-3

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	111.0	124.0	127.0	615
Totals:	111.0	124.0	127.0	615

Net Volume/Acre: 9.3 MBF

Regeneration Harvest	0.0
Partial Cut	12.0
Right of Way	0.0
Total Acres:	12.0

Unit: 32-3RW

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	17.0	19.0	19.0	101
Ponderosa Pine	2.0	2.0	2.0	3
Totals:	19.0	21.0	21.0	104

Net Volume/Acre: 19.0 MBF

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
Total Acres:	1.0

Unit: 33-10

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	169.0	189.0	193.0	1,140
Incense-cedar	17.0	17.0	18.0	262
Ponderosa Pine	6.0	6.0	6.0	72
Totals:	192.0	212.0	217.0	1,474

Net Volume/Acre: 10.1 MBF

Regeneration Harvest	0.0
Partial Cut	19.0
Right of Way	0.0
Total Acres:	19.0

Unit: 33-11

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	243.0	271.0	277.0	1,635
Ponderosa Pine	9.0	9.0	9.0	35
Sugar Pine	1.0	1.0	1.0	12
Totals:	253.0	281.0	287.0	1,682

Net Volume/Acre: 6.0 MBF

Regeneration Harvest	0.0
Partial Cut	42.0
Right of Way	0.0
Total Acres:	42.0

Unit: 33-12

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	516.0	575.0	589.0	3,419
Ponderosa Pine	7.0	7.0	7.0	31
White Fir	6.0	7.0	7.0	51
Sugar Pine	4.0	4.0	4.0	26
Incense-cedar	1.0	1.0	1.0	21
Totals:	534.0	594.0	608.0	3,548

Unit: 33-12R

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	4.0	5.0	5.0	21
Totals:	4.0	5.0	5.0	21

Unit: 33.2RW

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	19.0	21.0	22.0	148
Ponderosa Pine	3.0	3.0	3.0	22
Totals:	22.0	24.0	25.0	170

Unit: 34-1

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	152.0	160.0	160.0	2,155
Ponderosa Pine	1.0	1.0	1.0	26
Totals:	153.0	161.0	161.0	2,181

Net Volume/Acre: 6.3 MBF

Regeneration Harvest	0.0
Partial Cut	85.0
Right of Way	0.0
Total Acres:	85.0

Net Volume/Acre: 4.0 MBF

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	1.0
Total Acres:	1.0

Net Volume/Acre: 7.3 MBF

Regeneration Harvest	0.0
Partial Cut	0.0
Right of Way	3.0
Total Acres:	3.0

Net Volume/Acre: 5.9 MBF

Regeneration Harvest	0.0
Partial Cut	26.0
Right of Way	0.0
Total Acres:	26.0

Unit: 35-24

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	62.0	69.0	71.0	402
Sugar Pine	7.0	7.0	7.0	22
Ponderosa Pine	2.0	3.0	3.0	7
Totals:	71.0	79.0	81.0	431

Net Volume/Acre: 14.2 MBF

Regeneration Harvest	0.0
Partial Cut	5.0
Right of Way	0.0
Total Acres:	5.0

Total Stump To Truck	Net Volume	\$/MBF
\$765,899.61	2,709.0	\$282.72

Stump to Truck: Falling, Bucking, Yarding, & Loading

Yarding System	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Cable: Medium Yarder	GM MBF	1,202.0	\$259.86	\$312,351.72	115 Acres
Track Skidder	GM MBF	1,796.0	\$240.04	\$431,111.84	218 Acres, Track Skidder and Feller buncher side..
Subtotal				\$743,463.56	

Additional Costs

Item	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Intermediate Support	Each	3.0	\$250.00	\$750.00	Unit 3-2, 3-30' lift trees
Lift Tree	Each	21.0	\$150.00	\$3,150.00	Unit 3-2, 3-30'. Unit 27-11, 2-30'. Unit 27-22, 4-30'. Unit 32-3, 6-30'. Unit 33-10, 6-30'.
Directional Falling	Hour	231.2	\$35.29	\$8,159.05	
Subtotal				\$12,059.05	

Additional Moves

Equipment	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Cable Side	Total	1.0	\$5,022.00	\$5,022.00	3 Moves(Yarder, Loader, Tractor, Harvester/Delimiter)
Tractor Side	Total	1.0	\$4,203.00	\$4,203.00	3 Moves(loader, Tractor, Feller Buncher,Harvester/Delimiter)
Ripping Cat	Total	1.0	\$1,152.00	\$1,152.00	3 total moves@2hrs load/unload per move, minimum 4 hours per move
Subtotal				\$10,377.00	

Total	Net Volume	\$/MBF
\$181,199.12	2,709.0	\$66.89

Utilization Center	One Way Mileage	Description	Unit of Measure	# of Units	\$/Unit of Measure	Total Cost	% of Sale Volume
White City, OR	50.0	All Species	GM MBF	2,998.0	\$60.44	\$181,199.12	100 %

Engineering Allowances

Total	Net Volume	\$/MBF
\$108,745.73	2,709.0	\$40.14

Cost Item	Total Cost
Road Construction:	\$90,047.31
Road Maintenance/Rockwear:	\$18,698.42
Road Use Fees:	\$0.00

Comments:

See Engineering appraisal for further information..

Total	Net Volume	\$/MBF
\$69,927.31	2,709.0	\$25.81

Environmental Protection

Cost item	Total Cost
Snag Creation	\$7,500.00
Waterbar Skids/Soil class	\$1,441.50
Equipment Wash	\$360.00
Waterbar Corridors	\$220.24
Barricade Skid Trails/Temp routes	\$1,800.00
Seed and Mulch	\$5,425.00
Ripping	\$13,097.50
Subtotal	\$29,844.24

Logging

Cost item	Total Cost
skid Location	\$660.72
Landing Clean-up	\$3,825.00
Landing Construction	\$3,200.00
Subtotal	\$7,685.72

Slash Disposal & Site Prep

Cost item	Total Cost
Machine Pile and Burn and Mop up	\$1,418.20
Lop and Scatter	\$11,495.40
Cover & Burn Landing Decks	\$490.00
Machine Pile and Cover	\$18,993.75
Subtotal	\$32,397.35

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sale: Flume Peak TS
Sale Date: Jan 2021
Prep. By : EFreeman
Tract No: 21-01

ROAD MAINTENANCE AND ROAD USE APPRAISAL WORK SHEET

Summary of Costs

1.1) Road Use - Amortization: **\$0.00/2709 MBF = \$0.00/MBF**

Road Maintenance/Rockwear Obligations:

(2.1) BLM Maintenance	\$0.00
(2.2) BLM Rockwear	\$0.00
(5.1) Purchaser Maintenance Rockwear	<u>\$1,262.04</u>
Total Rockwear Payable to BLM	\$1,262.04
(3.1) 3rd Party Maintenance	\$0.00
(3.2) 3rd Party Rockwear	\$57.74
(4.1) Other Maintenance Payments	\$0.00
Total Maintenance/Rockwear Fee Obligation (2.1-5.1)	<u>\$1,319.78</u>

Purchaser Maintenance Allowances:

(5.2A) Move In	\$2,454.00
(5.2B) Culverts, Catch Basins, Downspouts	\$3,066.72
(5.2C) Grading, Ditching	\$4,136.73
(5.2D) Slide Removal and Slump Repair	\$0.00
(5.2E) Dust Palliative (Water)	\$2,873.52
(5.2F) Surface Repair (Aggregate)	\$1,324.00
(5.2G) Other	\$0.00
Total Purchaser Maintenance Allowances (5.2A-5.2G)	<u>\$13,854.97</u>

(2.1-5.2G) Cost (\$1,319.78 + \$13,854.97) = \$15,174.75
Cost/MBF \$15,174.75 / 2709 MBF = \$5.60/MBF

(5.2H) Decommissioning \$3,523.67

(5.2H) Cost/MBF \$3,523.67/2709 MBF = \$1.30/MBF

(2.1-5.2H) Cost (\$1,319.78 + \$13,854.97 + \$3,523.67) = \$18,698.42

Total Cost/MBF (Excluding Road Use) \$18,698.42/2709 MBF = \$6.90/MBF

1) Road Use Fees - Amortization

Details

R/W Rd Use Vol Road Use
Number Road Number Fee x MBF = Obligation

Subtotal by agreement number

(1.1) Subtotal \$0.00

2) BLM Maintenance - Timber Haul

MAINTENANCE (2.1)

ROCKWEAR (2.2)

Road Number A Surf Maint Vol
and Segment N Type Mi x Fee x MBF = Maint Fee x MBF = Rkwear

(2.1) Subtotal \$0.00

(2.2) Subtotal \$0.00

3) Third Party Maintenance and Rockwear

**Waived for rock in lieu*

MAINTENANCE (3.1)

ROCKWEAR (3.2)

<u>Agrmnt Number</u>	<u>Surface Type</u>	<u>Road Number</u>	<u>Mi</u>	<u>x</u>	<u>Fee x MBF</u>	<u>=</u>	<u>Maint</u>	<u>Fee x MBF</u>	<u>=</u>	<u>Rkwear</u>
M-2000EA	AGG	33-6-34.0	0.27					0.73	98	\$19.32
M-2000EA	AGG	33-6-26.0 A2	0.19					0.73	277	\$38.42
R-768*	AGG	33-6-27.0 A2	0.07					0.73	37	\$0.00*

Subtotal of maintenance fees by agreement number:

Subtotal of rockwear fees by agreement number:

M-2000EA \$57.74
 R-768* \$0.00*

(3.1) Maintenance Subtotal

\$0.00

(3.2) Rockwear Subtotal

\$57.74

4) Other Maintenance Payments - USFS or Others Perform Maintenance

Miles Vol Fee
Agency Road Number (Log) x (mbf) x MBF/MI = Cost

(4.1) Subtotal \$0.00

5) Purchaser Maintenance - Rock Wear

TIMBER HAUL (5.1)

Road No and Segment	A N	Mi	x	RkWear Fee	x	Vol MBF	=	Total RkWear
33-6-26.0 B	N	0.40		0.73		277		\$80.88
33-6-26.0 C	N	0.07		0.73		105		\$5.37
33-6-26.0 C	N	0.08		0.73		18		\$1.05
33-6-27.6 A	N	0.26		0.00		87		\$0.00
33-6-27.0 A1	N	0.26		0.73		37		\$7.02
33-6-27.0 A3	N	0.28		0.73		37		\$7.56
33-6-27.0 A3	N	0.03		0.73		22		\$0.48
33-6-27.3	N	0.11		0.73		15		\$1.20
34-6-3.1 C	A	0.08		0.73		29		\$1.69
34-6-3.1 B	A	0.35		0.73		182		\$46.50
34-6-3.1 B	A	0.16		0.73		257		\$30.02
34-6-3.1 A	A	0.51		0.73		1284		\$478.03
34-6-3.4	A	0.16		0.73		229		\$26.75
34-6-3.4	A	0.07		0.73		241		\$12.32
34-6-3.3 A	A	0.69		0.73		71		\$35.76
34-6-3.3 A	A	0.19		0.73		261		\$36.20
34-6-3.3 A	A	0.12		0.73		395		\$34.60
34-6-3.3 A	A	0.11		0.73		510		\$40.95
34-6-3.3 A	A	0.08		0.73		590		\$34.46
34-6-3.3 A	A	0.27		0.73		771		\$151.96
34-6-3.3 A	A	0.10		0.73		1027		\$74.97
Spur Rd 34	A	0.06		0.00		31		\$0.00
34-6-3.2	A	0.82		0.73		153		\$91.59
Spur Rd 33	A	0.06		0.00		26		\$0.00
33-6-26.0 A1	N	0.11		0.73		277		\$22.24
33-6-26.0 A3	N	0.20		0.73		277		\$40.44

(5.1) Subtotal \$1,262.04

Purchaser Operational Maintenance

Move In

No Equipment	Move Units	Cost/ x in	Dist x 50 Mi	Sub- Factor	= total
Motor Grader:	1	3	\$414.00	1.00	\$1,242.00
Back Hoe:	1	3	\$308.00	1.00	\$924.00
Loader:			\$414.00	0.63	\$0.00
Water Truck:	1	3	\$96.00	1.00	\$288.00
Dump Truck:			\$91.00	0.63	\$0.00
Excavator:			\$414.00	0.63	\$0.00
Roller:			\$414.00	0.63	\$0.00

(5.2A) Total \$2,454.00

Culvert Maintenance - Including Catch basins and Downpipes

	Miles	x	Cost/Mi	=	Subtotal
8	\$383.34		\$3,066.72		

(5.2B) Total \$3,066.72

Grading (Includes Ditches and Shoulders)

Miles	x	Cost/Mi	x	Freq	=	Subtotal
Blade w/ Ditch:	4.00	\$708.54	1			\$2,834.16
Blade w/o Ditch:	3.00	\$434.19	1			\$1,302.57

(5.2C) Total \$4,136.73

Slide and Slough removal, Slump Repair (15 sta-yds. ea.)

Type	No Slides	Hours	Equip	
Equipment	/Slumps	x Each	x Cost	= Subtotal
Grader:	0	0	\$142.72	\$0.00
Loader:	0	0	\$102.93	\$0.00
Backhoe:	0	0	\$87.60	\$0.00

(5.2D) Total \$0.00

Dust Palliative (Water)

Spreading Hours

	No	Freq	Truck				
	Miles	/ MPH	= Hours	x Days	x /Day	= Hours	
	3.00	5	0.6	60	1	36	
Load & Haul =			0.0	0	0	0	
Total Hours =			36				

Truck Cost: \$79.82/Hr. x 36.0 Hours = \$2,873.52

(5.2E) Total \$2,873.52

Surface Repair (Aggregate)

Quarry / Source Name: Commercial Source		
Production Cost:	50.0 CY x \$15.00/CY	= \$750.00
Haul to Stockpile:		
Grades > 15%	50.0 CY x ((\$1.78/CY x 0.00 Mi) + \$0.59)	= \$0.00
Grades <= 15%	50.0 CY x ((\$0.89/CY x 5.00 Mi) + \$0.59)	= \$252.00
State / Co Roads	50.0 CY x ((\$0.39/CY x 15.00 Mi) + \$0.59)	= \$322.00
	SubTotal	<u>\$1,324.00</u>

(5.2F) Total \$1,324.00

Other

Fallen Timber Cutting:	0.0 Hours x \$0.00/Hour	=\$0.00
Brush Cutting/Tree Trimming:	0.0 Hours x \$0.00/Hour	=\$0.00
Oil/Asphalt Materials:	Lump Sum	=\$0.00
Signing for Dust Palliatives:	Lump Sum	=\$0.00
	Lump Sum	=\$0.00
	Lump Sum	=\$0.00
	Lump Sum	=\$0.00
	Lump Sum	=\$0.00
	Lump Sum	=\$0.00

(5.2G) Total \$0.00

Decommissioning

Other Costs

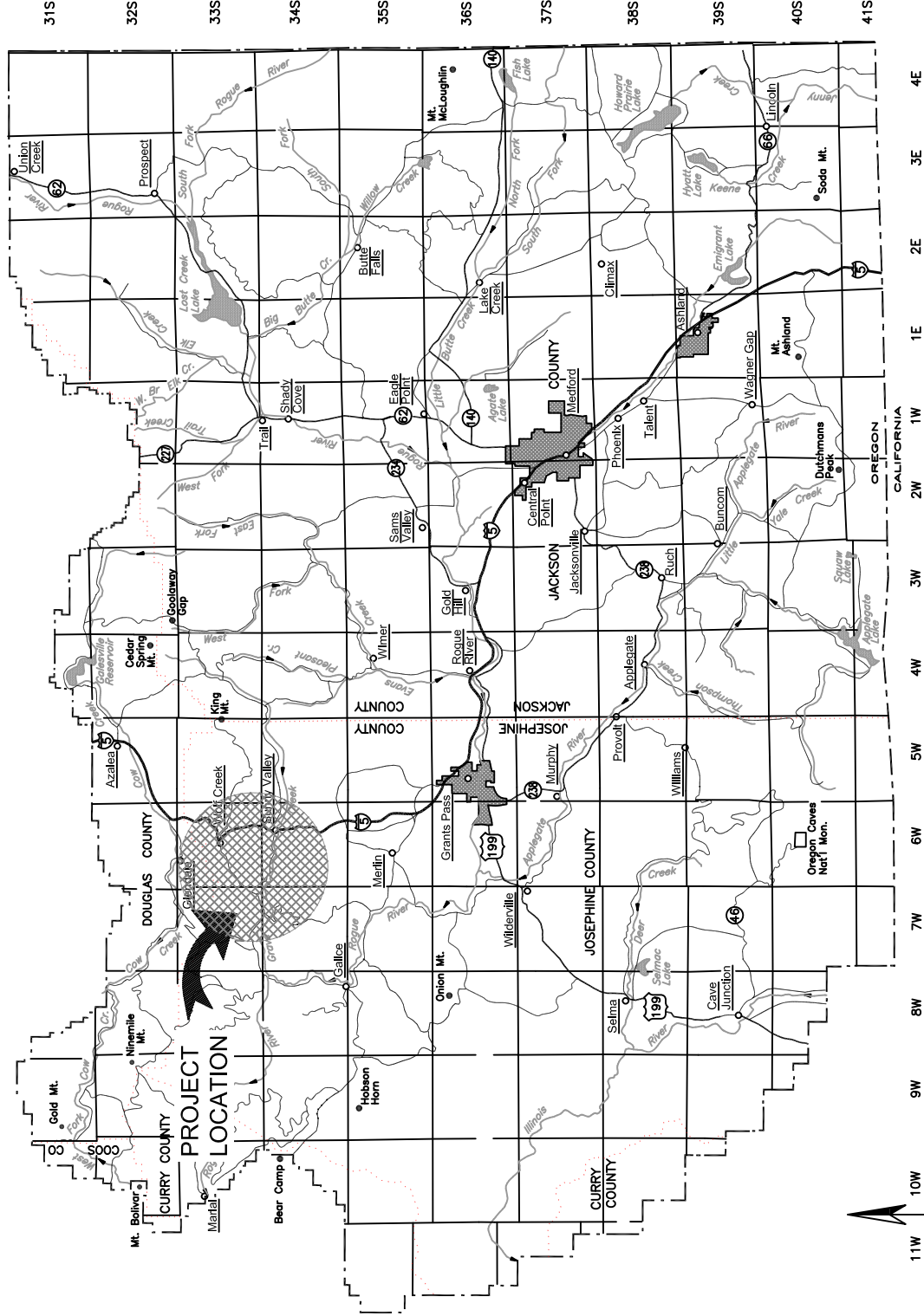
<u>Road</u> <u>Number</u>	<u>Cubic Yds</u> <u>Pullback Material</u>		<u>Qty</u> <u>Waterbars</u>		<u>Qty</u> <u>Earthen Barriers</u>	<u>= Total</u>
TR 03-02-D	(0x\$1.80)	+	(18x\$55.93)	+	(1x\$167.80)	= \$1,174.54
TR 03-02-A	(0x\$1.80)	+	(4x\$55.93)	+	(1x\$167.80)	= \$391.52
TR 03-02-B	(0x\$1.80)	+	(2x\$55.93)	+	(1x\$167.80)	= \$279.66
TR 03-02-C	(0x\$1.80)	+	(1x\$55.93)	+	(1x\$167.80)	= \$223.73
TR 33-12	(0x\$1.80)	+	(1x\$55.93)	+	(1x\$167.80)	= \$223.73
TR 32-3	(0x\$1.80)	+	(5x\$55.93)	+	(1x\$167.80)	= \$447.45
33-6-33.2 B	(0x\$1.80)	+	(8x\$55.93)	+	(1x\$167.80)	= \$615.24
34-6-3.4	(0x\$1.80)	+	(0x\$55.93)	+	(1x\$167.80)	= \$167.80

(Other Cost) Total \$3,523.67

(5.2H) Decommissioning Total \$3,523.67

UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 MEDFORD DISTRICT

EXHIBIT C1
 TRACT NO. ORM07-TS-21-01



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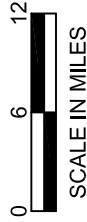


EXHIBIT NO.	DESCRIPTION
C1	TITLE SHEET
C2	ROAD RENOVATION MAPS
C3	ESTIMATE OF QUANTITIES - CONSTRUCTION
C4	SPECIFICATION SHEETS
C5	TYPICAL ROAD RENOVATION DETAILS
C6	ROADSIDE BRUSHING DETAILS
C7	ROADSIDE MANAGEMENT UNIT DETAILS
C8	DRAINAGE & EROSION CONTROL INSTALLATION
C9	ROAD RENOVATION WORKLIST
C10	ROAD SPECIFICATIONS
C11	SPECIAL PROVISIONS
D1	ROAD MAINTENANCE SPECIFICATIONS
D2	ROAD MAINTENANCE MAPS
D3	DECOMMISSIONING MAPS
D4	DECOMMISSIONING WORK LIST
D5	ESTIMATE OF QUANTITIES - MAINTENANCE
D6	BARRICADE & WATER BAR DETAILS

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

FLUME PEAK
 TIMBER SALE
 TITLE SHEET

REV. NO.	DESCRIPTION	DATE	APPROV.

DESIGNED: _____
 REVIEWED: _____
 APPROVED: _____
 DRAFTED BY: BLM
 DATE: SEPT 2020
 SCALE: 1" = 12 MI
 SHEET: 1 OF 1
 DRAWING NO.: OR-11-91113.4-1

EXHIBIT C2-1

LEGEND

- TS Units
- Land Ownership**
- BLM
- Private
- Industrial Lands

Roads by Surface

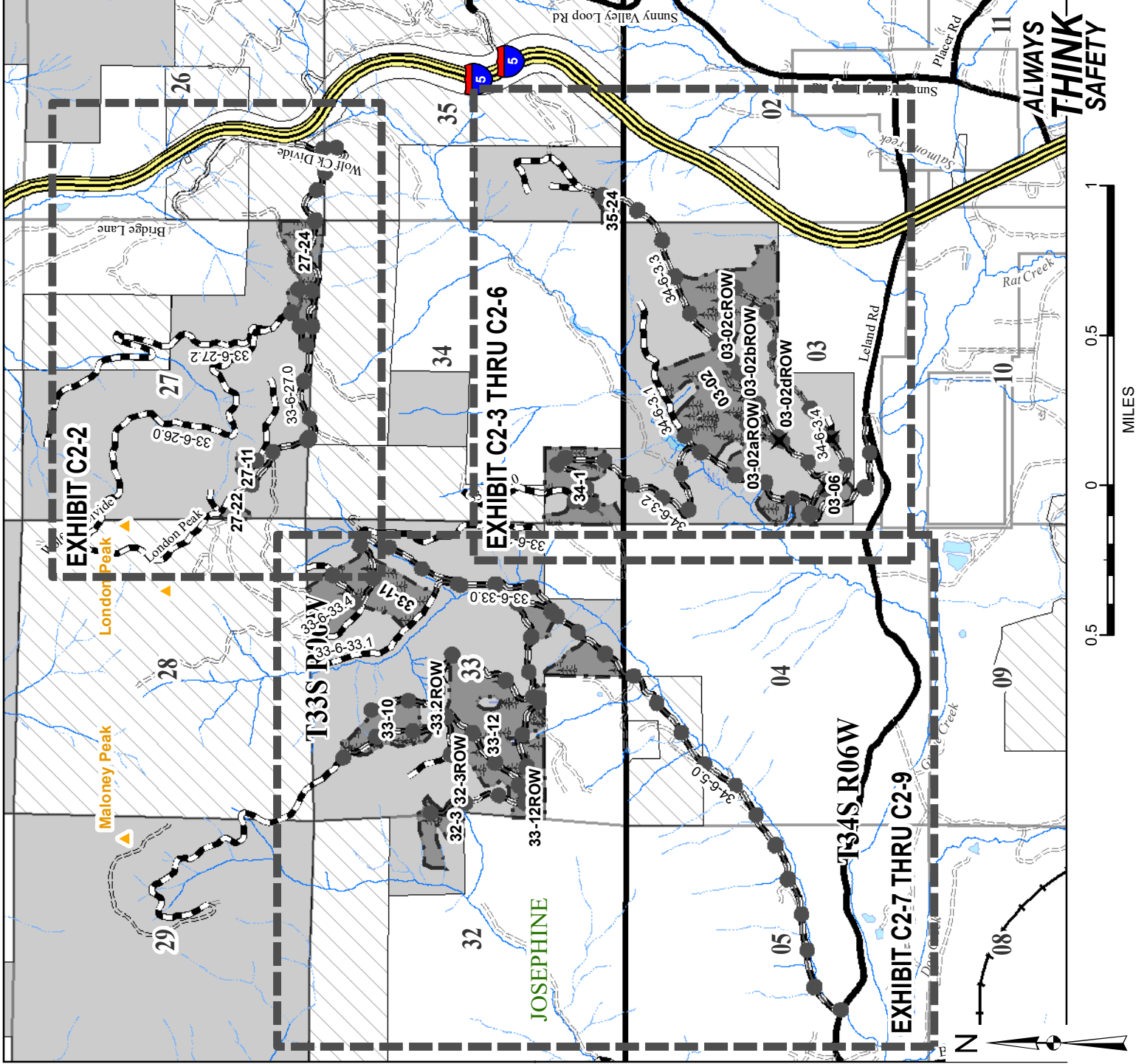
- Bituminous
- Aggregate
- Natural
- Unknown

Renovation Responsibility - Haul Rds

- Purchaser

Temp Route Type

- New construction
- Reconstruction
- Gates
- Barrier (Tree/Berm)







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Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD RENOVATION MAP OVERALL SALE AREA			
DRAFTED BY: ELF			SHEET: 1 OF 9
DATE: SEPT 2020			

EXHIBIT C2-2






LEGEND

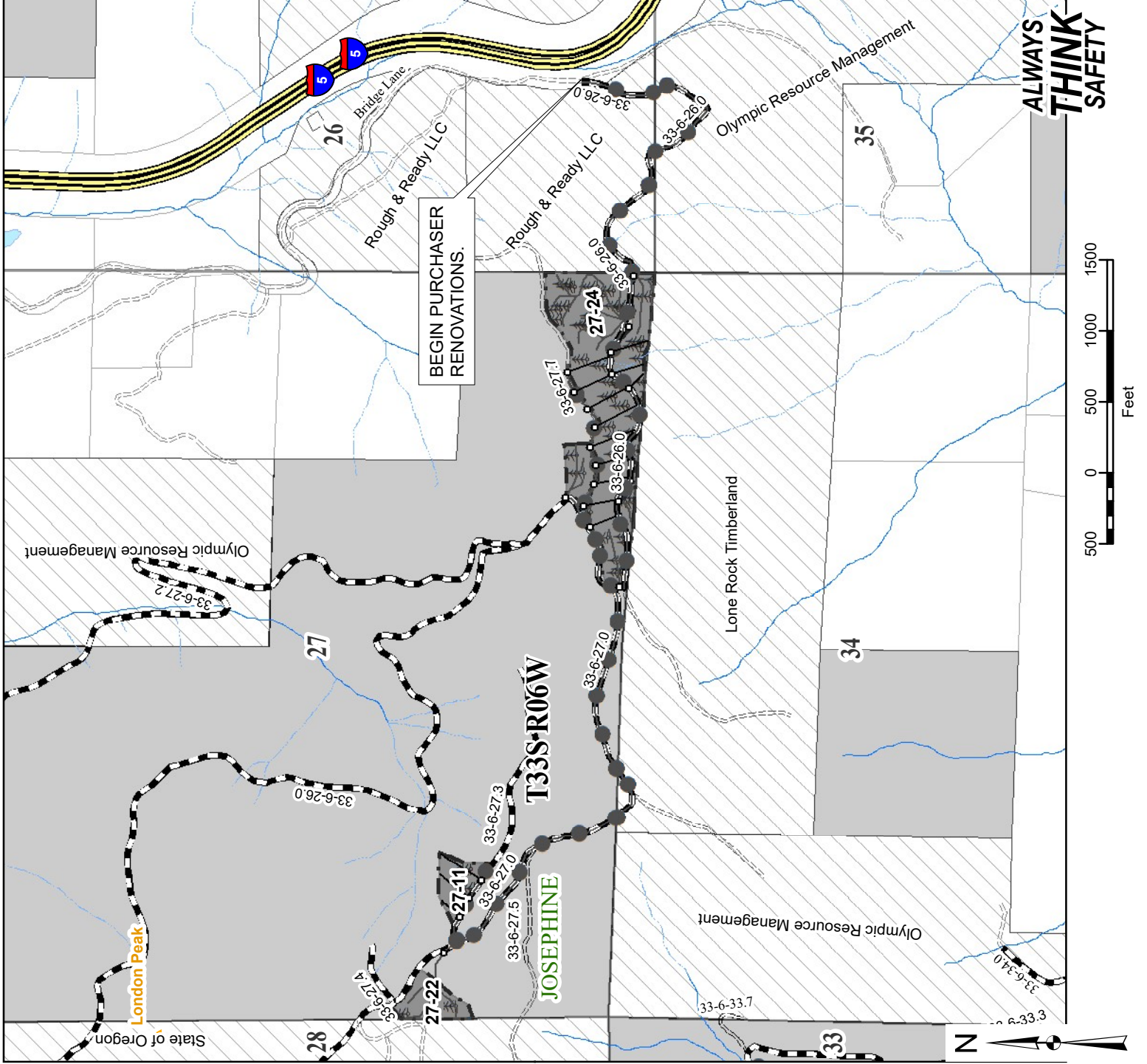
-  TS Units
- Land Ownership**
 -  BLM
 -  Private
 -  Industrial Lands

Roads by Surface

-  Bituminous
-  Aggregate
-  Natural
-  Unknown

Renovation Responsibility - Haul Rds

-  Purchaser
- Temp Route Type**
 -  New construction
 -  Reconstruction
 -  Gates
 -  Barrier (Tree/Berm)



Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD RENOVATION MAP LONDON PEAK AREA			
DRAFTED BY: ELF			
DATE: SEPT 2020		SHEET: 2 OF 9	

EXHIBIT C2-3

LEGEND

- TS Units
- Land Ownership**
- BLM
- Private
- Industrial Lands

Roads by Surface

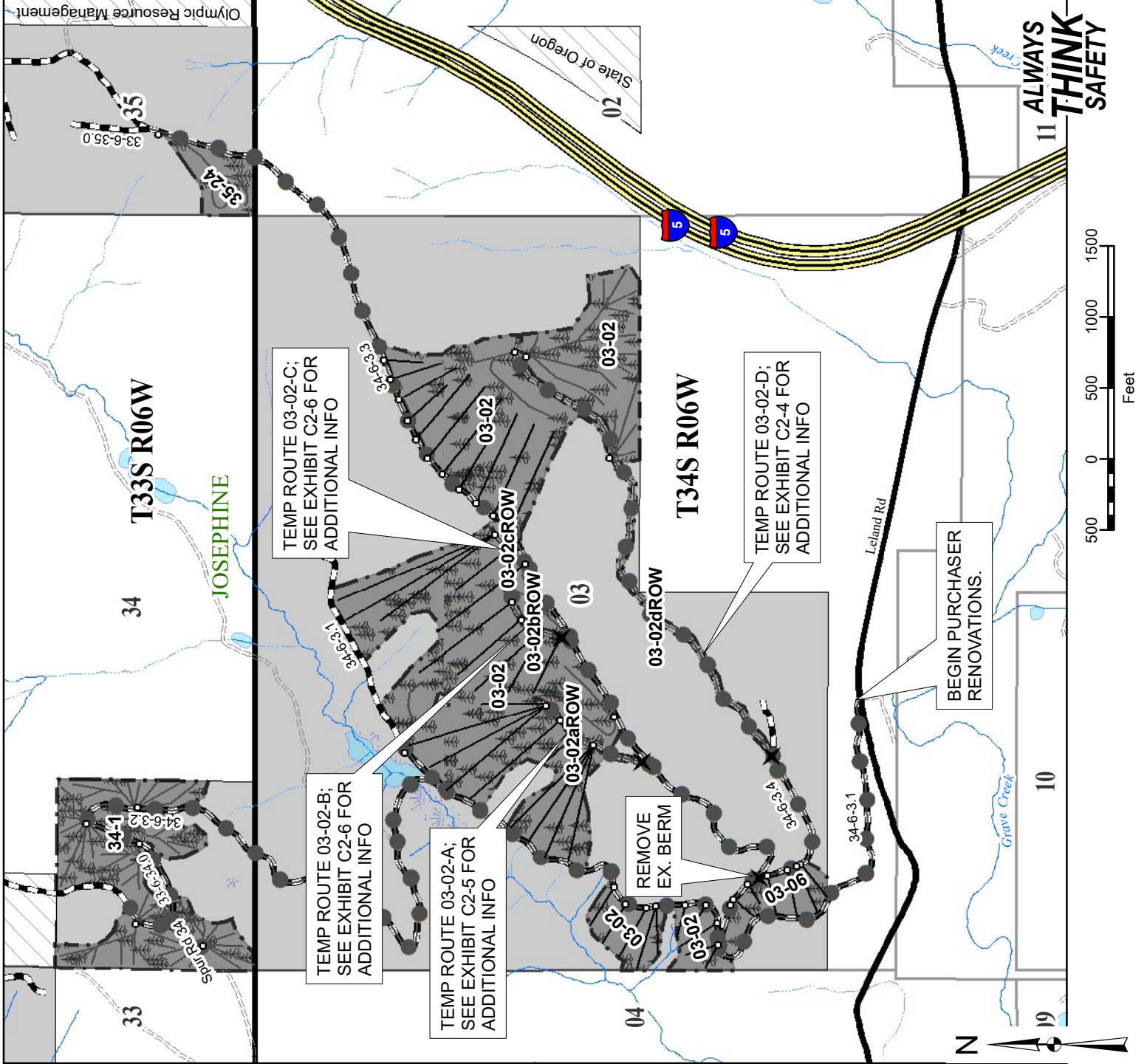
- Bituminous
- Aggregate
- Natural
- Unknown

Renovation Responsibility - Haul Rds

- Purchaser
- New construction
- Reconstruction
- Gates
- Barrier (Tree/Berm)

Temp Route Type

- New construction
- Reconstruction
- Gates
- Barrier (Tree/Berm)



Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD RENOVATION MAP MACKIN GULCH AREA			
DRAFTED BY: ELF			
DATE: SEPT 2020		SHEET: 3 OF 9	

EXHIBIT C2-4

LEGEND

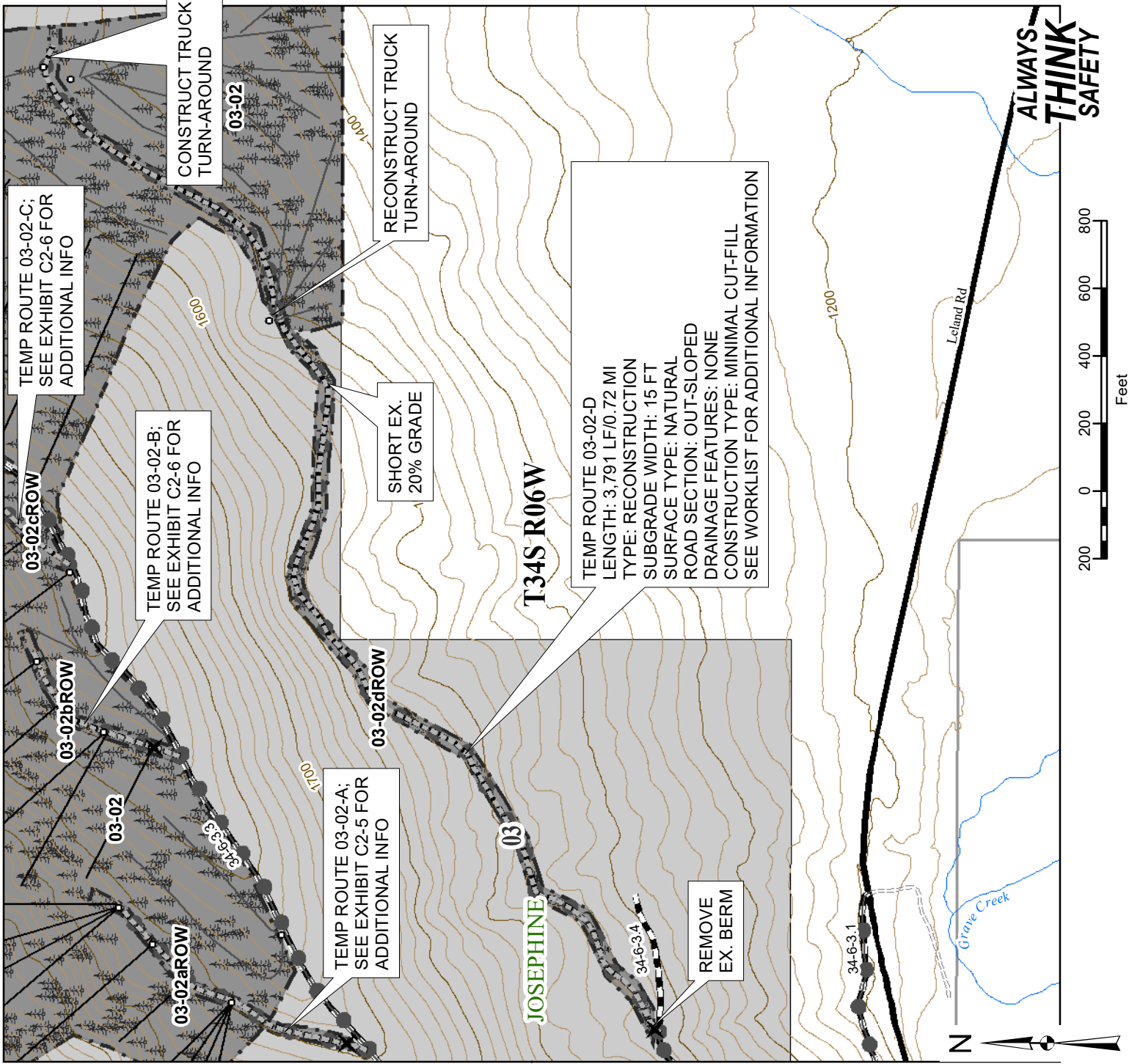
- TS Units
- Land Ownership**
- BLM
- Private
- Industrial Lands

Roads by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Renovation Responsibility - Haul Rds





- Purchaser
- Temp Route Type**
- New construction
- Reconstruction
- Gates
- Barrier (Tree/Berm)







Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD RENOVATION MAP MACKIN GULCH AREA			
DRAFTED BY: ELF			SHEET: 4 OF 9
DATE: SEPT 2020			

EXHIBIT C2-5

LEGEND

-  TS Units
- Land Ownership**
-  BLM
-  Private
-  Industrial Lands

Roads by Surface

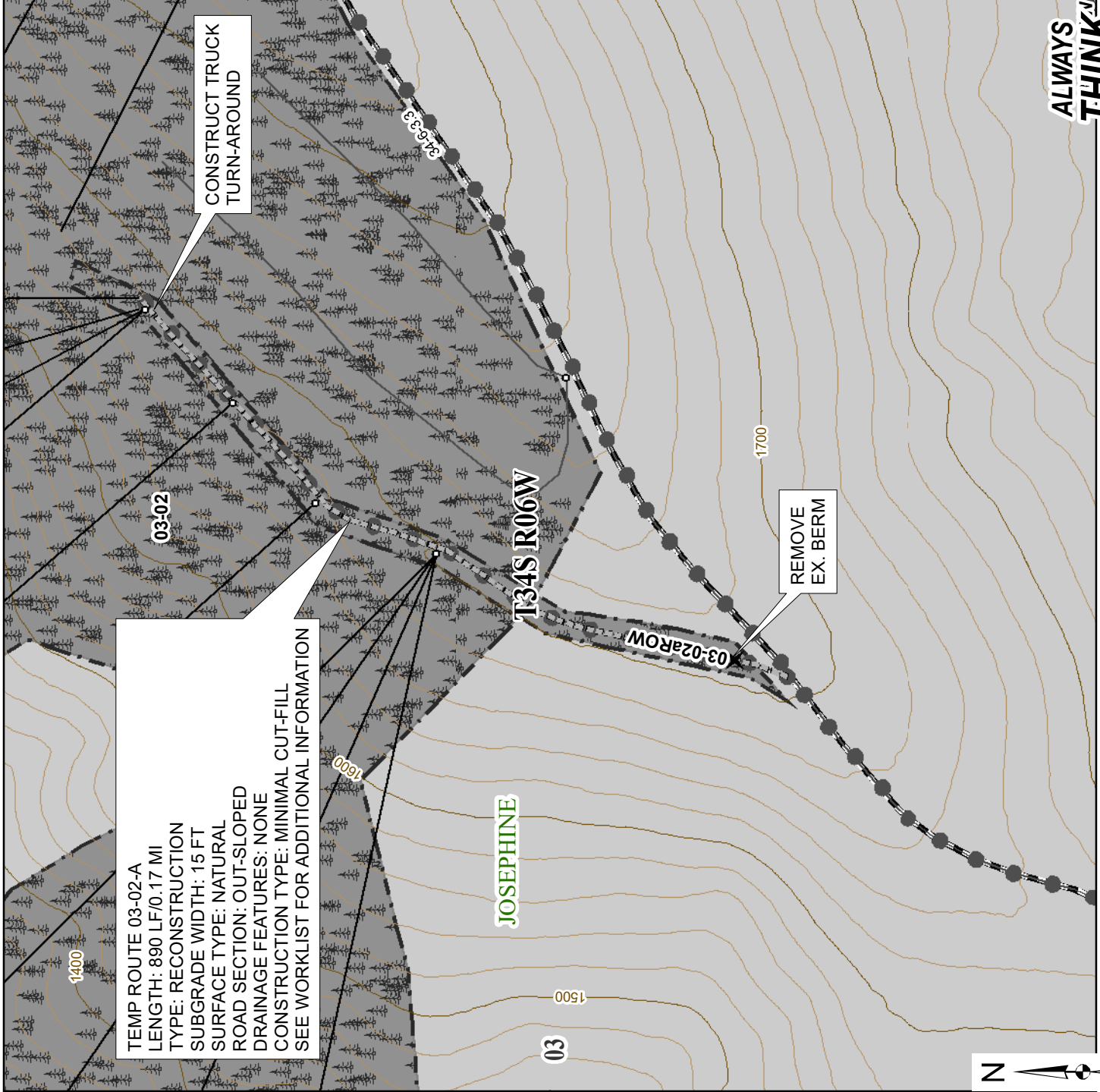
-  Bituminous
-  Aggregate
-  Natural
-  Unknown

Renovation Responsibility - Haul Rds

-  Purchaser

Temp Route Type

-  New construction
-  Reconstruction
-  Gates
-  Barrier (Tree/Berm)



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Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD RENOVATION MAP MACKIN GULCH AREA			
DRAFTED BY: ELF			SHEET: 5 OF 9
DATE: SEPT 2020			

EXHIBIT C2-6

LEGEND

- TS Units
- Land Ownership**
 - BLM
 - Private
 - Industrial Lands

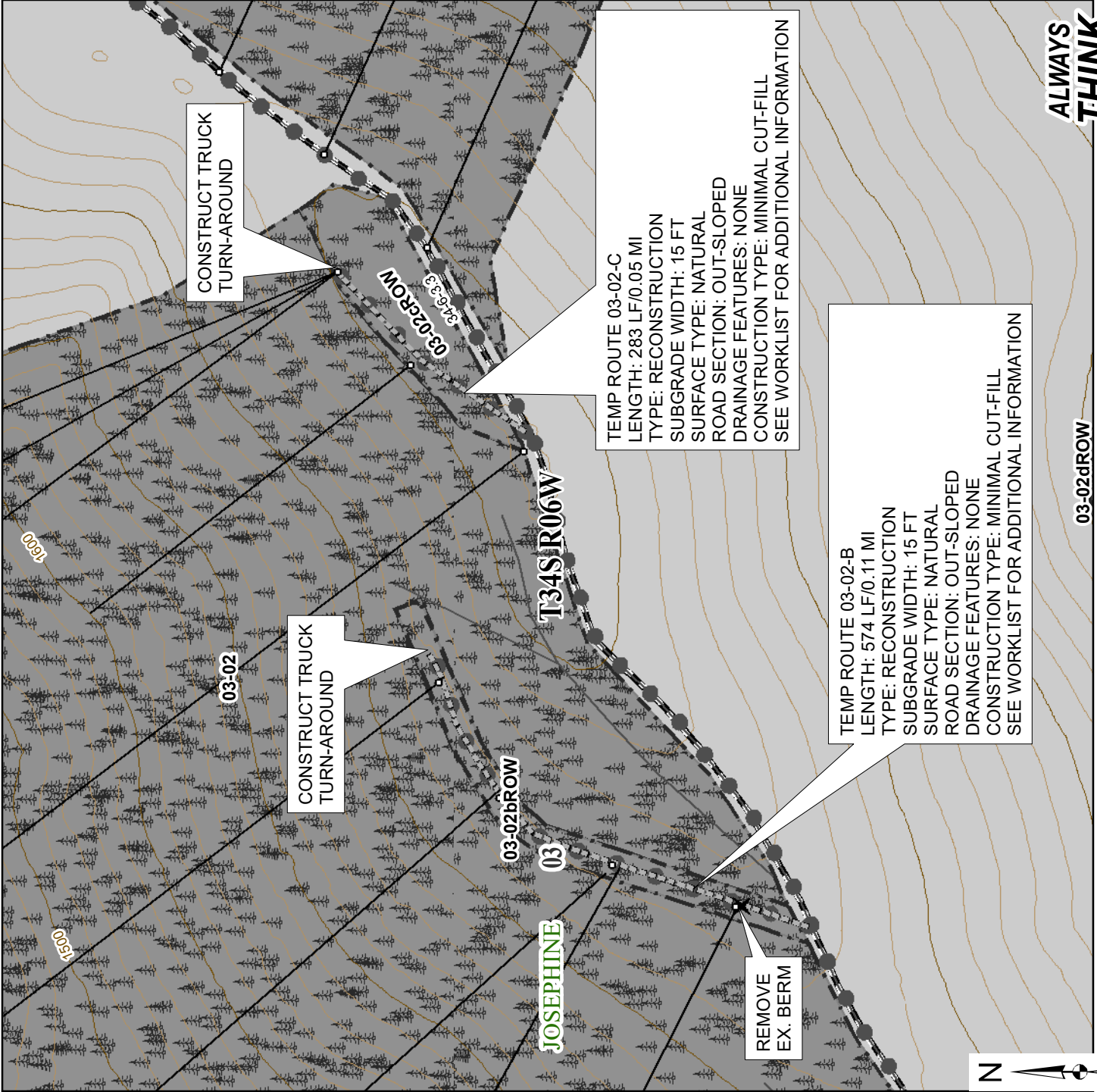
- Roads by Surface**
 - Bituminous
 - Aggregate
 - Natural
 - Unknown

Renovation Responsibility - Haul Rds

- Purchaser

Temp Route Type

- New construction
- Reconstruction
- Gates
- Barrier (Tree/Berm)



CONSTRUCT TRUCK TURN-AROUND

CONSTRUCT TRUCK TURN-AROUND

TEMP ROUTE 03-02-C
 LENGTH: 283 LF/0.05 MI
 TYPE: RECONSTRUCTION
 SUBGRADE WIDTH: 15 FT
 SURFACE TYPE: NATURAL
 ROAD SECTION: OUT-SLOPED
 DRAINAGE FEATURES: NONE
 CONSTRUCTION TYPE: MINIMAL CUT-FILL
 SEE WORKLIST FOR ADDITIONAL INFORMATION

TEMP ROUTE 03-02-B
 LENGTH: 574 LF/0.11 MI
 TYPE: RECONSTRUCTION
 SUBGRADE WIDTH: 15 FT
 SURFACE TYPE: NATURAL
 ROAD SECTION: OUT-SLOPED
 DRAINAGE FEATURES: NONE
 CONSTRUCTION TYPE: MINIMAL CUT-FILL
 SEE WORKLIST FOR ADDITIONAL INFORMATION

REMOVE EX. BERM

ALWAYS THINK SAFETY

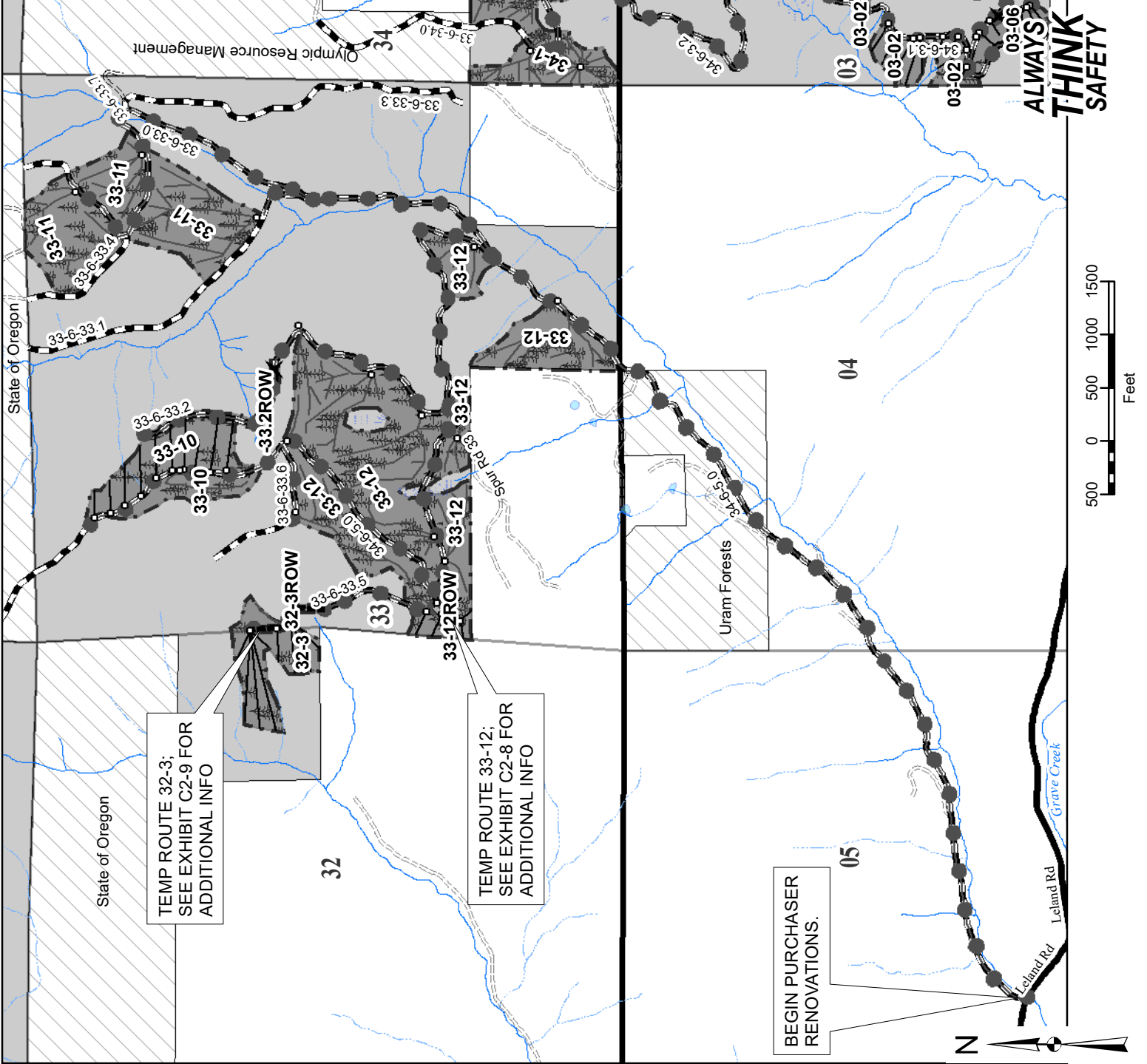


Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD RENOVATION MAP MACKIN GULCH AREA			
DRAFTED BY: ELF		SHEET: 6 OF 9	
DATE: SEPT 2020			

EXHIBIT C2-7

LEGEND

- TS Units
- Land Ownership**
 - BLM
 - Private
 - Industrial Lands
- Roads by Surface**
 - Bituminous
 - Aggregate
 - Natural
 - Unknown
- Renovation Responsibility - Haul Rds**
 - Purchaser
- Temp Route Type**
 - New construction
 - Reconstruction
 - Gates
 - Barrier (Tree/Berm)



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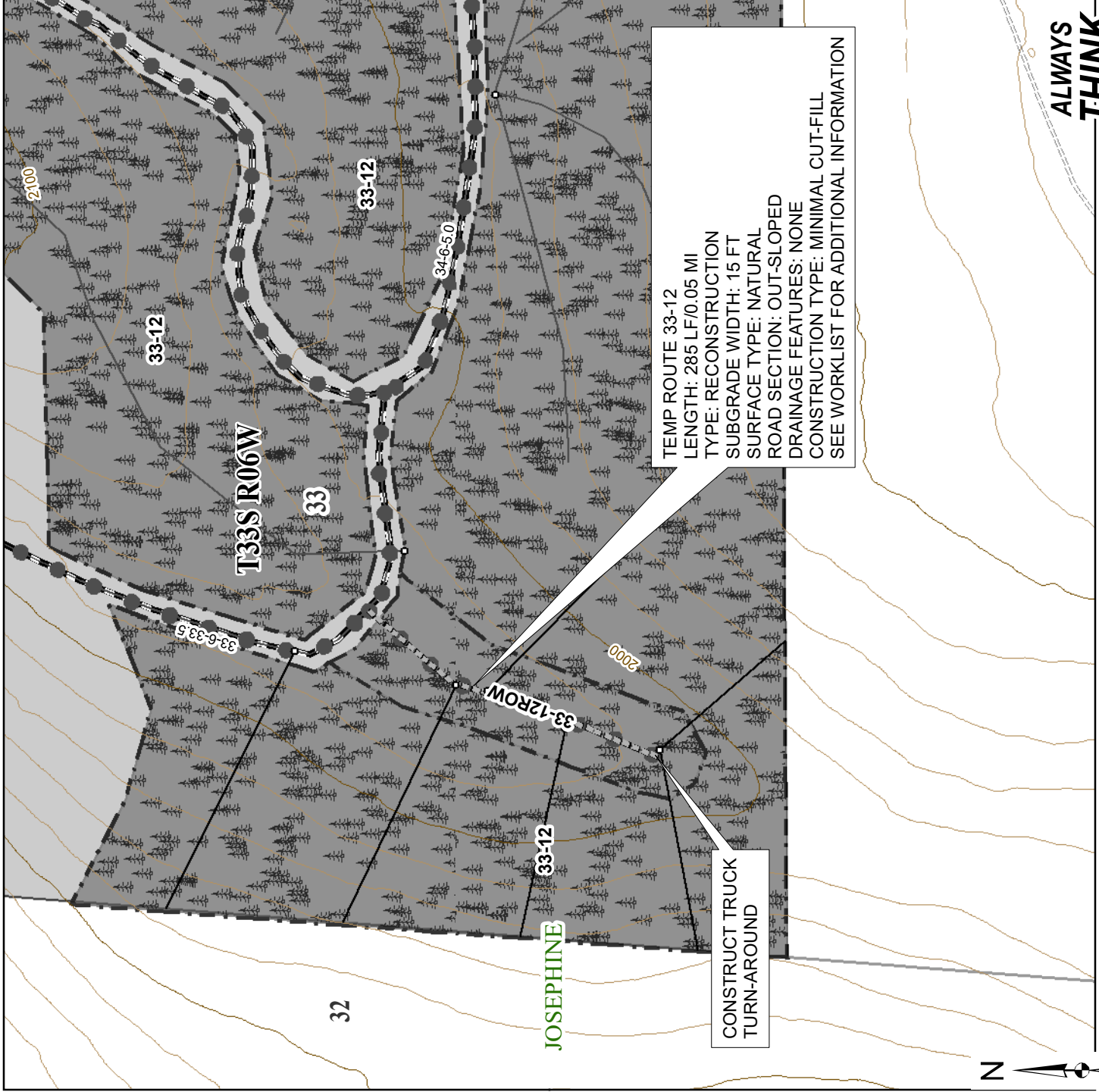


Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD RENOVATION MAP FLUME GULCH AREA			
DRAFTED BY: ELF			SHEET: 7 OF 9
DATE: SEPT 2020			

EXHIBIT C2-8

LEGEND

- TS Units
- Land Ownership**
 - BLM
 - Private
 - Industrial Lands
- Roads by Surface**
 - Bituminous
 - Aggregate
 - Natural
 - Unknown
- Renovation Responsibility - Haul Rds**
 - Purchaser
- Temp Route Type**
 - New construction
 - Reconstruction
 - Gates
 - Barrier (Tree/Berm)



TEMP ROUTE 33-12
 LENGTH: 285 LF/0.05 MI
 TYPE: RECONSTRUCTION
 SUBGRADE WIDTH: 15 FT
 SURFACE TYPE: NATURAL
 ROAD SECTION: OUT-SLOPED
 DRAINAGE FEATURES: NONE
 CONSTRUCTION TYPE: MINIMAL CUT-FILL
 SEE WORKLIST FOR ADDITIONAL INFORMATION

CONSTRUCT TRUCK
 TURN-AROUND

Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD RENOVATION MAP FLUME GULCH AREA			
DRAFTED BY: ELF			SHEET: 8 OF 9
DATE: SEPT 2020			

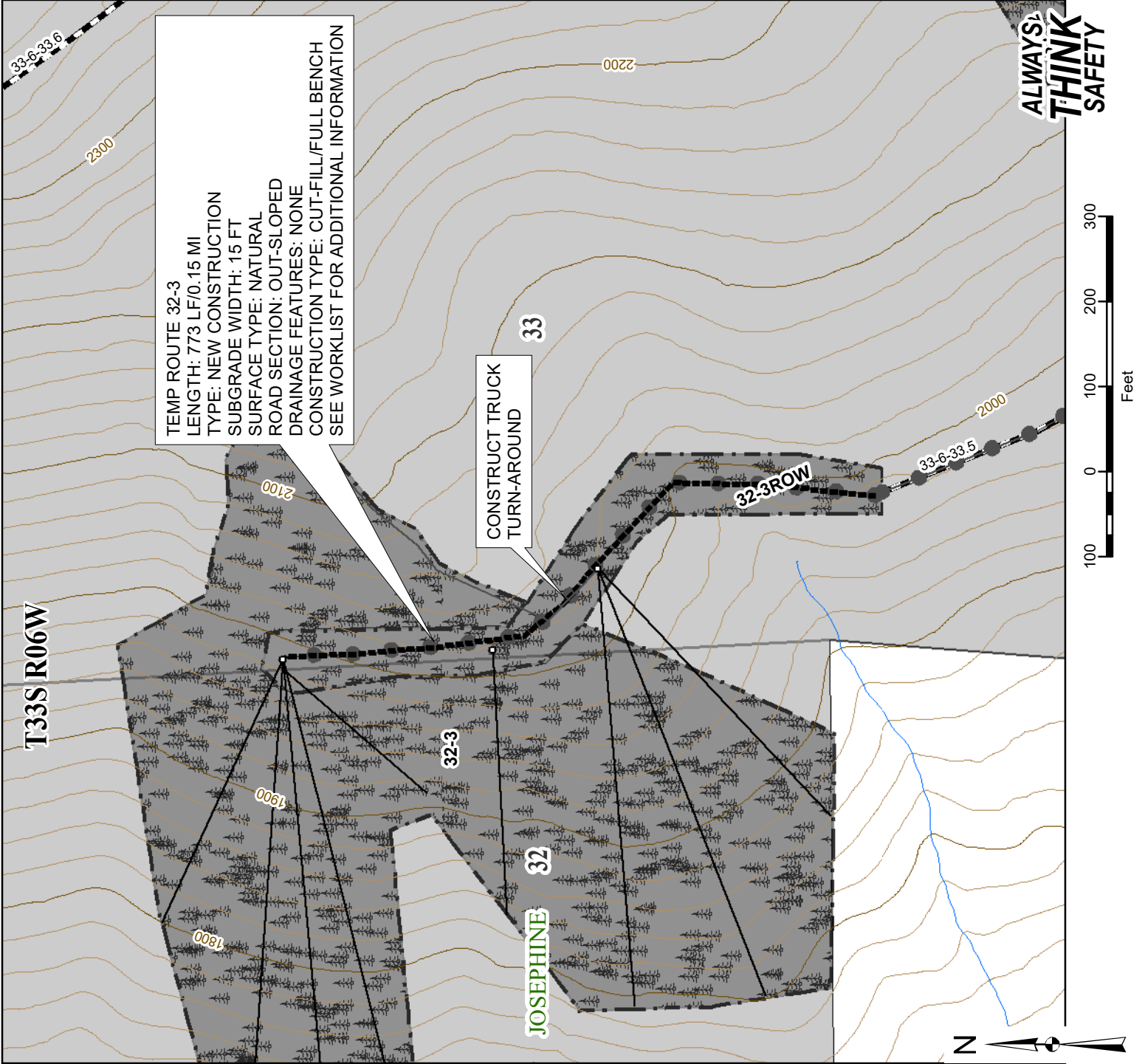
EXHIBIT C2-9

LEGEND

- TS Units
- Land Ownership**
 - BLM
 - Private
 - Industrial Lands
- Roads by Surface**
 - Bituminous
 - Aggregate
 - Natural
 - Unknown

Renovation Responsibility - Haul Rds

- Purchaser
- Temp Route Type**
 - New construction
 - Reconstruction
 - Gates
 - Barrier (Tree/Berm)



Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD RENOVATION MAP FLUME GULCH AREA			
DRAFTED BY: ELF			SHEET: 9 OF 9
DATE: SEPT 2020			

EXHIBIT C4-1

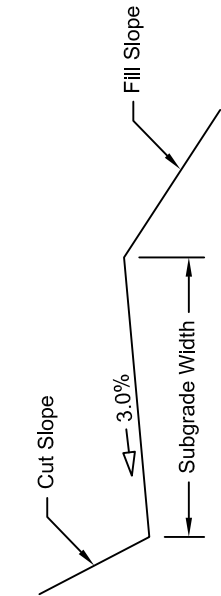
ROAD NUMBER	FROM (STA)	TO (STA)	LENGTH (MILES)	TYPICAL STATION TYPE	ALIGNMENT	ROAD WIDTH 1'-3'		GRADIENT		BRUSHING WIDTH			SURFACING 3						REMARKS																	
						MAXIMUM DEGREE OF CURVE	PROPOSED SUBGRADE	DITCH	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	BEYOND		EXISTING ROAD(S)	BASE COURSE			SURFACE COURSE																			
											TOP CUT	TOE FILL		L	R	MINIMUM WIDTH	COMPACTION DEPTH	TYPE 2		GRADING	MINIMUM WIDTH	COMPACTION DEPTH	TYPE 2	GRADING												
TR 03-02-D	0+00	37+66	0.71	3			15		18%	-20%	3	3																							NATIVE SURFACE	
TR 03-02-A	0+00	8+90	0.17	3			15		-	-18%	3	3																							NATIVE SURFACE	
TR 03-02-B	0+00	5+74	0.11	3			15		-	-5%	3	3																							NATIVE SURFACE	
TR 03-02-C	0+00	2+83	0.05	3			15		-	-7%	3	3																							NATIVE SURFACE	
TR 33-12	0+00	2+85	0.05	3			15		-	-14%	3	3																							NATIVE SURFACE	
TR 32-3	0+00	7+73	0.15	3			15		16%	-	3	3																							NATIVE SURFACE	

NOTES

- EXTRA SUB-GRADE WIDTHS TO EACH FILL SHOULDER, ADD 1 FOOT FOR FILLS OF 1-6 FEET AND 2 FEET FOR FILLS OVER 6 FEET. WIDEN THE INSIDE SHOULDER OF ALL CURVES AS FOLLOWS WHEN THE DEGREE OF CURVE EQUALS:
 7-21 ADD 1 FT.
 22-35 ADD 2 FT.
 36-48 ADD 3 FT.
 49-64 ADD 4 FT.
 65-96 ADD 5 FT.
- SURFACING TYPES
 A. PIT RUN ROCK
 B. GRID ROLLED ROCK MATERIAL
 C. SCREENED ROCK MATERIAL
 D. CRUSHED ROCK MATERIAL
 E. NATURAL/NATIVE SOIL
- TURNOUTS
 A. WIDTH 10 FT. IN ADDITION TO SUB-GRADE WIDTH, OR AS SHOWN ON THE PLANS.
 B. LOCATED APPROXIMATELY, AS SHOWN ON THE ROAD PLANS.
 C. INVISIBLE AND NOT MORE THAN 750 FT. APART.
- SURFACING TURNOUTS, CURVE WIDENING, AND ROAD APPROACH APRONS SHALL BE SURFACED.
 ALWAYS THINK SAFETY
- CLEARING WIDTH SEE SUBSECTION 2100

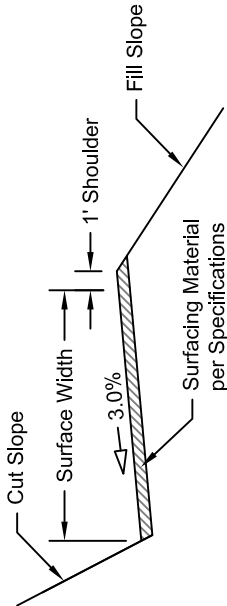
REV. NO.	DESCRIPTION	DATE	APPROV.
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE SPECIFICATION SHEET			
DRAFTED BY: BLM		SCALE: NONE	
DATE: SEPT 2020		SHEET: 1 OF 2	
DRAWING NO.: OR-11-9T13.4-1			

EXHIBIT C4-2



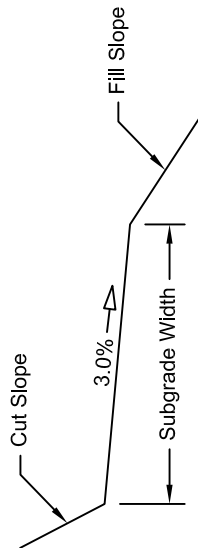
TYPICAL GRADING SECTION

TYPE 1



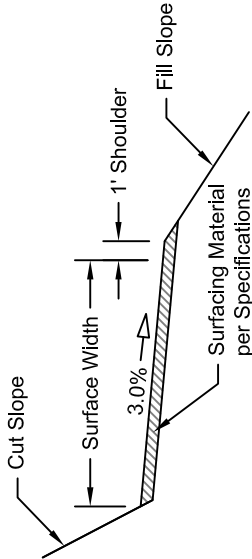
TYPICAL SURFACING SECTION

TYPE 2



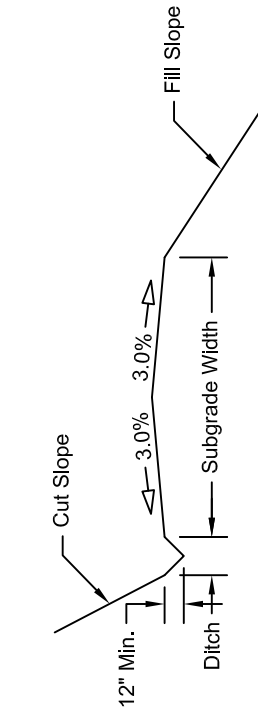
TYPICAL GRADING SECTION

TYPE 3



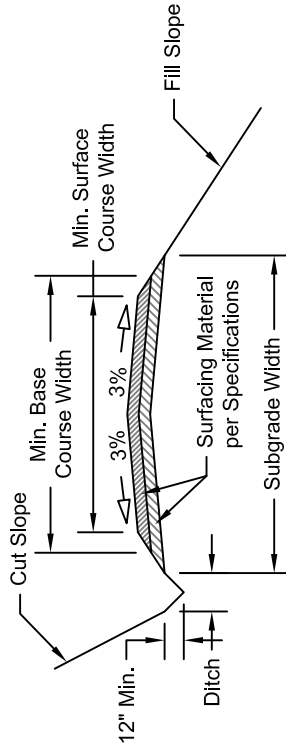
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TYPE 4



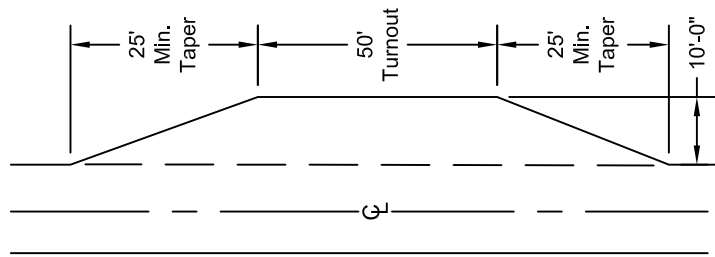
TYPICAL GRADING SECTION

TYPE 5



TYPICAL SURFACING SECTION

TYPE 6

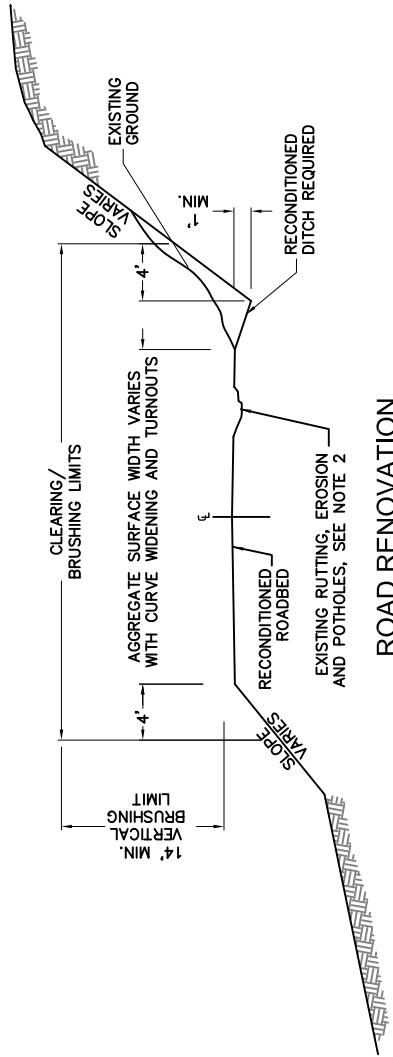


TYPICAL TURNOUT
PLAN VIEW

REV. NO.	DESCRIPTION	DATE	APPROV.
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE SPECIFICATION SHEET			
DRAFTED BY: BLM		SCALE: NONE	
DATE: SEPT 2020		SHEET: 2 OF 2	
DRAWING NO.: OR-11-9113.4-1			

ALWAYS
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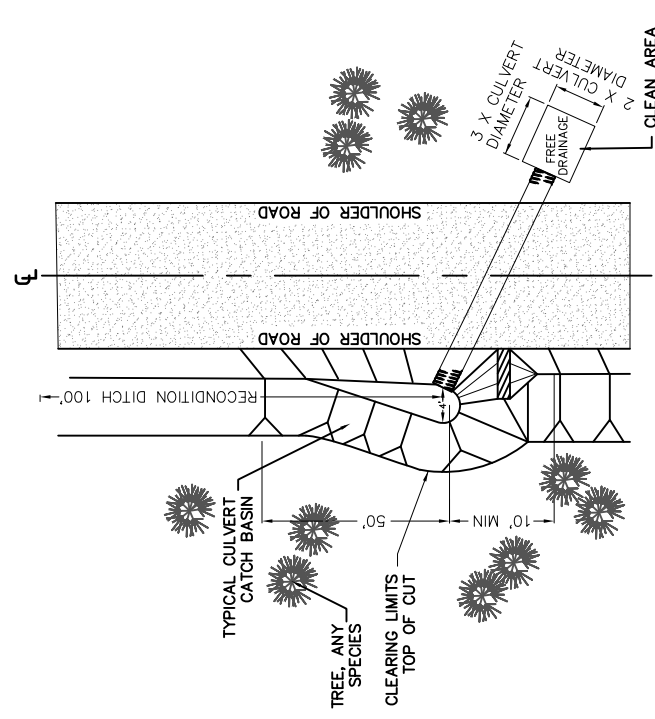
EXHIBIT C5



ROAD RENOVATION

NOTES:

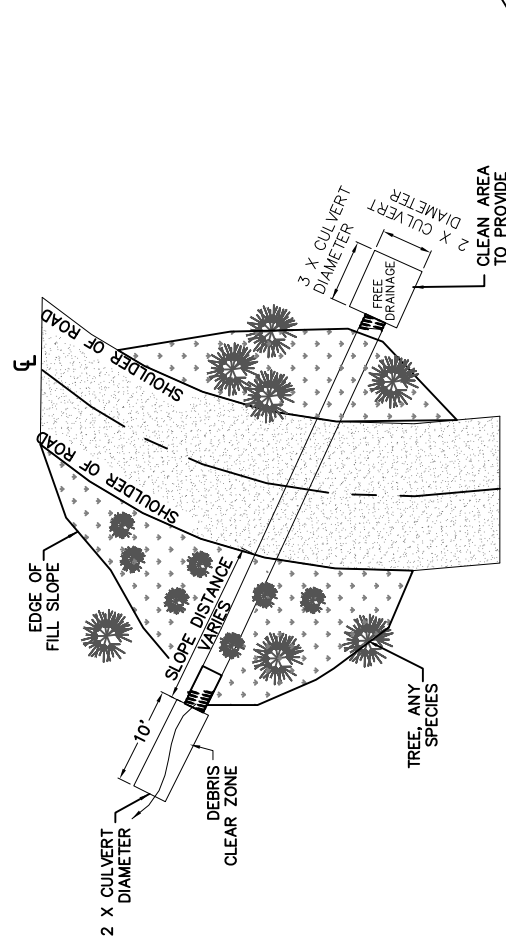
1. RECONSTRUCTION ROADS AS SHOWN AND IN ACCORDANCE WITH SECTION 500 OF THE SPECIFICATIONS. REQUIRED RECONSTRUCTION INCLUDES CURVE WIDENING AND TURNOUTS. DITCH RECONSTRUCTION INCLUDES CLEANING CULVERT INLETS AND OUTLETS.
2. WHERE RUTTING, EROSION AND POTHOLES EXIST, SCARIFY TO DEPTH OF RUT/EROSION/POTHOLE, BLADE, SHAPE AND COMPACT EXISTING AGGREGATE OR NATIVE SURFACE MATERIAL.
3. REMOVE AND DISPOSE OF SLIDE, DITCH, AND CATCH BASIN MATERIAL. DISPOSAL SITE LOCATIONS AS STAKED ON THE GROUND. DISPOSAL/WASTE SITES SHALL BE APPROVED BY THE AUTHORIZED OFFICER PRIOR TO USE. SEE VICINITY MAP FOR DISPOSAL SITE LOCATIONS/ OR AS STAKED ON GROUND.
4. MATCH EXISTING TRAVEL WAY CROSS SLOPE. THE TRAVELED WAY SHALL BE SHAPED TO THE EXISTING CROSS SLOPE. EXISTING ROADS WHICH ARE CROWNED SHALL BE AT 3% FROM CENTERLINE ROAD, INSLOPED AS IS, OUTSLOPED AS IS.



CROSS DRAIN CULVERT PLAN VIEW

CLEARING NOTES:

1. NO GRUBBING OR ROOT DISTURBANCE UNLESS NOTED
2. REMOVE VEGETATION BY CUTTING OR MOWING
3. RECONSTRUCTION CULVERT CATCH BASIN A MINIMUM OF 4' FROM CULVERT INLET

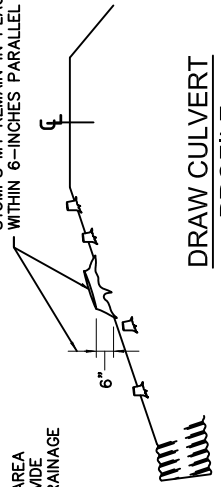


DRAW CULVERT PLAN VIEW

CLEARING NOTES:

1. NO GRUBBING OR ROOT DISTURBANCE UNLESS NOTED
2. REMOVE VEGETATION BY CUTTING OR MOWING
3. RECONSTRUCTION INLET CHANNEL, REMOVE ALL DEBRIS AND OBSTRUCTION A MINIMUM OF 2 X CULVERT DIAMETER & 10 FEET LONG

CULVERT OUTLET AT FILL SLOPE:
REMOVE ALL TREES, BRUSH AND DEBRIS FROM SHOULDER OF ROAD TO TOE OF FILL STUMPS MAY REMAIN IN PLACE, FLUSH CUT WITHIN 6-INCHES PARALLEL TO THE SLOPE

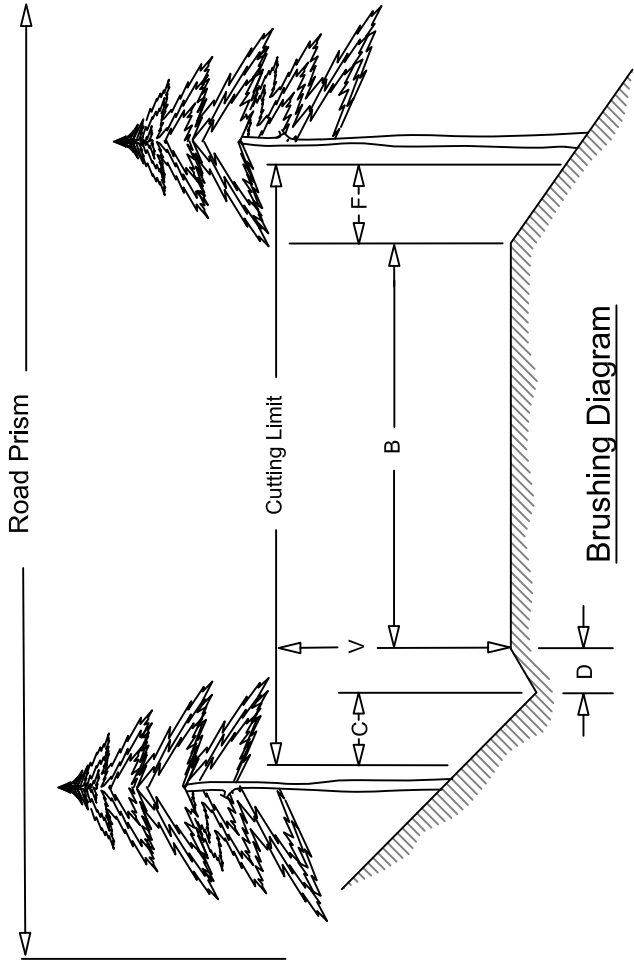


DRAW CULVERT PROFILE

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REV. NO.	DESCRIPTION	DATE	APPROV.
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE			
TYPICAL ROAD RENOVATION			
DRAFTED BY: BLM	SCALE: NONE		
DATE: SEPT 2020	SHEET: 1 OF 1		
DRAWING NO.: OR-11-9113.4-4			

EXHIBIT C6



Cutting Limit = C + D + B + F

B = Road Bed Subgrade (includes turnouts)

Cut all vegetation to maximum height of 1" flush with the running surface.

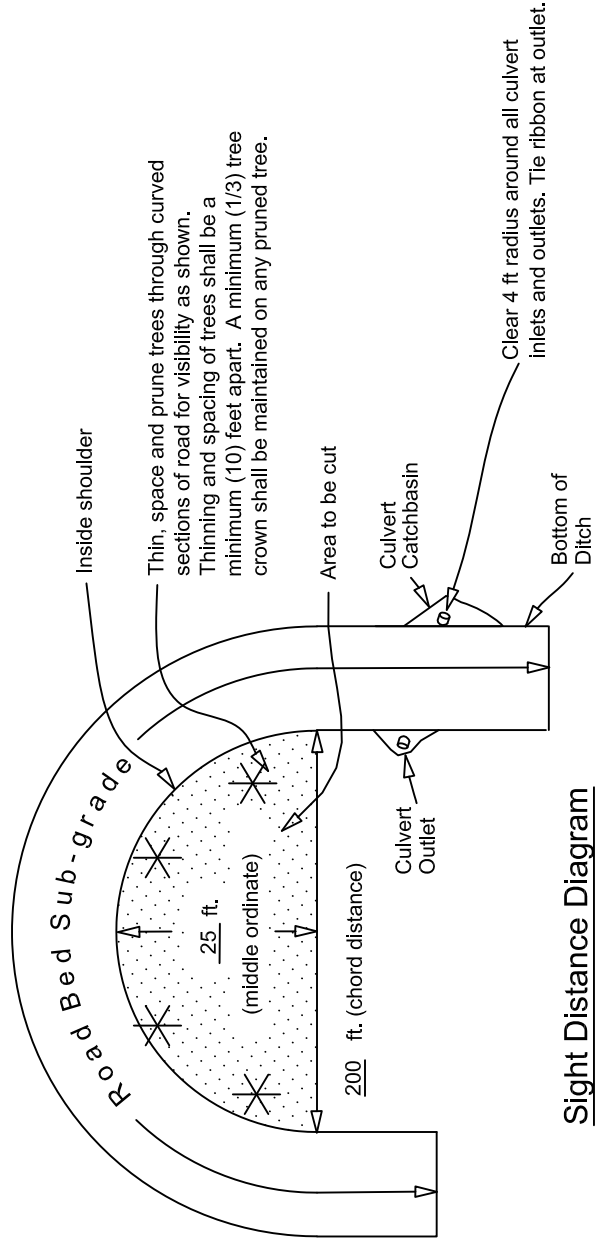
C = 4 ft - Distance to be brushed on cut slope beyond centerline of ditch. Cut all vegetation to maximum height of 4".

D = Centerline of ditch to inside shoulder. Cut all vegetation to maximum height of 1".

F = 4 ft - Distance to be brushed on fill slope beyond outside shoulder. Cut all vegetation to maximum height of 4".

V = 14 ft - Height of vertical cutting limit

Inside Corner



Sight Distance Diagram

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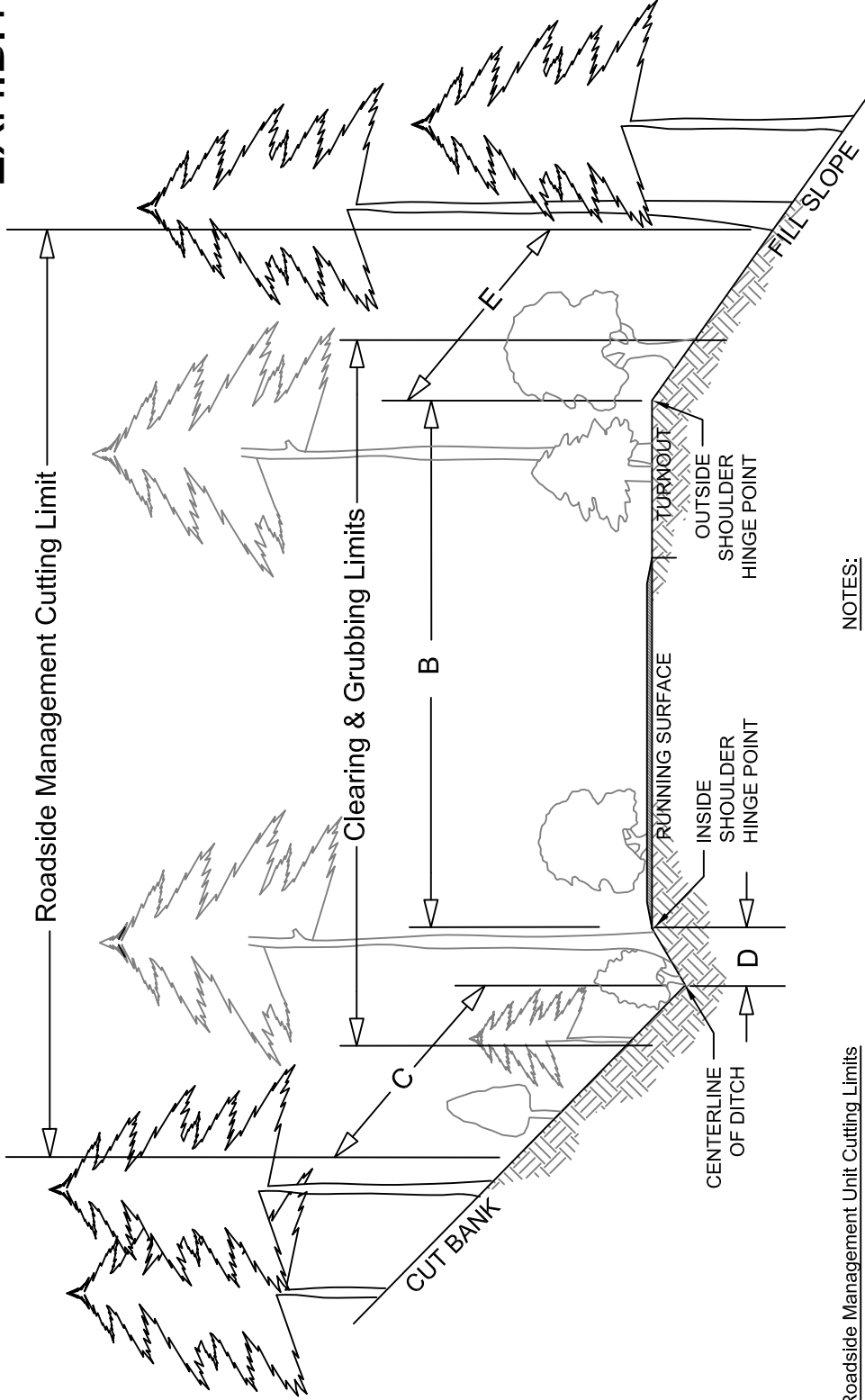
REV. NO.	DESCRIPTION	DATE	APPROV.

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

**FLUME PEAK
TIMBER SALE
ROADSIDE BRUSHING DETAIL**

DRAFTED BY: BLM SCALE: NONE
DATE: SEPT 2020 SHEET: 1 OF 1
DRAWING NO.: OR-11-9113.4-4

EXHIBIT C7



Roadside Management Unit Cutting Limits

(see Exhibit A's and Prospectus for additional unit specific information)

- C = 10-15 ft - Distance to remove all trees on cut slope beyond centerline of ditch. Variable slope distance as specified in timber sale specifications. Cut all trees. Remove all tree stumps from centerline of ditch to 4 ft slope distance up the cut bank (grind/pop).
- D = Centerline of ditch to inside shoulder hinge point. Cut all trees. Remove all tree stumps from inside shoulder hinge point to centerline of ditch (grind/pop).
- B = Road Running Surface (includes turnouts). Cut all trees. Remove all tree stumps from road running surface and turnouts.
- E = 10-15 ft - Distance to remove all trees on fill slope beyond outside shoulder hinge point. Variable slope distance as specified in timber sale specifications. Cut all trees. Remove all tree stumps from outside shoulder hinge point to 4 ft slope distance down the fill slope (grind/pop).

NOTES:

1. All stumps shall be grubbed and disposed of at a waste disposal site or other approved locations. Stump holes shall be filled (if needed) with suitable material and compacted.
2. Any stumps along cut banks and fill slopes that will impede road maintenance equipment shall be removed (grind/pop).
3. Seed and mulch disturbed areas along cut banks and fill slopes in accordance with the Soil Stabilization Specifications (1800).

REV. NO.	DESCRIPTION	DATE	APPROV.

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

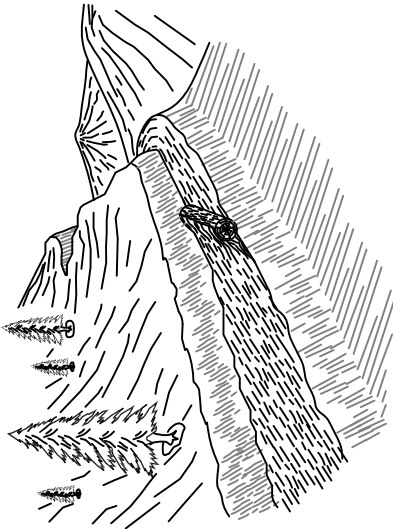
**FLUME PEAK
ROADSIDE MANAGEMENT
UNIT DETAIL**

DRAFTED BY: BLM
DATE: SEPT 2020
DRAWING NO.: OR-11-9113.4-4

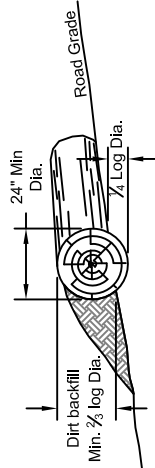
SCALE: NONE
SHEET: 1 OF 1

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EXHIBIT C8-1



LOG BARRICADE



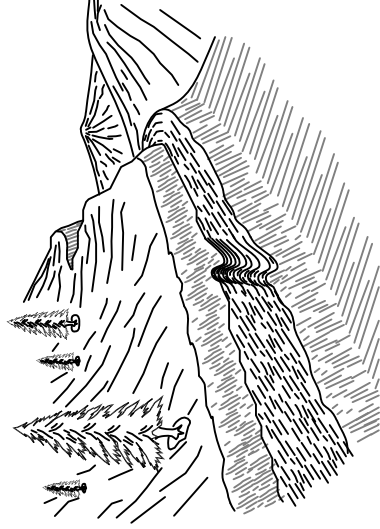
1. Log barricade shall be constructed as shown above.
2. Exact location is listed in Roads Work List.
3. All barricades shall be skewed 30 degrees.
4. The length shall be sufficient to extend from the cut bank to the fill slope.
5. The minimum small end diameter of the log barricade shall be 24".

WATER BAR SPACING* BY EROSION CLASS[^]

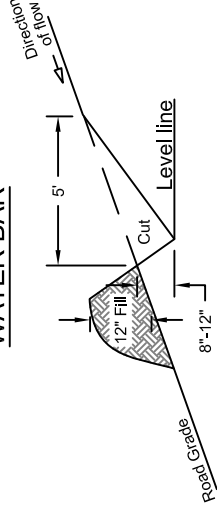
ROAD GRADE	HIGH	MODERATE	LOW
%	FEET	FEET	FEET
2-5	200	300	400
6-10	150	200	300
11-15	100	150	200
16-20	75	100	150
21-35	50	75	100
35+	50	50	50

* Spacing is determined by slope distance and is the maximum allowed for the grade.

[^] The erosion classes include the following rock types:
High: Granite, sandstone, andesite porphyry, glacial or alluvial deposits, soft matrix conglomerate, volcanic ash, and pyroclastics.
Moderate: Basalt, andesite, quartzite, hard matrix conglomerate, and rhyolite.
Low: Metasediments, metavolcanics, and hard shale.

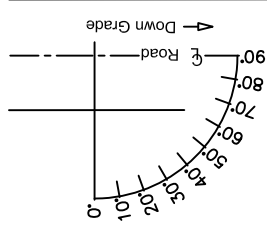


WATER BAR

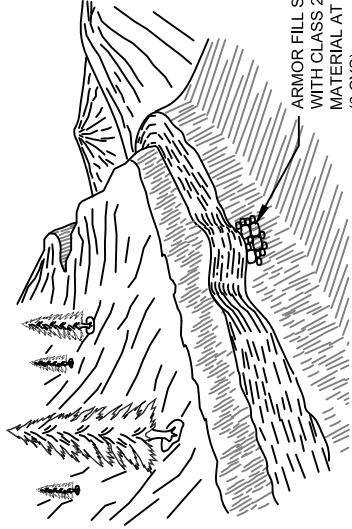


1. Water bars shall be constructed as shown above.
2. Exact location will be flagged by the Authorized Officer prior to construction.
3. All water bars shall be skewed 30 degrees.
4. Upon completion of skidding logs, for the logging season, each skid road will have cross drainage constructed as shown above.

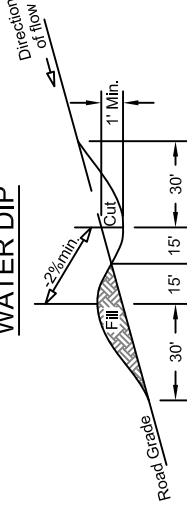
SKIEW DIAGRAM



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WATER DIP



1. Water dips shall be constructed as shown above.
2. Exact location is listed in Roads Work List.
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.
5. Armor outlet of water dip on fill slope. Riprap material will be securely placed at outlet a minimum of 10 LF wide by 8 LF down fill slope by 1 FT in depth. Key-in toe of Riprap apron for stability.
6. Seed and mulch fill slope upon completion to stabilize side-cast material. See Slope Protection specifications.

WATER DIP SPACING*

ROAD GRADE	SANDY LOAM	DECOMPOSED GRANITE/SAND	CLAY & SILTY SOILS
%	FEET	FEET	FEET
2-3	-	2000-1000	1200-600
4-7	1200-600	950-450	600-300
8-10	550-450	450-350	300-200
11-15	450-300	350-200	200-100
16+	300-250	200-150	100

* Spacing is determined by slope distance and is the maximum allowed for the grade.

REV. NO.	DESCRIPTION	DATE	APPROV.

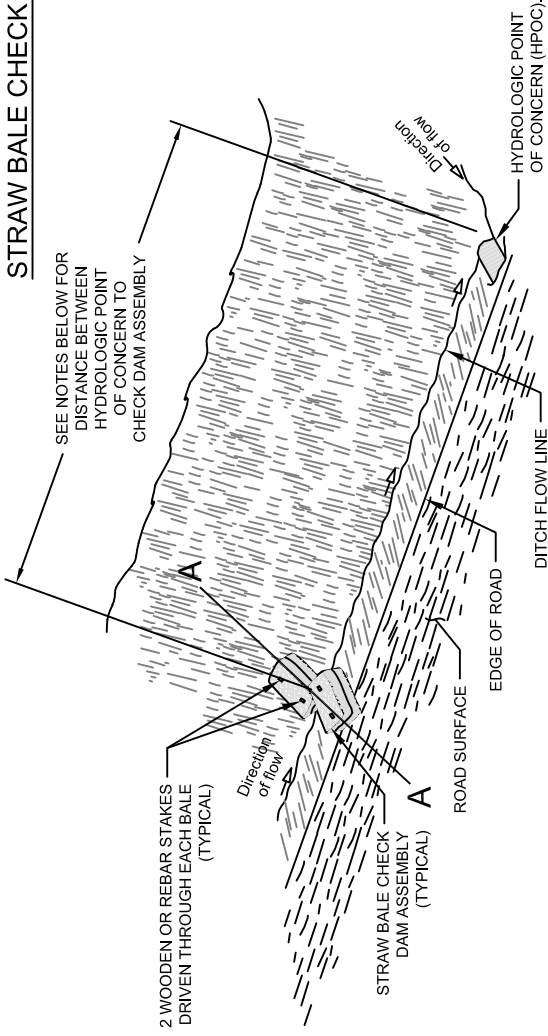
UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 MEDFORD DISTRICT - MEDFORD, OREGON

FLUME PEAK TIMBER SALE DRAINAGE & EROSION CONTROL DETAILS

DRAFTED BY: BLM	SCALE: NONE
DATE: SEPT 2020	SHEET: 1 OF 2
DRAWING NO.: OR-11-9113.4-4	

EXHIBIT C8-2

STRAW BALE CHECK DAM ASSEMBLY



PLAN

NOTES:

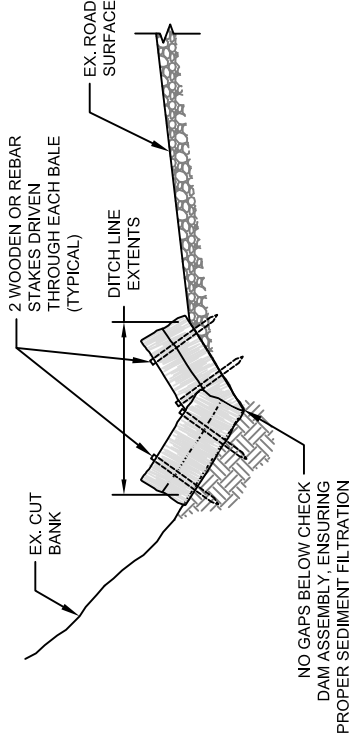
1. **All straw bales will be from a weed free certified source.**
2. Hydrologic Points of Concern (HPOC) are natural drainage features (ie. streams, creeks, draws) that intersect with existing or proposed roads.
3. If the HPOC is a bridge spanning across a noted or listed critical fish habitat (Coho) waterway, install check dam assembly, or other approved BMP, in road ditch line 150 LF up-grade from top of creek bank or edge of bridge.
4. If the HPOC is a draw culvert, install check dam assembly, or other approved BMP, in road ditch line 100 LF up-grade from inlet of culvert.

INSTALLATION NOTES:

1. Do not construct the check dam assembly more than one bale high.
2. Bales shall be placed tightly together and snug to the ground to ensure no gaps between bales or underneath the assembly.
3. Securely anchor the bales in place with two wooden or rebar stakes driven through the bales. Drive the stakes in the second bale toward the previously laid bale to force the bales tightly together. Ensure stakes are driven 12 inches minimum into the ground.
4. The assemblies do not need to be anchored if the terrain is relatively flat, less than 2% ditch line grade.

INSPECTION/MAINTENANCE NOTES:

1. Inspect each assembly before, during, and after each rain event.
2. Repair and/or replace damaged assemblies or decomposed bales promptly. Replacement bales shall be in good condition to ensure sediment trapping.
3. Trapped sediment shall be removed when it reaches 6-8 inches in depth.
4. Sediment shall be removed and placed in a stable area outside of wetlands, riparian reserves, floodplains, and waters of the State.



SECTION A-A

REV. NO.	DESCRIPTION	DATE	APPROV.

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

FLUME PEAK TIMBER SALE DRAINAGE & EROSION CONTROL INSTALLATION

DRAFTED BY: BLM
DATE: SEPT 2020
DRAWING NO.: OR-11-9113.4-4

SCALE: NONE
SHEET: 2 OF 2

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Exhibit C9

Timber Sale Name: Flume Peak

Page 1 of 9

Roads Work List

Definitions:

AGG = Aggregate Rock Surface

BST = Bituminous

CL = Center Line

CMP = Corrugated Metal Pipe

CY = Cubic Yard

HDPE = High Density Polyethylene

Jct = Junction/Intersection

MP = Mile Post

NAT = Natural or Native Surface

Pvt = Private (Industry or Citizen)

Seg = Segment

WDS = Waste Disposal Site

Road Renovation/Construction

The road renovation/construction work list consists of road work to be performed by the Purchaser's Representative and/or Contractor **prior** to timber hauling per Section 42(B)(2) of the contract Special Provisions. This work includes, but not limited to, clearing and grubbing; excavation for road construction; compacting, watering, blading and/or rolling the road surface; clearing and reshaping ditch lines; cleaning or enlarging catch basins and outlets; cleaning the entire barrel of all culverts; furnishing and replacing corrugated metal pipes (culverts); maintaining and/or constructing water-dips; surfacing or resurfacing roads with crushed rock aggregate; slide removal; seeding and mulching; constructing barricades; and removing all down trees from roadways. All road work shall comply with the contract Special Provisions, Specifications, and Exhibits.

London Peak Road System - See Exhibit C2-2 for Map

33-6-26.0 Road, Seg A1-C – Wolf Creek Divide – AGG – Sub: 14Ft / Ditch: 3Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ Bridge Lane (County Road). Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing.
0.05	Existing CMP
0.09	Existing CMP
0.11	Property line Rough & Ready LLC/Olympic Resource Management
0.15	Existing CMP
0.19	Jct w/ Pvt Rd on right.
0.20	Existing CMP
0.29	Existing CMP
0.30	Property line Olympic Resource Management/ Rough & Ready LLC
0.31	Jct w/ Pvt Rd on right.
0.35	Existing CMP
0.42	Existing CMP
0.49	Existing CMP
0.50	Property line Rough & Ready LLC /BLM. Unit 27-24 boundary on left and right.
0.64	Existing CMP
0.76	Existing CMP
0.84	Existing CMP
0.90	Unit 27-24 boundary on left.
0.92	Existing CMP
0.94	Jct w/ Pvt Rd on left (hidden).
0.96	Jct w/ 33-6-27.0 Rd on left.
1.04	Jct w/ 33-6-27.7 Rd on right.
1.10	End road renovation. Unit 27-24 boundary on right.

Exhibit C9

Timber Sale Name: Flume Peak

Page 2 of 9

33-6-27.7 Road, Seg A – State Sp7 – NAT – Sub: 15Ft / Ditch: 0Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 33-6-26.0 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications and roadside brushing. Unit 27-24 boundary on right.
0.04	Unit 27-24 boundary on left.
0.13	Unit 27-24 boundary on left.
0.18	Jct w/ Spur on left.
0.26	End road renovation. Construct truck turnaround.

33-6-27.0 Road, Seg A1-A3 – London Peak – AGG – Sub: 14Ft / Ditch: 3Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 33-6-26.0 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing.
0.01	Existing CMP
0.12	Existing CMP
0.17	Existing CMP
0.20	Existing CMP
0.26	Property line BLM/Lone Rock Timber.
0.27	Existing CMP
0.29	Jct w/ Pvt Rd on left.
0.33	Property line Lone Rock Timber /BLM.
0.44	Existing CMP
0.45	Jct w/ 33-6-27.5 Rd on left.
0.50	Existing CMP
0.55	Existing CMP
0.61	Jct w/ 33-6-27.3 Rd on right.
0.65	End road renovation. Proposed landing; see timber appraisal and Exhibit A's for additional information.

33-6-27.3 Road – Jack's Spur – AGG – Sub: 16Ft / Ditch: 0Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 33-6-27.0 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications and roadside brushing. Existing CMP (33-6-27.0 ditch line culvert).
0.02	Unit 27-11 boundary on left.
0.11	End road renovation. Unit 27-11 boundary on left.

Mackin Gulch Road System - See Exhibit C2-3 for Map

34-6-3.1 Road, Seg A-C – Mackin Gulch – AGG – Sub: 16Ft / Ditch: 3Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ Leland Rd (County Rd). Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing. The Purchaser shall be required to furnish and apply non-saline water, or approved equal, during dry hauling periods (dust abatement), when directed by the Contract Officer, for the

Exhibit C9

Timber Sale Name: Flume Peak

Page 3 of 9

	purpose of laying nuisance dust and to prevent loss of surface material over the next 0.50 miles of road.
0.06	Existing CMP
0.11	Existing CMP
0.18	Existing CMP
0.24	Existing CMP
0.29	Existing CMP
0.31	Property line Private/BLM. Unit 03-06 boundary on right.
0.35	Existing CMP
0.40	Existing CMP
0.48	Unit 03-02 boundary on left.
0.51	Jct w/ 34-6-3.3 Road on left. Unit 03-06 boundary on right.
0.58	Existing CMP
0.61	Unit 03-02 boundary on left.
0.62	Unit 03-02 boundary on left.
0.63	Existing CMP
0.72	Unit 03-02 boundary on left.
0.74	Existing CMP
0.77	Unit 03-02 boundary on right.
0.81	Existing CMP
0.87	Existing CMP
0.90	Unit 03-02 boundary on right.
0.92	Existing CMP
0.95	Unit 03-02 boundary on right.
0.97	Existing CMP
1.02	Jct w/ 34-6-3.2 Road on left.
1.05	Existing CMP
1.10	Jct w/ Spur on right. End road renovation. Proposed landing; see timber appraisal and Exhibit A's for additional information.

34-6-3.3 Road, Seg A – Mackin Ridge – AGG – Sub: 16Ft / Ditch: 0Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 34-6-3.1 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications and roadside brushing.
0.10	Jct w/ 34-6-3.4 Road on right. Unit 03-06 boundary on right.
0.21	Road erosion/Begin scarification of road surface.
0.37	Jct w/ TR 03-02-A on left.
0.43	Unit 03-06 boundary on left.
0.45	Road erosion ends/End scarification of road surface.
0.56	Jct w/ TR 03-02-B on left.
0.68	Jct w/ TR 03-02-C on left.
0.70	Unit 03-06 boundary on right.
0.75	Unit 03-06 boundary on left.
1.04	Unit 03-06 boundary on right.
1.05	Jct w/ Spur on left.
1.23	Property line BLM/Private.
1.36	Property line Private/BLM. Unit 35-24 boundary on left.
1.55	Unit 35-24 boundary on left.
1.56	Jct w/ 33-6-35.0 Rd on left. End road renovation.

Exhibit C9

Timber Sale Name: Flume Peak

Page 4 of 9

34-6-3.4 Road – Lower Mackin – AGG – Sub: 16Ft / Ditch: 0Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 34-6-3.3 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications and roadside brushing.
0.01	Remove existing berm.
0.07	Unit 03-06 boundary on right.
0.23	Jct w/ TR 03-02-D on left. End road renovation.

34-6-3.2 Road – Mackin Gulch Sp – AGG – Sub: 15Ft / Ditch: 3Ft & 15Ft / Ditch: 0Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 34-6-3.1 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing.
0.04	Existing CMP at Mackin Gulch crossing. Hydrologic Point of Concern: Install check dams, or other approved BMP's, per contract specifications and Exhibit C7-2.
0.13	Existing CMP
0.14	Jct w/ Spur on right.
0.16	Existing CMP
0.38	Existing CMP
0.48	Existing CMP
0.56	Existing CMP
0.61	Existing CMP
0.66	End ditchline
0.70	Unit 34-1 boundary on left and right.
0.82	Jct w/ 33-6-34.0 ahead. End road renovation.

33-6-34.0 Road – Mackin Sp – AGG – Sub: 15Ft / Ditch: 0Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 34-6-3.2 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing.
0.09	Unit 34-1 boundary on left and right.
0.11	Begin quarry area on right.
0.16	End quarry area on right.
0.17	Unit 34-1 boundary on left and right.
0.20	Jct w/ Spur Road 34 on right.
0.25	Proposed landing; see timber appraisal and Exhibit A's for additional information. Construct truck turn-around.
0.27	Unit 34-1 boundary on left. End road renovation.

Spur Road 34 – No Name – NAT – Sub: 15Ft / Ditch: 0Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 33-6-34.0 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications and roadside brushing.
0.06	End road renovation. Proposed landing; see timber appraisal and Exhibit A's for additional information. Construct truck turn-around.

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Flume Gulch System - See Exhibit C2-7 for Map

34-6-5.0 Road, Seg A-B – Flume Gulch – AGG – Sub: 16Ft / Ditch: 3Ft

<u>MP</u>	<u>Description</u>
0.00	Jct. w/ Leland Road (County). Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing. The Purchaser shall be required to furnish and apply non-saline water, or approved equal, during dry hauling periods (dust abatement), when directed by the Contract Officer, for the purpose of laying nuisance dust and to prevent loss of surface material over the next 1.00 miles of road.
0.01	Existing CMP
0.09	Existing CMP
0.19	Existing CMP
0.30	Existing CMP
0.38	Jct w/ Pvt Drive on left.
0.51	Existing CMP
0.57	Jct w/ Pvt Drive on left.
0.64	Existing CMP
0.73	Existing CMP
0.74	Jct w/ Pvt Drive on left.
0.81	Existing CMP
0.84	Jct w/ Pvt Drive on left and right.
0.91	Existing CMP
0.97	Jct w/ Pvt Drive on left.
1.00	Property line Private/Uram Forests.
1.04	Existing CMP
1.09	Existing CMP
1.25	Existing CMP
1.31	Existing CMP
1.34	Jct w/ Pvt Spur on right.
1.36	Jct w/ Pvt Drive on right.
1.39	Property line Uram Forests/Private.
1.40	Jct w/ Pvt Drive on left.
1.41	CAUTION!! EXISTING PRIVATE WELL SITE.
1.42	Property line Private/BLM. Unit 33-12 boundary on left.
1.51	Existing CMP
1.58	Unit 33-12 boundary on left.
1.61	Existing CMP
1.66	Existing CMP
1.68	Unit 33-12 boundary on left.
1.69	Jct w/ 33-6-33.0 Rd on right.
1.81	Existing CMP
1.91	Existing CMP
1.97	Unit 33-12 boundary on left.
2.01	Existing CMP
2.09	Existing CMP
2.15	Unit 33-12 boundary on left.
2.17	Existing CMP
2.18	Jct w/ 33-6-33.2 Rd on right. Unit 33-12 boundary on right.

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- 2.20 Jct w/ Spur Road 33 on left.
- 2.27 Existing CMP
- 2.36 Existing CMP. Unit 33-12 boundary on right.
- 2.38 Unit 33-12 boundary on right.
- 2.56 Jct w/ 33-6-33.5 Rd on left.
- 2.64 Existing CMP
- 2.77 Existing CMP
- 2.89 Existing CMP
- 2.95 Jct w/ 33-6-33.6 Road on left. Unit 33-12 boundary on left and right.
- 2.97 Existing CMP
- 3.01 Unit 33-10 boundary on left and right.
- 3.04 Existing CMP
- 3.23 Existing CMP
- 3.34 Unit 33-10 boundary on left.
- 3.35 Construct truck turnaround area.
- 3.37 End road renovation. Unit 33-10 boundary on right.

33-6-33.0 Road – Flume Gulch Sp – AGG – Sub: 14Ft / Ditch: 3Ft

- | <u>MP</u> | <u>Description</u> |
|-----------|---|
| 0.00 | Jct w/ 34-6-5.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing. |
| 0.07 | Existing CMP |
| 0.17 | Existing CMP |
| 0.22 | Existing CMP at Flume Gulch crossing. Hydrologic Point of Concern: Install check dams, or other approved BMP's, per contract specifications and Exhibit C7-2. |
| 0.28 | Existing CMP |
| 0.32 | Existing CMP |
| 0.37 | Jct w/ 33-6-33.1 Road on left. |
| 0.41 | Existing CMP |
| 0.53 | Existing CMP |
| 0.58 | Existing CMP |
| 0.65 | Existing CMP |
| 0.72 | Existing CMP |
| 0.73 | Jct w/ 33-6-33.3 Road on right. |
| 0.74 | Existing CMP at Flume Gulch crossing. Hydrologic Point of Concern: Install check dams, or other approved BMP's, per contract specifications and Exhibit C7-2. |
| 0.77 | Existing CMP |
| 0.79 | Unit 33-11 boundary on right. |
| 0.83 | Unit 33-11 boundary on right. |
| 0.84 | Existing CMP |
| 0.89 | Existing CMP |
| 0.95 | Existing CMP |
| 0.98 | Jct w/ 33-6-33.4 Road on left. |
| 1.02 | Existing CMP |
| 1.05 | Existing CMP |
| 1.18 | End road renovation. Unit 33-11 boundary on left and right. |

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33-6-33.1 Road – Flume Gulch Sp1 – AGG – Sub: 14Ft / Ditch: 3Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 33-6-33.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing.
0.08	Existing CMP at Flume Gulch crossing. Hydrologic Point of Concern: Install check dams, or other approved BMP's, per contract specifications and Exhibit C7-2.
0.12	End road renovation. Proposed landing; see timber appraisal and Exhibit A's for additional information. Unit 33-11 boundary on right.

33-6-33.2 Road, Seg A – Flume Gulch Sp2 – AGG – Sub: 14Ft / Ditch: 3Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 34-6-5.0 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing.
0.02	Existing CMP
0.10	Existing CMP
0.19	Existing CMP
0.32	Unit 33-12 boundary on left. Large landing area on right. WDS: Place waste material on stable area well off of road surface and outside of turnaround/landing area so not to impede drivability of traffic.
0.33	End road renovation.

33-6-33.2 Road, Seg B – Flume Gulch Sp2 – NAT – Sub: 16Ft / Ditch: 0Ft

<u>MP</u>	<u>Description</u>
0.33	Continue road renovation which includes scarification of road surface; reshaping road surface (blading, watering, and rolling) to road specifications; and roadside brushing.
0.40	Unit -33.2 ROW boundary. Begin roadside unit and road reconstruction. Upon completion of roadside unit timber removal, begin clearing and grubbing any stumps that would hinder road maintenance operations per Exhibit C7. See Exhibit A's and Prospectus for additional information.
0.42	Remove existing berm.
0.52	Existing sag in road grade. Key in and properly place 3 CY of Class 2 Riprap to armor outfall and protect subgrade from erosion.
0.65	End road renovation. Unit -33.2 ROW boundary. End roadside unit.

33-6-33.5 Road – Flume Descent E Sp – AGG – Sub: 14Ft / Ditch: 3Ft

<u>MP</u>	<u>Description</u>
0.00	Jct w/ 34-6-5.0 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing.
	Existing CMP
0.04	Jct w/ TR 33-12 on left.
0.08	Unit 33-12 boundary on left.
0.09	Unit 33-12 boundary on right.
0.10	Existing CMP
0.16	Existing CMP

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0.25 End road renovation. Jct w/ TR 32-3 ahead.

33-6-33.6 Road – Flume Descent D Sp – AGG – Sub: 14Ft / Ditch: 3Ft

<u>MP</u>	<u>Description</u>
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0.00	Jct w/ 34-6-5.0 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; clearing and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing.
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0.01	Unit 33-12 boundary on left.
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0.07	Existing CMP
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0.13	End road renovation. Reconstruct truck turnaround. Unit 33-12 boundary on left.
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Spur Road 33 – No Name – NAT – Sub: 15Ft / Ditch: 0Ft

<u>MP</u>	<u>Description</u>
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0.00	Jct w/ 34-6-5.0 Rd. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications and roadside brushing.
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0.06	End road renovation. Proposed landing; see timber appraisal and Exhibit A's for additional information. Construct truck turn-around.
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Exhibit C9

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Temporary Routes

All Temporary Routes are NAT surface, unless noted otherwise. Subgrade width shall not exceed 15 feet (not including turnouts and truck turn-arounds).

Mackin Gulch Area

TR 03-02-D (See Exhibit C2-4 for Map)

STA	Description
0+00	Jct w/ 34-6-3.4 Rd. Begin temp route reconstruction.
0+25	Remove existing berm.
22+65	Begin short 20% grade.
24+05	End 20% grade.
26+50	Reconstruct truck turnaround area.
25+90	Unit 03-02 boundary on right.
30+45	Unit 03-02 boundary on left.
36+74	Construct truck turnaround area.
37+66	End temp route reconstruction. Unit 03-02 boundary on left and right.

TR 03-02-A (See Exhibit C2-5 for Map)

STA	Description
0+00	Jct w/ 34-6-3.3 Rd. Begin temp route reconstruction.
0+55	Remove existing berm.
2+98	Unit 03-02 boundary on left and right.
8+90	End temp route reconstruction. Construct truck turn-around.

TR 03-02-B (See Exhibit C2-6 for Map)

STA	Description
0+00	Jct w/ 34-6-3.3 Rd. Begin temp route reconstruction.
0+80	Remove existing berm.
5+74	End temp route reconstruction. Construct truck turn-around.

TR 03-02-C (See Exhibit C2-6 for Map)

STA	Description
0+00	Jct w/ 34-6-3.3 Rd. Begin temp route reconstruction.
2+83	End temp route reconstruction. Construct truck turn-around.

Flume Gulch Area

TR 33-12 (See Exhibit C2-8 for Map)

STA	Description
0+00	Jct w/ 33-6-33.5 Rd. Begin temp route reconstruction.
2+85	End temp route reconstruction. Construct truck turn-around.

TR 32-3 (See Exhibit C2-9 for Map)

STA	Description
0+00	Jct w/ 33-6-33.5 Rd. Begin temp route construction.
4+25	Construct truck turn-around.
4+40	Unit 32-3 boundary on left and right.
7+73	End temp route construction.

TIMBER SALE ROAD SPECIFICATIONS

TABLE OF CONTENTS

SECTION	DESCRIPTION
100	General
200	Clearing and Grubbing
300	Excavation and Embankment
500	Renovation and Improvement of Existing Roads
600	Watering
1400	Slope Protection
1700	Erosion Control
1800	Soil Stabilization
2100	Roadside Brushing

TIMBER SALE ROAD SPECIFICATIONS

GENERAL – 100

101 - Prewrite Conference(s):

A prework conference will be held prior to the start of new construction, renovation operations, and surfacing. The Purchaser shall request the conference at least 72 hours prior to the time it is to be held. The conference will be attended by the Purchaser and/or their representative(s), subcontractor(s) and/or their representative(s), and the Authorized Officer and/or his representative(s).

The purpose of the prework conference 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).

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. This is 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.

TIMBER SALE ROAD SPECIFICATIONS

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.

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.

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

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 - The longitudinal center of a 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

TIMBER SALE ROAD SPECIFICATIONS

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 rock 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.

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.

TIMBER SALE ROAD SPECIFICATIONS

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:

AASHTO T 11 Quantity of rock finer than No. 200 sieve.

AASHTO T 27 Sieve analysis of fine and coarse aggregate using sieves with square openings; gradation.

AASHTO T 89 Liquid limit of material passing the No. 40 sieve. Water content at which the soil passes from a plastic to a liquid state.

AASHTO T 90 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.

AASHTO T 96 Resistance to abrasion of small size coarse aggregate by use of the Los Angeles machine.

AASHTO T 99 Relationship between soil moisture and density of soil.

Method A - 4" mold, soil passing a No. 4 sieve

25 blows/layer & 3 layers.

Method C - 4" mold, soil passing a 3/4-inch sieve

25 blows/layer & 3 layers.

Method D - 6" mold, soil passing a 3/4-inch sieve. 56 blows/layer & 3 layers.

AASHTO T 119 Slump of hydraulic cement concrete.

AASHTO T 152 Air content of freshly mixed concrete.

TIMBER SALE ROAD SPECIFICATIONS

- AASHTO T 166 Specific Gravity of compacted Bituminous Mixtures.
- AASHTO T 176 Shows relative portions of fine dust or claylike materials in soil or graded aggregate.
- AASHTO T 180 (OSHD 106-71) moisture density relationship of soil same as AASHTO T 99 proctor but uses a 10-lb rammer & 18-in drop height.
- AASHTO T 191 Sand Cone. 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 209 Maximum Specific Gravity of Bituminous Paving Mixtures.
- 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 Density of Soil and Soil-Aggregate in place by nuclear methods.
- AASHTO T 248 Reducing field samples of aggregate to testing size by mechanical splitter, quartering, or miniature stockpile sampling.
- ASTM D 4564 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.

TIMBER SALE ROAD SPECIFICATIONS

- 103g - Vibratory compactor. Vibratory compactors shall consist of multiple or gang-type compacting units or pads with a minimum variable width of 2 feet. It shall be self-contained and capable of compacting material as required.

- 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 seeps 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.

TIMBER SALE ROAD SPECIFICATIONS

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 and as staked on the ground.
- 202 - Where clearing limits have not been staked, established by these specifications or shown on the plans, the limits shall extend 3 feet back of the top of the cut slope and 3 feet out from the toe of the fill slope.
- 202b - Where clearing limits for roadside maintenance sections have not been staked or shown on the plans, the limits shall extend 6 horizontal feet back of the centerline of the ditch and 6 horizontal feet outside of the of the shoulder of the road.
- 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 Subsections 202 as shown on the plans and as posted.
- 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 staked on the ground shall consist of decking at a location designated by the Authorized Officer.
- 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 Subsections 204a, 204c, and 204d between the top of the cut slope and the toe of the fill slope.
- 204a - Stumps including those overhanging cut banks, shall be removed within the required excavation limits.
- 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.
- 205 - Clearing and grubbing debris shall not be placed or permitted to remain in or under road embankment sections. Such debris will, however, be permitted to remain under waste material from full-bench construction on steep side slopes.

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- 206 - Clearing and grubbing debris shall be disposed of by chipping in accordance with Subsection 209 and/or scattering in accordance with Subsection 210 and/or piling in accordance with Subsection 211.
- 206a - Notwithstanding Subsections 204, 204a, 204d, and 205, clearing and grubbing debris resulting from landing construction shall be placed at disposal sites and shall not be covered with excavated material. Location of disposal sites will be determined by the Authorized Officer.
- 208b - Trees, firm logs, and other firm large pieces, 4 inches in diameter and 8 feet in length and larger and not removed from the contract area by the Purchaser, shall be piled at locations determined by the Authorized Officer.
- 209 - Clearing and grubbing debris shall be reduced to chips of an acceptable size and disposed of by scattering.
- 210 - 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.
- 210a - Disposal of clearing and grubbing debris on non-government property by scattering this material outside of clearing limits will be permitted provided the Purchaser obtains a written permit from the property owner on whose property the disposal is to be made. The Purchaser shall furnish the Authorized Officer a certified copy of the permit and a written release from the property owner absolving the Government from responsibilities in connection with the disposal of debris on said property.
- 210b - Clearing and grubbing debris and stumps and cull logs resulting from road construction on non-Government property shall be loaded and hauled to designated areas, as shown on the plan. Disposal shall be by scattering in accordance with Subsection 210 or piling in accordance with Subsection 211.
- 211 - Disposal of clearing and grubbing debris and stumps and cull logs shall be by piling on government lands outside of established clearing limits in an area and in a manner acceptable to the Authorized Officer.
- 212 - 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.
- 213 - No clearing or grubbing debris shall be left lodged against standing trees.

TIMBER SALE ROAD SPECIFICATIONS

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.
- 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.
- 304 - Borrow shall consist of suitable material required for the construction of embankments or for other portions of the work; such material shall be obtained from sources selected by the Purchaser at his option and approved by the Authorized Officer.
- 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.
- 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. Roadway embankments of earth material shall be placed in horizontal layers not exceeding 8 inches in depth.
- 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

TIMBER SALE ROAD SPECIFICATIONS

- comes within 4 feet of subgrade.
- 306 - Layers of embankment material as specified under Subsections 305a and 305b, 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, 103g, 103h, and 103i.
- 306e - The final subgrade, except temporary routes, shall be compacted to full width with compacting equipment conforming to the requirements of Subsections 103f, 103g, 103h, and 103i. Minimum compaction shall be 1 hour of continuous compacting for each 4 stations of road or a fraction of as measured along the center line of the constructed road.
- 306f - Compaction of embankment layers for all temporary routes shall be accomplished by routing construction equipment over full width of embankment structures.
- 306g - All fill slopes shall be compacted to 75 percent of maximum density, either by walking with cat/excavator or by pressing with excavator bucket, to prevent surface erosion and raveling.
- 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 the pockets and the ditch with rock fragments, gravel, or other suitable porous material.
- 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.

TIMBER SALE ROAD SPECIFICATIONS

- 316 - Borrow material from sources selected at the Purchaser's option shall be inspected and approved in writing by the Authorized Officer prior to placement.
- 317 - Selected borrow shall consist of talus material, finely broken rock, gravel, or other material of granular or favorable characteristics from sources shown on the plans.
- 318 - Selected borrow or selected roadway excavation material shall be uniformly spread on the roadbed in lifts not to exceed 6 inches in depth until the required thickness shown on the plans is attained.

Each layer shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density and compacted to full width in accordance with the requirements of Subsection 306.

- 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 accordance with Subsection 321c. Materials not disposed of in this manner shall be retrieved and disposed of at the Purchaser's expense and at the direction of the Authorized Officer.
- 321b - Excess construction material as specified under Subsection 321 shall be loaded, hauled, and disposed of at waste disposal sites identified on the plans.
- 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 are required. Materials placed shall be sloped, shaped, and otherwise brought to a visible 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 more than 2 feet on the uphill side.

TIMBER SALE ROAD SPECIFICATIONS

- 327 - The finished grading shall be approved in writing by the Authorized Officer in segments or for the total project. The Purchaser shall give the Authorized Officer or Project Engineer a **3 work day notice** prior to final inspection of the grading operations and start of surfacing 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.

TIMBER SALE ROAD SPECIFICATIONS

RENOVATION AND IMPROVEMENT OF EXISTING ROADS - 500

- 501 - This work shall consist of reconditioning and preparing the roadbed and shoulders, minor excavation and/or embankment, 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.
- 501a - This work shall also include the removal and disposal of slides in accordance with these specifications.
- 502 - The existing road surface shall be bladed and shaped to the lines, grades, dimensions, and typical cross sections shown on the plans and as specified in the worklist.
- 502b - Drainage ditches shall be bladed and shaped in accordance with the lines, grades, dimensions, and typical cross sections shown on the plans.
- 503a - Debris from slide removal, turn around construction and reconstruction, ditch repair, and all other road construction shall be hauled to a designated disposal site as approved by the Authorized Officer and/or as shown on the plans.
- 504 - Existing road surface shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density and compacted to full width with equipment conforming to requirements of Subsections 103f, 103g, 103h, and 103i and as specified in the worklist.
- 504a - Minimum compaction required shall be 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 vegetative obstructions which will impede the structure's designed outflow configuration. Catch basins shall conform to the lines, grade, dimensions, and typical diagram shown on the plans.
- 507 - Existing and new drainage structures shall be replaced and placed with structures of the type, gauge, diameter, and length shown on the plans and in accordance with the placement requirements set forth under Section 400 of these specifications.
- 508 - Vegetation encroaching on the roadbed and the drainage ditches of existing roads shall be removed by cutting and disposed of in accordance with Section 2100 of these specifications.

TIMBER SALE ROAD SPECIFICATIONS

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

TIMBER SALE ROAD SPECIFICATIONS

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.
- 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 for use of water sources selected by the Purchaser and approved by the Authorized Officer.

TIMBER SALE ROAD SPECIFICATIONS

SLOPE PROTECTION - 1400

- 1401 - This work shall consist of furnishing, hauling, and placing stone materials for slope protection structures and splash pads (energy dissipaters) 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.

NOTE: Guide for relation between volume, size, and weight. (175 lbs./cu./ft.):

<i>Volume/Cubic Foot</i>	<i>Average Dimension in inches</i>	<i>Approximate Weight in Pounds</i>
<i>12</i>	<i>27.5 x 27.5 x 27.5</i>	<i>2100</i>
<i>6</i>	<i>21.8 x 21.8 x 21.8</i>	<i>1050</i>
<i>4</i>	<i>19.1 x 19.1 x 19.1</i>	<i>700</i>
<i>3</i>	<i>17.3 x 17.3 x 17.3</i>	<i>525</i>
<i>1</i>	<i>12.0 x 12.0 x 12.0</i>	<i>175</i>
<i>2/3</i>	<i>10.5 x 12.0 x 12.0</i>	<i>120</i>
<i>1/2</i>	<i>9.5 x 9.5 x 9.5</i>	<i>88</i>
<i>1/3</i>	<i>8.3 x 8.3 x 8.3</i>	<i>60</i>
<i>1/4</i>	<i>7.6 x 7.6 x 7.6</i>	<i>44</i>
<i>1/6</i>	<i>6.6 x 6.6 x 6.6</i>	<i>30</i>
<i>1/8</i>	<i>6.0 x 6.0 x 6.0</i>	<i>22</i>
<i>1/100</i>	<i>2.6 x 2.6 x 2.6</i>	<i>2</i>

- 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.

TIMBER SALE ROAD SPECIFICATIONS

1405 - Rip rap shall conform to the following gradations:

TABLE 1405¹

Class	Range of Intermediate Dimensions ² (inches)	Range of Rock Mass ³ (pounds)	% of Rock Equal or Smaller by Count
0	6-8	18-42	100
	5-6	10-18	85
	2-5	1-10	50
	0-2	0-1	15
1	9-15	59-270	100
	7-11	28-110	85
	5-8	10-42	50
	3-6	2-18	15
2	15-21	270-750	100
	11-15	110-270	85
	8-11	42-110	50
	6-8	10-42	15
3	21-27	750-1600	100
	15-19	270-560	85
	11-14	110-220	50
	8-10	42-81	15
4	27-33	1600-2900	100
	19-23	560-990	85
	14-17	220-400	50
	9-12	59-140	15

¹Gradation includes spalls and rock fragments to provide a stable, dense mass.

²The intermediate dimension is the longest straight-line distance across the rock that is perpendicular to the rock's longest axis on the rock face with the largest projection plane.

³Rock mass is based on a specific gravity of 2.65 (165#/cu.ft.) and 85 percent of the cubic volume as calculated using the intermediate dimension.

- 1406 - The placement of slope protection stones by the end dumping method shall be conducted to prevent the stones from escaping beyond the embankment toe.
- 1407 - Determination of the acceptability of the slope protection material gradation will be through visual inspection and physical measurements by the Authorized Officer.

TIMBER SALE ROAD SPECIFICATIONS

EROSION CONTROL - 1700

- 1701 - This work shall consist of measures to control soil erosion or water pollution during the construction operation through the use of berms, dikes, dams, sediment basins, fiber mats, netting, gravel, mulches, grasses, slope drains, and other erosion control devices or methods in accordance with these specifications and conforming to the lines, grades, dimensions and typical cross sections shown on the plans.
- 1704 - The erosion control provisions specified under this Subsection shall be coordinated with the Soil Stabilization requirements of Section 1800.
- 1705 - The surface area of erodible earth material exposed at any one time by clearing and grubbing shall not exceed 21,780 square feet (0.50 acres) after October 15 without prior approval by the Authorized Officer.
- 1706 - The surface area of erodible earth material exposed at one time by excavation, borrow, or fill within the right-of-way shall not exceed 21,780 square feet (0.50 acres) after October 15 without prior approval by the Authorized Officer.
- 1707 - Completed and partially completed segments of the road at the following location:

Road No.	From M.P.	To M.P.
TR 03-02-D	0.00	0.71
TR 03-02-A	0.00	0.17
TR 03-02-B	0.00	0.11
TR 03-02-C	0.00	0.05
TR 33-12	0.00	0.05
TR 32-3	0.00	0.15
33-6-33.2 B	0.33	0.65

carried over the winter and early spring periods shall be stabilized by seeding and mulching in accordance with Section 1800.

- 1708 - Newly constructed roads to be carried over the winter period, shall be blocked to vehicular traffic.
- 1708a - Road segments not completed during dry weather periods shall be winterized, by providing a well-drained roadway using water bars, maintaining drainage, and performing additional measures necessary to minimize erosion and other damage to the roadway, as directed by the Authorized Officer. Portions of roads not having surface rock in place will be blocked or barricaded to prevent vehicular traffic.

TIMBER SALE ROAD SPECIFICATIONS

SOIL STABILIZATION – 1800

- 1801 - This work shall consist of seeding and mulching on designated cut, fill, borrow, disposal, and special areas in accordance with these specifications. This work is required for road acceptance under Section 18 of this contract.
- 1802 - Soil stabilization work consisting of seeding and mulching shall be performed on existing roads and designated locations (culvert replacements and installations) in accordance with these specifications at the locations specified in the worklist.
- 1802a - Soil stabilization work consisting of seeding and mulching shall be performed on new road construction, landings, disturbed areas, and disposal sites in accordance with these specifications and as shown on the plans.
- 1803 - Soil stabilization work as specified under Subsections 1802 and 1802a shall be performed during the following seasonal periods:

From: August 15	To: October 15 (of the same year)
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If soil stabilization of disturbed areas is not completed by the specified fall date, the Purchaser shall treat disturbed areas in accordance with Subsection 1707 and then complete the requirements of Section 1800 the next construction season. The Authorized Officer may modify the above seasonal dates to conform to existing weather conditions and changes in the construction schedule.

- 1803a - The Purchaser shall begin soil stabilization work within 10 days of the starting work date when notified by the Authorized Officer.
- 1806a - Additional soil stabilization work consisting of seeding and mulching, may be required at the option of the Authorized Officer. Providing the additional stabilization is not due to Purchaser negligence as specified in Section 12 of the contract, a reduction in the total purchased price shall be made to offset the cost of furnishing and applying such additional stabilization material. Cost shall be based upon the unit price set forth in the current BLM Timber Appraisal Production Cost Schedule.
- 1808 - Mulch materials conforming to the requirements of Subsection 1808a shall be furnished by the Purchaser in the amounts specified under Subsection 1811 and applied in accordance with Subsection 1812.
- 1808a - Straw mulch shall be certified weed free from commercial grain fields and native grass fields. Straw mulch shall be from oats, wheat, rye, or other approved grain crops and shall be free from, mold, or other objectionable material. Straw mulch shall be in an air-dry condition and suitable for placement.

TIMBER SALE ROAD SPECIFICATIONS

- 1809 - Mulch material shall be delivered to the work area in a dry state. Material found to be wet will not be accepted. Material to be used in the mulching operation may be stockpiled along the road designated for treatment provided that it is maintained in a dry state and has the approval of the Authorized Officer.
- 1810 - Bulk mulching material required under these specifications shall be delivered to the work area bound either by twine, string, or hemp rope. Wire binding will not be permitted.
- 1811 - The Purchaser shall furnish and apply to approximately **4.8** acres designated for treatment as shown on the plans and as specified under Subsections 1802 and 1806a, a mixture of grass seed and mulch material at the following rate of application:

a. Two Stage:

Grass Seed	20 lbs./acre
Mulch	3,000 lbs./acre

The above proportion and application rate are subject to adjustment by the Authorized Officer during the application operation.

- 1812 - The Purchaser shall furnish and apply to the area designated for treatment as shown on the plans and as specified under Subsections 1802, 1802a, and 1806a, a mixture of grass seed and mulch, material at the application rate to be determined by the Authorized Officer based on visual observation of trial applications.

Mulches shall be spread/placed in treatment areas to a depth of 2 inches to allow seed germination or as directed by the Authorized Officer. Treatment area will be covered evenly and completely. Mulch can be broadcast onto the soil surface by hand or with hand/mechanical operated spreaders.

- 1814 - The Purchaser may reduce the application rate on partially covered slopes and refrain from application on areas already well stocked with grass or on rock surfaces as determined by the Authorized Officer.
- 1815 - The seed and mulch materials shall be placed by the dry method in accordance with the requirements set forth in Subsection 1815b.
- 1815b - Dry Method - Blowers, mechanical seeders, seed drills, landscape seeders, cultipaker seeders, or other approved mechanical seeding equipment may be used when seed and mulch are to be applied in dry form.
- 1818 - The maximum distance to be seeded and mulched from the road centerline shall be 20 feet for the cut slopes and 25 feet for the fill slopes.

TIMBER SALE ROAD SPECIFICATIONS

- 1819 - The Purchaser shall notify the Authorized Officer at least 3 days in advance of date he intends to commence the specified soil stabilization work.
- 1821 - Mulch that collects at the end of culverts or accumulates to excessive depths on the slopes shall be evenly spread by hand methods, as directed by the Authorized Officer.
- 1822 - No materials shall be applied when wind velocities would prevent a uniform application of the mix or slurry or when winds would drift the mix or slurry spray outside of the designated treatment area.
- 1824 - Twine, rope, sacks, and other debris resulting from the soil-stabilization operation shall be picked up and disposed of to the satisfaction of the Authorized Officer.

TIMBER SALE ROAD SPECIFICATIONS

ROADSIDE BRUSHING - 2100

- 2101 - This work shall consist of the removal of vegetation from the road prism - variable distance, and inside curves in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the Roadside Brushing Detail of this exhibit, at designated locations as shown in the plans.
- 2102 - Roadside brushing may be performed mechanically with self-powered, self-propelled equipment and/or manually with hand tools, including chain saws.
- 2103 - Vegetation cut manually and/or mechanically less than 6 inches in diameter when measured at D.B.H. shall be cut to a maximum height of 3 inches above the ground surface or above obstructions such as rocks or stumps on cut and fill slopes and all limbs below the 2 inch area will be severed from the trunk.
- 2103a - Vegetation shall be cut and removed from the roadbed 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. Limbs below the 1-inch area 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 14 feet above the running surface 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 running surface shall be cut, to within 1 inches of the trunk to produce a smooth vertical face.
- 2106 - Vegetative growth capable of growing 1 foot in height or higher shall be cut, within the road prism-variable distance or as directed by the Authorized Officer.
- 2107 - Inside curves shall be brushed out for a sight distance of 200 feet chord distance or a middle ordinate distance of 25 feet, whichever is achieved first. Overhanging limbs and vegetation more than 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 this operation shall be scattered (unless otherwise noted in the work list) downslope from the roadway. Debris shall not be allowed to accumulate in concentrations. Debris more than 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

TIMBER SALE ROAD SPECIFICATIONS

- by the Authorized Officer.
- 2110 - Vegetation 6 inches and smaller in diameter shall be chipped where indicated in the work list. Chips shall be scattered downslope from the roadway. Vegetation over 6 inches in diameter shall be disposed of by direction of the Authorized Officer.
 - 2115 - Mechanical brush cutters shall not be operated when there are people and occupied vehicles within 400 feet of the immediate operating area.
 - 2116 - 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.

SPECIAL PROVISIONS - ROADS

1. GENERAL:

Before the initial start of road renovation, construction, reconstruction, or surfacing operations, or after a shutdown of 7 or more days, the Purchaser, or the Purchasers Representative, shall notify the Authorized Officer 48 hours in advance of the date they plan to begin operations. The Purchaser shall also notify the Authorized Officer if they intend to cease operations for any period of 30 or more days.

2. DAMAGE:

The Purchasers Representative/Contractor shall protect, and is responsible for, any damage to existing telephone lines, transmission lines, fiber optic lines, fences, ditches, and other existing improvements as required in Section 14. Damage to utilities and existing improvements shall be promptly paid for or repaired to a condition which is, in the opinion of the Authorized Officer and the governing utility company, as good or better condition than just prior to such damage occurring.

3. PERMITS AND FEES:

All permits and fees required are the responsibility of the Purchaser.

4. SEASONAL RESTRICTION: - Waivers may be granted if conditions are favorable.

<u>ACTIVITY</u>	<u>START DATE</u>	<u>END DATE</u>
Road renovation	May 15	Oct. 15
In stream	June 15	Sept. 15

5. STREAMS:

All stream channel culverts and inlets shall be cleared and cleaned between **June 15th and September 15th** in accordance with Oregon Department of Fish and Wildlife (ODFW) in-stream work period guidelines.

Construct silt fences 25 and 50 feet below culvert replacement sites (on live streams) to trap sediment and prevent it from entering nearby stream channels.

Live streams shall be diverted around or through the work area in a manner that will minimize sedimentation downstream. Keep excavation site dewatered so that installation of culverts can be carried out only under dry conditions. Dispose of excess water by using natural drainage ways or devices near the site to the extent of their natural capacity and in a manner that will avoid damage to adjacent property. Utilize dewatering methods such as temporary sediment traps and/or silt fences for areas to be excavated. Provide for downstream water flow without significant transport of excavated material or sediment during construction. At no time shall turbidity limits exceed DEQ's water quality standards.

Ensure that all large wood is retained in the stream channel during culvert cleaning activities by moving logs which had accumulated on the upstream side of a culvert to the downstream side of the culvert.

6. WATER SOURCE:

The Purchaser is responsible for obtaining water, water sources shall be approved by the Authorized Officer prior to use. The Purchaser is responsible for all permits and fees from water sources on private or commercial sources.

7. EQUIPMENT:

Construction equipment shall be washed prior to entering BLM lands. Removal of all dirt, grease, and plant parts that may carry noxious weed seeds or vegetative parts is required. Equipment shall be inspected the Authorized Officer prior to entering BLM lands. Provide 48 hours' notice of inspection to BLM prior to mobilization.

8. SOIL STABILIZATION:

All disturbed soil shall be seeded and mulched. The Purchasers Representative/Contractor shall apply native grass seed and Certified Weed Free straw mulch for soil stabilization operations. BLM will furnish native grass seed, **if available**. Acquiring certified weed free straw mulch is the responsibility of the Purchasers Representative.

9. ROAD RENOVATION:

Road renovation shall generally take place between May 15th and October 15th of the same year. Waivers may be granted from the Authorized Officer for working outside of this time period. Seasonal restrictions for stream work and wildlife may still apply.

Loose material cleaned from ditch lines and/or slide material shall not be side-cast or placed where it can enter wetlands, riparian reserves, floodplains, and waters of the State.

10. ROADSIDE BRUSHING:

While roadside brushing, there shall be no scarring, or any other damage of the tree trunk or bole allowed. All debris resulting from roadside brushing activities shall be scattered downslope. Use of Excavators for brush removal will be at the discretion of the Authorized Officer. **All culvert inlets and outlets shall be brushed for a radius of 4 feet.**

While roadside brushing through private industry lands, conifer trees at the edges of the cleared area (see cutting limit, Exhibit C6) shall have the branches pruned rather than being felled.

All stumps, designated by the Authorized Officer, which would interfere with normal blading and road renovation operations (including turnouts), shall be removed in such a way as to not cause damage to the drainage ditch or the road bed. Stumps can be popped leaving roots or ground-down. Stumps that are ground-down, shall be ground to a minimum of **6 inches below existing grade**.

11. TEMPORARY ROUTES:

All temp routes and native surfaced roads (that were previously closed before timber sale activities began) shall be winterized by October 15th if access is needed over two dry seasons. Winterization includes water barring, seeding, mulching, and barricading. All temp routes shall be ripped, water barred, barricaded, seeded, and mulched after use unless otherwise specified.

Clearing, grubbing, and excavation activities of temporary spur routes shown on Exhibit C shall be performed in accordance with Road Specifications (Exhibit C10).

Construction of temporary routes shall be to minimum width.

12. COMMERCIAL AGGREGATE:

Aggregate furnished for this work shall be from an accredited weed free quarry or shall have been stockpiled in the period between November 1st and June 15th immediately prior to application. Aggregate which has been stockpiled between June 16th and October 31st of prior years will not

be accepted. Aggregate crushed between June 16th and October 31st of the same application year shall not be stockpiled for more than two weeks before application.

13. WILDLIFE RESTRICTIONS:

Seasonally restrict mechanical roadside brushing activities (including chainsaws) and heavy equipment use to avoid disturbance to nesting NSOs and raptors from March 1st through September 30th within 200 feet of known NSO and raptor nests. This seasonal restriction could be waived if non-nesting status is determined.

14. WET SEASON HAUL:

The Purchaser may wet season haul, with the Authorized Officer's approval, on roads with durable rock surfacing and sufficient rock depth to resist rutting or development of sediment on road surfaces that drain directly to wetlands, floodplains, and waters of the State.

If hauling activities during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul. Any costs for rocking and installation of additional drainage features will be at the Purchaser's expense and shall be completed in accordance with the plans and specifications shown in Exhibit C of this contract.

No hauling shall occur on native surface roads during the wet season (generally Oct. 15 – May 15); exceptions may be made during dry or frozen conditions of the wet season pending approval from a BLM Authorized Officer.

ROAD MAINTENANCE SPECIFICATIONS

TABLE OF CONTENTS

SECTION	DESCRIPTION
3000	General
3100	Operational Maintenance
3200	Seasonal Maintenance
3300	Final Maintenance
3400	Other Maintenance
3500	Decommissioning

Exhibit D1

Sale Name: Flume Peak T.S.

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GENERAL - 3000

3001 - The Purchaser shall be required to maintain all roads listed and/or as shown in Exhibit D maps of this contract in accordance with Sections 3000, 3100, 3200, 3300, 3400, and 3500 of this exhibit.

Road No. and Segment	Length Miles Used	Ownership	Road Surface Type	Maintenance Responsibility
33-6-26.0 (A1)	0.11	BLM	AGG	Purchaser
33-6-26.0 (A2)	0.19	ORM	AGG	Purchaser
33-6-26.0 (A3)	0.20	BLM	AGG	Purchaser
33-6-26.0 (B-C)	0.60	BLM	AGG	Purchaser
33-6-27.7 (A)	0.26	BLM	NAT	Purchaser
33-6-27.0 (A1)	0.26	BLM	AGG	Purchaser
33-6-27.0 (A2)	0.07	LRT	AGG	Purchaser
33-6-27.0 (A3)	0.32	BLM	AGG	Purchaser
33-6-27.3	0.11	BLM	AGG	Purchaser
34-6-3.1 (A-C)	1.10	BLM	AGG	Purchaser
34-6-3.3 (A)	1.56	BLM	AGG	Purchaser
34-6-3.4	0.23	BLM	AGG	Purchaser
34-6-3.2	0.82	BLM	AGG	Purchaser
33-6-34.0	0.27	ORM	AGG	Purchaser
SPUR RD 34	0.06	BLM	NAT	Purchaser
34-6-5.0 (A-B)	3.37	BLM	AGG	Purchaser
33-6-33.0	1.18	BLM	AGG	Purchaser
33-6-33.1	0.12	BLM	AGG	Purchaser
33-6-33.2 (A)	0.33	BLM	AGG	Purchaser
33-6-33.2 (B)	0.32	BLM	NAT	Purchaser
33-6-33.5	0.25	BLM	AGG	Purchaser
33-6-33.6	0.13	BLM	AGG	Purchaser
SPUR RD 33	0.06	BLM	NAT	Purchaser
TR 03-02-D	0.71	BLM	NAT	Purchaser

Exhibit D1

Sale Name: Flume Peak T.S.

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Road No. and Segment	Length Miles Used	Ownership	Road Surface Type	Maintenance Responsibility
TR 03-02-A	0.17	BLM	NAT	Purchaser
TR 03-02-B	0.11	BLM	NAT	Purchaser
TR 03-02-C	0.05	BLM	NAT	Purchaser
TR 33-12	0.05	BLM	NAT	Purchaser
TR 32-3	0.15	BLM	NAT	Purchaser

- 3001a - The Purchaser shall be required to provide maintenance on roads in accordance with Subsections 3403 and 3404.
- 3002 - The Purchaser shall maintain the cross section of existing dirt or graveled roads to the existing geometric standards.
- 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 roads 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 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.
- 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 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 designated, suitable 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 as directed by the Authorized Officer.
- 3104b - The Purchaser shall be responsible for removal of all slides or slough, up to fifteen station yards in quantity, at any one site. This work includes unlimited multiple sites on all roads required to be maintained by the purchaser.

Exhibit D1

Sale Name: Flume Peak T.S.

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Prior to removal of any slough or slide material exceeding fifteen 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 the current BLM Road Cost Guide. 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 materials eroded from road shoulders and fill slopes, up to fifteen 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 repair and replacement of eroded material exceeding fifteen 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 Road Cost Guide. 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 in accordance with Section 2100 of Exhibit C.

3108 - The Purchaser shall avoid fouling gravel or bituminous surfaces. 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 caused by such skidding activity is not considered maintenance and shall be repaired at the Purchaser's expense.

3108a - The Purchaser shall perform logging operations on gravel roadways only where the locations have been marked on the ground and/or approved by the Authorized Officer. The Purchaser shall furnish gravel for necessary repairs at designated locations. Repair of the road is not considered maintenance and shall be repaired at the Purchaser's expense.

SEASONAL MAINTENANCE - 3200

- 3201 - The Purchaser shall perform preventative maintenance at the end of Purchaser's hauling each season and during non-hauling periods which occur between other operations on the contract area. This includes 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 1st of 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 proceeding operating seasons.
- 3203 - The Purchaser shall complete road cleanup and maintenance, as specified in Section 3100, at the completion of logging operations on any roads 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 road 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 thirty 30 calendar days following the completion of hauling and in accordance with Section 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 Section 16(b), Special Provisions, and 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 Subsection 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 or snow removal, the Purchaser will perform the work according to the conditions and equipment requirements set forth in the authorization.

3403 - The Purchaser may 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 traveled. Subsequent applications shall be made for each 40 MBF of timber or 120 yds³ of rock hauled. Subsequent watering may be done at a rate less than one-half gallon per yd² when a specified lesser rate is approved by the Authorized Officer.

The Purchaser shall secure any necessary water permits and pay all required water fees for use of the water sources approved by the Authorized Officer.

3404 - The Purchaser may at his option and expense substitute lignin sulfonate for water on any or all road segments listed in the contract provided that written approval is received from the Authorized Officer. Such authorization shall include the 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.

3405a - Additional lignin sulfonate 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 ineffective due to third party damage, rain, or other events not under the control of the purchaser.

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 dust palliatives at least 3 days prior to the work by posting warning signs at key intersections to alert users that the road is being treated. All signs shall be removed by the Purchaser within thirty days of treatment.

3406 - Prior to the application of lignin sulfonate dust palliative, the roadbed shall be bladed and shaped to remove surface irregularities and excess loose material. The prepared surface must be visibly moist and drying.

3406b - A light application of water to promote penetration shall be made in advance of the

Exhibit D1

Sale Name: Flume Peak T.S.

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- application of the specified dust palliative to allow the drying process to begin and to eliminate any saturated surface conditions.
- 3406c - The prepared roadbed shall be approved by the Authorized Officer prior to application of the specified dust palliative.
- 3407 - The Purchaser shall furnish in duplicate, commercial certification signed by vendor of compliance with the lignin sulfonate or magnesium chloride dust palliative material requirements specified under Subsection 3412b. Commercial certification includes the date, identification number of truck or trailer, net mass, and brand name with each shipment. Also provide the net volume and specific gravity at 60°F, percent solids by mass, and PH.
- 3408 - Dust palliatives shall be applied with standard commercial distribution equipment operated in a manner that the material is uniformly applied on variable widths of surface at controlled rates.
- 3409 - The Purchaser shall notify the Authorized Officer a minimum of 3 days in advance of application of required dust palliative.
- 3410 - The Purchaser shall submit an application schedule for all dust palliative work to the Authorized Officer for approval. All work shall be in accordance with the approved plan.
- 3411 - Required lignin sulfonate dust palliative shall only be applied when the atmospheric temperature is 45°F and steady or rising and when the weather is not foggy or rainy. Do not apply dust palliative if rain is anticipated within 24 hours of application or when the ground is frozen.
- 3412 - The Purchaser shall apply to the prepared roadbed, a lignin sulfonate dust palliative conforming to the material requirements of Subsection 3412b. The rate of application shall be 0.5 gallons per yd² surface. A second application at the rate of 0.3 gallons per yd² shall be applied at a time designated by the Authorized Officer.

Applied materials not penetrating the road surface shall be blade mixed with additional water into the top 1 to 1½ inches of the surfacing at the Contractor's expense.

- 3412a - If required, the lignin sulfonate shall be field diluted within the application vehicle and be circulated at least 5 minutes to assure mixing. An air gap shall be provided between any water source and the materials being diluted. Accidental spills shall be contained to prevent entry in water courses or ponded water. The surface of adjacent structures and trees shall be protected from spattering or marring.

A wetting agent may be used in addition to the certified compound or mixed with the road surface preparation watering. A mix of less than 1:6000 is recommended.

Water used to dilute lignin sulfonate concentrate shall be clean and free of oil, salt, acid, alkali, vegetable matter, or any other substance that contaminates the finished product.

- 3412b - Specifications for Lignin Sulfonate:

Lignin sulfonate shall be the chemical residue produced as a byproduct of the acid sulfite

pulping process and supplied as a water solution. The base cation shall be ammonia, calcium, or sodium. The product shall be water soluble to allow field dilution. Dilute with water until the mixture contains a minimum 48 percent concentration with the following properties:

Solids	50%
Specific gravity	1.25
PH, AASHTO T289	4.5 min.

Ensure that the material does not exceed the following chemical constituents:

phosphorous	25.00 ppm
cyanide	0.20 ppm
arsenic	5.00 ppm
copper	0.20 ppm
lead	1.00 ppm
mercury	0.05 ppm
chromium	0.50 ppm
cadmium	0.20 ppm
barium	10.00 ppm
selenium	5.00 ppm
zinc	10.00 ppm

Apply when the ambient air temperature is 45° F or above.

DECOMMISSIONING – 3500

- 3501 - Decommissioning shall consist of installing water bars, seeding with native seed, placement of slash and/or placement of soil stabilization material, and blocking road from access by vehicles. This work is required for road acceptance under Section 18 of this contract.
- 3503 Decommissioning shall be performed on all temporary routes in accordance with these specifications, unless noted to perform full decommissioning activities as described in Section 3520.
- 3504 - Decommissioning work shall be completed after timber extraction, logging activities, and after road use for unit maintenance activities associated with this timber sale.
- 3506 - Stockpiled slash shall be used to protect exposed areas created by the Purchaser’s operations described in these sections. Slash shall be uniformly spread and placed without bunching. The operation shall produce a dense, uniform mat. All slash stockpiles created by the purchaser shall be utilized for decommissioning operations. Where slash is not available or no longer remaining, exposed soil areas shall be stabilized in accordance with Section 1800 – Soil Stabilization.
- 3508 - Protect areas mulched and treated with slash placement from damage by Purchaser traffic or construction equipment. Damaged areas shall be repaired by the Purchaser.
- 3509 - Barricades shall be installed across full width of roadway at locations designated in the specifications. Barricades shall be constructed conforming to the lines, grades, dimensions and typical details as shown on Exhibit D6.

Exhibit D1










Sale Name: Flume Peak T.S.

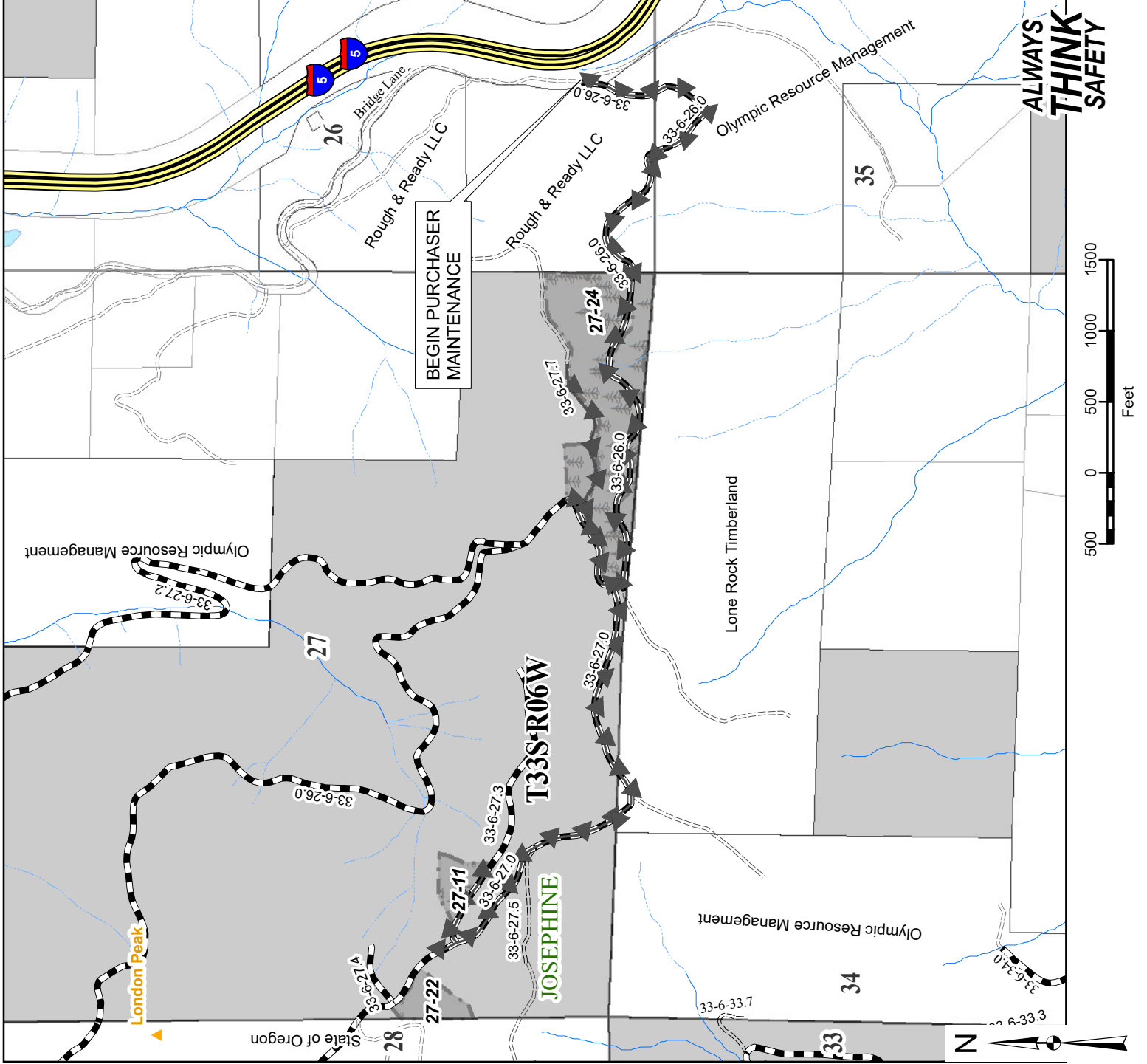
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- 3513 - Water bars shall be installed across full width of temporary routes at spacing shown in specifications. Water bars shall be constructed to the lines, grades, dimensions and typical details as shown on Exhibit D6.
- 3514 - Protection of exposed surfaces shall be accomplished by placement of soil stabilization material in accordance with Section 1800 and placement of slash described in Section 3506 on temporary routes, disturbed areas, landings, cut banks, fill slopes and other areas disturbed by the purchaser's decommissioning operations in accordance with these specifications and as shown in the plans.

EXHIBIT D2-1

LEGEND

-  TS Units
- Land Ownership**
 -  BLM
 -  Non-BLM
- Roads by Surface**
 -  Bituminous
 -  Aggregate
 -  Natural
 -  Unknown
-  Purchaser Maintenance
-  Temp Decommissioning



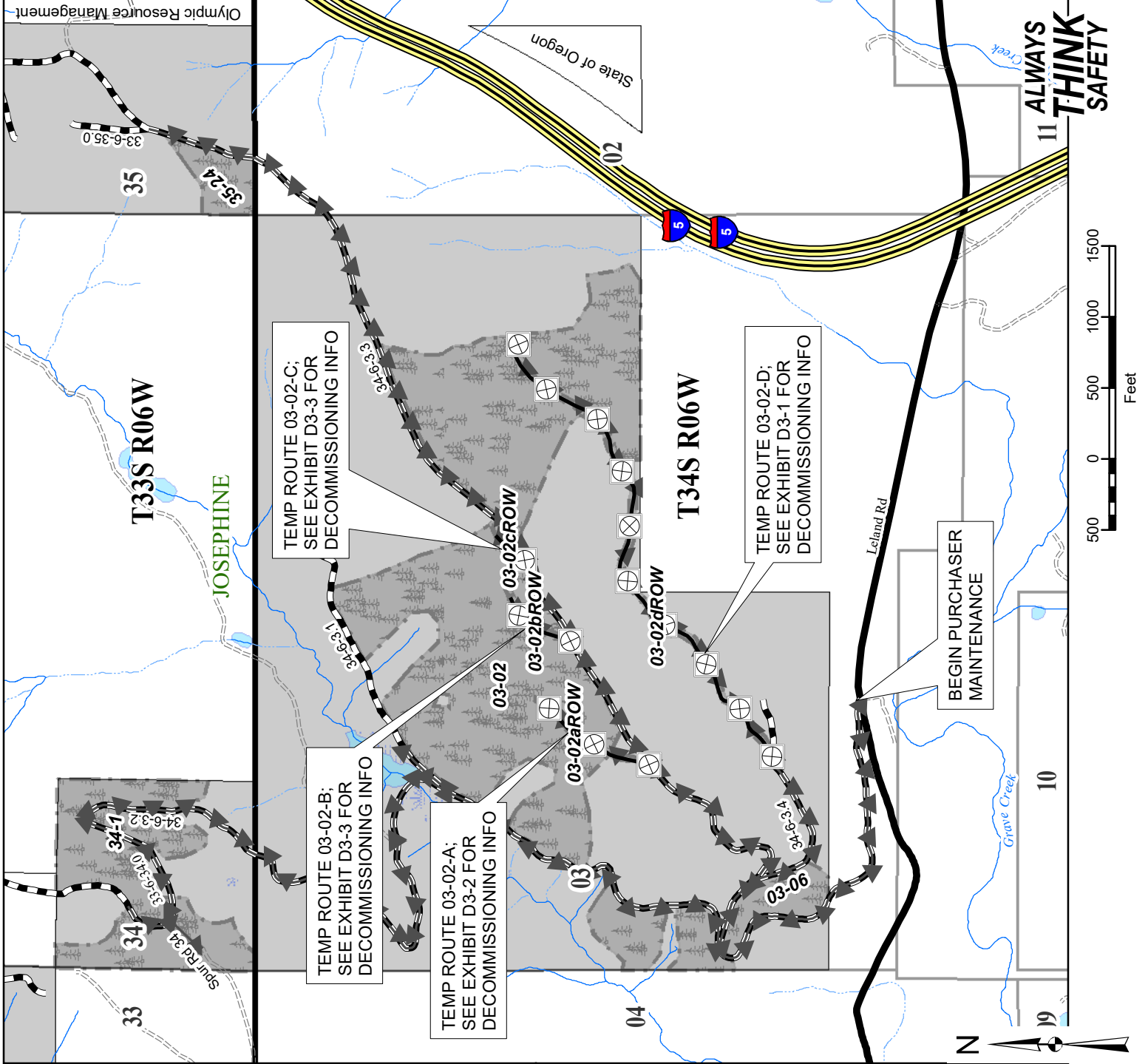
**ALWAYS
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SAFETY**

Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD MAINTENANCE MAP LONDON PEAK AREA			
DRAFTED BY: ELF			
DATE: SEPT 2020		SHEET: 1 OF 3	

EXHIBIT D2-2

LEGEND










- TS Units
- Land Ownership**
 - BLM
 - Non-BLM
- Roads by Surface**
 - Bituminous
 - Aggregate
 - Natural
 - Unknown
 - Purchaser Maintenance
 - Temp Decommissioning

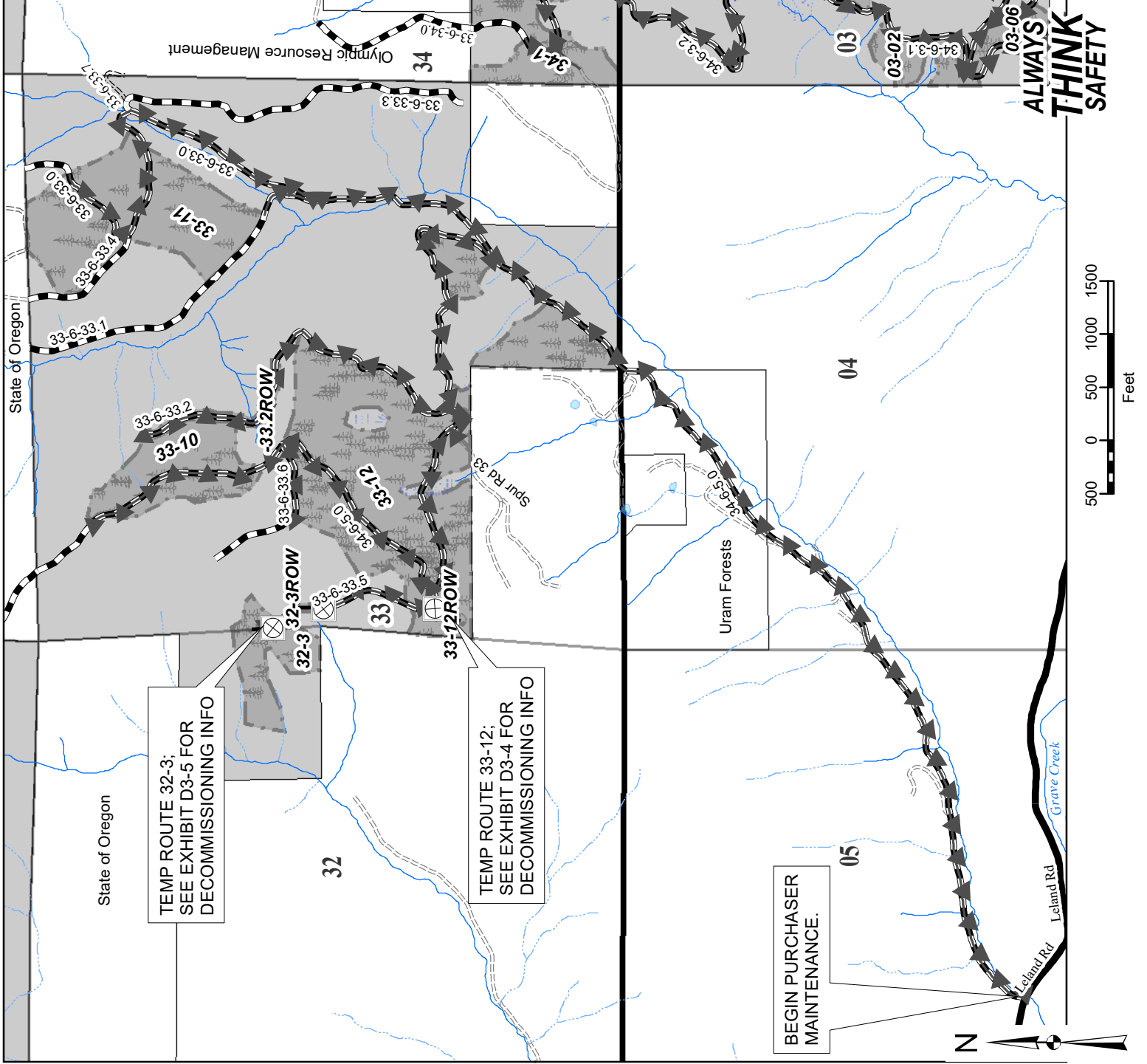


Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD MAINTENANCE MAP MACKIN GULCH AREA			
DRAFTED BY: ELF			SHEET: 2 OF 3
DATE: SEPT 2020			

EXHIBIT D2-3

LEGEND

-  TS Units
- Land Ownership**
 -  BLM
 -  Non-BLM
- Roads by Surface**
 -  Bituminous
 -  Aggregate
 -  Natural
 -  Unknown
-  Purchaser Maintenance
-  Temp Decommissioning












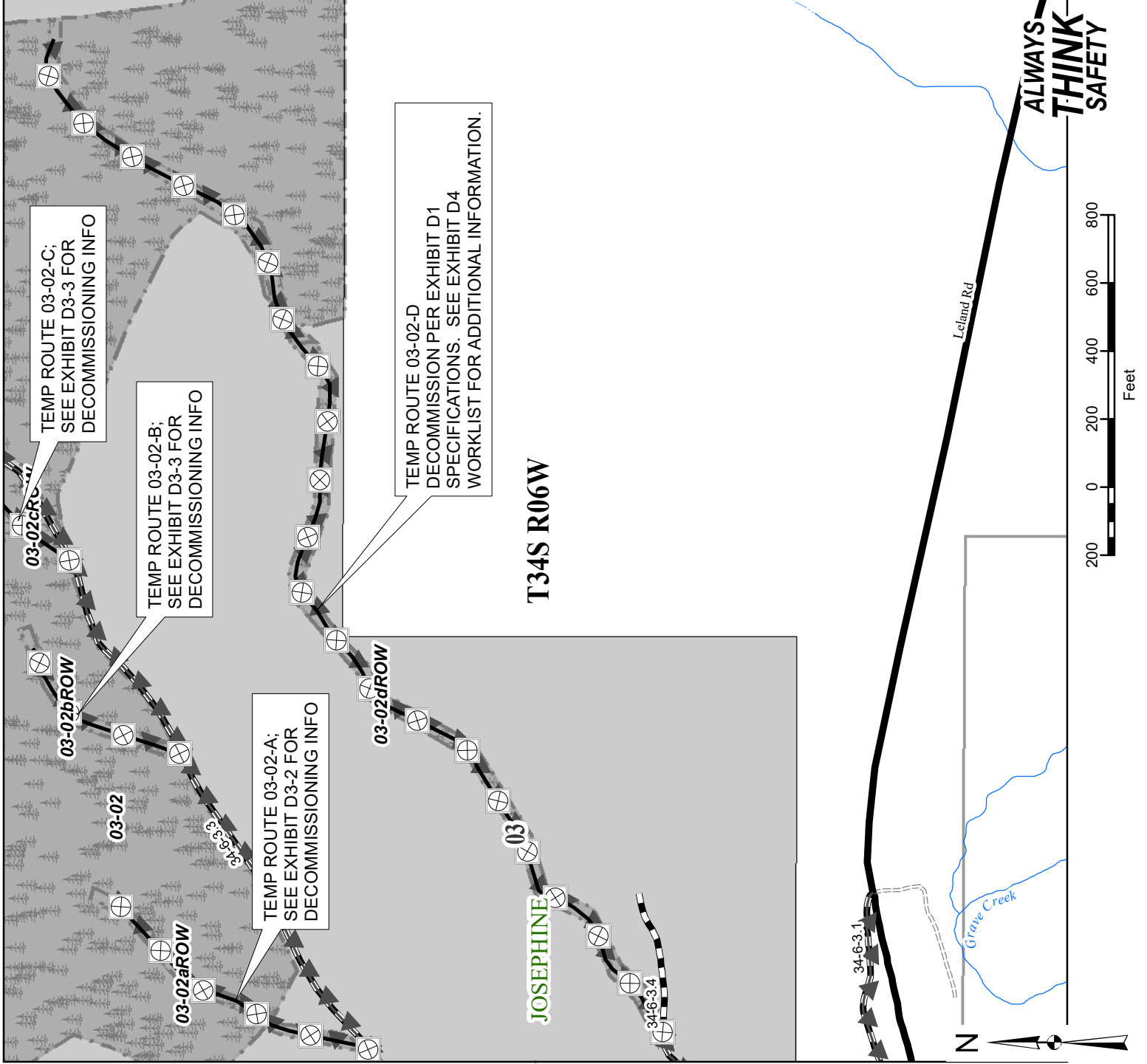
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Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE ROAD MAINTENANCE MAP FLUME GULCH AREA			
DRAFTED BY: ELF			SHEET: 3 OF 3
DATE: SEPT 2020			

EXHIBIT D3-1

LEGEND










-  TS Units
- Land Ownership**
 -  BLM
 -  Non-BLM
- Roads by Surface**
 -  Bituminous
 -  Aggregate
 -  Natural
 -  Unknown
 -  Purchaser Maintenance
 -  Temp Decommissioning

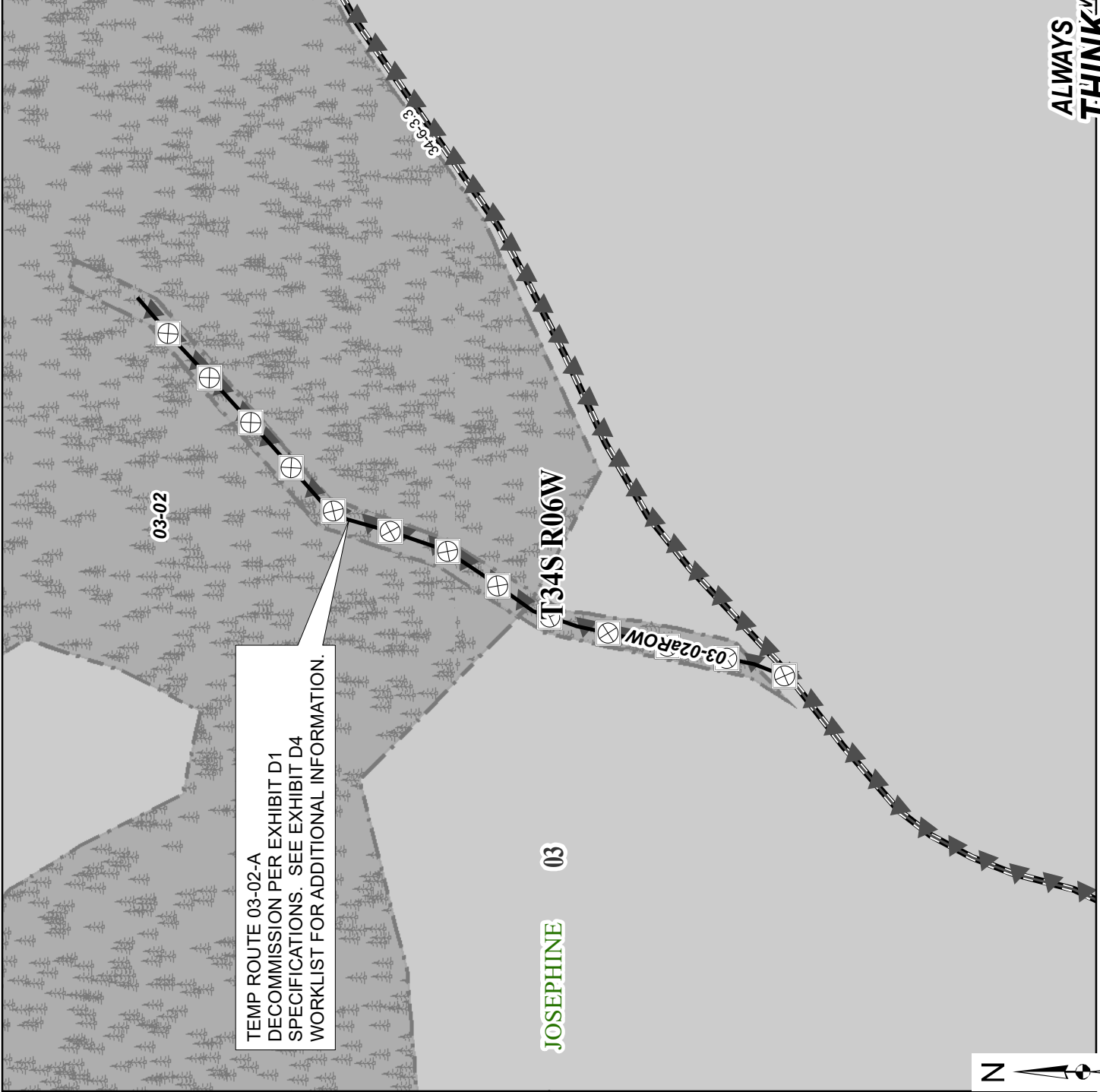


Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE TEMP DECOMMISSIONING MAP MACKIN GULCH AREA			
DRAFTED BY: ELF			SHEET: 1 OF 5
DATE: SEPT 2020			

EXHIBIT D3-2

LEGEND

-  TS Units
- Land Ownership**
-  BLM
-  Non-BLM
- Roads by Surface**
-  Bituminous
-  Aggregate
-  Natural
-  Unknown
-  Purchaser Maintenance
-  Temp Decommissioning












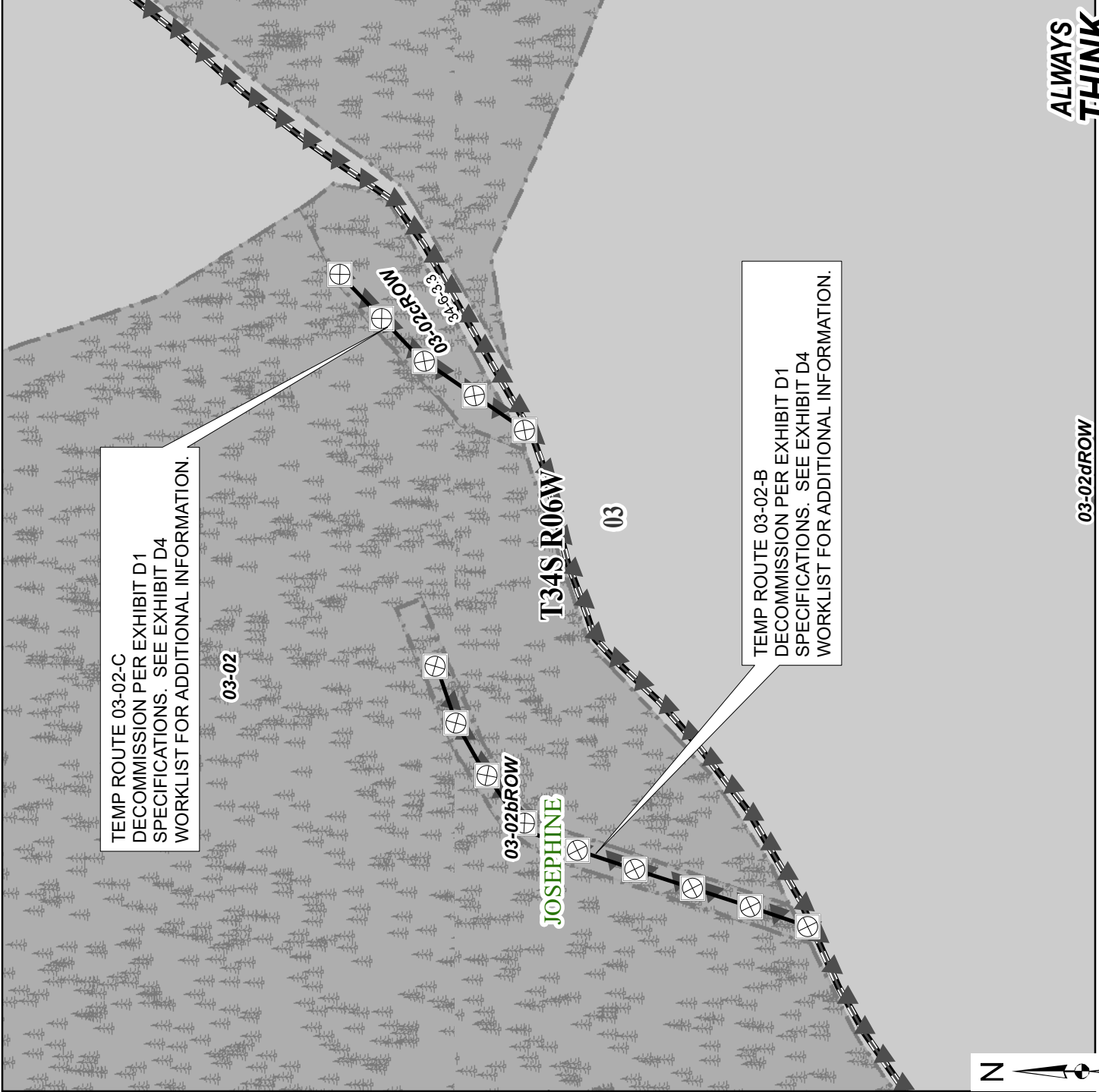
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Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE TEMP DECOMMISSIONING MAP MACKIN GULCH AREA			
DRAFTED BY: ELF			SHEET: 2 OF 5
DATE: SEPT 2020			

EXHIBIT D3-3

LEGEND










-  TS Units
- Land Ownership**
 -  BLM
 -  Non-BLM
- Roads by Surface**
 -  Bituminous
 -  Aggregate
 -  Natural
 -  Unknown
-  Purchaser Maintenance
-  Temp Decommissioning

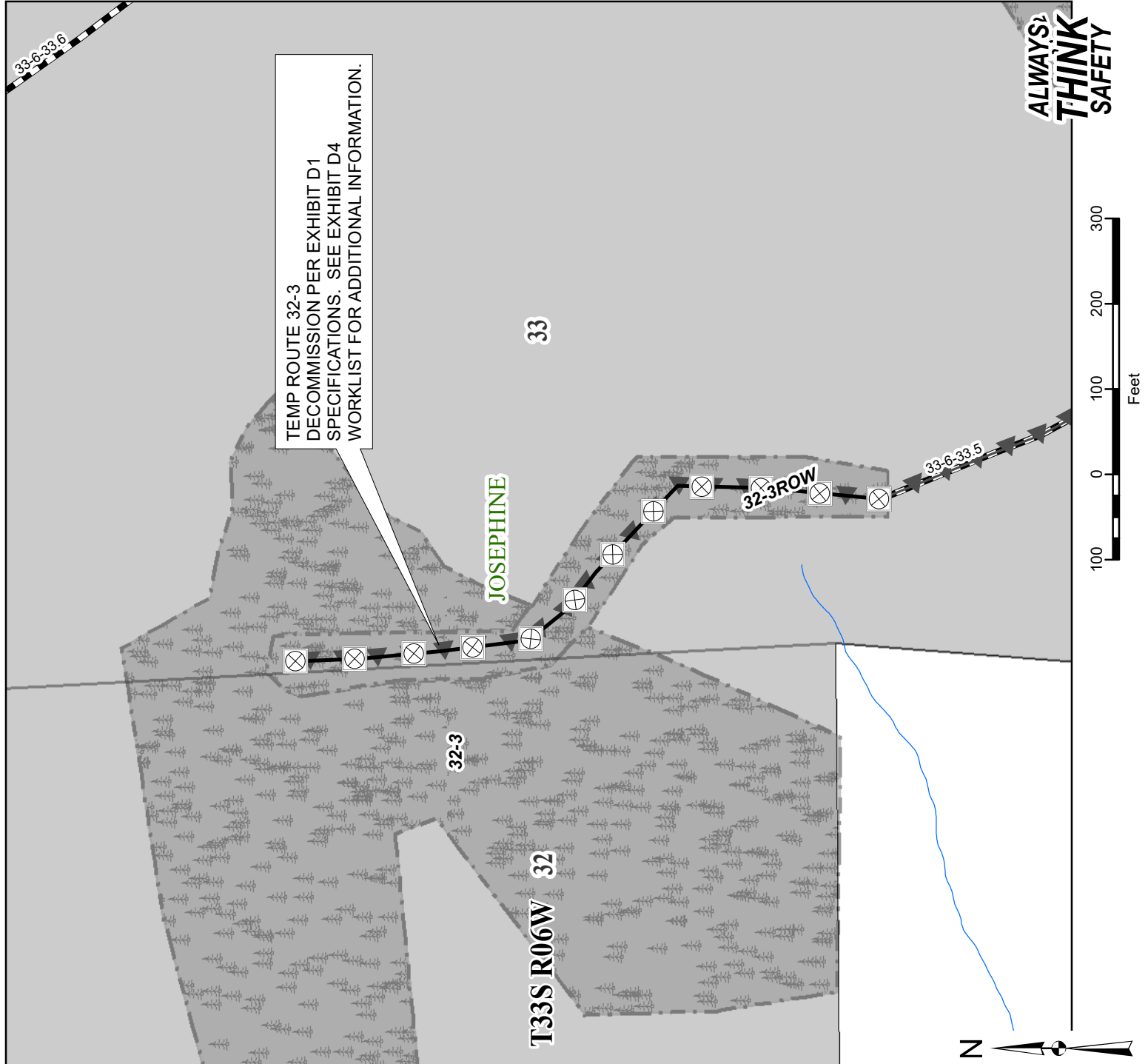


Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE TEMP DECOMMISSIONING MAP MACKIN GULCH AREA			
DRAFTED BY: ELF			SHEET: 3 OF 5
DATE: SEPT 2020			

EXHIBIT D3-5

LEGEND

-  TS Units
- Land Ownership**
 -  BLM
 -  Non-BLM
- Roads by Surface**
 -  Bituminous
 -  Aggregate
 -  Natural
 -  Unknown
-  Purchaser Maintenance
-  Temp Decommissioning



Rev No.	Description	Date	Approval
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE			
TEMP DECOMMISSIONING MAP			
FLUME GULCH AREA			
DRAFTED BY: ELF			SHEET: 5 OF 5
DATE: SEPT 2020			

Exhibit D4

Sale Name: Flume Peak T.S.

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Decommissioning Work List

Upon completion of timber operations, all Temp Routes are to be decommissioned as identified below. See Exhibit D1, Section 3500 for decommissioning specifications.

General Definitions:

Decommission: Decommissioning shall include installing water bars per the Water Bar Spacing by Erosion Class Table shown on Exhibit D6, and barricading entrances. All exposed or disturbed soils shall be seeded with approved native seed species and mulched with weed-free straw or approved native slash materials.

Mackin Gulch Area

34-6-3.4 Road – Lower Mackin (See Exhibit D3-1 for Map)

MP	Description
0.00	Jct w/ 34-6-3.3 Rd.
0.01	Reconstruct berm. End decommissioning.

TR 03-02-D (See Exhibit D3-1 for Map)

STA	Description
0+00	Jct w/ 34-6-3.4 Rd. Begin temp route decommissioning in accordance with Road Maintenance Specification (Exhibit D1) and Barricade and Waterbar Details (Exhibit D6).
0+25	Reconstruct berm.
37+66	End temp route decommissioning.

TR 03-02-A (See Exhibit D3-2 for Map)

STA	Description
0+00	Jct w/ 34-6-3.3 Rd. Begin temp route decommissioning in accordance with Road Maintenance Specification (Exhibit D1) and Barricade and Waterbar Details (Exhibit D6).
0+55	Reconstruct berm.
8+90	End temp route decommissioning.

TR 03-02-B (See Exhibit D3-3 for Map)

STA	Description
0+00	Jct w/ 34-6-3.3 Rd. Begin temp route decommissioning in accordance with Road Maintenance Specification (Exhibit D1) and Barricade and Waterbar Details (Exhibit D6).
0+80	Reconstruct berm.
5+74	End temp route decommissioning.

TR 03-02-C (See Exhibit D3-3 for Map)

STA	Description
0+00	Jct w/ 34-6-3.3 Rd. Begin temp route decommissioning in accordance with Road Maintenance Specification (Exhibit D1) and Barricade and Waterbar Details (Exhibit D6).
0+25	Construct berm.
2+83	End temp route decommissioning.

Exhibit D4

Sale Name: Flume Peak T.S.

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Flume Gulch Area

33-6-33.2 Road, Seg B – Flume Gulch Sp2

MP	Description
0.33	Begin Segment B.
0.42	Reconstruct berm.
0.65	End decommissioning.

TR 33-12 (See Exhibit D3-4 for Map)

STA	Description
0+00	Jct w/ 33-6-33.5 Rd. Begin temp route decommissioning in accordance with Road Maintenance Specification (Exhibit D1) and Barricade and Waterbar Details (Exhibit D6).
0+25	Construct berm.
2+85	End temp route decommissioning.

TR 32-3 (See Exhibit D3-5 for Map)

STA	Description
0+00	Jct w/ 33-6-33.5 Rd. Begin temp route decommissioning in accordance with Road Maintenance Specification (Exhibit D1) and Barricade and Waterbar Details (Exhibit D6).
0+25	Construct berm.
7+73	End temp route decommissioning.

EXHIBIT D5-1

ROAD NUMBER	FROM		TO		LENGTH MILE/STA	MAINTENANCE RESPONSIBILITY			DUST ABATEMENT/ % ROCKING	ROAD CLOSURE AND DECOMMISSIONING				
	MILE/STA	MILE/STA	MILE/STA	MILE/STA		BLM MAINTENANCE MILE	PURCHASER MAINTENANCE MILE	THIRD PARTY MAINTENANCE MILE		INSTALL EARTH/LOG BARRICADE EA	INSTALL MEGA-GATE EA	INSTALL WATER BARS EA	CAMOUFLAGE ROAD ENTRANCE (100 FT) EA	SUB-SOIL/ RIPPING/ DECOMPACT SUBGRADE MILE/STA
LONDON PEAK ROAD SYSTEM														
33-6-26.0 (A1-C)	0.00	1.10	1.10	1.10	1.10		1.10							
33-6-27.7 (A)	0.00	0.26	0.26	0.26	0.26		0.26							
33-6-27.0 (A1-A3)	0.00	0.65	0.65	0.65	0.65		0.65							
33-6-27.3	0.00	0.11	0.11	0.11	0.11		0.11							
MACKIN GULCH ROAD SYSTEM														
34-6-3.1 (A-C)	0.00	1.10	1.10	1.10	1.10		1.10		0.50					
34-6-3.3 (A)	0.00	1.56	1.56	1.56	1.56		1.56							
34-6-3.4	0.00	0.23	0.23	0.23	0.23		0.23			1				
34-6-3.2	0.00	0.82	0.82	0.82	0.82		0.82							
33-6-34.0	0.00	0.27	0.27	0.27	0.27		0.27							
SPUR RD 34	0.00	0.06	0.06	0.06	0.06		0.06							

DECOMMISSIONING NOTES

- ALL TEMP ROUTE ARE TO BE DECOMMISSIONED PER EXHIBIT D SPECIFICATIONS AND DETAILS.
- DECOMMISSIONING SHALL INCLUDE WATER BARRING, SEEDING & MULCHING, AND BARRICADING.
- FULL DECOMMISSIONING SHALL INCLUDE RIPPING, WATER BARRING, SEEDING & MULCHING, AND BARRICADING.

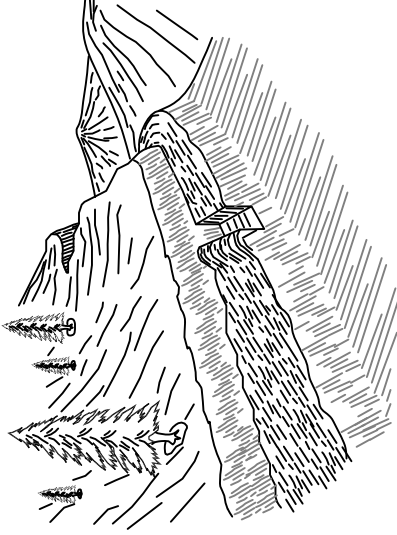
*FOR INFORMATIONAL USE ONLY.
QUANTITIES SHOWN ARE NOT PAY ITEMS.

ALWAYS
THINK
SAFETY

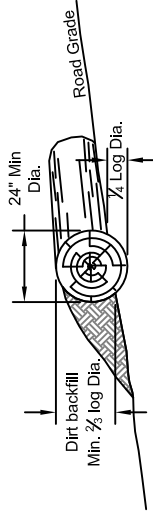
FLUME PEAK
TIMBER SALE
ESTIMATE OF QUANTITIES*

REV. NO.	DESCRIPTION	DATE	APPROVAL
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
DRAFTED BY: BLM			
DATE: SEPT 2020			
DRAWING NO.: OR-11-9113.4-1			
SCALE: NONE		SHEET: 1 OF 3	

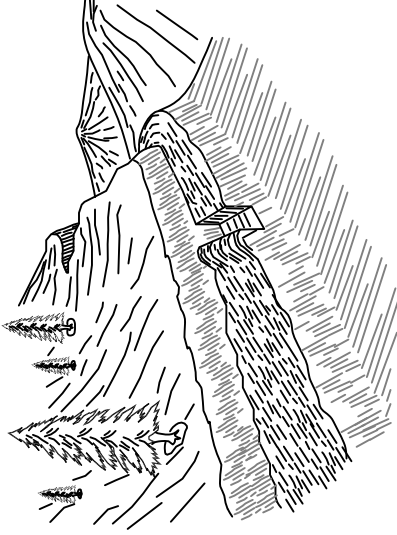
EXHIBIT D6



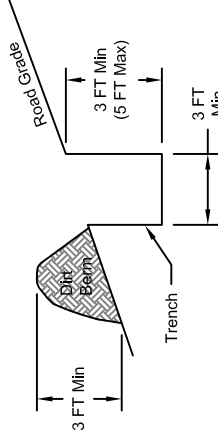
LOG BARRICADE



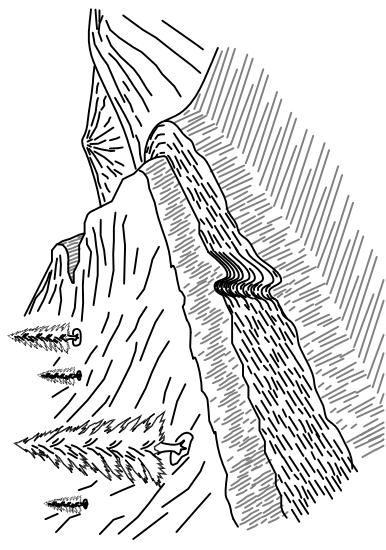
1. Log barricade shall be constructed as shown above.
2. Exact location is listed in Work List.
3. All barricades shall be skewed 30 degrees.
4. The length shall be sufficient to extend from the cut bank to the fill slope.
5. The minimum small end diameter of the log barricade shall be 24".



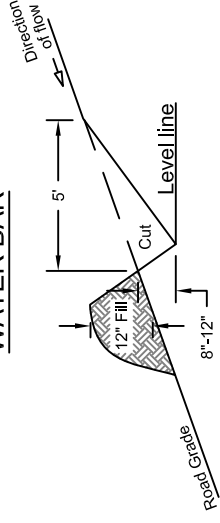
TRENCH BARRICADE



1. Barricade length shall extend across the entire road surface to a point sufficient to prohibit motor vehicle traffic.
2. Exact location is listed in the Work List.
3. All barricades shall be skewed as needed to drain or as directed by the Authorized Officer.

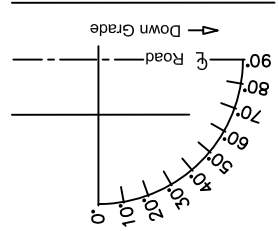


WATER BAR



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. Upon completion of skidding logs, for the logging season, each skid road will have cross drainage constructed as shown above.

SKREW DIAGRAM



WATER BAR SPACING* BY EROSION CLASS^

ROAD GRADE	HIGH	MODERATE	LOW
%	FEET	FEET	FEET
2-5	200	300	400
6-10	150	200	300
11-15	100	150	200
16-20	75	100	150
21-35	50	75	100
35+	50	50	50

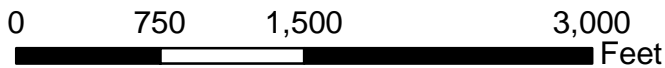
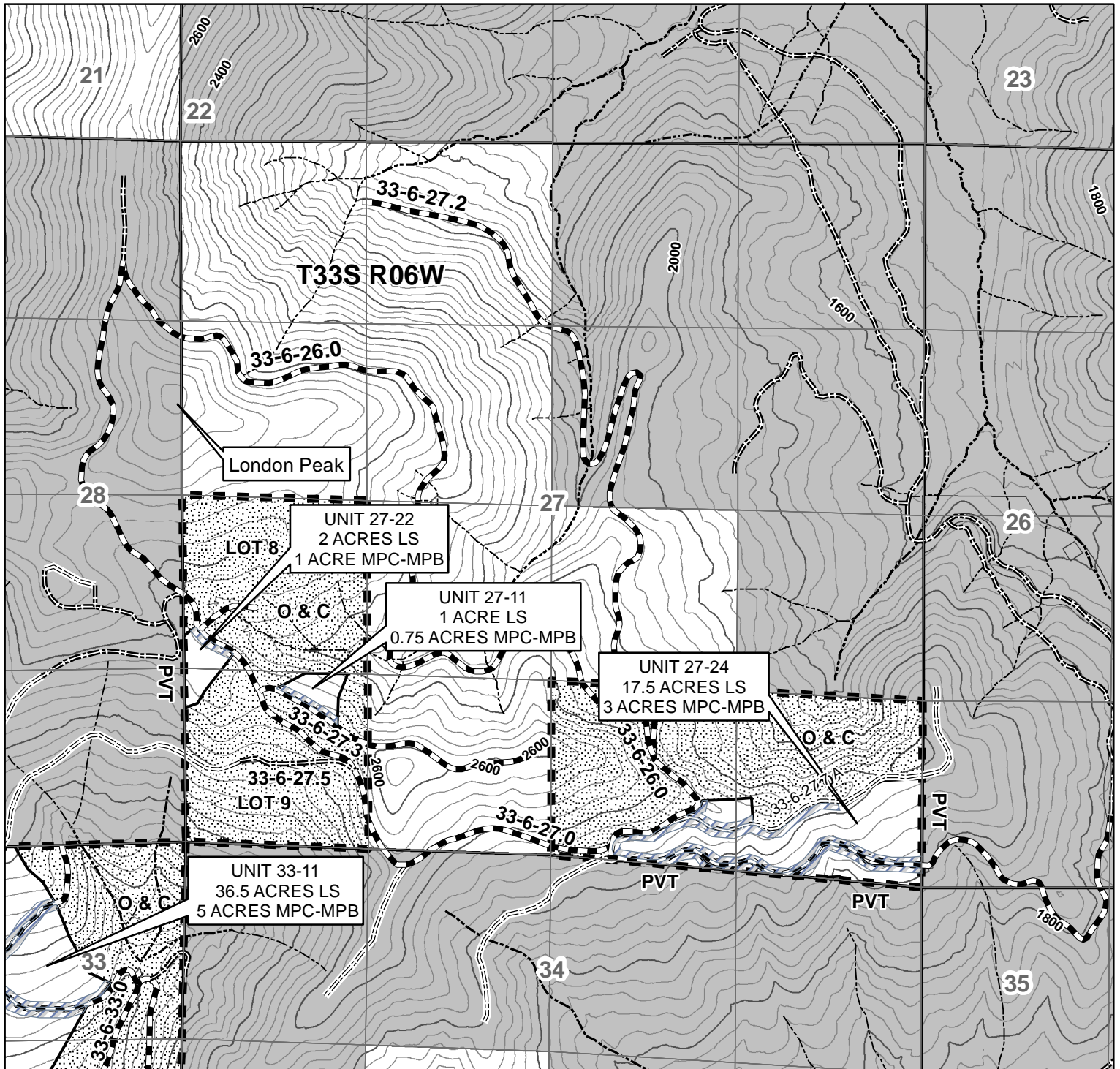
* Spacing is determined by slope distance and is the maximum allowed for the grade.

^ The erosion classes include the following rock types:

High: Granite, sandstone, andesite porphyry, glacial or alluvial deposits, soft matrix conglomerate, volcanic ash, and pyroclastics.
Moderate: Basalt, andesite, quartzite, hard matrix conglomerate, and rhyolite.
Low: Metasediments, metavolcanics, and hard shale.

ALWAYS
THINK
 SAFETY

REV. NO.	DESCRIPTION	DATE	APPROV.
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
FLUME PEAK TIMBER SALE BARRICADE AND WATER BAR DETAILS			
DRAFTED BY: BLM		SCALE: NONE	
DATE: SEPT 2020		SHEET: 1 OF 1	
DRAWING NO.: OR-11-9113.4-4			



1 inch = 1,000 feet

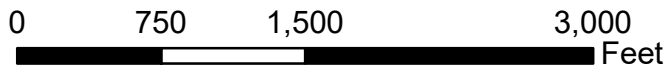
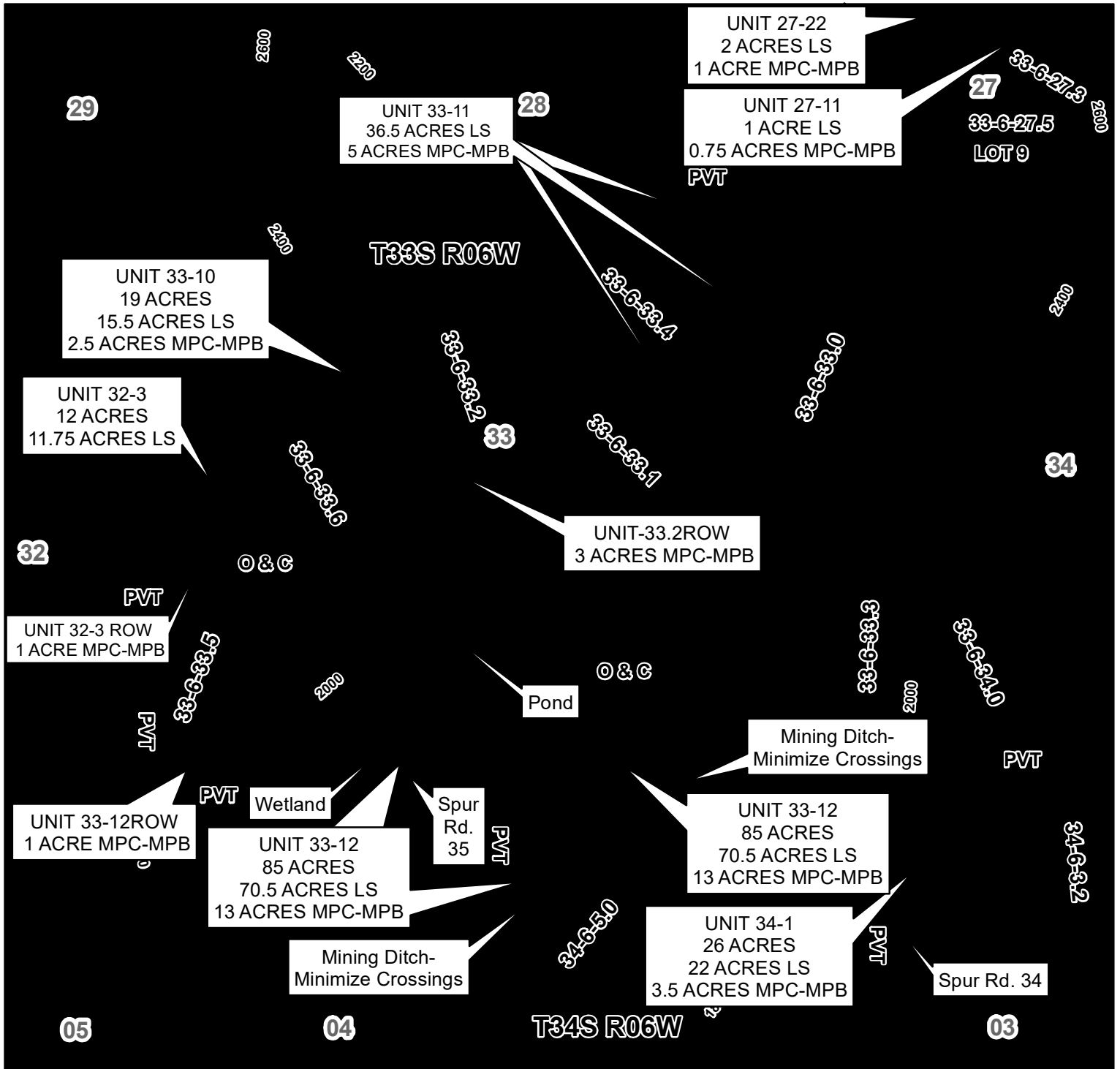
40 FOOT CONTOUR INTERVAL

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

United States Department of the Interior
 Bureau of Land Management
 Medford District Office
 3040 Biddle Road
 Medford, OR 97504
 (541) 618-2200

Map created by SDT
 9/28/2020





1 inch = 1,000 feet

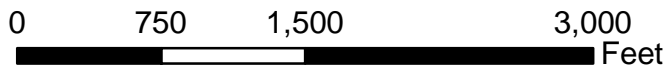
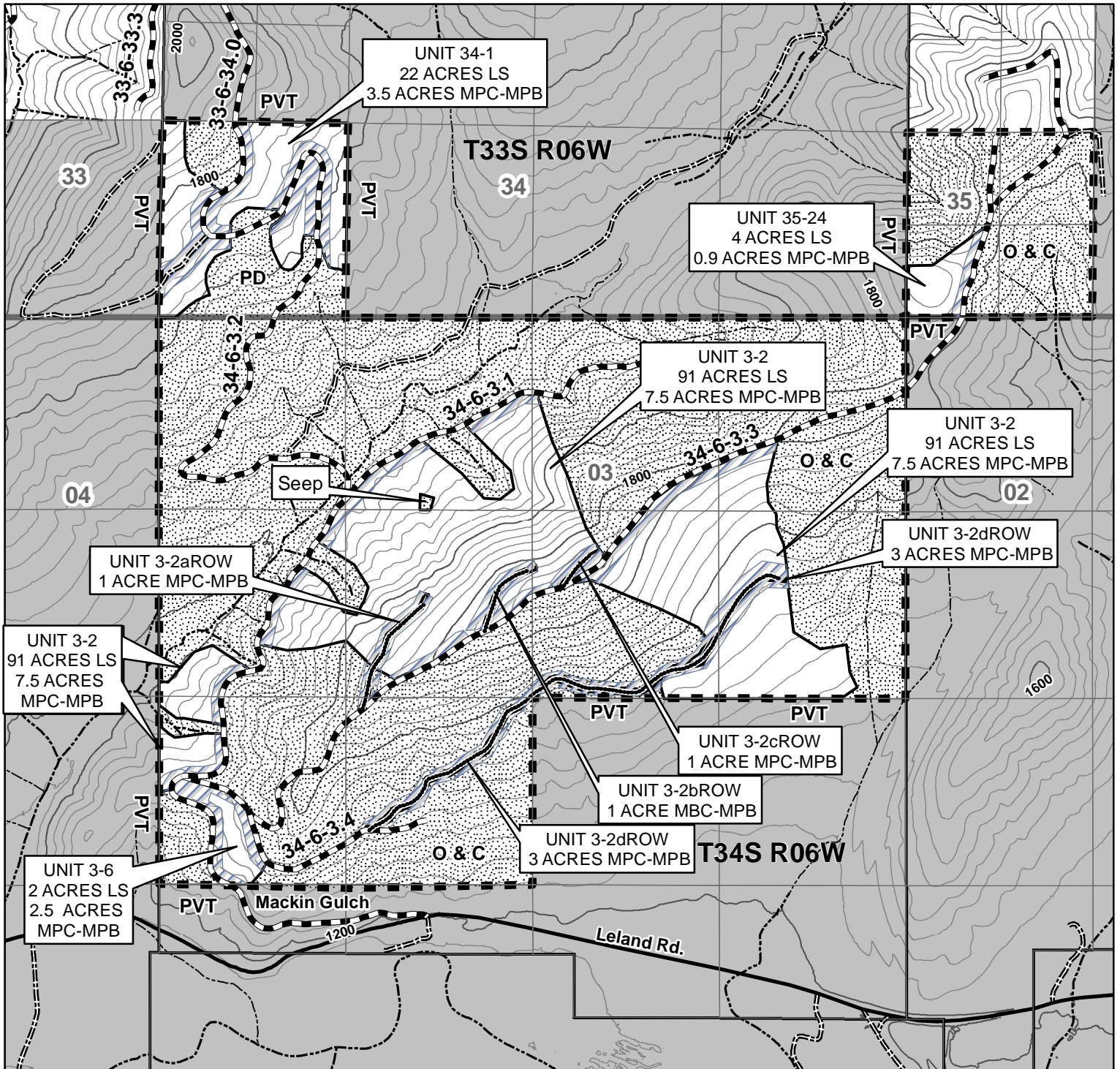
40 FOOT CONTOUR INTERVAL

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Map created by SDT
 9/28/2020



Legend

Temp Routes

==== Temp Route Construction

—— Temp Route Reconstruction

Roads

—— Paved




—+—+—+ Rocked

==== Natural Surface

Streams

----- Intermittent

----- Perennial

 Mining Ditch
 Contract Area Boundary
 Reserve Area Boundary

Flume Peak Timber Sale Units

Fuels Treatments

□ LS

▨ MPC - MPB

▭ Township and Range

▭ Sections

□ Bureau of Land Management

■ Other

LEGEND		
UNIT	UNIT ACRES	SLASH DISPOSAL TREATMENT PRESCRIPTION
3-2	101.0	LS / MPC - MPB
3-6	5.0	LS / MPC - MPB
27-11	2.0	LS / MPC - MPB
27-22	3.0	LS / MPC - MPB
27-24	22.0	LS / MPC - MPB
32-3	12.0	LS / MPC - MPB
33-10	19.0	LS / MPC - MPB
33-11	42.0	LS / MPC - MPB
33-12	85.0	LS / MPC - MPB
34-1	26.0	LS / MPC - MPB
35-24	5.0	LS / MPC - MPB
03-02aROW	1.0	MPC - MPB
03-02bROW	1.0	MPC - MPB
03-02cROW	1.0	MPC - MPB
03-02dROW	3.0	MPC - MPB
32-3ROW	1.0	MPC - MPB
-33.2ROW	3.0	MPC - MPB
33-12ROW	1.0	MPC - MPB

* BOUNDARIES OF HARVEST UNITS ARE POSTED AND PAINTED IN ORANGE
 LS = LOP & SCATTER
 MPC-MPB = MACHINE PILE & COVER, MACHINE PILE BURN

UNIT	Unit Acres	Estimated # of Landing Decks (Ac)	Lop & Scatter (Ac)	Machine Pile (Ac)	Machine Pile Burn (Ac)
3-2	101.0	2.50	91	7.50	7.50
3-6	5.0	0.50	2	2.50	2.50
27-11	2.0	0.25	1	0.75	0.75
27-22	3.0	0.10	2	1.00	1.00
27-24	22.0	1.50	17.5	3.00	3.00
32-3	12.0	0.30	11.70		
33-10	19.0	1.00	15.5	2.50	2.50
33-11	42.0	0.50	36.5	5.00	5.00
33-12	85.0	1.50	70.5	13.00	13.00
34-1	26.0	0.50	22	3.50	3.50
35-24	5.0	0.10	4	0.90	0.90
03-02aROW	1.0			1.00	1.00
03-02bROW	1.0			1.00	1.00
03-02cROW	1.0			1.00	1.00
03-02dROW	3.0			3.00	3.00
32-3ROW	1.0			1.00	1.00
-33.2ROW	3.0			3.00	3.00
33-12ROW	1.0			1.00	1.00
TOTAL	333.00	8.75	273.70	50.65	50.65

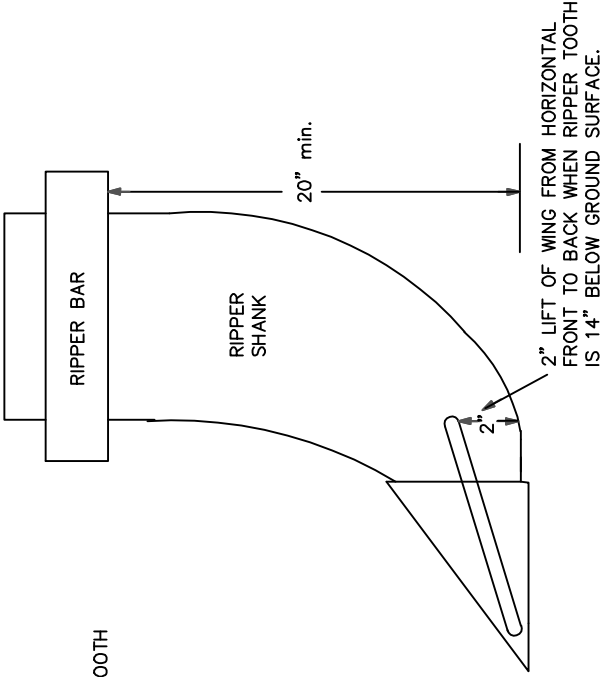
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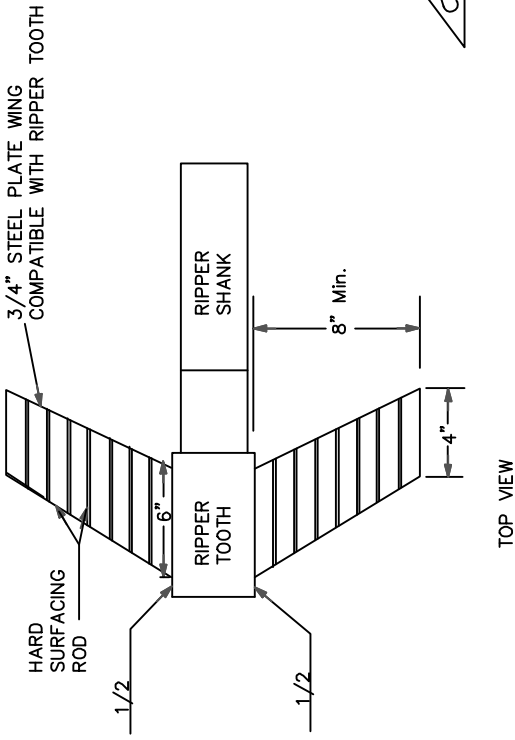
United States Department of the Interior
 Bureau of Land Management
 Medford District Office
 3040 Biddle Road
 Medford, OR 97504
 (541) 618-2200



EXHIBIT R
SHEET 1 OF 1

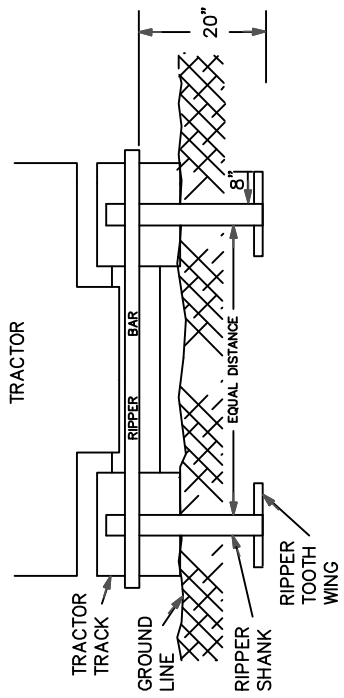


SIDE VIEW



TOP 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.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT ASHLAND RESOURCE AREA MEDFORD DISTRICT	
WING RIPPER DETAIL	
DESIGNED	
REVIEWED	
APPROVED	
DRAWN: JWR	SCALE: NONE
DATE: October 2009	SHEET 1 OF 1
DRAWING NO.	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Name of Bidder
Tract Number
Sale Name
Sale Notice <i>(dated)</i>
BLM District

DEPOSIT AND BID FOR: (Check One):

- Timber and/or Other Wood Products or**
(Examples of Other Wood Products: biomass, firewood, posts, poles, etc...)
- Vegetative Resources**
(Examples of Vegetative Resources: boughs, pinyon nuts, cones, plants, etc...)

<input type="checkbox"/> Sealed Bid for Sealed Bid Sale	<input type="checkbox"/> Written Bid for Oral Auction Sale
Time for opening sealed bids <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	Sale commences <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.
On <i>(date)</i> Place	On <i>(date)</i> Place

In response to the above dated Sale Notice, the required deposit and bid are hereby submitted for the purchase of designated Timber and/or Other Wood Products or Vegetative Resources on the tract specified above.

Required bid deposit is \$ _____ and is enclosed in the form of:

- cash money order cashier's check certified check bank draft
- 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 product and species will be considered. If the bid is rejected the deposit will be returned.

BID SCHEDULE – TIMBER AND/OR OTHER WOOD PRODUCTS OR VEGETATIVE RESOURCES

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
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
TOTAL PURCHASE PRICE						

If sale contract is executed, undersigned is liable for total purchase price including all modifications executed under the terms of the contract. Timber and/or Other Wood Products or Vegetative Resources designated for taking may be less or more than 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 and/or Other Wood Products or (1a) “Vegetative Resources” (2) Time bids are to be opened (3) Legal description

NOTICES

The Privacy Act and the regulations in 43 CFR 2.223(d) require that you be furnished with the following information:

AUTHORITY: 38 FR 6280 and 43 CFR 5442.1

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

ROUTINE USES: 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 and/or Other Wood Products or Vegetative Resources.

INSTRUCTIONS TO BIDDERS

1. **AUTHORITY** – Timber and/or Other Wood Products or Vegetative Resources, 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 and/or Other Wood Products or Vegetative Resources located on other 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 and/or Other Wood Products or Vegetative Resources, are codified in 43 CFR Group 5400.

2. **QUALIFICATIONS OF BIDDERS** – A bidder for sale of Timber and/or Other Wood Products or 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 and/or Other Wood Products or Vegetative Resources are located.

3. **INSPECTION OF TIMBER AND/OR OTHER WOOD PRODUCTS OR VEGETATIVE RESOURCES** – Bidder is invited, urged, and cautioned to inspect the Timber and/or Other Wood Products or Vegetative Resources prior to submitting a bid. By executing the Timber and/or Other Wood Products or Vegetative Resources sale contract, bidder warrants that the contract is accepted on the basis of his examination and inspection of the Timber and/or Other Wood Products or Vegetative Resources and his opinion of its value.

4. **DISCLAIMER OF WARRANTY** – Government expressly disclaims any warranty of the fitness of the designated Timber and/or Other Wood Products or Vegetative Resources for any purpose of the bidder; all Timber and/or Other Wood Products or 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 and/or Other Wood Products or Vegetative Resources to be sold is expressly disclaimed by Government.

5. **BIDS** – Sealed or written bids for not less than the advertised appraised price, per Timber and/or Other Wood Products or Vegetative Resources must be submitted in duplicate to the District Manager who issued *Timber and/or Other Wood Products or Vegetative Resources 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 and/or Other Wood Products or Vegetative Resources*, time bid is to be opened, tract number, and legal description of land on which Timber and/or Other Wood Products or Vegetative Resources are 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 and/or Other Wood Products or Vegetative Resources 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) **Timber and/or Other Wood Products or Vegetative Resources Sales** – For each product and species, bids shall specify (1) Bureau of Land Management estimated unit volume or quantity, (2) bidder’s price per unit and total value, and (3) bidder’s total purchase price. Estimated volume and price per unit are to be used for administrative and appraisal purposes only. Upon award of contract, the high bidder agrees to pay the Government for the Timber and/or Other Wood Products or Vegetative Resources designated for removal in accordance with the terms of the contract. Timber and/or Other Wood Products or Vegetative designated for taking may be less or more than total estimated volume or quantity shown above.

7. **BID DEPOSIT** – All bidders must make a deposit of not less than the amount specified in the *Timber and/or Other Wood Products or Vegetative Resources*

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 (*Applies To Timber Only*), or any approved guaranteed remittance approved by the Contracting 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 AND/OR OTHER WOOD PRODUCTS OR VEGETATIVE RESOURCES SALE CONTRACTS** – To be executed by purchaser, has been prepared by Government, and may be examined in the District or Field Manager’s office.

10. **PERFORMANCE BOND** – (*Primarily Used For Timber Sales*)

(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 Contracting Officer.

(b) If purchaser elects to cut Timber and/or Other Wood Products or Vegetative Resources 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 and/or Other Wood Products or Vegetative Resources 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 and/or Other Wood Products or Vegetative Resources covered by the bond increase. This increased amount of bond shall be used to assure payment for Timber and/or Other Wood Products or Vegetative Resources cut in advance of payment.

11. **PAYMENT BOND**— (*Primarily Used For Timber Sales*)

If purchaser elects to (a) cut and remove Timber and/or Other Wood Products or Vegetative Resources, or (b) remove Timber and/or Other Wood Products or Vegetative Resources 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 and/or Other Wood Products or Vegetative Resources covered by the bond. Payment bond shall be used to assure payment for Timber and/or Other Wood Products or Vegetative Resources 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 and/or Other Wood Products or Vegetative Resources 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 and/or Other Wood Products or Vegetative Resources 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 and/or Other Wood Products or Vegetative Resources, it may, in its discretion, keep the sale open, not to exceed ninety (90) days.

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 saw logs, 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 dimensions 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.